



# **ADDRESS-BASED SAMPLING RESEARCH REPORT**

Substance Abuse and Mental Health Services Administration  
Center for Behavioral Health Statistics and Quality  
Rockville, Maryland

September 2019

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# ADDRESS-BASED SAMPLING RESEARCH REPORT

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U.S. Department of Health and Human Services  
Substance Abuse and Mental Health Services Administration  
Center for Behavioral Health Statistics and Quality  
Populations Survey Branch

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# Table of Contents

Chapter	Page
<a href="#">Executive Summary .....</a>	<a href="#">1</a>
<a href="#">1. Introduction.....</a>	<a href="#">3</a>
<a href="#">2. National Survey on Drug Use and Health Summary .....</a>	<a href="#">5</a>
<a href="#">2.1 Current Sample Design and Selection .....</a>	<a href="#">5</a>
<a href="#">2.2 2009 NSDUH ABS Research .....</a>	<a href="#">6</a>
<a href="#">2.2.1 MLFS I.....</a>	<a href="#">7</a>
<a href="#">2.2.2 MLFS II .....</a>	<a href="#">7</a>
<a href="#">2.2.3 Major Findings and Recommendations .....</a>	<a href="#">8</a>
<a href="#">2.3 2017 NSDUH ABS Coverage Bias Research.....</a>	<a href="#">10</a>
<a href="#">3. Existing Studies .....</a>	<a href="#">15</a>
<a href="#">3.1 National Health Interview Survey (NHIS) .....</a>	<a href="#">15</a>
<a href="#">3.2 Residential Energy Consumption Survey .....</a>	<a href="#">16</a>
<a href="#">3.3 American National Election Studies .....</a>	<a href="#">17</a>
<a href="#">3.4 National Survey of Family Growth.....</a>	<a href="#">18</a>
<a href="#">4. Coverage .....</a>	<a href="#">21</a>
<a href="#">4.1 What Does "Coverage" Mean? .....</a>	<a href="#">21</a>
<a href="#">4.2 What Is the Current National Coverage Rate of the ABS Frame? .....</a>	<a href="#">22</a>
<a href="#">4.3 What Is the Best Method to Assess the Segment-Level Coverage Rate?.....</a>	<a href="#">25</a>
<a href="#">4.4 Under What Circumstances Does Coverage Vary?.....</a>	<a href="#">27</a>
<a href="#">4.4.1 Vendor.....</a>	<a href="#">27</a>
<a href="#">4.4.2 USPS Supplemental Files .....</a>	<a href="#">28</a>
<a href="#">4.4.3 Urbanicity .....</a>	<a href="#">29</a>
<a href="#">4.4.4 Time .....</a>	<a href="#">29</a>
<a href="#">4.4.5 Address Type .....</a>	<a href="#">29</a>
<a href="#">4.5 What Types of Dwelling Units Are Undercovered?.....</a>	<a href="#">31</a>
<a href="#">4.5.1 Unlocatable Addresses and Geocoding Error .....</a>	<a href="#">31</a>
<a href="#">4.5.2 Group Quarters.....</a>	<a href="#">32</a>
<a href="#">4.5.3 American Indian and Alaska Native (AIAN) Tribal Areas .....</a>	<a href="#">34</a>
<a href="#">4.5.4 Building Characteristics.....</a>	<a href="#">34</a>
<a href="#">4.5.5 Frame Errors .....</a>	<a href="#">34</a>
<a href="#">4.6 What Is the Best Method to Enhance the Coverage Rate for Housing Units? For Group Quarters?.....</a>	<a href="#">35</a>
<a href="#">4.6.1 Enhanced Listing (Also Known as "Dependent Listing") .....</a>	<a href="#">35</a>
<a href="#">4.6.2 Check for Housing Units Missed (CHUM) .....</a>	<a href="#">35</a>
<a href="#">4.6.3 Address Coverage Enhancement (ACE) (Also Known as the "Coverage Enhancement Procedure [CEP]").....</a>	<a href="#">36</a>
<a href="#">4.6.4 Frame Enhancement Methods Comparison.....</a>	<a href="#">36</a>

## Table of Contents (continued)

Chapter	Page
4.7	<a href="#">What Thresholds Should Be Used to Determine Where to List, Enhance, and Use the ABS Frame?.....</a> 38
4.8	<a href="#">What Is the Risk of Coverage Bias on NSDUH? .....</a> 40
4.9	<a href="#">Can Weighting or Other Postsurvey Adjustment Be Used to Reduce or Eliminate Coverage Bias?.....</a> 41
4.10	<a href="#">What Is the Best Method and Best Software for Geocoding? .....</a> 41
5.	<a href="#">Sampling .....</a> 45
5.1	<a href="#">How Will Changes in the Frame and Sample Design Disrupt the Time Series?.....</a> 45
5.2	<a href="#">Would a Hybrid ABS Design Require a Change from Sampling Census Blocks to Block Groups? What Are the Implications of Such a Change?.....</a> 46
6.	<a href="#">Logistics.....</a> 47
6.1	<a href="#">At What Point in Time Should Frame Enhancement Be Implemented? .....</a> 47
6.2	<a href="#">Is Electronic Listing Suitable for FIs and Compatible with Existing Systems? What Products Should Be Tested?.....</a> 48
6.3	<a href="#">How Would a Reduction in Time Spent on Field Enumeration Affect Interviewer Retention?.....</a> 49
6.4	<a href="#">What Changes Would Need to Be Made to Interviewer Training? .....</a> 50
6.5	<a href="#">How Would the FI's Path of Travel Need to Change?.....</a> 51
6.6	<a href="#">How Would Frame Enhancement at the Screening and Interviewing Stage Affect FI Workload Distribution and Efficiency? .....</a> 52
6.7	<a href="#">How Would a Reduction in Time Spent on Field Enumeration Affect Travel Time?.....</a> 52
6.8	<a href="#">How Would Frame Enhancement Be Monitored for Quality Assurance? .....</a> 53
6.9	<a href="#">Can Procedures Be Accurately and Uniformly Deployed in All Segments?.....</a> 54
7.	<a href="#">Next Steps .....</a> 55
References.....	57
List of Contributors.....	65

## Table of Contents (continued)

Appendix	Page
<u>A     The Effect of Using an ABS Frame on NSDUH: Coverage Bias.....</u>	<u>65</u>
<u>B     Domain Counts .....</u>	<u>87</u>
<u>C     2015-2016 NSDUH – Weighted Annual Averages Past Month Binge Alcohol Use – BNGDRKMON .....</u>	<u>101</u>
<u>D     2015-2016 NSDUH – Weighted Annual Averages Past Month Marijuana Use – MRJMON .....</u>	<u>115</u>
<u>E     2015-2016 NSDUH – Weighted Annual Averages Past Month Stimulant Use – STMNMMON.....</u>	<u>129</u>
<u>F     2015-2016 NSDUH – Weighted Annual Averages Past Year Serious Mental Illness (SMI) (Aged 18 or Older) – SMIYR_U .....</u>	<u>145</u>
<u>G     2015-2016 NSDUH – Weighted Annual Averages Past Month Alcohol Use – ALCMON .....</u>	<u>161</u>
<u>H     2015-2016 NSDUH – Weighted Annual Averages Past Month Cigarette Use – CIGMON .....</u>	<u>177</u>
<u>I     2015-2016 NSDUH – Weighted Annual Averages Past Year Alcohol Use Disorder – ABODALC .....</u>	<u>193</u>
<u>J     2015-2016 NSDUH – Weighted Annual Averages Past Year Illicit Drug Use Disorder – UDPYILL .....</u>	<u>207</u>
<u>K     2015-2016 NSDUH – Weighted Annual Averages Past Year Any Mental Illness (AMI) (Aged 18 or Older) – AMIYR_U .....</u>	<u>221</u>
<u>L     2015-2016 NSDUH – Weighted Annual Averages Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) – AMHTXRC.....</u>	<u>235</u>
<u>M     2015-2016 NSDUH – Weighted Annual Averages Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) – AMDEYR2 .....</u>	<u>249</u>
<u>N     2015-2016 NSDUH – Weighted Annual Averages Past Month Pain Reliever Use – PNRNMMON .....</u>	<u>263</u>
<u>O     2015-2016 NSDUH – Weighted Annual Averages Substance Use Disorder – UDPYILAL.....</u>	<u>277</u>
<u>P     2015-2016 NSDUH – Weighted Annual Averages Past Year Specialty Substance Use Treatment – TXYRSPILAL .....</u>	<u>291</u>
<u>Q     2015-2016 NSDUH – Weighted Annual Averages Past Year MDE in Youths (Aged 12 to 17) – YMDEYR2.....</u>	<u>305</u>

## List of Tables

Table	Page
<a href="#"><u>2.1</u></a> <a href="#"><u>Key Estimates Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) .....</u></a>	11
<a href="#"><u>2.2</u></a> <a href="#"><u>Categorization of Variables by Number and Magnitude of Significant Differences by Two Simulated ABS Frames (Subsample 1 and Subsample 2).....</u></a>	12
<a href="#"><u>2.3</u></a> <a href="#"><u>Percentage of Significantly Different Comparisons by Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame by Subdomain Size.....</u></a>	13
<a href="#"><u>2.4.</u></a> <a href="#"><u>Estimated Proportion of Subdomain Comparisons that Would Change Significance Given Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) (n = 17 for each variable).....</u></a>	14
<a href="#"><u>4.1</u></a> <a href="#"><u>Summary of ABS Frame Coverage Rate Estimates, by Publication .....</u></a>	23
<a href="#"><u>4.2</u></a> <a href="#"><u>ABS Frame Coverage and Net Coverage Estimates for Individual Segments .....</u></a>	24
<a href="#"><u>4.3</u></a> <a href="#"><u>Inaccuracy of USPS Vacancy Flag for Current Vacancy Status .....</u></a>	31
<a href="#"><u>4.4</u></a> <a href="#"><u>Cumulative Level of Geocoding Accuracy, by Urbanicity Level of Accuracy.....</u></a>	32
<a href="#"><u>4.5</u></a> <a href="#"><u>Comparing and Contrasting ABS Coverage Supplementation Methods.....</u></a>	37
<a href="#"><u>4.6</u></a> <a href="#"><u>Distribution of Distances (in Feet) from Vendors' Address Geocodes to Field Locations.....</u></a>	42
<a href="#"><u>6.1</u></a> <a href="#"><u>Summary of the Benefits and Challenges of Various Timings for Frame Enhancement.....</u></a>	47
<a href="#"><u>6.2</u></a> <a href="#"><u>Summary of the Effect of Hybrid ABS on Travel Time.....</u></a>	53
<a href="#"><u>6.3</u></a> <a href="#"><u>Summary of Decisions Influenced by ABS Design Method .....</u></a>	54
<a href="#"><u>7.1</u></a> <a href="#"><u>Summary of Considerations Required before NSDUH Can Transition to a Hybrid ABS Frame.....</u></a>	55
<a href="#"><u>A.1</u></a> <a href="#"><u>Excluded Addresses of Completed Households from Two Simulated ABS Frames (Subsample 1 and Subsample 2) .....</u></a>	68
<a href="#"><u>A.2</u></a> <a href="#"><u>Key Estimates Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) .....</u></a>	71
<a href="#"><u>A.3</u></a> <a href="#"><u>Estimated Absolute Bias Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) .....</u></a>	73
<a href="#"><u>A.4</u></a> <a href="#"><u>Estimated Relative Bias Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) .....</u></a>	76

## List of Tables (continued)

Table	Page
<u>A.5</u> <u>Categorization of Variables by Number and Magnitude of Significant Differences by Two Simulated ABS Frames (Subsample 1 and Subsample 2).....</u>	78
<u>A.6</u> <u>Percentage of Significantly Different Comparisons by Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame by Subdomain.....</u>	80
<u>A.7</u> <u>Percentage of Significantly Different Comparisons by Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame by Subdomain Size.....</u>	81
<u>A.8</u> <u>Estimated Proportion of Subdomain Comparisons that Would Change Significance Given Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) (<math>n = 17</math> for Each Variable).....</u>	83
<u>B.1</u> <u>Domain Counts .....</u>	87
<u>C.1</u> <u>Past Month Binge Alcohol Use.....</u>	101
<u>D.1</u> <u>Past Month Marijuana Use.....</u>	115
<u>E.1</u> <u>Past Month Stimulant Use .....</u>	129
<u>F.1</u> <u>Past Year Serious Mental Illness (SMI).....</u>	145
<u>G.1</u> <u>Past Month Alcohol Use .....</u>	161
<u>H.1</u> <u>Past Month Cigarette Use .....</u>	177
<u>I.1</u> <u>Past Year Alcohol Use Disorder .....</u>	193
<u>J.1</u> <u>Past Year Illicit Drug Use Disorder .....</u>	207
<u>K.1</u> <u>Past Year Any Mental Illness (AMI) (Aged 18 or Older) .....</u>	221
<u>L.1</u> <u>Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) .....</u>	235
<u>M.1</u> <u>Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older).....</u>	249
<u>N.1</u> <u>Past Month Pain Reliever Use .....</u>	263
<u>O.1</u> <u>Substance Use Disorder .....</u>	277
<u>P.1</u> <u>Past Year Specialty Substance Use Treatment .....</u>	291
<u>Q.1</u> <u>Past Year MDE in Youths (Aged 12 to 17) .....</u>	305

## List of Figures

Figure	Page
<u>4.1</u>	<u>Coverage Concepts ..... 21</u>
<u>4.2</u>	<u>Percentage of Locatable Addresses from No-Stat File, by County ..... 28</u>
<u>4.3</u>	<u>Illustration of the ACE Procedure..... 36</u>
<u>A.1</u>	<u>Estimated Absolute Coverage Bias Among Significant Comparisons of 15</u> <u>Estimates for Two Simulated ABS Frames (Subsample 1 and Subsample 2)</u> <u>Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)..... 74</u>
<u>A.2</u>	<u>Estimated Relative Coverage Bias Among Significant Comparisons of 15</u> <u>Estimates for Two Simulated ABS Frames (Subsample 1 and Subsample 2)</u> <u>Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)..... 77</u>

# Executive Summary

The use of address-based sampling (ABS) has increased over the recent past. The National Survey on Drug Use and Health (NSDUH) continues to thoroughly investigate the impact of making the transition from a field-enumerated frame to a hybrid ABS/field-enumerated frame (described in Chapter 1). If the Substance Abuse and Mental Health Services Administration (SAMHSA) is to move NSDUH to a hybrid ABS/field-enumerated frame, several questions will need to be answered, procedures will need to be developed and tested, and costs and benefits will need to be weighed. This report outlines what is known to date, how it may be applied to NSDUH, and what additional considerations need to be addressed. Overarching themes are summarized below.

- Although many best practices have been developed for hybrid-ABS designs (e.g., use of addresses from a licensed Computerized Delivery Sequence vendor along with field enumeration to maximize frame coverage [Section 4.4.1]), **many procedures have not been standardized across the industry**. For example, coverage error rates can be calculated as net coverage, undercoverage, overcoverage, or gross coverage error and may be calculated using different models, numerators, denominators, and covariates (Sections 4.1 and 4.3). Although much literature has been developed to validate these various procedures, little comparative research has been completed on coverage rates or other areas for which competing methods exist. This suggests that any validated method may be sufficient, but more research would be necessary to identify an optimal method.
- **Even where current best practices are clear, they may be changing**. For example, geocoding software is improving, and periodic evaluation will be necessary (Section 4.10).
- **All design considerations are interconnected, and the questions posed in this report cannot be answered in a vacuum**. For example, some segments will have middling coverage from the ABS frame. They will need to be enhanced. The timing of the enhancement (when and how frequently) influences and is influenced by the frame enhancement procedure, accuracy of the frame enhancement, labor force job satisfaction, labor force burden, and proportion of field interviewers and listers who would need to be trained to conduct the enhancement (Section 6.1).
- Relatedly, **all design choices come with costs and benefits**. This report is an attempt to provide an unbiased and exhaustive list of the pros and cons of each choice, but the ultimate decisions are yet to be made. For example, moving to a three-tiered ABS frame (e.g., segments with high coverage would use the ABS frame, segments with low coverage would be field enumerated, and segments with middling coverage would use the ABS frame with enhancement) offers the largest potential for cost savings, but logistical challenges may reduce labor-force job satisfaction and job performance (Section 6.1). Goals will need to be prioritized prior to moving forward.
- **Unique solutions will need to be developed for NSDUH**. The survey maintains ongoing data collection and is significantly larger than most other ABS surveys. Additional changes to ABS best practices will need to be made to make them scalable. Furthermore, NSDUH includes group quarters (GQs) in the sample frame (Section 6.7). Most GQs are

excluded or significantly undercovered on the ABS frame, and alternative sampling procedures will need to be considered (Section 4.5.2).

The above themes are daunting, and the amount of literature and other sources on which this report is based is significant. However, this is not to suggest that a transition to a hybrid ABS frame is impractical or not worthwhile. It is to suggest that each decision should be carefully considered and tested prior to moving NSDUH to a hybrid ABS design. To frame the discussion and next steps, **Chapter 7 includes a list of considerations that will need attention.**



# 1. Introduction

Researchers draw a sample of residential addresses from a list of addresses obtained from a licensed vendor, a process referred to as address-based sampling (ABS). The vendor lists are based on the U.S. Postal Service's Computerized Delivery Sequence (CDS) file.<sup>1</sup> ABS has gained popularity over the past decade as a replacement for field listing. By eliminating (or greatly reducing) the need for field listing, ABS has the potential to significantly reduce costs, improve timeliness, and eliminate human error. However, ABS also has limitations. Some addresses may be incorrectly included or excluded from a segment due to geocoding error. Other addresses do not represent the physical location of the dwelling unit and cannot be fielded in an in-person survey (e.g., households that only receive mail via a post office box). The CDS also does not include group quarters (GQs), resulting in undercoverage.

To minimize the weaknesses of ABS, some surveys have adopted a hybrid ABS design. Hybrid ABS uses the ABS frame in areas with high coverage and field listing in areas with low coverage. In some cases, the ABS frame may be used with a coverage enhancement method (e.g., half-open interval [HOI]) in areas with moderate coverage. This approach improves coverage compared with an ABS-only design and reduces costs and time in the field compared with field listing. However, staffing, training, and implementation of frame enhancement methods are more complex than traditional field listing, increasing the risk of error when compared with traditional listing.

Although research conducted on the 2009 Mailing List Field Studies (MLFS) (see Section 2.2) suggested that a hybrid ABS design could replace the existing listed frame, the Substance Abuse and Mental Health Services Administration (SAMHSA) determined that the potential benefits did not outweigh the potential risks. Although cost savings were realized in the MLFS, they were not as large as expected. There were also concerns about the feasibility of interviewers to correctly implement a frame enhancement procedure and the existing HOI procedure, geocoding error, the ability to identify and cover GQs, error in calculating segment coverage rates, and how these challenges may alter the time series. In the past 5 years, several changes have occurred that may change the cost-benefit analysis for the National Survey on Drug Use and Health (NSDUH).

- The coverage rate of the ABS frame has improved.
- There have been advances in the field to quantify errors resulting from using an ABS frame.
- Several other national in-person surveys have transitioned to a hybrid ABS frame. As a result, best practices have been developed to minimize the risk of error and further improve the efficiencies and ease of implementation.

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<sup>1</sup> Vendors have varying access to the CDS. For the purposes of this report, the vendor-licensed list is referred to as the "ABS frame," and the USPS list is referred to as the "CDS." More information on vendor licenses and the differences between the ABS frame and the CDS may be found in Section 4.4.1.

- NSDUH procedures have changed (e.g., HOI is no longer in use), making it more amenable to a hybrid ABS frame.
- Field costs associated with traditional field listing have increased in recent years, making a hybrid ABS design more compelling.

This document summarizes the current literature, existing hybrid ABS research on NSDUH, and experiences and lessons learned from existing hybrid ABS designs. A series of interviews were conducted with individuals experienced with the implementation of hybrid ABS designs, including project directors, methodologists, statisticians, field managers, listers, and interviewers. The report first summarizes hybrid ABS work on NSDUH (Chapter 2) and other hybrid ABS surveys (Chapter 3) followed by chapters dedicated to coverage, sampling, and logistical concerns (Chapters 4 to 6). Each of the substantive chapters (i.e., coverage, sampling, and logistics) are further arranged by a summary of the topic area and a list of questions and answers. The final chapter (Chapter 7) is a summary of next steps for consideration.

## **2. National Survey on Drug Use and Health Summary**

In this chapter, the current National Survey on Drug Use and Health (NSDUH) sample design and selection procedures are reviewed to provide context for the changes related to address-based sampling (ABS) that are discussed in subsequent chapters. The ABS research that has been completed to date on the NSDUH project is also summarized.

### **2.1 Current Sample Design and Selection**

The NSDUH respondent universe is the civilian, noninstitutionalized population aged 12 years old or older residing within the United States. The survey covers residents of households (e.g., individuals living in houses/townhouses, apartments, and condominiums; civilians living in housing on military bases) and individuals in noninstitutional group quarters (GQs), such as shelters, rooming/boarder houses, college dormitories, migratory workers' camps, or halfway houses (Center for Behavioral Health Statistics and Quality [CBHSQ], 2017).

A coordinated design was developed for the 2014 through 2017 NSDUHs and is being extended to the 2018 through 2022 NSDUHs. To support these studies, an independent, multistage area probability sample was selected down to the area segment level within each state and the District of Columbia. First, each state was stratified into approximately equally populated state sampling regions (SSRs). Then census tracts were selected within each SSR, census block groups were selected within census tracts, and area segments (one or more census blocks) were selected within census block groups. The selection of census block groups at the second stage of selection was added in 2014 to facilitate possible transitioning to an ABS design in the future (CBHSQ, 2017). Finally, area segments were assigned to survey years and calendar quarters. Each quarter, a sample of dwelling units (DUs) was selected within the quarter's sample segments, with additional samples selected and held in reserve for release later in the quarter if that quarter's responses fell below expectation. Selected DUs were screened, and zero, one, or two eligible residents were selected for the interview.

Within each sample segment, the DU frame is constructed via field enumeration (FE) or listing. Eight sample segments per SSR or 6,000 total sample segments are fielded each year. Half of the segments are retained from the prior year, and the other half are new. FE occurs between April and November in the year prior to data collection. In addition to increasing the precision of estimates of year-to-year trends, this 50 percent overlap of segments significantly reduces segment listing costs because only one half of the segments need to be listed each year.

Prior to 2014, the half-open interval (HOI) frame supplementation procedure<sup>2</sup> also was implemented. An evaluation of 2010 NSDUH data found that the HOI procedure accounted for only 0.2 percent of the total DUs on the NSDUH frame (Iannacchione, McMichael, Shook-Sa, & Morton, 2012). Therefore, the HOI was eliminated to decrease the burden on FIs and simplify the screening process. Currently, if a field interviewer (FI) encounters a new or missed DU on the premises of a sampled DU (e.g., a garage apartment), the new or missed DU is selected into the sample. To minimize bias associated with large numbers of missed DUs, FIs are instructed to call their supervisors if they notice large differences<sup>3</sup> in the segment listing and what they encounter in the field (CBHSQ, 2017).

In 2016, 135,188 screenings and 67,942 interviews were completed. Between 600-700 FIs were employed at any given time to conduct screening and interviewing. A subset of FIs (approximately 35 percent of all FIs) also conducted FE, assisted by over 100 listers who did not serve as FIs. Although these numbers vary slightly across years, they are relatively constant.

## **2.2 2009 NSDUH ABS Research**

In 2009, two Mailing List Field Studies (MLFS I and MLFS II) were fielded to evaluate the coverage, cost, and implementation procedures of a hybrid ABS sampling frame for NSDUH. Unlike the three categories of segments outlined in the introduction (ABS frame, ABS frame with enhancement, and FE), the 2009 research used a two-category design: (1) ABS frame with enhancement and (2) FE. The vast majority of segments would use the ABS frame supplemented using the Check for Housing Units Missed (CHUM) procedure.<sup>4</sup> Segments with low ABS frame coverage would rely on FE and the HOI<sup>5</sup> for the remaining (primarily rural) segments where ABS coverage is low.

The CHUM procedure has two components that supplement the coverage of an ABS frame. In CHUM1, FIs establish a path of travel from the sampled DU to the next DU. Facing the located sampled DU, the FI travels clockwise around the block, without crossing a street, to find the next DU. Street crossings are avoided to ensure that each path of travel is nonoverlapping. After the address of the next DU is found, it is checked against the ABS frame to determine whether it was missed. If the address of the next DU is not on the ABS frame or is incorrectly geocoded out of the sample segment, the DU is included in the sample. These steps are repeated until either the address of a DU on the ABS frame is found or the block is circumnavigated. Because CHUM1 is restricted to blocks associated with a sampled address, DUs in blocks with no addresses on the ABS frame will be missed. CHUM2 mitigates this

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<sup>2</sup> In summary, the HOI technique states that, if a DU is selected and an FI observes any new or missed DUs between the selected DU and the DU appearing immediately after the selection on the counting and listing form, all new or missed dwellings falling in this interval will be selected. If a large number of new or missed DUs are encountered (greater than 10), a sample of the new or missing DUs is selected, and the sample weight is adjusted accordingly.

<sup>3</sup> A "large difference" includes a whole apartment building or a new subdivision not listed; a missed floor, missed wing, or other groups of units missed within a multiunit building; a GQs' structure not listed; or missed DUs in a GQs' structure. When working GQs, FIs check with managers or other knowledgeable persons to determine if the listing is accurate. Discrepancies are reported to sampling staff; if confirmed, units are added to the sample.

<sup>4</sup> Alternative enhancement methods are available but were not used in either of the MLFS. For more information on alternative approaches, see Section 4.6.

<sup>5</sup> As noted previously, the HOI is no longer being implemented on NSDUH.

source of undercoverage by adding the "missed blocks" and their associated DUs to the frame. FIs perform the CHUM2 procedure from a predetermined start point in a randomly selected area rather than a starting DU. The FIs follow the same path of travel that they do for the CHUM1 procedure, stopping when they either list an address that matches to the ABS list or they return to the start point without finding a match (Iannacchione et al., 2012).

Iannacchione et al. (2012) summarized the results of the NSDUH ABS research, including the results of MLFS I and MLFS II, subsequent work developing and testing the CHUM procedure, and exploratory analyses on coverage prediction; GQs' coverage; geocoding error; and potential supplemental sources of addresses. The following subsections describe the methods of the two field studies.

### **2.2.1 MLFS I**

The sample for the MLFS I had 3,878 screened and eligible sampled DUs in a subsample of 200 NSDUH segments. Prior to selecting the sample, the NSDUH segments were stratified by expected ABS net coverage.<sup>6</sup> A separate stratum for segments with a high percentage of GQs was also created. A total of 1,725 interviews were obtained from the 3,878 sampled DUs in the first quarter of 2009. The use of segments already fielded allowed the NSDUH team to determine the eligibility of DUs and to compare prevalence rates without having to conduct additional interviews.

To develop a hybrid frame of DUs, the team attempted to match the street name and number, city, state, and ZIP Code of eligible sampled DUs obtained from the NSDUH screening to a list of mailing addresses purchased from a commercial vendor. Sampled DUs whose mailing address did not initially match to the ABS list were followed up with a telephone or field check to verify or correct the mailing address of the DU. Finally, the CHUM procedure was applied to the nonmatching sampled DU addresses to estimate the gain in coverage afforded by this portion of the hybrid frame methodology. An ABS address was selected in the vicinity of the nonmatching (missed) DU and treated as a sampled DU for the purposes of implementing the CHUM procedure. If the missed NSDUH DU was picked up by the CHUM, it was considered to be covered by the hybrid frame.

The analysis of the MLFS I data examined several coverage thresholds to identify a threshold that provides comparable coverage and comparable prevalence estimates with the current NSDUH frame. Cost savings associated with the hybrid frame were also estimated.

### **2.2.2 MLFS II**

The only source of undercoverage associated with the hybrid frame during the MLFS I was attributable to the incorrect implementation of the CHUM. Thus, the objective of the MLFS II was to develop and evaluate an improved CHUM training protocol. At-home and in-

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<sup>6</sup> Net coverage was estimated as the number of geocodable DUs on the ABS frame divided by the total number of DUs in the segment as estimated by Claritas in 2007 (Iannacchione et al., 2012). For more discussion on net coverage calculations, see Section 4.1. Claritas is a market research firm headquartered in Ithaca, New York (see <https://www.claritas.com/>). Formerly, Claritas was affiliated with Nielsen Holdings, from which they became independent in January 2017.

person CHUM training protocols and field exercises were designed. The in-person portion of the CHUM training was conducted in Research Triangle Park, North Carolina, on July 28, 2010. The field exercises took place immediately following the in-person training on July 28 and 29, 2010.

To evaluate the training protocol, NSDUH statisticians purposely created CHUM intervals in the area surrounding Research Triangle Park that represented a variety of situations (e.g., rural areas, apartment buildings) and difficulty levels. The percentage of correctly implemented CHUM intervals was tabulated, and a debriefing was held with study participants to receive feedback on the training protocol.

### **2.2.3 Major Findings and Recommendations**

#### **Coverage of the Hybrid Frame**

- Theoretically, the hybrid frame provides 100 percent coverage of the target population. In FE segments, the coverage is equivalent to the current NSDUH coverage rate. In an ABS frame with enhancement segments, DUs that are not included on the ABS frame are covered by the CHUM procedure. The only known sources of undercoverage occur when field staff incorrectly implement the CHUM and/or HOI procedures.
- The ABS net coverage estimate is defined for each segment as the ratio of the number of DUs with locatable mailing addresses<sup>7</sup> to the total number of DUs in the segment. Segments that meet or exceed a specified coverage threshold would be assigned to ABS with enhancement; otherwise, they would be assigned to FE. Based on the 2009 NSDUH, ABS coverage thresholds of 50, 65, or 80 percent lead to approximately 8, 14, or 27 percent, respectively, of NSDUH segments being assigned to FE.
- ABS frame coverage of GQs is problematic. Therefore, segments with high concentrations of GQs should be allocated to FE whenever possible. The 2010 decennial census is the only feasible source for predefining segments requiring FE based on having a large noninstitutional GQ population. However, as the data age, the quality of the predictor will deteriorate.
- Geocoding error occurs when the geographic coordinates assigned to a DU do not correspond to its actual location. Without a frame supplementation procedure such as the CHUM, geocoding error can lead to both overcoverage error and undercoverage error of an ABS frame. Geocoding error is more likely in rural areas than urban areas and for area segments at more granular levels of census geography (e.g., census blocks will suffer from more geocoding error than census block groups).

#### **Cost Savings of the Hybrid Frame**

- The cost savings afforded by the hybrid frame depend on how many segments are assigned to ABS with enhancement. In general, the lower the ABS coverage threshold, the more segments will be allocated to ABS and the higher the cost savings. However, because the CHUM procedure is designed to supplement areas with adequate ABS

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<sup>7</sup> A locatable mailing address has a street name and number, unit number if appropriate, city name, state name or abbreviation, and ZIP Code.

coverage, it is more efficient to allocate segments with very low ABS coverage to the FE frame.

- Cost savings are also a function of how well ABS coverage is predicted at the segment level. Inefficiencies arise when segments are allocated to FE that should be allocated to ABS and when segments are allocated to ABS that should be allocated to FE (because the high reliance on the CHUM procedure mitigates the cost savings of ABS).

## Implementation of the CHUM Procedure

- The CHUM procedure is an ABS frame-supplementation procedure. The CHUM is implemented by field staff from selected DUs to pick up any DUs that are not included on the ABS frame. When implemented correctly, it gives every DU in a sampled segment a chance of selection with known probability.
- ABS frames supplemented with the CHUM procedure provide 100 percent coverage of the target population when the CHUM is implemented correctly. A field study (MLFS II) was implemented to measure how well NSDUH field staff implement the CHUM procedure in various situations that they are likely to encounter in the field. For typical CHUM intervals,<sup>8</sup> the CHUM was implemented correctly 90.7 percent of the time compared with being implemented correctly 60.0 percent of the time for high-difficulty intervals.
- To ensure correct implementation of the CHUM procedure, field staff must receive adequate training. The at-home training combined with in-person training that was used on the MLFS II was generally effective; however, during fieldwork, FIs reported difficulty with several concepts, such as performing the CHUM at apartments and trailer parks and knowing when to contact field support for assistance. As a result, improved training procedures and materials are needed.<sup>9</sup>
- After training, FIs must be monitored in the field through the use of seeding<sup>10</sup> and other techniques to ensure they are correctly implementing the CHUM procedure. They must also be provided with field support to answer questions that arise while implementing the CHUM procedure in the field.

Iannacchione et al. (2012) found that, with proper training and monitoring, the hybrid sampling frame can be implemented in a way that reduces survey costs while maintaining NSDUH's high scientific standards. Further efficiencies can be gained by developing techniques that accurately allocate segments with low ABS coverage (e.g., segments with high concentrations of GQs) to the FE frame and by continuing to explore sources of supplemental addresses.

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<sup>8</sup> Implementation of the CHUM interval specifies that an FI first face a sampled DU, then proceed clockwise around the block, without crossing a street, to find the next DU.

<sup>9</sup> CHUM training procedures and materials have since been improved.

<sup>10</sup> In summary, "seeding" involves deleting a certain number of ABS addresses from the ABS list within sampled CHUM intervals as a way to monitor whether FIs are correctly implementing the CHUM. In addition to being able to determine when FIs are not implementing the CHUM, the process encourages compliance because FIs are told about the seeding process during training (Iannacchione et al., 2012).



## 2.3 2017 NSDUH ABS Coverage Bias Research

While reviewing the findings from the MLFS and summarizing the current literature, the team identified several changes that occurred between 2009 and 2017 that could alter the cost savings and coverage bias observed on NSDUH. As a result, new coverage bias analyses were conducted to assess the effect of adopting a hybrid ABS frame on NSDUH in the current survey climate.

To estimate bias, three datasets were created using the 2015 and 2016 NSDUH data, which were collected using a field enumerated sample. The first dataset is the combined full set of 2015 and 2016 NSDUH respondents ( $n = 136,015$ ). It is considered the control group and was used to create estimates assuming a field enumerated frame. The second dataset (Subsample 1) was a subset of the combined set of 2015 and 2016 NSDUH respondents in which all respondents living at description-based addresses were excluded ( $n = 128,944$ ). The third dataset (Subsample 2) further subset the combined 2015 and 2016 NSDUH respondents by excluding GQs and addresses in American Indian or Alaska Native (AIAN) tribal areas in addition to description-based addresses ( $n = 125,179$ ). The exclusions made in Subsamples 1 and 2 should be most like the addresses that would be missing from an ABS frame. GQs and AIAN tribal areas are frequently missing from the ABS frame. In Subsample 1, it was assumed that a supplemental frame (e.g., the Integrated Postsecondary Education Data System) would be used to ensure that individuals living in GQs were represented and that all segments that included AIAN tribal areas could be identified ahead of time and continue to be FE. In Subsample 2, neither of these assumptions were made, and they were considered missing from the frame.

Prevalence estimates were made for 15 measures for each sample, and the subsamples were compared with the field enumerated sample. [Table 2.1](#) displays the weighted count of individuals who reported the behavior of interest and the weighted estimates produced using each of the three samples. Significant differences were found between both of the two subsamples and the FE sample for 3 out of the 15 measures. Both subsamples resulted in significantly higher prevalence of alcohol use in the past month and alcohol disorder within the past year. Both subsamples also yielded a significantly lower estimate of cigarette use in the past month. Only the first subsample, excluding description-based addresses, produced a significantly different estimate for use of mental health services in the past year. All seven of the observed significant differences were small, (i.e., 0.1 to 0.2 percentage points [absolute difference] and 0.6 to 1.8 percent [relative difference]).



**Table 2.1 Key Estimates Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)**

Measure of Interest	FE Sample		Subsample 1. Sample Excluding Description-Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Weighted N	%	Weighted N	%	Weighted N	%
Past month binge alcohol use	66,008	24.6	66,015	24.6	66,113	24.6
Past month marijuana use	23,104	8.6	23,056	8.6	22,992	8.6
Past month stimulant use	1,694	0.6	1,704	0.6	1,711	0.6
Past year serious mental illness (aged 18+)	10,063	4.1	10,040	4.1	10,035	4.1
Past month alcohol use	137,528	51.2	138,060	51.4*	138,297	51.5*
Past month cigarette use	51,642	19.2	50,992	19.0*	50,998	19.0*
Past year alcohol use disorder	15,396	5.7	15,535	5.8*	15,548	5.8*
Past year illicit drug use disorder	7,559	2.8	7,565	2.8	7,507	2.8
Past year any mental illness (aged 18+)	44,036	18.1	44,071	18.1	44,051	18.1
Past year mental health service use	34,612	14.3	34,825	14.4*	34,752	14.3
Past year major depressive episode (aged 18+)	16,152	6.7	16,209	6.7	16,230	6.7
Past month pain reliever use	3,562	1.3	3,528	1.3	3,511	1.3
Substance use disorder	20,461	7.6	20,568	7.7	20,543	7.6
Past year specialty substance use treatment	2,287	0.9	2,298	0.9	2,255	0.8
Past year major depressive episode (aged 12-17)	3,060	12.6	3,064	12.6	3,066	12.7

\*  $p < 0.05$

In addition to analyzing the overall estimates across frames, estimates were also constructed within 8 domains (college enrollment status, age, sex, Hispanicity, race, pregnancy status, census division, and county type) and 13 cross domains. The absolute and relative difference was calculated for each variable across samples and by domain. Variables of interest were evaluated on the proportion of comparisons that were significantly different at the 0.05 level and the magnitude of the change in estimates across samples. This analysis resulted in a total of 17,404 comparisons. Across all comparisons, 7 percent were found to be significantly and substantively different from the FE sample. However, some variables were much more susceptible to frame shifts (e.g., past year illicit drug use disorder) than others (e.g., past month binge alcohol use). [Table 2.2](#) summarizes the effects of the frame changes on each variable. For more details on the analysis, including specific statistics on each comparison, please see Appendix A, [Tables A.2](#) and [A.3](#) and [Figures A.1](#) and [A.2](#).

Comparisons were also summarized by domain and by domain counts. Similar to the measures, some domains were more likely to experience differences in estimates than others, but no clear pattern emerged. A pattern did emerge when reviewing significant differences by domain counts. [Table 2.3](#) summarizes the comparisons by domain counts—how many cases were in the denominator of each estimate. When domain counts were less than 2,000, the number of significant differences was frequently no greater than chance. However, the larger the domain counts, the smaller the detectable difference and the greater risk of identifying significant differences. Among estimates with domain counts of 10,000 or more, 17 percent of Subsample 1 estimates and 13 percent of Subsample 2 estimates were found to be significantly different from the estimates produced using the FE sample.

**Table 2.2 Categorization of Variables by Number and Magnitude of Significant Differences by Two Simulated ABS Frames (Subsample 1 and Subsample 2)**

<b>Subsample 1: Sample Excluding Description-Based Addresses</b>	<b>Subsample 2: Sample Excluding GQ, AIAN Tribal Areas, And Description-Based Addresses</b>			
	<b>Variables Unaffected by the Shift to n ABS Frame</b>	<b>Variables That Will Suffer Bias for Few Domains, But the Bias Will Be Large When Observed</b>	<b>Variables That Will Suffer Bias for Many Domains But for Which the Bias Will Be Small</b>	<b>Variables That Will Suffer Bias For Many Domains, and the Bias Will Be Large</b>
Variables unaffected by the shift to an ABS frame	<ul style="list-style-type: none"> <li>• Past month binge alcohol use (BNGDRKMON)</li> <li>• Past month stimulant use (STMNMMON)</li> <li>• Past year serious mental illness (age 18+) (SMIYR U)</li> </ul>			
Variables that will suffer bias for few domains, but the bias will be large when observed	<ul style="list-style-type: none"> <li>• Substance use disorder (UDPYILAL)</li> <li>• Past year specialty substance use treatment (TXYRSPIL)</li> <li>• Past month marijuana use (MRJMON)</li> </ul>	<ul style="list-style-type: none"> <li>• Past month pain reliever use (PNRNMMON)</li> </ul>		<ul style="list-style-type: none"> <li>• Past year major depressive episode (age 18+) (AMDEYR2)</li> </ul>
Variables that will suffer bias for many domains but for which the bias will be small		<ul style="list-style-type: none"> <li>• Past year mental health service use (AMHTXRC)</li> </ul>	<ul style="list-style-type: none"> <li>• Past month alcohol use (ALCMON)</li> <li>• Past month cigarette use (CIGMON)</li> <li>• Past year any mental illness (age 18+) (AMIYR U)</li> </ul>	
Variables that will suffer bias for many domains, and the bias will be large		<ul style="list-style-type: none"> <li>• Past year alcohol use disorder (ABODALC)</li> </ul>		<ul style="list-style-type: none"> <li>• Past year illicit drug use disorder (UDPYILL)</li> </ul>

**Table 2.3 Percentage of Significantly Different Comparisons by Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame by Subdomain Size**

Sample Sizes	Subsample 1. Sample Excluding Description-Based Addresses		Subsample 2. Sample Excluding GQ, AIAN tribal areas, and Description-Based Addresses	
	# of Comparisons Made	% of Comparisons $p < 0.05$	# of Comparisons Made	% of Comparisons $p < 0.05$
<250	67	1	64	0
250-499	325	6	315	3
500-749	197	4	196	5
750-999	171	7	171	5
1,000-1,999	511	5	539	4
2,000-2,999	386	10	356	8
3,000-3,999	273	10	298	9
4,000-4,999	174	12	136	10
5,000-5,999	184	13	169	12
6,000-6,999	102	11	131	10
7,000-7,999	89	11	133	3
8,000-8,999	174	11	131	8
9,000-9,999	89	12	103	7
$\geq 10,000$	1,156	17	1,112	13

Finally, comparisons were made to determine whether a shift in frame would ultimately change the conclusions drawn from analyses across subdomains ([Table 2.4](#)). The first two columns of [Table 2.4](#) for each subsample include all agreements (both the FE and the subsample comparisons were significant at the 0.05 level or both the FE and subsample comparisons failed to reach significance). Only 9 (4 percent) of the 255 total comparisons in Subsample 1 (17 subdomains x 15 measures) and 14 (6 percent) of the comparisons in Subsample 2 yielded different outcomes than the FE sample comparison. This is approximately the margin of error that would be expected when testing at the 0.05 significance level, suggesting that a frame change would result in an acceptably small number of different conclusions when making subdomain comparisons. There was variation by measure in both subsamples, but the number of comparisons for each measure was small ( $n = 17$ ), making the estimates by measure unstable. Given the data, the shift in frame will have minimal effect on subdomain comparisons.

Although these findings provide a "best guess" of the effect of a hybrid ABS design given the data available, the results should be interpreted with caution. Several assumptions and limitations of the data make these results represent a "worst case" scenario. Additional details on the analyses and their limitations are available in Appendix A.

**Table 2.4 Estimated Proportion of Subdomain Comparisons that Would Change Significance Given Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) ( $n = 17$  for each variable)**

Variable	Subsample 1. Sample Excluding Description-Based Addresses				Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses			
	FE & Subsample Subdomain Est. Signif. Diff.	Neither Est. Signif. Diff.	FE Subdomain Est. Signif. Diff.	Subsample Subdomain Est. Signif. Diff.	FE & Subsample Subdomain Est. Signif. Diff.	Neither Est. Signif. Diff.	FE Subdomain Est. Signif. Diff.	Subsample Subdomain Est. Signif. Diff.
Total	51	45	1	2	51	44	2	4
Past month binge alcohol use (BNGDRKMON)	65	29	0	6	59	24	6	12
Past month marijuana use (MRJMON)	76	24	0	0	76	24	0	0
Past month stimulant use (STMNMMON)	41	59	0	0	41	59	0	0
Past year serious mental illness (age 18+) (SMIYR_U)	53	47	0	0	53	47	0	0
Past month alcohol use (ALCMON)	88	6	6	0	88	6	6	0
Past month cigarette use (CIGMON)	71	18	6	6	76	18	0	6
Past year alcohol use disorder (ABODALC)	41	59	0	0	41	53	0	6
Past year illicit drug use disorder (UDPYILL)	47	53	0	0	47	53	0	0
Past year any mental illness (age 18+) (AMIYR_U)	53	47	0	0	53	41	0	6
Past year mental health service use (AMHTXRC)	71	24	0	6	71	24	0	6
Past year major depressive episode (age 18+) (AMDEYR2)	41	53	0	6	35	47	6	12
Past month pain reliever use (PNRNMMON)	24	71	6	0	24	71	6	0
Substance use disorder (UDPYILAL)	53	47	0	0	53	41	0	6
Past year specialty substance use treatment (TXYRSPILAL)	12	82	0	6	12	82	0	6
Past year major depressive episode (age 12-17) (YMDEYR2)	29	65	0	6	29	71	0	0

## 3. Existing Studies

This chapter presents information on other surveys that use a hybrid address-based sampling (ABS) design. The methods used by the most relevant studies are summarized in this chapter: the National Health Interview Survey (NHIS), the Residential Energy Consumption Survey (RECS), the American National Election Studies (ANES), and the National Survey of Family Growth (NSFG). Experiences from these surveys have been cited throughout this report to lend further evidence and support to the findings.

### 3.1 National Health Interview Survey (NHIS)

The NHIS, conducted since 1957, is the largest in-person health survey in the United States. Conducted by the National Center for Health Statistics (NCHS) and fielded by the U.S. Census Bureau, the NHIS collects data year-round on medical conditions, health insurance, doctor's office visits, physical activity, and other health behaviors. Although sample sizes vary from year to year, approximately 87,500 individuals in 35,000 units are interviewed each year, with a household response rate of 67.9 percent.

Until 2016, the NHIS used field enumeration (FE) to construct a frame from which to draw a multistage, area probability sample. In 2016, the NHIS transitioned to hybrid ABS. Sample in segments that fell in counties where the estimated county coverage rate was 85 percent or higher was drawn from Marketing Systems Group's (MSG) frame based on the U.S. Postal Service's Computerized Delivery Sequence (CDS), while all other segments were field enumerated. The numerator of the coverage estimate includes both the CDS-licensed addresses from the vendor, MSG, and addresses on the No-Stat file that pass a filter.<sup>[11](#)</sup>

Dormitories were included on the frame by using information from the Integrated Postsecondary Education Data System (IPEDS). The list of institutions from IPEDS was geocoded. If an institution fell inside a sampled segment, the institution was contacted and asked to provide a list of dormitories. This technique was extremely expensive, and institutions were reluctant to provide the requested information. Starting in 2018, the NHIS will change the household roster to include individuals currently away at college and living in on-campus housing. If a college student living on campus is selected, a phone number will be collected, and the interview will be conducted over the phone. Dormitories will no longer be sampled. In addition to dormitories, other group quarters (GQs) are considered in scope for NHIS but are identified only in segments that are field enumerated. No special procedures are implemented to ensure that they are covered in the ABS segments.

NHIS listers and field interviewers (FIs) complete standard census training and NHIS study-specific training before starting work. The change in sampling frames did not necessitate changes in training or implementation procedures. Interviewers are provided with maps with pins of the geocoded location of sampled units. Although this feature is new to NHIS, many census

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<sup>11</sup> A complete list of filter criteria is unknown, but they include items such as "have a complete city-style address" (e.g., street number, street name, city, state, and ZIP Code).

interviewers are cross-trained on other census-conducted studies for which this feature may have been previously used.

### 3.2 Residential Energy Consumption Survey

The RECS is a periodic survey of households that collects energy characteristics, energy usage patterns, and household demographics. The survey has been conducted by the Energy Information Administration since 1978, with the most recently completed iteration in 2015. The 2015 RECS began as an in-person survey using computer-assisted personal interviewing (CAPI) for data collection.<sup>12</sup> A total of 6,522 sampled housing units (HUs) (GQs are not considered in-scope) were attempted in CAPI, yielding 2,417 completed in-person interviews and resulting in an American Association for Public Opinion Research Response Rate 2 of 41.8 percent.

Although RECS has always used a multistage, area probability sample design, it transitioned from FE to hybrid ABS in 2009. The 2005 RECS design was the foundation for the 2009 survey and was supplemented with additional primary sampling units (PSUs) and segments for an expanded sample. EIA determined which segments were satisfactorily covered with an ABS frame and which segments needed to be enhanced in the field. Segments were assigned to an ABS frame if they met one of three conditions: (1) at least one block in the segment did not require listing for the decennial census (i.e., had a Census Bureau's Type of Enumeration Area<sup>13</sup> [TEA] code of 1) and a net coverage ratio (ABS/Claritas) of at least 0.8; (2) the segment had a net coverage ratio (ABS/2000 census) of at least 0.9; or (3) manual review of satellite images and vacancy counts deemed ABS acceptable. All other segments were assigned to enhanced listing for HU frame construction. Data collection lasted 6 months (February through August 2010), during which time, nonresponding sample members were contacted multiple times by interviewers and through the mail with letters and postcards.

In 2015, the RECS design was amended. A Compact Information Systems-licensed ABS frame with appended No-Stat addresses (Section 4.4.2) was used, and the same multistage, area probability protocols were used to select census block groups. Net coverage estimates were calculated as the ratio of the number of city-style mailing addresses on the ABS frame compared with the estimated number of HUs in the census block group according to the American Community Survey. Segments with ratios greater than or equal to 90 percent ( $n = 547$ ) were fielded using the ABS frame; segments with 56 to 90 percent coverage were enhanced using the Check for Housing Units Missed (CHUM) ( $n = 213$ ) procedure, and the remaining segments ( $n = 40$ ) were field enumerated. Given the large size of some block groups, some field-enumerated segments were further divided into smaller sections and subsampled.

Field-enumerated segments were listed on paper prior to HU sample selection, similar to what is done for the National Survey on Drug Use and Health (NSDUH). CHUM was conducted concurrently with screening and interviewing during the 6-month field period (August through

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<sup>12</sup> For budget reasons, nonrespondents were moved from CAPI to a mail and web mixed mode design halfway through data collection. The response rates and case counts referenced here are for those attempted and completed in CAPI.

<sup>13</sup> A TEA code indicates the type of geography and FE methods conducted in the field by the U.S. Census Bureau in the last decennial census. A TEA code of "1" indicates mailout/mailback, a geography with good mailing address coverage (Johanson, Scheu, & Wechter, 2011).

February). FIs used tablets to conduct CHUM and separate laptops for interviewing. Facing the located HU, the FI traveled clockwise around the block, without crossing a street, to find the next HU. Upon locating the next HU in the path of travel, the FI checked its address against the ABS frame to determine whether it was missed. The entire ABS frame within each selected segment was stored on the FI's tablet to facilitate this check. If the address of the next HU was not on the ABS frame, the newly identified HU was assigned the same probability of selection as the originally selected HU. Interviewers repeated this step until either the address of an HU on the ABS frame was found or the block was circumnavigated. Following these procedures, a total of 163 new addresses were identified in 213 CHUM segments and were released to the field for data collection.

### **3.3 American National Election Studies**

The 2008 Time Series Study within the National Science Foundation's ANES consisted of 2,322 completed CAPI and audio computer-assisted self-interviewing (ACASI) interviews on electoral participation, voting behavior, and public opinion (ANES, n.d.; Howell, 2015). The survey was administered to English- or Spanish-speaking U.S. citizens of voting age who were also U.S. residents (Howell, 2015).

A five-stage sample design was used. Counties, census tracts, and census block groups were selected in the first three stages. A sample of residential mailing addresses was selected from each selected block group in the fourth stage, and FIs randomly selected up to one eligible person from each household in the fifth stage. Although the foundation of the frame was ABS, CHUM was implemented in all sampled segments. The CHUM data were collected using a combination of paper maps and lists and an iPAQ handheld computer, which was used for entering addresses. CHUM resulted in the addition of 282 new addresses (more than 6 percent of HUs in the sampled segments) to the frame at a cost of 0.8 hours per complete.

NSF has gained much knowledge from this first implementation of CHUM. They determined that the 2-hour training allotted to CHUM was insufficient, especially since additional CHUM questions surfaced during evening study halls. Once the training was completed, FIs continued to need more than anticipated clarification on procedures, which was true even for the most experienced FIs. The FIs often had difficulty finding the starting point, which, in some areas, was far from the rest of the sample in the segment. This happened most often in large, rural segments. The geocoding from the vendor, MSG, had many errors. Sometimes, FIs had difficulty locating addresses that had been selected and added after CHUM.

An additional challenge related to CHUM was that added cases were not "spawned" to the field in real time. Instead, they were first sent to the statisticians for verification. The statisticians then delivered additional sample in four different waves throughout the first month of data collection. By the time some of these cases were released, the FI had already finished working in the area and had to return to work the new cases.

All of these challenges have since been addressed, and the most recent field studies have had significantly fewer difficulties implementing frame enhancement.

### 3.4 National Survey of Family Growth

The NSFG is a repeated cross-sectional survey of individuals 15 to 44 years of age that has been conducted since 1973. Although it was previously conducted sporadically, it was moved to continuous data collection in 2006. The NSFG covers topics such as family life, marriage and divorce, pregnancy, infertility, use of contraception, and men's and women's health (Centers for Disease Control and Prevention [CDC], 2016a, 2017). The interviews were administered by female FIs using CAPI and ACASI modes (CDC, 2016b).

Although the NSFG design has undergone several changes over the years, the survey currently uses a stratified five-stage probability sample, with PPS selection within four key race/ethnicity domains. In the first two stages, PSUs and secondary sampling units (SSUs) were selected. In the third stage, FIs used an electronic listing application (ELA) (referred to as "enhanced listing" in Section 4.6.1) to update an ABS frame. In SSUs for which lists were unavailable (roughly 2 percent of the segments), FIs conducted field enumeration. Once listing was complete, HUs were randomly selected, then contacted and screened by FIs. In the fourth stage, FIs selected one eligible person to interview from each household containing eligible persons. During the fifth and final phase of sample selection, a subsample of nonresponding cases was selected for additional follow-up (CDC, 2016a, 2016b).

Data collection is ongoing, and the sample design was created so that data collected between 2011 through 2019 could be combined to create a nationally representative sample. However, a sample of PSUs are drawn annually, and samples of area segments and housing units are released quarterly. For each 12-week period, interviewers are expected to enhance list the following quarters' PSUs and complete their assigned caseloads for screening and interviewing. Approximately 5,000 addresses are sampled quarterly, yielding an average of 1,911 completed screening interviews and 1,302 completed main interviews (CDC, 2016a).

FIs were trained to list using the ELA. The application allowed them to update existing addresses, add new addresses, and delete missing addresses. The ELA also allowed for addresses to be reordered, which was necessary for the application of the half-open interval procedure and simplified the process of locating sampled addresses at a later date for interviewing. Maps were loaded into the ELA, and FIs could annotate the maps to mark dangerous areas, describe the location of units, and more. FIs could also record in the ELA any pertinent observations, such as notes about dangerous neighborhoods, locked buildings, and controlled access. This information was used to estimate nonresponse and prioritize follow-up efforts (CDC, 2016a).

Once complete, listing data were reviewed by experienced office staff to check for completeness. The office staff also checked for accuracy using resources such as online maps, street views, and satellite images. In addition, automated quality control checks were used as a check for completeness and accuracy. These checks included (1) comparing census counts of HUs with the counts of listed units reported by FIs, (2) reporting consistency check violations that FIs made when using the ELA, and (3) flagging listings that (based on ELA time stamps) took an unusually high or low amount of time to complete (CDC, 2016a).

FIs were trained to check for missed HUs when they were in the field interviewing. The FI laptops contained a system called SurveyTrak that listed all HUs in each segment. FIs were



instructed to ensure that a random subset of HUs were listed and to look for any that might have been missed. In particular, FIs were to check mailboxes, doors, and utility meters for indications of missed units. FIs were also trained to ask screener respondents for information about additional HUs in their structure (CDC, 2016a).

When FIs discovered one or two missing HUs, they were instructed to add them to the SurveyTrak list and attempt a screening at each of the missing units. If more than two missing units were discovered, FIs were instructed to call sampling office staff for directions on how to proceed. The sampling office would then subsample the original and additional HUs and add new cases to the FI's sample. This resulted in unequal probabilities of selection, so adjustments accounting for this subsampling were incorporated into the final weights (CDC, 2016a).

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## 4. Coverage

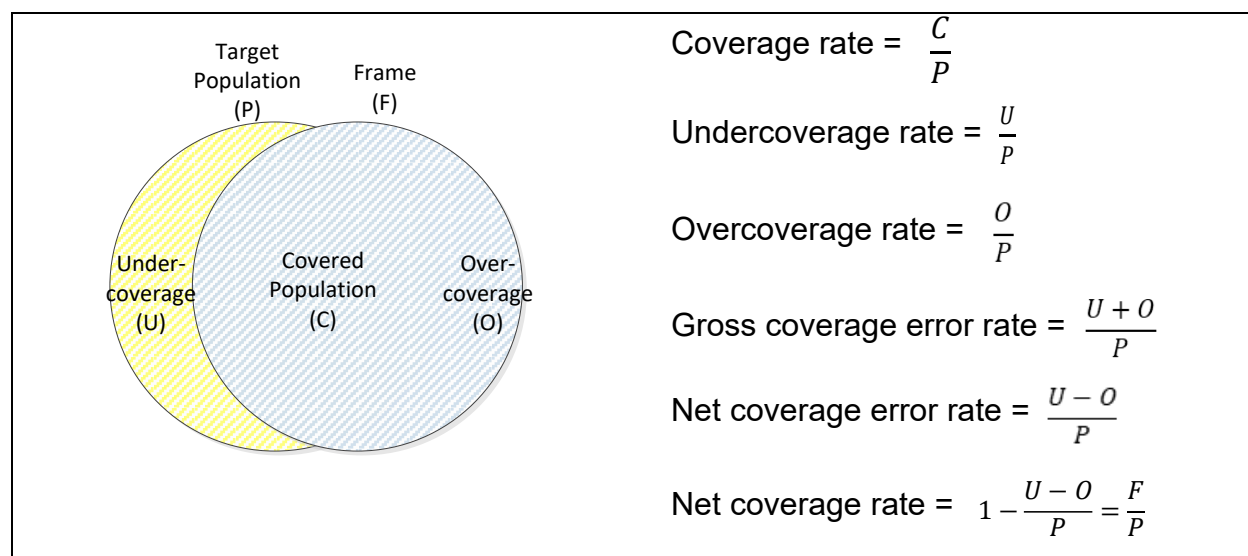
The bulk of this report focuses on the extent to which moving to a hybrid address-based sampling (ABS) frame affects coverage and coverage bias. This chapter answers these broad questions while also investigating several nuances of the frame and design choices that affect coverage.

### 4.1 What Does "Coverage" Mean?

Coverage is generally defined as the extent to which the target population is included in the sampling frame (and therefore has a chance of selection). The coverage rate is the proportion of the target population that is listed in the frame. In the context of ABS frames for the National Survey on Drug Use and Health (NSDUH), the coverage rate is the proportion of dwelling units (DUs) included on the ABS frame.

The term "coverage" has been used somewhat loosely in the literature. To clarify, a review of various types of coverage error as defined by Kish (1965) is discussed. Undercoverage refers to the extent to which target population units are missing from the frame. Undercovered units for the ABS frame are discussed in Section 4.5. The undercoverage rate for NSDUH is the percentage of DUs not in the ABS frame. Thus, the coverage rate can be thought of as one minus the undercoverage rate. Overcoverage, on the other hand, refers to addresses on the frame that are extraneous to the target population. The overcoverage rate for NSDUH is the number of such extraneous addresses (e.g., businesses) divided by the number of DUs in the target population.<sup>14</sup> [Figure 4.1](#) illustrates these concepts.

**Figure 4.1 Coverage Concepts**



<sup>14</sup> Some literature defines the overcoverage rate as O/F, the percentage of the frame not in the target population. The definition O/P is consistent with Kish (1965) and with the net coverage rate formula.

The gross coverage error rate refers to the sum of the undercoverage and overcoverage rates. For example, a frame with 5 percent undercoverage and 3 percent overcoverage has 8 percent gross coverage error. Although this error rate provides a more complete picture of the frame's limitations, the gross coverage error rate is rarely calculated. Instead, researchers often rely on an estimate of the net coverage error rate, the difference between the undercoverage and overcoverage rates (2 percent undercoverage in this example). The net coverage rate is one minus the net coverage error rate and is most frequently estimated by dividing the number of DU addresses on the frame by an estimate of the DUs in the population.

Even with these definitions in hand, estimates of coverage or net coverage in the literature are influenced by many factors, including the following:

- whether the authors are estimating coverage or net coverage (Section 4.3);
- the types of addresses undercovered on the frame (Section 4.5);
- whether the vendor has supplemented the frame with addresses from other sources (e.g., the No-Stat file) (Section 4.4.2);
- the types of addresses the frame builder chooses to include or exclude (e.g., addresses flagged as seasonal homes) (Section 4.5.4);
- the definition of the target population (e.g., housing units [HUs] vs. occupied households) (Section 4.2);
- the choice of estimate for the target population (e.g., decennial census vs. Claritas) (Section 4.3); and
- whether the entire frame and national target population are considered or just the sample segments (segments are prone to geocoding error, which contributes to coverage error, whereas geocoding error is irrelevant for total U.S. coverage estimates) (Section 4.5).

Each of these factors and the various types of coverage are considered and documented throughout this report.

## **4.2 What Is the Current National Coverage Rate of the ABS Frame?**

According to the American Association for Public Opinion Research (AAPOR, 2016), ABS coverage estimates for the United States have been in the range of 90 to 98 percent. OMB Guideline 2.1.3 states that U.S. federal government surveys should have a coverage rate of at least 95 percent overall and for major strata. If the coverage rate falls below 85 percent, coverage improvement should be considered, and a coverage bias analysis should be conducted (WhiteHouse.gov, 2006).

As previously noted, many factors influence the estimated coverage rates. Staab and Iannacchione (2003) estimated national net coverage ratios with Claritas control totals as 97 percent. Eckman and English (2012a) estimated national net coverage of census HUs as 92.3 percent using only city-style addresses and 86.7 percent using only high-confidence geocoded city-style addresses. Kennel and Li (2009) estimated national coverage as 88.6 percent.

[Table 4.1](#) summarizes various estimates in the literature but indicates some of the features of the estimates that may influence the results.

**Table 4.1 Summary of ABS Frame Coverage Rate Estimates, by Publication**

Authors	Year	Target Population	Control Total	Measure <sup>1</sup>	Overall Estimate, %	Rural Estimate, %
O'Muircheartaigh, Eckman, & Weiss	2002	52 segments, all HUs	Field listings	Match rate	87	
O'Muircheartaigh, Eckman, & Weiss	2002	14 segments, all HUs	Enhanced listing	Match rate	93	
Staab & Iannacchione	2003	HUs in all local areas (bigger than ZIP Codes) in total United States	Claritas households (occupied HUs)	Net coverage	97	86.3
Dohrmann, Han, & Mohadjer	2006	Civilian noninstitutionalized population, including GQs in 3 geographic areas	2000 census, total units	Net coverage	96	76.8
O'Muircheartaigh et al.	2006	100 segments, all HUs	Field verifications	Match rate	77	
O'Muircheartaigh et al.	2006	96 segments (excluding 4 problem segments), all HUs	Field verifications	Match rate	83	51-56
Iannacchione et al.	2007	22 rural and 28 urban segments in North Carolina, all HUs	Field-verified HUs	Weighted match rate	82.1	77.5
Iannacchione et al.	2007	22 rural and 28 urban segments in North Carolina, occupied HUs	Field-verified HUs	Weighted match rate	95	93
O'Muircheartaigh, English, & Eckman	2007	Set of segments, all HUs	"Best" list	Match rate	81	
Kennel & Li	2009	Total U.S. HUs	Census MAF	Match rate	88.6	
Kennel & Li	2009	Representative sample areas	Census MAF	Match rate	91	
Kennel & Li	2009	Representative sample areas	Sample ground canvassing	Match rate 1	82.5	
Kennel & Li	2009	Representative sample areas	Sample ground canvassing	Match rate 2	89.5	
Iannacchione et al.	2010	Noninstitutional sample HUs in 200 segments	Traditional listings		71.6	
Iannacchione et al.	2010	Noninstitutional sample HUs in 200 segments	Traditional listings		78.5	
Shook-Sa, McMichael, Ridenhour, & Iannacchione	2010	Screened and eligible DUs in 200 segments	Screened and eligible DUs		89.6	
Shore, Montaquila, & Hsu	2010	HUs in segments in 7 PSUs for the NCS	Field listings	Match rate	84	
Harter et al.	2011	All HUs in 10 urban segments and 10 rural segments	Traditional listings	Match rate		45
Harter et al.	2011	All HUs in 10 urban segments and 10 rural segments	Traditional listings	Net coverage		55.3

See notes at end of table.

(continued)

**Table 4.1 Summary of ABS Frame Coverage Rate Estimates, by Publication (continued)**

Authors	Year	Target Population	Control Total	Measure <sup>1</sup>	Overall Estimate, %	Rural Estimate, %
Shook-Sa, Currihan, McMichael, & Iannacchione	2013	Subsample of NSDUH HUs	Completed subsample HUs	Match rate	93.2	72.8
Shook-Sa et al.	2013	Subsample of NSDUH HUs	Completed subsample HUs	Match rate	93.2	76.6
Eckman & English	2012a	Number of HUs that should be on the frame	2010 Census HU count	Net coverage	92.3	

ABS = address-based sampling; DU = dwelling unit; GQ = group quarter; HU = housing unit; MAF = Master Address File; NCS = National Children's Study; NSDUH = National Survey on Drug Use and Health; PSU = primary sampling unit.

<sup>1</sup> The match rate is the proportion of addresses on the ABS frame that matched to an address on the control frame.

Even if the overall coverage of the ABS frame is near 100 percent, the coverage rate for a given sample of segments could be significantly lower. [Table 4.1](#) shows that many of the segment-based estimates (Harter et al., 2011; Iannacchione et al., 2007, 2010; Kennel & Li, 2009; O'Muircheartaigh et al., 2002, 2006, 2007; Shore et al., 2010) are lower than the estimates for the total United States. This is due to geocoding error (Section 4.5.1). The smaller the geography of a segment, the greater the risk of coverage error due to geocoding error.

For NSDUH, the emphasis is on segment-level coverage because it is at the segment level that DU-level sampling frames are created. Researchers have demonstrated that segment coverage rates can vary considerably, even within the same primary sampling unit (PSU). [Table 4.2](#) illustrates this point in the last column, where net coverage rates and match rates for segments in any one row can cover a wide range. Thus, the national coverage rate is less important for the NSDUH than the method used to calculate segment-level coverage (Section 4.3) or the method to determine where to list, enhance, or use the ABS frame (Section 4.7).

**Table 4.2 ABS Frame Coverage and Net Coverage Estimates for Individual Segments**

Authors	Year	Target Population	Control Total	Measure <sup>1</sup>	Match Rates or Net Coverage Rates for Individual Segments, %
Dohrmann, Han, & Mohadjer	2007	Residential addresses in SSUs in 6 counties	Field listings	Match rate	74.9 to 99.8
Dohrmann et al.	2007	Residential addresses in 2 areas with GQs			97.2 and 99.1
English, O'Muircheartaigh, Dekker, Latterner, & Eckman	2009	HUs that should have been listed in 17 segments in Waukesha, Wisconsin	Field-verified lists (best), includes new construction and chronically vacant HUs	Match rate	89 to 92
Montaquila, Hsu, Brick, English, & O'Muircheartaigh	2009	Segments in 7 PSUs for the NCS	Field listings	Net coverage rates, match rates	26 to 130
Montaquila et al.	2009	Segments in 7 PSUs for the NCS	Census	Net coverage rates	26 to 826
Montaquila et al.	2009	Segments in 7 PSUs for the NCS	Unknown	Match rates	50 to 94

ABS = address-based sampling; GQ = group quarter; HU = housing unit; NCS = National Children's Study; PSU = primary sampling unit; SSU = second stage unit.

<sup>1</sup> The match rate is the proportion of addresses on the ABS frame that matched to an address on the control frame.

### 4.3 What Is the Best Method to Assess the Segment-Level Coverage Rate?

To date, no comparative research on the coverage estimation methods has been conducted. Three primary decisions need to be made when designing a method:

- Which statistical technique (ratio vs. model) should be used to estimate coverage?
- If using a model, what type of model should be used and with what covariates?
- What dataset will serve as the source of the population estimate?

The options for each of these decisions are outlined below, but additional research that compares the accuracy, cost, fit-for-purpose, and availability of the various options is needed prior to identifying the optimal methodology.

Two primary statistical techniques are available to predict segment-level coverage—ratios and models. For the ratio method, the frame count of the DUs is divided by an estimate of the true DU count for an area, producing an estimate of the net coverage rate (Section 4.1). However, the net coverage rate can be deceiving. A net coverage ratio of 100 percent can mask significant undercoverage and overcoverage. Even so, the net coverage ratio is extremely quick and easy to compute with data available at the beginning of the study. It is easy to adjust ratio thresholds (Section 4.7) for cost considerations, and often ratios are at least a first step in evaluating segment-level coverage.

Models have also been used to predict coverage. Montaquila, Hsu, and Brick (2011) and Hsu, Montaquila, and Brick (2010) used a linear regression model, whereas English, Bilgen, and Fiorio (2012a) used logistic regression. O'Muircheartaigh et al. (2007) and O'Muircheartaigh, English, Latterner, Eckman, and Dekker (2009) used decision tree models to divide segments into categories of coverage rates. O'Muircheartaigh et al. (2009) also estimated overcoverage by a similar modeling process, so that gross coverage error rates and net coverage error rates could be computed, if desired. The purpose of some models was to estimate the coverage rate, whereas other models were developed to cluster cases with similar coverage rates so that the appropriate frame-construction method could be applied. For NSDUH, options include (1) collecting the same auxiliary variables and assuming that the authors' models are applicable for the NSDUH or (2) fitting a NSDUH-specific model based on the auxiliary variables available to NSDUH. The validity of either approach would require thorough testing prior to adoption and periodic validation to ensure that the accuracy of the models do not change over time.

Model-fitting requires that model inputs be available for all segment and a coverage estimate (the model dependent variable) be available for a sample of segments. The model would be fit using the segments for which a coverage estimate was available. The coefficients derived from the model would then be used to predict coverage for the remaining segments. Typically, these coverage estimates are match rates—the proportion of addresses on the ABS frame that match to addresses from existing field listings. Although much of the literature estimates coverage retrospectively through match rates, the goal is to predict coverage for segments that have not yet been listed—hence, the models.

Models require an assortment of auxiliary variables as covariates. The auxiliary variables might come from decennial census or American Community Survey (ACS) data on the segment geographical areas, or they could be derived from other federal data related to the geographies. Such variables include segment area in square miles, number of blocks, population density, socioeconomic status, and racial/ethnic population proportions. Auxiliary variables might come from the ABS frame itself, such as the proportion of city-style addresses in the segment. The ratio estimate of net coverage, previously described, is a popular and useful auxiliary variable. Shook-Sa et al. (2010) tried using block and address-level variables as model covariates. To be useful in production, the auxiliary variables should be available for the sample segments prior to determining how the sample frame in the segment will be constructed. Additionally, the same variables, calculated in the same ways, should be available across time so that comparable model-based coverage estimates can be constructed across time.

Because a standardized set of covariates that apply to any segment in the nation to determine coverage has yet to be developed, models require time and effort to determine a set of significant covariates that adequately explain the variations in the coverage rates and that adequately predict the coverage rates of an independent set of segments. Even if a model is set for a given survey, the frame evolves over time (Section 4.4.4), and the models should be evaluated periodically and updated as needed.

Both net coverage ratios and coverage models require control totals, which are estimates of the true DU count in the segments. Dohrmann et al. (2006), Montaquila et al. (2009), and Eckman and English (2012a) used decennial census counts. Alternatively, 5-year ACS counts have been used for projects with larger segments, such as the 2015 Residential Energy Consumption Survey (RECS). If the geography is a major metropolitan area or the total United States, then the American Housing Survey (AHS) could be used. Staab and Iannacchione (2003) purchased counts from Claritas as a substitute for aging census counts. For retrospective match rates used in evaluations and models, Dohrmann et al. (2007), English et al. (2009), Harter et al. (2011), Montaquila et al. (2009), O'Muircheartaigh et al. (2002, 2006, 2007), and Shore et al. (2010) used prior field enumerations (FEs) or field-enhanced frames. Shook-Sa et al. (2010, 2013) and Iannacchione et al. (2010) used a subsample of screened NSDUH HUs for research only.

The estimates of true totals are also subject to error. Federal statistics will always be at least somewhat dated by the time they are available. Claritas' methodology is considered proprietary and cannot be evaluated. Also, it should be noted that FE is subject to coverage errors as well. Eckman and Kreuter (2013) indicated that FE undercovers 13.6 percent of HUs, and Cunningham, Hunter, Justin, Morton, and Stolzenberg (2006) estimated that FE had a 4.9 percent undercoverage rate for NSDUH-eligible DUs, primarily due to errors with the path of travel, invisible segment boundaries, complex numbering systems, DUs on street corners, and incomplete address information in rural areas. O'Muircheartaigh et al. (2009, p. 6194) stated, "The USPS [U.S. Postal Service]-derived list was a more effective representation of reality than the traditional list in most cases."

The choice of estimate for the "truth" can get into some subtleties. Is the frame trying to cover the population of eligible DUs (e.g., occupied HUs) or the set of all DUs that would have been listed? FE often intentionally includes vacant and partially constructed HUs to maximize



coverage, even though some will be out of scope at the time of screening and interviewing. Prior field listings for the sample segments are rarely available, so the comparable issue for other sources is whether to use total HUs or occupied HUs (households). Total HUs are expected to be closer to field listing counts, and occupied HUs are expected to be closer to the set of HUs eligible for the study. The choice depends on the purpose, and the rates will be noticeably different. For a set of urban and rural segments, for example, Iannacchione et al. (2007) estimated net coverage rates as 82 percent of all HUs and 95 percent of occupied HUs.<sup>15</sup>

Another factor is that prior field listings can include GQs in DU counts, but other sources are more likely to have HU counts without GQs. Dohrmann et al. (2006) estimated net coverage in a set of urban/suburban segments as 99 percent without GQs and 79 percent with GQs.<sup>16</sup>

When field-listed addresses are available, matching with ABS addresses is surprisingly difficult. (It helps to first standardize the field listing addresses into standard USPS format. A service such as MailListCleaner™ can often clean an uploaded file in minutes, or the USPS can clean the file in weeks.) When low match rates are accompanied by high overcoverage, the likely problem is difficulty in matching; in this case, the match rate may understate the true coverage of the frame.

## 4.4 Under What Circumstances Does Coverage Vary?

When the same methods are used, the same set of addresses are included in the ABS frame, and the same control totals are used, coverage estimates for the same geography can still vary for a number of reasons, as discussed in this section.

### 4.4.1 Vendor

Vendors who base their frames on USPS sources have either a Computerized Delivery Sequence file (CDS) license or a Delivery Sequence File Second Generation (DSF<sup>2</sup>) license (AAPOR, 2016). Under a CDS license, a vendor must demonstrate that it "owns" a given ZIP Code. A vendor is said to "own" a ZIP Code if it already has address records for 90 to 110 percent of mailing address points in that ZIP Code. Once confirmed, the USPS will standardize the addresses that the vendor has and supplement it with any addresses on the USPS's CDS that are not on the vendor's list. A vendor may be missing all or most addresses in ZIP Codes for which sufficient coverage requirements have not been met and the CDS is not accessible to the vendor, but such ZIP Codes are rare. McMichael (2015) compared an ABS frame obtained through a CDS-licensed vendor, Compact Information Systems [CIS],<sup>17</sup> with other USPS products by ZIP Code and concluded that the ABS frame has 93.1 percent of all U.S. ZIP Codes. The frame is missing (1) 762 ZIP Codes that correspond to individual businesses, governments, or universities, and (2) 2,052 primarily business ZIP Codes that have 8,052 potential residential addresses, 2,889 of which are likely to be active addresses. In other words, the HU coverage error due to missing ZIP Codes was less than 0.01 percent of all residential

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<sup>15</sup> The net coverage rate was calculated as the number of active and locatable mailing addresses on the ABS frame divided by the total number of housing units or occupied housing units found in the 2006 ACS, respectively.

<sup>16</sup> The net coverage rate was calculated as the percent of addresses found on the ABS frame that could be matched to the field enumerated frame.

<sup>17</sup> Only two vendors, Valassis (formerly ADVO) and CIS, have national CDS licenses (McMichael, 2015).

addresses. Dohrmann et al. (2006) found very little difference in frame files from Valassis and CIS after deduplication and other frame preparations.

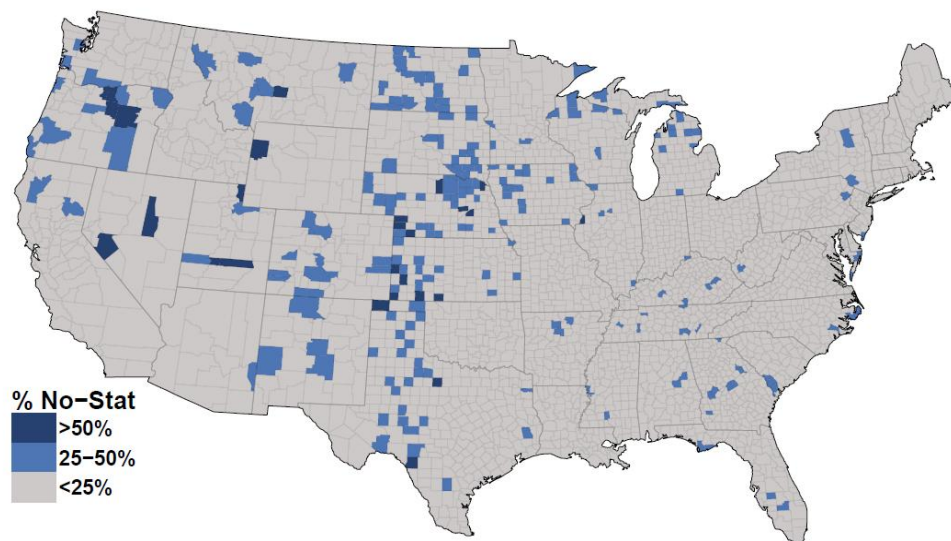
Although no research has been conducted to compare CDS- and DSF<sup>2</sup>-based frames, frames obtained through CDS licenses are considered better than those acquired through DSF<sup>2</sup> licenses. Under a DSF<sup>2</sup> license, the USPS will standardize (e.g., change "St" to "Street") addresses provided from the vendor, but it will not supplement the list with any missing addresses.

Vendor lists might also differ in the frequency of updates, method of deduplication, and whether the vendor supplements the frame with addresses from other sources (AAPOR, 2016). As long as the main vendors update their files with reasonable frequency, the impact should be very minor.

#### 4.4.2 USPS Supplemental Files

Coverage of the standard ABS frame acquired through a CDS or DSF<sup>2</sup> license can be altered by supplementing the frame with additional data sources. The USPS also has a companion No-Stat file primarily composed of addresses that do not receive mail delivery (e.g., new construction). Shook-Sa et al. (2013) found that including all No-Stat addresses in rural areas except drop units (Section 4.4.5) increased coverage in those areas by about 3.8 percent but introduced inefficiency by adding many inactive addresses. They also found that by adding only active No-Stat addresses to the rural areas, coverage in those areas improved by about 2.2 percent with no apparent loss of efficiency. As shown in [Figure 4.2](#), which first appeared in Shook-Sa et al. (2013), significant portions of locatable addresses for some counties are in the No-Stat file.

**Figure 4.2 Percentage of Locatable Addresses from No-Stat File, by County**



Martin and Loudermilk (2008) suggested the possibility of improving coverage by including addresses that appeared on the residential file or a USPS update at least once in the past 12 months, which might add some temporarily inactive addresses.

#### **4.4.3 Urbanicity**

Several studies have noted that coverage is far better in urban and suburban areas than in rural areas (e.g., Dohrmann et al., 2006; O'Muircheartaigh et al., 2002; Staab & Iannacchione, 2003). Historically, rural areas had a higher rate of post office boxes and other unlocatable addresses.

However, it is not the case that all urban areas are suitably covered and all rural areas are not. Dohrmann and Sigman (2013, p. 2) noted

Montaquila et al. (2009) found that although coverage rates were generally higher in urban areas, there was variation in coverage rates at the segment level within PSUs, even in very urban PSUs. This variation is such that the USPS-based lists may appear to provide near-complete coverage of some segments and inadequate coverage of others within the same PSU.

Dohrmann and Sigman (2013, p. 8) also stated, "It was our belief that urban differences are primarily due to census-geography geocoding errors whereas rural differences are primarily due to ABS undercoverage." These variations may also be affected by the address type cited in Section 4.4.5.

#### **4.4.4 Time**

As discussed in Section 4.4.3, coverage has been more problematic in rural areas, particularly in areas that do not have home delivery of mail (Staab & Iannacchione, 2003). Several authors noted that coverage in rural areas is improving as rural route boxes, post office boxes, and other unlocatable addresses are converting to city-style addresses to assist 911 emergency services. O'Muircheartaigh et al. (2009) found that coverage of frames in rural areas was getting better, at least in the 2003 to 2007 time frame, and that some rural areas were ready for ABS. However, a more current evaluation of coverage in rural areas may be needed to determine whether the frames now have sufficient coverage in most places.

Unangst and McMichael (2015) studied quarterly changes in the ABS frame over nine quarters from October 2012 through October 2014. The ABS frame grew throughout, primarily adding city-style addresses that replaced highway contract and rural route addresses as well as accounted for new housing growth.

#### **4.4.5 Address Type**

In addition to the address, the full ABS frame includes several additional variables that offer additional information on the address. Sampling statisticians may use these variables to further exclude duplicate, unusable, or out-of-scope addresses prior to sample selection.

Virtually all studies exclude post office boxes that are not an HU's only way to receive mail. Individuals with post office boxes that are not flagged as the only way to get mail may be sampled both through their post office box and their street address, doubling their probability of selection. Excluding post office boxes removes multiple chances of selection for those HUs.

Most in-person surveys that are based on geographical segments will exclude addresses that cannot be geocoded (latitude and longitude attached) and located because it is unknown in advance whether the addresses are inside or outside the segments. Often, that means limiting the frame to city-style addresses (those with a street number and name, city name, state abbreviation or name, and ZIP Code) and excluding post office boxes, even those that are an HU's only way to receive mail (approximately 1 percent of households have post office boxes only), rural route boxes, and highway contractor boxes. Nationally, 98.8 percent of deduplicated HUs in an ABS frame have city-style addresses (McMichael, 2017). (The fact that addresses may be geocoded to the wrong block is a separate issue, as discussed in Section 4.5.1.)

A frame variable also identifies drop points, which are mail receptacles that serve multiple HUs without unit numbers. Typically, the mail is distributed among the HUs by someone responsible for mail for the entire building or complex. If the number of drop units at the drop point is known, the frame could have a record for each unit, assuming the field interviewer (FI) can use a path of travel to list or at least distinguish among the units. Alternatively, AAPOR (2016) suggested interviewing all units at a selected drop point. For mail surveys or advance letters, however, the drop points may have to be excluded because the survey has no control over which unit(s) receive(s) the mail. Drop points are especially problematic in large, older cities, such as Boston, Chicago, New York City, and Philadelphia (Amaya, 2017). In Queen's County, New York, for example, drop units account for 27 percent of all HU addresses in an ABS frame (McMichael, 2017).

The address files contain flags for urban HUs that have been vacant for 90 days or more and for seasonal and educational HUs. Seasonal addresses are addresses that the USPS believes are consistently vacant for 3 or more months out of the year. Educational HUs are those that have high turnover in the names associated with the address. These addresses are typically vacant in the summer and are generally found near college and universities. Vacant and seasonal HUs are often ineligible for a study, so excluding them might save costs. However, researchers have found that these flag variables are not necessarily reliable. For example, vacancy status can change quickly. Unangst and McMichael (2015) found that 23 percent of addresses flagged as vacant were occupied a year later. Harter (2016) summarized the confirmed inaccuracy rates of vacancy flags as evaluated by other researchers and shown in [Table 4.3](#); these rates are lower bounds on the true inaccuracy rates. The resulting coverage and efficiency trade-off for inaccurate flags makes the use of such flags risky.

**Table 4.3 Inaccuracy of USPS Vacancy Flag for Current Vacancy Status**

Source	Percentage of Sample HUs Flagged as Vacant	Percentage of Flagged HUs Confirmed Occupied	Percentage of Not Flagged HUs Deemed Vacant or Returned Undeliverable
Amaya, LeClere, Florio, & English (2014)	6.5	9	8
Kali, Sigman, Ren, & Jones (2014)	< 3	40	--
Wiant, McMichael, Murphy, Morton, & Waggy (2016)	3	20	4

HU = housing unit; USPS = U.S. Postal Service.

## 4.5 What Types of Dwelling Units Are Undercovered?

Generally, ABS frames include only residential or primarily residential addresses. Therefore, addresses that are primarily businesses but may include some HUs are excluded. Of particular interest to NSDUH, college dormitories and other DUs that receive mail through a college or university address with its own ZIP Code are not included on the residential frame (McMichael, 2015).

ABS frames do not include simplified addresses that have just a city, state, and ZIP Code. Otherwise, undercovered units tend to fall into one of the categories described in the following sections: unlocatable addresses, incorrectly geocoded addresses, group quarters (GQs), American Indian or Alaska Native (AIAN) tribal areas, certain structure types such as trailers, and frame errors.

### 4.5.1 Unlocatable Addresses and Geocoding Error

Dohrmann, Kalton, Montaquila, Good, and Berlin (2012) and Eckman and English (2012a, 2012b) described the geocoding process. Addresses are matched to a database of street segments for which address ranges and geocodes are available. The specific street address is interpolated within the street segment. Then block geographies are overlaid so that the HU geocodes are included within a block's set of geographic boundaries. The geocodes may not be exactly right, and the block overlay may be offset slightly, so that an HU may even be on the wrong side of the street. Usually, the assumption is that the address can be geocoded to the correct block, which is the critical objective. If the address cannot be assigned to a street segment, then the process defaults to the centroid of the ZIP+4 of the address, the ZIP+2, or the centroid of the ZIP Code, which may or may not be within the sample segment. The ability to use the less precise geocodes is why more addresses can be geocoded to larger segments than to smaller segments. For example, segments defined by tracts will have fewer geocoding errors than segments defined by individual blocks. The inability to geocode some addresses to street segments is why segments suffer more geocoding error than larger geographies, and the coverage rates for segments are lower than those for the total United States, states, counties, or ZIP Codes. While larger segments improve geocoding accuracy, they also affect field operations such as increasing travel costs within segments.

Some addresses such as post office boxes and rural route boxes cannot be geocoded and are intentionally excluded from segment frames for in-person interviewing, contributing to undercoverage. Some vendor frames do not include simplified addresses, another form of

unlocatable addresses. Dorhmann et al. (2006, 2007) estimated that 15 percent of rural addresses and about 0.2 to 4.9 percent of urban and suburban addresses were not geocodable. Because rural areas have been converting to city-style addresses for emergency 911 services, the geocodable rate should currently be higher and continue to increase. The locatable rate should be approximately the same as the percentage of city-style addresses, which currently is 98.8 percent (McMichael, 2017).

Even among addresses that can be geocoded, error may occur, resulting in incorrect inclusion or exclusion from the segment. Eckman and English (2012a) estimated that 16.7 percent of ABS addresses could not be geocoded to the correct street segment or block. For nonmetropolitan addresses, 45.1 percent could not be geocoded to the street segment or block. Among city-style addresses, 6.1 percent could not be geocoded to that level. These findings were similar to those of the NSDUH MLFS cited in Iannacchione et al. (2012) and Shook-Sa et al. (2010) (Table 4.4). City-style address conversion and larger sample segments, such as census block groups, should reduce geocoding error and minimize its effect on coverage. However, even if the address can be geocoded to the right segment, there may still be differences between the geocoded location and the ground truth, requiring the interviewer to "hunt" for the selected address (see Section 6.5 for more details).

**Table 4.4 Cumulative Level of Geocoding Accuracy, by Urbanicity Level of Accuracy**

Segment Type	Overall		Urban Segments		Rural Segments	
	Number	Weighted Percent	Number	Weighted Percent	Number	Weighted Percent
Segment	2,689	89.9	2,273	92.5	416	76.6
Census Block Group	3,186	99.3	2,605	99.8	581	96.5
Census Tract	3,226	99.9	2,619	100.0	607	99.8
County	3,229	100.0	2,619	100.0	610	100.0

Adapted from Table 2 of Shook-Sa et al 2010.

In addition to urbanicity, geocoding error has also been found to be associated with high-rise carrier routes, multifamily buildings, and irregularly shaped segments (i.e., non-rectangular segments) (O'Muircheartaigh et al., 2006; Zandbergen, 2011). An urban/rural indicator and segment square miles could easily be added to an ABS frame for NSDUH. The ABS frame has high-rise carrier routes and multifamily building indicators, but if these addresses are undercovered, they may or may not adequately indicate a problem segment. At this point, the only way to identify irregularly shaped segments is by manual review.

Geocoding error is also dependent on the quality of the underlying georeferencing database (if used) and geocoding method (Zandbergen, 2011).

#### **4.5.2 Group Quarters**

ABS frames generally include addresses that are residential or primarily residential, which would exclude some of the GQs. Many GQs, such as group homes, halfway houses, and fraternity/sorority houses, are in traditional HU stock and are included in the residential address frames. GQs such as dormitories and shelters generally are not in the residential ABS frame because they are listed as businesses, delivered offsite to a central repository, or are not delivered

by the USPS (Dohrmann et al., 2006). For example, many universities have their own mail delivery infrastructure. Mail is delivered to the university's postal service department and sorted and delivered there. As a result, the final delivery point is not on the CDS.

Most ABS researchers do not need to address the GQ issue because GQs are out of scope for their studies, but this is a concern for NSDUH. Currently for NSDUH, GQs are routinely listed in the field along with HUs. In 2017, a total of 18,429 GQs were listed (0.4 percent of the total frame). Although only a small portion of the entire sample, exclusion or underrepresentation on the ABS frame introduces a risk of coverage bias especially for those populations covered by the GQs, e.g., college students. As part of the 2017 NSDUH coverage bias analysis (Section 2.3), a subset of 2015-2016 respondents that excluded GQs (among other addresses unlikely to be found on the CDS) was compared to the full set of 2015-2016 respondents. By excluding GQs, it was expected that the subsample would disproportionately exclude full-time college students who often live in dormitories. Among full-time college students aged 18 to 22, 10 percent of prevalence estimates constructed from the subsample were significantly different from the full sample. This was in line with the overall proportion of estimates that were found to significantly differ across all domains and suggests that the exclusion of GQs may not be large enough to introduce large amounts of coverage bias among full time college students (see Appendix A for more information on the analyses and results).

GQs complicate the control totals for coverage estimates and the frame construction. Although census population estimates include persons living in GQs, census HU estimates do not include GQs. The Census Bureau commissioned a study by the National Research Council (2012) to recommend ways of improving GQ population estimates for substate geographies in the ACS; with an inadequate sample of GQs, many total population estimates in ACS substate areas were suspect, especially small counties with relatively large GQ populations. The National Academies of Sciences, Engineering, and Medicine (2016) followed up with ideas for tailoring the ACS for GQ respondents in its workshop for reducing ACS respondent burden.

Iannacchione et al. (2010) recommended treating segments with known GQs separately from other segments in deciding whether to use an ABS frame. In fact, Iannacchione et al. (2012) recommended assigning segments with concentrations of GQ populations to FE rather than ABS as much as possible. Identification of such segments is best done with decennial census data.

Although not inclusive of all types of GQ, the Integrated Postsecondary Education Data System (IPEDS) database includes a list of higher education institutions. Since 2016, the National Health Interview Survey has geocoded the IPEDS database to identify higher education institutions that fall into its sample segments. Institutions are contacted via telephone and asked to provide a list of dormitories. The resulting list is added to the frame prior to sample selection. However, the National Center for Health Statistics will no longer implement this method in 2018 due to high costs and difficulty screening within GQs (see Section 3.1 for additional details).

If GQs are discovered in the interviewing stage, they currently are handled by the "bust" procedure if the number of units in the GQ is 50 or more (Center for Behavioral Health Statistics and Quality, 2017). That is, interviewers create a list and send to the sampling statisticians to add to the frame and sample. Smaller GQs that are found are not added to the sample. This same rule



could apply with an ABS frame, if deemed appropriate, but more GQs will be found because they tend to be absent from the ABS frame. More research is needed to understand the extent of the undercoverage issue for GQs for an ABS only frame and how accurately segments with GQs can be identified so they may be assigned to FE.

#### **4.5.3 American Indian and Alaska Native (AIAN) Tribal Areas**

According to Dohrmann and Sigman (2013, p. 2), "Many researchers agree that in some very rural PSUs, such as those containing American Indian reservations, USPS mail delivery is not pervasive enough for ABS to be effective." The ABS frame includes only addresses to which the USPS delivers. Several AIAN tribal areas have their own mail delivery infrastructure. As a result, the USPS does not deliver to these areas, and addresses on many reservations are not included in the frame. The literature does not show that a flag for the presence of a reservation or the percentage of the AIAN population in a segment has been used as an auxiliary variable in modeling coverage, but it would be worth testing such a variable. Currently, NSDUH segments in AIAN tribal areas are identified following data collection for analysis purposes, but this activity could be performed prior to frame construction. Although an AIAN variable is available at the block level, the segment-level indicator is based on the majority of blocks in a segment.

#### **4.5.4 Building Characteristics**

Certain types of HUs are more likely to be omitted from an ABS frame than others. New construction may not be on the frame yet. Unangst and McMichael (2015) found that nearly half of new construction addresses on the No-Stat file transferred to the CDS-based frame within a year.

Temporary trailer homes, conversions from businesses, illegal apartments, apartments without separate street numbers, informal housing, units in multiunit buildings, and coach houses also are more prone to be undercovered (O'Muircheartaigh et al., 2007). Kennel and Li (2009) confirmed that 30 to 40 percent of mobile homes are not covered. The 2018 NSDUH's counting and listing manual (RTI International, 2017) covers these situations for FE, so the current NSDUH frame may not have a problem with these types of units. However, there is no easy way to verify that.

Long-term vacant and rural vacant HUs may be on the No-Stat file rather than on the primary ABS frame. Shore et al. (2010) found that 21.8 percent of HUs on traditional field lists but not on the ABS frame were ineligible (almost half of which were vacant), whereas only 3.7 percent of ABS-covered HUs were ineligible (more than half vacant). The implication is that coverage of the eligible population (occupied HUs) is better than the apparent coverage of all HUs.

#### **4.5.5 Frame Errors**

Anecdotal evidence from ABS researchers suggests that frame errors are present and could affect coverage. For example, a revamped apartment building that changes street addresses may be on the frame twice under both old and new addresses. Also, a drop point may not have the exact number of drop units indicated. Errors of this type affect the counts in the net coverage



ratios and the number of records in the frame. More research is needed to determine the extent and impact of frame errors.

The Census Bureau, which receives updates directly from the USPS rather than from vendors, has examined discrepancies between USPS records and the Census Bureau's address canvassing operations. This research was used to help determine which addresses from the USPS to include in their ABS frames and other ways to improve the effectiveness of the USPS records (Martin & Loudermilk, 2008; Tomaszewski & Shaw, 2013; Ying, 2012).

#### **4.6 What Is the Best Method to Enhance the Coverage Rate for Housing Units? For Group Quarters?**

At this time, the answers to these questions are unknown, but, with further investigation, it may be possible to identify both a best and sufficient method for NSDUH. For these purposes, "best" is defined as the method that can be implemented most reliably, most accurately, least costly, and with the least impact on NSDUH field staff. A "sufficient" method is one that is reliable and accurate enough to prevent an unacceptable shift in the NSDUH's key estimates, results in a significant cost savings, and has minimal impact on field staff retention and job satisfaction.

To date, three primary methods have been developed to enhance coverage of an ABS frame: enhanced listing, Check for Housing Units Missed (CHUM), and address coverage enhancement (ACE). Below is a summary of each approach followed by a comparison.

##### **4.6.1 Enhanced Listing (Also Known as "Dependent Listing")**

Addresses from the ABS frame are geocoded, and those that geocode into the sampled segment are provided to the lister. In the field, the lister traverses the segment in the prescribed path of travel, checking to see whether each HU encountered is on the ABS frame. If not, the HU is added to the frame. If an address on the list does not correspond to any HU on the ground in the segment, the address is removed from the frame. Once the lister has completed his or her task, the updated list of addresses is sent back to the central office, and a sample is drawn (English, Dekker, & O'Muircheartaigh, 2013). Enhanced listing occurs as a separate procedure, prior to sampling and data collection.

##### **4.6.2 Check for Housing Units Missed (CHUM)**

In the first of two components (referred to as CHUM1 and CHUM2), the area after a selected HU is searched in the prescribed path of travel. The search continues until either another HU on the ABS frame for that block is encountered or the entire block is searched. In the second component, sample segment blocks with no residential addresses on the ABS frame are randomly selected and listed (Shook-Sa, Harter, McMichael, Ridenhour, & Dever, 2016). In both CHUM1 and CHUM2, these procedures are implemented during data collection. The CHUM procedures were applied in the Mailing List Field Studies (MLFS I and MLFS II) and are described in more detail in Section 2.2.

### 4.6.3 Address Coverage Enhancement (ACE) (Also Known as the "Coverage Enhancement Procedure [CEP]")

All addresses are geocoded into mutually exclusive geographical segments, including traditionally unlocatable addresses (e.g., simplified addresses or post office boxes) that are geocoded to the ZIP+4 or ZIP centroid. Segments and DUs are sampled, and a rule is created to determine where frame enhancement occurs. For example, the rule may be as follows: "If the northwestern most HU in the geographical segment is sampled, then frame enhancement will be implemented in this segment. If it is not sampled, then no frame enhancement will occur in that segment." The rule is set based on the estimated measure of size across all segments and the desired variability among the sampling weights (Kalton, Kali, & Sigman, 2014).

If the rule is enacted (i.e., the predetermined unit is sampled), then the lister is sent out with a map of the geographic boundary (blue line in [Figure 4.3](#)) and the list of addresses geocoded into the geographic boundary (HUs with red or blue dots). Listers are instructed to find and confirm all addresses on the provided list, regardless of the boundary. Additionally, they are required to identify all addresses within the geographic boundary that are not already on the list (all HUs with an "X"). Once the list has been completed, the listers send the updated list of addresses back to the central office. Lister-added addresses that are found on the ABS frame and were geocoded elsewhere are excluded (empty "X"), but all lister-added addresses that were not on the ABS frame (filled "X") are included and sampled for interviewing (Dohrmann et al., 2012).

**Figure 4.3 Illustration of the ACE Procedure**



Source: This figure first appeared in a Joint Statistical Meeting paper by Dohrmann et al. (2012).

### 4.6.4 Frame Enhancement Methods Comparison

All three methods have their strengths and weaknesses that are briefly summarized in [Table 4.5](#).<sup>18</sup> Although some research on the validity and reliability of each has been conducted,

<sup>18</sup> Regardless of technique, frame enhancement is conducted only in segments for which the coverage rate is estimated to be below a predefined acceptable limit. More information on best practices for defining this limit can be found in Section 4.7.

no comprehensive evaluation of any method has been completed. More importantly, comparisons across methods have yet to be quantified. Until such comparative research is conducted, the choice of a "best method" is not clear.

**Table 4.5 Comparing and Contrasting ABS Coverage Supplementation Methods**

Constraints and Considerations	Coverage Supplementation Method		
	Enhanced Listing	CHUM	ACE
Cost comparison?	Less than traditional FE, but still searches entire segments	Less than enhanced listing and probably comparable with ACE	Less than enhanced listing and probably comparable with CHUM
Control of sample size?	Sample size not affected	Less control over sample size with added units	Less control over sample size with added units
Size of segments? (CBG vs. CB)	Geographically larger segments directly increase cost	Size less relevant because not searching the entire segment	Geographically larger segments directly increase cost, unless number of ACE segments compensates
Definition of segments?	Based on census geographies and HUs that actually are located within them	Based on census geographies and HUs that actually are located within them	Area segments based on census geographies, and list segments based on HUs that geocode within the area segments, whether they geocode in the right place or not
Concepts for geocoding error?	Geocoding error corrected in selected segments	Geocoding error corrected in search intervals	Geocoding error expected and accepted
Applied to which segments?	Usually limited to segments that do not have extremely high coverage, based on coverage threshold	Usually limited to segments that do not have extremely high or extremely low coverage, based on coverage thresholds	Usually limited to segments that do not have extremely low coverage, based on coverage thresholds
Subsampling of segments?	Possible	Possible	Only segments that meet the rule are enhanced
Design includes very low coverage areas?	Enhanced listing still applies	May revert to traditional FE below a coverage threshold	May revert to traditional FE below a coverage threshold
Blocks with no frame addresses?	Listed if part of sample segment	Chance of selection through CHUM2 if part of sample segment	Searched if part of ACE segment
Timing?	As late as possible before HU selection	After HU selection, either at the time of data collection or just before	After HU selection, either at the time of data collection or just before
Focus of FIs?	Completely separate trip, so focus of interviewers not affected	Could be in a separate trip or during S&I; more focused and less risk of error if scheduled before interviewing starts	Could be in a separate trip or in the data collection trip; more focused and less risk of error if scheduled before interviewing starts
Technology or equipment required?	Computerized (preferred) or paper	Computerized (preferred) or paper	Computerized (preferred) or paper

ACE = address coverage enhancement; CHUM = Check for Housing Units Missed; FE = field enumeration; HU = housing unit.

Note: This table was adapted from Harter and English (2018).

Preliminary information suggests that a revised CHUM procedure may be a sufficient method for frame enhancement on NSDUH. In 2016, Harter, Amaya, Day, Kowalski, and Shook-Sa (2016) performed a review of CHUM, and, based on recommendations from a variety of staff who had experience with CHUM, a series of recommendations were made. These included, but are not limited to, the following: (1) setting the starting point of CHUM2 to an intersection instead of a random point, (2) revising and expanding CHUM training, and (3) enhancing the CHUM listing software to improve usability.

The above methods address DUs in general and may be applied to areas with GQs. Although untested, areas suspected to contain high levels of GQs will be better served under FE or enhanced listing. In both methods, a full list of addresses is obtained prior to sample selection, which allows the sampling statistician to control the probabilities of selection and the sample sizes within a segment. Under CHUM and ACE, enhancement occurs after sample selection. Adding a significant number of units through CHUM or ACE will either increase the sample size within the segment, increasing the intraclass correlations and design effects, or force the sampling statistician to first subsample then introduce variability through the sample selection weights.

#### **4.7 What Thresholds Should Be Used to Determine Where to List, Enhance, and Use the ABS Frame?**

Many studies use coverage or net coverage estimates at the segment level to determine which method of frame construction to use for each segment. The coverage estimates could be produced by *ratios* (Dohrmann et al., 2006; Eckman & English, 2012a; Harter et al., 2011; Montaquila et al., 2009; Staab & Iannacchione, 2003), or *models*, either regression model predictions (Hsu et al., 2010; Montaquila et al., 2011) or model-based decision trees (O'Muircheartaigh et al., 2009). Whereas Section 4.3 discusses these various methods for calculating coverage, this section focuses on how thresholds of the coverage estimates may be set and applied to classify segments into an appropriate frame construction method. To illustrate the threshold concept, consider a design where segment-level frames of HUs are (1) ABS if the net coverage ratio for the segment is greater than or equal to 0.90, (2) ABS supplemented with field searches for segment net coverage ratios between 0.50 and 0.90, and (3) FE listings if the segment net coverage ratio is 0.50 or less. The threshold values in this example are 0.90 and 0.50.

Several factors influence decisions about coverage thresholds because the choice of coverage or net coverage can influence the distribution of values. Factors include the addresses included in the frame, the choice of denominator as "truth" in net coverage ratios, the choice of auxiliary variables and model structure for model-based predictions of coverage, and the relative penalties for misclassifying segments. These factors should be considered in combination when identifying ideal thresholds for NSDUH.

Various researchers tested thresholds and methods for establishing thresholds. English et al. (2012b) used logistic regression models and match rates to determine which segments should use ABS alone as the sampling frame and recommended average segment values as thresholds for various segment characteristics. They concluded that ABS is preferred in segments with the following characteristics:

- The net coverage ratio (ABS/2010 census) is higher than average, where the average net coverage ratio is the threshold.
- There has been above-average growth in housing since 2000, where the average census-to-census ratio is the threshold for that measure.
- The percentage of HUs that are "urban" (according to the 2010 census) is higher than average.

- The percentage of HUs that are Type of Enumeration Area (TEA) 1 (according to the 2010 census) is higher than average.
- The HU density (per square mile) is higher than average.
- The percentage of HUs that are occupied is higher than average.
- The segment is larger in area than average.
- Median household income is higher than average.
- The percentage of the population that is white non-Latino per block is lower than average.
- The percentage of addresses that are in multiunit buildings is higher than average.

Furthermore, they suggested that field enhancement of the ABS list is better than FE in most places, except where the ABS frame has no records; that is, the threshold for number of ABS records is zero or close to zero. This study is unusual in that it suggests multiple tests and multiple thresholds for classifying segments.

Hsu et al. (2010) and Montaquila et al. (2011) tested thresholds of 0.70 and 0.80 with their model to predict match rates to listings (using the same segments used to fit the model). They predicted match rates for each segment used in the model and checked whether the actual match rate was on the same side of the threshold as the prediction. With a threshold of 0.70, all but two segments were predicted on the correct side of the threshold. With 0.80, all but three were correctly classified. Then the model was tested on an independent set of 132 segments—segments not used to estimate the model. (None of the independent segments had GQs). With 0.70 as the threshold, 17 percent were incorrectly classified above the threshold, and 31 percent were incorrectly classified below. With 0.80 as the threshold, 24 percent were incorrectly classified above, and 21 percent were incorrectly classified below. Apparently, the model is not a very reliable way of classifying segments relative to a threshold. Note that the authors treated the net coverage ratio (ABS/census) as a preliminary measure; it did not have as good a correlation with actual match rates as the model-predicted rates did, but the 2000 census was old at that point.

Iannacchione et al. (2010) retroactively tested net coverage thresholds of 20, 50, and 80 percent to separate ABS (plus enhancement) frame construction from FE frames for segments where listing and interviewing had already taken place. The higher the threshold, the better the coverage overall, assuming FE was accurate, but also higher the cost. Having the lower threshold would have missed more sample participants than higher thresholds. Differences in prevalence estimates were small, but even small differences are often statistically significant in NSDUH. The authors advised that thresholds should be reevaluated periodically and that thresholds likely will vary by state.

In their final ABS research report for NSDUH, Iannacchione et al. (2012) stated that net coverage thresholds of 50, 65, or 80 percent would result in 8, 14, or 26 percent, respectively, of segments being assigned to FE. If the No-Stat file is included in the ABS frame to increase coverage, then more segments surpass the threshold, and fewer would be assigned to FE. When the authors compared estimated net coverage to actual coverage (by matching ABS addresses to

FE listings), they found that 9.4 percent of segments were estimated to be on the wrong side of a 50 percent threshold.

AAPOR (2016) stated that coverage thresholds are study specific and that some segments' coverage will be predicted on the wrong side of the thresholds. AAPOR suggested a sensitivity analysis to determine how much bias can be tolerated for a given coverage rate or how much coverage is needed to not exceed a certain bias limit. But FE or enhancement of ABS frames in segments that do not meet the threshold is expensive. Sometimes, budget, schedule, and analytic goals influence the thresholds. Finally, net coverage estimates, by definition, tend to be higher than match rate coverage estimates, which might affect the choice of thresholds.

## **4.8 What Is the Risk of Coverage Bias on NSDUH?**

Research suggests that the risk to national estimates varies, but more analysis would be helpful. Using data from MLFS I, Morton, McMichael, Ridenhour, and Bose (2010) compared key NSDUH outcomes across three frames: FE, ABS frame, and ABS frame with CHUM. Most importantly for this question was the comparison between FE and ABS frame with CHUM. Of the 27 comparisons made between the two frames, three comparisons were statistically significant at the 5 percent level, and an additional three comparisons were significant at the 10 percent level.<sup>19</sup> Even among the significant differences, the magnitude of the difference was small (0.0 to 0.8 percentage points). An additional four comparisons were planned but could not be completed due to insufficient sample sizes.

In the 2017 NSDUH analysis (Section 2.3), two subsamples were created to estimate coverage from the CDS. Fifteen measures were compared across the subsamples and full, field-enumerated sample by a variety of domains and two-way cross domains. Between 9 and 12 percent of comparisons were found to significantly differ between the subsamples and the FE sample. However, some differences were larger than others, and some variables were more or less susceptible to the frame switch. This is relatively consistent with a recent simulation using the 2015 Residential Energy Consumption Survey (RECS) (Amaya, Zimmer, Morton, & Harter, 2018). Some variables, such as the number of adults in the household or whether the householder owned or rented the DU, were relatively unaffected by the CDS coverage rate. Other variables (e.g., race/ethnicity) were at high risk for coverage bias, even when there was only slight undercoverage. The simulation was conducted assuming a national sample and two sub-national samples and found similar results.

In a separate analysis using data from two rural PSUs in the National Children's Study (NCS) Vanguard Study, Shore et al. (2010) found significant differences between addresses on both FE and ABS frames to addresses on only FE frames with respect to the following characteristics: type of DU, interview conducted in English, and Hispanic respondent. The results are not generalizable to all areas; however, they suggest that a coverage enhancement procedure should be used to eliminate coverage bias.

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<sup>19</sup> The variables that were significant at the 5 percent level were being a college graduate, being above 200 percent of the federal poverty threshold, and living in GQs. Variables that reached significance at the 10 percent level were being 100 to 199 percent of the federal poverty threshold, receiving treatment for illicit drugs in the past year, and having a family income of less than \$20,000.

The above analysis may suggest that the risk and magnitude of bias on national estimates is small. However, a few caveats deserve note.

- First, the sample sizes of the MLFS and NCS studies were small, reducing the power and likelihood of identifying significant differences. In the case of the MLFS analysis, only 75 cases were included in the field-enumerated frame that were not found in the ABS frame with CHUM. Although this speaks to high coverage rates of an ABS frame with CHUM, reducing the risk of coverage bias, it also means that the analysis had little ability to predict.
- Second, neither the MLFS nor 2017 NSDUH analyses accounted for hybrid designs currently under consideration. The MLFS analysis assumed that all segments would use an ABS frame with CHUM, which would not be the case. Areas with estimated high coverage would use an ABS-only frame, and areas with low estimated coverage would be field enumerated or enhanced. The MLFS analysis underestimates the potential for differences in high coverage areas. In 2017, all bias analysis assumed an ABS design without enhancement or field enumeration, overestimating the potential for differences in low-coverage areas.
- Finally, the MLFS analysis assumed a fixed coverage rate, which is only applicable at the national level. To the extent that coverage rates vary by subgroup (demographically or geographically), the risk of coverage bias may also vary by subgroup.

Other limitations to the 2017 NSDUH analysis may be found in Appendix A, and additional limitations to the RECS analysis may be found in Amaya et al. (2018). The degree to which these caveats will shift the risk of coverage bias is unknown.

#### **4.9 Can Weighting or Other Postsurvey Adjustment Be Used to Reduce or Eliminate Coverage Bias?**

The literature does not have much to say about weight adjustments for coverage error of ABS frames. Weight adjustments generally account for error due to nonresponse and poststratification to control totals.<sup>20</sup> For another study, P.S. Kott of RTI (personal communication, January 16, 2017) suggested the possibility of a coverage adjustment by frame type. So, for example, consider a scenario in which the ABS and FE frames are available for a representative sample of segments. Under this scenario, the difference between the two could be measured, and the weights of the HUs in the ABS segments could be adjusted to account for coverage error. One might consider adjusting each segment individually based on its expected coverage error, but the effectiveness would depend on how well the expected coverage could be estimated. More research is needed.

#### **4.10 What Is the Best Method and Best Software for Geocoding?**

When using the ABS frame, addresses must be assigned to specific segments, typically defined by census boundaries. Addresses are assigned to the segments through the process of

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<sup>20</sup> Some studies also adjust for eligibility of unknown-eligibility cases, but that is not an issue with NSDUH, where all occupied DUs are assumed to be eligible.



geocoding, usually by first assigning latitude and longitude to each address. Section 4.5.1 discusses the general process of assigning addresses to segments, primarily by matching city-style addresses to street segments and interpolating the address within the range of geocodes corresponding to the segment. This section summarizes some of the ways geocoding can be accomplished. Ultimately, geocoding involves a process and a geospatial database. Because the databases and companies providing data and services continue to evolve, a new review should be conducted based on the latest information.

Some ABS vendors provide geocodes with addresses on their frames. N. English of NORC (personal communication, April 28, 2017) indicated that there is virtually no difference between the Valassis geocodes and the geocodes produced by NORC.<sup>21</sup> Not all vendors use a standard approach to geocoding, however, so it is a good idea to understand the methods used (S. Eckman, personal communication, May 23, 2017).

McMichael, Ridenhour, Keating, and Krotki (2014) noted that geocodes need both *reliability* (repeated measures will obtain approximately the same geocodes) and *accuracy* (repeated measures will center on the correct geocodes). These authors examined the precision and accuracy of three batch geocoding services: TomTom, Arc GIS, and TAMU. They measured the distances from the geocodes of ABS addresses (assuming the Global Positioning System [GPS] devices in the field identified the location of the geocodes) to the actual location of the buildings in the field and summarized the distributions of the results, as shown in [Table 4.6](#). The distributions are highly skewed, indicating that most addresses are reasonably close, but a small proportion of addresses geocoded extremely badly, presumably to the centroid of the ZIP Code. On the basis of these distributions, McMichael et al. (2014) recommended using TomTom, then ArcGIS. Moreover, as technology changes, the performance is likely to change. Comparative research would have to be repeated periodically.

**Table 4.6 Distribution of Distances (in Feet) from Vendors' Address Geocodes to Field Locations**

Geocode Service	Mean	25th Percentile	Median	75th Percentile
TomTom	211	27	47	97
ArcGIS	234	68	99	144
TAMU	646	70	110	255

Note: TomTom is made by TomTom NV, a company based in Amsterdam, Netherlands. ArcGIS was developed by Esri, a company based in Redlands, California. TAMU is made by Texas A&M University in College Station, Texas.

Online tools with satellite imagery or maps of segments may enable a virtual "lister" in the office to place a virtual "pin" on the rooftop of a building corresponding to an address. Such geocodes would be extremely accurate, assuming the pins were placed on the correct structures. However, the imagery may not be current, and the addresses that are not locatable through traditional geocoding probably would not be locatable online either. Dorhmann, Harding, and Li (2008) proposed a digital canvassing operation of this sort. An online system for virtual listing has been developed, as has a batch tool for determining the age of the most recent images for segments (Wheaton, Rineer, Chrest, & Cajka, 2017).

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<sup>21</sup> Geocoding software used by Valassis is unknown. NORC uses MapMaker Plus from Pitney-Bowes.



During FE, listers can capture geocodes with laptops or other GPS-enabled handheld devices. Although FE-collected geocodes will not affect the coverage issue for ABS frames, they may still be useful for FIs. McMichael et al. (2014) indicated that the precision and accuracy of GPS devices are affected by hardware, software, the number of satellites to which the device is visible, atmospheric conditions, and other factors. They determined that 99 percent of GPS coordinates were within 158 feet of the true location, which is sufficient to differentiate most housing structures. In a separate test, De La Rosa (2017) drove with multiple GPS devices through Manhattan to check the consistency of the path of travel and block assignments. He found that 95 percent of the GPS locations to be within 7.5 meters. Outside this range, at least 70 percent of geocoding errors were within 15 meters. All devices displayed some errors; in Manhattan, De La Rosa found errors to be associated with tall buildings and "canyons" between buildings.

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## 5. Sampling

This chapter summarizes how changes to the sample frame and design could affect the survey. Two sampling-related questions are addressed, and areas needing further research are identified.

### 5.1 How Will Changes in the Frame and Sample Design Disrupt the Time Series?

Three primary factors influence whether a switch to a hybrid address-based sampling (ABS) design would affect the time series: (1) changes in coverage bias (Section 4.8), (2) changes in sampling error due to changes in the sampling geographies and the intracluster correlation (Section 5.2), and (3) introduction of new interviewer effects resulting from a change in implementation procedures (Chapter 6).

First, although both field-enumerated and hybrid ABS frames suffer from some undercoverage, they do not undercover the same units. In a study by English et al. (2009), 4 percent of addresses were found on the ABS frame that were not found on the field-enumerated frame, while 7 percent were found on the field-enumerated frame but not on the ABS frame. To the extent that individuals living in uncovered field-enumerated housing units (HUs) are different from those uncovered in ABS HUs, then the extent of coverage bias could change and affect the overall time series.

Second, in order to minimize the risk of geocoding error, the National Survey on Drug Use and Health (NSDUH) could move from sampling census blocks to sampling census block groups. As a result, intracluster correlation would decrease and confidence intervals may shrink for annual estimates. However, an examination of a variety of NSDUH outcomes suggests that the correlation between overlapping samples is low. As a result, this increase in geocoding precision may be offset by the weakening of correlation between overlapping samples and may have little effect on comparisons of estimates over time. The magnitude in the increase in precision and the extent that this increase would change the significance of tests between time points are unknown. Implications of such a change are further discussed in Section 5.2.

Third, a hybrid ABS design may include some frame enhancement. If field interviewers (FIs) are responsible for enhancement implementation, then their duties would increase. Requiring FIs to take on additional tasks could reduce their efficiency on others. For example, they may spend less time practicing their gaining cooperation skills, may make fewer visits to a nonresponding dwelling unit (DU), or generally be distracted by their other responsibilities. To the extent that these changes affect the type of respondents recruited into the sample, then the time series could be disrupted.

Using data from the first of the Mailing List Field Studies (MLFS I), Morton et al. (2010) compared prevalence estimates for a number of key NSDUH outcomes based on the field enumeration (FE) frame with those based on the hybrid ABS frame. Although a few significant differences were identified (see Section 4.8 for details), the magnitude of the differences was small, and the analysis could not distinguish between coverage, sampling, and interviewer

effects. Additional analysis would be necessary to isolate the source of the differences and identify adjustments to the design (e.g., frame enhancement procedures) that may further reduce the risk to the time series.

## **5.2 Would a Hybrid ABS Design Require a Change from Sampling Census Blocks to Block Groups? What Are the Implications of Such a Change?**

Under a hybrid ABS design, census block groups may be preferred in ABS segments and census blocks may be preferred for segments requiring frame enumeration or enhancement. Compared with geocoding at the census block level, geocoding accuracy improves significantly at the census block group level in both rural and urban areas, reducing the risk of overcoverage or undercoverage (Section 4.5.1). In addition, census block groups have less intracluster correlation than census blocks, further enhancing precision for annual estimates. Blocks are ideal for enumerated segments because FE is not affected by geocoding error, and smaller segments make it easier for listers to complete enumeration in a single trip.

Switching to census block group segments would have little if any implication on other aspects of NSDUH. Census block groups already make up one level of the sampling strategy (census tracts are selected within state sampling regions, census block groups are sampled within tracts, and a collection of one or more census blocks are sampled within census block groups), so a change in design would not affect the sampling process. Moreover, in 2014, each completed interview was assigned a census block ID, which was then used to link other geographic information to the record. Because this is done only for completed interviews, this append would still be possible. Interviewers would note the location of the address on a map, this would be translated to a census block number, and additional information could be appended. Although possible regardless of the method used, this procedure would likely be more streamlined and automated if a Global Positioning System (GPS) was embedded into the interviewing device (Section 6.2). Finally, a move to census block group-based segments would increase within segment interviewer travel because sampled DUs would be more dispersed. However, this increase may be small due to the correlation in coverage and urbanicity; segments with sufficient coverage are more likely to be located in urban and suburban areas where census block groups cover geographically small areas.

Although sampling census block groups has many advantages, listing would be cost-prohibitive if the geographic areas are too large. Thus, FE segments would continue to consist of one or more census blocks. This protocol is similar to that used by NORC to construct the NORC National Frame. In the National Frame, tracts are used as segments in urban areas and block groups as segments in rural areas (NORC, n.d.). For variance estimation, both types of segments would be treated the same. That is, there would be no issue defining and using variance replicates when some segments are defined by block groups and others consist of one or more census blocks.

## 6. Logistics

As is evidenced in the previous chapters, changes to the sample frame have several implications on implementation. Survey tasks, and labor hours must be redistributed, and procedures must be altered to account for these changes. This chapter addresses the various ways in which a switch to a hybrid address-based sampling (ABS) design may affect day-to-day operations.

### 6.1 At What Point in Time Should Frame Enhancement Be Implemented?

As discussed in Section 4.6, three primary methods are available for frame enhancement: enhanced listing, CHUM, and ACE. Traditionally, field enhancement occurs prior to frame construction and sample selection, whereas CHUM and ACE are implemented concurrently with screening and interviewing. Given the scale of NSDUH, the ongoing nature of the survey, and lessons learned on previous hybrid ABS surveys, the traditional timing of frame enhancement would need to be reevaluated prior to adoption.

[Table 6.1](#) summarizes the benefits and challenges of three different timings. Under scenario 1, frame enhancement would occur once over the 2-year period that the segment was in the sample and would be implemented at the same time as FE. In scenario 2, frame enhancement would occur before each quarter. Because each segment is sampled in one quarter per year, each segment would require frame enhancement once per year, but enhancement would occur in all quarters.<sup>22</sup> In scenarios 1 and 2, frame enhancement would occur in a separate trip from screening and interviewing whereas in scenario 3, they would be implemented concurrently.

**Table 6.1 Summary of the Benefits and Challenges of Various Timings for Frame Enhancement**

Benefits/ Challenges	Timing of Frame Enhancement		
	Scenario 1: Before S&I of First Year	Scenario 2: Before S&I of Each Quarter	Scenario 3: Concurrently with S&I
Benefits	<ul style="list-style-type: none"> <li>• Most consistent with current listing procedures, so least impact on field operations</li> <li>• Maintains separation between enhancement and S&amp;I, improving ability to track hours and minimizing multitasking which could diminish quality or efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Maintains separation between enhancement and S &amp; I, improving ability to track hours and minimizing multitasking, which could diminish quality or efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminates need for listers</li> <li>• (Likely) most cost-efficient because it eliminates multiple trips</li> </ul>

(continued)

<sup>22</sup> Scenario 2 could be further split into scenarios 2a and 2b. Under scenario 2a, enhancement would be implemented in the last month of the previous quarter (e.g., December field enhancement for quarter 1), whereas it would be implemented 4 months prior to data collection (e.g., September field enhancement for quarter 1) under scenario 2b. Scenario 2b allows more flexibility for field staff and sampling statisticians to minimize the risk of competing tasks or mistakes. All other benefits and challenges would be similar across these two options, so they have been grouped together for this discussion.

**Table 6.1 Summary of the Benefits and Challenges of Various Timings for Frame Enhancement (continued)**

Benefits/ Challenges	Timing of Frame Enhancement		
	Scenario 1: Before S&I of First Year	Scenario 2: Before S&I of Each Quarter	Scenario 3: Concurrently with S&I
Challenges	<ul style="list-style-type: none"> <li>• DUs are not selected 2 years in advance, making CHUM and ACE impossible without adaptation</li> <li>• Not as cost-efficient as scenario 3</li> </ul>	<ul style="list-style-type: none"> <li>• Overstretches workforce because FIs are already busy with refusal conversion and refresher training</li> <li>• Overstretches FSs because they would be required to balance refusal conversion, training, and frame enhancement staffing and quality control</li> <li>• Requires training of all FIs because they do not know what segments will be sampled and require frame enhancement in any given quarter</li> <li>• Requires change in staffing profile because all FIs will need to have listing skills</li> <li>• More expensive than FE or other scenarios in segments that require traveling listers because it entails more trips</li> <li>• Frames across segment types (FE, enhanced, ABS only) will vary because they are being created at different times</li> <li>• Not efficient for enhanced listing compared with scenario 1</li> </ul>	<ul style="list-style-type: none"> <li>• Increases FI workload and requires multitasking, increasing risk of error</li> <li>• Increases FI workload, potentially slowing down S &amp; I production</li> <li>• Requires training all FIs because they do not know what segments will be sampled and require frame enhancement in any given quarter</li> <li>• Requires change in staffing profile because all FIs will need to have listing skills</li> <li>• Not possible for enhanced listing because sampling must occur between enhancement and S &amp; I</li> <li>• Cannot capitalize on helpful information gained from previous trip to the segment</li> </ul>

ABS = address-based sampling; ACE = address coverage enhancement; CHUM = Check for Housing Units Missed; DU = dwelling unit; FE = field enumeration; FI = field interviewer; FS = field supervisor; S & I = screening and interviewing.

In general, field staff benefit from early implementation (scenario 1), while sampling and costs are more favorable under later implementation (scenario 3). Too many compromises are required on all sides to make scenario 2 an ideal choice.

## 6.2 Is Electronic Listing Suitable for FIs and Compatible with Existing Systems? What Products Should Be Tested?

Electronic listing has been found to be suitable for FE and frame enhancement, but current software has several weaknesses that could be corrected to enhance usability, efficiency, and accuracy.

Although quantitative research is lacking, qualitative interviews with the National Survey of Family Growth's (NSFG's) FIs suggest that enhanced listing using a computer is easier than paper-based listing. One benefit of computerized listing is the ability to easily insert a previously missed address when listers are checking their listing sheet. On paper, all of the subsequent addresses would have to be erased and moved down one row to accommodate the missed unit. Preloaded streets also minimize typographical errors and improve matching abilities back to the ABS frame.

Despite these benefits, current software will need improvements prior to implementation on NSDUH. For example, most of the current software is form-based instead of map-based. Not only does this create inefficiencies for listers who have to switch back and forth between the maps and the listing platform, but it also does not capitalize on several features that may be of interest. For example, a map-based system could be used to pinpoint the location of dwelling units (DUs) that do not have addresses or to collect Global Positioning System (GPS) information for quality control. Similarly, most listing software is DU-specific and does not remember the last entry. When listing a large apartment building, it may be more efficient to autofill the previous street address and other building information and only require that the lister fill in the new apartment unit number. This would reduce frustrations, improve efficiency, and minimize error.

Plans are currently in place to develop a tablet-based, GPS-enabled electronic listing application using ESRI Collector (ArcGIS, 2018). The e-listing application will be tested to ensure that it is intuitive for listers and field staff and compatible with NSDUH equipment. Although the application is still under development, proposed features include allowing the user to zoom in, pan, and move around the map. Field staff will be able to see the boundaries of the segment and their current location on the map. Listers may drop a pin at each DU's location and record address information. FIs, in turn, will be able to use the GPS coordinates (or the address) for navigation and confirmation of sample DU address locations. In future years of NSDUH, maps could be prepopulated with the ABS addresses at their geocoded locations. Having these data on FI tablets when conducting NSDUH interviews would reduce the burden for FIs in locating and identifying selected DUs. All data stored on the device would be transmitted and uploaded to the NSDUH case management system (CMS) and reviewed by management and editing staff for completeness and efficiency.

In addition to the electronic listing software, other factors and protocols would also need to be developed prior to implementation of electronic listing on NSDUH. For example, current NSDUH listing training is all conducted at home. New training materials would need to be developed, and in-person training may be necessary. NSFG listers also reported difficulty conducting e-listings in segments that required driving, especially in rural areas and on busy streets with no reasonable place to pull over. Interviewer safety is a priority, and protocols would need to be developed for these situations. Currently, interviewers jot down quick notes and fill in the listing sheet in more detail at a later point. One solution to typing while driving may be the use of speech-to-text software. However, an investigation into the accuracy of speech-to-text and compatibility with NSDUH systems and the e-listing application would need to be conducted before it could be implemented. Finally, screen glare can make listing difficult in certain weather conditions. Hardware and screen covers would need to be investigated prior to implementation.

### **6.3 How Would a Reduction in Time Spent on Field Enumeration Affect Interviewer Retention?**

Qualitative evidence suggests that switching from FE to a hybrid ABS frame would have little effect on FI retention and improve the job satisfaction of field supervisors. Four focus groups were conducted with current NSDUH listers, FIs, and field supervisors to determine aspects of their job that they enjoyed, did not enjoy, were easiest, and were most difficult. Although the majority of FI listers that attended the NSDUH focus group reported that they

enjoyed listing due to the additional work hours and freedom it afforded from screening and interviewing tasks (i.e., less interaction with respondents), few reported this as their favorite or most interesting part of their job. Oppositely, field supervisors commented on not having enough time to manage listing in addition to their current screening and interviewing tasks and would like to eliminate listing management from their job descriptions.

Although the overall time spent listing would be significantly reduced under a hybrid ABS design, any given FI's listing hours would be minimally affected for three reasons. First, nearly two thirds of FIs do not conduct any listing and would be unaffected by a reduction in listing hours. Second, the overall labor force could be reduced. Approximately one third of listers only conduct listing; they are not FIs.. As listing needs decline, the number of individuals who only list could be reduced, keeping the labor hours dedicated to other listers constant. The extent to which this staffing profile could be implemented is dependent on the location of both the staff and the segments requiring FE. Third, listing does not constitute a large portion of the work conducted by field staff that conduct both listing and screening and interviewing. Listing runs from April to November. Although listing provides supplemental income for some FIs, it does not provide consistent work for them throughout the year. In 2016, FIs who also listed completed an average of eight listings each.

## **6.4 What Changes Would Need to Be Made to Interviewer Training?**

Two primary changes would be necessary to implement hybrid ABS: (1) in-person training would initially be required for listers to learn how to conduct electronic listing and (2) if a 3-tiered approach was implemented, home-based, classroom, and field-based training would be introduced to all field staff to conduct frame enhancement.

For NSDUH, lister training is currently home based. Adding equipment and electronic mapping for FE would initially require in-person training to properly review the new equipment. Because NSDUH does not currently use electronic listing, training modules would need to be developed from scratch. As listers become more familiar with electronic listing and as the U.S. population naturally becomes more technologically adept, it may be possible to develop training videos for home-based training. The National Agricultural Statistics Service (NASS) has had success using a mixture of home-based and in-person training sessions to teach FIs how to use their iPad mapping tools, although the application is slightly different from household listing (Barboza & Abreu, 2017).

Separately, all field staff would be required to attend an additional training module on the chosen frame enhancement technique followed by a certification of procedures learned. An additional half day of training that incorporates presentations, demonstrations, and practice exercises, along with a step-by-step video (including instructions for using tools and maps), should be presented. Prior to training, field staff would be required to review a manual detailing procedures and complete a web-based iLearning course. In-person training could be added to existing New-to-Project or Veteran FI training sessions or completed as a stand-alone training. After the in-person training, FIs would complete an iLearning course each year as a refresher. In addition, all field management staff would need to be trained on the new procedures to aid in guiding staff with questions in the field. In addition to classroom and home exercises, an in-field



practice exercise would be beneficial, presenting varying levels of difficulty. Results could be used for a group discussion of lessons learned prior to the commencement of training.

## **6.5 How Would the FI's Path of Travel Need to Change?**

The path of travel is a continuous path that field staff take while listing a segment to ensure complete coverage of the segment. The path of travel is marked on the map(s) and is often used by FIs at the screening stage to locate sampled dwelling units (SDUs). Prior to 2014, the path of travel was also used to implement the half-open interval (HOI) frame supplementation procedure by checking the interval between an SDU and the next listed dwelling unit (DU) for missed DUs.

ABS segments would not have a path of travel marked on the map. Thus, FIs would be required to rely on address information to locate SDUs. Current NSDUH procedures provide guidance to FIs in locating an SDU should there be an inconsistency with the location on the map. If the SDU address matches the approximate location on the map, the FI proceeds with contacting the SDU. If the SDU address does not match the position of the location on the map, but the street number is clearly visible, FIs are instructed to answer two questions: (1) Is the location of the SDU address in the general vicinity on the map (e.g., around the corner, down the street, or in the surrounding area)? (2) Is the location of the SDU address within the segment boundaries? If the answer to both questions is "yes," FIs are instructed to proceed with contacting the address. If the answer to either question is "no," the sampling team is contacted for assistance in locating the SDU.

Because ABS segments will not have an existing path of travel, FIs would also be required to create their own path of travel for frame supplementation. As described in Section 2.2, implementation of the CHUM requires field staff to first face a sample DU, then proceed clockwise around the block, without crossing a street, to find the next DU. The FI makes all possible right turns until the interval ends (an address is found on the ABS frame) or the block is circumnavigated. The CHUM2 procedure ensures coverage of census blocks with no ABS addresses. The current NSDUH path of travel performed during FE differs in that it requires field staff to make U-turns at segment boundaries, resulting in a continuous path of travel for the entire segment. HOI procedures were eliminated in 2014,<sup>23</sup> so interviewers would be trained on one path of travel to implement one frame supplementation procedure (CHUM or other) at the interviewing stage.

At the listing stage, there would be no change to the current path of travel procedures implemented on NSDUH for FE segments. To ensure that every street and roadway within a segment is covered, field staff would follow the existing continuous path of travel, recording or checking for DUs on the right side of the street. A continuous path of travel allows field staff to cover an entire area, checking each street once while remaining within segment boundaries, and has proven successful on NSDUH.

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<sup>23</sup> A question remains in the screening instrument to conduct HOI within an address (i.e., to identify additional DUs on the property). This procedure does not require a path of travel and is not affected by CHUM.

## 6.6 How Would Frame Enhancement at the Screening and Interviewing Stage Affect FI Workload Distribution and Efficiency?

The answer to this question is dependent on when frame enhancement occurs (see Section 6.1 for a list of options).<sup>24</sup> If frame enhancement were to be conducted from April to November in the year prior to data collection (i.e., during the same period currently used for FE), frame enhancement should not affect screening and interviewing time. Alternatively, frame enhancement could be conducted concurrently with screening and interviewing. Under this scenario, timing spent on screening and interviewing would be more difficult to parse from time spent conducting enhancement. Concurrent implementation would also risk staff overstretch, which may increase the hours per completed interview. Interviewers would be asked to multitask, which may make them inefficient at any given task, and increase screening and interviewing hours.

However, several other changes (if implemented) may improve the efficiency of FIs. First, electronic listing and frame enhancement may reduce the amount of time it takes for an FI to locate an address. As outlined in Section 6.2, electronic listing may also capture a geolocation and image that may be used by FIs to locate and confirm they are at the correct address. Second, address quality is frequently better on the ABS frame than obtained by listers (N. English, personal communication, April 28, 2017).

To date, no research has been conducted to compare the efficiency of field-enumerated segments with that of frame-enhanced or ABS-only segments. Because these segments are different in many other ways (e.g., urbanicity), a direct comparison is not appropriate, and it is unknown whether any available data may be used to conclusively assess the ways in which quality may change.

## 6.7 How Would a Reduction in Time Spent on Field Enumeration Affect Travel Time?

Travel time is incurred for three types of activities: FE, field enhancement, and screening and interviewing. [Table 6.2](#) summarizes how each of these groups and each type of travel may be influenced by a hybrid ABS design.

Overall, travel could decline because no travel would be required to list or enhance ABS-only segments. The change in travel time would be dependent on the coverage thresholds used (see Section 4.7), the coverage enhancement method used (Section 4.6), and the timing of the enhancement (Section 6.1). Higher travel costs would be incurred from more trips to and from a segment than travel within the segment. Because FE that occurs prior to data collection requires separate trips, a hybrid ABS design that included frame enhancement would result in cost savings. This would be true even if the travel within a segment increases. The lower the coverage threshold, the higher the savings because more segments would be fielded via ABS-only or ABS with enhancement.

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<sup>24</sup> Section 6.1 outlines three scenarios for frame enhancement, but ultimately determines scenario 2 to be undesirable. Therefore, only scenarios 1 and 3 are discussed here.

**Table 6.2 Summary of the Effect of Hybrid ABS on Travel Time**

Task	Travel
Field Enumeration	<ul style="list-style-type: none"> <li>• Eliminated in ABS-only segments</li> <li>• Replaced by travel to conduct field enhancement in segments with middling coverage if enhancement occurs prior to S&amp;I</li> <li>• Eliminated in ABS frame plus enhanced segments if enhancement occurs concurrently with S&amp;I</li> <li>• Unchanged in field-enumerated segments</li> </ul>
Field Enhancement	<ul style="list-style-type: none"> <li>• Replaces travel to conduct field enumeration in segments with middling coverage if enhancement occurs prior to S&amp;I</li> <li>• None if enhancement occurs concurrently with S&amp;I</li> </ul>
Screening and Interviewing	<ul style="list-style-type: none"> <li>• Increased within ABS-only and enhanced segment travel due to larger segment sizes (Section 5.2)</li> </ul>

ABS = address-based sampling; S&I = screening and interviewing.

If frame enhancement were completed prior to data collection, enhancement travel would replace field listing travel in segments where frame enhancement is required. Travel costs may increase in these segments because the number of trips to the segment would remain constant while the segment size would increase, increasing the within segment travel. Although travel costs in ABS-only segments would still decline, the net effect on travel costs would depend on the coverage thresholds.

## 6.8 How Would Frame Enhancement Be Monitored for Quality Assurance?

Quality assurance for frame enhancement should incorporate existing quality control (QC) procedures currently used at the count and list stage. Mapping and sampling staff would review maps to check for a unique address/description for each DU, consistent spelling of street names, coverage of all within-segment streets, missed DUs, and eligibility of all DUs listed in a segment. For problems that cannot be resolved through satellite or online imagery, field validation steps would be initiated to take corrective action. NSDUH project managers would also review performance reports and statistics to monitor field staff performance.

In addition, trained statisticians-on-call could staff a hotline to answer questions to resolve field-based sampling issues in real time so that field staff could get immediate answers and continue working. Statisticians would be guided by a set of decision trees and use online resources to view the structure(s) and areas in question.

Another process for determining how often a FI has implemented frame enhancement correctly is by implementing a "seeding" process. Projects that use ABS routinely delete a certain number of ABS addresses to monitor whether field staff have correctly implemented the frame enhancement. FIs are told about the seeding process during training to explain that seeding is needed not only for QC, but also as a way to extend training in the field. Whenever a seeded address is missed, the FI is contacted, and a review of the frame enhancement technique for the seeded address is performed (Iannacchione et al., 2012).

New field procedures could be implemented on NSDUH to aid in QC for frame enhancement (see Section 6.3). For example, mapping tools used for electronic listing can store path of travel and GPS coordinates, validate FI presence, and help ensure complete coverage of the segment streets. Further data quality reports pulled from the tablet could be reviewed for indicators of questionable quality, such as inconsistent GPS coordinates and unexpected start or

stop times. Utilizing time stamps recorded on the tablet would ensure efficiency of the listing and aid supervisors with timesheet review and staff retraining.

## 6.9 Can Procedures Be Accurately and Uniformly Deployed in All Segments?

Although unknown, preliminary evidence suggests it is possible to accurately and uniformly deploy an alternative frame in all segments. Until a method for listing (e.g., ACE, enhanced listing, CHUM, and whether electronic or not) is chosen, drawing conclusions is difficult. Factors contingent upon the chosen method for listing and frame enhancement can be found in [Table 6.3](#).

**Table 6.3 Summary of Decisions Influenced by ABS Design Method**

<b>Decision</b>	<b>How ABS Design Influences Decision</b>	<b>Discussed Further in Section(s):</b>
Products for testing	Options would depend upon type of listing (electronic or not).	6.2
Type of staff used to conduct frame enhancement (FI lister, lister only, CHUM only)	More information on cutoff points would provide further guidance on the number, location, and type of staff needed and the effect on the current staffing structure.	6.3
Quality of training	Timing and type of training would depend on ABS design and timeline for frame enhancement.	6.1, 6.4
Change in path of travel	With the elimination of HOI procedures conducted during S&I, there would be no change to path of travel. However, FIs would not have the benefit of any notes included by listers that may help FIs orient themselves to the segment. If a frame enhancement method other than CHUM is selected, this will need to be revisited.	6.5
Timeline for frame enhancement	The timing of frame enhancement will affect whether the FIs are overstretched with too many tasks, reducing accuracy.	6.1

ABS = address-based sampling; CHUM = Check for Housing Units Missed; FI = field interviewer; HOI = half-open interval; NSDUH = National Survey on Drug Use and Health; S&I = screening and interviewing.

At present, no quantitative evaluations have been conducted to assess the implementation of procedures with FIs, although qualitative evidence does suggest that it works with the right QC and training. Segment size would change regardless of enhancement method. Census blocks would be selected in segments that continued to be field enumerated, whereas census block groups would be used in all other segments. Although interviewers would notice a difference in segment size, this change would be unlikely to cause confusion. Regardless of size, FIs receive maps with the segment information. Even under the current design, FIs are used to the maps often falling on multiple pages and requiring complex paths of travel. It is unlikely that increasing the segment size would affect quality.

## 7. Next Steps

The information included in this report is meant to provide a foundation from which to assess various design options to transition the National Survey on Drug Use and Health (NSDUH) to a hybrid address-based sampling (ABS) frame. However, the quantity of information provided, the interconnectedness of the various questions and responses, and the number of questions that do not have clear and definitive answers can be daunting. Although the next steps for some of the questions and responses are clear (e.g., selecting geocoding software), the path to address others is more abstract (e.g., maintaining field interviewer [FI] job satisfaction).

[Table 7.1](#) summarizes the decisions that will need to be made before NSDUH can be transitioned to a hybrid ABS frame. The goal of this table is to help define a series of next steps and provide a framework for integrating the information provided in the prior chapters. Where possible, recommendations are made in the report. In other cases, additional analysis and field testing will be required to gather more information to make an informed decision. Plans are under way for a pilot and field test designed to answer the outstanding questions.

**Table 7.1 Summary of Considerations Required before NSDUH Can Transition to a Hybrid ABS Frame**

Considerations	Recommendation Made?	Requires Analysis?	Requires Field Testing?	Also Influences:
ABS frame source (vendor) (Section 4.4.1)	Yes	No	No	<ul style="list-style-type: none"> <li>Coverage rate and proportion of segments requiring enhancement and listing</li> </ul>
Frame appends, inclusions, and exclusions (e.g., post office boxes) (Sections 4.4.2 and 4.4.5)  Special procedures for GQs	Yes	No	Yes	<ul style="list-style-type: none"> <li>Potential coverage bias</li> <li>Frame efficiencies</li> <li>Coverage rate and proportion of segments requiring enhancement and listing</li> <li>Type of coverage rate calculation used</li> </ul>
Coverage rate calculation method (Sections 4.1 and 4.3)  Type of coverage (e.g., net) Model versus ratio Denominator If model, covariates to include	No	Yes	No	<ul style="list-style-type: none"> <li>Frame appends required</li> <li>Coverage rate accuracy</li> <li>Proportion of segments requiring enhancement and listing</li> <li>Enhancement and listing efficiencies</li> </ul>
Method for geocoding (Sections 4.5.1 and 4.10)	No	No	No	<ul style="list-style-type: none"> <li>Undercoverage and overcoverage</li> <li>Cost (software)</li> <li>Segment size</li> </ul>
Method for frame enhancement (Section 4.6)	No	Yes	Yes	<ul style="list-style-type: none"> <li>Definition of a segment</li> <li>Importance of accurate geocoding</li> <li>Timing of enhancement</li> <li>Accuracy of implementation</li> <li>FI and FS job satisfaction</li> <li>Training procedures</li> <li>Path of travel</li> <li>Travel time</li> <li>Cost savings</li> </ul>

See notes at end of table.

(continued)

**Table 7.1 Summary of Considerations Required before NSDUH Can Transition to a Hybrid ABS Frame (continued)**

<b>Considerations</b>	<b>Recommendation Made?</b>	<b>Requires Analysis?</b>	<b>Requires Field Testing?</b>	<b>Also Influences:</b>
Thresholds for FE and enhancement (Section 4.7)	No	Yes	No	<ul style="list-style-type: none"> <li>• Proportion of segments requiring enhancement and listing</li> <li>• Risk of bias</li> <li>• Hybrid frame coverage</li> </ul>
Segment size (e.g., census block) (Section 5.2)	Yes	No	No	<ul style="list-style-type: none"> <li>• Travel costs and time</li> <li>• Geocoding error</li> <li>• Intracluster correlation</li> </ul>
Timing of frame enhancement (Section 6.1)	No	Yes	Yes	<ul style="list-style-type: none"> <li>• Method of frame enhancement</li> <li>• Implementation accuracy and workforce overstretch</li> <li>• Proportion of FIs requiring enhancement training</li> </ul>
Training protocols for frame enhancement (Section 6.4)	Yes	No	Yes	<ul style="list-style-type: none"> <li>• Implementation accuracy</li> </ul>
Quality control procedures for frame enhancement (Section 6.9)	Yes	No	Yes	<ul style="list-style-type: none"> <li>• Labor hour tracking and accuracy</li> </ul>
Use of e-listing (Section 6.2) Device Software Data plan Data to be captured (e.g., GPS) Mapping Training protocols	Yes	No	Yes	<ul style="list-style-type: none"> <li>• Interviewer job satisfaction</li> <li>• Data quality</li> <li>• Timeliness for listing issue resolution and handoff between listing, sampling, and S&amp;I</li> <li>• Falsification monitoring</li> </ul>
Weighting procedures (Section 4.9) Whether to account for coverage variance If yes, how	No	Yes	No	<ul style="list-style-type: none"> <li>• Risk of coverage bias</li> </ul>

ABS = address-based sampling; FE = field enumeration; FI = field interviewer; FS = field supervisor; GPS = Global Positioning System; GQs = group quarters; NSDUH = National Survey on Drug Use and Health; S&I = screening and interviewing.

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This methodological report was prepared by the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality, and RTI International (a registered trademark and a trade name of Research Triangle Institute). Work by RTI was performed under Contract No. HHSS283201300001C. Peter Tice served as the Government Project Officer, and David Hunter served as the RTI Project Director.

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Finally, James Wagner at University of Michigan, Stephen Blumberg at the National Center for Health Statistics, and James Berry at the Energy Information Administration provided feedback to ensure aspects of the other surveys mentioned in Chapter 3 were accurate and complete.

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# **Appendix A: The Effect of Using an ABS Frame on NSDUH: Coverage Bias**

## **Introduction**

As part of the National Survey on Drug Use and Health (NSDUH) redesign, the Substance Abuse and Mental Health Services Administration (SAMHSA) is considering moving from a field enumerated sample frame to a hybrid address-based sample (ABS) frame. Hybrid ABS uses the ABS frame in areas with high coverage, field listing in areas with low coverage, and the ABS frame with a coverage enhancement method (e.g., half-open interval [HOI]) in areas with moderate coverage. The ABS frame is constructed based on the U.S. Postal Service's (USPS) Computerized Delivery Sequence (CDS) file.

One of the concerns of using the ABS frame is the risk of coverage bias, which could arise from multiple sources:

- Some addresses may be incorrectly included or excluded from a sampled segment due to geocoding error.
- Some addresses do not represent the physical location of the dwelling unit and cannot be fielded in an in-person survey (e.g., households that only receive mail via a post office box).
- The CDS also does not include group quarters (GQs) and frequently excludes addresses on American Indian and Alaska Native (AIAN) tribal areas.

The purpose of this memo is to estimate how much coverage bias may be introduced by the exclusion of a subset of the NSDUH target population residing in areas with low to moderate ABS coverage on 15 of NSDUH's most important prevalence measures.

## **Methods**

To estimate bias, three datasets were created using the 2015 and 2016 NSDUH data, which were collected using a field enumerated (FE) sample. The first dataset is the combined full set of 2015 and 2016 NSDUH respondents ( $n = 136,015$ ). It should be considered the control group and was used to create estimates assuming a field enumerated frame. This dataset is referred to as the "FE sample" in the remainder of this report.

### **Subsample 1**

The second dataset (Subsample 1) is a subset of the combined set of 2015 and 2016 NSDUH respondents, in which all respondents living at description-based addresses were excluded ( $n = 128,944$ ). Because an ABS frame was not used in the 2015 and 2016 NSDUH, proxy information had to be used to determine which addresses were likely to be included on the field enumerated frame but excluded on the ABS frame. Description-based addresses were defined as all residential addresses that did not have street numbers (usually found in rural areas among housing units that receive mail through P.O. Boxes and not at-home delivery). These types of addresses cannot be included on an ABS frame because they cannot be geocoded and

located by interviewers. While the ABS frame also excludes GQs (e.g., college dormitories) and many housing units in AIAN tribal areas, these addresses were not excluded in this dataset. Instead, it was assumed that a supplemental frame (e.g., the Integrated Postsecondary Education Data System [IPEDS]) would be used to ensure individuals living in GQs were represented<sup>25</sup> and that all segments that included AIAN tribal areas could be identified ahead of time and continue to be field enumerated. All GQs, even if they were missing a street number, were included in Subsample 1. Subsample 1 can be characterized as the NSDUH sample except for descriptive addresses.

## Subsample 2

The third dataset (Subsample 2) further subset the combined 2015 and 2016 NSDUH respondents by excluding GQs and addresses in AIAN tribal areas in addition to description-based addresses ( $n = 125,179$ ). This dataset was used to simulate prevalence estimates when using an ABS frame without enhancement (i.e., no supplemental frame of GQs and no listing of segments that included AIAN tribal areas). Subsample 2 can be characterized as the NSDUH sample that only includes addresses on the ABS frame.

Note that subsample 2 is contained in subsample 1, which is contained in the FE sample. [Table A.1](#) provides a summary of the cases excluded from each subsample.

**Table A.1 Excluded Addresses of Completed Households from Two Simulated ABS Frames (Subsample 1 and Subsample 2)**

Type of Address	Subsample 1. Sample Excluding Description-Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	N	Percent of FE Sample	N	Percent of FE Sample
Descriptive addresses	7,071	5.2	7,071	5.2
Group Quarters	0	0.0	3,325	2.4
Addresses in AIAN tribal areas	0	0.0	1,351	1.0
Total excluded addresses <sup>1</sup>	7,071	5.2	10,836	8.0

<sup>1</sup> The total is less than the sum of the address types due to 911 addresses counted in multiple categories. Six addresses were excluded because they were GQs in AIAN tribal areas, and 905 addresses were descriptive addresses in AIAN tribal areas.

## Analyses

For each dataset, 15 prevalence estimates were constructed:

- Past month binge alcohol use (BNGDRKMON)
- Past month marijuana use (MRJMON)
- Past year mental health service use (inpatient, outpatient, or prescription meds; age 18+) (AMHTXRC)

<sup>25</sup> Please see Section 4.5.2 (Group Quarters) for more information on the IPEDS frame. Other GQs such as homeless shelters, rooming or boarding houses, migratory worker camps, and halfway houses may not have a suitable supplemental frame source and may need to be field enumerated assuming these areas can be classified as such during frame construction.

- Past month stimulant use (STMNMMON)
- Past year serious mental illness (SMI) (age 18+) (SMIYR\_U)
- Past month alcohol use (ALCMON)
- Past month cigarette use (CIGMON)
- Past year alcohol use disorder (ABODALC)
- Substance use disorder (UDPYILAL)
- Past year any mental illness (AMI) (age 18+) (AMIYR\_U)
- Past year MDE (age 18+) (AMDEYR2)
- Past month pain reliever use (PNRNMMON)
- Past year illicit drug use disorder (UDPYILL)
- Past year specialty substance use treatment (TXYRSPILAL)
- Past year major depressive episode (MDE) (12-17) (YMDEYR2)

These variables were chosen by SAMHSA as the most important. Estimates were created by applying the post-stratified weights. Each dataset was post-stratified to account for the subset and more accurately simulate the estimates that would result from an ABS frame.<sup>26</sup>

Estimates from the FE sample (the complete set of 2015 and 2016 NSDUH respondents) were compared with estimates from each of the subset datasets (Subsample 1 and Subsample 2) using standard *t*-tests for differences in proportions. Because the subsamples were a subset of the FE sample, comparisons between them violate the assumption of independence. All comparisons were conducted using the stacked method to account for the covariance caused from this violation (Center for Behavioral Health Statistics and Quality, 2015). Three sets of comparisons were made:

- overall (i.e., full population estimate);
- categories within eight domains — college enrollment status, age, sex, Hispanicity, race, pregnancy status, census division, and county type; and
- categories within 13 two-way cross-domains.

A maximum of 346 comparisons were possible for each dataset/measure combination. However, not all estimates were constructed and compared or all domains and two-way cross-domains. Comparisons were not conducted if estimates were suppressed using the standard NSDUH suppression criteria or if the comparison was not applicable (e.g., past year SMI for individuals 12-17 years of age).

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<sup>26</sup> A poststratification adjustment was implemented for each subsample. The process of poststratification adjustment was as follows: (1) ANALWT, as constructed for the 2015 and 2016 NSDUH data files, was used as the starting point. (2) Poststratification was conducted using the same set of variables used in the 2015 and 2016 NSDUH poststratification adjustment for developing ANALWT. The complete variable list can be found in 2015 National Survey on Drug Use and Health: Person-Level Sampling Weight Calibration (Section 11 in Methodological Resource Book). (3) The control total for each variable was the average of population estimates for the 2015 and 2016 NSDUH. (4) Nine model groups corresponding to the nine census divisions were created. (5) The ABS bias analysis weights were the product of ANALWT and the poststratification adjustment factor. The same quality control checks were performed as for developing ANALWT.

## Results

Across the three datasets, measures, domains, and cross-domains, a total of 8,702 comparisons were created. Domain counts may be found in Appendix B, and all comparisons may be found in Appendices C-Q. However, looking at all comparisons is overwhelming and not practical. Instead, the results have been summarized in four ways. First, the overall estimates as derived from the subsamples were compared with the FE sample. Second, the absolute and relative difference was calculated for each variable across samples and by domain. Variables of interest were evaluated on the proportion of comparisons that were significantly different at the 0.05 level and the magnitude of the change in estimates across samples. Third, comparisons were summarized by domain and sample size (as opposed to prevalence estimate) to identify whether some domains or samples were more susceptible to a frame shift than others. Finally, substantive analyses (e.g., comparisons of prevalence across subdomains) were conducted by sample to identify whether conclusions from multivariate or time-series analyses would change.

### Summary 1. Differences in Overall Estimates by Sample

[Table A.2](#) displays the overall estimates produced using each of the three samples. When comparing the estimates from the two subsamples to the FE sample, seven significant differences were found. Both subsamples resulted in significantly higher prevalence of alcohol use in the past month and alcohol disorder within the past year. Both subsamples also yielded a significantly lower estimate of cigarette use in the past month. Only the first subsample, excluding description-based addresses, produced a significantly different estimate for use of mental health services in the past year. All seven of the observed significant differences were small, 0.1 to 0.2 percentage points (absolute difference) and 0.6 to 1.8 percent (relative difference).

**Table A.2 Key Estimates Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)**

Variable	FE Sample		Subsample 1. Sample Excluding Description-Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal areas, and Description-Based Addresses	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
BNGDRKMON	66,008	24.6	66,015	24.6	66,113	24.6
MRJMON	23,104	8.6	23,056	8.6	22,992	8.6
STMNMMON	1,694	0.6	1,704	0.6	1,711	0.6
SMIYR U	10,063	4.1	10,040	4.1	10,035	4.1
ALCMON	137,528	51.2	138,060	51.4 <sup>a</sup>	138,297	51.5 <sup>a</sup>
CIGMON	51,642	19.2	50,992	19.0 <sup>a</sup>	50,998	19.0 <sup>a</sup>
ABODALC	15,396	5.7	15,535	5.8 <sup>a</sup>	15,548	5.8 <sup>a</sup>
UDPYILL	7,559	2.8	7,565	2.8	7,507	2.8
AMIYR U	44,036	18.1	44,071	18.1	44,051	18.1
AMHTXRC	34,612	14.3	34,825	14.4 <sup>a</sup>	34,752	14.3
AMDEYR2	16,152	6.7	16,209	6.7	16,230	6.7
PNRNMMON	3,562	1.3	3,528	1.3	3,511	1.3
UDPYILAL	20,461	7.6	20,568	7.7	20,543	7.6
TXYRSPILAL	2,287	0.9	2,298	0.9	2,255	0.8
YMDEYR2	3,060	12.6	3,064	12.6	3,066	12.7

<sup>a</sup> the estimate is significantly different from the FE Sample at the 0.05 level.

## Summary 2. Absolute and Relative Differences in Estimates by Measure

Comparisons were summarized and reviewed across all domains by absolute bias. [Table A.3](#) shows the number of comparisons made for each subset dataset and each measure. Among the comparisons for each dataset/measure combination, the percentage of comparisons that were significant at  $\alpha = 0.05$  is reported. Due to sampling error and the number of tests conducted, 435 comparisons (5 percent) were expected to be statistically significant by chance even if no differences existed between the samples.

Given the large sample sizes and significant sample overlap for most comparisons and the resulting small standard errors, many statistically significant comparisons would not be practically significant (i.e., the magnitude of the difference would be quite small). Therefore, two additional columns were included to account for practical significance. The first reports the percentage of statistically significant comparisons for which the absolute difference between the rounded field enumerated frame estimate and the rounded subset estimate ( $|p_{subset} - p_{full}|$ ) was greater than 0.1 percentage points. The second reports the percentage of all comparisons that were both significant and produced an absolute difference greater than 0.1 percentage points.

[Figure A.1](#) is included to provide a more complete view of the absolute differences between the FE sample and the subsets. Blue represents Subsample 1 (excluding description-based addresses), and red represents Subsample 2 (excluding GQ, AIAN tribal areas, and description-based addresses). Each pane in the figure displays the absolute bias for a given estimate. On the right side of each pane is a bar chart. This represents the proportion of all

comparisons that produced significant differences. It is consistent with the second and sixth columns in [Table A.3](#) (percentage of Comparisons  $p < 0.05$ ). The left side of each pane displays the cumulative percentage of significant comparisons (y-axis) by the absolute difference (x-axis).

Across all variables and all domains, 12 percent of Subsample 1 estimates and 9 percent of Subsample 2 estimates were significantly different from the estimates produced using the FE sample. Many of the significant comparisons were the result of small percentage point differences. Over one third (37 percent) of Subsample 1 and nearly one quarter (24 percent) of Subsample 2 significant comparisons were no more than 0.1 percentage points different from the FE sample. In general, this suggests that while the ABS frame may introduce a trend break, it will not be universal. Most comparisons (88 percent and 91 percent for Subsample 1 and Subsample 2, respectively) would not suffer any change. Given NSDUH's large sample sizes, comparisons often produce statistically significant differences that are not meaningful.

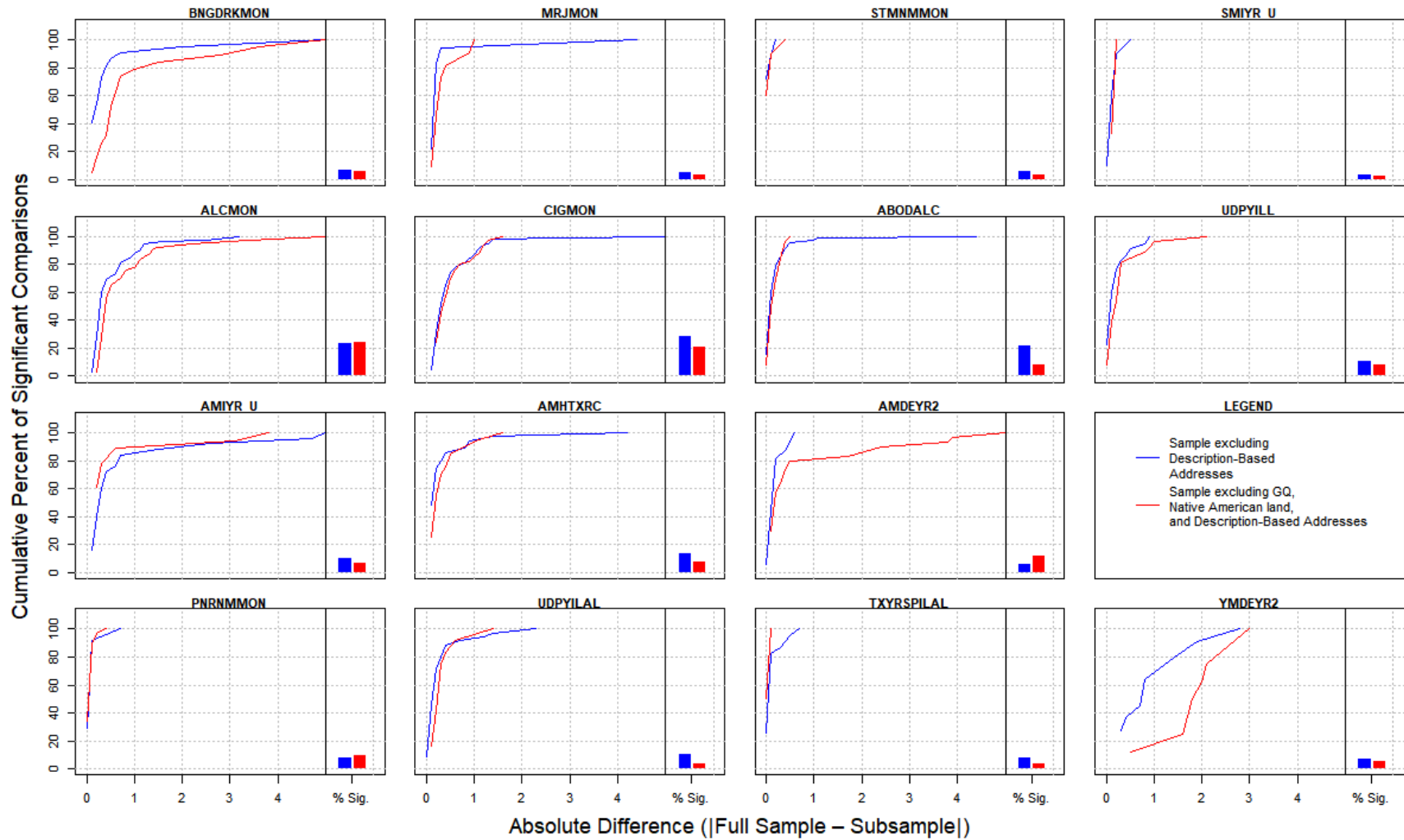
However, the effect of a frame switch varied by variable. For example, comparisons of stimulant use within the past year (SMIYR\_U) were relatively unchanged across frames and within domains. Only 4 percent of Subsample 1 comparisons and 2 percent of Subsample 2 comparisons were significantly different from the FE Sample, fewer than would be expected by chance. Estimates for alcohol use within the past month (ALCMON) were much more susceptible to frame changes. In each subsample, 24 percent of all comparisons were significantly different from the FE Sample estimate, and nearly all (97 percent and 100 percent in Subsample 1 and Subsample 2, respectively) significant differences were larger than 0.1 percentage points. Looking at [Figure A.1](#), approximately 10 percent of significant differences in Subsample 1 and 20 percent in Subsample 2 were larger than 1.0 percentage points.

**Table A.3 Estimated Absolute Bias Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)**

Variable	Subsample 1. Sample Excluding Description-Based Addresses				Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses			
	# of Comparisons Made	% of Comparisons $p < 0.05$	% of Signif. Diff. that Changed $> 0.1\text{pp}^\dagger$	% of All Comparisons that Changed $> 0.1\text{pp}$ & were Signif. Diff.	# of Comparisons Made	% of Comparisons $p < 0.05$	% of Signif. Diff. that Changed $> 0.1\text{pp}^\dagger$	% of All Comparisons that Changed $> 0.1\text{pp}$ & were Signif. Diff.
Total	4,373	12	63	7	4,329	9	76	6
BNGDRKMON	320	7	59	4	319	6	95	6
MRJMON	325	6	78	4	321	3	91	3
STMNMMON	302	6	11	1	301	3	10	0
SMIYR U	261	4	40	2	259	2	67	2
ALCMON	318	24	97	23	316	24	100	24
CIGMON	321	28	96	27	317	21	100	21
ABODALC	322	21	41	9	319	8	50	4
UDPYILL	325	11	40	4	319	8	62	5
AMIYR U	259	10	84	8	257	7	100	7
AMHTXRC	259	14	51	7	254	8	75	6
AMDEYR2	259	6	56	3	257	12	70	8
PNRNMMON	318	8	8	1	314	9	10	1
UDPYILAL	324	11	54	6	321	4	83	3
TXYRSPILAL	308	7	17	1	305	4	0	0
YMDEYR2	152	7	100	7	150	5	100	5

<sup>†</sup> pp=percentage point. Several cells have very small sample sizes (5-10). The percentages should be interpreted with caution.

**Figure A.1** Estimated Absolute Coverage Bias Among Significant Comparisons of 15 Estimates for Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)





Some measured behaviors are very prevalent while others are rare. For example, 51.2 percent of the population have consumed an alcoholic beverage in the past month while only 0.6 percent have misused a stimulant in the past month. A 0.1 percentage point change in alcohol consumption estimates may not be perceived as a large difference between samples (regardless of significance testing) whereas the same change in stimulant use may be interpreted as very large. To account for difference in prevalence, results were also reviewed by relative bias.

[Table A.4](#) and [Figure A.2](#) follow the same layout as [Table A.3](#) and [Figure A.1](#), respectively.

Instead of displaying the absolute difference, [Table A.4](#) displays the percentage of statistically

significant comparisons for which the relative difference  $\left( \frac{|p_{subset} - p_{full}|}{p_{full}} * 100 \right)$  was greater than 1

percent and the percentage of all comparisons that were both significant and produced a relative difference greater than 1 percent. The x-axis of [Figure A.2](#) is the relative difference.

The findings across all variables and all domains look similar to the absolute difference analysis—67 percent of significant comparisons between Subsample 1 and the FE Sample and 72 percent between Subsample 2 and the FE Sample were more than 1 percent different from each other. Also similar to the absolute difference analysis, the magnitude of the difference varied by measure. Most significant differences (81 percent and 83 percent for Subsample 1 and Subsample 2, respectively) among estimates of cigarette use in the past month (CIGMON) were greater than 1 percent while approximately one third (33 percent and 36 percent for Subsample 1 and Subsample 2, respectively) of significant comparisons among estimates of alcohol use in the past month (ALCMON) were greater than 1 percent different.

For interpretative purposes, the 15 variables of interest were grouped into four categories: (1) variables that were unaffected by the shift to an ABS frame, (2) variables that suffered bias for few domains, but the bias was large when observed, (3) variables that suffered bias for many domains but for which the bias was small, and (4) variables that suffered bias for many domains and the bias was large when observed. Variables were categorized by reviewing data in [Tables A.3](#) and [A.4](#) and the graphs in [Figures A.1](#) and [A.2](#); no mathematical cutoffs were established. While several variables behaved similarly between both subsamples, some did not.

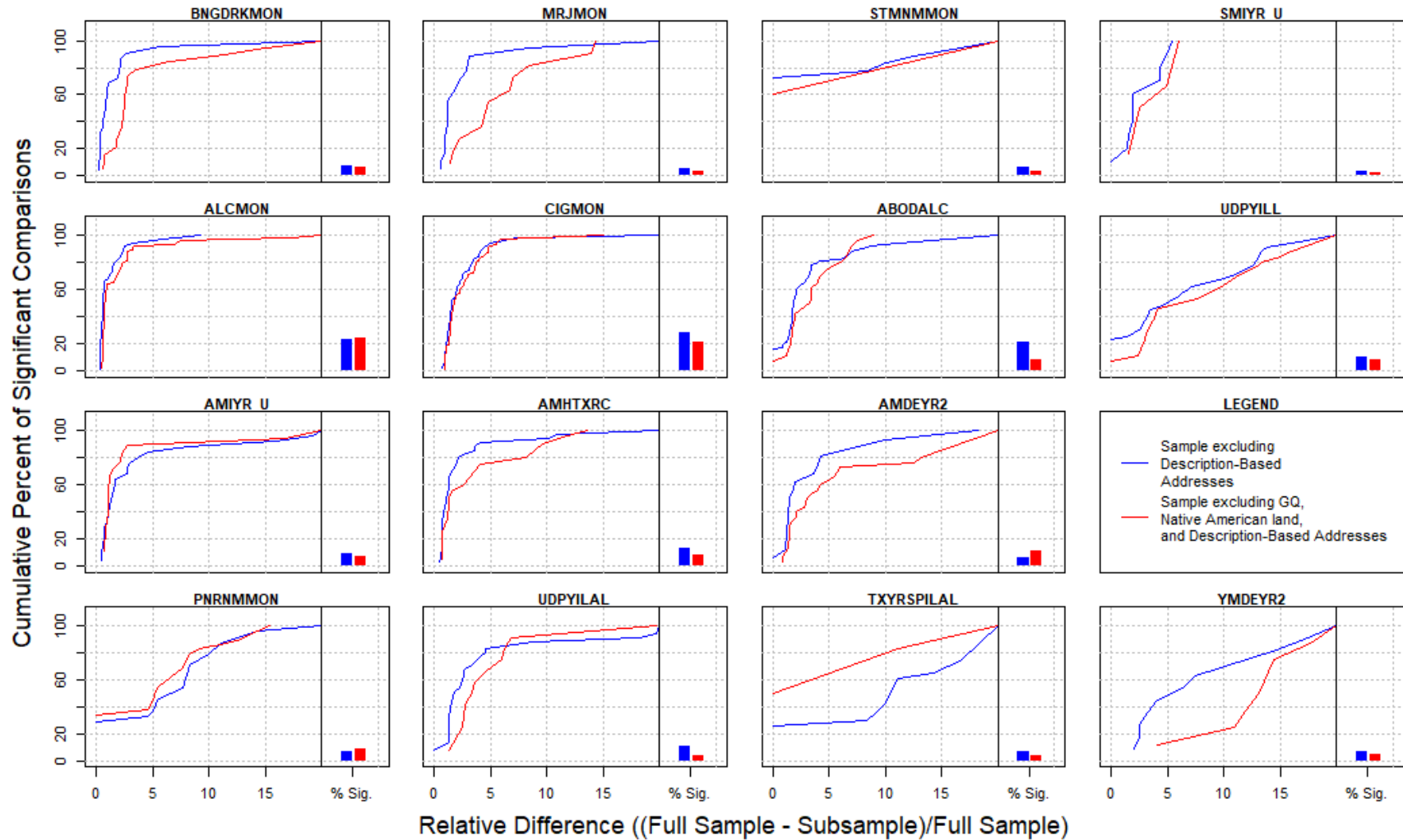
Variables were categorized independently for each of the two subsamples and are displayed in [Table A.5](#). Variables found in the cells on the diagonal were similar between subsamples while those in cells off the diagonal varied by subsample. Eight of the 15 variables (53 percent) performed similarly in both subsamples. The remaining seven variables behaved differently between the two subsamples. This suggests a complex relationship between coverage and weighting. In the above analyses, differences between the FE sample and the subsamples suggests the presence of coverage bias that is not corrected by weighting. The variables placed in the off diagonals in [Table A.5](#) suggests that the coverage bias is different between the two subsamples. Because Subsample 2 is a further subset of Subsample 1, it may be expected that the two subsamples would vary. However, if coverage bias were linear, the bias of Subsample 2 variables should be larger. [Table A.5](#) shows that the bias varies, and estimates within Subsample 2 are frequently less prone to bias.

**Table A.4 Estimated Relative Bias Among Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)**

Variable	Subsample 1. Sample Excluding Description-Based Addresses				Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses			
	# of Comparisons Made	% of Comparisons $p < 0.05$	% of Signif. Diff. that Changed $> 0.1pp^{\dagger}$	% of All Comparisons that Changed $> 0.1pp$ & were Signif. Diff.	# of Comparisons Made	% of Comparisons $p < 0.05$	% of Signif. Diff. that Changed $> 0.1pp^{\dagger}$	% of All Comparisons that Changed $> 0.1pp$ & were Signif. Diff.
Total	4,373	12	67	8	4,329	9	72	6
BNGDRKMON	320	7	36	3	319	6	84	5
MRJMON	325	6	67	4	321	3	100	3
STMNMMON	302	6	28	2	301	3	40	1
SMIYR U	261	4	90	3	259	2	100	2
ALCMON	318	24	33	8	316	24	36	9
CIGMON	321	28	81	23	317	21	83	17
ABODALC	322	21	80	17	319	8	92	8
UDPYILL	325	11	77	8	319	8	92	8
AMIYR U	259	10	68	7	257	7	67	5
AMHTXRC	259	14	51	7	254	8	75	6
AMDEYR2	259	6	94	6	257	12	93	11
PNRNMMON	318	8	71	5	314	9	66	6
UDPYILAL	324	11	89	10	321	4	100	4
TXYRSPILAL	308	7	74	6	305	4	50	2
YMDEYR2	152	7	100	7	150	5	100	5

<sup>†</sup> Several cells have very small sample sizes (5-10). The percentages should be interpreted with caution.

**Figure A.2** Estimated Relative Coverage Bias Among Significant Comparisons of 15 Estimates for Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample)



**Table A.5 Categorization of Variables by Number and Magnitude of Significant Differences by Two Simulated ABS Frames (Subsample 1 and Subsample 2)**

Subsample 1: Sample Excluding Description-Based Addresses	Subsample 2: Sample Excluding GQ, AIAN Tribal Areas, And Description-Based Addresses			
	Variables Unaffected By the Shift to an ABS Frame	Variables That Will Suffer Bias for Few Domains, But the Bias Will Be Large When Observed	Variables That Will Suffer Bias for Many Domains But for Which the Bias Will Be Small	Variables That Will Suffer Bias for Many Domains, and the Bias Will Be Large
Variables unaffected by the shift to an ABS frame	<ul style="list-style-type: none"> <li>• BNGDRKMON</li> <li>• STMNMMON</li> <li>• SMIYR_U</li> </ul>			
Variables that will suffer bias for few domains, but the bias will be large when observed	<ul style="list-style-type: none"> <li>• UDPYILAL</li> <li>• TXYRSPIL</li> <li>• MRJMON</li> </ul>	<ul style="list-style-type: none"> <li>• PNRNMMON</li> </ul>		<ul style="list-style-type: none"> <li>• AMDEYR2</li> </ul>
Variables that will suffer bias for many domains but for which the bias will be small		<ul style="list-style-type: none"> <li>• AMHTXRC</li> </ul>	<ul style="list-style-type: none"> <li>• ALCMON</li> <li>• CIGMON</li> <li>• AMIYR_U</li> </ul>	
Variables that will suffer bias for many domains, and the bias will be large		<ul style="list-style-type: none"> <li>• ABODALC</li> </ul>		<ul style="list-style-type: none"> <li>• UDPYILL</li> </ul>

Binge drinking within the past month (BNGDRKMON), stimulant use within the past month (STMNMMON), and SMI within the past year (age 18+) (SMIYR\_U) were relatively unaffected by any frame change. Fewer than 5 percent of all comparisons for each of these variables produced significant absolute differences larger than 0.1 percentage points or relative differences larger than 1 percent for either subset dataset. In [Figures A.1](#) and [A.2](#), the lines for both subsamples in the graphs for these variables approached 100 percent quickly, further suggesting these variables would be relatively unaffected by a frame change.

An additional three variables met these criteria for Subsample 2: substance use disorder within the past year (UDPYILL), specialty substance use treatment within the past year (TXYRSPILAL), and marijuana use within the past month (MRJMON). Subsample 1 estimates among these variables more frequently diverged from the FE Sample estimates and yielded larger differences than Subsample 2.<sup>27</sup> For Subsample 1, these three variables were categorized into the second group—variables that suffered bias for few domains, but the bias was large when observed. Subsample 2 also produced estimates of having an alcohol disorder within the past year (ABODALC) with less relative coverage bias. Comparisons between the FE Sample and Subsample 2 resulted in significant differences 8 percent of the time as opposed to 21 percent for Subsample 1. The significant differences were relatively large for both subsamples. As a result,

<sup>27</sup> The relative change among significantly different estimates of marijuana use within the past month is the only exception to this statement. While Subsample 1 produced more significant differences when compared with the FE Sample, the differences were generally smaller than the significant difference identified between Subsample 2 and the FE Sample.

ABODALC was placed in category 2 (few, but large differences) for Subsample 2 and in category 4 (many and large differences) for Subsample 1.

Past year MDE use (AMDEYR2) was the only variable that performed better in Subsample 1 than Subsample 2. Subsample 1 produced fewer significant differences when compared with the FE Sample (6 percent and 12 percent for Subsample 1 and Subsample 2, respectively), and the observed significant differences were much smaller than those observed between Subsample 2 and the FE Sample. AMDEYR2 was placed in category 2 (few but large differences) for Subsample 1 and category 4 for Subsample 2 (many and large differences).

Five of the remaining variables were similarly categorized in both samples. Of particular note is illicit drug use disorder within the past year (UDPYILL). Estimates created using data from Subsample 1 and Subsample 2, individually, were frequently different and the magnitude of the difference was often large. Among the FE Sample, 9.7 percent of American Indians and Alaskan Natives living in nonmetro areas with 20,000 people or more were estimated to have had an illicit drug use disorder. This number rose to 12.0 percent in Subsample 1—a difference of 24 percent or 2.3 percentage points.

The remaining variable, use of mental health services within the past year (AMHTXRC), was more often found to be significantly different from the FE Sample in Subsample 1 than Subsample 2, but the magnitude of significant differences was generally larger in Subsample 2 than Subsample 1.

### **Summary 3. Differences in Estimates by Domain and Sample Size**

Next, the data were summarized independently of the measures—first by domain ([Table A.6](#)) and then by sample size ([Table A.7](#)).

[Table A.6](#) includes two sets of columns and contain information similar to [Tables A.3](#) and [A.4](#). For each subsample and domain, there is a count of the number of significance tests performed between the subsample and the FE sample and a percentage of how many of these comparisons were significant at  $\alpha=0.05$ . Note that adding the count of comparisons for a given subsample will yield a number higher than the total number of tests conducted. This is because tests performed on cross-domains were counted twice—once in each domain. For example, tests on estimates of Hispanic females were counted under “Hispanic” and “Female.”

The number of significant differences varied by domain and by sample. Only 1 percent ( $n = 1$ ) of the estimates produced for pregnant females aged 15-17 in Subsample 2 was significantly different from the FE sample estimates whereas 21 percent of estimates among all females in Subsample 1 were significantly different. In general, more estimates produced by age, sex, and college enrollment status were found to be significantly different from their FE counterpart than other domain estimates.

**Table A.6 Percentage of Significantly Different Comparisons by Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame by Subdomain**

Subdomain	Subsample 1. Sample Excluding Description-Based Addresses		Subsample 2. Sample Excluding GQ, AIAN tribal areas, and Description-Based Addresses	
	# of Comparisons Made	% of Comparisons $p < 0.05$	# of Comparisons Made	% of Comparisons $p < 0.05$
Age Group				
12-17	285	13	285	5
18+	364	13	364	10
18-25	391	16	391	7
26-49	364	13	364	14
50+	341	13	340	10
Gender				
Male	110	19	110	10
Female	110	21	110	16
Hispanicity				
Hispanic/Latino	322	3	321	4
Not Hispanic/Latino	336	17	336	13
Race				
White Only	336	14	336	10
Black Only	318	9	318	7
NHOPI Only	153	2	150	3
Asian Only	258	5	254	5
AIAN Only	267	7	237	7
2 or More Races	270	8	264	3
Division				
New England	164	10	164	5
Middle Atlantic	196	8	196	6
East North Central	182	18	181	12
West North Central	167	7	165	7
South Atlantic	193	16	189	11
East South Central	149	11	146	13
West South Central	183	8	180	6
Mountain	188	9	188	6
Pacific	202	5	202	5
County Type				
Large Metro	202	12	202	7
Small Metro, pop 250K-1,000,000	200	9	200	5
Small Metro, <250K population	183	10	183	9
Nonmetro, 20K or more urban pop	186	10	178	2
Nonmetro, 2,500-19,999 urban pop	163	7	148	7
Nonmetro, <2,500 urban pop	122	8	115	5
College Enrollment				
Full-Time College Students	42	14	42	10
Other Persons Aged 18 to 22 <sup>2</sup>	42	19	42	17
Pregnancy				
Pregnant Female Aged 15-44	96	4	96	1
Not Pregnant Female Aged 15-44	173	14	173	12

[Table A.7](#) summarizes the comparisons by domain counts—how many cases were in the denominator of each estimate. When domain counts were less than 2,000, the number of significant differences was frequently no greater than chance. However, the larger the domain counts, the smaller the detectable difference and the greater risk of identifying significant differences. Among estimates with domain counts of 10,000 or more, 17 percent of Subsample 1 estimates and 13 percent of Subsample 2 estimates were found to be significantly different from the estimates produced using the FE sample.

**Table A.7 Percentage of Significantly Different Comparisons by Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame by Subdomain Size**

Sample Sizes	Subsample 1. Sample Excluding Description-Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	# of Comparisons Made	% of Comparisons $p < 0.05$	# of Comparisons Made	% of Comparisons $p < 0.05$
<250	67	1	64	0
250-499	325	6	315	3
500-749	197	4	196	5
750-999	171	7	171	5
1,000-1,999	511	5	539	4
2,000-2,999	386	10	356	8
3,000-3,999	273	10	298	9
4,000-4,999	174	12	136	10
5,000-5,999	184	13	169	12
6,000-6,999	102	11	131	10
7,000-7,999	89	11	133	3
8,000-8,999	174	11	131	8
9,000-9,999	89	12	103	7
$\geq 10,000$	1,156	17	1,112	13

## Summary 4. Differences in Conclusions Drawn from Substantive Analyses

All the above analyses compared the estimates produced by the FE sample to each of the subsamples. These analyses can detect whether the estimates will differ by frame within a given year, but NSDUH data are more frequently used to compare subdomains within a year (e.g., do African Americans consume alcohol at a different rate than the overall population?) or to compare trends across years (e.g., has alcohol consumption changed over time?). The above analyses do not account for subdomain comparisons or trend analyses.

To determine whether a change in frame would yield different conclusions for subpopulation comparisons, 17 subpopulations were compared with the overall estimates for each measure and for each sample. The 17 subpopulations included Hispanics and non-Hispanics, six race subpopulations, and the nine census divisions. These are the subpopulations for which comparisons are typically made using NSDUH data. The outcomes of the FE comparisons were then compared with each of the subsample comparisons. Ideally, the shift in frame will not shift the outcome of comparisons. For example, the estimate for alcohol consumption among African Americans was 42.6 percent using the FE sample. This was

significantly different from the overall population estimate of 51.2 percent within the FE sample. When comparing African Americans to the overall population within Subsample 1, the African-American estimates are also significantly lower. The same conclusion, a lower proportion of African Americans have had an alcoholic drink within the past month than the population as a whole, would be reached in both samples.

[Table A.8](#) displays the summary of these comparisons by subsample and measure. The first two columns for each subsample include all agreements (both the FE and the subsample comparisons were significant at the .05 level or both the FE and subsample comparisons failed to reach significance). Only 9 (4 percent) of the 255 total comparisons in Subsample 1 (17 subdomains x 15 measures) and 14 (6 percent) of the comparisons in Subsample 2 yielded different outcomes than the FE sample comparison. This is approximately the margin of error that would be expected when testing at the .05 significance level, suggesting that a frame change would result in an acceptably small number of different conclusions when making subdomain comparisons. There was variation by measure in both subsamples, but the number of comparisons for each measure was small ( $n = 17$ ), making the estimates by measure unstable.

In addition to subdomain comparisons, researchers also use NSDUH data to assess changes over time. To determine whether a change in frame would create a trend break and limit researchers' ability to conduct time series analyses, it was proposed to recreate the subdomain analysis across years. For example, the FE 2014 estimates would be compared independently to the FE sample (2015-2016), Subsample 1, and Subsample 2. Differences in the outcomes (e.g., whether each comparison yielded a significant difference) would be compared across the FE sample and each subsample. Unfortunately, this analysis cannot be completed. A partial redesign was implemented in 2015. Comparisons between 2014 and other samples would conflate the trend break observed from the redesign with a simulated trend break created by a change in frame.

An alternative approach to assess the risk of a trend break is to review the number of comparisons that significantly change over time (e.g., 2015 vs. 2016) to the number of comparisons that significantly differed between the FE sample and each subsample. Appendices C-Q include columns that compare the 2015 NSDUH sample and the 2016 NSDUH sample, but they should be used with caution. It is possible that change occurs over time, resulting in a significant comparison between 2015 and 2016. The 2015-2016 FE sample could also be significantly different from the subsamples. The same outcome in both cases does not suggest that there is no trend break. These comparisons conflate trend breaks due to coverage bias with true change over time.



**Table A.8 Estimated Proportion of Subdomain Comparisons that Would Change Significance Given Two Simulated ABS Frames (Subsample 1 and Subsample 2) Compared with the 2015-2016 NSDUH Field Enumerated Frame (FE Sample) ( $n = 17$  for Each Variable)**

Variable	Subsample 1. Sample Excluding Description-Based Addresses				Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses			
	FE & Subsample Subdomain Est. Signif. Diff.	Neither Est. Signif. Diff.	FE Subdomain Est. Signif. Diff.	Subsample Subdomain Est. Signif. Diff.	FE & Subsample Subdomain Est. Signif. Diff.	Neither Est. Signif. Diff.	FE Subdomain Est. Signif. Diff.	Subsample Subdomain Est. Signif. Diff.
Total	51	45	1	2	51	44	2	4
BNGDRKMON	65	29	0	6	59	24	6	12
MRJMON	76	24	0	0	76	24	0	0
STMNMMON	41	59	0	0	41	59	0	0
SMIYR_U	53	47	0	0	53	47	0	0
ALCMON	88	6	6	0	88	6	6	0
CIGMON	71	18	6	6	76	18	0	6
ABODALC	41	59	0	0	41	53	0	6
UDPYILL	47	53	0	0	47	53	0	0
AMIYR_U	53	47	0	0	53	41	0	6
AMHTXRC	71	24	0	6	71	24	0	6
AMDEYR2	41	53	0	6	35	47	6	12
PNRNMMON	24	71	6	0	24	71	6	0
UDPYILAL	53	47	0	0	53	41	0	6
TXYRSPILAL	12	82	0	6	12	82	0	6
YMDEYR2	29	65	0	6	29	71	0	0

## Summary, Limitations, and Conclusions

While a hybrid ABS design may offer cost savings, a hybrid ABS frame will fail to cover some housing units currently found on the field enumerated frame.<sup>28</sup> The purpose of this analysis was to identify whether this coverage difference would introduce coverage bias. To do so, two subsamples were created from the field enumerated set of respondents. One subsample excluded simplified addresses (addresses without a street number) since these addresses are not found on the ABS frame. In the second subsample, simplified addresses, GQs, and addresses in AIAN tribal areas were excluded. While some differences between the two subsamples were identified, they produced similar results on most variables. Ultimately, (1) some variables were less affected by the undercoverage, (2) some variables were consistently biased but the bias was small, (3) some variables were rarely biased, but the bias was large when observed, and (4) two variables in each subsample were consistently biased and the bias was large.

In addition to reviewing the differences by measures, comparisons were also summarized by domain and by domain size. Similar to the measures, some domains were more likely to experience differences in estimates than others, but no clear pattern emerged. A pattern did emerge when reviewing significant differences by domain size with the proportion of significant differences increasing as domain size increased.

Finally, comparisons were made to determine whether a shift in frame would ultimately change the conclusions drawn from analyses across subdomains and across time. Given the data, the shift in frame will have minimal effect on subdomain comparisons. Unfortunately, trend analysis was not feasible given the data available at the time of this writing.

While these findings provide a “best guess” of the effect of a hybrid ABS design given the data available, the results should be interpreted with caution. Several assumptions and limitations of the data make these results represent a “worst case” scenario. First, the analyses were conducted on two years of data. This increased the sample sizes and reduced the confidence intervals, increasing the likelihood of finding significant differences. By assuming the average sample size found in annual NSDUH datasets and using information found in [Table A.7](#) (and holding all else equal), the number of significant differences could be reduced by approximately 20 percent. For Subsample 1, the proportion of significant comparisons could reduce from 12 percent to 9 percent, and for Subsample 2, from 9 percent to 7 percent.

Second, all differences between the FE sample and the subsamples were attributed to undercoverage of the ABS frame. However, the FE sample suffers from its own error and undercoverage, such as being unable to enumerate gated communities or controlled-access buildings. To the extent that excluded units are different from included units, FE frames may also suffer from coverage bias.

Third, these analyses are limited to national estimates and do not include state or sub-state estimates. While official state estimates are model-based, the small area estimation

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<sup>28</sup> Hybrid ABS implies that FE would occur in areas with low coverage, frame enhancement may occur in areas with middling coverage, and the Computerized Delivery Sequence (CDS) file would be used in areas with high coverage. However, geocoding error and some undercoverage will remain in areas where only the CDS is used.

methodology used has a design-based component that plays a significant role in the estimation process. For example, states that have a significant proportion of noncity-style addresses (e.g., 39 percent in Alaska and 28 percent in West Virginia as shown in McMichael (2017) and AIAN tribal lands (e.g., Arizona, Oklahoma) may be disproportionately affected by coverage bias from an ABS frame compared with the nation.

Fourth, practical significance, as defined here, is based on the absolute and relative differences between the subsamples and the FE sample. These measures only account for the precision of the subsample estimates indirectly. An alternative analysis strategy would be calculating difference as:

$$\frac{|p_{subset} - p_{full}|}{se_{p_{subset}}}$$

where a value over a particular threshold (e.g., 0.2 in Cochran, 1977) would correspond to a distortion of the probability of Type I error which would have an impact on the accuracy of outcomes from statistical testing and confidence interval estimation.

Finally, and most importantly, the subsamples used to simulate a hybrid ABS frame are imperfect. Some of the cases dropped from the subsample would have been found on the ABS frame while others that were not dropped from the subsample may have been missing from the ABS frame. Moreover, field enumeration or frame enhancement that would occur in segments that suffer from low coverage was ignored. If the majority of the addresses dropped from our simulation were in low coverage segments, then they would have been included on a hybrid frame because such segments would continue to use field enumeration or frame enhancement methods. The ABS frames would need to be mapped to the 2015 and 2016 NSDUH segments and a coverage threshold set to determine whether these addresses would have fallen in field enumerated segments given a hybrid ABS design. Our analysis also did not account for geocoding error found on the hybrid ABS frame. This error could introduce both over- and undercoverage and introduce additional variability.

Based on these findings and limitations, there are three potential courses of action. First, it should be determined whether the identified biases and the magnitude of some biases is within acceptable limits for the NSDUH. Second, if the identified biases are considered to be within acceptable limits, then estimates may be further revised by mapping the ABS frame onto the NSDUH segments to identify which segments would be field enumerated and which would utilize the ABS frame. Addresses that would fall in field enumerated segments that were dropped in the subset samples could be reincluded, reducing undercoverage and reducing the risk of coverage bias. Even if the identified bias is not within acceptable limits, this step would be worthwhile because the above analyses are likely an overestimate of the change. Third, after the second step, a field test should be conducted to further improve the accuracy of the information on the coverage bias. Unlike the analyses conducted in this report, a field test would account for geocoding error, listing error, and provide actual counts of addresses that would not be found on a hybrid ABS frame. Field test data may also be used to determine if changes in the frame have an impact on time series analyses.

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## Appendix B: Domain Counts

Table B.1 Domain Counts

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
<b>Age Group</b>					
12+	136,015	128,944	7,071	125,179	10,836
12-17	33,992	32,099	1,893	31,423	2,569
18+	102,023	96,845	5,178	93,756	8,267
18-25	33,532	31,907	1,625	30,136	3,396
26-49	47,850	45,356	2,494	44,447	3,403
50+	20,641	19,582	1,059	19,173	1,468
<b>Gender</b>					
Male	64,851	61,389	3,462	59,555	5,296
Female	71,164	67,555	3,609	65,624	5,540
<b>Hispanicity</b>					
Hispanic/Latino	24,741	23,986	755	23,575	1,166
Not Hispanic/Latino	111,274	104,958	6,316	101,604	9,670
<b>Race</b>					
White Only	98,224	92,907	5,317	90,527	7,697
Black Only	18,375	17,728	647	17,359	1,016
NHOPI Only	1,259	1,219	40	1,186	73
Asian Only	5,991	5,888	103	5,764	227
AIAN Only	5,898	5,287	611	4,731	1,167
2 or More Races	6,268	5,915	353	5,612	656
<b>Division</b>					
New England	11,511	10,992	519	10,776	735
Middle Atlantic	14,226	13,796	430	13,686	540
East North Central	18,383	17,794	589	17,736	647
West North Central	13,530	12,597	933	12,144	1,386
South Atlantic	25,496	24,002	1,494	23,576	1,920
East South Central	7,679	6,960	719	6,786	893
West South Central	12,426	11,509	917	10,267	2,159
Mountain	15,665	14,830	835	14,248	1,417
Pacific	17,099	16,464	635	15,960	1,139

(continued)

**Table B.1 Domain Counts (continued)**

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
<b>County Type</b>					
Large Metro	61,764	60,712	1,052	60,149	1,615
Small Metro, pop 250,000-1,000,000	31,094	29,845	1,249	28,701	2,393
Small Metro, < 250,000 population	16,824	15,737	1,087	15,239	1,585
Nonmetro, 20,000 or more urban pop	10,900	9,945	955	9,441	1,459
Nonmetro, 2,500-19,999 urban pop	12,290	10,452	1,838	9,556	2,734
Nonmetro, < 2,500 urban pop	3,143	2,253	890	2,093	1,050
<b>College Enrollment</b>					
Persons Aged 18-22 <sup>1</sup>	20,194	19,214	980	17,711	2,483
Full-Time College Students	7,341	7,086	255	6,005	1,336
Other Persons Aged 18-22 <sup>2</sup>	12,853	12,128	725	11,706	1,147
<b>Pregnancy</b>					
Female Aged 15-44 <sup>3</sup>	46,671	44,326	2,345	42,886	3,785
Pregnant Female Aged 15-44	1,754	1,666	88	1,629	125
Not Pregnant Female Aged 15-44	44,917	42,660	2,257	41,257	3,660
<b>Division by Age Group</b>					
New England					
12+	11,511	10,992	519	10,776	735
12-17	2,842	2,711	131	2,704	138
18+	8,669	8,281	388	8,072	597
18-25	2,679	2,556	123	2,362	317
26-49	4,162	3,978	184	3,965	197
50+	1,828	1,747	81	1,745	83
Middle Atlantic					
12+	14,226	13,796	430	13,686	540
12-17	3,566	3,469	97	3,465	101
18+	10,660	10,327	333	10,221	439
18-25	3,571	3,462	109	3,373	198
26-49	4,913	4,745	168	4,728	185
50+	2,176	2,120	56	2,120	56
East North Central					
12+	18,383	17,794	589	17,736	647
12-17	4,625	4,492	133	4,484	141
18+	13,758	13,302	456	13,252	506
18-25	4,592	4,448	144	4,414	178
26-49	6,374	6,144	230	6,140	234
50+	2,792	2,710	82	2,698	94

(continued)

**Table B.1 Domain Counts (continued)**

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
West North Central					
12+	13,530	12,597	933	12,144	1,386
12-17	3,430	3,153	277	3,104	326
18+	10,100	9,444	656	9,040	1,060
18-25	3,338	3,156	182	2,807	531
26-49	4,781	4,465	316	4,423	358
50+	1,981	1,823	158	1,810	171
South Atlantic					
12+	25,496	24,002	1,494	23,576	1,920
12-17	6,382	5,973	409	5,907	475
18+	19,114	18,029	1,085	17,669	1,445
18-25	6,185	5,830	355	5,608	577
26-49	9,042	8,522	520	8,430	612
50+	3,887	3,677	210	3,631	256
East South Central					
12+	7,679	6,960	719	6,786	893
12-17	1,871	1,699	172	1,670	201
18+	5,808	5,261	547	5,116	692
18-25	1,940	1,767	173	1,681	259
26-49	2,698	2,427	271	2,385	313
50+	1,170	1,067	103	1,050	120
West South Central					
12+	12,426	11,509	917	10,267	2,159
12-17	3,105	2,816	289	2,519	586
18+	9,321	8,693	628	7,748	1,573
18-25	3,094	2,902	192	2,549	545
26-49	4,379	4,085	294	3,681	698
50+	1,848	1,706	142	1,518	330
Mountain					
12+	15,665	14,830	835	14,248	1,417
12-17	3,941	3,714	227	3,597	344
18+	11,724	11,116	608	10,651	1,073
18-25	3,867	3,673	194	3,406	461
26-49	5,526	5,234	292	5,093	433
50+	2,331	2,209	122	2,152	179

(continued)

Table B.1 Domain Counts (continued)

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
Pacific					
12+	17,099	16,464	635	15,960	1,139
12-17	4,230	4,072	158	3,973	257
18+	12,869	12,392	477	11,987	882
18-25	4,266	4,113	153	3,936	330
26-49	5,975	5,756	219	5,602	373
50+	2,628	2,523	105	2,449	179
<b>Division by Hispanicity</b>					
New England					
Hispanic/Latino	1,214	1,192	22	1,181	33
Not Hispanic/Latino	10,297	9,800	497	9,595	702
Middle Atlantic					
Hispanic/Latino	2,727	2,678	49	2,657	70
Not Hispanic/Latino	11,499	11,118	381	11,029	470
East North Central					
Hispanic/Latino	1,922	1,873	49	1,869	53
Not Hispanic/Latino	16,461	15,921	540	15,867	594
West North Central					
Hispanic/Latino	1,156	1,109	47	1,089	67
Not Hispanic/Latino	12,374	11,488	886	11,055	1,319
South Atlantic					
Hispanic/Latino	4,090	3,939	151	3,900	190
Not Hispanic/Latino	21,406	20,063	1,343	19,676	1,730
East South Central					
Hispanic/Latino	373	349	24	342	31
Not Hispanic/Latino	7,306	6,611	695	6,444	862
West South Central					
Hispanic/Latino	3,659	3,449	210	3,273	386
Not Hispanic/Latino	8,767	8,060	707	6,994	1,773
Mountain					
Hispanic/Latino	3,989	3,862	127	3,784	205
Not Hispanic/Latino	11,676	10,968	708	10,464	1,212
Pacific					
Hispanic/Latino	5,611	5,535	76	5,480	131
Not Hispanic/Latino	11,488	10,929	559	10,480	1,008

(continued)



Table B.1 Domain Counts (continued)

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
<b>Division by Race</b>					
New England					
White Only	9,654	9,177	477	8,996	658
Black Only	702	689	13	681	21
NHOPI Only	90	90	0	86	4
Asian Only	384	379	5	366	18
AIAN Only	250	248	2	245	5
2 or More Races	431	409	22	402	29
Middle Atlantic					
White Only	9,752	9,392	360	9,321	431
Black Only	2,289	2,263	26	2,241	48
NHOPI Only	164	160	4	160	4
Asian Only	897	882	15	871	26
AIAN Only	589	580	9	579	10
2 or More Races	535	519	16	514	21
East North Central					
White Only	14,244	13,754	490	13,708	536
Black Only	2,433	2,365	68	2,359	74
NHOPI Only	69	68	1	68	1
Asian Only	571	564	7	559	12
AIAN Only	389	381	8	381	8
2 or More Races	677	662	15	661	16
West North Central					
White Only	11,368	10,572	796	10,243	1,125
Black Only	846	830	16	814	32
NHOPI Only	48	47	1	46	2
Asian Only	321	316	5	308	13
AIAN Only	460	381	79	301	159
2 or More Races	487	451	36	432	55
South Atlantic					
White Only	15,915	14,823	1,092	14,608	1,307
Black Only	6,628	6,389	239	6,279	349
NHOPI Only	151	150	1	146	5
Asian Only	880	864	16	845	35
AIAN Only	898	819	79	776	122
2 or More Races	1,024	957	67	922	102

(continued)

Table B.1 Domain Counts (continued)

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
East South Central					
White Only	5,328	4,799	529	4,744	584
Black Only	1,919	1,760	159	1,681	238
NHOPI Only	18	15	3	13	5
Asian Only	103	102	1	89	14
AIAN Only	98	86	12	63	35
2 or More Races	213	198	15	196	17
West South Central					
White Only	8,771	8,106	665	7,243	1,528
Black Only	2,080	1,974	106	1,872	208
NHOPI Only	54	52	2	51	3
Asian Only	353	347	6	328	25
AIAN Only	572	518	54	401	171
2 or More Races	596	512	84	372	224
Mountain					
White Only	12,649	12,074	575	11,776	873
Black Only	608	601	7	581	27
NHOPI Only	154	151	3	144	10
Asian Only	344	341	3	336	8
AIAN Only	1,225	1,006	219	792	433
2 or More Races	685	657	28	619	66
Pacific					
White Only	10,543	10,210	333	9,888	655
Black Only	870	857	13	851	19
NHOPI Only	511	486	25	472	39
Asian Only	2,138	2,093	45	2,062	76
AIAN Only	1,417	1,268	149	1,193	224
2 or More Races	1,620	1,550	70	1,494	126
<b>County Type by Age Group</b>					
Large Metro					
12+	61,764	60,712	1,052	60,149	1,615
12-17	15,496	15,225	271	15,165	331
18+	46,268	45,487	781	44,984	1,284
18-25	14,898	14,651	247	14,268	630
26-49	22,642	22,253	389	22,165	477
50+	8,728	8,583	145	8,551	177

(continued)

Table B.1 Domain Counts (continued)

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
Small Metro, population 250,000-1,000,000					
12+	31,094	29,845	1,249	28,701	2,393
12-17	7,803	7,446	357	7,218	585
18+	23,291	22,399	892	21,483	1,808
18-25	7,986	7,676	310	7,213	773
26-49	10,715	10,286	429	9,978	737
50+	4,590	4,437	153	4,292	298
Small Metro, < 250,000 population					
12+	16,824	15,737	1,087	15,239	1,585
12-17	4,040	3,777	263	3,709	331
18+	12,784	11,960	824	11,530	1,254
18-25	4,503	4,229	274	3,938	565
26-49	5,687	5,294	393	5,195	492
50+	2,594	2,437	157	2,397	197
Nonmetro, 20,000 or more urban population					
12+	10,900	9,945	955	9,441	1,459
12-17	2,681	2,427	254	2,351	330
18+	8,219	7,518	701	7,090	1,129
18-25	2,839	2,608	231	2,347	492
26-49	3,628	3,295	333	3,180	448
50+	1,752	1,615	137	1,563	189
Nonmetro, 2,500-19,999 urban population					
12+	12,290	10,452	1,838	9,556	2,734
12-17	3,129	2,619	510	2,413	716
18+	9,161	7,833	1,328	7,143	2,018
18-25	2,683	2,315	368	1,994	689
26-49	4,120	3,468	652	3,225	895
50+	2,358	2,050	308	1,924	434
Nonmetro, < 2,500 urban pop					
12+	3,143	2,253	890	2,093	1,050
12-17	843	605	238	567	276
18+	2,300	1,648	652	1,526	774
18-25	623	428	195	376	247
26-49	1,058	760	298	704	354
50+	619	460	159	446	173
<b>County Type by Hispanicity</b>					
Large Metro					
Hispanic/Latino	14,878	14,653	225	14,567	311
Not Hispanic/Latino	46,886	46,059	827	45,582	1,304

(continued)

Table B.1 Domain Counts (continued)

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
Small Metro, population 250,000-1,000,000					
Hispanic/Latino	5,731	5,525	206	5,365	366
Not Hispanic/Latino	25,363	24,320	1,043	23,336	2,027
Small Metro, < 250,000 population					
Hispanic/Latino	1,949	1,872	77	1,810	139
Not Hispanic/Latino	14,875	13,865	1,010	13,429	1,446
Nonmetro, 20,000 or more urban population					
Hispanic/Latino	1,168	1,080	88	1,051	117
Not Hispanic/Latino	9,732	8,865	867	8,390	1,342
Nonmetro, 2,500-19,999 urban population					
Hispanic/Latino	858	728	130	669	189
Not Hispanic/Latino	11,432	9,724	1,708	8,887	2,545
Nonmetro, < 2,500 urban population					
Hispanic/Latino	157	128	29	113	44
Not Hispanic/Latino	2,986	2,125	861	1,980	1,006
<b>County Type by Race</b>					
Large Metro					
White Only	40,307	39,576	731	39,194	1,113
Black Only	11,346	11,149	197	11,082	264
NHOPI Only	626	619	7	614	12
Asian Only	3,925	3,899	26	3,850	75
AIAN Only	2,950	2,904	46	2,878	72
2 or More Races	2,610	2,565	45	2,531	79
Small Metro, population 250,000-1,000,000					
White Only	22,884	21,918	966	21,110	1,774
Black Only	3,613	3,472	141	3,359	254
NHOPI Only	369	364	5	353	16
Asian Only	1,340	1,323	17	1,287	53
AIAN Only	1,070	1,007	63	947	123
2 or More Races	1,818	1,761	57	1,645	173
Small Metro, < 250,000 population					
White Only	13,583	12,683	900	12,364	1,219
Black Only	1,499	1,409	90	1,310	189
NHOPI Only	100	94	6	93	7
Asian Only	370	349	21	339	31
AIAN Only	521	495	26	449	72
2 or More Races	751	707	44	684	67

(continued)

Table B.1 Domain Counts (continued)

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
Nonmetro, 20,000 or more urban population					
White Only	8,768	8,027	741	7,726	1,042
Black Only	826	778	48	736	90
NHOPI Only	125	111	14	101	24
Asian Only	252	226	26	220	32
AIAN Only	410	341	69	238	172
2 or More Races	519	462	57	420	99
Nonmetro, 2,500-19,999 urban pop					
White Only	10,127	8,770	1,357	8,271	1,856
Black Only	937	814	123	766	171
NHOPI Only	36	30	6	24	12
Asian Only	89	81	8	58	31
AIAN Only	642	413	229	173	469
2 or More Races	459	344	115	264	195
Nonmetro, < 2,500 urban pop					
White Only	2,555	1,933	622	1,862	693
Black Only	154	106	48	106	48
NHOPI Only	3	1	2	1	2
Asian Only	15	10	5	10	5
AIAN Only	305	127	178	46	259
2 or More Races	111	76	35	68	43
<b>College Enrollment by Gender</b>					
Persons Aged 18 to 22 <sup>1</sup>					
Male	9,994	9,487	507	8,770	1,224
Female	10,200	9,727	473	8,941	1,259
Full-Time College Students					
Male	3,267	3,166	101	2,669	598
Female	4,074	3,920	154	3,336	738
Other Persons Aged 18 to 22 <sup>2</sup>					
Male	6,727	6,321	406	6,101	626
Female	6,126	5,807	319	5,605	521
<b>Age Group by Gender</b>					
12+					
Male	64,851	61,389	3,462	59,555	5,296
Female	71,164	67,555	3,609	65,624	5,540
12-17					
Male	17,296	16,338	958	15,974	1,322
Female	16,696	15,761	935	15,449	1,247

(continued)

**Table B.1 Domain Counts (continued)**

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
18+					
Male	47,555	45,051	2,504	43,581	3,974
Female	54,468	51,794	2,674	50,175	4,293
18-25					
Male	16,237	15,416	821	14,566	1,671
Female	17,295	16,491	804	15,570	1,725
26-49					
Male	21,863	20,690	1,173	20,249	1,614
Female	25,987	24,666	1,321	24,198	1,789
50+					
Male	9,455	8,945	510	8,766	689
Female	11,186	10,637	549	10,407	779
<b>Age Group by Race</b>					
12+					
White Only	98,224	92,907	5,317	90,527	7,697
Black Only	18,375	17,728	647	17,359	1,016
NHOPI Only	1,259	1,219	40	1,186	73
Asian Only	5,991	5,888	103	5,764	227
AIAN Only	5,898	5,287	611	4,731	1,167
2 or More Races	6,268	5,915	353	5,612	656
12-17					
White Only	23,162	21,808	1,354	21,460	1,702
Black Only	5,079	4,887	192	4,835	244
NHOPI Only	367	354	13	348	19
Asian Only	1,301	1,276	25	1,262	39
AIAN Only	1,777	1,606	171	1,447	330
2 or More Races	2,306	2,168	138	2,071	235
18+					
White Only	75,062	71,099	3,963	69,067	5,995
Black Only	13,296	12,841	455	12,524	772
NHOPI Only	892	865	27	838	54
Asian Only	4,690	4,612	78	4,502	188
AIAN Only	4,121	3,681	440	3,284	837
2 or More Races	3,962	3,747	215	3,541	421

(continued)

Table B.1 Domain Counts (continued)

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
18-25					
White Only	23,248	22,054	1,194	20,813	2,435
Black Only	4,921	4,760	161	4,594	327
NHOPI Only	417	405	12	387	30
Asian Only	1,602	1,577	25	1,487	115
AIAN Only	1,598	1,454	144	1,306	292
2 or More Races	1,746	1,657	89	1,549	197
26-49					
White Only	35,070	33,137	1,933	32,630	2,440
Black Only	6,149	5,944	205	5,834	315
NHOPI Only	378	367	11	360	18
Asian Only	2,491	2,449	42	2,432	59
AIAN Only	2,025	1,804	221	1,613	412
2 or More Races	1,737	1,655	82	1,578	159
50+					
White Only	16,744	15,908	836	15,624	1,120
Black Only	2,226	2,137	89	2,096	130
NHOPI Only	97	93	4	91	6
Asian Only	597	586	11	583	14
AIAN Only	498	423	75	365	133
2 or More Races	479	435	44	414	65
<b>Age Group by Hispanicity</b>					
12+					
Hispanic/Latino	24,741	23,986	755	23,575	1,166
Not Hispanic/Latino	111,274	104,958	6,316	101,604	9,670
12-17					
Hispanic/Latino	7,712	7,452	260	7,342	370
Not Hispanic/Latino	26,280	24,647	1,633	24,081	2,199
18+					
Hispanic/Latino	17,029	16,534	495	16,233	796
Not Hispanic/Latino	84,994	80,311	4,683	77,523	7,471
18-25					
Hispanic/Latino	6,789	6,606	183	6,429	360
Not Hispanic/Latino	26,743	25,301	1,442	23,707	3,036
26-49					
Hispanic/Latino	8,356	8,094	262	7,988	368
Not Hispanic/Latino	39,494	37,262	2,232	36,459	3,035

(continued)

**Table B.1 Domain Counts (continued)**

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
50+					
Hispanic/Latino	1,884	1,834	50	1,816	68
Not Hispanic/Latino	18,757	17,748	1,009	17,357	1,400
<b>Pregnancy by Age Group</b>					
Female Aged 15-44 <sup>3</sup>					
15-17	8,409	7,925	484	7,782	627
18-25	17,219	16,419	800	15,501	1,718
26-44	21,043	19,982	1,061	19,603	1,440
Pregnant Female Aged 15-44					
15-17	57	56	1	56	1
18-25	823	777	46	754	69
26-44	874	833	41	819	55
Not Pregnant Female Aged 15-44					
15-17	8,352	7,869	483	7,726	626
18-25	16,396	15,642	754	14,747	1,649
26-44	20,169	19,149	1,020	18,784	1,385
<b>Pregnancy by Race</b>					
Female Aged 15-44 <sup>3</sup>					
White Only	32,851	31,070	1,781	30,149	2,702
Black Only	6,840	6,616	224	6,462	378
NHOPI Only	453	439	14	422	31
Asian Only	2,276	2,235	41	2,177	99
AIAN Only	1,942	1,770	172	1,600	342
2 or More Races	2,309	2,196	113	2,076	233
Pregnant Female Aged 15-44					
White Only	1,190	1,120	70	1,107	83
Black Only	295	289	6	279	16
NHOPI Only	19	19	0	17	2
Asian Only	77	75	2	75	2
AIAN Only	85	78	7	71	14
2 or More Races	88	85	3	80	8
Not Pregnant Female Aged 15-44					
White Only	31,661	29,950	1,711	29,042	2,619
Black Only	6,545	6,327	218	6,183	362
NHOPI Only	434	420	14	405	29
Asian Only	2,199	2,160	39	2,102	97
AIAN Only	1,857	1,692	165	1,529	328
2 or More Races	2,221	2,111	110	1,996	225

(continued)



**Table B.1 Domain Counts (continued)**

Domains	FE Sample (2015+2016)	Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses	
	Sample Size	Sample Size	Difference from FE Sample	Sample Size	Difference from FE Sample
<b>Pregnancy by Hispanicity</b>					
Female Aged 15-44 <sup>3</sup>					
Hispanic/Latino	9,194	8,935	259	8,766	428
Not Hispanic/Latino	37,477	35,391	2,086	34,120	3,357
Pregnant Female Aged 15-44					
Hispanic/Latino	364	358	6	356	8
Not Hispanic/Latino	1,390	1,308	82	1,273	117
Not Pregnant Female Aged 15-44					
Hispanic/Latino	8,830	8,577	253	8,410	420
Not Hispanic/Latino	36,087	34,083	2,004	32,847	3,240

AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

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## Appendix C: 2015-2016 NSDUH – Weighted Annual Averages Past Month Binge Alcohol Use – BNGDRKMON

**Table C.1 Past Month Binge Alcohol Use**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	66,008	24.6	66,015	24.6	66,113	24.6	66,690	24.9	65,327	24.2
12-17	1,328	5.3	1,329	5.3	1,320	5.3	1,441	5.8	1,214	4.9 a
18+	64,681	26.5	64,686	26.5	64,793	26.6	65,249	26.9	64,113	26.2
18-25	13,442	38.7	13,490	38.8 a	13,513	38.9	13,626	39.0	13,258	38.4
26-49	32,173	32.5	32,222	32.6	32,297	32.7	32,312	32.8	32,035	32.3
50+	19,065	17.3	18,975	17.2	18,983	17.3	19,311	17.7	18,820	17.0
<b>Gender</b>										
Male	38,070	29.2	38,103	29.3	38,207	29.4	38,351	29.6	37,789	28.9
Female	27,938	20.2	27,912	20.2	27,906	20.2	28,339	20.5	27,538	19.8
<b>Hispanicity</b>										
Hispanic/Latino	11,100	25.3	11,090	25.2	11,085	25.2	11,178	25.7	11,022	24.9
Not Hispanic/Latino	54,908	24.4	54,925	24.5	55,029	24.5	55,512	24.8	54,304	24.1
<b>Race</b>										
White Only	53,771	25.7	53,860	25.7	53,899	25.7	54,358	26.0	53,184	25.3
Black Only	7,917	23.2	7,905	23.2	7,938	23.3	7,951	23.4	7,883	23.0
NHOPI Only	253	19.2	247	18.7	237	18.2	229	21.0	276	18.0
Asian Only	2,002	13.5	1,982	13.4	2,000	13.5	2,105	14.2	1,900	12.9
AIAN Only	775	24.4	769	24.2	794	25.0	777	24.6	773	24.1
2 or More Races	1,290	23.2	1,253	22.6	1,245	22.4	1,270	23.3	1,310	23.2
<b>Division</b>										
New England	3,534	28.0	3,522	27.9	3,523	27.9	3,304	26.2	3,764	29.7 a
Middle Atlantic	9,057	25.8	9,067	25.8	9,069	25.8	9,150	26.0	8,963	25.5
East North Central	10,296	26.3	10,362	26.4 a	10,365	26.4	10,271	26.2	10,321	26.3
West North Central	4,840	27.7	4,811	27.5	4,833	27.6	4,778	27.4	4,902	28.0
South Atlantic	12,688	23.9	12,673	23.8	12,645	23.8	12,863	24.3	12,513	23.4
East South Central	3,173	20.2	3,228	20.5	3,255	20.7 a	3,185	20.3	3,161	20.1
West South Central	7,405	23.3	7,368	23.2	7,410	23.3	7,544	23.9	7,265	22.7
Mountain	4,535	23.3	4,553	23.3	4,577	23.5	4,616	23.9	4,454	22.7
Pacific	10,481	23.9	10,432	23.8	10,435	23.8	10,979	25.1	9,984	22.7 a

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	38,073	25.4	38,625	25.4	39,112	25.4	38,547	25.8	37,600	25.0
Small Metro, pop 250,000-1,000,000	13,177	23.7	13,281	23.7	13,097	23.8	13,564	24.2	12,789	23.1
Small Metro, < 250,000 population	6,328	24.8	6,256	24.7	6,226	24.7	6,316	24.7	6,341	24.8
Nonmetro, 20,000 or more urban pop	3,593	23.6	3,540	23.7	3,509	23.5	3,682	24.3	3,504	22.8
Nonmetro, 2,500-19,999 urban pop	4,065	22.4	3,685	22.1	3,563	22.2	3,824	22.5	4,306	22.3
Nonmetro, < 2,500 urban pop	773	18.7	628	18.3	606	17.8	758	16.6	787	21.3 a
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	7,286	34.4	7,327	34.6 a	7,187	34.5	7,355	34.6	7,217	34.2
Full-Time College Students	3,013	38.0	3,052	38.2	2,843	38.0	2,996	37.9	3,031	38.0
Other Persons Aged 18 to 22 <sup>2</sup>	4,272	32.3	4,275	32.4	4,344	32.5	4,359	32.6	4,186	31.9
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	17,859	28.2	17,886	28.3	17,887	28.3	18,072	28.7	17,645	27.8
Pregnant Female Aged 15-44	102	4.5	98	4.3	100	4.3	105	4.6	98	4.3
Not Pregnant Female Aged 15-44	17,757	29.1	17,787	29.2	17,787	29.2	17,966	29.7	17,547	28.6
<b>Division by Age Group</b>										
New England										
12+	3,534	28.0	3,522	27.9	3,523	27.9	3,304	26.2	3,764	29.7 a
12-17	72	6.7	72	6.7	71	6.7	77	7.1	68	6.3
18+	3,462	29.9	3,451	29.8	3,452	29.8	3,227	27.9	3,696	31.9 a
18-25	744	45.1	743	45.0	736	44.6	724	43.9	764	46.2
26-49	1,637	36.9	1,641	37.0	1,646	37.1	1,629	36.6	1,645	37.1
50+	1,081	19.7	1,066	19.5	1,070	19.5	874	16.0	1,288	23.4 a
Middle Atlantic										
12+	9,057	25.8	9,067	25.8	9,069	25.8	9,150	26.0	8,963	25.5
12-17	194	6.4	195	6.4	195	6.4	219	7.2	168	5.6
18+	8,863	27.6	8,871	27.6	8,874	27.6	8,931	27.8	8,795	27.4
18-25	1,962	44.2	1,965	44.3	1,965	44.3	1,953	43.7	1,970	44.8
26-49	4,226	32.9	4,244	33.0	4,248	33.1	4,274	33.2	4,178	32.6
50+	2,675	18.0	2,662	17.9	2,661	17.9	2,704	18.3	2,647	17.8

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	10,296	26.3	10,362	26.4	10,365	26.4	10,271	26.2	10,321	26.3
12-17	220	6.0	216	5.9	216	5.9	256	6.9	184	5.0
18+	10,077	28.4	10,146	28.6	10,149	28.6	10,016	28.2	10,137	28.5
18-25	2,121	41.8	2,130	42.0	2,124	41.9	2,145	42.2	2,097	41.5
26-49	4,832	34.6	4,831	34.6	4,832	34.6	4,867	34.8	4,798	34.4
50+	3,123	18.9	3,185	19.3	3,193	19.4	3,004	18.3	3,243	19.6
West North Central										
12+	4,840	27.7	4,811	27.5	4,833	27.6	4,778	27.4	4,902	28.0
12-17	87	5.2	82	5.0	82	5.0	83	5.0	90	5.5
18+	4,753	30.0	4,729	29.8	4,751	30.0	4,695	29.7	4,811	30.3
18-25	1,036	44.7	1,033	44.5	1,048	45.2	1,044	44.9	1,028	44.4
26-49	2,390	38.4	2,402	38.6	2,400	38.6	2,383	38.4	2,397	38.5
50+	1,327	18.2	1,294	17.7	1,303	17.8	1,268	17.4	1,386	18.9
South Atlantic										
12+	12,688	23.9	12,673	23.8	12,645	23.8	12,863	24.3	12,513	23.4
12-17	215	4.6	218	4.6	215	4.5	242	5.1	188	4.0
18+	12,473	25.7	12,456	25.7	12,431	25.6	12,621	26.2	12,324	25.3
18-25	2,512	38.4	2,531	38.7	2,509	38.4	2,609	39.6	2,416	37.2
26-49	5,847	30.4	5,857	30.4	5,844	30.3	5,895	30.7	5,800	30.0
50+	4,113	18.1	4,068	17.9	4,077	18.0	4,118	18.4	4,109	17.9
East South Central										
12+	3,173	20.2	3,228	20.5	3,255	20.7	3,185	20.3	3,161	20.1
12-17	71	4.9	72	4.9	71	4.8	69	4.7	74	5.0
18+	3,102	21.8	3,156	22.2	3,184	22.4	3,116	21.9	3,088	21.6
18-25	620	30.6	630	31.1	640	31.6	617	30.3	624	31.0
26-49	1,568	27.9	1,604	28.5	1,610	28.6	1,508	26.9	1,628	28.9
50+	914	13.9	922	14.0	935	14.2	991	15.1	836	12.6
West South Central										
12+	7,405	23.3	7,368	23.2	7,410	23.3	7,544	23.9	7,265	22.7
12-17	173	5.2	176	5.3	170	5.1	196	5.9	151	4.5
18+	7,231	25.4	7,192	25.2	7,241	25.4	7,348	26.0	7,115	24.8
18-25	1,455	33.6	1,458	33.6	1,453	33.5	1,439	33.1	1,471	34.0
26-49	3,963	32.2	3,960	32.2	4,028	32.8	3,977	32.6	3,949	31.9
50+	1,814	15.3	1,774	15.0	1,760	14.8	1,933	16.4	1,695	14.2

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
12+	4,535	23.3	4,553	23.3	4,577	23.5	4,616	23.9	4,454	22.7
12-17	94	4.9	95	5.0	96	5.0	92	4.8	96	5.0
18+	4,441	25.3	4,458	25.4	4,480	25.5	4,524	26.0	4,358	24.6
18-25	935	36.1	938	36.2	962	37.1 a	976	37.7	894	34.5
26-49	2,312	31.9	2,313	31.9	2,315	31.9	2,364	32.9	2,260	30.9
50+	1,194	15.4	1,207	15.6	1,204	15.6	1,184	15.5	1,204	15.4
Pacific										
12+	10,481	23.9	10,432	23.8	10,435	23.8	10,979	25.1	9,984	22.7 a
12-17	201	5.0	203	5.1 a	204	5.1 a	208	5.2	195	4.9
18+	10,280	25.8	10,228	25.7	10,231	25.7	10,771	27.1	9,789	24.5 a
18-25	2,057	35.6	2,061	35.7	2,077	35.9	2,119	36.4	1,996	34.8
26-49	5,398	31.7	5,370	31.6	5,375	31.6	5,416	32.0	5,381	31.5
50+	2,824	16.6	2,797	16.4	2,779	16.3 a	3,236	19.1	2,413	14.1 a
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	314	26.0	312	25.9	315	26.1	339	28.5	288	23.5
Not Hispanic/Latino	3,220	28.2	3,210	28.1	3,209	28.1	2,965	25.9	3,476	30.4 a
Middle Atlantic										
Hispanic/Latino	1,186	23.4	1,193	23.6	1,191	23.5	1,167	23.2	1,205	23.7
Not Hispanic/Latino	7,871	26.1	7,874	26.2	7,878	26.2	7,983	26.5	7,758	25.8
East North Central										
Hispanic/Latino	773	26.1	782	26.5	786	26.6	828	28.2	718	24.1
Not Hispanic/Latino	9,523	26.3	9,579	26.4 a	9,578	26.4	9,443	26.0	9,603	26.5
West North Central										
Hispanic/Latino	229	24.3	217	23.1	216	23.0	221	23.7	237	24.9
Not Hispanic/Latino	4,611	27.9	4,594	27.8	4,617	27.9	4,557	27.6	4,665	28.1
South Atlantic										
Hispanic/Latino	1,695	24.7	1,709	24.9	1,703	24.8	1,618	23.9	1,771	25.5
Not Hispanic/Latino	10,993	23.7	10,964	23.7	10,942	23.6	11,245	24.4	10,741	23.1
East South Central										
Hispanic/Latino	117	21.1	123	22.2	122	22.1	99	18.0	*	* *
Not Hispanic/Latino	3,056	20.2	3,105	20.5	3,133	20.7 a	3,086	20.4	3,027	19.9

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
Hispanic/Latino	2,178	24.6	2,147	24.3	2,152	24.3	2,253	25.8	2,104	23.5
Not Hispanic/Latino	5,226	22.8	5,221	22.7	5,259	22.9	5,292	23.1	5,161	22.4
Mountain										
Hispanic/Latino	1,145	25.7	1,143	25.7	1,136	25.5	1,103	25.0	1,187	26.4
Not Hispanic/Latino	3,390	22.5	3,410	22.7	3,441	22.9	3,514	23.5	3,267	21.6
Pacific										
Hispanic/Latino	3,465	26.5	3,463	26.5	3,463	26.5	3,551	27.3	3,379	25.7
Not Hispanic/Latino	7,017	22.8	6,968	22.6	6,972	22.7	7,428	24.2	6,605	21.4
<b>Division by Race</b>										
New England										
White Only	3,103	28.7	3,096	28.6	3,092	28.6	2,880	26.6	3,326	30.7
Black Only	252	27.6	256	28.0	259	28.4	204	22.6	301	32.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	103	17.6	104	18.2	107	18.8	*	*	67	11.1
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	44	20.2	40	18.4	*	*	*	*
Middle Atlantic										
White Only	7,323	27.6	7,331	27.6	7,330	27.6	7,389	27.8	7,257	27.4
Black Only	1,143	22.3	1,146	22.4	1,148	22.4	1,168	22.9	1,119	21.8
NHOPI Only	40	28.7	40	27.2	40	27.2	*	*	*	*
Asian Only	325	12.9	330	13.2	332	13.3	322	12.8	327	13.0
AIAN Only	60	25.3	60	25.3	60	25.1	68	28.8	52	21.8
2 or More Races	166	26.6	159	25.6	159	25.5	164	26.7	168	26.5
East North Central										
White Only	8,733	26.9	8,770	27.0	8,769	27.0	8,815	27.1	8,651	26.7
Black Only	1,211	26.4	1,242	27.1	1,238	27.0	1,156	25.2	1,267	27.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	123	9.5	125	9.7	128	9.9	96	7.5	150	11.6
AIAN Only	55	25.1	53	24.3	55	25.3	52	24.2	*	*
2 or More Races	156	25.4	155	25.2	156	25.4	140	23.1	173	27.5

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	4,320	28.2	4,335	28.3	4,352	28.4	4,214	27.5	4,426	28.9
Black Only	291	25.8	279	24.8	284	25.1	*	*	262	23.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	82	16.7	77	15.7	82	16.6	111	22.4	53	10.8
AIAN Only	63	28.2	50	22.4	48	21.8	*	*	60	26.9
2 or More Races	72	24.1	55	18.3	52	17.4	*	*	*	*
South Atlantic										
White Only	9,481	24.7	9,523	24.9	9,509	24.8	9,676	25.4	9,285	24.1
Black Only	2,665	23.1	2,614	22.6	2,619	22.7	2,652	23.1	2,678	23.0
NHOPI Only	39	21.0	37	20.1	33	18.9	*	*	*	*
Asian Only	227	12.0	229	12.1	226	11.9	231	12.4	222	11.7
AIAN Only	83	24.0	79	22.7	71	20.4	75	21.7	92	26.3
2 or More Races	193	21.2	191	21.0	188	20.6	185	20.7	200	21.6
East South Central										
White Only	2,453	20.3	2,517	20.9	2,528	21.0	2,433	20.2	2,472	20.5
Black Only	656	20.9	647	20.6	667	21.3	691	22.1	621	19.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	16	6.9	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	28	14.3	*	*	27	13.7	*	*	*	*
West South Central										
White Only	5,950	24.0	5,901	23.8	5,924	23.9	6,011	24.3	5,890	23.6
Black Only	1,024	22.7	1,044	23.1	1,042	23.1	1,052	23.5	996	21.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	176	14.1	169	13.5	176	14.1	*	*	140	11.3
AIAN Only	116	20.8	118	21.1	139	24.8	131	23.5	102	18.1
2 or More Races	122	20.7	119	20.3	117	19.8	125	21.6	119	19.8
Mountain										
White Only	3,954	23.5	3,947	23.4	3,957	23.5	4,011	24.0	3,898	23.0
Black Only	185	24.4	202	26.7	206	27.2	218	29.1	152	19.9
NHOPI Only	17	12.0	16	11.6	15	10.9	*	*	*	*
Asian Only	114	18.2	110	17.5	107	17.0	*	*	108	17.2
AIAN Only	152	22.5	163	24.1	174	25.7	141	21.0	164	24.1
2 or More Races	112	24.8	114	25.3	118	26.2	110	24.8	115	24.9

(continued)



Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pacific										
White Only	8,454	26.0	8,440	26.0	8,437	26.0	8,928	27.6	7,979	24.5 a
Black Only	490	20.4	475	19.8	476	19.8	492	20.5	488	20.3
NHOPI Only	101	16.6	93	15.3	92	15.3	86	18.9	116	15.2
Asian Only	835	14.0	822	13.8	826	13.9	853	14.1	817	14.0
AIAN Only	212	27.3	217	27.8	217	27.8	214	27.6	211	26.9
2 or More Races	389	23.6	384	23.4	388	23.6	405	25.0	373	22.3
<b>County Type by Age Group</b>										
Large Metro										
12+	38,073	25.4	38,625	25.4	39,112	25.4	38,547	25.8	37,600	25.0
12-17	717	5.1	740	5.2 a	744	5.1	770	5.5	665	4.7
18+	37,356	27.5	37,886	27.5	38,369	27.5	37,777	27.9	36,935	27.1
18-25	7,422	38.5	7,521	38.5	7,613	38.6	7,459	38.5	7,384	38.5
26-49	19,516	33.2	19,826	33.2	20,098	33.3	19,643	33.5	19,388	32.9
50+	10,419	18.1	10,539	18.0	10,658	17.9	10,675	18.6	10,162	17.5
Small Metro, pop 250,000-1,000,000										
12+	13,177	23.7	13,281	23.7	13,097	23.8	13,564	24.2	12,789	23.1
12-17	293	5.5	293	5.5	290	5.5	323	6.0	263	5.0
18+	12,884	25.6	12,988	25.6	12,807	25.7	13,241	26.1	12,526	25.1
18-25	2,893	38.7	2,910	38.7	2,863	38.6	3,021	39.8	2,765	37.6
26-49	6,210	31.7	6,262	31.6	6,172	31.7	6,353	32.1	6,067	31.2
50+	3,781	16.3	3,816	16.3	3,772	16.4	3,867	16.6	3,695	15.9
Small Metro, < 250,000 population										
12+	6,328	24.8	6,256	24.7	6,226	24.7	6,316	24.7	6,341	24.8
12-17	114	5.2	111	5.1	110	5.0	130	5.9	98	4.6
18+	6,214	26.6	6,145	26.5	6,116	26.6	6,186	26.5	6,243	26.7
18-25	1,483	41.3	1,490	41.8	1,489	41.9	1,465	42.0	1,501	40.7
26-49	2,781	32.7	2,750	32.7	2,730	32.7	2,770	32.0	2,792	33.5
50+	1,951	17.3	1,905	17.0	1,896	17.0	1,952	17.4	1,950	17.2

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 20,000 or more urban pop										
12+	3,593	23.6	3,540	23.7	3,509	23.5	3,682	24.3	3,504	22.8
12-17	91	6.4	84	6.0	83	6.0	96	6.7	85	6.0
18+	3,502	25.3	3,456	25.5	3,426	25.3	3,586	26.1	3,419	24.6
18-25	750	37.7	744	38.1	762	38.8	818	39.9	682	35.3
26-49	1,588	31.2	1,544	31.2	1,527	31.1	1,551	30.8	1,625	31.7
50+	1,165	17.3	1,167	17.6	1,137	17.1	1,217	18.4	1,112	16.2
Nonmetro, 2,500-19,999 urban pop										
12+	4,065	22.4	3,685	22.1	3,563	22.2	3,824	22.5	4,306	22.3
12-17	93	5.9	87	6.1	81	5.9	99	6.8	86	5.1
18+	3,972	23.9	3,598	23.6	3,482	23.7	3,724	23.9	4,220	23.9
18-25	761	37.9	718	38.6	680	38.6	722	36.9	801	38.7
26-49	1,720	30.6	1,538	30.5	1,484	30.5	1,650	32.1	1,789	29.3
50+	1,491	16.6	1,342	16.1	1,318	16.3	1,353	16.0	1,629	17.2
Nonmetro, < 2,500 urban pop										
12+	773	18.7	628	18.3	606	17.8	758	16.6	787	21.3
12-17	20	5.7	14	5.0	13	4.8	23	6.2	16	5.2
18+	753	19.9	614	19.5	593	18.9	735	17.5	770	22.8
18-25	133	33.2	105	33.6	106	34.3	141	31.8	125	34.9
26-49	360	27.5	302	28.6	286	28.1	346	23.9	374	32.1
50+	259	12.5	207	11.6	201	11.2	248	10.8	271	14.7
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	7,692	25.5	7,752	25.5	7,814	25.6	7,818	25.9	7,565	25.2
Not Hispanic/Latino	30,381	25.4	30,873	25.4	31,298	25.4	30,729	25.8	30,034	25.0
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	2,150	24.5	2,126	24.4	2,098	24.5	2,147	25.5	2,154	23.6
Not Hispanic/Latino	11,026	23.5	11,154	23.5	10,998	23.6	11,417	24.0	10,636	23.1
Small Metro, < 250,000 population										
Hispanic/Latino	692	25.3	683	25.2	654	24.5	658	25.2	727	25.3
Not Hispanic/Latino	5,636	24.7	5,573	24.6	5,572	24.7	5,657	24.6	5,614	24.8
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	282	23.1	283	24.1	289	24.6	311	24.0	252	22.2
Not Hispanic/Latino	3,312	23.6	3,257	23.7	3,220	23.4	3,370	24.3	3,253	22.9

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	242	24.7	210	23.8	197	22.5	209	25.5	274	24.1
Not Hispanic/Latino	3,823	22.2	3,475	22.0	3,367	22.1	3,614	22.3	4,031	22.1
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	* *	*	* *	*	*	*	*
Not Hispanic/Latino	730	18.3	592	17.9	573	17.5	725	16.5	736	20.5
<b>County Type by Race</b>										
Large Metro										
White Only	29,959	27.2	30,468	27.2	30,802	27.2	30,322	27.5	29,597	26.8
Black Only	5,303	23.6	5,350	23.5	5,407	23.5	5,386	24.1	5,221	23.1
NHOPI Only	169	20.1	164	19.2	161	18.8	161	23.7	177	17.6
Asian Only	1,593	13.6	1,589	13.4	1,602	13.5	1,624	13.9	1,563	13.2
AIAN Only	389	25.6	381	25.1	443	26.6	396	25.2	383	26.1
2 or More Races	659	22.6	674	22.3	697	22.5	658	23.3	660	22.0
Small Metro, pop 250,000-1,000,000										
White Only	11,079	24.4	11,159	24.4	10,990	24.5	11,475	25.1	10,682	23.7
Black Only	1,331	22.5	1,356	22.8	1,357	23.1	1,291	21.6	1,372	23.5
NHOPI Only	55	18.3	56	18.2	51	17.1	41	15.0	*	*
Asian Only	253	12.1	254	12.1	251	12.2	290	13.4	217	10.6
AIAN Only	139	22.4	146	22.2	153	22.3	138	21.8	141	23.0
2 or More Races	319	23.5	310	22.4	294	22.3	329	24.8	308	22.3
Small Metro, < 250,000 population										
White Only	5,455	25.2	5,434	25.2	5,399	25.1	5,427	25.1	5,483	25.2
Black Only	580	24.0	534	22.7	521	23.3	630	24.6	531	23.3
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	75	12.2	71	12.8	73	13.1	68	10.3	81	14.5
AIAN Only	76	26.5	90	26.0	103	26.2	72	25.5	80	27.5
2 or More Races	132	27.6	116	26.4	118	26.4	114	25.6	*	*
Nonmetro, 20,000 or more urban pop										
White Only	3,128	24.0	3,076	24.2	3,062	24.0	3,225	24.9	3,031	23.2
Black Only	271	20.4	275	20.5	274	20.4	252	20.6	289	20.1
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	40	18.0	39	18.4	44	19.0	*	*	*	*
AIAN Only	62	22.5	67	22.4	*	* *	*	*	63	19.8
2 or More Races	78	22.5	69	23.3	61	21.1	*	*	77	29.0

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
White Only	3,459	22.1	3,157	22.0	3,091	22.0	3,234	22.0	3,683	22.2
Black Only	392	23.2	357	23.4	343	23.0	346	23.0	438	23.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	82	22.6	68	23.6	*	* *	87	25.5	77	19.9
2 or More Races	90	26.2	72	23.3	64	22.6	79	27.4	*	* *
Nonmetro, < 2,500 urban pop										
White Only	692	19.1	566	18.4	555	18.1	675	16.8	708	21.9 a
Black Only	40	14.8	*	* *	*	* *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	27	23.5	*	* *	*	* *	23	24.1	*	* *
2 or More Races	13	11.1	*	* *	*	* *	*	*	*	* *
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	3,798	35.0	3,806	35.1	3,750	35.0	3,873	35.7	3,724	34.3
Female	3,487	33.8	3,522	34.1 a	3,437	33.9	3,482	33.4	3,493	34.2
Full-Time College Students										
Male	1,403	38.2	1,420	38.3	1,328	38.3	1,477	39.4	1,330	37.0
Female	1,610	37.7	1,632	38.1 a	1,515	37.7	1,519	36.5	1,701	38.9
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	2,395	33.3	2,385	33.4	2,422	33.5	2,396	33.7	2,394	33.0
Female	1,877	31.0	1,890	31.3 a	1,922	31.4	1,963	31.4	1,792	30.6
<b>Age Group by Gender</b>										
12+										
Male	38,070	29.2	38,103	29.3	38,207	29.4	38,351	29.6	37,789	28.9
Female	27,938	20.2	27,912	20.2	27,906	20.2	28,339	20.5	27,538	19.8
12-17										
Male	646	5.1	646	5.1	643	5.1	732	5.8	559	4.4 a
Female	682	5.6	683	5.6	677	5.5	709	5.8	655	5.4
18+										
Male	37,424	31.9	37,457	31.9	37,563	32.0	37,619	32.1	37,230	31.6
Female	27,256	21.6	27,229	21.6	27,229	21.6	27,630	22.0	26,883	21.2

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
Male	7,051	40.4	7,057	40.5	7,087	40.6	7,232	41.3	6,870	39.6
Female	6,391	37.0	6,432	37.2	6,426	37.2	6,394	36.8	6,388	37.1
26-49										
Male	18,845	38.7	18,908	38.9	18,950	39.0	18,810	38.8	18,880	38.7
Female	13,328	26.5	13,313	26.5	13,347	26.6	13,501	26.9	13,155	26.1
50+										
Male	11,528	22.4	11,491	22.4	11,526	22.4	11,577	22.7	11,479	22.2
Female	7,537	12.9	7,484	12.8	7,457	12.7	7,735	13.3	7,340	12.4
<b>Age Group by Race</b>										
12+										
White Only	53,771	25.7	53,860	25.7	53,899	25.7	54,358	26.0	53,184	25.3
Black Only	7,917	23.2	7,905	23.2	7,938	23.3	7,951	23.4	7,883	23.0
NHOPI Only	253	19.2	247	18.7	237	18.2	229	21.0	276	18.0
Asian Only	2,002	13.5	1,982	13.4	2,000	13.5	2,105	14.2	1,900	12.9
AIAN Only	775	24.4	769	24.2	794	25.0	777	24.6	773	24.1
2 or More Races	1,290	23.2	1,253	22.6	1,245	22.4	1,270	23.3	1,310	23.2
12-17										
White Only	1,061	5.8	1,059	5.8	1,051	5.7	1,161	6.3	962	5.2
Black Only	136	3.7	139	3.7	135	3.6	157	4.2	115	3.1
NHOPI Only	12	6.7	12	7.2	12	7.2	18	9.4	6	3.7
Asian Only	37	2.8	36	2.8	37	2.8	34	2.7	39	2.9
AIAN Only	20	5.0	20	5.0	22	5.4	19	4.7	21	5.4
2 or More Races	61	6.6	63	6.8	64	6.9	52	5.7	71	7.5
18+										
White Only	52,710	27.6	52,802	27.6	52,848	27.6	53,197	27.9	52,222	27.2
Black Only	7,781	25.6	7,767	25.6	7,803	25.7	7,794	25.8	7,768	25.4
NHOPI Only	241	21.2	234	20.4	225	19.7	211	23.4	270	19.8
Asian Only	1,966	14.6	1,945	14.4	1,963	14.5	2,071	15.2	1,861	13.9
AIAN Only	755	27.1	749	26.9	772	27.8	757	27.6	752	26.7
2 or More Races	1,229	26.6	1,189	25.7	1,181	25.6	1,218	26.8	1,240	26.4

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
White Only	10,755	42.1	10,791	42.2	10,802	42.3	10,815	42.1	10,695	42.1
Black Only	1,569	29.4	1,571	29.5	1,571	29.5	1,633	30.4	1,505	28.5
NHOPI Only	66	27.8	64	27.1	63	26.8	62	24.9	70	30.9
Asian Only	510	24.0	512	24.0	518	24.6	526	25.5	493	22.5
AIAN Only	187	35.4	198	37.4	205	37.8	194	37.4	179	33.6
2 or More Races	356	37.0	353	36.9	355	36.5	397	39.7	315	34.1
26-49										
White Only	25,988	34.6	26,066	34.7	26,129	34.8	26,165	34.9	25,810	34.4
Black Only	3,879	29.4	3,859	29.2	3,866	29.3	3,789	28.9	3,969	29.8
NHOPI Only	155	30.2	154	29.8	145	29.5	127	29.8	183	30.5
Asian Only	1,068	15.5	1,061	15.5	1,074	15.6	1,154	16.7	982	14.4
AIAN Only	432	32.2	428	31.6	447	32.8	444	32.8	420	31.6
2 or More Races	651	34.2	654	34.0	637	33.5	632	34.5	670	33.9
50+										
White Only	15,967	17.6	15,945	17.6	15,918	17.6	16,218	18.0	15,716	17.2
Black Only	2,333	19.7	2,336	19.7	2,366	20.0	2,372	20.3	2,295	19.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	388	8.6	372	8.2	371	8.2	390	8.5	385	8.8
AIAN Only	136	14.9	123	13.7	120	13.9	120	13.7	153	16.0
2 or More Races	221	12.6	182	10.5	190	10.9	189	11.1	254	14.1
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	11,100	25.3	11,090	25.2	11,085	25.2	11,178	25.7	11,022	24.9
Not Hispanic/Latino	54,908	24.4	54,925	24.5	55,029	24.5	55,512	24.8	54,304	24.1
12-17										
Hispanic/Latino	299	5.2	302	5.2	301	5.2	319	5.6	278	4.8
Not Hispanic/Latino	1,029	5.4	1,027	5.4	1,019	5.3	1,122	5.9	936	4.9
18+										
Hispanic/Latino	10,801	28.3	10,788	28.3	10,783	28.3	10,858	28.7	10,744	27.9
Not Hispanic/Latino	53,879	26.2	53,898	26.2	54,010	26.3	54,390	26.5	53,369	25.9
18-25										
Hispanic/Latino	2,653	35.5	2,649	35.5	2,633	35.3	2,712	36.4	2,594	34.7
Not Hispanic/Latino	10,789	39.6	10,841	39.7	10,880	39.9	10,914	39.8	10,665	39.4

(continued)

Table C.1 Past Month Binge Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
Hispanic/Latino	6,195	31.8	6,197	31.8	6,197	31.8	6,160	31.8	6,230	31.8
Not Hispanic/Latino	25,979	32.7	26,025	32.8	26,100	32.9	26,152	33.0	25,805	32.4
50+										
Hispanic/Latino	1,954	17.4	1,942	17.3	1,953	17.4	1,987	18.0	1,921	16.8
Not Hispanic/Latino	17,111	17.3	17,033	17.2	17,029	17.2	17,324	17.6	16,899	17.0
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	600	9.6	598	9.6	592	9.5	630	10.2	569	9.0
18-25	6,360	36.9	6,401	37.2	6,394	37.1	6,372	36.8	6,347	37.1
26-44	10,899	27.4	10,887	27.4	10,902	27.4	11,069	28.1	10,730	26.8
Pregnant Female Aged 15-44										
15-17	*	*	*	*	*	*	*	*	*	*
18-25	43	5.7	40	5.3	40	5.3	59	7.1	27	4.1
26-44	57	3.9	57	3.8	58	3.9	45	3.1	70	4.5
Not Pregnant Female Aged 15-44										
15-17	598	9.6	597	9.6	590	9.5	629	10.2	568	9.0
18-25	6,317	38.3	6,361	38.6	6,353	38.6	6,314	38.3	6,320	38.4
26-44	10,842	28.4	10,830	28.3	10,844	28.4	11,024	29.1	10,659	27.6
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	14,100	30.3	14,155	30.4	14,146	30.4	14,251	30.7	13,950	29.9
Black Only	2,328	24.6	2,296	24.3	2,287	24.2	2,326	24.8	2,330	24.4
NHOPI Only	96	24.1	88	22.6	83	22.1	75	20.8	118	26.8
Asian Only	631	14.3	632	14.3	628	14.3	669	15.5	592	13.1
AIAN Only	216	25.1	223	25.3	251	27.3	223	26.1	208	24.0
2 or More Races	487	31.9	491	31.8	492	31.7	527	34.8	447	29.1
Pregnant Female Aged 15-44										
White Only	76	4.5	72	4.3	73	4.3	80	4.7	71	4.3
Black Only	19	5.1	18	4.8	18	5.0	23	6.1	14	4.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

**Table C.1 Past Month Binge Alcohol Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 15-44										
White Only	14,024	31.3	14,083	31.4 <sup>a</sup>	14,073	31.4	14,171	31.7	13,878	30.8
Black Only	2,310	25.3	2,278	25.1	2,269	24.9	2,303	25.5	2,316	25.1
NHOPI Only	96	24.8	88	23.3	83	22.8	75	21.1	118	27.8
Asian Only	629	14.7	630	14.8	626	14.8	669	15.9	588	13.5
AIAN Only	213	25.8	220	25.9	247	28.1	222	27.0	205	24.5
2 or More Races	484	32.9	488	32.8	490	32.8	527	35.9	442	29.9
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	3,109	24.2	3,099	24.1	3,079	24.0	3,202	25.0	3,016	23.3
Not Hispanic/Latino	14,750	29.3	14,787	29.4	14,808	29.4	14,870	29.7	14,630	28.9
Pregnant Female Aged 15-44										
Hispanic/Latino	19	3.9	20	4.0	19	3.9	26	5.4	12	2.6
Not Hispanic/Latino	83	4.6	79	4.4	80	4.4	80	4.4	86	4.8
Not Pregnant Female Aged 15-44										
Hispanic/Latino	3,090	25.0	3,079	24.9	3,060	24.8	3,176	25.8	3,004	24.1
Not Hispanic/Latino	14,667	30.2	14,708	30.3	14,728	30.3	14,790	30.6	14,544	29.8

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.



## Appendix D: 2015-2016 NSDUH – Weighted Annual Averages Past Month Marijuana Use – MRJMON

**Table D.1 Past Month Marijuana Use**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	23,104	8.6	23,056	8.6	22,992	8.6	22,226	8.3	23,981	8.9 a
12-17	1,681	6.8	1,685	6.8	1,684	6.8	1,752	7.0	1,609	6.5
18+	21,423	8.8	21,371	8.8	21,308	8.7	20,474	8.4	22,373	9.1 a
18-25	7,053	20.3	7,097	20.4 a	7,094	20.4	6,921	19.8	7,184	20.8
26-49	9,778	9.9	9,766	9.9	9,763	9.9	9,140	9.3	10,416	10.5 a
50+	4,593	4.2	4,508	4.1	4,450	4.0 a	4,412	4.0	4,773	4.3
<b>Gender</b>										
Male	14,205	10.9	14,214	10.9	14,201	10.9	13,715	10.6	14,696	11.3
Female	8,898	6.4	8,842	6.4	8,791	6.4	8,511	6.2	9,285	6.7 a
<b>Hispanicity</b>										
Hispanic/Latino	3,272	7.4	3,250	7.4	3,217	7.3	3,151	7.2	3,394	7.7
Not Hispanic/Latino	19,832	8.8	19,806	8.8	19,775	8.8	19,075	8.5	20,588	9.1 a
<b>Race</b>										
White Only	17,615	8.4	17,552	8.4	17,537	8.4	16,984	8.1	18,247	8.7 a
Black Only	3,781	11.1	3,785	11.1	3,749	11.0	3,695	10.9	3,867	11.3
NHOPI Only	111	8.4	101	7.6	99	7.6	101	9.2	121	7.9
Asian Only	474	3.2	476	3.2	473	3.2	450	3.0	497	3.4
AIAN Only	300	9.4	311	9.8	300	9.4	280	8.9	319	10.0
2 or More Races	823	14.8	831	15.0	834	15.0	716	13.1	930	16.5 a
<b>Division</b>										
New England	1,485	11.7	1,493	11.8	1,494	11.8	1,391	11.0	1,578	12.5
Middle Atlantic	2,967	8.4	2,996	8.5	2,975	8.5	2,931	8.3	3,002	8.5
East North Central	3,405	8.7	3,417	8.7	3,421	8.7	3,363	8.6	3,446	8.8
West North Central	1,215	6.9	1,190	6.8	1,192	6.8	1,208	6.9	1,221	7.0
South Atlantic	4,107	7.7	4,076	7.7	4,079	7.7	4,076	7.7	4,138	7.7
East South Central	1,014	6.5	1,016	6.5	1,002	6.4	946	6.0	1,082	6.9
West South Central	1,940	6.1	1,940	6.1	1,915	6.0	1,836	5.8	2,043	6.4
Mountain	1,955	10.0	1,945	10.0	1,932	9.9	1,968	10.2	1,942	9.9
Pacific	5,018	11.4	4,982	11.4	4,981	11.4	4,508	10.3	5,528	12.6 a

(continued)

**Table D.1 Past Month Marijuana Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	13,665	9.1	13,839	9.1	13,928	9.1	13,072	8.8	14,258	9.5 a
Small Metro, pop 250,000-1,000,000	4,627	8.3	4,624	8.2	4,557	8.3	4,559	8.1	4,695	8.5
Small Metro, < 250,000 population	2,136	8.4	2,122	8.4	2,107	8.4	2,041	8.0	2,231	8.7
Nonmetro, 20,000 or more urban pop	1,253	8.2	1,215	8.1	1,198	8.0	1,313	8.7	1,193	7.8
Nonmetro, 2,500-19,999 urban pop	1,219	6.7	1,087	6.5	1,040	6.5	1,038	6.1	1,400	7.2
Nonmetro, < 2,500 urban pop	204	4.9	169	4.9	163	4.8	204	4.5	203	5.5
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	4,473	21.1	4,504	21.3 a	4,441	21.3	4,391	20.6	4,556	21.6
Full-Time College Students	1,558	19.6	1,578	19.8	1,464	19.6	1,527	19.3	1,589	20.0
Other Persons Aged 18 to 22 <sup>2</sup>	2,915	22.0	2,926	22.2 a	2,977	22.3 a	2,864	21.4	2,966	22.6
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	6,599	10.4	6,615	10.5	6,602	10.4	6,342	10.1	6,857	10.8
Pregnant Female Aged 15-44	95	4.1	96	4.2	98	4.2	78	3.4	111	4.9
Not Pregnant Female Aged 15-44	6,505	10.7	6,519	10.7	6,504	10.7	6,264	10.3	6,746	11.0
<b>Division by Age Group</b>										
New England										
12+	1,485	11.7	1,493	11.8	1,494	11.8	1,391	11.0	1,578	12.5
12-17	107	9.9	107	10.0	107	10.0	120	11.1	93	8.7
18+	1,378	11.9	1,386	12.0	1,386	12.0	1,271	11.0	1,485	12.8
18-25	480	29.1	477	28.9	481	29.1	463	28.1	497	30.1
26-49	599	13.5	607	13.7	602	13.6	556	12.5	642	14.5
50+	299	5.5	303	5.5	303	5.5	251	4.6	346	6.3
Middle Atlantic										
12+	2,967	8.4	2,996	8.5	2,975	8.5	2,931	8.3	3,002	8.5
12-17	199	6.5	199	6.6	199	6.6	219	7.2	179	5.9
18+	2,768	8.6	2,797	8.7	2,776	8.6	2,712	8.4	2,823	8.8
18-25	1,000	22.5	1,009	22.7	995	22.4	993	22.2	1,006	22.9
26-49	1,262	9.8	1,285	10.0 a	1,277	9.9	1,189	9.2	1,335	10.4
50+	506	3.4	504	3.4	503	3.4	530	3.6	481	3.2

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	3,405	8.7	3,417	8.7	3,421	8.7	3,363	8.6	3,446	8.8
12-17	276	7.5	277	7.5	276	7.5	288	7.8	264	7.2
18+	3,128	8.8	3,140	8.8	3,145	8.9	3,075	8.7	3,182	9.0
18-25	1,030	20.3	1,034	20.4	1,036	20.4	999	19.6	1,061	21.0
26-49	1,363	9.8	1,364	9.8	1,364	9.8	1,398	10.0	1,329	9.5
50+	735	4.5	743	4.5	744	4.5	678	4.1	792	4.8
West North Central										
12+	1,215	6.9	1,190	6.8	1,192	6.8	1,208	6.9	1,221	7.0
12-17	94	5.7	94	5.7	94	5.7	99	6.0	88	5.3
18+	1,121	7.1	1,096	6.9	1,099	6.9	1,108	7.0	1,133	7.1
18-25	366	15.8	367	15.8	370	16.0	365	15.7	366	15.8
26-49	543	8.7	543	8.7	539	8.7	525	8.5	561	9.0
50+	212	2.9	186	2.5	189	2.6	218	3.0	207	2.8
South Atlantic										
12+	4,107	7.7	4,076	7.7	4,079	7.7	4,076	7.7	4,138	7.7
12-17	294	6.2	294	6.2	294	6.2	293	6.2	296	6.3
18+	3,812	7.9	3,781	7.8	3,784	7.8	3,783	7.9	3,842	7.9
18-25	1,348	20.6	1,358	20.8	1,365	20.9	1,400	21.3	1,295	20.0
26-49	1,694	8.8	1,671	8.7	1,675	8.7	1,537	8.0	1,852	9.6
50+	770	3.4	752	3.3	745	3.3	846	3.8	694	3.0
East South Central										
12+	1,014	6.5	1,016	6.5	1,002	6.4	946	6.0	1,082	6.9
12-17	81	5.5	77	5.2	74	5.0	86	5.8	75	5.1
18+	933	6.6	939	6.6	929	6.5	860	6.1	1,007	7.0
18-25	309	15.3	310	15.3	305	15.1	284	14.0	334	16.6
26-49	483	8.6	482	8.6	475	8.5	460	8.2	506	9.0
50+	141	2.1	147	2.2	148	2.2	116	1.8	167	2.5
West South Central										
12+	1,940	6.1	1,940	6.1	1,915	6.0	1,836	5.8	2,043	6.4
12-17	192	5.8	196	5.9	196	5.9	214	6.5	169	5.1
18+	1,748	6.1	1,745	6.1	1,719	6.0	1,621	5.7	1,875	6.5
18-25	639	14.8	654	15.1	640	14.8	622	14.3	656	15.2
26-49	771	6.3	762	6.2	789	6.4	715	5.9	828	6.7
50+	338	2.8	329	2.8	290	2.4	285	2.4	391	3.3

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
12+	1,955	10.0	1,945	10.0	1,932	9.9	1,968	10.2	1,942	9.9
12-17	138	7.2	141	7.4	143	7.5	139	7.3	137	7.1
18+	1,817	10.3	1,804	10.3	1,789	10.2	1,829	10.5	1,805	10.2
18-25	535	20.7	537	20.8	535	20.7	518	20.0	552	21.3
26-49	881	12.1	879	12.1	868	12.0	834	11.6	927	12.7
50+	401	5.2	387	5.0	387	5.0	477	6.2	326	4.2
Pacific										
12+	5,018	11.4	4,982	11.4	4,981	11.4	4,508	10.3	5,528	12.6
12-17	300	7.5	300	7.5	300	7.5	294	7.3	307	7.6
18+	4,718	11.8	4,682	11.8	4,681	11.8	4,214	10.6	5,222	13.1
18-25	1,347	23.3	1,351	23.4	1,367	23.7	1,277	21.9	1,417	24.7
26-49	2,181	12.8	2,174	12.8	2,174	12.8	1,926	11.4	2,436	14.3
50+	1,190	7.0	1,157	6.8	1,140	6.7	1,011	6.0	1,369	8.0
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	143	11.8	142	11.7	138	11.4	129	10.8	157	12.8
Not Hispanic/Latino	1,342	11.7	1,351	11.8	1,356	11.9	1,262	11.0	1,421	12.4
Middle Atlantic										
Hispanic/Latino	415	8.2	413	8.2	405	8.0	376	7.5	454	8.9
Not Hispanic/Latino	2,551	8.5	2,583	8.6	2,570	8.5	2,555	8.5	2,548	8.5
East North Central										
Hispanic/Latino	201	6.8	201	6.8	202	6.8	182	6.2	221	7.4
Not Hispanic/Latino	3,203	8.8	3,216	8.9	3,219	8.9	3,181	8.8	3,226	8.9
West North Central										
Hispanic/Latino	75	8.0	76	8.0	75	8.0	79	8.5	71	7.5
Not Hispanic/Latino	1,140	6.9	1,114	6.7	1,117	6.7	1,129	6.8	1,151	6.9
South Atlantic										
Hispanic/Latino	388	5.7	391	5.7	379	5.5	411	6.1	365	5.2
Not Hispanic/Latino	3,719	8.0	3,685	8.0	3,700	8.0	3,664	7.9	3,773	8.1
East South Central										
Hispanic/Latino	42	7.5	41	7.4	39	7.1	51	9.2	33	5.9
Not Hispanic/Latino	972	6.4	975	6.4	963	6.4	895	5.9	1,049	6.9

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
Hispanic/Latino	394	4.5	397	4.5	388	4.4	381	4.4	406	4.5
Not Hispanic/Latino	1,546	6.7	1,543	6.7	1,528	6.7	1,455	6.4	1,637	7.1
Mountain										
Hispanic/Latino	433	9.7	430	9.7	438	9.8	477	10.8	388	8.6
Not Hispanic/Latino	1,522	10.1	1,515	10.1	1,495	9.9	1,491	10.0	1,554	10.3
Pacific										
Hispanic/Latino	1,182	9.0	1,160	8.9	1,154	8.8	1,064	8.2	1,299	9.9
Not Hispanic/Latino	3,836	12.5	3,822	12.4	3,827	12.4	3,444	11.2	4,229	13.7 a
<b>Division by Race</b>										
New England										
White Only	1,310	12.1	1,307	12.1	1,309	12.1	1,232	11.4	1,387	12.8
Black Only	91	10.0	88	9.6	87	9.6	82	9.0	100	10.9
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	27	4.7	30	5.2	32	5.6	*	*	15	2.4 *
AIAN Only	3	5.3	3	4.6	3	5.0	3	4.1	4	6.6
2 or More Races	*	*	*	* *	*	* *	25	11.7	*	* *
Middle Atlantic										
White Only	2,224	8.4	2,248	8.5	2,234	8.4	2,252	8.5	2,196	8.3
Black Only	573	11.2	575	11.2	566	11.1	505	9.9	640	12.5
NHOPI Only	8	5.8	8	5.8	8	5.8	*	*	*	* *
Asian Only	61	2.4	65	2.6 a	65	2.6 a	73	2.9	50	2.0
AIAN Only	10	4.0	10	4.0	10	4.1	10	4.3	9	3.8
2 or More Races	91	14.6	90	14.5	91	14.6	85	13.9	97	15.3
East North Central										
White Only	2,658	8.2	2,658	8.2	2,660	8.2	2,630	8.1	2,687	8.3
Black Only	592	12.9	604	13.2	606	13.2	581	12.7	604	13.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	21	1.6	21	1.7	22	1.7	24	1.9	17	1.3
AIAN Only	30	13.8	33	15.1	33	15.0	*	*	*	* *
2 or More Races	99	16.0	97	15.8	96	15.7	93	15.4	104	16.6

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	944	6.2	934	6.1	938	6.1	955	6.2	932	6.1
Black Only	184	16.3	171	15.2	174	15.4	187	16.7	180	15.8
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	24	4.9	25	5.1	26	5.3	*	*	32	6.5
AIAN Only	27	12.4	29	13.0	*	*	21	9.4	34	15.2
2 or More Races	32	10.8	28	9.5	28	9.5	22	7.6	43	13.9
South Atlantic										
White Only	2,795	7.3	2,768	7.2	2,761	7.2	2,776	7.3	2,814	7.3
Black Only	1,132	9.8	1,124	9.7	1,132	9.8	1,137	9.9	1,128	9.7
NHOPI Only	12	6.3	12	6.4	12	6.7	*	*	*	*
Asian Only	57	3.0	56	3.0	52	2.8	48	2.6	67	3.5
AIAN Only	15	4.4	16	4.5	18	5.1	17	4.8	14	4.1
2 or More Races	95	10.4	100	11.0	104	11.4	85	9.5	105	11.3
East South Central										
White Only	758	6.3	754	6.3	751	6.2	717	6.0	798	6.6
Black Only	225	7.2	235	7.5	224	7.2	204	6.5	247	7.8
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	3	1.5	3	1.4	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	23	11.4	19	9.8	19	9.3	*	*	*	*
West South Central										
White Only	1,429	5.8	1,435	5.8	1,426	5.7	1,299	5.3	1,560	6.3
Black Only	399	8.8	398	8.8	383	8.5	429	9.6	369	8.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	18	1.5	16	1.3	15	1.2	14	1.2	22	1.8
AIAN Only	30	5.3	28	5.1	29	5.2	29	5.2	31	5.4
2 or More Races	56	9.5	55	9.3	55	9.4	55	9.5	57	9.6
Mountain										
White Only	1,627	9.7	1,615	9.6	1,617	9.6	1,647	9.8	1,607	9.5
Black Only	138	18.3	133	17.5	130	17.2	*	*	137	17.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	26	4.1	26	4.2	24	3.7	*	*	30	4.8
AIAN Only	69	10.2	73	10.9	65	9.6	83	12.4	55	8.0
2 or More Races	75	16.6	80	17.6	79	17.5	68	15.4	81	17.7

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pacific										
White Only	3,871	11.9	3,832	11.8	3,840	11.8	3,476	10.7	4,266	13.1 a
Black Only	446	18.6	458	19.1	446	18.6	430	17.9	463	19.3
NHOPI Only	49	8.1	38	6.3	38	6.3	44	9.6	55	7.1
Asian Only	235	3.9	233	3.9	234	3.9	212	3.5	259	4.4
AIAN Only	110	14.2	116	14.9	115	14.8	89	11.5	132	16.8
2 or More Races	306	18.6	305	18.5	309	18.8	258	15.9	354	21.2
<b>County Type by Age Group</b>										
Large Metro										
12+	13,665	9.1	13,839	9.1	13,928	9.1	13,072	8.8	14,258	9.5 a
12-17	977	7.0	997	7.0	1,006	7.0	1,025	7.3	928	6.6
18+	12,689	9.3	12,842	9.3	12,922	9.3	12,048	8.9	13,330	9.8 a
18-25	4,096	21.2	4,156	21.3	4,168	21.1	4,048	20.9	4,143	21.6
26-49	5,973	10.2	6,039	10.1	6,101	10.1	5,496	9.4	6,450	10.9 a
50+	2,621	4.5	2,647	4.5	2,653	4.5	2,504	4.4	2,737	4.7
Small Metro, pop 250,000-1,000,000										
12+	4,627	8.3	4,624	8.2	4,557	8.3	4,559	8.1	4,695	8.5
12-17	365	6.9	363	6.8	359	6.9	376	7.0	354	6.7
18+	4,262	8.5	4,261	8.4	4,198	8.4	4,183	8.3	4,341	8.7
18-25	1,525	20.4	1,546	20.5	1,532	20.6	1,495	19.7	1,554	21.1
26-49	1,803	9.2	1,819	9.2	1,809	9.3	1,721	8.7	1,886	9.7
50+	934	4.0	896	3.8	857	3.7	967	4.2	901	3.9
Small Metro, < 250,000 population										
12+	2,136	8.4	2,122	8.4	2,107	8.4	2,041	8.0	2,231	8.7
12-17	144	6.6	149	6.8 a	147	6.8	149	6.7	140	6.5
18+	1,992	8.5	1,974	8.5	1,959	8.5	1,892	8.1	2,092	9.0
18-25	692	19.3	693	19.5	701	19.7	655	18.8	730	19.8
26-49	835	9.8	822	9.8	817	9.8	816	9.4	854	10.2
50+	464	4.1	458	4.1	442	4.0	421	3.7	508	4.5

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 20,000 or more urban pop										
12+	1,253	8.2	1,215	8.1	1,198	8.0	1,313	8.7	1,193	7.8
12-17	87	6.1	83	5.9	81	5.9	81	5.7	92	6.5
18+	1,166	8.4	1,133	8.4	1,117	8.3	1,231	9.0	1,101	7.9
18-25	367	18.4	355	18.2	361	18.4	383	18.7	350	18.1
26-49	533	10.5	515	10.4	500	10.2	549	10.9	518	10.1
50+	266	3.9	263	4.0	256	3.8	299	4.5	233	3.4
Nonmetro, 2,500-19,999 urban pop										
12+	1,219	6.7	1,087	6.5	1,040	6.5	1,038	6.1	1,400	7.2
12-17	93	5.9	83	5.8	80	5.8	105	7.3	80	4.8
18+	1,126	6.8	1,003	6.6	960	6.5	932	6.0	1,320	7.5
18-25	316	15.7	302	16.2	287	16.3	272	13.9	359	17.4
26-49	555	9.9	499	9.9	472	9.7	476	9.3	635	10.4
50+	255	2.8	202	2.4	201	2.5	184	2.2	326	3.4
Nonmetro, < 2,500 urban pop										
12+	204	4.9	169	4.9	163	4.8	204	4.5	203	5.5
12-17	15	4.4	11	3.9	11	3.9	16	4.2	14	4.5
18+	188	5.0	158	5.0	152	4.9	188	4.5	189	5.6
18-25	58	14.4	45	14.4	45	14.5	68	15.3	48	13.2
26-49	78	6.0	71	6.7	65	6.3	83	5.7	74	6.3
50+	52	2.5	42	2.4	42	2.4	37	1.6	68	3.7
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	2,119	7.0	2,123	7.0	2,123	7.0	2,042	6.8	2,195	7.3
Not Hispanic/Latino	11,547	9.6	11,716	9.6	11,805	9.6	11,030	9.3	12,064	10.0
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	724	8.3	710	8.2	685	8.0	695	8.3	753	8.3
Not Hispanic/Latino	3,903	8.3	3,914	8.3	3,872	8.3	3,863	8.1	3,942	8.5
Small Metro, < 250,000 population										
Hispanic/Latino	228	8.3	235	8.6	233	8.7	203	7.8	253	8.8
Not Hispanic/Latino	1,908	8.4	1,888	8.3	1,873	8.3	1,838	8.0	1,978	8.7
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	111	9.1	101	8.6	101	8.6	112	8.6	109	9.7
Not Hispanic/Latino	1,142	8.1	1,114	8.1	1,097	8.0	1,200	8.7	1,084	7.6

(continued)



Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	74	7.5	66	7.5	58	6.7	73	9.0	74	6.5
Not Hispanic/Latino	1,145	6.7	1,021	6.5	982	6.5	964	6.0	1,326	7.3 a
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	17	12.1	15	12.0	16	13.1	*	*	*	*
Not Hispanic/Latino	186	4.7	154	4.7	147	4.5	179	4.1	193	5.4
<b>County Type by Race</b>										
Large Metro										
White Only	9,916	9.0	10,043	9.0	10,111	8.9	9,476	8.6	10,356	9.4 a
Black Only	2,698	12.0	2,725	12.0	2,724	11.9	2,622	11.7	2,774	12.2
NHOPI Only	79	9.4	69	8.1	68	7.9	67	9.8	92	9.2
Asian Only	391	3.3	399	3.4	395	3.3	385	3.3	397	3.3
AIAN Only	106	7.0	110	7.2	132	7.9	102	6.5	111	7.6
2 or More Races	475	16.3	493	16.3	498	16.0	421	14.9	528	17.6
Small Metro, pop 250,000-1,000,000										
White Only	3,699	8.2	3,684	8.1	3,619	8.1	3,710	8.1	3,687	8.2
Black Only	617	10.4	618	10.4	605	10.3	600	10.0	635	10.9
NHOPI Only	22	7.2	24	7.8	25	8.2 a	19	7.0	24	7.4
Asian Only	55	2.6	53	2.5	55	2.7	45	2.1	66	3.2
AIAN Only	52	8.3	56	8.4	66	9.6	41	6.4	63	10.2
2 or More Races	182	13.4	189	13.6	188	14.3 a	144	10.9	220	15.9
Small Metro, < 250,000 population										
White Only	1,788	8.2	1,778	8.2	1,782	8.3	1,699	7.9	1,878	8.6
Black Only	219	9.1	211	9.0	198	8.9	223	8.7	215	9.4
NHOPI Only	3	4.3	*	*	*	*	*	*	*	*
Asian Only	18	3.0	16	3.0	16	2.9	10	1.6	26	4.7
AIAN Only	40	14.1	48	14.0	42	10.6	*	*	*	*
2 or More Races	66	13.9	64	14.6	64	14.4	57	12.7	76	15.0
Nonmetro, 20,000 or more urban pop										
White Only	1,055	8.1	1,025	8.1	1,022	8.0	1,094	8.4	1,016	7.8
Black Only	116	8.7	112	8.3	110	8.2	119	9.8	112	7.8
NHOPI Only	4	7.0	4	6.4	3	5.4	*	*	*	*
Asian Only	7	3.2	6	2.7	6	2.5	7	2.7	*	*
AIAN Only	31	11.1	33	11.0	22	8.7	36	15.1	25	8.0
2 or More Races	40	11.6	36	12.1	35	11.9	51	12.1	29	10.9

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses			Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop											
White Only	991	6.3	876	6.1		859	6.1	846	5.8	1,136	6.8
Black Only	120	7.1	110	7.2		101	6.8	114	7.6	127	6.8
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*	*
AIAN Only	55	15.2	56	19.6	a	*	*	40	11.7	70	18.3
2 or More Races	50	14.4	43	13.8		42	14.8	*	*	67	16.8
Nonmetro, < 2,500 urban pop											
White Only	166	4.6	145	4.7		144	4.7	159	4.0	172	5.3
Black Only	11	4.1	*	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*	*
AIAN Only	16	14.2	8	11.3		*	*	16	16.4	16	12.7
2 or More Races	*	*	*	*	*	*	*	*	*	*	*
<b>College Enrollment by Gender</b>											
Persons Aged 18 to 22 <sup>1</sup>											
Male	2,614	24.1	2,625	24.2		2,604	24.3	2,584	23.8	2,644	24.4
Female	1,859	18.0	1,879	18.2	a	1,837	18.1	1,807	17.3	1,912	18.7
Full-Time College Students											
Male	833	22.7	848	22.9		792	22.8	881	23.5	785	21.8
Female	725	17.0	731	17.1		673	16.7	646	15.5	804	18.4
Other Persons Aged 18 to 22 <sup>2</sup>											
Male	1,781	24.8	1,777	24.9		1,812	25.0	1,703	24.0	1,859	25.6
Female	1,134	18.7	1,148	19.0	a	1,164	19.0	1,160	18.5	1,107	18.9
<b>Age Group by Gender</b>											
12+											
Male	14,205	10.9	14,214	10.9		14,201	10.9	13,715	10.6	14,696	11.3
Female	8,898	6.4	8,842	6.4		8,791	6.4	8,511	6.2	9,285	6.7
12-17											
Male	912	7.2	918	7.2		920	7.3	956	7.5	867	6.8
Female	769	6.3	767	6.3		764	6.3	796	6.5	741	6.1
18+											
Male	13,294	11.3	13,296	11.3		13,281	11.3	12,758	10.9	13,829	11.7
Female	8,130	6.4	8,075	6.4		8,026	6.4	7,715	6.1	8,544	6.7

(continued)

**Table D.1 Past Month Marijuana Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
Male	4,138	23.7	4,155	23.8	4,168	23.9	4,108	23.4	4,168	24.0
Female	2,915	16.9	2,941	17.0	2,926	16.9	2,814	16.2	3,016	17.5
26-49										
Male	6,234	12.8	6,242	12.8	6,233	12.8	5,846	12.1	6,623	13.6
Female	3,544	7.1	3,523	7.0	3,531	7.0	3,294	6.6	3,793	7.5
50+										
Male	2,921	5.7	2,898	5.6	2,880	5.6	2,805	5.5	3,038	5.9
Female	1,671	2.9	1,610	2.7	1,570	2.7	1,607	2.8	1,735	2.9
<b>Age Group by Race</b>										
12+										
White Only	17,615	8.4	17,552	8.4	17,537	8.4	16,984	8.1	18,247	8.7
Black Only	3,781	11.1	3,785	11.1	3,749	11.0	3,695	10.9	3,867	11.3
NHOPI Only	111	8.4	101	7.6	99	7.6	101	9.2	121	7.9
Asian Only	474	3.2	476	3.2	473	3.2	450	3.0	497	3.4
AIAN Only	300	9.4	311	9.8	300	9.4	280	8.9	319	10.0
2 or More Races	823	14.8	831	15.0	834	15.0	716	13.1	930	16.5
12-17										
White Only	1,251	6.8	1,251	6.8	1,251	6.8	1,327	7.2	1,174	6.4
Black Only	255	6.9	256	6.9	253	6.8	264	7.1	246	6.6
NHOPI Only	15	8.2	13	7.9	13	7.9	*	*	4	2.5
Asian Only	38	2.9	38	2.9	38	2.9	27	2.1	49	3.6
AIAN Only	27	6.7	29	7.2	31	7.6	30	7.3	24	6.1
2 or More Races	95	10.3	98	10.6	98	10.5	79	8.7	111	11.8
18+										
White Only	16,365	8.6	16,301	8.5	16,286	8.5	15,656	8.2	17,073	8.9
Black Only	3,526	11.6	3,529	11.6	3,495	11.5	3,431	11.4	3,621	11.8
NHOPI Only	96	8.5	87	7.6	86	7.5	75	8.3	117	8.6
Asian Only	436	3.2	438	3.3	435	3.2	423	3.1	448	3.3
AIAN Only	273	9.8	282	10.2	269	9.7	251	9.1	296	10.5
2 or More Races	728	15.7	733	15.9	736	15.9	637	14.0	819	17.4

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
White Only	5,222	20.4	5,265	20.6	5,256	20.6	5,061	19.7	5,382	21.2
Black Only	1,246	23.4	1,256	23.6	1,255	23.5	1,270	23.6	1,223	23.1
NHOPI Only	46	19.2	44	18.7	43	18.5	45	18.3	46	20.2
Asian Only	196	9.2	194	9.1	189	9.0	196	9.5	196	8.9
AIAN Only	98	18.5	97	18.3	104	19.1	91	17.6	104	19.5
2 or More Races	245	25.5	241	25.1	248	25.5	257	25.7	233	25.2
26-49										
White Only	7,373	9.8	7,363	9.8	7,397	9.9	6,921	9.2	7,824	10.4
Black Only	1,665	12.6	1,656	12.5	1,633	12.4	1,586	12.1	1,745	13.1
NHOPI Only	37	7.2	31	6.0	31	6.2	28	6.4	*	*
Asian Only	203	3.0	204	3.0	205	3.0	163	2.4	243	3.6
AIAN Only	137	10.3	149	11.0	138	10.1	134	9.9	141	10.6
2 or More Races	362	19.0	362	18.8	359	18.9	308	16.8	417	21.1
50+										
White Only	3,770	4.2	3,673	4.1	3,633	4.0	3,674	4.1	3,866	4.2
Black Only	614	5.2	617	5.2	607	5.1	575	4.9	653	5.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	37	0.8	40	0.9	41	0.9	64	1.4	9	0.2
AIAN Only	38	4.2	37	4.1	28	3.2	25	2.9	51	5.3
2 or More Races	120	6.8	130	7.5	129	7.4	71	4.2	169	9.4
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	3,272	7.4	3,250	7.4	3,217	7.3	3,151	7.2	3,394	7.7
Not Hispanic/Latino	19,832	8.8	19,806	8.8	19,775	8.8	19,075	8.5	20,588	9.1
12-17										
Hispanic/Latino	382	6.6	379	6.5	378	6.5	408	7.1	355	6.1
Not Hispanic/Latino	1,299	6.8	1,306	6.8	1,306	6.8	1,344	7.0	1,253	6.6
18+										
Hispanic/Latino	2,891	7.6	2,871	7.5	2,839	7.4	2,743	7.3	3,038	7.9
Not Hispanic/Latino	18,533	9.0	18,500	9.0	18,469	9.0	17,731	8.7	19,334	9.4
18-25										
Hispanic/Latino	1,370	18.3	1,379	18.5	1,375	18.4	1,341	18.0	1,398	18.7
Not Hispanic/Latino	5,683	20.8	5,717	21.0	5,719	21.0	5,580	20.3	5,786	21.4

(continued)

Table D.1 Past Month Marijuana Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
Hispanic/Latino	1,247	6.4	1,248	6.4	1,231	6.3	1,118	5.8	1,375	7.0
Not Hispanic/Latino	8,531	10.7	8,518	10.7	8,533	10.7	8,022	10.1	9,040	11.4 a
50+										
Hispanic/Latino	274	2.4	244	2.2	233	2.1	284	2.6	265	2.3
Not Hispanic/Latino	4,318	4.4	4,264	4.3	4,218	4.3 a	4,129	4.2	4,508	4.5
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	656	10.5	655	10.5	652	10.4	680	11.0	632	10.0
18-25	2,893	16.8	2,919	17.0 a	2,903	16.9	2,794	16.1	2,993	17.5
26-44	3,050	7.7	3,041	7.7	3,046	7.7	2,868	7.3	3,232	8.1
Pregnant Female Aged 15-44										
15-17	*	*	*	* *	*	* *	*	*	*	* *
18-25	55	7.4	55	7.3	56	7.4	53	6.4	56	8.5
26-44	34	2.3	36	2.4	36	2.4	18	1.3	51	3.3
Not Pregnant Female Aged 15-44										
15-17	651	10.4	649	10.5	647	10.4	674	10.9	628	10.0
18-25	2,838	17.2	2,864	17.4 a	2,847	17.3	2,740	16.6	2,936	17.8
26-44	3,015	7.9	3,006	7.9	3,010	7.9	2,850	7.5	3,181	8.2
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	4,821	10.4	4,829	10.4	4,822	10.4	4,613	9.9	5,028	10.8 a
Black Only	1,212	12.8	1,219	12.9	1,213	12.8	1,192	12.7	1,233	12.9
NHOPI Only	35	8.8	26	6.7	25	6.6	40	11.2	*	* *
Asian Only	150	3.4	149	3.4	144	3.3	121	2.8	179	4.0
AIAN Only	97	11.2	105	11.8	109	11.9	107	12.5	86	10.0
2 or More Races	284	18.6	286	18.5	289	18.6	268	17.7	301	19.6
Pregnant Female Aged 15-44										
White Only	64	3.8	64	3.8	65	3.8	50	2.9	77	4.7
Black Only	26	7.1	27	7.2	27	7.4	27	7.0	25	7.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *

(continued)

**Table D.1 Past Month Marijuana Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 15-44										
White Only	4,757	10.6	4,766	10.6	4,757	10.6	4,563	10.2	4,951	11.0
Black Only	1,187	13.0	1,192	13.1	1,186	13.0	1,165	12.9	1,208	13.1
NHOPI Only	35	8.9	26	6.8	24	6.6	40	11.2	*	* *
Asian Only	148	3.5	147	3.4	141	3.3	121	2.9	174	4.0
AIAN Only	96	11.6	104	12.2	108	12.2	107	13.0	84	10.1
2 or More Races	283	19.2	285	19.2	288	19.3	268	18.2	298	20.2
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	996	7.7	1,000	7.8	994	7.7	1,011	7.9	981	7.6
Not Hispanic/Latino	5,603	11.1	5,615	11.1	5,608	11.1	5,331	10.6	5,875	11.6 a
Pregnant Female Aged 15-44										
Hispanic/Latino	11	2.4	12	2.5	13	2.5	7	1.5	15	3.2
Not Hispanic/Latino	83	4.6	83	4.6	85	4.7	71	3.9	96	5.4
Not Pregnant Female Aged 15-44										
Hispanic/Latino	985	8.0	988	8.0	981	8.0	1,003	8.2	966	7.8
Not Hispanic/Latino	5,520	11.4	5,532	11.4	5,523	11.4	5,261	10.9	5,779	11.8 a

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

## Appendix E: 2015-2016 NSDUH – Weighted Annual Averages Past Month Stimulant Use – STMNMMON

**Table E.1 Past Month Stimulant Use**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	1,694	0.6	1,704	0.6	1,711	0.6	1,653	0.6	1,735	0.6
12-17	105	0.4	106	0.4	108	0.4	117	0.5	92	0.4
18+	1,590	0.7	1,598	0.7	1,602	0.7	1,536	0.6	1,643	0.7
18-25	762	2.2	769	2.2	763	2.2	757	2.2	767	2.2
26-49	686	0.7	688	0.7	696	0.7	645	0.7	727	0.7
50+	142	0.1	141	0.1	143	0.1	134	0.1	150	0.1
<b>Gender</b>										
Male	879	0.7	894	0.7	899	0.7	877	0.7	881	0.7
Female	815	0.6	809	0.6	811	0.6	776	0.6	854	0.6
<b>Hispanicity</b>										
Hispanic/Latino	184	0.4	186	0.4	190	0.4	172	0.4	197	0.4
Not Hispanic/Latino	1,510	0.7	1,517	0.7	1,521	0.7	1,481	0.7	1,539	0.7
<b>Race</b>										
White Only	1,512	0.7	1,521	0.7	1,523	0.7	1,481	0.7	1,543	0.7
Black Only	61	0.2	64	0.2	64	0.2	39	0.1	83	0.2
NHOPI Only	6	0.4	6	0.5	6	0.5	9	0.8	2	0.1
Asian Only	37	0.3	37	0.3	37	0.3	47	0.3	28	0.2
AIAN Only	15	0.5	12	0.4	15	0.5	22	0.7	7	0.2
2 or More Races	64	1.1	64	1.1	65	1.2	55	1.0	72	1.3
<b>Division</b>										
New England	126	1.0	130	1.0	127	1.0	125	1.0	126	1.0
Middle Atlantic	213	0.6	212	0.6	210	0.6	188	0.5	238	0.7
East North Central	275	0.7	275	0.7	277	0.7	299	0.8	251	0.6
West North Central	117	0.7	114	0.6	117	0.7	95	0.5	139	0.8
South Atlantic	332	0.6	336	0.6	335	0.6	318	0.6	345	0.6
East South Central	124	0.8	130	0.8	132	0.8	149	0.9	100	0.6
West South Central	169	0.5	171	0.5	171	0.5	178	0.6	159	0.5
Mountain	104	0.5	104	0.5	108	0.6	102	0.5	107	0.5
Pacific	235	0.5	232	0.5	234	0.5	200	0.5	270	0.6

(continued)

Table E.1 Past Month Stimulant Use (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>County Type</b>										
Large Metro	962	0.6	985	0.6	995	0.6	890	0.6	1,033	0.7
Small Metro, pop 250,000-1,000,000	362	0.7	362	0.6	350	0.6	349	0.6	375	0.7
Small Metro, < 250,000 population	185	0.7	186	0.7	189	0.8	181	0.7	189	0.7
Nonmetro, 20,000 or more urban pop	95	0.6	95	0.6	96	0.6	127	0.8	63	0.4 a
Nonmetro, 2,500-19,999 urban pop	81	0.4	67	0.4	70	0.4	102	0.6	59	0.3
Nonmetro, < 2,500 urban pop	10	0.2	9	0.3	10	0.3	4	0.1	17	0.4
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	536	2.5	539	2.5	523	2.5	535	2.5	538	2.6
Full-Time College Students	281	3.5	283	3.5	263	3.5	289	3.7	274	3.4
Other Persons Aged 18 to 22 <sup>2</sup>	255	1.9	256	1.9	259	1.9	246	1.8	264	2.0
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	661	1.0	664	1.1	666	1.1	620	1.0	701	1.1
Pregnant Female Aged 15-44	2	0.1	2	0.1	3	0.1	3	0.1	1	0.1
Not Pregnant Female Aged 15-44	659	1.1	661	1.1	663	1.1	617	1.0	700	1.1
<b>Division by Age Group</b>										
New England										
12+	126	1.0	130	1.0 a	127	1.0	125	1.0	126	1.0
12-17	7	0.6	7	0.7 a	7	0.7	12	1.1	1	0.1
18+	119	1.0	123	1.1 a	120	1.0	113	1.0	125	1.1
18-25	69	4.2	72	4.3	68	4.1	65	4.0	73	4.4
26-49	44	1.0	46	1.0	46	1.0	37	0.8	52	1.2
50+	5	0.1	5	0.1	6	0.1	10	0.2	*	* *
Middle Atlantic										
12+	213	0.6	212	0.6	210	0.6	188	0.5	238	0.7
12-17	8	0.3	7	0.2	7	0.2	12	0.4	3	0.1
18+	205	0.6	204	0.6	202	0.6	175	0.5	235	0.7
18-25	106	2.4	105	2.4	102	2.3	91	2.0	121	2.7
26-49	92	0.7	93	0.7	93	0.7	85	0.7	100	0.8
50+	7	0.0	7	0.0	7	0.0	*	*	13	0.1 *

(continued)



Table E.1 Past Month Stimulant Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	275	0.7	275	0.7	277	0.7	299	0.8	251	0.6
12-17	14	0.4	14	0.4	14	0.4	16	0.4	13	0.3
18+	261	0.7	261	0.7	263	0.7	283	0.8	239	0.7
18-25	145	2.9	144	2.8	145	2.9	140	2.8	150	3.0
26-49	104	0.7	105	0.7	105	0.8	119	0.9	88	0.6
50+	12	0.1	12	0.1	13	0.1	24	0.1	*	* *
West North Central										
12+	117	0.7	114	0.6	117	0.7	95	0.5	139	0.8
12-17	12	0.7	11	0.7	12	0.7	10	0.6	15	0.9
18+	105	0.7	102	0.6	105	0.7	85	0.5	124	0.8
18-25	51	2.2	49	2.1	50	2.1	58	2.5	44	1.9
26-49	44	0.7	43	0.7	45	0.7	27	0.4	61	1.0
50+	10	0.1	10	0.1	10	0.1	*	*	19	0.3 *
South Atlantic										
12+	332	0.6	336	0.6	335	0.6	318	0.6	345	0.6
12-17	24	0.5	26	0.5 a	26	0.6 a	29	0.6	19	0.4
18+	307	0.6	310	0.6	309	0.6	290	0.6	325	0.7
18-25	141	2.2	146	2.2 a	144	2.2	155	2.4	128	2.0
26-49	124	0.6	121	0.6	122	0.6	102	0.5	147	0.8
50+	42	0.2	43	0.2	43	0.2	32	0.1	51	0.2
East South Central										
12+	124	0.8	130	0.8	132	0.8	149	0.9	100	0.6
12-17	2	0.1	2	0.1	2	0.1	2	0.2	1	0.1
18+	123	0.9	128	0.9	131	0.9	146	1.0	99	0.7
18-25	45	2.2	46	2.3	47	2.3	52	2.6	37	1.8
26-49	55	1.0	57	1.0	58	1.0	68	1.2	42	0.7
50+	23	0.4	25	0.4	25	0.4	26	0.4	21	0.3

(continued)

Table E.1 Past Month Stimulant Use (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
West South Central										
12+	169	0.5	171	0.5	171	0.5	178	0.6	159	0.5
12-17	17	0.5	18	0.6	19	0.6	18	0.5	16	0.5
18+	152	0.5	152	0.5	152	0.5	160	0.6	143	0.5
18-25	81	1.9	84	1.9	80	1.8	85	1.9	78	1.8
26-49	49	0.4	53	0.4	55	0.4	46	0.4	52	0.4
50+	22	0.2	16	0.1	17	0.1	30	0.3	13	0.1
Mountain										
12+	104	0.5	104	0.5	108	0.6	102	0.5	107	0.5
12-17	2	0.1	2	0.1	2	0.1	1	0.1	3	0.2
18+	102	0.6	102	0.6	106	0.6	101	0.6	104	0.6
18-25	47	1.8	47	1.8	50	1.9	52	2.0	43	1.7
26-49	55	0.8	55	0.8	56	0.8	49	0.7	60	0.8
50+	*	*	*	*	*	*	*	*	*	*
Pacific										
12+	235	0.5	232	0.5	234	0.5	200	0.5	270	0.6
12-17	19	0.5	18	0.5	18	0.5	17	0.4	20	0.5
18+	217	0.5	214	0.5	216	0.5	183	0.5	250	0.6
18-25	76	1.3	75	1.3	77	1.3	59	1.0	93	1.6
26-49	118	0.7	116	0.7	117	0.7	111	0.7	125	0.7
50+	22	0.1	22	0.1	22	0.1	12	0.1	32	0.2
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	5	0.4	5	0.4	5	0.4	7	0.6	3	0.2
Not Hispanic/Latino	121	1.1	125	1.1	122	1.1	118	1.0	123	1.1
Middle Atlantic										
Hispanic/Latino	26	0.5	26	0.5	25	0.5	24	0.5	27	0.5
Not Hispanic/Latino	187	0.6	186	0.6	184	0.6	164	0.5	211	0.7
East North Central										
Hispanic/Latino	20	0.7	20	0.7	20	0.7	20	0.7	20	0.7
Not Hispanic/Latino	255	0.7	255	0.7	256	0.7	279	0.8	231	0.6
West North Central										
Hispanic/Latino	8	0.8	9	0.9	9	0.9	8	0.9	7	0.8
Not Hispanic/Latino	109	0.7	105	0.6	108	0.7	86	0.5	132	0.8

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Table E.1 Past Month Stimulant Use (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
South Atlantic										
Hispanic/Latino	30	0.4	28	0.4	27	0.4	36	0.5	23	0.3
Not Hispanic/Latino	302	0.7	307	0.7	308	0.7	282	0.6	322	0.7
East South Central										
Hispanic/Latino	5	0.8	5	0.9	5	0.9	*	*	1	0.1 *
Not Hispanic/Latino	120	0.8	125	0.8	128	0.8	140	0.9	100	0.7
West South Central										
Hispanic/Latino	26	0.3	29	0.3 a	33	0.4 a	25	0.3	28	0.3
Not Hispanic/Latino	142	0.6	142	0.6	138	0.6	154	0.7	131	0.6
Mountain										
Hispanic/Latino	25	0.6	24	0.5	25	0.6	19	0.4	31	0.7
Not Hispanic/Latino	80	0.5	80	0.5	83	0.5	84	0.6	76	0.5
Pacific										
Hispanic/Latino	41	0.3	40	0.3	40	0.3	25	0.2	57	0.4
Not Hispanic/Latino	194	0.6	192	0.6	194	0.6	175	0.6	213	0.7
<b>Division by Race</b>										
New England										
White Only	115	1.1	116	1.1	114	1.1	116	1.1	113	1.0
Black Only	6	0.6	7	0.7	7	0.7	3	0.3	9	0.9
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	2	0.3	2	0.3	2	0.3	3	0.6	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	3	1.5	5	2.3	4	1.9	*	*	5	2.1 *
Middle Atlantic										
White Only	200	0.8	199	0.8	197	0.7	184	0.7	217	0.8
Black Only	3	0.1	3	0.1	3	0.1	3	0.1	3	0.1
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	1	0.0	1	0.0	1	0.0	1	0.0	1	0.1
AIAN Only	0	0.2	0	0.2	0	0.2	1	0.2	0	0.2
2 or More Races	8	1.3	9	1.4	9	1.4	*	*	17	2.6 *

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Table E.1 Past Month Stimulant Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
White Only	249	0.8	252	0.8	253	0.8	277	0.9	220	0.7
Black Only	10	0.2	10	0.2	10	0.2	4	0.1	16	0.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	10	0.8	9	0.7	10	0.8	9	0.7	11	0.9
AIAN Only	1	0.2	1	0.2	0	0.2	*	*	1	0.5
2 or More Races	6	0.9	4	0.6	4	0.6	9	1.4	3	0.5
West North Central										
White Only	103	0.7	101	0.7	101	0.7	76	0.5	131	0.9
Black Only	3	0.3	3	0.3	3	0.3	1	0.1	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	2	0.7
2 or More Races	2	0.8	3	0.9	3	0.9	3	1.2	1	0.4
South Atlantic										
White Only	296	0.8	299	0.8	298	0.8	293	0.8	300	0.8
Black Only	20	0.2	20	0.2	21	0.2	14	0.1	27	0.2
NHOPI Only	0	0.2	*	* *	*	* *	*	*	*	* *
Asian Only	5	0.3	6	0.3	6	0.3	4	0.2	6	0.3
AIAN Only	1	0.2	1	0.2	1	0.2	1	0.3	0	0.1
2 or More Races	9	1.0	9	1.0	10	1.1	6	0.7	11	1.2
East South Central										
White Only	112	0.9	119	1.0	120	1.0	133	1.1	91	0.8
Black Only	6	0.2	7	0.2	6	0.2	6	0.2	6	0.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *

(continued)

Table E.1 Past Month Stimulant Use (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
West South Central										
White Only	157	0.6	159	0.6	160	0.6	168	0.7	147	0.6
Black Only	8	0.2	8	0.2	8	0.2	7	0.2	8	0.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	0	0.0	*	* *	*	* *	0	0.1	*	* *
2 or More Races	4	0.6	4	0.7	3	0.5	3	0.5	4	0.7
Mountain										
White Only	93	0.5	92	0.5	95	0.6	96	0.6	89	0.5
Black Only	3	0.5	4	0.5	4	0.5	*	*	7	0.9 *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	2	0.3	2	0.3	2	0.3	*	*	1	0.2 *
AIAN Only	2	0.3	1	0.2	1	0.2	2	0.2	2	0.3
2 or More Races	5	1.0	*	* *	*	* *	2	0.5	*	* *
Pacific										
White Only	186	0.6	183	0.6	185	0.6	138	0.4	234	0.7
Black Only	2	0.1	2	0.1	2	0.1	2	0.1	3	0.1
NHOPI Only	5	0.8	5	0.8	5	0.8	8	1.8	2	0.2
Asian Only	17	0.3	17	0.3	18	0.3	27	0.4	8	0.1
AIAN Only	2	0.3	3	0.3	3	0.4	3	0.4	2	0.2
2 or More Races	21	1.3	22	1.3	22	1.3	21	1.3	22	1.3
<b>County Type by Age Group</b>										
Large Metro										
12+	962	0.6	985	0.6	995	0.6	890	0.6	1,033	0.7
12-17	60	0.4	63	0.4	65	0.4	64	0.5	56	0.4
18+	902	0.7	922	0.7	930	0.7	826	0.6	977	0.7
18-25	394	2.0	403	2.1	409	2.1	381	2.0	406	2.1
26-49	439	0.7	447	0.7	450	0.7	399	0.7	479	0.8
50+	69	0.1	71	0.1	71	0.1	46	0.1	92	0.2

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Table E.1 Past Month Stimulant Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
12+	362	0.7	362	0.6	350	0.6	349	0.6	375	0.7
12-17	25	0.5	26	0.5	25	0.5	28	0.5	23	0.4
18+	337	0.7	336	0.7	325	0.7	321	0.6	352	0.7
18-25	183	2.5	184	2.4	172	2.3	196	2.6	171	2.3
26-49	122	0.6	125	0.6	126	0.6	95	0.5	149	0.8
50+	31	0.1	27	0.1	27	0.1	30	0.1	32	0.1
Small Metro, < 250,000 population										
12+	185	0.7	186	0.7	189	0.8	181	0.7	189	0.7
12-17	10	0.5	10	0.5	11	0.5	14	0.6	6	0.3
18+	175	0.7	176	0.8	179	0.8	167	0.7	182	0.8
18-25	102	2.8	104	2.9	105	3.0	83	2.4	121	3.3
26-49	49	0.6	48	0.6	48	0.6	45	0.5	53	0.6
50+	24	0.2	25	0.2	25	0.2	40	0.4	8	0.1
Nonmetro, 20,000 or more urban pop										
12+	95	0.6	95	0.6	96	0.6	127	0.8	63	0.4 a
12-17	5	0.3	3	0.2	3	0.2	5	0.3	4	0.3
18+	90	0.7	92	0.7	94	0.7	122	0.9	59	0.4 a
18-25	48	2.4	50	2.6 a	50	2.6	61	3.0	34	1.8
26-49	36	0.7	36	0.7	37	0.8	49	1.0	24	0.5
50+	6	0.1	6	0.1	6	0.1	12	0.2	*	* *
Nonmetro, 2,500-19,999 urban pop										
12+	81	0.4	67	0.4	70	0.4	102	0.6	59	0.3
12-17	4	0.3	4	0.3	4	0.3	6	0.4	2	0.1
18+	77	0.5	63	0.4	66	0.4	97	0.6	57	0.3
18-25	32	1.6	25	1.3	24	1.4	34	1.7	30	1.4
26-49	33	0.6	27	0.5	29	0.6	57	1.1	9	0.2 a
50+	12	0.1	12	0.1	13	0.2	6	0.1	17	0.2

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Table E.1 Past Month Stimulant Use (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, < 2,500 urban pop										
12+	10	0.2	9	0.3	10	0.3	4	0.1	17	0.4
12-17	0	0.1	0	0.1	1	0.2	0	0.1	1	0.2
18+	10	0.3	9	0.3	9	0.3	3	0.1	16	0.5
18-25	4	1.0	3	0.8	3	1.0	3	0.7	5	1.3
26-49	6	0.4	6	0.6	6	0.6	0	0.0	*	* *
50+	*	*	*	* *	*	* *	*	*	*	* *
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	102	0.3	104	0.3	108	0.4	100	0.3	103	0.3
Not Hispanic/Latino	860	0.7	881	0.7	887	0.7	791	0.7	930	0.8
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	54	0.6	51	0.6	52	0.6	38	0.5	69	0.8
Not Hispanic/Latino	308	0.7	311	0.7	298	0.6	311	0.7	306	0.7
Small Metro, < 250,000 population										
Hispanic/Latino	16	0.6	16	0.6	15	0.6	13	0.5	20	0.7
Not Hispanic/Latino	169	0.7	170	0.8	175	0.8	169	0.7	169	0.7
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	12	1.0	13	1.1	14	1.2	19	1.4	5	0.4
Not Hispanic/Latino	83	0.6	81	0.6	83	0.6	108	0.8	58	0.4
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	0	0.0	0	0.0	0	0.0	0	0.0	*	* *
Not Hispanic/Latino	81	0.5	67	0.4	70	0.5	102	0.6	59	0.3
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	* *	*	* *	*	*	*	* *
Not Hispanic/Latino	9	0.2	8	0.2	8	0.2	1	0.0	17	0.5
<b>County Type by Race</b>										
Large Metro										
White Only	846	0.8	866	0.8	876	0.8	786	0.7	907	0.8
Black Only	48	0.2	50	0.2	49	0.2	24	0.1	72	0.3 a
NHOPI Only	1	0.2	2	0.2	1	0.2	*	*	*	* *
Asian Only	30	0.3	30	0.3	31	0.3	45	0.4	15	0.1
AIAN Only	4	0.2	3	0.2	4	0.2	3	0.2	4	0.3
2 or More Races	32	1.1	34	1.1	33	1.1	29	1.0	35	1.2

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Table E.1 Past Month Stimulant Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
White Only	333	0.7	332	0.7	320	0.7	318	0.7	348	0.8
Black Only	6	0.1	6	0.1	6	0.1	10	0.2	2	0.0
NHOPI Only	3	1.0	4	1.2	4	1.2	*	*	1	0.2 *
Asian Only	2	0.1	3	0.1	2	0.1	1	0.1	4	0.2
AIAN Only	1	0.2	1	0.2	1	0.2	1	0.1	2	0.3
2 or More Races	17	1.2	17	1.2	18	1.3	14	1.1	19	1.4
Small Metro, < 250,000 population										
White Only	164	0.8	165	0.8	166	0.8	170	0.8	159	0.7
Black Only	8	0.3	8	0.3	9	0.4	5	0.2	10	0.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	4	0.7	4	0.7	4	0.7	*	*	*	* *
AIAN Only	0	0.1	1	0.2	1	0.3	0	0.1	0	0.1
2 or More Races	8	1.6	8	1.8 a	9	2.0 a	5	1.2	10	2.0
Nonmetro, 20,000 or more urban pop										
White Only	90	0.7	90	0.7	92	0.7	122	0.9	58	0.4 a
Black Only	*	*	*	* *	*	* *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	0	0.2	0	0.2	0	0.2	1	0.3	*	* *
AIAN Only	1	0.5	1	0.3	1	0.4	2	0.9	1	0.2
2 or More Races	3	0.8	3	1.0	3	1.0	1	0.3	4	1.6
Nonmetro, 2,500-19,999 urban pop										
White Only	69	0.4	60	0.4	62	0.4	81	0.6	58	0.3
Black Only	*	*	*	* *	*	* *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	3	1.0	1	0.4	*	* *	*	*	1	0.3 *

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Table E.1 Past Month Stimulant Use (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, < 2,500 urban pop										
White Only	9	0.2	8	0.2	8	0.3	4	0.1	14	0.4
Black Only	*	*	*	* *	*	* *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	0	0.2	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	272	2.5	276	2.5	268	2.5	280	2.6	263	2.4
Female	265	2.6	263	2.5	254	2.5	255	2.4	275	2.7
Full-Time College Students										
Male	136	3.7	139	3.7	129	3.7	148	4.0	124	3.4
Female	145	3.4	144	3.4	134	3.3	141	3.4	150	3.4
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	136	1.9	137	1.9	139	1.9	132	1.9	140	1.9
Female	119	2.0	119	2.0	121	2.0	114	1.8	125	2.1
<b>Age Group by Gender</b>										
12+										
Male	879	0.7	894	0.7	899	0.7	877	0.7	881	0.7
Female	815	0.6	809	0.6	811	0.6	776	0.6	854	0.6
12-17										
Male	53	0.4	55	0.4	57	0.4	61	0.5	46	0.4
Female	51	0.4	51	0.4	51	0.4	56	0.5	46	0.4
18+										
Male	826	0.7	840	0.7	842	0.7	816	0.7	836	0.7
Female	764	0.6	758	0.6	760	0.6	720	0.6	808	0.6
18-25										
Male	399	2.3	405	2.3	402	2.3	403	2.3	394	2.3
Female	363	2.1	364	2.1	361	2.1	354	2.0	372	2.2
26-49										
Male	379	0.8	384	0.8	387	0.8	371	0.8	386	0.8
Female	307	0.6	304	0.6	310	0.6	273	0.5	341	0.7

(continued)

Table E.1 Past Month Stimulant Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
50+										
Male	49	0.1	51	0.1	53	0.1 a	42	0.1	55	0.1
Female	93	0.2	90	0.2	90	0.2	92	0.2	95	0.2
<b>Age Group by Race</b>										
12+										
White Only	1,512	0.7	1,521	0.7	1,523	0.7	1,481	0.7	1,543	0.7
Black Only	61	0.2	64	0.2 a	64	0.2 a	39	0.1	83	0.2
NHOPI Only	6	0.4	6	0.5	6	0.5	9	0.8	2	0.1
Asian Only	37	0.3	37	0.3	37	0.3	47	0.3	28	0.2
AIAN Only	15	0.5	12	0.4	15	0.5	22	0.7	7	0.2
2 or More Races	64	1.1	64	1.1	65	1.2	55	1.0	72	1.3
12-17										
White Only	88	0.5	88	0.5	90	0.5	100	0.5	75	0.4
Black Only	4	0.1	4	0.1	4	0.1	1	0.0	6	0.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	4	0.3	4	0.3	4	0.3	5	0.4	2	0.2
AIAN Only	1	0.2	1	0.2	2	0.4	1	0.2	1	0.2
2 or More Races	6	0.7	6	0.7	6	0.7	5	0.5	8	0.8
18+										
White Only	1,424	0.7	1,432	0.7	1,433	0.7	1,380	0.7	1,468	0.8
Black Only	57	0.2	60	0.2 a	60	0.2 a	38	0.1	77	0.3
NHOPI Only	3	0.3	4	0.3	4	0.4	5	0.5	2	0.2
Asian Only	33	0.2	33	0.2	33	0.2	42	0.3	25	0.2
AIAN Only	14	0.5	11	0.4	14	0.5	21	0.8	6	0.2
2 or More Races	58	1.2	57	1.2	58	1.3	51	1.1	65	1.4
18-25										
White Only	684	2.7	689	2.7	683	2.7	681	2.7	686	2.7
Black Only	33	0.6	34	0.6 a	34	0.6 a	30	0.6	36	0.7
NHOPI Only	2	0.8	2	0.9	2	0.9	*	*	*	*
Asian Only	20	0.9	19	0.9	19	0.9	20	1.0	20	0.9
AIAN Only	3	0.7	2	0.4	2	0.4	5	0.9	2	0.4
2 or More Races	21	2.2	22	2.3	22	2.3	18	1.8	24	2.6

(continued)

Table E.1 Past Month Stimulant Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
White Only	604	0.8	609	0.8	613	0.8	565	0.8	644	0.9
Black Only	19	0.1	20	0.1	20	0.2	8	0.1	30	0.2
NHOPI Only	2	0.3	2	0.4	2	0.4	1	0.2	2	0.4
Asian Only	14	0.2	14	0.2	14	0.2	22	0.3	6	0.1
AIAN Only	10	0.8	9	0.7	11	0.8	*	*	4	0.3
2 or More Races	37	1.9	35	1.8	36	1.9	33	1.8	41	2.1
50+										
White Only	136	0.2	135	0.1	137	0.2	134	0.1	138	0.2
Black Only	6	0.0	6	0.0	6	0.0	*	*	12	0.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
Age Group by Hispanicity										
12+										
Hispanic/Latino	184	0.4	186	0.4	190	0.4	172	0.4	197	0.4
Not Hispanic/Latino	1,510	0.7	1,517	0.7	1,521	0.7	1,481	0.7	1,539	0.7
12-17										
Hispanic/Latino	19	0.3	19	0.3	21	0.4	18	0.3	19	0.3
Not Hispanic/Latino	86	0.5	86	0.5	87	0.5	99	0.5	73	0.4
18+										
Hispanic/Latino	166	0.4	167	0.4	168	0.4	154	0.4	178	0.5
Not Hispanic/Latino	1,424	0.7	1,431	0.7	1,434	0.7	1,382	0.7	1,465	0.7
18-25										
Hispanic/Latino	97	1.3	96	1.3	97	1.3	107	1.4	86	1.1
Not Hispanic/Latino	665	2.4	672	2.5	666	2.4	650	2.4	681	2.5
26-49										
Hispanic/Latino	69	0.4	71	0.4	71	0.4	47	0.2	92	0.5
Not Hispanic/Latino	616	0.8	617	0.8	625	0.8	598	0.8	634	0.8
50+										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	142	0.1	141	0.1	143	0.1	134	0.1	150	0.2

(continued)

Table E.1 Past Month Stimulant Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	46	0.7	46	0.7	46	0.7	55	0.9	36	0.6
18-25	360	2.1	361	2.1	357	2.1	349	2.0	371	2.2
26-44	255	0.6	258	0.6	262	0.7	216	0.5	293	0.7
Pregnant Female Aged 15-44										
15-17	*	*	*	* *	*	* *	*	*	*	*
18-25	1	0.2	2	0.2	2	0.2	2	0.3	1	0.1
26-44	1	0.0	1	0.0	1	0.1	1	0.0	1	0.0
Not Pregnant Female Aged 15-44										
15-17	46	0.7	46	0.7	46	0.7	55	0.9	36	0.6
18-25	359	2.2	359	2.2	356	2.2	347	2.1	371	2.3
26-44	254	0.7	257	0.7	261	0.7	215	0.6	293	0.8
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	584	1.3	587	1.3	586	1.3	547	1.2	622	1.3
Black Only	21	0.2	22	0.2	22	0.2	14	0.1	28	0.3
NHOPI Only	5	1.2	5	1.4	5	1.4	8	2.3	*	* *
Asian Only	15	0.3	15	0.3	15	0.4	20	0.5	11	0.2
AIAN Only	10	1.2	8	0.9	11	1.1	*	*	3	0.4 *
2 or More Races	25	1.6	26	1.7	26	1.7	14	0.9	36	2.3
Pregnant Female Aged 15-44										
White Only	2	0.1	2	0.1	3	0.2	3	0.2	1	0.1
Black Only	*	*	*	* *	*	* *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *

(continued)

**Table E.1 Past Month Stimulant Use (continued)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Not Pregnant Female Aged 15-44										
White Only	582	1.3	585	1.3	583	1.3	544	1.2	621	1.4
Black Only	21	0.2	22	0.2	22	0.2	14	0.2	28	0.3
NHOPI Only	5	1.3	5	1.4	5	1.5	8	2.4	*	* *
Asian Only	15	0.4	15	0.4	15	0.4	20	0.5	11	0.2
AIAN Only	10	1.3	8	1.0	11	1.2	*	*	3	0.4 *
2 or More Races	25	1.7	26	1.8	26	1.7	14	1.0	36	2.4
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	81	0.6	80	0.6	83	0.6	67	0.5	94	0.7
Not Hispanic/Latino	580	1.2	583	1.2	582	1.2	554	1.1	607	1.2
Pregnant Female Aged 15-44										
Hispanic/Latino	1	0.2	1	0.3	1	0.3	*	*	*	* *
Not Hispanic/Latino	1	0.1	1	0.1	1	0.1	1	0.0	1	0.1
Not Pregnant Female Aged 15-44										
Hispanic/Latino	79	0.6	79	0.6	82	0.7	64	0.5	94	0.8
Not Hispanic/Latino	579	1.2	582	1.2	581	1.2	553	1.1	606	1.2

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

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## Appendix F: 2015-2016 NSDUH – Weighted Annual Averages Past Year Serious Mental Illness (SMI) (Aged 18 or Older) – SMIYR\_U

**Table F.1 Past Year Serious Mental Illness (SMI)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	10,063	4.1	10,040	4.1	10,035	4.1	9,765	4.0	10,360	4.2
18-25	1,895	5.5	1,894	5.5	1,895	5.5	1,756	5.0	2,035	5.9
26-49	5,087	5.1	5,063	5.1	5,058	5.1	4,896	5.0	5,279	5.3
50+	3,080	2.8	3,083	2.8	3,081	2.8	3,113	2.8	3,047	2.7
<b>Gender</b>										
Male	3,526	3.0	3,576	3.0	3,527	3.0	3,464	3.0	3,588	3.0
Female	6,537	5.2	6,465	5.1	6,507	5.2	6,301	5.0	6,772	5.3
<b>Hispanicity</b>										
Hispanic/Latino	1,250	3.3	1,217	3.2	1,171	3.1	1,114	2.9	1,386	3.6
Not Hispanic/Latino	8,813	4.3	8,824	4.3	8,864	4.3	8,651	4.2	8,975	4.4
<b>Race</b>										
White Only	8,404	4.4	8,377	4.4	8,353	4.4	8,116	4.3	8,693	4.5
Black Only	932	3.1	923	3.0	928	3.1	884	2.9	979	3.2
NHOPI Only	24	2.1	23	2.0	22	2.0	17	1.9	31	2.2
Asian Only	228	1.7	226	1.7	223	1.7	241	1.8	215	1.6
AIAN Only	107	3.8	109	3.9	128	4.6	113	4.1	101	3.6
2 or More Races	368	8.0	382	8.3	381	8.2	394	8.7	342	7.3
<b>Division</b>										
New England	491	4.2	495	4.3	484	4.2	494	4.3	487	4.2
Middle Atlantic	1,251	3.9	1,243	3.9	1,232	3.8	1,222	3.8	1,279	4.0
East North Central	1,567	4.4	1,586	4.5	1,585	4.5	1,542	4.3	1,592	4.5
West North Central	600	3.8	627	4.0	629	4.0	584	3.7	616	3.9
South Atlantic	2,010	4.1	1,989	4.1	1,983	4.1	1,950	4.0	2,071	4.2
East South Central	655	4.6	627	4.4	636	4.5	622	4.4	689	4.8
West South Central	1,009	3.5	1,005	3.5	1,023	3.6	1,033	3.6	985	3.4
Mountain	889	5.1	911	5.2	909	5.2	869	5.0	910	5.1
Pacific	1,591	4.0	1,558	3.9	1,552	3.9	1,450	3.7	1,732	4.3

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	5,278	3.9	5,390	3.9	5,445	3.9	5,108	3.8	5,448	4.0
Small Metro, pop 250,000-1,000,000	2,266	4.5	2,268	4.5	2,220	4.5	2,108	4.2	2,423	4.8
Small Metro, < 250,000 population	977	4.2	964	4.2	973	4.2	968	4.1	987	4.2
Nonmetro, 20,000 or more urban pop	667	4.8	650	4.8	646	4.8	756	5.5	578	4.2
Nonmetro, 2,500-19,999 urban pop	733	4.4	654	4.3	636	4.3	667	4.3	799	4.5
Nonmetro, < 2,500 urban pop	142	3.8	114	3.6	114	3.6	158	3.8	126	3.7
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	1,168	5.5	1,165	5.5	1,145	5.5	1,055	5.0	1,282	6.1 a
Full-Time College Students	420	5.3	418	5.2	382	5.1	345	4.4	495	6.2 a
Other Persons Aged 18 to 22 <sup>2</sup>	749	5.7	746	5.7	763	5.7	710	5.3	787	6.0
<b>Pregnancy</b>										
Female Aged 18-44 <sup>3</sup>	3,852	6.8	3,826	6.7	3,863	6.8	3,640	6.4	4,065	7.1 a
Pregnant Female Aged 18-44	93	4.1	97	4.3 a	96	4.2	70	3.1	115	5.2
Not Pregnant Female Aged 18-44	3,760	6.9	3,730	6.8	3,767	6.9	3,569	6.6	3,950	7.2
<b>Division by Age Group</b>										
New England										
12+	--	--	--	-- --	--	-- --	--	--	--	--
12-17	--	--	--	-- --	--	-- --	--	--	--	--
18+	491	4.2	495	4.3	484	4.2	494	4.3	487	4.2
18-25	103	6.3	100	6.1	99	6.0	82	5.0	124	7.5
26-49	245	5.5	250	5.6	243	5.5	255	5.7	236	5.3
50+	142	2.6	145	2.6	143	2.6	157	2.9	127	2.3
Middle Atlantic										
12+	--	--	--	-- --	--	-- --	--	--	--	--
12-17	--	--	--	-- --	--	-- --	--	--	--	--
18+	1,251	3.9	1,243	3.9	1,232	3.8	1,222	3.8	1,279	4.0
18-25	240	5.4	239	5.4	240	5.4	225	5.0	255	5.8
26-49	622	4.8	617	4.8	604	4.7	606	4.7	637	5.0
50+	389	2.6	388	2.6	388	2.6	391	2.6	387	2.6

(continued)



Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,567	4.4	1,586	4.5	1,585	4.5	1,542	4.3	1,592	4.5
18-25	320	6.3	324	6.4	323	6.4	294	5.8	346	6.8
26-49	780	5.6	777	5.6	778	5.6	781	5.6	779	5.6
50+	467	2.8	485	2.9	483	2.9	467	2.8	466	2.8
West North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	600	3.8	627	4.0	629	4.0	584	3.7	616	3.9
18-25	122	5.3	125	5.4	127	5.5	108	4.6	136	5.9
26-49	342	5.5	342	5.5	346	5.6	305	4.9	378	6.1
50+	136	1.9	159	2.2	157	2.1	171	2.3	102	1.4
South Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,010	4.1	1,989	4.1	1,983	4.1	1,950	4.0	2,071	4.2
18-25	290	4.4	290	4.4	287	4.4	244	3.7	336	5.2
26-49	931	4.8	906	4.7	900	4.7	934	4.9	929	4.8
50+	789	3.5	793	3.5	797	3.5	772	3.4	807	3.5
East South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	655	4.6	627	4.4	636	4.5	622	4.4	689	4.8
18-25	96	4.8	94	4.7	97	4.8	72	3.5	121	6.0
26-49	363	6.5	357	6.4	360	6.4	325	5.8	401	7.1
50+	196	3.0	175	2.7	179	2.7	225	3.4	167	2.5

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,009	3.5	1,005	3.5	1,023	3.6	1,033	3.6	985	3.4
18-25	209	4.8	209	4.8	216	5.0	230	5.3	188	4.3
26-49	549	4.5	547	4.4	564	4.6	499	4.1	598	4.8
50+	251	2.1	249	2.1	243	2.1	303	2.6	199	1.7
Mountain										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	889	5.1	911	5.2	909	5.2	869	5.0	910	5.1
18-25	178	6.9	181	7.0	173	6.7	170	6.6	185	7.2
26-49	449	6.2	458	6.3	457	6.3	436	6.1	462	6.3
50+	263	3.4	273	3.5	279	3.6	264	3.4	262	3.3
Pacific										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,591	4.0	1,558	3.9	1,552	3.9	1,450	3.7	1,732	4.3
18-25	338	5.8	332	5.7	333	5.8	331	5.7	345	6.0
26-49	807	4.7	810	4.8	807	4.7	756	4.5	858	5.0
50+	447	2.6	416	2.4	412	2.4	364	2.2	529	3.1
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	51	4.8	48	4.5	47	4.4	31	3.0	70	6.6
Not Hispanic/Latino	440	4.2	447	4.2	438	4.2	463	4.4	417	4.0
Middle Atlantic										
Hispanic/Latino	183	4.1	179	4.0	166	3.7	162	3.6	204	4.5
Not Hispanic/Latino	1,068	3.9	1,064	3.9	1,066	3.9	1,060	3.8	1,075	3.9
East North Central										
Hispanic/Latino	107	4.3	108	4.3	108	4.3	117	4.7	97	3.8
Not Hispanic/Latino	1,459	4.4	1,478	4.5	1,477	4.5	1,424	4.3	1,495	4.5

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
Hispanic/Latino	19	2.5	16	2.0	16	2.0	15	1.9	24	3.0
Not Hispanic/Latino	580	3.9	611	4.1	614	4.1	569	3.8	592	3.9
South Atlantic										
Hispanic/Latino	146	2.4	150	2.5	139	2.3	148	2.5	144	2.3
Not Hispanic/Latino	1,864	4.4	1,838	4.3	1,844	4.4	1,802	4.3	1,927	4.5
East South Central										
Hispanic/Latino	27	5.7	16	3.4	17	3.7	*	*	*	* *
Not Hispanic/Latino	628	4.6	611	4.4	619	4.5	600	4.4	657	4.8
West South Central										
Hispanic/Latino	175	2.3	179	2.4	168	2.2	182	2.4	168	2.2
Not Hispanic/Latino	834	4.0	826	4.0	855	4.1	851	4.1	817	3.9
Mountain										
Hispanic/Latino	148	3.9	160	4.2	154	4.0	128	3.4	168	4.4
Not Hispanic/Latino	741	5.4	751	5.5	755	5.5	741	5.4	741	5.3
Pacific										
Hispanic/Latino	393	3.5	360	3.2	356	3.1	309	2.7	478	4.2
Not Hispanic/Latino	1,197	4.2	1,197	4.2	1,197	4.2	1,141	4.0	1,254	4.4
<b>Division by Race</b>										
New England										
White Only	423	4.2	424	4.3	415	4.2	446	4.5	400	4.0
Black Only	31	3.8	33	4.1	33	4.1	12	1.5	50	6.1 a
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	11	2.2	10	2.0	11	2.3	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	19	9.8	22	11.2	20	10.3	*	*	9	4.3 *
Middle Atlantic										
White Only	1,051	4.3	1,048	4.3	1,035	4.2	994	4.1	1,109	4.6
Black Only	131	2.9	132	2.9	133	2.9	139	3.0	123	2.7
NHOPI Only	3	2.9	3	2.8	3	2.8	*	*	*	* *
Asian Only	29	1.3	25	1.1	25	1.1	40	1.7	18	0.8
AIAN Only	5	2.1	5	2.3	5	2.3	4	2.0	5	2.3
2 or More Races	31	6.0	31	6.0	30	5.9	41	8.2	21	4.0

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
White Only	1,357	4.6	1,369	4.6	1,370	4.6	1,323	4.5	1,391	4.7
Black Only	129	3.2	125	3.1	124	3.0	146	3.6	112	2.7
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	32	2.8	37	3.2	36	3.1	27	2.3	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	9	4.9 *
2 or More Races	34	6.9	41	8.2	41	8.2	26	5.4	42	8.3
West North Central										
White Only	516	3.7	524	3.8	530	3.8	481	3.4	550	3.9
Black Only	39	4.0	47	4.8	46	4.6	44	4.5	34	3.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	10	2.3	9	2.3	8	1.9	*	*	6	1.4 *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	19	7.6	*	* *	*	* *	*	*	14	5.6 *
South Atlantic										
White Only	1,598	4.5	1,597	4.5	1,594	4.5	1,621	4.6	1,575	4.4
Black Only	314	3.0	302	2.9	300	2.9	261	2.6	368	3.5
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	34	2.0	35	2.1	33	2.0	22	1.4	45	2.6
AIAN Only	5	1.6	*	* *	*	* *	2	0.8	*	* *
2 or More Races	59	7.7	44	5.8	45	5.8	43	5.6	76	9.9
East South Central										
White Only	568	5.2	542	4.9	543	4.9	531	4.8	606	5.5
Black Only	74	2.7	71	2.6	79	2.8	71	2.5	78	2.8
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	4	2.5	5	2.9	4	2.6	*	*	*	* *

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
White Only	856	3.8	854	3.8	852	3.8	868	3.9	845	3.8
Black Only	100	2.5	103	2.6	108	2.7	113	2.9	88	2.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	11	1.0	11	1.0	10	0.9	12	1.1	*	*
AIAN Only	12	2.4	7	1.5	*	*	13	2.7	11	2.1
2 or More Races	27	5.5	28	5.8	36	7.5	27	5.9	26	5.1
Mountain										
White Only	772	5.1	787	5.2	786	5.2	759	5.0	784	5.1
Black Only	48	7.2	49	7.4	47	7.0	52	7.9	*	*
NHOPI Only	2	1.3	2	1.4	2	1.4	*	*	*	*
Asian Only	14	2.5	14	2.4	14	2.4	*	*	14	2.5
AIAN Only	20	3.3	18	3.0	23	3.8	14	2.4	25	4.2
2 or More Races	34	9.0	42	11.1	38	10.0	27	7.4	*	*
Pacific										
White Only	1,263	4.3	1,233	4.2	1,229	4.2	1,093	3.7	1,433	4.8
Black Only	64	2.9	60	2.8	58	2.7	46	2.1	82	3.8
NHOPI Only	14	2.6	14	2.6	14	2.6	9	2.4	19	2.8
Asian Only	85	1.5	82	1.5	83	1.5	109	1.9	61	1.1
AIAN Only	24	3.6	27	3.9	28	4.2	25	3.8	24	3.5
2 or More Races	141	10.2	142	10.3	140	10.2	168	12.3	113	8.1
County Type by Age Group										
Large Metro										
12+	--	--	--	-- --	--	-- --	--	--	--	--
12-17	--	--	--	-- --	--	-- --	--	--	--	--
18+	5,278	3.9	5,390	3.9	5,445	3.9	5,108	3.8	5,448	4.0
18-25	1,032	5.4	1,042	5.3	1,056	5.4	981	5.1	1,084	5.7
26-49	2,694	4.6	2,767	4.6 a	2,790	4.6	2,585	4.4	2,804	4.8
50+	1,551	2.7	1,582	2.7	1,599	2.7	1,542	2.7	1,560	2.7

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,266	4.5	2,268	4.5	2,220	4.5	2,108	4.2	2,423	4.8
18-25	443	5.9	451	6.0	438	5.9	392	5.2	493	6.7
26-49	1,109	5.7	1,093	5.5	1,070	5.5	1,060	5.4	1,159	6.0
50+	714	3.1	723	3.1	712	3.1	657	2.8	771	3.3
Small Metro, < 250,000 population										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	977	4.2	964	4.2	973	4.2	968	4.1	987	4.2
18-25	180	5.0	183	5.1	183	5.2	155	4.4	204	5.5
26-49	510	6.0	495	5.9	497	6.0	564	6.5	456	5.5
50+	288	2.5	286	2.6	292	2.6	248	2.2	327	2.9
Nonmetro, 20,000 or more urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	667	4.8	650	4.8	646	4.8	756	5.5	578	4.2
18-25	110	5.5	100	5.1	101	5.2	116	5.6	105	5.4
26-49	314	6.2	304	6.2	306	6.2	294	5.8	334	6.5
50+	242	3.6	245	3.7	238	3.6	346	5.2	139	2.0
Nonmetro, 2,500-19,999 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	733	4.4	654	4.3	636	4.3	667	4.3	799	4.5
18-25	106	5.2	96	5.1	93	5.3	91	4.6	120	5.8
26-49	373	6.6	334	6.6	325	6.7	297	5.8	450	7.4
50+	254	2.8	225	2.7	218	2.7	280	3.3	228	2.4

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, < 2,500 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	142	3.8	114	3.6	114	3.6	158	3.8	126	3.7
18-25	25	6.2	23	7.3	23	7.4	22	5.0	28	7.7
26-49	86	6.6	70	6.7	70	6.8	96	6.6	76	6.5
50+	31	1.5	21	1.2	21	1.2	*	*	22	1.2
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	814	3.1	828	3.1	808	3.0	782	3.0	846	3.2
Not Hispanic/Latino	4,464	4.1	4,562	4.1	4,637	4.1	4,326	4.0	4,602	4.2
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	304	4.0	262	3.5	236	3.2	202	2.8	405	5.2
Not Hispanic/Latino	1,962	4.6	2,005	4.6	1,984	4.7	1,905	4.4	2,018	4.8
Small Metro, < 250,000 population										
Hispanic/Latino	58	2.5	61	2.6	61	2.7	48	2.1	69	2.8
Not Hispanic/Latino	919	4.4	903	4.3	912	4.4	920	4.4	918	4.4
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	48	4.6	45	4.5	46	4.6	55	4.9	41	4.3
Not Hispanic/Latino	619	4.8	604	4.8	600	4.8	701	5.6	536	4.1
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	23	2.7	17	2.2	16	2.0	21	3.0	24	2.5
Not Hispanic/Latino	710	4.5	638	4.4	620	4.4	646	4.3	774	4.6
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	140	3.8	111	3.6	110	3.6	153	3.8	126	3.8
<b>County Type by Race</b>										
Large Metro										
White Only	4,230	4.2	4,306	4.2	4,338	4.2	4,031	4.0	4,429	4.4
Black Only	612	3.0	626	3.1	633	3.1	580	2.9	644	3.2
NHOPI Only	15	2.1	14	1.9	14	1.9	12	2.2	18	2.0
Asian Only	181	1.7	183	1.7	182	1.7	203	1.9	158	1.5
AIAN Only	41	3.1	42	3.2	55	3.9	50	3.7	32	2.5
2 or More Races	199	8.2	219	8.7	222	8.6	231	9.9	167	6.6

(continued)

**Table F.1 Past Year Serious Mental Illness (SMI) (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
White Only	1,918	4.6	1,921	4.6	1,876	4.6	1,817	4.4	2,019	4.9
Black Only	199	3.8	196	3.7	192	3.7	162	3.1	235	4.6
NHOPI Only	6	2.5	7	2.5	6	2.5	3	1.4	*	*
Asian Only	31	1.6	31	1.6	28	1.5	20	1.0	42	2.3
AIAN Only	14	2.6	21	3.7	26	4.3	9	1.7	20	3.6
2 or More Races	97	8.6	92	8.1	91	8.3	96	8.6	98	8.6
Small Metro, < 250,000 population										
White Only	867	4.4	864	4.4	874	4.4	849	4.3	886	4.4
Black Only	52	2.4	42	2.0	41	2.1	47	2.1	57	2.8
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	9	1.6	5	1.1	5	0.9	15	2.4	3	0.5
AIAN Only	15	6.1	18	5.9	21	6.1	*	*	11	4.3
2 or More Races	33	8.6	34	9.6	32	9.0	*	*	*	*
Nonmetro, 20,000 or more urban pop										
White Only	601	5.1	585	5.0	579	5.0	677	5.7	525	4.4
Black Only	40	3.4	38	3.2	39	3.3	57	5.3	22	1.8
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	1	0.6	*	*
AIAN Only	8	3.2	10	3.8	10	4.2	6	2.9	*	*
2 or More Races	11	4.0	9	3.9	10	4.1	*	*	9	4.2
Nonmetro, 2,500-19,999 urban pop										
White Only	660	4.6	596	4.5	581	4.5	594	4.4	727	4.8
Black Only	25	1.7	17	1.3	18	1.4	29	2.2	21	1.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	23	7.3	12	4.9	*	*	*	*	19	5.7
2 or More Races	23	7.7	*	*	*	*	16	6.4	*	*

(continued)



Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, < 2,500 urban pop										
White Only	128	3.8	105	3.7	105	3.7	148	4.0	108	3.6
Black Only	4	1.7	*	* *	*	* *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	6	5.8	*	* *	*	* *	2	1.9	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	389	3.6	378	3.5	372	3.5	346	3.2	432	4.0
Female	780	7.6	787	7.6	773	7.6	709	6.8	850	8.3 a
Full-Time College Students										
Male	118	3.2	115	3.1	106	3.1	105	2.8	130	3.6
Female	302	7.1	304	7.1	276	6.9	240	5.8	364	8.3 a
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	271	3.8	263	3.7	266	3.7	241	3.4	302	4.2
Female	477	7.9	483	8.0	497	8.1 a	469	7.5	485	8.3
<b>Age Group by Gender</b>										
12+										
Male	--	--	--	-- --	--	-- --	--	--	--	-- --
Female	--	--	--	-- --	--	-- --	--	--	--	-- --
12-17										
Male	--	--	--	-- --	--	-- --	--	--	--	-- --
Female	--	--	--	-- --	--	-- --	--	--	--	-- --
18+										
Male	3,526	3.0	3,576	3.0	3,527	3.0	3,464	3.0	3,588	3.0
Female	6,537	5.2	6,465	5.1	6,507	5.2	6,301	5.0	6,772	5.3
18-25										
Male	674	3.9	664	3.8	660	3.8	635	3.6	714	4.1
Female	1,221	7.1	1,230	7.1	1,235	7.1	1,121	6.5	1,321	7.7 a
26-49										
Male	1,801	3.7	1,820	3.7	1,800	3.7	1,742	3.6	1,861	3.8
Female	3,286	6.5	3,243	6.5	3,259	6.5	3,154	6.3	3,418	6.8

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
50+										
Male	1,051	2.0	1,091	2.1	1,068	2.1	1,087	2.1	1,014	2.0
Female	2,029	3.5	1,992	3.4	2,013	3.4	2,026	3.5	2,033	3.4
<b>Age Group by Race</b>										
12+										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
12-17										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
18+										
White Only	8,404	4.4	8,377	4.4	8,353	4.4	8,116	4.3	8,693	4.5
Black Only	932	3.1	923	3.0	928	3.1	884	2.9	979	3.2
NHOPI Only	24	2.1	23	2.0	22	2.0	17	1.9	31	2.2
Asian Only	228	1.7	226	1.7	223	1.7	241	1.8	215	1.6
AIAN Only	107	3.8	109	3.9	128	4.6	113	4.1	101	3.6
2 or More Races	368	8.0	382	8.3	381	8.2	394	8.7	342	7.3
18-25										
White Only	1,535	6.0	1,528	6.0	1,530	6.0	1,437	5.6	1,633	6.4
Black Only	182	3.4	185	3.5	181	3.4	153	2.8	212	4.0
NHOPI Only	4	1.7	4	1.8	4	1.8	4	1.8	4	1.6
Asian Only	75	3.5	75	3.5	76	3.6	56	2.7	94	4.3
AIAN Only	15	2.8	15	2.9	16	2.9	13	2.6	16	3.0
2 or More Races	85	8.8	86	9.0	88	9.0	93	9.3	77	8.3

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
White Only	4,231	5.6	4,203	5.6	4,191	5.6	4,074	5.4	4,389	5.8
Black Only	487	3.7	490	3.7	493	3.7	435	3.3	539	4.0
NHOPI Only	19	3.7	19	3.6	18	3.7	11	2.6	27	4.5
Asian Only	111	1.6	109	1.6	107	1.6	124	1.8	98	1.4
AIAN Only	69	5.2	70	5.1	79	5.8	83	6.2	55	4.2
2 or More Races	169	8.9	172	8.9	171	9.0	168	9.2	171	8.6
50+										
White Only	2,638	2.9	2,645	2.9	2,632	2.9	2,606	2.9	2,670	2.9
Black Only	263	2.2	248	2.1	253	2.1	296	2.5	229	1.9
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	42	0.9	41	0.9	40	0.9	61	1.3	*	*
AIAN Only	23	2.5	24	2.7	33	3.8	*	*	30	3.1
2 or More Races	114	6.5	124	7.1	123	7.0	133	7.8	94	5.2
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
Not Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
12-17										
Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
Not Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
18+										
Hispanic/Latino	1,250	3.3	1,217	3.2	1,171	3.1 a	1,114	2.9	1,386	3.6
Not Hispanic/Latino	8,813	4.3	8,824	4.3	8,864	4.3	8,651	4.2	8,975	4.4
18-25										
Hispanic/Latino	303	4.1	301	4.0	289	3.9 a	263	3.5	344	4.6
Not Hispanic/Latino	1,592	5.8	1,593	5.8	1,606	5.9	1,493	5.4	1,691	6.2 a
26-49										
Hispanic/Latino	592	3.0	583	3.0	563	2.9	581	3.0	604	3.1
Not Hispanic/Latino	4,495	5.7	4,480	5.6	4,496	5.7	4,315	5.4	4,674	5.9
50+										
Hispanic/Latino	354	3.2	333	3.0	319	2.8	271	2.5	438	3.8
Not Hispanic/Latino	2,726	2.8	2,750	2.8	2,762	2.8	2,842	2.9	2,609	2.6

(continued)

Table F.1 Past Year Serious Mental Illness (SMI) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Pregnancy by Age Group</b>										
Female Aged 18-44 <sup>3</sup>										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	1,213	7.0	1,222	7.1	1,227	7.1	1,119	6.5	1,308	7.6 a
26-44	2,639	6.6	2,605	6.6	2,636	6.6	2,521	6.4	2,757	6.9
Pregnant Female Aged 18-44										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	37	5.0	38	5.1	36	4.7	42	5.0	33	4.9
26-44	56	3.7	59	3.9 a	60	4.0	29	2.0	82	5.3 a
Not Pregnant Female Aged 18-44										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	1,176	7.1	1,184	7.2	1,191	7.2	1,078	6.5	1,275	7.7 a
26-44	2,583	6.8	2,546	6.7	2,576	6.7	2,492	6.6	2,675	6.9
<b>Pregnancy by Race</b>										
Female Aged 18-44 <sup>3</sup>										
White Only	3,138	7.5	3,110	7.4	3,150	7.5	2,995	7.1	3,281	7.8
Black Only	377	4.4	375	4.4	370	4.3	329	3.9	425	4.9
NHOPI Only	17	4.6	16	4.7	16	4.7	13	4.4	*	* *
Asian Only	127	3.1	123	3.0	121	3.0	109	2.7	144	3.5
AIAN Only	46	6.1	46	5.9	53	6.5	54	7.1	39	5.1
2 or More Races	148	11.3	155	11.7	154	11.6	139	10.7	157	11.9
Pregnant Female Aged 18-44										
White Only	76	4.6	79	4.8 a	80	4.8	61	3.6	91	5.6
Black Only	8	2.4	9	2.4	8	2.4	5	1.3	12	3.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
Not Pregnant Female Aged 18-44										
White Only	3,062	7.6	3,031	7.5	3,070	7.6	2,934	7.3	3,190	7.9
Black Only	369	4.5	367	4.5	362	4.4	325	4.0	413	5.0
NHOPI Only	11	3.2	11	3.3	11	3.4	13	4.4	*	* *
Asian Only	127	3.2	123	3.2	121	3.1	109	2.8	144	3.7
AIAN Only	45	6.2	45	6.0	52	6.7	53	7.3	38	5.2
2 or More Races	146	11.6	153	12.1 a	152	12.0	136	10.8	156	12.4

(continued)

**Table F.1 Past Year Serious Mental Illness (SMI) (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Pregnancy by Hispanicity</b>										
Female Aged 18-44 <sup>3</sup>										
Hispanic/Latino	541	4.7	535	4.7	535	4.7	469	4.1	612	5.3
Not Hispanic/Latino	3,312	7.3	3,291	7.2	3,329	7.3	3,171	7.0	3,453	7.6
Pregnant Female Aged 18-44										
Hispanic/Latino	13	2.8	14	2.9	14	2.9	8	1.7	18	3.8
Not Hispanic/Latino	80	4.5	83	4.6	82	4.6	63	3.5	97	5.6
Not Pregnant Female Aged 18-44										
Hispanic/Latino	528	4.8	521	4.8	521	4.8	461	4.2	594	5.4
Not Hispanic/Latino	3,232	7.4	3,209	7.3	3,246	7.4	3,108	7.1	3,355	7.6

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

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## Appendix G: 2015-2016 NSDUH – Weighted Annual Averages Past Month Alcohol Use – ALCMON

**Table G.1 Past Month Alcohol Use**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	137,528	51.2	138,060	51.4	138,297	51.5	138,322	51.7	136,735	50.7
12-17	2,341	9.4	2,345	9.4	2,330	9.4	2,392	9.6	2,289	9.2
18+	135,188	55.5	135,715	55.7	135,967	55.8	135,929	56.0	134,446	55.0
18-25	20,060	57.7	20,121	57.9	20,188	58.1	20,367	58.3	19,754	57.1
26-49	60,738	61.4	60,947	61.6	61,109	61.8	60,885	61.7	60,591	61.1
50+	54,389	49.4	54,647	49.7	54,670	49.7	54,678	50.0	54,101	48.8
<b>Gender</b>										
Male	72,587	55.8	72,886	56.0	73,057	56.1	72,889	56.2	72,286	55.3
Female	64,941	46.9	65,174	47.1	65,240	47.1	65,432	47.4	64,449	46.4
<b>Hispanicity</b>										
Hispanic/Latino	18,662	42.5	18,630	42.4	18,636	42.4	18,488	42.4	18,835	42.5
Not Hispanic/Latino	118,867	52.9	119,430	53.2	119,660	53.3	119,833	53.5	117,900	52.4
<b>Race</b>										
White Only	113,259	54.0	113,792	54.3	113,976	54.4	113,614	54.3	112,903	53.8
Black Only	14,538	42.6	14,596	42.8	14,660	43.0	14,868	43.8	14,209	41.4
NHOPI Only	492	37.4	494	37.4	477	36.5	400	36.5	583	38.1
Asian Only	5,565	37.6	5,462	36.9	5,448	36.8	5,918	39.8	5,211	35.3
AIAN Only	1,183	37.2	1,202	37.8	1,237	38.9	1,186	37.6	1,180	36.9
2 or More Races	2,492	44.9	2,513	45.3	2,499	45.0	2,335	42.8	2,648	46.9
<b>Division</b>										
New England	7,468	59.1	7,462	59.0	7,472	59.1	7,380	58.4	7,555	59.7
Middle Atlantic	19,294	54.9	19,352	55.0	19,368	55.1	19,346	55.0	19,243	54.8
East North Central	20,971	53.5	21,054	53.7	21,045	53.7	20,769	53.0	21,173	54.0
West North Central	9,907	56.6	9,888	56.5	9,920	56.7	9,788	56.1	10,025	57.2
South Atlantic	26,480	49.8	26,639	50.1	26,639	50.1	27,061	51.2	25,899	48.4
East South Central	6,377	40.6	6,530	41.6	6,558	41.7	6,409	40.9	6,345	40.3
West South Central	14,742	46.4	14,784	46.5	14,906	46.9	14,814	46.9	14,669	45.9
Mountain	9,694	49.7	9,735	49.9	9,754	50.0	9,626	49.8	9,762	49.7
Pacific	22,596	51.5	22,616	51.6	22,634	51.6	23,128	52.9	22,063	50.2

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	79,929	53.4	81,179	53.4	82,088	53.4	80,628	54.0	79,230	52.7 a
Small Metro, pop 250,000-1,000,000	27,889	50.1	28,165	50.2	27,766	50.4	28,394	50.7	27,383	49.6
Small Metro, < 250,000 population	13,062	51.1	12,950	51.1	12,904	51.2	12,967	50.7	13,158	51.6
Nonmetro, 20,000 or more urban pop	7,192	47.2	7,148	47.8 a	7,152	48.0	7,346	48.5	7,038	45.9
Nonmetro, 2,500-19,999 urban pop	7,886	43.4	7,311	43.9	7,094	44.1 a	7,379	43.4	8,394	43.4
Nonmetro, < 2,500 urban pop	1,570	38.0	1,307	38.1	1,292	38.0	1,608	35.2	1,533	41.5 a
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	10,841	51.2	10,877	51.4 a	10,702	51.3	11,036	51.9	10,645	50.5
Full-Time College Students	4,571	57.6	4,624	57.9 a	4,353	58.1	4,588	58.0	4,554	57.2
Other Persons Aged 18 to 22 <sup>2</sup>	6,270	47.4	6,253	47.4	6,349	47.5	6,448	48.2	6,091	46.5
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	33,188	52.5	33,341	52.7 a	33,393	52.8 a	33,396	53.1	32,980	51.9
Pregnant Female Aged 15-44	200	8.8	198	8.6	203	8.8	214	9.3	187	8.3
Not Pregnant Female Aged 15-44	32,987	54.1	33,143	54.4 a	33,190	54.5 a	33,182	54.8	32,793	53.5 a
<b>Division by Age Group</b>										
New England										
12+	7,468	59.1	7,462	59.0	7,472	59.1	7,380	58.4	7,555	59.7
12-17	129	12.0	128	11.9	128	11.9	133	12.4	124	11.7
18+	7,339	63.4	7,334	63.4	7,345	63.5	7,247	62.7	7,431	64.1
18-25	1,123	68.1	1,121	67.9	1,118	67.7	1,139	69.0	1,108	67.1
26-49	3,089	69.6	3,082	69.4	3,091	69.6	3,082	69.2	3,097	69.9
50+	3,126	57.0	3,131	57.1	3,136	57.2	3,026	55.5	3,226	58.5
Middle Atlantic										
12+	19,294	54.9	19,352	55.0	19,368	55.1	19,346	55.0	19,243	54.8
12-17	349	11.5	349	11.5	349	11.5	383	12.6	315	10.4
18+	18,946	59.0	19,003	59.2	19,018	59.2	18,964	59.0	18,928	58.9
18-25	2,797	63.1	2,799	63.1	2,800	63.1	2,857	63.9	2,738	62.2
26-49	8,191	63.8	8,201	63.9	8,215	64.0	8,167	63.4	8,214	64.1
50+	7,958	53.6	8,003	53.9	8,003	53.9	7,939	53.7	7,976	53.5

(continued)



Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	20,971	53.5	21,054	53.7	21,045	53.7	20,769	53.0	21,173	54.0
12-17	353	9.6	350	9.5	351	9.5	360	9.7	346	9.4
18+	20,618	58.0	20,704	58.3	20,694	58.3	20,409	57.5	20,826	58.6
18-25	3,071	60.6	3,080	60.7	3,079	60.7	3,100	60.9	3,043	60.2
26-49	9,060	64.9	9,090	65.1	9,090	65.1	9,171	65.6	8,949	64.2
50+	8,486	51.5	8,534	51.8	8,525	51.7	8,138	49.5	8,834	53.4
West North Central										
12+	9,907	56.6	9,888	56.5	9,920	56.7	9,788	56.1	10,025	57.2
12-17	159	9.7	151	9.1	152	9.2	154	9.4	164	10.0
18+	9,747	61.5	9,737	61.5	9,768	61.6	9,633	60.9	9,861	62.1
18-25	1,451	62.5	1,452	62.6	1,473	63.5	1,477	63.5	1,425	61.6
26-49	4,206	67.6	4,224	67.9	4,228	68.0	4,115	66.2	4,297	69.0
50+	4,090	56.0	4,061	55.6	4,068	55.7	4,041	55.6	4,139	56.4
South Atlantic										
12+	26,480	49.8	26,639	50.1	26,639	50.1	27,061	51.2	25,899	48.4
12-17	393	8.3	399	8.5	395	8.4	404	8.6	382	8.1
18+	26,088	53.8	26,240	54.1	26,244	54.1	26,658	55.3	25,517	52.3
18-25	3,802	58.2	3,829	58.6	3,809	58.3	3,900	59.3	3,704	57.1
26-49	11,417	59.3	11,465	59.5	11,463	59.5	11,681	60.9	11,153	57.6
50+	10,869	47.9	10,945	48.3	10,972	48.4	11,078	49.4	10,660	46.5
East South Central										
12+	6,377	40.6	6,530	41.6	6,558	41.7	6,409	40.9	6,345	40.3
12-17	116	7.9	115	7.8	113	7.7	105	7.1	126	8.6
18+	6,261	44.0	6,415	45.0	6,445	45.2	6,304	44.4	6,219	43.5
18-25	980	48.4	988	48.8	1,005	49.6	940	46.1	1,019	50.6
26-49	2,870	51.0	2,937	52.2	2,949	52.4	2,904	51.7	2,836	50.3
50+	2,412	36.6	2,490	37.8	2,491	37.8	2,461	37.5	2,363	35.6

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
12+	14,742	46.4	14,784	46.5	14,906	46.9	14,814	46.9	14,669	45.9
12-17	303	9.1	307	9.3	296	8.9	316	9.6	290	8.7
18+	14,439	50.7	14,476	50.8	14,610	51.3	14,498	51.2	14,379	50.2
18-25	2,257	52.1	2,266	52.3	2,284	52.7	2,263	52.1	2,252	52.0
26-49	7,259	59.1	7,316	59.5	7,441	60.5	7,194	58.9	7,325	59.2
50+	4,922	41.5	4,894	41.3	4,885	41.2	5,041	42.8	4,803	40.2
Mountain										
12+	9,694	49.7	9,735	49.9	9,754	50.0	9,626	49.8	9,762	49.7
12-17	173	9.0	174	9.1	176	9.2	172	9.0	173	9.0
18+	9,521	54.2	9,561	54.4	9,578	54.5	9,453	54.2	9,589	54.1
18-25	1,398	54.0	1,406	54.3	1,419	54.8	1,419	54.8	1,378	53.2
26-49	4,255	58.7	4,262	58.8	4,268	58.9	4,233	58.9	4,277	58.5
50+	3,868	50.0	3,892	50.3	3,892	50.3	3,802	49.7	3,933	50.2
Pacific										
12+	22,596	51.5	22,616	51.6	22,634	51.6	23,128	52.9	22,063	50.2
12-17	366	9.1	370	9.2	368	9.2	365	9.1	368	9.2
18+	22,229	55.8	22,245	55.9	22,266	55.9	22,763	57.4	21,695	54.3
18-25	3,180	55.0	3,179	55.0	3,202	55.4	3,273	56.2	3,087	53.9
26-49	10,390	61.1	10,368	61.0	10,366	61.0	10,338	61.1	10,442	61.2
50+	8,659	50.8	8,698	51.0	8,697	51.0	9,152	54.1	8,166	47.6
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	498	41.2	484	40.1	488	40.4	536	45.0	460	37.6
Not Hispanic/Latino	6,970	60.9	6,978	61.0	6,984	61.1	6,844	59.8	7,096	62.1
Middle Atlantic										
Hispanic/Latino	2,100	41.5	2,119	41.9	2,126	42.0	2,096	41.7	2,104	41.4
Not Hispanic/Latino	17,195	57.1	17,233	57.2	17,242	57.3	17,251	57.2	17,138	57.0
East North Central										
Hispanic/Latino	1,344	45.4	1,329	45.0	1,334	45.1	1,324	45.1	1,364	45.8
Not Hispanic/Latino	19,627	54.1	19,725	54.4	19,711	54.4	19,445	53.6	19,809	54.7

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
Hispanic/Latino	424	45.0	393	41.8	391	41.6	371	39.8	476	50.1
Not Hispanic/Latino	9,483	57.3	9,495	57.4	9,529	57.6	9,417	57.0	9,549	57.6
South Atlantic										
Hispanic/Latino	2,984	43.5	2,993	43.6	2,986	43.5	2,961	43.7	3,006	43.2
Not Hispanic/Latino	23,496	50.7	23,645	51.0	23,653	51.1	24,100	52.3	22,893	49.2
East South Central										
Hispanic/Latino	206	37.2	217	39.1	217	39.2	193	35.1	219	39.2
Not Hispanic/Latino	6,171	40.7	6,313	41.6	6,341	41.8	6,216	41.1	6,126	40.3
West South Central										
Hispanic/Latino	3,612	40.8	3,579	40.5	3,588	40.6	3,598	41.1	3,627	40.6
Not Hispanic/Latino	11,129	48.5	11,205	48.8	11,318	49.3	11,217	49.1	11,042	47.9
Mountain										
Hispanic/Latino	1,885	42.3	1,880	42.2	1,872	42.0	1,796	40.8	1,974	43.8
Not Hispanic/Latino	7,809	51.9	7,855	52.2	7,882	52.4	7,830	52.4	7,789	51.4
Pacific										
Hispanic/Latino	5,610	42.9	5,635	43.1	5,633	43.1	5,614	43.2	5,605	42.7
Not Hispanic/Latino	16,986	55.2	16,981	55.2	17,000	55.2	17,514	57.1	16,458	53.3
<b>Division by Race</b>										
New England										
White Only	6,642	61.4	6,631	61.3	6,637	61.3	6,561	60.6	6,723	62.1
Black Only	391	42.9	392	42.9	392	42.9	363	40.2	419	45.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	284	48.4	268	46.8	272	47.9	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
Middle Atlantic										
White Only	15,783	59.5	15,855	59.8	15,861	59.8	15,805	59.5	15,761	59.5
Black Only	2,150	42.0	2,151	42.0	2,156	42.1	2,228	43.6	2,071	40.4
NHOPI Only	56	39.9	56	38.5	57	38.6	*	*	*	*
Asian Only	922	36.7	903	36.0	907	36.2	903	36.0	941	37.4
AIAN Only	85	35.9	87	36.7	87	36.6	91	38.7	79	33.2
2 or More Races	299	48.0	299	48.1	300	48.1	275	44.8	323	51.2

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
White Only	18,108	55.8	18,159	56.0	18,164	56.0	17,910	55.2	18,307	56.5
Black Only	2,059	44.9	2,109	46.0	2,106	45.9	2,039	44.5	2,079	45.3
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	421	32.6	415	32.3	403	31.3	456	35.6	386	29.7
AIAN Only	89	40.7	85	38.8	85	39.1	*	*	*	*
2 or More Races	270	43.8	262	42.6	263	42.7	243	40.3	296	47.2
West North Central										
White Only	8,984	58.6	9,025	58.9	9,045	59.0	8,802	57.5	9,167	59.8
Black Only	482	42.7	460	40.8	464	41.1	521	46.6	442	38.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	208	42.3	187	38.2	192	38.9	*	*	*	*
AIAN Only	89	40.1	*	*	84	37.9	*	*	*	*
2 or More Races	129	43.1	*	*	*	*	*	*	*	*
South Atlantic										
White Only	20,304	53.0	20,463	53.4	20,473	53.4	20,788	54.5	19,821	51.5
Black Only	4,897	42.4	4,904	42.4	4,916	42.5	5,034	43.9	4,760	40.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	711	37.7	712	37.7	707	37.2	731	39.1	692	36.4
AIAN Only	127	36.7	122	35.2	112	32.3	118	34.2	137	39.1
2 or More Races	375	41.2	373	41.0	373	41.0	331	37.1	418	45.1
East South Central										
White Only	4,966	41.2	5,110	42.4	5,131	42.6	4,939	41.0	4,993	41.3
Black Only	1,214	38.8	1,204	38.4	1,226	39.1	1,268	40.6	1,160	36.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	82	36.0	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
White Only	11,964	48.2	11,995	48.4	12,109	48.8	11,915	48.3	12,013	48.2
Black Only	1,917	42.4	1,937	42.9	1,960	43.4	1,964	43.8	1,869	41.0
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	390	31.3	379	30.3	364	29.2	441	35.4	339	27.2
AIAN Only	177	31.6	187	33.4	204	36.5	182	32.8	172	30.4
2 or More Races	251	42.7	243	41.2	232	39.4	265	45.9	237	39.7
Mountain										
White Only	8,584	51.0	8,606	51.1	8,602	51.1	8,522	51.0	8,645	51.0
Black Only	371	48.9	377	49.8	381	50.3	336	45.0	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	269	43.1	255	40.6	254	40.1	*	*	215	34.4
AIAN Only	233	34.5	255	37.7	274	40.5	238	35.5	228	33.5
2 or More Races	192	42.5	200	44.2	203	45.0	173	39.1	211	45.8
Pacific										
White Only	17,923	55.2	17,947	55.3	17,953	55.3	18,373	56.7	17,473	53.7
Black Only	1,058	44.1	1,062	44.3	1,059	44.2	1,113	46.4	1,003	41.8
NHOPI Only	232	38.0	232	38.3	230	38.1	*	*	*	* *
Asian Only	2,274	38.2	2,261	37.9	2,271	38.1	2,391	39.5	2,157	36.9
AIAN Only	326	41.9	335	43.0	337	43.4	311	40.2	341	43.5
2 or More Races	782	47.6	779	47.4	784	47.6	764	47.1	801	48.0
<b>County Type by Age Group</b>										
Large Metro										
12+	79,929	53.4	81,179	53.4	82,088	53.4	80,628	54.0	79,230	52.7
12-17	1,334	9.5	1,370	9.6	1,371	9.5	1,346	9.6	1,323	9.4
18+	78,594	57.9	79,809	57.9	80,717	57.9	79,282	58.6	77,907	57.2
18-25	11,232	58.3	11,375	58.3	11,522	58.4	11,362	58.6	11,103	57.9
26-49	37,405	63.7	37,988	63.7	38,457	63.8	37,719	64.4	37,092	62.9
50+	29,957	51.9	30,446	51.9	30,738	51.8	30,201	52.7	29,712	51.2

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
12+	27,889	50.1	28,165	50.2	27,766	50.4	28,394	50.7	27,383	49.6
12-17	493	9.3	495	9.3	486	9.3	510	9.5	476	9.0
18+	27,395	54.4	27,670	54.5	27,280	54.7	27,884	55.1	26,907	53.8
18-25	4,322	57.9	4,355	57.9	4,301	57.9	4,478	59.1	4,167	56.7
26-49	11,747	59.9	11,860	59.9	11,700	60.1	11,782	59.5	11,711	60.3
50+	11,327	48.8	11,455	48.9	11,278	49.1	11,624	50.0	11,029	47.5
Small Metro, < 250,000 population										
12+	13,062	51.1	12,950	51.1	12,904	51.2	12,967	50.7	13,158	51.6
12-17	190	8.7	188	8.6	189	8.7	212	9.6	168	7.8
18+	12,872	55.1	12,762	55.1	12,715	55.2	12,755	54.6	12,990	55.6
18-25	2,163	60.3	2,153	60.4	2,150	60.5	2,127	61.0	2,199	59.7
26-49	5,061	59.6	5,015	59.7	4,993	59.9	5,132	59.3	4,990	59.8
50+	5,648	50.0	5,594	50.0	5,572	50.1	5,496	48.9	5,801	51.1
Nonmetro, 20,000 or more urban pop										
12+	7,192	47.2	7,148	47.8	7,152	48.0	7,346	48.5	7,038	45.9
12-17	145	10.2	139	10.0	137	9.9	145	10.2	144	10.1
18+	7,047	51.0	7,008	51.7	7,015	51.9	7,200	52.5	6,893	49.5
18-25	1,099	55.2	1,084	55.5	1,113	56.7	1,187	57.8	1,011	52.3
26-49	2,881	56.7	2,846	57.5	2,841	57.8	2,812	55.8	2,949	57.6
50+	3,068	45.5	3,079	46.3	3,061	46.1	3,202	48.3	2,934	42.7
Nonmetro, 2,500-19,999 urban pop										
12+	7,886	43.4	7,311	43.9	7,094	44.1	7,379	43.4	8,394	43.4
12-17	147	9.4	134	9.4	128	9.4	148	10.2	147	8.8
18+	7,739	46.6	7,177	47.2	6,966	47.3	7,231	46.4	8,247	46.7
18-25	1,062	52.8	1,007	54.0	953	54.1	1,017	52.1	1,106	53.5
26-49	3,030	53.9	2,717	54.0	2,620	53.8	2,801	54.6	3,259	53.4
50+	3,647	40.6	3,453	41.5	3,393	41.9	3,412	40.2	3,882	40.9

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, < 2,500 urban pop										
12+	1,570	38.0	1,307	38.1	1,292	38.0	1,608	35.2	1,533	41.5 a
12-17	30	8.8	19	6.9	18	6.6 a	30	8.0	31	9.6
18+	1,540	40.7	1,288	40.8	1,274	40.7	1,578	37.6	1,502	44.5 a
18-25	182	45.4	148	47.1	149	48.2	196	44.2	168	46.8
26-49	615	47.0	520	49.3	499	49.0	639	44.0	591	50.6
50+	743	35.8	620	34.7	626	34.8	743	32.2	743	40.2
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	12,941	43.0	13,017	42.9	13,117	43.0	12,971	42.9	12,911	43.1
Not Hispanic/Latino	66,988	56.0	68,162	56.0	68,971	55.9	67,657	56.8	66,319	55.1 a
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	3,656	41.7	3,624	41.6	3,583	41.8	3,511	41.7	3,801	41.7
Not Hispanic/Latino	24,233	51.7	24,541	51.8	24,183	52.0	24,883	52.3	23,583	51.1
Small Metro, < 250,000 population										
Hispanic/Latino	1,137	41.5	1,125	41.4	1,082	40.5	1,027	39.4	1,247	43.4
Not Hispanic/Latino	11,925	52.3	11,826	52.3	11,822	52.5	11,940	52.0	11,911	52.6
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	522	42.9	509	43.4	506	43.1	605	46.5	440	38.8
Not Hispanic/Latino	6,669	47.5	6,638	48.2 a	6,647	48.4	6,741	48.7	6,598	46.4
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	345	35.2	302	34.4	299	34.2	309	37.7	381	33.4
Not Hispanic/Latino	7,541	43.8	7,009	44.5	6,795	44.7 a	7,069	43.6	8,013	44.0
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	60	42.2	52	41.7	49	41.3	*	*	*	* *
Not Hispanic/Latino	1,510	37.9	1,255	38.0	1,243	37.8	1,544	35.1	1,477	41.2 a

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type by Race</b>										
Large Metro										
White Only	63,201	57.3	64,304	57.3	64,971	57.3	63,731	57.8	62,672	56.8
Black Only	9,971	44.3	10,081	44.3	10,200	44.4	10,178	45.5	9,765	43.1
NHOPI Only	348	41.3	352	41.3	344	40.2	269	39.4	*	*
Asian Only	4,473	38.1	4,432	37.5	4,444	37.4	4,648	39.9	4,297	36.2
AIAN Only	604	39.8	599	39.5	678	40.8	619	39.4	590	40.2
2 or More Races	1,331	45.7	1,410	46.6	1,452	46.8	1,184	41.8	1,478	49.4
Small Metro, pop 250,000-1,000,000										
White Only	23,902	52.7	24,114	52.8	23,787	53.0	24,301	53.2	23,503	52.2
Black Only	2,359	39.9	2,406	40.5	2,388	40.6	2,414	40.3	2,303	39.5
NHOPI Only	91	30.2	91	29.6	85	28.5	*	*	*	*
Asian Only	708	33.7	707	33.7	681	33.1	803	37.3	613	30.0
AIAN Only	211	33.9	228	34.7	228	33.4	191	30.3	231	37.7
2 or More Races	618	45.6	618	44.7	597	45.2	598	45.1	639	46.2
Small Metro, < 250,000 population										
White Only	11,373	52.5	11,333	52.6	11,313	52.6	11,104	51.4	11,642	53.5
Black Only	1,056	43.7	1,019	43.3	983	44.0	1,200	46.9	911	40.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	240	39.3	198	35.8	197	35.5	*	*	195	34.9
AIAN Only	143	49.8	164	47.5	175	44.5	*	*	129	44.2
2 or More Races	221	46.3	205	46.5	205	45.8	208	46.5	234	46.1
Nonmetro, 20,000 or more urban pop										
White Only	6,405	49.2	6,358	49.9	6,368	50.0	6,542	50.5	6,269	48.0
Black Only	458	34.5	470	35.0	479	35.7	438	35.9	478	33.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	84	37.8	82	38.7	88	38.2	*	*	*	*
AIAN Only	86	31.3	97	32.4	*	*	*	*	*	*
2 or More Races	139	40.1	123	41.6	109	37.4	*	*	118	44.2

(continued)



Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
White Only	6,963	44.5	6,479	45.1	6,341	45.1	6,512	44.3	7,414	44.7
Black Only	608	36.1	559	36.6	545	36.5	536	35.7	680	36.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	107	29.5	92	32.3	*	* *	110	32.5	104	26.9
2 or More Races	149	43.2	137	44.1	*	* *	*	*	*	*
Nonmetro, < 2,500 urban pop										
White Only	1,413	39.0	1,204	39.1	1,197	39.0	1,423	35.5	1,404	43.5
Black Only	87	32.0	61	34.8	65	35.8	*	*	*	*
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	32	28.2	*	* *	*	* *	26	26.9	*	*
2 or More Races	*	*	*	* *	*	* *	*	*	*	*
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	5,498	50.7	5,505	50.7	5,433	50.8	5,601	51.6	5,394	49.7
Female	5,343	51.8	5,372	52.1	5,269	52.0	5,436	52.2	5,251	51.4
Full-Time College Students										
Male	2,083	56.8	2,110	56.9	1,984	57.2	2,203	58.8	1,964	54.6
Female	2,488	58.3	2,514	58.7	2,369	58.9	2,385	57.3	2,591	59.3
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	3,414	47.5	3,395	47.5	3,450	47.7	3,398	47.8	3,431	47.3
Female	2,855	47.2	2,858	47.3	2,900	47.4	3,051	48.7	2,660	45.5
<b>Age Group by Gender</b>										
12+										
Male	72,587	55.8	72,886	56.0	73,057	56.1	72,889	56.2	72,286	55.3
Female	64,941	46.9	65,174	47.1	65,240	47.1	65,432	47.4	64,449	46.4
12-17										
Male	1,145	9.0	1,148	9.1	1,141	9.0	1,179	9.3	1,112	8.8
Female	1,195	9.8	1,196	9.8	1,189	9.7	1,213	9.9	1,177	9.6

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18+										
Male	71,442	60.8	71,737	61.1	71,916	61.2	71,710	61.3	71,174	60.4
Female	63,746	50.5	63,978	50.7	64,052	50.8	64,219	51.1	63,272	50.0
18-25										
Male	10,225	58.6	10,238	58.7	10,284	59.0	10,433	59.5	10,018	57.7
Female	9,835	56.9	9,883	57.1	9,904	57.3	9,933	57.2	9,736	56.6
26-49										
Male	32,674	67.2	32,793	67.4	32,898	67.6	32,630	67.3	32,719	67.1
Female	28,064	55.8	28,154	56.0	28,211	56.1	28,256	56.3	27,872	55.4
50+										
Male	28,542	55.5	28,706	55.8	28,733	55.9	28,648	56.1	28,437	54.9
Female	25,847	44.1	25,941	44.2	25,936	44.2	26,030	44.7	25,664	43.5
<b>Age Group by Race</b>										
12+										
White Only	113,259	54.0	113,792	54.3	113,976	54.4	113,614	54.3	112,903	53.8
Black Only	14,538	42.6	14,596	42.8	14,660	43.0	14,868	43.8	14,209	41.4
NHOPI Only	492	37.4	494	37.4	477	36.5	400	36.5	583	38.1
Asian Only	5,565	37.6	5,462	36.9	5,448	36.8	5,918	39.8	5,211	35.3
AIAN Only	1,183	37.2	1,202	37.8	1,237	38.9	1,186	37.6	1,180	36.9
2 or More Races	2,492	44.9	2,513	45.3	2,499	45.0	2,335	42.8	2,648	46.9
12-17										
White Only	1,871	10.2	1,872	10.2	1,858	10.1	1,904	10.4	1,838	10.0
Black Only	256	6.9	258	6.9	255	6.9	274	7.3	239	6.4
NHOPI Only	17	9.6	17	10.1	17	10.4	*	*	11	6.8
Asian Only	67	5.1	68	5.2	68	5.2	63	4.9	71	5.3
AIAN Only	36	9.1	36	8.9	37	9.2	44	10.7	29	7.5
2 or More Races	92	10.0	94	10.1	94	10.1	85	9.3	100	10.6

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18+										
White Only	111,387	58.2	111,921	58.5	a	112,118	58.6	a	111,710	58.5
Black Only	14,282	47.0	14,338	47.2		14,404	47.4	a	14,594	48.3
NHOPI Only	474	41.8	477	41.4		460	40.2		377	41.7
Asian Only	5,497	40.7	5,394	40.0	a	5,380	39.9	a	5,855	43.0
AIAN Only	1,147	41.2	1,166	42.0		1,200	43.3		1,142	41.6
2 or More Races	2,399	51.9	2,419	52.4		2,406	52.0		2,251	49.5
18-25										
White Only	15,580	61.0	15,635	61.2	a	15,660	61.3	a	15,649	60.9
Black Only	2,590	48.6	2,594	48.7		2,600	48.8		2,730	50.8
NHOPI Only	100	42.0	100	42.3		99	42.4		111	44.6
Asian Only	981	46.1	982	46.1		989	47.0		998	48.4
AIAN Only	251	47.6	259	49.0		279	51.3		265	51.1
2 or More Races	558	58.0	550	57.4		561	57.8		614	61.4
26-49										
White Only	48,065	64.1	48,307	64.4	a	48,436	64.5	a	48,137	64.2
Black Only	7,485	56.6	7,480	56.6		7,509	56.8		7,616	58.1
NHOPI Only	250	48.6	249	48.3		235	47.6		190	44.5
Asian Only	3,118	45.4	3,078	45.0		3,085	44.9		3,159	45.7
AIAN Only	622	46.4	629	46.3		661	48.5		648	47.9
2 or More Races	1,197	62.8	1,204	62.6		1,184	62.2		1,135	62.0
50+										
White Only	47,742	52.7	47,978	52.9	a	48,022	53.0	a	47,924	53.2
Black Only	4,207	35.5	4,264	36.0		4,295	36.3	a	4,248	36.3
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	1,398	31.1	1,333	29.5	a	1,306	28.9	a	1,698	36.8
AIAN Only	274	29.9	279	31.2		261	30.0		230	26.2
2 or More Races	644	36.7	665	38.2		660	37.8		501	29.3

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	18,662	42.5	18,630	42.4	18,636	42.4	18,488	42.4	18,835	42.5
Not Hispanic/Latino	118,867	52.9	119,430	53.2	119,660	53.3	119,833	53.5	117,900	52.4
12-17										
Hispanic/Latino	515	8.9	520	9.0	518	9.0	510	8.9	520	8.9
Not Hispanic/Latino	1,825	9.6	1,825	9.6	1,811	9.5	1,882	9.8	1,769	9.3
18+										
Hispanic/Latino	18,146	47.6	18,110	47.5	18,118	47.5	17,978	47.5	18,315	47.6
Not Hispanic/Latino	117,041	57.0	117,605	57.2	117,849	57.3	117,951	57.5	116,131	56.4
18-25										
Hispanic/Latino	3,829	51.3	3,827	51.3	3,811	51.0	3,822	51.3	3,835	51.3
Not Hispanic/Latino	16,232	59.5	16,294	59.7	16,377	60.0	16,544	60.3	15,919	58.8
26-49										
Hispanic/Latino	10,103	51.9	10,111	52.0	10,119	52.0	10,014	51.7	10,192	52.1
Not Hispanic/Latino	50,635	63.7	50,836	64.0	50,990	64.2	50,871	64.2	50,398	63.3
50+										
Hispanic/Latino	4,215	37.5	4,172	37.1	4,188	37.3	4,142	37.6	4,288	37.4
Not Hispanic/Latino	50,175	50.8	50,475	51.1	50,482	51.1	50,536	51.4	49,814	50.1
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	1,011	16.1	1,010	16.2	1,000	16.0	1,041	16.8	980	15.4
18-25	9,788	56.8	9,835	57.1	9,856	57.2	9,889	57.1	9,688	56.6
26-44	22,389	56.4	22,496	56.6	22,536	56.7	22,466	57.1	22,311	55.6
Pregnant Female Aged 15-44										
15-17	*	*	*	*	*	*	*	*	*	*
18-25	71	9.4	66	8.8	66	8.7	98	11.8	43	6.5
26-44	126	8.5	129	8.5	133	8.8	111	7.8	141	9.1
Not Pregnant Female Aged 15-44										
15-17	1,007	16.2	1,006	16.2	997	16.1	1,036	16.8	978	15.5
18-25	9,718	59.0	9,770	59.3	9,790	59.5	9,791	59.4	9,645	58.6
26-44	22,263	58.2	22,367	58.5	22,403	58.6	22,355	59.0	22,170	57.5

(continued)

Table G.1 Past Month Alcohol Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	25,682	55.2	25,847	55.6	25,852	55.6	25,701	55.4	25,663	55.0
Black Only	4,551	48.0	4,533	47.9	4,548	48.0	4,697	50.0	4,404	46.1
NHOPI Only	174	43.4	166	42.4	157	41.9	142	39.6	205	46.6
Asian Only	1,632	36.9	1,630	37.0	1,620	37.0	1,642	38.0	1,621	35.9
AIAN Only	314	36.5	323	36.5	373	40.6	336	39.2	293	33.9
2 or More Races	835	54.7	843	54.5	843	54.3	878	57.9	792	51.5
Pregnant Female Aged 15-44										
White Only	145	8.7	143	8.5	144	8.5	160	9.3	131	8.0
Black Only	39	10.7	39	10.4	41	11.2	50	13.1	27	8.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
Not Pregnant Female Aged 15-44										
White Only	25,537	56.9	25,704	57.3	25,707	57.4	25,541	57.1	25,533	56.7
Black Only	4,512	49.5	4,494	49.4	4,507	49.5	4,647	51.5	4,377	47.5
NHOPI Only	169	43.5	161	42.5	152	41.8	142	40.2	195	46.3
Asian Only	1,627	38.1	1,626	38.1	1,616	38.2	1,642	39.1	1,612	37.1
AIAN Only	311	37.7	319	37.5	369	41.9	333	40.7	290	34.7
2 or More Races	831	56.4	838	56.4	839	56.2	876	59.7	786	53.2
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	5,361	41.7	5,361	41.8	5,340	41.6	5,358	41.9	5,363	41.5
Not Hispanic/Latino	27,827	55.2	27,980	55.5	28,053	55.7	28,038	56.0	27,616	54.5
Pregnant Female Aged 15-44										
Hispanic/Latino	31	6.5	32	6.5	32	6.3	45	9.4	17	3.5
Not Hispanic/Latino	169	9.4	167	9.2	171	9.4	169	9.3	170	9.5

(continued)

**Table G.1 Past Month Alcohol Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 15-44										
Hispanic/Latino	5,330	43.1	5,329	43.2	5,308	43.0	5,313	43.2	5,346	43.0
Not Hispanic/Latino	27,658	56.9	27,814	57.3 <sup>a</sup>	27,882	57.4 <sup>a</sup>	27,868	57.7	27,447	56.2 <sup>a</sup>

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPi = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

## Appendix H. 2015-2016 NSDUH – Weighted Annual Averages Past Month Cigarette Use – CIGMON

**Table H.1 Past Month Cigarette Use**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	51,642	19.2	50,992	19.0	50,998	19.0	51,952	19.4	51,333	19.1
12-17	947	3.8	951	3.8	941	3.8	1,039	4.2	855	3.4
18+	50,695	20.8	50,041	20.5	50,057	20.5	50,912	21.0	50,478	20.6
18-25	8,725	25.1	8,653	24.9	8,772	25.3	9,330	26.7	8,120	23.5
26-49	24,656	24.9	24,325	24.6	24,214	24.5	25,037	25.4	24,274	24.5
50+	17,314	15.7	17,064	15.5	17,071	15.5	16,545	15.1	18,084	16.3
<b>Gender</b>										
Male	27,990	21.5	27,663	21.3	27,755	21.3	28,318	21.8	27,662	21.2
Female	23,653	17.1	23,329	16.9	23,243	16.8	23,634	17.1	23,671	17.1
<b>Hispanicity</b>										
Hispanic/Latino	6,584	15.0	6,543	14.9	6,505	14.8	6,644	15.3	6,525	14.7
Not Hispanic/Latino	45,058	20.1	44,449	19.8	44,493	19.8	45,308	20.2	44,808	19.9
<b>Race</b>										
White Only	41,023	19.6	40,490	19.3	40,522	19.3	41,047	19.6	40,998	19.5
Black Only	6,934	20.3	6,888	20.2	6,860	20.1	7,173	21.1	6,695	19.5
NHOPI Only	214	16.2	204	15.5	199	15.2	174	15.9	253	16.5
Asian Only	1,356	9.2	1,360	9.2	1,375	9.3	1,495	10.0	1,216	8.2
AIAN Only	711	22.4	701	22.0	688	21.6	686	21.7	736	23.0
2 or More Races	1,406	25.3	1,348	24.3	1,355	24.4	1,376	25.2	1,436	25.4
<b>Division</b>										
New England	2,290	18.1	2,290	18.1	2,285	18.1	2,181	17.3	2,398	18.9
Middle Atlantic	6,510	18.5	6,478	18.4	6,462	18.4	6,527	18.6	6,494	18.5
East North Central	8,352	21.3	8,339	21.3	8,356	21.3	8,574	21.9	8,131	20.7
West North Central	3,578	20.5	3,516	20.1	3,536	20.2	3,614	20.7	3,543	20.2
South Atlantic	10,394	19.5	10,112	19.0	10,095	19.0	10,278	19.4	10,510	19.6
East South Central	4,001	25.5	3,942	25.1	3,970	25.3	3,970	25.3	4,031	25.6
West South Central	6,617	20.8	6,481	20.4	6,455	20.3	6,618	20.9	6,616	20.7
Mountain	3,415	17.5	3,409	17.5	3,427	17.6	3,526	18.2	3,304	16.8
Pacific	6,485	14.8	6,425	14.7	6,412	14.6	6,664	15.3	6,306	14.3

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	25,693	17.2	26,002	17.1	26,405	17.2	26,126	17.5	25,259	16.8
Small Metro, pop 250,000-1,000,000	11,300	20.3	11,269	20.1	11,076	20.1	11,628	20.8	10,973	19.9
Small Metro, < 250,000 population	5,464	21.4	5,377	21.2	5,386	21.4	5,479	21.4	5,449	21.3
Nonmetro, 20,000 or more urban pop	3,538	23.2	3,434	23.0	3,395	22.8	3,503	23.1	3,572	23.3
Nonmetro, 2,500-19,999 urban pop	4,564	25.1	3,992	24.0	3,850	23.9	4,031	23.7	5,098	26.4
Nonmetro, < 2,500 urban pop	1,083	26.2	917	26.7	886	26.0	1,184	25.9	982	26.6
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	4,813	22.7	4,780	22.6	4,801	23.0	5,170	24.3	4,456	21.1
Full-Time College Students	1,144	14.4	1,157	14.5	1,104	14.7	1,215	15.4	1,073	13.5
Other Persons Aged 18 to 22 <sup>2</sup>	3,669	27.7	3,622	27.5	3,697	27.7	3,955	29.6	3,383	25.8
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	12,861	20.3	12,718	20.1	12,731	20.1	13,285	21.1	12,437	19.6
Pregnant Female Aged 15-44	270	11.9	270	11.7	272	11.7	314	13.6	226	10.0
Not Pregnant Female Aged 15-44	12,591	20.7	12,448	20.4	12,459	20.5	12,971	21.4	12,210	19.9
<b>Division by Age Group</b>										
New England										
12+	2,290	18.1	2,290	18.1	2,285	18.1	2,181	17.3	2,398	18.9
12-17	41	3.8	42	3.9	42	3.9	48	4.5	34	3.2
18+	2,249	19.4	2,249	19.4	2,243	19.4	2,133	18.5	2,364	20.4
18-25	426	25.8	426	25.8	442	26.8	457	27.7	395	23.9
26-49	1,017	22.9	1,018	22.9	1,001	22.6	999	22.4	1,034	23.4
50+	806	14.7	805	14.7	800	14.6	677	12.4	935	17.0
Middle Atlantic										
12+	6,510	18.5	6,478	18.4	6,462	18.4	6,527	18.6	6,494	18.5
12-17	87	2.9	86	2.8	86	2.8	106	3.5	69	2.3
18+	6,423	20.0	6,392	19.9	6,376	19.8	6,422	20.0	6,425	20.0
18-25	1,076	24.3	1,084	24.4	1,093	24.7	1,133	25.4	1,020	23.2
26-49	3,090	24.1	3,068	23.9	3,043	23.7	3,116	24.2	3,065	23.9
50+	2,256	15.2	2,240	15.1	2,239	15.1	2,172	14.7	2,340	15.7

(continued)



Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	8,352	21.3	8,339	21.3	8,356	21.3	8,574	21.9	8,131	20.7
12-17	182	4.9	182	4.9	182	4.9	185	5.0	179	4.9
18+	8,170	23.0	8,158	23.0	8,174	23.0	8,389	23.6	7,952	22.4
18-25	1,404	27.7	1,400	27.6	1,408	27.8	1,542	30.3	1,267	25.1
26-49	3,893	27.9	3,873	27.7	3,875	27.8	4,071	29.1	3,715	26.6
50+	2,873	17.4	2,884	17.5	2,891	17.5	2,776	16.9	2,970	17.9
West North Central										
12+	3,578	20.5	3,516	20.1	3,536	20.2	3,614	20.7	3,543	20.2
12-17	87	5.3	85	5.1	83	5.0	91	5.5	83	5.0
18+	3,491	22.0	3,431	21.7	3,453	21.8	3,522	22.3	3,460	21.8
18-25	648	27.9	635	27.3	655	28.2	660	28.4	637	27.5
26-49	1,650	26.5	1,612	25.9	1,613	25.9	1,664	26.8	1,636	26.3
50+	1,193	16.3	1,184	16.2	1,185	16.2	1,199	16.5	1,187	16.2
South Atlantic										
12+	10,394	19.5	10,112	19.0	10,095	19.0	10,278	19.4	10,510	19.6
12-17	150	3.2	157	3.3	153	3.2	150	3.2	151	3.2
18+	10,244	21.1	9,955	20.5	9,942	20.5	10,128	21.0	10,360	21.2
18-25	1,663	25.5	1,646	25.2	1,660	25.4	1,831	27.8	1,495	23.0
26-49	4,847	25.2	4,692	24.4	4,675	24.3	4,990	26.0	4,703	24.3
50+	3,734	16.5	3,617	16.0	3,607	15.9	3,306	14.7	4,161	18.1
East South Central										
12+	4,001	25.5	3,942	25.1	3,970	25.3	3,970	25.3	4,031	25.6
12-17	78	5.3	77	5.3	79	5.3	80	5.4	77	5.3
18+	3,922	27.5	3,864	27.1	3,891	27.3	3,891	27.4	3,953	27.7
18-25	630	31.1	622	30.7	633	31.3	668	32.8	592	29.4
26-49	1,893	33.7	1,889	33.6	1,896	33.7	1,919	34.2	1,868	33.1
50+	1,399	21.2	1,353	20.5	1,362	20.7	1,304	19.9	1,494	22.5

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
12+	6,617	20.8	6,481	20.4	6,455	20.3	6,618	20.9	6,616	20.7
12-17	120	3.6	121	3.7	117	3.5	159	4.8	81	2.4
18+	6,497	22.8	6,359	22.3	6,338	22.2	6,459	22.8	6,534	22.8
18-25	1,097	25.3	1,075	24.8	1,085	25.0	1,125	25.9	1,068	24.7
26-49	3,324	27.0	3,253	26.5	3,196	26.0	3,287	26.9	3,361	27.2
50+	2,076	17.5	2,032	17.1	2,057	17.3	2,046	17.4	2,105	17.6
Mountain										
12+	3,415	17.5	3,409	17.5	3,427	17.6	3,526	18.2	3,304	16.8
12-17	68	3.5	69	3.6	68	3.6	79	4.1	57	3.0
18+	3,347	19.0	3,339	19.0	3,359	19.1	3,447	19.8	3,247	18.3
18-25	620	23.9	620	24.0	639	24.7	630	24.4	610	23.5
26-49	1,654	22.8	1,637	22.6	1,632	22.5	1,678	23.3	1,629	22.3
50+	1,073	13.9	1,082	14.0	1,088	14.0	1,138	14.9	1,009	12.9
Pacific										
12+	6,485	14.8	6,425	14.7	6,412	14.6	6,664	15.3	6,306	14.3
12-17	132	3.3	131	3.3	131	3.3	141	3.5	122	3.0
18+	6,353	16.0	6,294	15.8	6,281	15.8	6,522	16.4	6,184	15.5
18-25	1,160	20.1	1,145	19.8	1,156	20.0	1,283	22.0	1,037	18.1
26-49	3,288	19.3	3,282	19.3	3,282	19.3	3,313	19.6	3,264	19.1
50+	1,905	11.2	1,867	11.0	1,843	10.8	1,926	11.4	1,883	11.0
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	206	17.0	198	16.4	194	16.1	185	15.5	227	18.5
Not Hispanic/Latino	2,084	18.2	2,092	18.3	2,091	18.3	1,996	17.5	2,171	19.0
Middle Atlantic										
Hispanic/Latino	884	17.5	877	17.3	863	17.1	912	18.1	857	16.8
Not Hispanic/Latino	5,626	18.7	5,601	18.6	5,599	18.6	5,616	18.6	5,637	18.8
East North Central										
Hispanic/Latino	522	17.6	512	17.3	513	17.3	518	17.7	525	17.6
Not Hispanic/Latino	7,831	21.6	7,827	21.6	7,843	21.6	8,056	22.2	7,606	21.0
West North Central										
Hispanic/Latino	155	16.4	144	15.3	145	15.4	144	15.4	166	17.4
Not Hispanic/Latino	3,423	20.7	3,372	20.4	3,391	20.5	3,470	21.0	3,377	20.4

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
South Atlantic										
Hispanic/Latino	867	12.6	877	12.8	876	12.8	882	13.0	853	12.3
Not Hispanic/Latino	9,527	20.6	9,235	19.9	9,219	19.9	9,396	20.4	9,657	20.7
East South Central										
Hispanic/Latino	111	20.0	113	20.4	111	20.0	101	18.3	121	21.7
Not Hispanic/Latino	3,890	25.7	3,829	25.3	3,859	25.5	3,870	25.6	3,910	25.7
West South Central										
Hispanic/Latino	1,447	16.4	1,422	16.1	1,384	15.7	1,464	16.7	1,429	16.0
Not Hispanic/Latino	5,170	22.5	5,059	22.0	5,071	22.1	5,154	22.5	5,187	22.5
Mountain										
Hispanic/Latino	677	15.2	686	15.4	692	15.5	680	15.4	674	15.0
Not Hispanic/Latino	2,738	18.2	2,723	18.1	2,735	18.2	2,846	19.0	2,630	17.4
Pacific										
Hispanic/Latino	1,716	13.1	1,715	13.1	1,728	13.2	1,760	13.5	1,672	12.7
Not Hispanic/Latino	4,769	15.5	4,710	15.3	4,683	15.2	4,904	16.0	4,634	15.0
<b>Division by Race</b>										
New England										
White Only	1,996	18.4	1,991	18.4	1,992	18.4	1,913	17.7	2,079	19.2
Black Only	152	16.7	155	16.9	150	16.4	123	13.6	182	19.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	44	7.6	50	8.8	52	9.1	60	10.7	29	4.7
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
Middle Atlantic										
White Only	5,109	19.3	5,074	19.1	5,070	19.1	5,114	19.2	5,104	19.3
Black Only	954	18.6	948	18.5	935	18.3	966	18.9	942	18.4
NHOPI Only	22	15.5	23	15.4	23	15.4	*	*	*	*
Asian Only	217	8.6	227	9.0	228	9.1	205	8.1	230	9.1
AIAN Only	38	16.1	38	16.1	38	16.1	37	15.6	*	*
2 or More Races	170	27.4	168	27.1	167	26.8	182	29.7	159	25.1

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
White Only	6,927	21.3	6,902	21.3	6,918	21.3	7,122	21.9	6,732	20.8
Black Only	1,068	23.3	1,068	23.3	1,068	23.3	1,148	25.0	988	21.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	103	8.0	105	8.2	103	8.0	84	6.6	122	9.4
AIAN Only	68	31.1	71	32.3	71	32.4	*	*	*	*
2 or More Races	171	27.7	178	29.0	179	29.1	168	27.9	173	27.5
West North Central										
White Only	3,033	19.8	2,977	19.4	2,998	19.6	3,055	20.0	3,011	19.6
Black Only	311	27.6	329	29.2	328	29.1	319	28.5	304	26.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	57	11.5	55	11.3	59	12.0	*	*	51	10.4
AIAN Only	94	42.5	90	40.4	83	37.5	101	45.9	87	39.1
2 or More Races	77	25.6	59	19.7	61	20.5	*	*	83	27.1
South Atlantic										
White Only	7,692	20.1	7,492	19.6	7,488	19.5	7,453	19.5	7,932	20.6
Black Only	2,241	19.4	2,171	18.8	2,159	18.7	2,364	20.6	2,117	18.2
NHOPI Only	27	14.4	28	15.2	*	*	*	*	*	*
Asian Only	157	8.3	154	8.1	158	8.3	217	11.6	97	5.1
AIAN Only	59	17.0	64	18.5	60	17.3	50	14.6	67	19.3
2 or More Races	218	24.0	203	22.3	205	22.5	172	19.2	265	28.6
East South Central										
White Only	3,249	26.9	3,189	26.4	3,186	26.4	3,236	26.9	3,262	27.0
Black Only	609	19.5	624	19.9	639	20.4	575	18.4	644	20.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	30	13.2	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH			
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		
West South Central												
White Only	5,276	21.3	5,157	20.8	a	5,151	20.8	5,197	21.0	5,355	21.5	
Black Only	978	21.7	982	21.7		977	21.6	1,027	22.9	930	20.4	
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*	
Asian Only	83	6.6	84	6.7		80	6.4	100	8.0	66	5.3	
AIAN Only	120	21.4	105	18.7		100	17.9	124	22.4	115	20.3	
2 or More Races	134	22.8	129	22.0		128	21.8	152	26.4	116	19.4	
Mountain												
White Only	2,902	17.2	2,904	17.2		2,916	17.3	2,911	17.4	2,893	17.1	
Black Only	148	19.6	147	19.4		147	19.4	*	*	*	*	
NHOPI Only	13	8.9	13	9.4		13	9.6	*	*	*	*	
Asian Only	87	14.0	89	14.2		90	14.1	*	*	30	4.9	
AIAN Only	133	19.7	130	19.2		135	20.0	136	20.4	129	19.0	
2 or More Races	132	29.2	126	27.8		126	27.9	159	35.9	*	*	
Pacific												
White Only	4,838	14.9	4,804	14.8		4,803	14.8	5,048	15.6	4,629	14.2	
Black Only	472	19.7	465	19.4		457	19.1	490	20.4	455	18.9	
NHOPI Only	99	16.2	88	14.5		87	14.4	68	14.9	130	16.9	
Asian Only	573	9.6	566	9.5		569	9.5	579	9.6	567	9.7	
AIAN Only	160	20.6	166	21.3		156	20.0	157	20.2	164	21.0	
2 or More Races	342	20.8	336	20.4		340	20.7	322	19.9	362	21.7	
County Type by Age Group												
Large Metro												
12+	25,693	17.2	26,002	17.1		26,405	17.2	26,126	17.5	25,259	16.8	
12-17	423	3.0	438	3.1	a	443	3.1	472	3.4	374	2.7	
18+	25,270	18.6	25,565	18.5		25,962	18.6	25,654	19.0	24,886	18.3	
18-25	4,396	22.8	4,451	22.8		4,564	23.1	a	4,680	24.1	4,111	21.4
26-49	12,638	21.5	12,812	21.5		12,899	21.4	12,871	22.0	12,405	21.0	
50+	8,236	14.3	8,301	14.2		8,499	14.3	8,102	14.1	8,370	14.4	

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
12+	11,300	20.3	11,269	20.1	11,076	20.1	11,628	20.8	10,973	19.9
12-17	207	3.9	207	3.9	202	3.9	224	4.2	189	3.6
18+	11,094	22.0	11,062	21.8	10,874	21.8	11,404	22.5	10,784	21.6
18-25	1,864	25.0	1,862	24.7	1,872	25.2	1,997	26.3	1,732	23.5
26-49	5,428	27.7	5,401	27.3	5,324	27.3	5,639	28.5	5,217	26.8
50+	3,802	16.4	3,799	16.2	3,678	16.0	3,768	16.2	3,836	16.5
Small Metro, < 250,000 population										
12+	5,464	21.4	5,377	21.2	5,386	21.4	5,479	21.4	5,449	21.3
12-17	97	4.5	100	4.6	102	4.7	107	4.8	88	4.1
18+	5,367	23.0	5,277	22.8	5,284	22.9	5,373	23.0	5,361	22.9
18-25	1,034	28.8	1,023	28.7	1,037	29.1	1,116	32.0	952	25.8
26-49	2,453	28.9	2,397	28.5	2,382	28.6	2,541	29.4	2,364	28.3
50+	1,880	16.7	1,857	16.6	1,866	16.8	1,716	15.3	2,045	18.0
Nonmetro, 20,000 or more urban pop										
12+	3,538	23.2	3,434	23.0	3,395	22.8	3,503	23.1	3,572	23.3
12-17	76	5.3	74	5.3	74	5.4	81	5.7	71	5.0
18+	3,461	25.0	3,360	24.8	3,321	24.6	3,422	24.9	3,501	25.1
18-25	611	30.7	601	30.8	605	30.8	710	34.6	512	26.5
26-49	1,656	32.6	1,574	31.8	1,556	31.6	1,606	31.9	1,705	33.3
50+	1,195	17.7	1,185	17.8	1,160	17.5	1,106	16.7	1,283	18.7
Nonmetro, 2,500-19,999 urban pop										
12+	4,564	25.1	3,992	24.0	3,850	23.9	4,031	23.7	5,098	26.4
12-17	117	7.5	111	7.8	101	7.4	120	8.3	113	6.7
18+	4,448	26.8	3,881	25.5	3,749	25.5	3,911	25.1	4,985	28.2
18-25	672	33.4	605	32.5	582	33.0	679	34.8	664	32.1
26-49	2,007	35.7	1,727	34.3	1,660	34.1	1,859	36.2	2,155	35.3
50+	1,769	19.7	1,550	18.6	1,508	18.6	1,372	16.2	2,165	22.8

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, < 2,500 urban pop										
12+	1,083	26.2	917	26.7	886	26.0	1,184	25.9	982	26.6
12-17	27	7.9	21	7.5	20	7.2	35	9.2	20	6.3
18+	1,056	27.9	896	28.4	867	27.7	1,149	27.4	962	28.5
18-25	149	37.0	110	35.2	113	36.5	148	33.4	149	41.5
26-49	474	36.3	413	39.1	393	38.6	521	35.9	428	36.7
50+	433	20.8	373	20.9	360	20.0	480	20.8	385	20.9
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	4,196	13.9	4,226	13.9	4,247	13.9	4,258	14.1	4,134	13.8
Not Hispanic/Latino	21,497	18.0	21,776	17.9	22,158	18.0	21,868	18.4	21,126	17.6
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	1,509	17.2	1,461	16.8	1,428	16.7	1,424	16.9	1,594	17.5
Not Hispanic/Latino	9,792	20.9	9,808	20.7	9,648	20.7	10,204	21.4	9,379	20.3
Small Metro, < 250,000 population										
Hispanic/Latino	421	15.4	418	15.4	405	15.2	452	17.3	390	13.6
Not Hispanic/Latino	5,043	22.1	4,959	21.9	4,980	22.1	5,027	21.9	5,059	22.3
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	248	20.4	247	21.0	243	20.7	292	22.4	204	18.0
Not Hispanic/Latino	3,290	23.4	3,188	23.2	3,152	23.0	3,212	23.2	3,368	23.7
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	173	17.6	156	17.8	151	17.3	180	21.9	166	14.6
Not Hispanic/Latino	4,391	25.5	3,836	24.3	3,699	24.3	3,851	23.8	4,932	27.1
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	38	26.9	*	*	*	*	*	*	*	*
Not Hispanic/Latino	1,045	26.2	882	26.7	855	26.1	1,145	26.0	945	26.4
<b>County Type by Race</b>										
Large Metro										
White Only	19,184	17.4	19,453	17.3	19,779	17.4	19,359	17.6	19,009	17.2
Black Only	4,370	19.4	4,400	19.3	4,418	19.2	4,594	20.6	4,146	18.3
NHOPI Only	135	16.0	124	14.6	119	14.0	106	15.5	164	16.3
Asian Only	1,079	9.2	1,093	9.2	1,092	9.2	1,143	9.8	1,015	8.6
AIAN Only	247	16.3	249	16.4	280	16.9	246	15.7	249	17.0
2 or More Races	678	23.3	682	22.6	716	23.1	678	24.0	678	22.7

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
White Only	9,311	20.5	9,276	20.3	9,089	20.3	9,522	20.9	9,100	20.2
Black Only	1,281	21.7	1,291	21.7	1,259	21.4	1,358	22.7	1,203	20.6
NHOPI Only	50	16.6	51	16.8	52	17.4	40	14.7	*	*
Asian Only	193	9.2	190	9.0	199	9.7	259	12.0	128	6.3
AIAN Only	138	22.2	138	20.9	167	24.5	139	22.0	137	22.4
2 or More Races	327	24.2	323	23.4	309	23.4	310	23.4	345	24.9
Small Metro, < 250,000 population										
White Only	4,672	21.5	4,594	21.3	4,592	21.4	4,608	21.3	4,735	21.7
Black Only	524	21.7	509	21.6	497	22.2	586	22.9	462	20.3
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	49	8.0	47	8.5	51	9.2	63	9.5	35	6.2
AIAN Only	75	26.0	93	26.9	106	26.9	*	*	69	23.8
2 or More Races	136	28.4	124	28.2	130	29.0	*	*	135	26.6
Nonmetro, 20,000 or more urban pop										
White Only	3,047	23.4	2,943	23.1	2,928	23.0	3,031	23.4	3,063	23.4
Black Only	305	23.0	306	22.8	305	22.8	270	22.1	340	23.6
NHOPI Only	14	22.1	*	*	*	*	*	*	*	*
Asian Only	19	8.5	20	9.4	25	11.0	18	7.6	*	*
AIAN Only	64	23.3	70	23.4	*	*	61	26.0	68	21.4
2 or More Races	89	25.7	81	27.5	74	25.4	*	*	71	26.9
Nonmetro, 2,500-19,999 urban pop										
White Only	3,864	24.7	3,404	23.7	3,327	23.7	3,511	23.9	4,217	25.4
Black Only	409	24.3	353	23.1	350	23.5	300	20.0	517	27.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	133	36.9	105	36.8	*	*	115	33.8	152	39.6
2 or More Races	138	40.2	*	*	*	*	*	*	*	*

(continued)



Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, < 2,500 urban pop										
White Only	945	26.1	819	26.6	808	26.3	1,015	25.3	874	27.1
Black Only	46	17.0	29	16.5	30	16.7	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	53	46.9	46	61.5	*	*	45	46.7	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	2,807	25.9	2,773	25.6	2,782	26.0	2,963	27.3	2,651	24.4
Female	2,006	19.4	2,007	19.5	2,019	19.9	2,207	21.2	1,805	17.7
Full-Time College Students										
Male	650	17.7	657	17.7	628	18.1	707	18.9	593	16.5
Female	495	11.6	501	11.7	477	11.9	509	12.2	481	11.0
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	2,157	30.0	2,116	29.6	2,155	29.8	2,256	31.7	2,058	28.4
Female	1,511	25.0	1,506	25.0	1,542	25.2	1,698	27.1	1,324	22.6
<b>Age Group by Gender</b>										
12+										
Male	27,990	21.5	27,663	21.3	27,755	21.3	28,318	21.8	27,662	21.2
Female	23,653	17.1	23,329	16.9	23,243	16.8	23,634	17.1	23,671	17.1
12-17										
Male	528	4.2	530	4.2	525	4.1	578	4.6	478	3.8
Female	419	3.4	421	3.4	416	3.4	462	3.8	377	3.1
18+										
Male	27,462	23.4	27,133	23.1	27,230	23.2	27,740	23.7	27,184	23.1
Female	23,234	18.4	22,908	18.2	22,827	18.1	23,172	18.4	23,295	18.4
18-25										
Male	5,093	29.2	5,027	28.8	5,085	29.1	5,380	30.7	4,805	27.7
Female	3,633	21.0	3,626	21.0	3,687	21.3	3,950	22.7	3,315	19.3
26-49										
Male	13,534	27.8	13,365	27.5	13,314	27.4	13,784	28.4	13,284	27.2
Female	11,122	22.1	10,960	21.8	10,901	21.7	11,253	22.4	10,990	21.8

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
50+										
Male	8,835	17.2	8,741	17.0	8,832	17.2	8,576	16.8	9,095	17.6
Female	8,479	14.5	8,323	14.2	8,239	14.1	7,969	13.7	8,989	15.2
<b>Age Group by Race</b>										
12+										
White Only	41,023	19.6	40,490	19.3	40,522	19.3	41,047	19.6	40,998	19.5
Black Only	6,934	20.3	6,888	20.2	6,860	20.1	7,173	21.1	6,695	19.5
NHOPI Only	214	16.2	204	15.5	199	15.2	174	15.9	253	16.5
Asian Only	1,356	9.2	1,360	9.2	1,375	9.3	1,495	10.0	1,216	8.2
AIAN Only	711	22.4	701	22.0	688	21.6	686	21.7	736	23.0
2 or More Races	1,406	25.3	1,348	24.3	1,355	24.4	1,376	25.2	1,436	25.4
12-17										
White Only	786	4.3	783	4.3	778	4.2	863	4.7	708	3.9
Black Only	77	2.1	80	2.1	78	2.1	94	2.5	59	1.6
NHOPI Only	5	2.8	5	2.8	5	2.8	*	*	2	1.1
Asian Only	15	1.2	15	1.1	15	1.1	14	1.1	17	1.2
AIAN Only	15	3.9	16	4.1	15	3.6	14	3.5	16	4.3
2 or More Races	49	5.3	51	5.5	50	5.4	46	5.1	52	5.5
18+										
White Only	40,237	21.0	39,706	20.8	39,744	20.8	40,184	21.1	40,289	21.0
Black Only	6,858	22.6	6,809	22.4	6,782	22.3	7,080	23.5	6,635	21.7
NHOPI Only	209	18.4	200	17.3	194	17.0	166	18.4	251	18.4
Asian Only	1,340	9.9	1,345	10.0	1,360	10.1	1,481	10.9	1,199	9.0
AIAN Only	696	25.0	684	24.6	673	24.3	672	24.5	720	25.5
2 or More Races	1,357	29.3	1,297	28.1	1,305	28.2	1,329	29.3	1,384	29.4
18-25										
White Only	6,895	27.0	6,842	26.8	6,918	27.1	7,284	28.3	6,506	25.6
Black Only	1,067	20.0	1,060	19.9	1,071	20.1	1,208	22.5	926	17.5
NHOPI Only	56	23.6	56	23.6	53	22.9	57	23.1	55	24.1
Asian Only	259	12.2	265	12.4	280	13.3	288	13.9	229	10.5
AIAN Only	152	28.9	142	26.9	145	26.8	142	27.5	162	30.4
2 or More Races	296	30.7	288	30.0	304	31.3	350	35.0	242	26.2

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
White Only	19,389	25.8	19,128	25.5	19,049	25.4	19,561	26.1	19,217	25.6
Black Only	3,393	25.7	3,356	25.4	3,344	25.3	3,558	27.1	3,227	24.2
NHOPI Only	124	24.1	116	22.6	111	22.5	96	22.4	152	25.3
Asian Only	743	10.8	729	10.7	733	10.7	849	12.3	637	9.3
AIAN Only	379	28.2	381	28.1	375	27.5	363	26.9	394	29.6
2 or More Races	629	33.0	613	31.9	603	31.7	610	33.3	647	32.7
50+										
White Only	13,953	15.4	13,736	15.2	13,777	15.2	13,339	14.8	14,566	16.0
Black Only	2,398	20.3	2,392	20.2	2,367	20.0	2,313	19.8	2,482	20.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	339	7.5	352	7.8	347	7.7	344	7.5	333	7.6
AIAN Only	165	18.0	161	18.0	153	17.6	166	18.9	164	17.2
2 or More Races	432	24.6	396	22.8	398	22.8	369	21.6	495	27.5
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	6,584	15.0	6,543	14.9	6,505	14.8	6,644	15.3	6,525	14.7
Not Hispanic/Latino	45,058	20.1	44,449	19.8	44,493	19.8	45,308	20.2	44,808	19.9
12-17										
Hispanic/Latino	138	2.4	136	2.4	135	2.3	154	2.7	122	2.1
Not Hispanic/Latino	809	4.2	814	4.3	806	4.2	886	4.6	733	3.8
18+										
Hispanic/Latino	6,447	16.9	6,407	16.8	6,370	16.7	6,490	17.2	6,403	16.6
Not Hispanic/Latino	44,249	21.5	43,635	21.2	43,687	21.3	44,422	21.7	44,076	21.4
18-25										
Hispanic/Latino	1,484	19.9	1,477	19.8	1,476	19.8	1,561	20.9	1,407	18.8
Not Hispanic/Latino	7,241	26.6	7,176	26.3	7,296	26.8	7,769	28.3	6,713	24.8
26-49										
Hispanic/Latino	3,745	19.2	3,729	19.2	3,713	19.1	3,731	19.3	3,759	19.2
Not Hispanic/Latino	20,911	26.3	20,595	25.9	20,501	25.8	21,307	26.9	20,515	25.8
50+										
Hispanic/Latino	1,217	10.8	1,201	10.7	1,181	10.5	1,199	10.9	1,236	10.8
Not Hispanic/Latino	16,097	16.3	15,864	16.1	15,890	16.1	15,346	15.6	16,848	17.0

(continued)

Table H.1 Past Month Cigarette Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	363	5.8	365	5.8	361	5.8	409	6.6	317	5.0 a
18-25	3,612	21.0	3,604	20.9	3,666	21.3 a	3,927	22.7	3,297	19.3 a
26-44	8,887	22.4	8,749	22.0 a	8,703	21.9 a	8,950	22.7	8,823	22.0
Pregnant Female Aged 15-44										
15-17	*	*	*	* *	*	* *	*	*	*	* *
18-25	137	18.3	131	17.6	131	17.2	190	22.9	84	12.6 a
26-44	128	8.6	134	8.8	136	9.0	115	8.1	142	9.1
Not Pregnant Female Aged 15-44										
15-17	357	5.7	359	5.8	356	5.7	399	6.5	316	5.0 a
18-25	3,475	21.1	3,473	21.1	3,535	21.5 a	3,737	22.7	3,213	19.5 a
26-44	8,758	22.9	8,615	22.5 a	8,568	22.4 a	8,835	23.3	8,681	22.5
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	10,235	22.0	10,125	21.8 a	10,115	21.7 a	10,464	22.5	10,007	21.4
Black Only	1,680	17.7	1,651	17.4	1,655	17.5	1,833	19.5	1,527	16.0 a
NHOPI Only	68	16.9	58	14.9	58	15.4	50	13.9	*	* *
Asian Only	266	6.0	264	6.0	272	6.2	294	6.8	237	5.3
AIAN Only	186	21.6	203	23.0 a	204	22.2	180	21.0	193	22.3
2 or More Races	426	27.9	416	26.9 a	427	27.5	464	30.6	388	25.2
Pregnant Female Aged 15-44										
White Only	212	12.6	211	12.6	215	12.7	232	13.6	192	11.7
Black Only	35	9.7	34	9.1	32	8.6	53	14.0	16	4.8 a
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *

(continued)

**Table H.1 Past Month Cigarette Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 15-44										
White Only	10,023	22.3	9,914	22.1	9,899	22.1	10,232	22.9	9,815	21.8
Black Only	1,645	18.1	1,617	17.8	1,624	17.8	1,780	19.7	1,511	16.4
NHOPI Only	67	17.3	58	15.3	57	15.8	49	13.9	*	*
Asian Only	260	6.1	258	6.1	266	6.3	288	6.9	232	5.3
AIAN Only	184	22.2	201	23.6	201	22.8	177	21.6	190	22.8
2 or More Races	411	27.9	400	26.9	412	27.6	445	30.3	377	25.5
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	1,681	13.1	1,664	13.0	1,649	12.8	1,746	13.7	1,617	12.5
Not Hispanic/Latino	11,180	22.2	11,054	21.9	11,082	22.0	11,540	23.0	10,820	21.4
Pregnant Female Aged 15-44										
Hispanic/Latino	28	5.9	30	6.1	30	6.0	23	4.8	34	7.0
Not Hispanic/Latino	242	13.4	240	13.3	242	13.3	291	15.9	193	10.9
Not Pregnant Female Aged 15-44										
Hispanic/Latino	1,653	13.4	1,634	13.2	1,619	13.1	1,723	14.0	1,583	12.7
Not Hispanic/Latino	10,938	22.5	10,814	22.3	10,840	22.3	11,249	23.3	10,627	21.7

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

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## Appendix I: 2015-2016 NSDUH – Weighted Annual Averages Past Year Alcohol Use Disorder – ABODALC

**Table I.1 Past Year Alcohol Use Disorder**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	15,396	5.7	15,535	5.8	a	15,548	5.8	a	15,736	5.9
12-17	555	2.2	558	2.2		556	2.2		623	2.5
18+	14,841	6.1	14,977	6.1	a	14,992	6.2	a	15,113	6.2
18-25	3,752	10.8	3,792	10.9	a	3,772	10.9		3,821	10.9
26-49	7,346	7.4	7,386	7.5		7,429	7.5	a	7,519	7.6
50+	3,742	3.4	3,799	3.5		3,791	3.4		3,772	3.5
<b>Gender</b>										
Male	9,751	7.5	9,841	7.6	a	9,859	7.6		10,104	7.8
Female	5,645	4.1	5,694	4.1	a	5,690	4.1		5,631	4.1
<b>Hispanicity</b>										
Hispanic/Latino	2,536	5.8	2,567	5.8		2,560	5.8		2,790	6.4
Not Hispanic/Latino	12,861	5.7	12,968	5.8	a	12,989	5.8	a	12,946	5.8
<b>Race</b>										
White Only	12,441	5.9	12,543	6.0	a	12,552	6.0		12,883	6.2
Black Only	1,814	5.3	1,837	5.4		1,845	5.4		1,713	5.0
NHOPI Only	58	4.4	55	4.2		50	3.8		62	5.7
Asian Only	459	3.1	462	3.1		454	3.1		480	3.2
AIAN Only	254	8.0	253	8.0		262	8.3		268	8.5
2 or More Races	371	6.7	385	6.9		385	6.9		330	6.1
<b>Division</b>										
New England	941	7.4	958	7.6		942	7.5		902	7.1
Middle Atlantic	1,984	5.6	2,008	5.7	a	1,994	5.7		2,071	5.9
East North Central	2,319	5.9	2,351	6.0		2,348	6.0		2,276	5.8
West North Central	1,015	5.8	1,015	5.8		1,024	5.9		1,032	5.9
South Atlantic	2,805	5.3	2,798	5.3		2,789	5.2		2,811	5.3
East South Central	681	4.3	727	4.6	a	721	4.6	a	713	4.6
West South Central	1,675	5.3	1,687	5.3		1,735	5.5		1,789	5.7
Mountain	1,107	5.7	1,123	5.8		1,121	5.7		1,107	5.7
Pacific	2,869	6.5	2,869	6.5		2,874	6.6		3,033	6.9

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>County Type</b>										
Large Metro	8,992	6.0	9,122	6.0	9,239	6.0	9,283	6.2	8,701	5.8
Small Metro, pop 250,000-1,000,000	3,121	5.6	3,182	5.7	3,114	5.7	3,174	5.7	3,067	5.6
Small Metro, < 250,000 population	1,494	5.8	1,520	6.0	1,523	6.0	1,468	5.7	1,521	6.0
Nonmetro, 20,000 or more urban pop	817	5.4	826	5.5	815	5.5	848	5.6	786	5.1
Nonmetro, 2,500-19,999 urban pop	831	4.6	762	4.6	739	4.6	829	4.9	833	4.3
Nonmetro, < 2,500 urban pop	142	3.4	123	3.6	118	3.5	134	2.9	149	4.0
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	2,175	10.3	2,195	10.4	2,145	10.3	2,227	10.5	2,124	10.1
Full-Time College Students	873	11.0	896	11.2	828	11.1	884	11.2	863	10.8
Other Persons Aged 18 to 22 <sup>2</sup>	1,302	9.8	1,299	9.9	1,317	9.9	1,343	10.0	1,261	9.6
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	3,973	6.3	4,017	6.4	4,018	6.4	4,030	6.4	3,916	6.2
Pregnant Female Aged 15-44	117	5.1	121	5.3	124	5.4	143	6.2	90	4.0
Not Pregnant Female Aged 15-44	3,857	6.3	3,896	6.4	3,893	6.4	3,887	6.4	3,826	6.2
<b>Division by Age Group</b>										
New England										
12+	941	7.4	958	7.6	942	7.5	902	7.1	981	7.7
12-17	28	2.6	28	2.6	28	2.6	28	2.6	28	2.7
18+	913	7.9	930	8.0	914	7.9	874	7.6	952	8.2
18-25	210	12.7	214	13.0	202	12.2	189	11.5	231	14.0
26-49	411	9.3	406	9.1	402	9.1	445	10.0	377	8.5
50+	292	5.3	310	5.7	310	5.7	239	4.4	345	6.3
Middle Atlantic										
12+	1,984	5.6	2,008	5.7	1,994	5.7	2,071	5.9	1,896	5.4
12-17	65	2.2	66	2.2	66	2.2	82	2.7	49	1.6
18+	1,918	6.0	1,942	6.0	1,928	6.0	1,989	6.2	1,847	5.8
18-25	543	12.2	545	12.3	538	12.1	587	13.1	499	11.3
26-49	915	7.1	923	7.2	917	7.1	942	7.3	888	6.9
50+	460	3.1	473	3.2	473	3.2	460	3.1	461	3.1

(continued)



Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	2,319	5.9	2,351	6.0	2,348	6.0	2,276	5.8	2,362	6.0
12-17	84	2.3	85	2.3	86	2.3	101	2.7	66	1.8
18+	2,236	6.3	2,266	6.4	2,263	6.4	2,175	6.1	2,296	6.5
18-25	565	11.2	568	11.2	566	11.2	597	11.7	534	10.6
26-49	1,049	7.5	1,063	7.6	1,062	7.6	1,025	7.3	1,073	7.7
50+	621	3.8	635	3.9	635	3.8	553	3.4	690	4.2
West North Central										
12+	1,015	5.8	1,015	5.8	1,024	5.9	1,032	5.9	998	5.7
12-17	39	2.4	37	2.3	37	2.2	30	1.8	49	3.0
18+	976	6.2	978	6.2	987	6.2	1,003	6.3	949	6.0
18-25	274	11.8	274	11.8	275	11.8	284	12.2	264	11.4
26-49	473	7.6	474	7.6	480	7.7	493	7.9	452	7.3
50+	229	3.1	229	3.1	232	3.2	226	3.1	232	3.2
South Atlantic										
12+	2,805	5.3	2,798	5.3	2,789	5.2	2,811	5.3	2,799	5.2
12-17	83	1.8	84	1.8	85	1.8	99	2.1	66	1.4
18+	2,723	5.6	2,714	5.6	2,704	5.6	2,712	5.6	2,733	5.6
18-25	652	10.0	669	10.2	660	10.1	647	9.8	656	10.1
26-49	1,358	7.0	1,342	7.0	1,340	7.0	1,437	7.5	1,279	6.6
50+	713	3.1	703	3.1	703	3.1	628	2.8	798	3.5
East South Central										
12+	681	4.3	727	4.6	721	4.6	713	4.6	648	4.1
12-17	19	1.3	19	1.3	19	1.3	21	1.4	18	1.2
18+	662	4.6	708	5.0	702	4.9	693	4.9	630	4.4
18-25	173	8.5	182	9.0	183	9.0	166	8.2	180	8.9
26-49	344	6.1	368	6.5	363	6.5	330	5.9	358	6.4
50+	144	2.2	158	2.4	156	2.4	196	3.0	92	1.4
West South Central										
12+	1,675	5.3	1,687	5.3	1,735	5.5	1,789	5.7	1,560	4.9
12-17	95	2.9	95	2.9	95	2.9	111	3.4	79	2.4
18+	1,580	5.5	1,592	5.6	1,640	5.8	1,678	5.9	1,481	5.2
18-25	404	9.3	405	9.3	404	9.3	411	9.5	397	9.2
26-49	808	6.6	814	6.6	863	7.0	861	7.1	754	6.1
50+	368	3.1	373	3.1	373	3.1	406	3.5	330	2.8

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
12+	1,107	5.7	1,123	5.8	1,121	5.7	1,107	5.7	1,108	5.6
12-17	55	2.9	54	2.8	54	2.8	61	3.2	49	2.5
18+	1,053	6.0	1,068	6.1	1,066	6.1	1,046	6.0	1,059	6.0
18-25	299	11.5	300	11.6	303	11.7	272	10.5	326	12.6
26-49	479	6.6	489	6.8	483	6.7	484	6.7	474	6.5
50+	275	3.5	279	3.6	281	3.6	290	3.8	259	3.3
Pacific										
12+	2,869	6.5	2,869	6.5	2,874	6.6	3,033	6.9	2,704	6.1
12-17	87	2.2	89	2.2	86	2.2	90	2.2	84	2.1
18+	2,781	7.0	2,781	7.0	2,788	7.0	2,942	7.4	2,620	6.6
18-25	633	10.9	634	11.0	641	11.1	668	11.5	598	10.4
26-49	1,509	8.9	1,507	8.9	1,519	8.9	1,501	8.9	1,518	8.9
50+	639	3.8	639	3.7	628	3.7	773	4.6	505	2.9
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	57	4.7	57	4.7	53	4.4	64	5.4	50	4.1
Not Hispanic/Latino	884	7.7	900	7.9	889	7.8	838	7.3	931	8.1
Middle Atlantic										
Hispanic/Latino	306	6.0	313	6.2	312	6.2	303	6.0	309	6.1
Not Hispanic/Latino	1,678	5.6	1,695	5.6	1,682	5.6	1,769	5.9	1,587	5.3
East North Central										
Hispanic/Latino	206	7.0	210	7.1	210	7.1	187	6.4	225	7.5
Not Hispanic/Latino	2,114	5.8	2,141	5.9	2,139	5.9	2,090	5.8	2,138	5.9
West North Central										
Hispanic/Latino	55	5.8	54	5.8	55	5.8	63	6.8	47	4.9
Not Hispanic/Latino	960	5.8	961	5.8	969	5.9	969	5.9	951	5.7
South Atlantic										
Hispanic/Latino	288	4.2	288	4.2	281	4.1	318	4.7	258	3.7
Not Hispanic/Latino	2,517	5.4	2,510	5.4	2,508	5.4	2,493	5.4	2,541	5.5
East South Central										
Hispanic/Latino	26	4.6	33	5.9	34	6.1	21	3.9	30	5.3
Not Hispanic/Latino	655	4.3	695	4.6	687	4.5	692	4.6	618	4.1

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
West South Central										
Hispanic/Latino	479	5.4	489	5.5	497	5.6	595	6.8	364	4.1 a
Not Hispanic/Latino	1,195	5.2	1,197	5.2	1,239	5.4	1,194	5.2	1,196	5.2
Mountain										
Hispanic/Latino	224	5.0	227	5.1	227	5.1	246	5.6	202	4.5
Not Hispanic/Latino	884	5.9	895	6.0	894	5.9	861	5.8	906	6.0
Pacific										
Hispanic/Latino	896	6.9	895	6.8	893	6.8	993	7.6	798	6.1
Not Hispanic/Latino	1,973	6.4	1,974	6.4	1,982	6.4	2,040	6.6	1,906	6.2
<b>Division by Race</b>										
New England										
White Only	826	7.6	829	7.7	820	7.6	782	7.2	870	8.0
Black Only	53	5.8	56	6.1	52	5.7	50	5.5	57	6.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	16	2.7	18	3.2	19	3.3	22	3.9	9	1.5
AIAN Only	1	2.0	1	1.4	1	1.5	2	3.1	1	0.9
2 or More Races	*	*	*	*	*	*	*	*	*	*
Middle Atlantic										
White Only	1,533	5.8	1,553	5.9 a	1,549	5.8	1,627	6.1	1,439	5.4
Black Only	317	6.2	318	6.2	309	6.0	318	6.2	315	6.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	75	3.0	76	3.0	76	3.0	77	3.1	74	2.9
AIAN Only	14	6.0	16	6.7	16	6.7	14	5.9	*	*
2 or More Races	38	6.2	37	6.0	38	6.1	24	4.0	53	8.3
East North Central										
White Only	1,982	6.1	2,001	6.2	2,002	6.2	1,935	6.0	2,029	6.3
Black Only	251	5.5	260	5.7	256	5.6	256	5.6	246	5.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	25	1.9	25	1.9	25	2.0	40	3.2	9	0.7 a
AIAN Only	13	6.1	15	7.0	15	7.1	13	6.0	13	6.1
2 or More Races	47	7.7	49	7.9	49	7.9	32	5.4	62	9.9

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	875	5.7	887	5.8	890	5.8	874	5.7	877	5.7
Black Only	65	5.8	65	5.7	68	6.0	60	5.3	71	6.3
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	24	4.9	23	4.7	23	4.7	37	7.5	11	2.2
AIAN Only	32	14.2	22	9.8 a	25	11.2	*	*	*	*
2 or More Races	16	5.5	16	5.3	15	5.1	15	5.2	18	5.8
South Atlantic										
White Only	2,124	5.5	2,103	5.5	2,093	5.5	2,206	5.8	2,042	5.3
Black Only	561	4.9	569	4.9	574	5.0	488	4.3	634	5.4
NHOPI Only	5	2.7	5	2.8	5	2.9	*	*	*	*
Asian Only	55	2.9	56	3.0	54	2.9	51	2.7	58	3.0
AIAN Only	13	3.7	15	4.3	11	3.2	12	3.6	13	3.8
2 or More Races	48	5.2	49	5.4	51	5.6	47	5.3	48	5.1
East South Central										
White Only	545	4.5	597	5.0 a	596	4.9 a	612	5.1	478	4.0
Black Only	120	3.8	116	3.7	113	3.6	97	3.1	143	4.6
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	*	*	*	* *	*	* *	*	*	*	*
2 or More Races	4	2.0	4	2.0	3	1.6	1	0.6	*	* *
West South Central										
White Only	1,307	5.3	1,316	5.3	1,340	5.4	1,429	5.8	1,184	4.8
Black Only	246	5.5	253	5.6	268	5.9	260	5.8	233	5.1
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	40	3.2	42	3.3 a	34	2.7	34	2.7	45	3.6
AIAN Only	40	7.2	38	6.8	54	9.7	40	7.2	41	7.3
2 or More Races	29	5.0	30	5.1	33	5.7	18	3.0	41	6.9

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
White Only	950	5.6	957	5.7	961	5.7	959	5.7	941	5.5
Black Only	37	4.9	39	5.2	40	5.3	32	4.3	43	5.6
NHOPI Only	6	4.1	6	4.1	5	3.7	*	*	*	* *
Asian Only	16	2.5	15	2.4	15	2.3	17	2.7	15	2.3
AIAN Only	66	9.7	71	10.5	67	9.9	59	8.8	73	10.7
2 or More Races	33	7.2	34	7.6	32	7.2	34	7.7	31	6.7
Pacific										
White Only	2,298	7.1	2,299	7.1	2,300	7.1	2,458	7.6	2,138	6.6
Black Only	162	6.8	161	6.7	165	6.9	153	6.4	172	7.1
NHOPI Only	22	3.6	22	3.6	21	3.5	22	4.8	*	* *
Asian Only	203	3.4	201	3.4	202	3.4	199	3.3	208	3.5
AIAN Only	69	8.9	71	9.2	70	9.0	83	10.8	55	7.1
2 or More Races	114	6.9	115	7.0	116	7.1	118	7.3	109	6.6
<b>County Type by Age Group</b>										
Large Metro										
12+	8,992	6.0	9,122	6.0	9,239	6.0	9,283	6.2	8,701	5.8
12-17	296	2.1	303	2.1	299	2.1	339	2.4	253	1.8 a
18+	8,696	6.4	8,819	6.4	8,940	6.4	8,944	6.6	8,448	6.2
18-25	2,112	11.0	2,147	11.0	2,161	11.0	2,120	10.9	2,105	11.0
26-49	4,525	7.7	4,589	7.7	4,672	7.8	4,727	8.1	4,323	7.3
50+	2,059	3.6	2,083	3.6	2,107	3.5	2,097	3.7	2,020	3.5
Small Metro, pop 250,000-1,000,000										
12+	3,121	5.6	3,182	5.7 a	3,114	5.7	3,174	5.7	3,067	5.6
12-17	126	2.4	127	2.4	128	2.5	133	2.5	119	2.3
18+	2,994	6.0	3,055	6.0 a	2,986	6.0	3,041	6.0	2,948	5.9
18-25	774	10.4	786	10.4	760	10.2	796	10.5	753	10.2
26-49	1,435	7.3	1,455	7.3	1,436	7.4	1,435	7.2	1,434	7.4
50+	785	3.4	813	3.5 a	790	3.4	810	3.5	760	3.3

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, < 250,000 population										
12+	1,494	5.8	1,520	6.0	1,523	6.0	1,468	5.7	1,521	6.0
12-17	52	2.4	54	2.5	55	2.5	50	2.3	53	2.5
18+	1,443	6.2	1,466	6.3	1,468	6.4	1,418	6.1	1,468	6.3
18-25	443	12.4	455	12.8	458	12.9	454	13.0	433	11.7
26-49	638	7.5	641	7.6	634	7.6	633	7.3	643	7.7
50+	362	3.2	371	3.3	376	3.4	331	2.9	392	3.5
Nonmetro, 20,000 or more urban pop										
12+	817	5.4	826	5.5	815	5.5	848	5.6	786	5.1
12-17	34	2.4	34	2.5	36	2.6	42	3.0	26	1.9
18+	782	5.7	791	5.8	779	5.8	805	5.9	760	5.5
18-25	197	9.9	200	10.2	201	10.3	226	11.0	168	8.7
26-49	307	6.0	300	6.1	300	6.1	318	6.3	295	5.8
50+	279	4.1	292	4.4	278	4.2	260	3.9	297	4.3
Nonmetro, 2,500-19,999 urban pop										
12+	831	4.6	762	4.6	739	4.6	829	4.9	833	4.3
12-17	36	2.3	31	2.2	31	2.3	45	3.1	28	1.7
18+	794	4.8	731	4.8	708	4.8	784	5.0	805	4.6
18-25	194	9.7	176	9.4	164	9.3	197	10.1	192	9.3
26-49	378	6.7	339	6.7	329	6.8	349	6.8	407	6.7
50+	222	2.5	216	2.6	215	2.7	238	2.8	206	2.2
Nonmetro, < 2,500 urban pop										
12+	142	3.4	123	3.6	118	3.5	134	2.9	149	4.0
12-17	11	3.1	8	3.0	7	2.6	13	3.5	9	2.7
18+	131	3.5	115	3.6	111	3.6	121	2.9	141	4.2
18-25	31	7.7	28	8.9	28	9.0	29	6.5	33	9.1
26-49	64	4.9	62	5.9	58	5.7	56	3.9	71	6.1
50+	36	1.7	25	1.4	25	1.4	35	1.5	37	2.0
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	1,734	5.8	1,773	5.8	1,786	5.8	1,979	6.5	1,489	5.0
Not Hispanic/Latino	7,258	6.1	7,349	6.0	7,453	6.0	7,304	6.1	7,212	6.0
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	501	5.7	500	5.7	487	5.7	499	5.9	502	5.5
Not Hispanic/Latino	2,620	5.6	2,682	5.7	2,626	5.6	2,675	5.6	2,565	5.6

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Small Metro, < 250,000 population										
Hispanic/Latino	167	6.1	165	6.1	159	5.9	157	6.0	176	6.1
Not Hispanic/Latino	1,328	5.8	1,355	6.0	1,364	6.1	1,311	5.7	1,345	5.9
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	85	7.0	85	7.2	83	7.1	116	9.0	53	4.7
Not Hispanic/Latino	732	5.2	741	5.4	732	5.3	731	5.3	733	5.2
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	34	3.5	31	3.5	31	3.5	32	3.9	37	3.2
Not Hispanic/Latino	797	4.6	731	4.6	708	4.7	797	4.9	796	4.4
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	126	3.2	110	3.3	105	3.2	128	2.9	125	3.5
<b>County Type by Race</b>										
Large Metro										
White Only	7,038	6.4	7,128	6.4	7,204	6.4	7,368	6.7	6,708	6.1
Black Only	1,243	5.5	1,268	5.6	1,287	5.6	1,209	5.4	1,277	5.6
NHOPI Only	31	3.7	29	3.4	26	3.1	34	4.9	29	2.9
Asian Only	379	3.2	381	3.2	378	3.2	395	3.4	363	3.1
AIAN Only	108	7.1	111	7.3	135	8.1	117	7.4	99	6.8
2 or More Races	192	6.6	205	6.8	209	6.7	160	5.6	225	7.5
Small Metro, pop 250,000-1,000,000										
White Only	2,625	5.8	2,673	5.8	2,611	5.8	2,695	5.9	2,556	5.7
Black Only	278	4.7	285	4.8	281	4.8	250	4.2	306	5.3
NHOPI Only	*	*	20	6.5	18	6.0	19	7.1	*	*
Asian Only	62	2.9	63	3.0	60	2.9	65	3.0	58	2.9
AIAN Only	38	6.1	41	6.2	47	6.9	39	6.1	37	6.0
2 or More Races	97	7.2	100	7.3	96	7.3	107	8.0	88	6.4
Small Metro, < 250,000 population										
White Only	1,288	5.9	1,310	6.1	1,315	6.1	1,283	5.9	1,293	5.9
Black Only	120	5.0	118	5.0	111	4.9	111	4.3	129	5.7
NHOPI Only	2	3.0	*	*	*	*	*	*	*	*
Asian Only	14	2.2	15	2.7	14	2.6	14	2.2	13	2.3
AIAN Only	34	12.0	39	11.4	44	11.1	27	9.7	*	*
2 or More Races	36	7.6	35	8.0	36	8.0	29	6.5	44	8.6

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 20,000 or more urban pop										
White Only	688	5.3	693	5.4	691	5.4	716	5.5	660	5.0
Black Only	88	6.7	87	6.5	89	6.6	79	6.5	97	6.8
NHOPI Only	2	3.9	2	4.1	2	3.4	*	*	*	*
Asian Only	3	1.2	1	0.6	1	0.6	2	0.8	*	*
AIAN Only	21	7.7	26	8.8	17	6.7	27	11.3	16	5.0
2 or More Races	15	4.2	16	5.3	14	4.9	20	4.6	9	3.5
Nonmetro, 2,500-19,999 urban pop										
White Only	688	4.4	635	4.4	626	4.5	710	4.8	667	4.0
Black Only	76	4.5	71	4.6	70	4.7	59	3.9	94	5.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	36	10.0	27	9.3	*	*	*	*	30	7.8
2 or More Races	27	7.9	27	8.7	*	*	14	4.8	*	*
Nonmetro, < 2,500 urban pop										
White Only	114	3.1	103	3.4	105	3.4	112	2.8	115	3.6
Black Only	8	2.8	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	16	14.2	10	12.7	*	*	15	15.8	*	*
2 or More Races	4	3.3	*	*	*	*	*	*	*	*
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	1,159	10.7	1,163	10.7	1,151	10.8	1,193	11.0	1,125	10.4
Female	1,017	9.8	1,032	10.0	994	9.8	1,034	9.9	999	9.8
Full-Time College Students										
Male	419	11.4	429	11.6	411	11.8	477	12.7	362	10.1
Female	454	10.6	467	10.9	418	10.4	407	9.8	501	11.5
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	740	10.3	734	10.3	740	10.2	716	10.1	763	10.5
Female	562	9.3	565	9.4	576	9.4	627	10.0	498	8.5
<b>Age Group by Gender</b>										
12+										
Male	9,751	7.5	9,841	7.6	9,859	7.6	10,104	7.8	9,398	7.2
Female	5,645	4.1	5,694	4.1	5,690	4.1	5,631	4.1	5,659	4.1

(continued)



Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
12-17										
Male	244	1.9	247	1.9	246	1.9	298	2.3	191	1.5 a
Female	311	2.5	311	2.5	310	2.5	325	2.7	297	2.4
18+										
Male	9,507	8.1	9,595	8.2 a	9,612	8.2	9,807	8.4	9,207	7.8
Female	5,334	4.2	5,382	4.3 a	5,380	4.3	5,306	4.2	5,362	4.2
18-25										
Male	2,090	12.0	2,102	12.0	2,105	12.1	2,158	12.3	2,021	11.6
Female	1,663	9.6	1,690	9.8 a	1,667	9.6	1,663	9.6	1,663	9.7
26-49										
Male	4,835	9.9	4,855	10.0	4,875	10.0	5,041	10.4	4,629	9.5
Female	2,511	5.0	2,530	5.0	2,554	5.1 a	2,478	4.9	2,544	5.1
50+										
Male	2,582	5.0	2,638	5.1	2,633	5.1	2,607	5.1	2,557	4.9
Female	1,160	2.0	1,162	2.0	1,158	2.0	1,165	2.0	1,156	2.0
<b>Age Group by Race</b>										
12+										
White Only	12,441	5.9	12,543	6.0 a	12,552	6.0	12,883	6.2	11,999	5.7 a
Black Only	1,814	5.3	1,837	5.4	1,845	5.4	1,713	5.0	1,914	5.6
NHOPI Only	58	4.4	55	4.2	50	3.8	62	5.7	53	3.5
Asian Only	459	3.1	462	3.1	454	3.1	480	3.2	438	3.0
AIAN Only	254	8.0	253	8.0	262	8.3	268	8.5	241	7.5
2 or More Races	371	6.7	385	6.9	385	6.9	330	6.1	412	7.3
12-17										
White Only	454	2.5	455	2.5	455	2.5	500	2.7	409	2.2 a
Black Only	46	1.2	48	1.3 a	48	1.3	55	1.5	38	1.0
NHOPI Only	6	3.2	5	3.1	5	3.2	*	*	2	1.0 *
Asian Only	14	1.1	14	1.0	13	1.0	16	1.2	12	0.9
AIAN Only	9	2.3	11	2.7	10	2.4	11	2.7	8	2.0
2 or More Races	26	2.8	26	2.8	25	2.7	32	3.5	20	2.1

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18+										
White Only	11,987	6.3	12,088	6.3	12,097	6.3	12,383	6.5	11,590	6.0
Black Only	1,767	5.8	1,789	5.9	1,797	5.9	1,658	5.5	1,877	6.1
NHOPI Only	52	4.6	50	4.3	45	3.9	52	5.8	51	3.8
Asian Only	445	3.3	449	3.3	441	3.3	464	3.4	425	3.2
AIAN Only	245	8.8	242	8.7	253	9.1	257	9.3	233	8.3
2 or More Races	345	7.5	359	7.8	360	7.8	299	6.6	392	8.3
18-25										
White Only	3,018	11.8	3,048	11.9	3,027	11.8	3,029	11.8	3,008	11.8
Black Only	399	7.5	400	7.5	401	7.5	427	7.9	371	7.0
NHOPI Only	16	6.7	17	7.0	16	6.8	20	8.0	12	5.2
Asian Only	136	6.4	139	6.5	135	6.4	145	7.0	127	5.8
AIAN Only	69	13.2	72	13.5	76	13.9	76	14.6	63	11.8
2 or More Races	114	11.8	116	12.1	117	12.1	125	12.4	103	11.1
26-49										
White Only	5,820	7.8	5,858	7.8	5,900	7.9	5,954	7.9	5,686	7.6
Black Only	908	6.9	911	6.9	905	6.8	936	7.1	881	6.6
NHOPI Only	35	6.8	32	6.1	28	5.6	30	7.1	*	*
Asian Only	276	4.0	274	4.0	272	4.0	296	4.3	256	3.7
AIAN Only	130	9.7	133	9.8	146	10.7	158	11.7	101	7.6
2 or More Races	177	9.3	178	9.2	178	9.3	143	7.8	210	10.6
50+										
White Only	3,149	3.5	3,182	3.5	3,170	3.5	3,400	3.8	2,897	3.2
Black Only	460	3.9	477	4.0	491	4.1	295	2.5	625	5.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	32	0.7	35	0.8	34	0.7	22	0.5	42	1.0
AIAN Only	46	5.0	38	4.3	31	3.6	22	2.5	69	7.3
2 or More Races	55	3.1	66	3.8	64	3.7	31	1.8	80	4.4
Age Group by Hispanicity										
12+										
Hispanic/Latino	2,536	5.8	2,567	5.8	2,560	5.8	2,790	6.4	2,282	5.1
Not Hispanic/Latino	12,861	5.7	12,968	5.8	12,989	5.8	12,946	5.8	12,775	5.7
12-17										
Hispanic/Latino	140	2.4	137	2.4	135	2.3	143	2.5	137	2.3
Not Hispanic/Latino	415	2.2	422	2.2	421	2.2	479	2.5	351	1.8

(continued)

Table I.1 Past Year Alcohol Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18+										
Hispanic/Latino	2,395	6.3	2,430	6.4	2,424	6.4	2,646	7.0	2,144	5.6 a
Not Hispanic/Latino	12,445	6.1	12,547	6.1 a	12,568	6.1 a	12,466	6.1	12,424	6.0
18-25										
Hispanic/Latino	768	10.3	781	10.5 a	771	10.3	824	11.1	712	9.5
Not Hispanic/Latino	2,984	10.9	3,011	11.0 a	3,000	11.0	2,997	10.9	2,972	11.0
26-49										
Hispanic/Latino	1,295	6.7	1,308	6.7	1,321	6.8	1,373	7.1	1,217	6.2
Not Hispanic/Latino	6,051	7.6	6,078	7.7	6,108	7.7	6,146	7.8	5,955	7.5
50+										
Hispanic/Latino	332	3.0	341	3.0	332	3.0	449	4.1	215	1.9 a
Not Hispanic/Latino	3,410	3.5	3,458	3.5	3,460	3.5	3,323	3.4	3,497	3.5
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	271	4.3	271	4.3	270	4.3	291	4.7	251	4.0
18-25	1,655	9.6	1,683	9.8 a	1,659	9.6	1,654	9.5	1,656	9.7
26-44	2,047	5.2	2,063	5.2	2,088	5.3 a	2,084	5.3	2,009	5.0
Pregnant Female Aged 15-44										
15-17	*	*	*	* *	*	* *	*	*	*	* *
18-25	56	7.5	57	7.6	57	7.6	78	9.3	34	5.1
26-44	59	3.9	62	4.1	65	4.3	64	4.5	54	3.5
Not Pregnant Female Aged 15-44										
15-17	269	4.3	269	4.3	268	4.3	290	4.7	249	3.9
18-25	1,600	9.7	1,626	9.9 a	1,602	9.7	1,577	9.6	1,623	9.9
26-44	1,988	5.2	2,001	5.2	2,024	5.3 a	2,021	5.3	1,955	5.1
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	3,139	6.7	3,180	6.8 a	3,171	6.8	3,095	6.7	3,183	6.8
Black Only	468	4.9	465	4.9	466	4.9	487	5.2	449	4.7
NHOPI Only	15	3.8	16	4.0	14	3.8	26	7.2	4	0.9 a
Asian Only	157	3.6	157	3.6	152	3.5	194	4.5	121	2.7
AIAN Only	74	8.6	75	8.5	87	9.5	96	11.2	51	5.9 a
2 or More Races	120	7.8	125	8.1	127	8.2	132	8.7	107	7.0

(continued)

**Table I.1 Past Year Alcohol Use Disorder (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pregnant Female Aged 15-44										
White Only	97	5.8	100	5.9	102	6.0	111	6.5	82	5.0
Black Only	14	3.9	15	4.0	16	4.2	22	5.9	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
Not Pregnant Female Aged 15-44										
White Only	3,043	6.8	3,081	6.9 a	3,069	6.8	2,985	6.7	3,101	6.9
Black Only	454	5.0	450	4.9	451	5.0	464	5.2	443	4.8
NHOPI Only	15	3.8	15	4.1	14	3.8	26	7.3	4	1.0 a
Asian Only	154	3.6	154	3.6	149	3.5	187	4.5	121	2.8
AIAN Only	72	8.7	73	8.6	85	9.6	95	11.5	50	5.9 a
2 or More Races	119	8.1	124	8.3	126	8.4	130	8.9	107	7.3
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	645	5.0	655	5.1	650	5.1	672	5.3	619	4.8
Not Hispanic/Latino	3,328	6.6	3,362	6.7 a	3,368	6.7	3,358	6.7	3,298	6.5
Pregnant Female Aged 15-44										
Hispanic/Latino	20	4.1	23	4.7	24	4.8	28	5.9	12	2.5
Not Hispanic/Latino	97	5.4	98	5.4	100	5.5	115	6.3	78	4.4
Not Pregnant Female Aged 15-44										
Hispanic/Latino	626	5.1	632	5.1	626	5.1	644	5.2	607	4.9
Not Hispanic/Latino	3,231	6.7	3,264	6.7 a	3,268	6.7	3,243	6.7	3,219	6.6

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

## Appendix J: 2015-2016 NSDUH – Weighted Annual Averages Past Year Illicit Drug Use Disorder – UDPYILL

**Table J.1 Past Year Illicit Drug Use Disorder**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	7,559	2.8	7,565	2.8	7,507	2.8	7,737	2.9	7,381	2.7
12-17	822	3.3	830	3.3	827	3.3	855	3.4	789	3.2
18+	6,737	2.8	6,735	2.8	6,679	2.7	6,883	2.8	6,592	2.7
18-25	2,479	7.1	2,496	7.2	2,502	7.2	2,530	7.2	2,428	7.0
26-49	3,135	3.2	3,089	3.1	3,039	3.1	3,239	3.3	3,032	3.1
50+	1,123	1.0	1,151	1.0	1,138	1.0	1,114	1.0	1,132	1.0
<b>Gender</b>										
Male	4,760	3.7	4,776	3.7	4,723	3.6	4,985	3.8	4,535	3.5
Female	2,799	2.0	2,790	2.0	2,784	2.0	2,752	2.0	2,846	2.1
<b>Hispanicity</b>										
Hispanic/Latino	1,210	2.8	1,208	2.7	1,182	2.7	1,291	3.0	1,130	2.5
Not Hispanic/Latino	6,349	2.8	6,357	2.8	6,324	2.8	6,447	2.9	6,251	2.8
<b>Race</b>										
White Only	5,804	2.8	5,781	2.8	5,745	2.7	5,952	2.8	5,656	2.7
Black Only	1,178	3.5	1,198	3.5	1,185	3.5	1,201	3.5	1,156	3.4
NHOPI Only	36	2.7	37	2.8	36	2.8	44	4.0	27	1.8
Asian Only	178	1.2	182	1.2	180	1.2	181	1.2	174	1.2
AIAN Only	103	3.2	107	3.4	105	3.3	105	3.3	101	3.2
2 or More Races	261	4.7	261	4.7	255	4.6	255	4.7	267	4.7
<b>Division</b>										
New England	487	3.9	494	3.9	489	3.9	526	4.2	448	3.5
Middle Atlantic	896	2.5	904	2.6	894	2.5	848	2.4	945	2.7
East North Central	978	2.5	987	2.5	986	2.5	1,068	2.7	889	2.3
West North Central	409	2.3	411	2.3	415	2.4	408	2.3	410	2.3
South Atlantic	1,412	2.7	1,395	2.6	1,388	2.6	1,422	2.7	1,402	2.6
East South Central	451	2.9	443	2.8	436	2.8	510	3.3	392	2.5
West South Central	747	2.3	751	2.4	715	2.2	815	2.6	680	2.1
Mountain	616	3.2	615	3.2	614	3.1	603	3.1	628	3.2
Pacific	1,563	3.6	1,566	3.6	1,570	3.6	1,538	3.5	1,588	3.6

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>County Type</b>										
Large Metro	4,330	2.9	4,410	2.9	4,392	2.9 a	4,339	2.9	4,320	2.9
Small Metro, pop 250,000-1,000,000	1,525	2.7	1,543	2.7	1,519	2.8	1,527	2.7	1,522	2.8
Small Metro, < 250,000 population	751	2.9	748	3.0	746	3.0	816	3.2	686	2.7
Nonmetro, 20,000 or more urban pop	404	2.7	387	2.6	379	2.5	489	3.2	320	2.1 a
Nonmetro, 2,500-19,999 urban pop	453	2.5	387	2.3	380	2.4	466	2.7	440	2.3
Nonmetro, < 2,500 urban pop	97	2.3	91	2.6 a	90	2.6 a	101	2.2	92	2.5
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	1,608	7.6	1,612	7.6	1,605	7.7	1,621	7.6	1,594	7.6
Full-Time College Students	485	6.1	484	6.1	458	6.1	483	6.1	486	6.1
Other Persons Aged 18 to 22 <sup>2</sup>	1,123	8.5	1,128	8.6	1,146	8.6	1,138	8.5	1,109	8.5
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	2,160	3.4	2,152	3.4	2,156	3.4	2,154	3.4	2,165	3.4
Pregnant Female Aged 15-44	68	3.0	67	2.9	68	2.9	76	3.3	60	2.6
Not Pregnant Female Aged 15-44	2,092	3.4	2,085	3.4	2,088	3.4	2,078	3.4	2,106	3.4
<b>Division by Age Group</b>										
New England										
12+	487	3.9	494	3.9	489	3.9	526	4.2	448	3.5
12-17	40	3.7	40	3.8	41	3.8	43	4.0	37	3.5
18+	447	3.9	453	3.9	448	3.9	484	4.2	411	3.5
18-25	171	10.4	168	10.2	173	10.5	155	9.4	188	11.4
26-49	193	4.3	195	4.4	184	4.1	217	4.9	168	3.8
50+	83	1.5	90	1.7 a	91	1.7 a	112	2.0	55	1.0
Middle Atlantic										
12+	896	2.5	904	2.6	894	2.5	848	2.4	945	2.7
12-17	64	2.1	65	2.1	65	2.1	65	2.1	63	2.1
18+	832	2.6	840	2.6	829	2.6	782	2.4	881	2.7
18-25	326	7.4	327	7.4	331	7.5	315	7.0	338	7.7
26-49	366	2.8	367	2.9	354	2.8	322	2.5	410	3.2
50+	139	0.9	145	1.0 a	145	1.0 a	146	1.0	133	0.9

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	978	2.5	987	2.5	986	2.5	1,068	2.7	889	2.3
12-17	127	3.4	124	3.4	124	3.4	136	3.7	118	3.2
18+	851	2.4	863	2.4	862	2.4	932	2.6	770	2.2
18-25	325	6.4	329	6.5	331	6.5	380	7.5	271	5.4
26-49	397	2.8	399	2.9	399	2.9	400	2.9	393	2.8
50+	129	0.8	135	0.8	132	0.8	152	0.9	106	0.6
West North Central										
12+	409	2.3	411	2.3	415	2.4	408	2.3	410	2.3
12-17	51	3.1	53	3.2	53	3.2	55	3.3	48	2.9
18+	357	2.3	358	2.3	361	2.3	353	2.2	362	2.3
18-25	126	5.4	128	5.5	128	5.5	121	5.2	131	5.6
26-49	144	2.3	146	2.3	148	2.4	132	2.1	155	2.5
50+	88	1.2	84	1.1	86	1.2	99	1.4	77	1.0
South Atlantic										
12+	1,412	2.7	1,395	2.6	1,388	2.6	1,422	2.7	1,402	2.6
12-17	137	2.9	144	3.0	143	3.0	132	2.8	142	3.0
18+	1,274	2.6	1,251	2.6	1,245	2.6	1,290	2.7	1,259	2.6
18-25	469	7.2	473	7.2	474	7.3	493	7.5	445	6.9
26-49	612	3.2	572	3.0	569	3.0	605	3.2	619	3.2
50+	194	0.9	207	0.9	202	0.9	192	0.9	196	0.9
East South Central										
12+	451	2.9	443	2.8	436	2.8	510	3.3	392	2.5
12-17	41	2.8	41	2.8	41	2.8	47	3.2	35	2.4
18+	410	2.9	402	2.8	395	2.8	463	3.3	357	2.5
18-25	146	7.2	148	7.3	146	7.2	147	7.2	145	7.2
26-49	231	4.1	217	3.9	212	3.8	268	4.8	194	3.4
50+	33	0.5	37	0.6	37	0.6	47	0.7	18	0.3
West South Central										
12+	747	2.3	751	2.4	715	2.2	815	2.6	680	2.1
12-17	103	3.1	105	3.2	104	3.1	124	3.8	82	2.5
18+	644	2.3	647	2.3	611	2.1	691	2.4	598	2.1
18-25	265	6.1	270	6.2	259	6.0	267	6.2	262	6.1
26-49	303	2.5	296	2.4	279	2.3	345	2.8	261	2.1
50+	77	0.6	81	0.7	73	0.6	79	0.7	74	0.6

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
12+	616	3.2	615	3.2	614	3.1	603	3.1	628	3.2
12-17	89	4.6	91	4.7	88	4.6	86	4.5	92	4.8
18+	527	3.0	524	3.0	526	3.0	517	3.0	536	3.0
18-25	202	7.8	201	7.8	203	7.8	186	7.2	219	8.4
26-49	259	3.6	257	3.5	256	3.5	275	3.8	244	3.3
50+	65	0.8	66	0.8	67	0.9	55	0.7	74	0.9
Pacific										
12+	1,563	3.6	1,566	3.6	1,570	3.6	1,538	3.5	1,588	3.6
12-17	168	4.2	168	4.2	169	4.2	166	4.1	170	4.2
18+	1,395	3.5	1,397	3.5	1,401	3.5	1,372	3.5	1,418	3.5
18-25	448	7.8	452	7.8	457	7.9	466	8.0	430	7.5
26-49	631	3.7	640	3.8	639	3.8	674	4.0	588	3.4
50+	315	1.9	306	1.8	305	1.8	232	1.4	399	2.3
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	54	4.5	51	4.2	48	3.9	57	4.7	52	4.3
Not Hispanic/Latino	433	3.8	443	3.9	441	3.9	470	4.1	395	3.5
Middle Atlantic										
Hispanic/Latino	150	3.0	147	2.9	141	2.8	131	2.6	169	3.3
Not Hispanic/Latino	746	2.5	757	2.5	753	2.5	717	2.4	776	2.6
East North Central										
Hispanic/Latino	81	2.7	79	2.7	80	2.7	86	2.9	76	2.6
Not Hispanic/Latino	897	2.5	908	2.5	907	2.5	982	2.7	813	2.2
West North Central										
Hispanic/Latino	20	2.1	19	2.0	19	2.0	17	1.8	22	2.4
Not Hispanic/Latino	389	2.3	392	2.4	395	2.4	390	2.4	388	2.3
South Atlantic										
Hispanic/Latino	145	2.1	150	2.2	141	2.1	150	2.2	141	2.0
Not Hispanic/Latino	1,266	2.7	1,245	2.7	1,247	2.7	1,272	2.8	1,261	2.7
East South Central										
Hispanic/Latino	27	4.9	20	3.7	19	3.3	39	7.1	15	2.7
Not Hispanic/Latino	424	2.8	423	2.8	417	2.8	471	3.1	377	2.5

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Table J.1 Past Year Illicit Drug Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
West South Central										
Hispanic/Latino	185	2.1	189	2.1	177	2.0	229	2.6	141	1.6
Not Hispanic/Latino	562	2.5	562	2.4	538	2.3	586	2.6	539	2.3
Mountain										
Hispanic/Latino	146	3.3	146	3.3	149	3.3	148	3.4	144	3.2
Not Hispanic/Latino	470	3.1	469	3.1	465	3.1	455	3.0	485	3.2
Pacific										
Hispanic/Latino	402	3.1	406	3.1	410	3.1	434	3.3	371	2.8
Not Hispanic/Latino	1,161	3.8	1,159	3.8	1,161	3.8	1,104	3.6	1,217	3.9
<b>Division by Race</b>										
New England										
White Only	420	3.9	420	3.9	418	3.9	455	4.2	385	3.6
Black Only	37	4.0	39	4.3	35	3.8	33	3.6	41	4.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	9	1.6	*	* *	*	* *	*	*	7	1.2 *
AIAN Only	1	1.6	1	1.0	1	1.1	2	2.7	*	* *
2 or More Races	15	6.9	17	7.8	15	7.0	*	*	12	5.4 *
Middle Atlantic										
White Only	669	2.5	674	2.5	669	2.5	644	2.4	693	2.6
Black Only	186	3.6	186	3.6	180	3.5	172	3.4	200	3.9
NHOPI Only	2	1.3	2	1.3	2	1.3	*	*	*	*
Asian Only	17	0.7	18	0.7 a	18	0.7	20	0.8	14	0.6
AIAN Only	2	1.0	3	1.1	3	1.1	1	0.6	4	1.5
2 or More Races	20	3.3	22	3.6	22	3.6	8	1.3	33	5.2 a
East North Central										
White Only	750	2.3	752	2.3	755	2.3	839	2.6	660	2.0 a
Black Only	179	3.9	188	4.1 a	185	4.0	175	3.8	182	4.0
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	9	0.7	10	0.8	10	0.8	19	1.4	0	0.0 a
AIAN Only	9	4.3	10	4.7	10	4.5	3	1.5	16	7.1
2 or More Races	29	4.7	25	4.1	25	4.0	29	4.7	30	4.7

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	343	2.2	343	2.2	345	2.2	357	2.3	329	2.1
Black Only	41	3.6	41	3.6	41	3.6	33	3.0	49	4.3
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	2	0.4	2	0.5	2	0.5	3	0.6	1	0.2
AIAN Only	11	5.0	13	5.8	*	* *	8	3.6	*	* *
2 or More Races	12	4.0	12	3.9	10	3.4	7	2.4	17	5.6
South Atlantic										
White Only	982	2.6	953	2.5	946	2.5	969	2.5	994	2.6
Black Only	364	3.2	371	3.2	372	3.2	399	3.5	330	2.8
NHOPI Only	5	2.5	5	2.5	5	2.6	*	*	*	*
Asian Only	15	0.8	17	0.9 a	17	0.9	16	0.8	15	0.8
AIAN Only	8	2.4	10	3.0	9	2.5	10	2.8	7	1.9
2 or More Races	37	4.1	40	4.3	40	4.4	26	2.9	49	5.2
East South Central										
White Only	354	2.9	348	2.9	344	2.9	417	3.5	291	2.4 a
Black Only	78	2.5	81	2.6	81	2.6	76	2.4	80	2.5
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	4	1.9	4	1.9	*	* *	*	*	*	*
AIAN Only	*	*	*	* *	*	* *	*	*	*	*
2 or More Races	*	*	8	3.9 *	8	3.9 *	*	*	*	*
West South Central										
White Only	572	2.3	580	2.3	556	2.2	613	2.5	531	2.1
Black Only	123	2.7	124	2.7	123	2.7	148	3.3	98	2.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	10	0.8	8	0.7	8	0.6	13	1.0	*	* *
AIAN Only	15	2.8	13	2.2	4	0.7 a	19	3.5	12	2.0
2 or More Races	26	4.4	25	4.3	24	4.0	21	3.7	31	5.1
Mountain										
White Only	508	3.0	507	3.0	508	3.0	488	2.9	528	3.1
Black Only	43	5.7	41	5.4	41	5.4	47	6.2	*	* *
NHOPI Only	3	2.1	3	2.1	3	2.2	*	*	*	*
Asian Only	10	1.5	10	1.5	10	1.6	*	*	9	1.5 *
AIAN Only	24	3.6	26	3.9	27	4.0	29	4.3	20	2.9
2 or More Races	28	6.1	28	6.2	25	5.5	26	5.9	29	6.3

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pacific										
White Only	1,208	3.7	1,205	3.7	1,205	3.7	1,169	3.6	1,246	3.8
Black Only	128	5.3	127	5.3	127	5.3	119	4.9	137	5.7
NHOPI Only	17	2.9	18	2.9	17	2.8	25	5.5	10	1.3 a
Asian Only	101	1.7	101	1.7	102	1.7	88	1.4	114	2.0
AIAN Only	28	3.5	30	3.8	34	4.3	32	4.1	24	3.0
2 or More Races	82	5.0	85	5.1 a	86	5.2 a	106	6.5	58	3.5 a
<b>County Type by Age Group</b>										
Large Metro										
12+	4,330	2.9	4,410	2.9	4,392	2.9 a	4,339	2.9	4,320	2.9
12-17	462	3.3	470	3.3	472	3.3	472	3.4	451	3.2
18+	3,868	2.8	3,940	2.9	3,920	2.8	3,868	2.9	3,869	2.8
18-25	1,413	7.3	1,431	7.3	1,436	7.3	1,409	7.3	1,416	7.4
26-49	1,832	3.1	1,863	3.1	1,844	3.1	1,796	3.1	1,869	3.2
50+	624	1.1	646	1.1 a	640	1.1	663	1.2	584	1.0
Small Metro, pop 250,000-1,000,000										
12+	1,525	2.7	1,543	2.7	1,519	2.8	1,527	2.7	1,522	2.8
12-17	186	3.5	188	3.5	185	3.5	199	3.7	174	3.3
18+	1,338	2.7	1,354	2.7	1,334	2.7	1,328	2.6	1,349	2.7
18-25	506	6.8	523	6.9 a	520	7.0 a	514	6.8	499	6.8
26-49	563	2.9	559	2.8	546	2.8	571	2.9	554	2.9
50+	269	1.2	272	1.2	268	1.2	242	1.0	296	1.3
Small Metro, < 250,000 population										
12+	751	2.9	748	3.0	746	3.0	816	3.2	686	2.7
12-17	69	3.1	72	3.3	73	3.4 a	74	3.3	64	3.0
18+	682	2.9	676	2.9	673	2.9	742	3.2	622	2.7
18-25	253	7.1	257	7.2	263	7.4 a	278	8.0	228	6.2
26-49	330	3.9	317	3.8	303	3.6 a	406	4.7	253	3.0 a
50+	99	0.9	102	0.9 a	107	1.0 a	58	0.5	140	1.2

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Table J.1 Past Year Illicit Drug Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 20,000 or more urban pop										
12+	404	2.7	387	2.6	379	2.5	489	3.2	320	2.1 a
12-17	47	3.3	45	3.2	42	3.0	47	3.3	47	3.3
18+	357	2.6	342	2.5	337	2.5	442	3.2	273	2.0 a
18-25	146	7.3	140	7.2	143	7.3	170	8.3	121	6.3
26-49	159	3.1	142	2.9	143	2.9	195	3.9	122	2.4
50+	53	0.8	60	0.9 a	51	0.8	76	1.2	29	0.4
Nonmetro, 2,500-19,999 urban pop										
12+	453	2.5	387	2.3	380	2.4	466	2.7	440	2.3
12-17	47	3.0	44	3.1	44	3.2	51	3.5	44	2.6
18+	406	2.4	343	2.3	336	2.3	415	2.7	397	2.2
18-25	130	6.5	116	6.3	112	6.4	128	6.6	131	6.4
26-49	211	3.8	166	3.3	163	3.3	226	4.4	197	3.2
50+	65	0.7	60	0.7	60	0.7	61	0.7	68	0.7
Nonmetro, < 2,500 urban pop										
12+	97	2.3	91	2.6 a	90	2.6 a	101	2.2	92	2.5
12-17	11	3.0	11	3.9 a	11	4.0 a	12	3.2	9	2.9
18+	86	2.3	80	2.5 a	79	2.5	89	2.1	83	2.5
18-25	32	7.9	28	9.0	28	9.1	*	*	33	9.1 *
26-49	41	3.1	42	4.0 a	41	4.0 a	45	3.1	37	3.1
50+	14	0.7	10	0.6	10	0.6	13	0.6	14	0.8
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	758	2.5	763	2.5	756	2.5	784	2.6	732	2.4
Not Hispanic/Latino	3,572	3.0	3,647	3.0	3,636	2.9	3,556	3.0	3,588	3.0
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	245	2.8	250	2.9	231	2.7	274	3.3	217	2.4
Not Hispanic/Latino	1,279	2.7	1,292	2.7	1,288	2.8	1,253	2.6	1,305	2.8
Small Metro, < 250,000 population										
Hispanic/Latino	114	4.2	113	4.2	116	4.3	136	5.2	92	3.2
Not Hispanic/Latino	637	2.8	635	2.8	631	2.8	680	3.0	594	2.6
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	45	3.7	37	3.1	35	3.0	49	3.7	41	3.6
Not Hispanic/Latino	360	2.6	351	2.5	345	2.5	440	3.2	279	2.0 a

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Table J.1 Past Year Illicit Drug Use Disorder (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	28	2.8	24	2.7	23	2.6	25	3.0	31	2.7
Not Hispanic/Latino	425	2.5	363	2.3	357	2.3	441	2.7	409	2.2
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	20	14.4	21	16.8	*	* *	*	*	*	*
Not Hispanic/Latino	76	1.9	70	2.1	68	2.1	77	1.8	75	2.1
<b>County Type by Race</b>										
Large Metro										
White Only	3,164	2.9	3,214	2.9	3,207	2.8 a	3,167	2.9	3,160	2.9
Black Only	813	3.6	830	3.6	819	3.6	829	3.7	797	3.5
NHOPI Only	24	2.8	25	2.9	25	2.9	30	4.4	17	1.7
Asian Only	154	1.3	157	1.3	158	1.3	158	1.4	149	1.3
AIAN Only	41	2.7	44	2.9	45	2.7	44	2.8	39	2.7
2 or More Races	135	4.6	140	4.6	138	4.4	112	4.0	157	5.3
Small Metro, pop 250,000-1,000,000										
White Only	1,244	2.7	1,252	2.7	1,231	2.7	1,262	2.8	1,226	2.7
Black Only	176	3.0	184	3.1 a	184	3.1	162	2.7	190	3.3
NHOPI Only	8	2.6	9	2.8	8	2.6	8	3.1	7	2.2
Asian Only	17	0.8	18	0.9	16	0.8	14	0.7	20	1.0
AIAN Only	12	1.9	11	1.7	14	2.0	11	1.8	13	2.0
2 or More Races	67	5.0	69	5.0	66	5.0	68	5.1	67	4.8
Small Metro, < 250,000 population										
White Only	626	2.9	617	2.9	618	2.9	681	3.2	572	2.6
Black Only	83	3.4	86	3.6 a	80	3.6	89	3.5	76	3.3
NHOPI Only	3	3.3	*	* *	*	* *	*	*	*	*
Asian Only	5	0.8	5	1.0	5	0.8	4	0.7	5	0.9
AIAN Only	11	3.7	11	3.2	14	3.6	7	2.4	14	4.9
2 or More Races	24	5.0	26	5.8 a	26	5.8 a	*	*	17	3.4 *
Nonmetro, 20,000 or more urban pop										
White Only	334	2.6	318	2.5	311	2.4	404	3.1	264	2.0 a
Black Only	44	3.3	41	3.1	42	3.1	47	3.9	42	2.9
NHOPI Only	2	2.6	1	1.4	*	* *	*	*	*	*
Asian Only	1	0.7	1	0.4	1	0.4	2	1.0	0	0.2
AIAN Only	9	3.4	13	4.4	12	4.4	12	5.1	7	2.1
2 or More Races	14	4.0	13	4.5	13	4.6	21	5.0	6	2.3

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
White Only	363	2.3	311	2.2	308	2.2	363	2.5	364	2.2
Black Only	51	3.0	46	3.0	47	3.2	56	3.7	46	2.5
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	23	6.4	21	7.2	*	* *	28	8.1	19	5.0
2 or More Races	15	4.2	9	2.9	8	2.7	17	6.0	12	2.9
Nonmetro, < 2,500 urban pop										
White Only	72	2.0	69	2.2 a	70	2.3 a	75	1.9	69	2.1
Black Only	*	*	*	* *	*	* *	*	*	*	*
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	6	5.6	7	9.6	*	* *	3	3.5	9	7.2
2 or More Races	*	*	*	* *	*	* *	*	*	*	*
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	998	9.2	1,003	9.2	1,002	9.4	989	9.1	1,007	9.3
Female	610	5.9	609	5.9	603	5.9	632	6.1	588	5.8
Full-Time College Students										
Male	294	8.0	298	8.0	281	8.1	295	7.9	293	8.2
Female	190	4.5	186	4.4	177	4.4	188	4.5	193	4.4
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	704	9.8	705	9.9	721	10.0	694	9.8	714	9.8
Female	419	6.9	422	7.0	426	7.0	444	7.1	395	6.8
<b>Age Group by Gender</b>										
12+										
Male	4,760	3.7	4,776	3.7	4,723	3.6	4,985	3.8	4,535	3.5
Female	2,799	2.0	2,790	2.0	2,784	2.0	2,752	2.0	2,846	2.1
12-17										
Male	418	3.3	426	3.4 a	422	3.3	431	3.4	405	3.2
Female	404	3.3	404	3.3	405	3.3	424	3.5	384	3.1
18+										
Male	4,342	3.7	4,349	3.7	4,301	3.7	4,555	3.9	4,130	3.5
Female	2,395	1.9	2,386	1.9	2,379	1.9	2,328	1.9	2,462	1.9

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
Male	1,562	9.0	1,573	9.0	1,578	9.0	1,596	9.1	1,527	8.8
Female	918	5.3	923	5.3	924	5.3	934	5.4	902	5.2
26-49										
Male	2,060	4.2	2,029	4.2	1,981	4.1	2,216	4.6	1,904	3.9
Female	1,075	2.1	1,060	2.1	1,058	2.1	1,023	2.0	1,128	2.2
50+										
Male	721	1.4	747	1.5	741	1.4	743	1.5	699	1.3
Female	402	0.7	403	0.7	397	0.7	371	0.6	433	0.7
<b>Age Group by Race</b>										
12+										
White Only	5,804	2.8	5,781	2.8	5,745	2.7	5,952	2.8	5,656	2.7
Black Only	1,178	3.5	1,198	3.5	1,185	3.5	1,201	3.5	1,156	3.4
NHOPI Only	36	2.7	37	2.8	36	2.8	44	4.0	27	1.8
Asian Only	178	1.2	182	1.2	180	1.2	181	1.2	174	1.2
AIAN Only	103	3.2	107	3.4	105	3.3	105	3.3	101	3.2
2 or More Races	261	4.7	261	4.7	255	4.6	255	4.7	267	4.7
12-17										
White Only	629	3.4	632	3.4	631	3.4	660	3.6	598	3.3
Black Only	104	2.8	105	2.8	105	2.8	103	2.7	105	2.8
NHOPI Only	10	5.4	9	5.2	9	5.3	*	*	5	3.0
Asian Only	25	1.9	25	1.9	25	1.9	20	1.6	29	2.1
AIAN Only	12	3.1	15	3.7	14	3.5	13	3.1	12	3.1
2 or More Races	42	4.5	43	4.7	43	4.6	44	4.8	40	4.2
18+										
White Only	5,174	2.7	5,149	2.7	5,114	2.7	5,291	2.8	5,058	2.6
Black Only	1,075	3.5	1,093	3.6	1,080	3.6	1,098	3.6	1,051	3.4
NHOPI Only	26	2.3	28	2.4	28	2.4	29	3.3	22	1.6
Asian Only	153	1.1	157	1.2	155	1.1	161	1.2	145	1.1
AIAN Only	91	3.3	92	3.3	91	3.3	92	3.4	89	3.2
2 or More Races	219	4.7	217	4.7	212	4.6	211	4.6	227	4.8

(continued)

Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
White Only	1,844	7.2	1,852	7.2	1,857	7.3	1,876	7.3	1,811	7.1
Black Only	411	7.7	417	7.8	425	8.0 a	415	7.7	408	7.7
NHOPI Only	14	5.8	15	6.2 a	15	6.3 a	18	7.2	10	4.3
Asian Only	68	3.2	68	3.2	65	3.1	86	4.2	51	2.3
AIAN Only	40	7.6	41	7.7	41	7.6	35	6.7	45	8.4
2 or More Races	102	10.6	103	10.8	100	10.3	101	10.1	103	11.2
26-49										
White Only	2,520	3.4	2,474	3.3	2,446	3.3 a	2,575	3.4	2,465	3.3
Black Only	402	3.0	403	3.1	386	2.9	434	3.3	370	2.8
NHOPI Only	12	2.3	13	2.6	13	2.6	12	2.7	12	2.0
Asian Only	64	0.9	65	0.9	65	0.9	64	0.9	63	0.9
AIAN Only	45	3.4	44	3.3	41	3.0	51	3.8	39	2.9
2 or More Races	93	4.9	89	4.6	88	4.6	103	5.6	83	4.2
50+										
White Only	811	0.9	823	0.9	811	0.9	840	0.9	781	0.9
Black Only	262	2.2	272	2.3 a	269	2.3	250	2.1	274	2.3
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	21	0.5	24	0.5	25	0.6	11	0.2	*	* *
AIAN Only	6	0.6	7	0.7	9	1.0	6	0.7	5	0.5
2 or More Races	24	1.3	25	1.4	24	1.4	7	0.4	40	2.2
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	1,210	2.8	1,208	2.7	1,182	2.7	1,291	3.0	1,130	2.5
Not Hispanic/Latino	6,349	2.8	6,357	2.8	6,324	2.8	6,447	2.9	6,251	2.8
12-17										
Hispanic/Latino	223	3.8	220	3.8	220	3.8	250	4.3	196	3.4
Not Hispanic/Latino	599	3.1	610	3.2 a	608	3.2	605	3.2	593	3.1
18+										
Hispanic/Latino	987	2.6	988	2.6	963	2.5	1,041	2.8	934	2.4
Not Hispanic/Latino	5,750	2.8	5,747	2.8	5,717	2.8	5,842	2.8	5,658	2.7
18-25										
Hispanic/Latino	481	6.4	483	6.5	478	6.4	506	6.8	456	6.1
Not Hispanic/Latino	1,998	7.3	2,013	7.4	2,024	7.4	2,024	7.4	1,972	7.3

(continued)



Table J.1 Past Year Illicit Drug Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
Hispanic/Latino	432	2.2	430	2.2	415	2.1	435	2.2	430	2.2
Not Hispanic/Latino	2,703	3.4	2,659	3.3	2,624	3.3 a	2,804	3.5	2,602	3.3
50+										
Hispanic/Latino	74	0.7	75	0.7	69	0.6	100	0.9	48	0.4
Not Hispanic/Latino	1,049	1.1	1,075	1.1 a	1,069	1.1	1,014	1.0	1,084	1.1
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	304	4.8	302	4.8	304	4.9	339	5.5	269	4.2 a
18-25	912	5.3	918	5.3	919	5.3	929	5.4	896	5.2
26-44	943	2.4	932	2.3	933	2.3	886	2.3	1,000	2.5
Pregnant Female Aged 15-44										
15-17	*	*	*	*	*	*	*	*	*	*
18-25	34	4.5	34	4.5	33	4.4	53	6.4	15	2.3 a
26-44	33	2.2	32	2.1	33	2.2	22	1.6	43	2.8
Not Pregnant Female Aged 15-44										
15-17	303	4.9	300	4.8	302	4.9	338	5.5	268	4.3 a
18-25	878	5.3	884	5.4	886	5.4	876	5.3	881	5.4
26-44	910	2.4	900	2.4	900	2.4	864	2.3	957	2.5
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	1,688	3.6	1,674	3.6	1,676	3.6	1,662	3.6	1,715	3.7
Black Only	296	3.1	295	3.1	295	3.1	295	3.1	296	3.1
NHOPI Only	13	3.3	14	3.5	13	3.4	21	5.7	6	1.3
Asian Only	33	0.8	34	0.8	33	0.7	38	0.9	29	0.6
AIAN Only	31	3.6	36	4.1 a	44	4.8	31	3.6	32	3.7
2 or More Races	98	6.4	99	6.4	95	6.1	109	7.2	88	5.7
Pregnant Female Aged 15-44										
White Only	56	3.3	55	3.3	56	3.3	62	3.6	49	3.0
Black Only	9	2.6	9	2.5	8	2.3	12	3.0	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

**Table J.1 Past Year Illicit Drug Use Disorder (continued)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Not Pregnant Female Aged 15-44										
White Only	1,633	3.6	1,620	3.6	1,620	3.6	1,600	3.6	1,665	3.7
Black Only	286	3.1	285	3.1	287	3.2	283	3.1	289	3.1
NHOPI Only	13	3.3	13	3.5	12	3.4	20	5.6	6	1.3
Asian Only	33	0.8	34	0.8	33	0.8	38	0.9	29	0.7
AIAN Only	31	3.8	36	4.3	43	4.9	31	3.8	31	3.7
2 or More Races	96	6.5	97	6.5	92	6.2	106	7.2	85	5.8
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	362	2.8	361	2.8	358	2.8	419	3.3	305	2.4
Not Hispanic/Latino	1,798	3.6	1,791	3.6	1,798	3.6	1,735	3.5	1,860	3.7
Pregnant Female Aged 15-44										
Hispanic/Latino	11	2.3	12	2.5	12	2.4	8	1.6	15	3.1
Not Hispanic/Latino	57	3.2	55	3.0	55	3.0	69	3.8	45	2.5
Not Pregnant Female Aged 15-44										
Hispanic/Latino	351	2.8	349	2.8	346	2.8	411	3.3	290	2.3
Not Hispanic/Latino	1,741	3.6	1,736	3.6	1,742	3.6	1,666	3.5	1,815	3.7

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

## Appendix K: 2015-2016 NSDUH – Weighted Annual Averages Past Year Any Mental Illness (AMI) (Aged 18 or Older) – AMIYR\_U

**Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	44,036	18.1	44,071	18.1	44,051	18.1	43,421	17.9	44,652	18.3
18-25	7,605	21.9	7,636	22.0	7,629	22.0	7,574	21.7	7,635	22.1
26-49	20,746	21.0	20,753	21.0	20,763	21.0	20,589	20.9	20,903	21.1
50+	15,685	14.3	15,682	14.3	15,659	14.2	15,257	14.0	16,114	14.5
<b>Gender</b>										
Male	16,963	14.4	17,018	14.5	16,957	14.4	16,785	14.3	17,142	14.5
Female	27,073	21.5	27,053	21.4	27,095	21.5	26,636	21.2	27,510	21.7
<b>Hispanicity</b>										
Hispanic/Latino	5,777	15.1	5,776	15.1	5,741	15.0	5,502	14.5	6,053	15.7
Not Hispanic/Latino	38,259	18.6	38,295	18.6	38,310	18.6	37,919	18.5	38,598	18.7
<b>Race</b>										
White Only	35,872	18.8	35,892	18.8	35,896	18.8	35,229	18.5	36,516	19.1
Black Only	4,626	15.2	4,636	15.3	4,586	15.1	4,695	15.6	4,557	14.9
NHOPI Only	165	14.6	163	14.1	158	13.9	110	12.2	220	16.1
Asian Only	1,642	12.2	1,608	11.9	1,581	11.7	1,650	12.1	1,634	12.2
AIAN Only	494	17.7	481	17.3	529	19.1	480	17.5	507	18.0
2 or More Races	1,237	26.8	1,292	28.0	1,301	28.2	1,257	27.7	1,218	25.9
<b>Division</b>										
New England	2,222	19.2	2,230	19.3	2,221	19.2	2,249	19.5	2,195	18.9
Middle Atlantic	5,586	17.4	5,579	17.4	5,570	17.3	5,457	17.0	5,715	17.8
East North Central	6,274	17.7	6,373	17.9	6,361	17.9	6,467	18.2	6,081	17.1
West North Central	2,777	17.5	2,788	17.6	2,806	17.7	2,700	17.1	2,854	18.0
South Atlantic	8,867	18.3	8,790	18.1	8,773	18.1	8,724	18.1	9,010	18.5
East South Central	2,855	20.0	2,814	19.8	2,811	19.7	2,884	20.3	2,827	19.8
West South Central	4,733	16.6	4,769	16.7	4,785	16.8	4,665	16.5	4,801	16.8
Mountain	3,456	19.7	3,490	19.9	3,483	19.8	3,492	20.0	3,420	19.3
Pacific	7,266	18.2	7,238	18.2	7,241	18.2	6,783	17.1	7,749	19.4

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	23,756	17.5	24,236	17.6	24,512	17.6	23,474	17.3	24,038	17.6
Small Metro, pop 250,000-1,000,000	9,675	19.2	9,765	19.2	9,545	19.1	9,547	18.9	9,804	19.6
Small Metro, < 250,000 population	4,275	18.3	4,203	18.2	4,205	18.3	4,286	18.3	4,263	18.2
Nonmetro, 20,000 or more urban pop	2,564	18.5	2,496	18.4	2,473	18.3	2,666	19.4	2,461	17.7
Nonmetro, 2,500-19,999 urban pop	3,111	18.7	2,804	18.4	2,749	18.7	2,731	17.5	3,491	19.8
Nonmetro, < 2,500 urban pop	655	17.3	568	18.0	567	18.1	717	17.1	594	17.6
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	4,575	21.6	4,589	21.7	4,519	21.7	4,559	21.4	4,591	21.8
Full-Time College Students	1,667	21.0	1,668	20.9	1,549	20.7	1,690	21.4	1,645	20.6
Other Persons Aged 18 to 22 <sup>2</sup>	2,908	22.0	2,921	22.2	2,969	22.2	2,869	21.5	2,946	22.5
<b>Pregnancy</b>										
Female Aged 18-44 <sup>3</sup>	14,685	25.8	14,727	25.9	14,778	26.0	14,542	25.7	14,827	25.9
Pregnant Female Aged 18-44	393	17.6	396	17.6	397	17.5	383	17.0	404	18.2
Not Pregnant Female Aged 18-44	14,291	26.1	14,331	26.2	14,381	26.3	14,159	26.0	14,423	26.2
<b>Division by Age Group</b>										
New England										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,222	19.2	2,230	19.3	2,221	19.2	2,249	19.5	2,195	18.9
18-25	403	24.4	400	24.2	401	24.3	390	23.6	417	25.2
26-49	1,045	23.5	1,053	23.7	1,045	23.5	1,105	24.8	985	22.3
50+	773	14.1	778	14.2	775	14.1	754	13.8	792	14.4
Middle Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	5,586	17.4	5,579	17.4	5,570	17.3	5,457	17.0	5,715	17.8
18-25	985	22.2	990	22.3	991	22.4	988	22.1	982	22.3
26-49	2,554	19.9	2,564	20.0	2,553	19.9	2,473	19.2	2,634	20.6
50+	2,048	13.8	2,026	13.6	2,025	13.6	1,996	13.5	2,100	14.1

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses			Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses			2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central												
12+	--	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--	--
18+	6,274	17.7	6,373	17.9	a	6,361	17.9	a	6,467	18.2	6,081	17.1
18-25	1,156	22.8	1,164	22.9		1,159	22.9		1,150	22.6	1,162	23.0
26-49	2,896	20.7	2,919	20.9		2,919	20.9		2,961	21.2	2,830	20.3
50+	2,222	13.5	2,291	13.9	a	2,283	13.8	a	2,356	14.3	2,088	12.6
West North Central												
12+	--	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--	--
18+	2,777	17.5	2,788	17.6		2,806	17.7		2,700	17.1	2,854	18.0
18-25	485	20.9	492	21.2		493	21.2		451	19.4	519	22.4
26-49	1,258	20.2	1,245	20.0		1,246	20.0		1,192	19.2	1,323	21.3
50+	1,035	14.2	1,051	14.4		1,067	14.6		1,057	14.5	1,012	13.8
South Atlantic												
12+	--	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--	--
18+	8,867	18.3	8,790	18.1		8,773	18.1		8,724	18.1	9,010	18.5
18-25	1,374	21.0	1,375	21.0		1,386	21.2		1,378	20.9	1,371	21.1
26-49	3,905	20.3	3,887	20.2		3,876	20.1		3,974	20.7	3,836	19.8
50+	3,588	15.8	3,527	15.6		3,511	15.5		3,373	15.0	3,803	16.6
East South Central												
12+	--	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--	--
18+	2,855	20.0	2,814	19.8		2,811	19.7		2,884	20.3	2,827	19.8
18-25	395	19.5	392	19.3		395	19.5		372	18.3	418	20.7
26-49	1,344	23.9	1,309	23.3		1,306	23.2		1,326	23.6	1,362	24.2
50+	1,116	16.9	1,113	16.9		1,111	16.8		1,185	18.1	1,047	15.8
West South Central												
12+	--	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--	--
18+	4,733	16.6	4,769	16.7		4,785	16.8		4,665	16.5	4,801	16.8
18-25	819	18.9	830	19.2		824	19.0		817	18.8	822	19.0
26-49	2,358	19.2	2,372	19.3		2,415	19.7		2,355	19.3	2,362	19.1
50+	1,555	13.1	1,567	13.2		1,546	13.0		1,493	12.7	1,618	13.5

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	3,456	19.7	3,490	19.9	3,483	19.8	3,492	20.0	3,420	19.3
18-25	617	23.8	624	24.1	617	23.8	584	22.6	651	25.1
26-49	1,713	23.6	1,723	23.8	1,719	23.7	1,763	24.5	1,662	22.7
50+	1,126	14.5	1,144	14.8	1,147	14.8	1,144	14.9	1,108	14.2
Pacific										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	7,266	18.2	7,238	18.2	7,241	18.2	6,783	17.1	7,749	19.4
18-25	1,369	23.7	1,371	23.7	1,363	23.6	1,444	24.8	1,294	22.6
26-49	3,674	21.6	3,681	21.7	3,684	21.7	3,440	20.3	3,908	22.9
50+	2,223	13.0	2,186	12.8	2,194	12.9	1,899	11.2	2,546	14.8
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	173	16.5	174	16.6	169	16.1	171	16.5	175	16.4
Not Hispanic/Latino	2,049	19.5	2,056	19.5	2,052	19.5	2,079	19.8	2,020	19.2
Middle Atlantic										
Hispanic/Latino	786	17.5	771	17.2	759	16.9	700	15.7	871	19.3
Not Hispanic/Latino	4,800	17.4	4,808	17.4	4,810	17.4	4,757	17.2	4,844	17.6
East North Central										
Hispanic/Latino	398	15.9	410	16.3	409	16.3	413	16.6	383	15.2
Not Hispanic/Latino	5,875	17.8	5,963	18.1	5,953	18.0	6,053	18.3	5,697	17.3
West North Central										
Hispanic/Latino	100	12.6	90	11.4	87	11.1	69	8.8	130	16.4
Not Hispanic/Latino	2,678	17.8	2,698	17.9	2,719	18.1	2,631	17.5	2,724	18.1
South Atlantic										
Hispanic/Latino	900	14.8	925	15.2	921	15.1	883	14.7	917	14.9
Not Hispanic/Latino	7,967	18.8	7,864	18.5	7,852	18.5	7,842	18.6	8,093	19.0
East South Central										
Hispanic/Latino	106	22.4	94	19.9	95	20.1	*	*	*	*
Not Hispanic/Latino	2,749	20.0	2,720	19.7	2,717	19.7	2,788	20.3	2,711	19.6

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
Hispanic/Latino	969	12.7	993	13.0	991	13.0	894	11.9	1,044	13.6
Not Hispanic/Latino	3,764	18.0	3,777	18.1	3,794	18.2	3,770	18.1	3,758	17.9
Mountain										
Hispanic/Latino	635	16.6	645	16.9	645	16.9	622	16.5	648	16.8
Not Hispanic/Latino	2,821	20.5	2,845	20.7	2,838	20.6	2,869	21.0	2,772	20.0
Pacific										
Hispanic/Latino	1,711	15.1	1,674	14.8	1,665	14.7	1,653	14.7	1,768	15.5
Not Hispanic/Latino	5,555	19.5	5,565	19.5	5,576	19.6	5,129	18.1	5,980	20.9 a
<b>Division by Race</b>										
New England										
White Only	1,945	19.5	1,947	19.5	1,949	19.6	1,965	19.7	1,926	19.3
Black Only	138	17.0	141	17.4	133	16.4	128	16.0	147	17.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	73	13.9	72	14.1	70	13.9	70	13.7	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
Middle Atlantic										
White Only	4,392	18.0	4,407	18.1	4,398	18.1	4,221	17.3	4,563	18.8
Black Only	802	17.5	783	17.0	781	17.0	854	18.6	750	16.3
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	220	9.5	217	9.4	217	9.4	207	8.9	233	10.1
AIAN Only	30	14.1	30	14.1	30	14.2	39	18.4	21	9.8
2 or More Races	130	25.4	128	25.0	129	25.1	129	25.5	131	25.2
East North Central										
White Only	5,396	18.2	5,460	18.5 a	5,453	18.4 a	5,582	18.9	5,209	17.6
Black Only	566	13.9	571	14.1	569	14.0	608	15.0	525	12.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	137	11.8	140	12.1	140	12.0	125	10.9	148	12.6
AIAN Only	45	23.3	47	24.9	46	24.7	*	*	*	*
2 or More Races	129	26.0	154	31.0 a	152	30.6	108	22.1	149	29.7

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	2,361	16.9	2,363	16.9	2,370	17.0	2,260	16.2	2,461	17.6
Black Only	167	16.8	178	17.9	174	17.6	164	16.7	169	16.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	42	22.3	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
South Atlantic										
White Only	6,836	19.4	6,803	19.3	6,819	19.3	6,692	19.1	6,980	19.7
Black Only	1,550	15.0	1,535	14.9	1,511	14.6	1,565	15.3	1,534	14.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	252	15.0	238	14.1	225	13.3	256	15.4	248	14.6
AIAN Only	49	15.8	51	16.4	51	16.7	37	11.7	*	*
2 or More Races	165	21.5	148	19.4	151	19.8	164	21.4	166	21.7
East South Central										
White Only	2,353	21.4	2,295	20.8	2,294	20.8	2,410	21.9	2,296	20.8
Black Only	413	14.8	415	14.9	414	14.9	374	13.5	451	16.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
West South Central										
White Only	3,909	17.5	3,936	17.6	3,921	17.6	3,819	17.2	3,998	17.8
Black Only	533	13.4	551	13.8	548	13.7	569	14.4	498	12.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	92	8.2	92	8.2	86	7.7	105	9.2	79	7.2
AIAN Only	86	17.6	78	16.2	100	20.5	67	14.3	*	*
2 or More Races	97	20.0	101	20.5	121	25.0	94	20.4	100	19.7
Mountain										
White Only	3,022	19.8	3,048	20.0	3,052	20.0	3,056	20.2	2,989	19.4
Black Only	121	18.0	134	20.0	134	19.9	116	17.5	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	72	13.0	65	11.7	63	11.3	*	*	51	9.1
AIAN Only	88	14.8	87	14.6	88	14.8	82	13.9	94	15.6
2 or More Races	132	35.1	134	35.8	125	33.4	*	*	*	*

(continued)



Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pacific										
White Only	5,659	19.1	5,636	19.1	5,640	19.1	5,223	17.7	6,095	20.6 a
Black Only	336	15.6	329	15.2	323	15.0	317	14.7	356	16.4
NHOPI Only	91	16.8	90	16.6	90	16.7	47	12.0	*	* *
Asian Only	686	12.5	678	12.3	676	12.3	677	12.1	696	12.9
AIAN Only	118	17.5	122	18.0	129	19.1	116	17.7	119	17.3
2 or More Races	375	27.2	384	27.9	383	27.9	403	29.6	347	24.9
<b>County Type by Age Group</b>										
Large Metro										
12+	--	--	--	-- --	--	-- --	--	--	--	-- --
12-17	--	--	--	-- --	--	-- --	--	--	--	-- --
18+	23,756	17.5	24,236	17.6 a	24,512	17.6	23,474	17.3	24,038	17.6
18-25	4,252	22.1	4,298	22.0	4,348	22.0	4,203	21.7	4,301	22.4
26-49	11,460	19.5	11,696	19.6 a	11,847	19.7 a	11,339	19.4	11,580	19.6
50+	8,044	13.9	8,242	14.0	8,317	14.0	7,932	13.8	8,156	14.0
Small Metro, pop 250,000-1,000,000										
12+	--	--	--	-- --	--	-- --	--	--	--	-- --
12-17	--	--	--	-- --	--	-- --	--	--	--	-- --
18+	9,675	19.2	9,765	19.2	9,545	19.1	9,547	18.9	9,804	19.6
18-25	1,656	22.2	1,693	22.5 a	1,660	22.4	1,648	21.7	1,665	22.6
26-49	4,544	23.2	4,589	23.2	4,487	23.0	4,600	23.2	4,488	23.1
50+	3,475	15.0	3,482	14.9	3,398	14.8	3,299	14.2	3,652	15.7
Small Metro, < 250,000 population										
12+	--	--	--	-- --	--	-- --	--	--	--	-- --
12-17	--	--	--	-- --	--	-- --	--	--	--	-- --
18+	4,275	18.3	4,203	18.2	4,205	18.3	4,286	18.3	4,263	18.2
18-25	763	21.3	757	21.3	750	21.1	768	22.0	758	20.6
26-49	2,007	23.6	1,971	23.5	1,967	23.6	2,070	23.9	1,944	23.3
50+	1,505	13.3	1,475	13.2	1,488	13.4	1,448	12.9	1,561	13.8

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 20,000 or more urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,564	18.5	2,496	18.4	2,473	18.3	2,666	19.4	2,461	17.7
18-25	429	21.5	418	21.4	419	21.3	469	22.9	389	20.1
26-49	1,139	22.4	1,104	22.3	1,100	22.4	1,159	23.0	1,119	21.9
50+	996	14.8	973	14.6	955	14.4	1,039	15.7	953	13.9
Nonmetro, 2,500-19,999 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	3,111	18.7	2,804	18.4	2,749	18.7	2,731	17.5	3,491	19.8
18-25	436	21.7	411	22.0	394	22.4	410	21.0	461	22.3
26-49	1,297	23.1	1,142	22.7	1,122	23.1	1,104	21.5	1,489	24.4
50+	1,379	15.3	1,251	15.0	1,232	15.2	1,216	14.3	1,541	16.2
Nonmetro, < 2,500 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	655	17.3	568	18.0	567	18.1	717	17.1	594	17.6
18-25	69	17.2	59	18.8	59	18.9	76	17.2	62	17.2
26-49	300	22.9	250	23.7	240	23.6	317	21.9	282	24.2
50+	287	13.8	259	14.5	268	14.9	323	14.0	250	13.5
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	3,863	14.7	3,916	14.8	3,924	14.7	3,767	14.3	3,959	15.1
Not Hispanic/Latino	19,893	18.2	20,320	18.2	20,588	18.3	19,707	18.1	20,078	18.2
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	1,275	16.9	1,247	16.7	1,209	16.4	1,153	16.0	1,398	17.8
Not Hispanic/Latino	8,400	19.6	8,518	19.7	8,336	19.6	8,394	19.3	8,406	20.0
Small Metro, < 250,000 population										
Hispanic/Latino	318	13.5	310	13.3	306	13.3	250	11.0	387	15.8
Not Hispanic/Latino	3,956	18.8	3,893	18.7	3,899	18.8	4,036	19.1	3,876	18.5
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	165	15.8	163	16.4	164	16.4	205	18.1	124	13.0
Not Hispanic/Latino	2,399	18.8	2,332	18.6	2,310	18.4	2,461	19.5	2,337	18.0

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	132	15.6	120	15.6	117	15.2	95	13.3	169	17.3
Not Hispanic/Latino	2,979	18.9	2,684	18.6	2,632	18.9	2,636	17.7	3,322	19.9
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	632	17.2	548	17.9	546	18.0	685	16.9	579	17.6
<b>County Type by Race</b>										
Large Metro										
White Only	18,401	18.3	18,761	18.4	18,960	18.4	18,063	18.0	18,739	18.7
Black Only	3,012	15.0	3,083	15.2	3,096	15.1	3,085	15.5	2,938	14.5
NHOPI Only	108	14.8	107	14.3	104	13.9	66	11.7	150	16.7
Asian Only	1,330	12.4	1,331	12.3	1,320	12.2	1,275	12.0	1,385	12.8
AIAN Only	202	15.3	211	16.0	274	19.1	242	17.7	161	12.6
2 or More Races	704	29.0	744	29.4	758	29.3	744	31.8	664	26.4
Small Metro, pop 250,000-1,000,000										
White Only	8,210	19.9	8,322	20.0	8,164	20.0	8,059	19.4	8,360	20.4
Black Only	833	15.9	818	15.5	782	15.0	870	16.4	795	15.4
NHOPI Only	30	11.8	32	12.1	31	12.1	30	13.3	31	10.6
Asian Only	191	10.1	182	9.6	163	8.8	247	12.7	136	7.4
AIAN Only	122	22.1	118	20.3	118	19.2	67	12.0	178	32.3
2 or More Races	289	25.7	293	25.5	287	26.3	273	24.6	304	26.8
Small Metro, < 250,000 population										
White Only	3,687	18.5	3,683	18.6	3,697	18.7	3,656	18.5	3,718	18.5
Black Only	325	15.1	296	14.1	278	14.0	338	14.8	312	15.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	92	16.1	69	13.4	66	12.8	*	*	76	14.8
AIAN Only	51	20.5	54	17.9	60	17.8	*	*	39	15.6
2 or More Races	101	26.2	86	24.5	87	24.5	*	*	91	22.3
Nonmetro, 20,000 or more urban pop										
White Only	2,271	19.1	2,200	18.9	2,181	18.8	2,365	20.0	2,177	18.3
Black Only	182	15.5	181	15.2	182	15.2	184	17.1	181	14.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	22	11.0	20	10.6	19	9.2	15	6.9	*	*
AIAN Only	29	11.9	33	12.3	27	11.2	28	13.5	*	*
2 or More Races	54	19.0	56	23.7	*	*	*	*	36	16.8

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses			Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses			2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop												
White Only	2,708	18.9	2,402	18.2	a	2,365	18.3		2,434	18.0	2,982	19.6
Black Only	249	16.5	237	17.5		227	17.1		172	12.7	326	19.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*	*	*
AIAN Only	66	21.4	49	20.2		*	*	*	*	*	*	*
2 or More Races	79	26.4	*	*	*	*	*	*	*	*	*	*
Nonmetro, < 2,500 urban pop												
White Only	595	17.9	525	18.5		530	18.7		651	17.6	540	18.2
Black Only	25	10.3	*	*	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*	*	*
AIAN Only	23	22.6	*	*	*	*	*	*	15	18.0	30	26.0
2 or More Races	*	*	*	*	*	*	*	*	*	*	*	*
<b>College Enrollment by Gender</b>												
Persons Aged 18 to 22 <sup>1</sup>												
Male	1,836	16.9	1,826	16.8		1,803	16.8		1,805	16.6	1,866	17.2
Female	2,740	26.5	2,763	26.8	a	2,716	26.8		2,754	26.4	2,725	26.7
Full-Time College Students												
Male	622	17.0	617	16.7		583	16.8		656	17.5	589	16.4
Female	1,045	24.5	1,050	24.5		966	24.0		1,034	24.9	1,056	24.2
Other Persons Aged 18 to 22 <sup>2</sup>												
Male	1,213	16.9	1,209	16.9		1,219	16.9		1,149	16.2	1,277	17.6
Female	1,695	28.0	1,713	28.4	a	1,750	28.6	a	1,720	27.5	1,669	28.5
<b>Age Group by Gender</b>												
12+												
Male	--	--	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--	--	--
12-17												
Male	--	--	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--	--	--
18+												
Male	16,963	14.4	17,018	14.5		16,957	14.4		16,785	14.3	17,142	14.5
Female	27,073	21.5	27,053	21.4		27,095	21.5		26,636	21.2	27,510	21.7

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
Male	3,052	17.5	3,055	17.5	3,044	17.5	3,027	17.3	3,078	17.7
Female	4,553	26.3	4,581	26.5	4,585	26.5	4,547	26.2	4,558	26.5
26-49										
Male	8,258	17.0	8,248	17.0	8,236	16.9	8,212	16.9	8,305	17.0
Female	12,488	24.8	12,505	24.9	12,527	24.9	12,377	24.7	12,598	25.0
50+										
Male	5,653	11.0	5,715	11.1	5,676	11.0	5,546	10.9	5,759	11.1
Female	10,033	17.1	9,967	17.0	9,983	17.0	9,711	16.7	10,354	17.5
<b>Age Group by Race</b>										
12+										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
12-17										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
18+										
White Only	35,872	18.8	35,892	18.8	35,896	18.8	35,229	18.5	36,516	19.1
Black Only	4,626	15.2	4,636	15.3	4,586	15.1	4,695	15.6	4,557	14.9
NHOPI Only	165	14.6	163	14.1	158	13.9	110	12.2	220	16.1
Asian Only	1,642	12.2	1,608	11.9	1,581	11.7	1,650	12.1	1,634	12.2
AIAN Only	494	17.7	481	17.3	529	19.1	480	17.5	507	18.0
2 or More Races	1,237	26.8	1,292	28.0	1,301	28.2	1,257	27.7	1,218	25.9

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
White Only	5,977	23.4	6,000	23.5	6,016	23.5	5,945	23.1	6,009	23.6
Black Only	812	15.2	810	15.2	801	15.0	800	14.9	825	15.6
NHOPI Only	38	16.0	38	16.1	38	16.2	35	13.9	42	18.2
Asian Only	416	19.6	416	19.6	405	19.2	416	20.2	415	19.0
AIAN Only	96	18.3	105	19.8	98	18.1	87	16.9	105	19.6
2 or More Races	266	27.6	267	27.8	271	27.9	291	29.1	240	25.9
26-49										
White Only	16,727	22.3	16,717	22.3	16,701	22.3	16,622	22.2	16,832	22.4
Black Only	2,206	16.7	2,222	16.8	2,208	16.7	2,191	16.7	2,221	16.7
NHOPI Only	95	18.4	93	17.9	89	18.0	68	15.9	121	20.2
Asian Only	895	13.0	880	12.9	879	12.8	880	12.7	911	13.3
AIAN Only	248	18.5	254	18.7	295	21.6	256	18.9	240	18.1
2 or More Races	575	30.2	587	30.5	592	31.1	573	31.2	578	29.2
50+										
White Only	13,169	14.5	13,176	14.5	13,179	14.5	12,662	14.1	13,676	15.0
Black Only	1,607	13.6	1,603	13.5	1,578	13.3	1,705	14.6	1,510	12.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	330	7.4	311	6.9	296	6.6	353	7.6	308	7.0
AIAN Only	150	16.3	122	13.7	135	15.6	137	15.7	162	17.0
2 or More Races	396	22.6	438	25.2	439	25.1	393	22.9	400	22.2
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
Not Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
12-17										
Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
Not Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
18+										
Hispanic/Latino	5,777	15.1	5,776	15.1	5,741	15.0	5,502	14.5	6,053	15.7
Not Hispanic/Latino	38,259	18.6	38,295	18.6	38,310	18.6	37,919	18.5	38,598	18.7
18-25										
Hispanic/Latino	1,427	19.1	1,421	19.0	1,411	18.9	1,413	18.9	1,442	19.3
Not Hispanic/Latino	6,178	22.7	6,215	22.8	6,218	22.8	6,161	22.4	6,194	22.9

(continued)

Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
Hispanic/Latino	2,909	15.0	2,905	14.9	2,881	14.8	2,844	14.7	2,975	15.2
Not Hispanic/Latino	17,836	22.5	17,847	22.5	17,882	22.5	17,746	22.4	17,927	22.5
50+										
Hispanic/Latino	1,441	12.8	1,450	12.9	1,449	12.9	1,245	11.3	1,636	14.3
Not Hispanic/Latino	14,245	14.4	14,232	14.4	14,210	14.4	14,012	14.3	14,477	14.6
<b>Pregnancy by Age Group</b>										
Female Aged 18-44 <sup>3</sup>										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	4,534	26.3	4,562	26.5	4,566	26.5	4,532	26.2	4,537	26.5
26-44	10,150	25.5	10,165	25.6	10,213	25.7	10,010	25.4	10,290	25.7
Pregnant Female Aged 18-44										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	140	18.7	138	18.5	137	18.1	165	19.9	115	17.3
26-44	254	17.0	258	17.1	260	17.2	218	15.3	289	18.6
Not Pregnant Female Aged 18-44										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	4,395	26.7	4,424	26.9	4,428	26.9	4,367	26.5	4,423	26.9
26-44	9,897	25.9	9,907	25.9	9,953	26.0	9,792	25.8	10,001	25.9
<b>Pregnancy by Race</b>										
Female Aged 18-44 <sup>3</sup>										
White Only	11,678	27.8	11,714	27.9	11,760	28.0	11,585	27.7	11,771	28.0
Black Only	1,570	18.5	1,571	18.5	1,558	18.3	1,535	18.2	1,605	18.7
NHOPI Only	79	22.2	78	22.4	75	22.6	75	24.5	*	*
Asian Only	699	17.3	682	16.9	669	16.7	700	17.6	699	17.0
AIAN Only	172	22.6	180	23.2	205	25.3	171	22.6	172	22.7
2 or More Races	486	37.1	501	37.7	510	38.2	476	36.4	497	37.8
Pregnant Female Aged 18-44										
White Only	290	17.6	293	17.7	294	17.7	272	16.1	308	19.0
Black Only	60	17.3	59	16.7	59	16.7	75	20.8	44	13.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

**Table K.1 Past Year Any Mental Illness (AMI) (Aged 18 or Older) (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 18-44										
White Only	11,388	28.2	11,421	28.3	11,466	28.5 a	11,313	28.1	11,463	28.4
Black Only	1,510	18.5	1,512	18.6	1,500	18.4	1,460	18.1	1,561	18.9
NHOPI Only	73	21.1	72	21.3	69	21.6	75	24.7	*	* *
Asian Only	675	17.3	660	16.9	647	16.7	675	17.5	676	17.1
AIAN Only	169	23.3	177	23.7	202	26.1	167	23.2	171	23.3
2 or More Races	476	37.8	489	38.5	498	39.1	469	37.3	482	38.4
<b>Pregnancy by Hispanicity</b>										
Female Aged 18-44 <sup>3</sup>										
Hispanic/Latino	2,244	19.6	2,247	19.6	2,242	19.6	2,183	19.2	2,304	20.0
Not Hispanic/Latino	12,441	27.3	12,480	27.4	12,536	27.5 a	12,359	27.3	12,523	27.4
Pregnant Female Aged 18-44										
Hispanic/Latino	58	12.5	61	12.9	62	12.8	50	10.9	65	14.0
Not Hispanic/Latino	336	18.9	335	18.8	335	18.8	333	18.5	339	19.3
Not Pregnant Female Aged 18-44										
Hispanic/Latino	2,186	19.9	2,186	19.9	2,180	19.9	2,133	19.5	2,239	20.3
Not Hispanic/Latino	12,105	27.7	12,145	27.8	12,201	27.9 a	12,026	27.7	12,184	27.7

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.



# Appendix L: 2015-2016 NSDUH – Weighted Annual Averages Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) – AMHTXRC

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses			Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Age Group</b>											
12+	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--
18+	34,612	14.3	34,825	14.4	a	34,752	14.3	34,243	14.2	34,982	14.4
18-25	4,234	12.3	4,250	12.3		4,272	12.4	4,044	11.7	4,423	12.9
26-49	15,105	15.3	15,197	15.4	a	15,146	15.4	15,057	15.3	15,154	15.4
50+	15,273	13.9	15,378	14.0		15,334	14.0	15,142	13.9	15,404	14.0
<b>Gender</b>											
Male	11,788	10.1	11,938	10.2	a	11,899	10.2	11,945	10.3	11,632	9.9
Female	22,824	18.2	22,887	18.2		22,853	18.2	22,298	17.8	23,350	18.5
<b>Hispanicity</b>											
Hispanic/Latino	3,149	8.3	3,112	8.2		3,045	8.0	3,055	8.1	3,242	8.5
Not Hispanic/Latino	31,464	15.4	31,713	15.5	a	31,707	15.5	31,187	15.3	31,740	15.5
<b>Race</b>											
White Only	30,230	15.9	30,383	16.0	a	30,388	16.0	29,790	15.7	30,670	16.1
Black Only	2,619	8.7	2,671	8.9		2,615	8.7	2,656	8.8	2,581	8.5
NHOPI Only	63	5.7	59	5.2		54	4.8	51	5.7	75	5.6
Asian Only	690	5.2	660	4.9		633	4.7	697	5.2	682	5.1
AIAN Only	289	10.5	294	10.7		303	11.0	299	11.0	279	10.0
2 or More Races	721	15.7	759	16.5		760	16.5	749	16.6	693	14.8
<b>Division</b>											
New England	2,251	19.6	2,261	19.7		2,254	19.6	2,219	19.4	2,283	19.8
Middle Atlantic	4,617	14.5	4,624	14.5		4,599	14.4	4,544	14.2	4,689	14.7
East North Central	5,403	15.3	5,476	15.5	a	5,468	15.5	5,155	14.6	5,651	16.0
West North Central	2,669	16.9	2,715	17.2		2,712	17.2	2,529	16.1	2,810	17.7
South Atlantic	6,825	14.1	6,862	14.2		6,811	14.1	6,618	13.8	7,033	14.5
East South Central	2,022	14.3	2,021	14.3		2,032	14.4	2,108	14.9	1,935	13.7
West South Central	3,335	11.8	3,376	11.9		3,403	12.0	3,341	11.9	3,329	11.7
Mountain	2,420	13.8	2,440	13.9		2,430	13.9	2,629	15.1	2,212	12.6
Pacific	5,070	12.8	5,051	12.8		5,045	12.7	5,100	12.9	5,040	12.7

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	18,718	13.9	19,190	14.0	19,392	14.0	18,551	13.8	18,884	13.9
Small Metro, pop 250,000-1,000,000	7,652	15.3	7,723	15.3	7,472	15.1	7,728	15.3	7,576	15.2
Small Metro, < 250,000 population	3,510	15.1	3,469	15.1	3,480	15.2	3,482	15.0	3,539	15.2
Nonmetro, 20,000 or more urban pop	1,941	14.1	1,927	14.3	1,931	14.3	1,977	14.5	1,905	13.7
Nonmetro, 2,500-19,999 urban pop	2,290	13.9	2,073	13.7	2,031	13.9	1,957	12.6	2,623	14.9
Nonmetro, < 2,500 urban pop	501	13.3	444	14.1	447	14.3	547	13.1	455	13.5
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	2,538	12.1	2,548	12.1	2,522	12.2	2,383	11.3	2,693	12.8
Full-Time College Students	1,001	12.7	1,007	12.7	952	12.8	956	12.1	1,047	13.2
Other Persons Aged 18 to 22 <sup>2</sup>	1,537	11.7	1,541	11.8	1,570	11.8	1,427	10.8	1,646	12.6
<b>Pregnancy</b>										
Female Aged 18-44 <sup>3</sup>	10,333	18.2	10,373	18.3	10,376	18.3	10,168	18.0	10,498	18.4
Pregnant Female Aged 18-44	254	11.4	252	11.2	254	11.2	226	10.1	282	12.7
Not Pregnant Female Aged 18-44	10,079	18.5	10,120	18.6	10,122	18.6	9,941	18.3	10,216	18.7
<b>Division by Age Group</b>										
New England										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,251	19.6	2,261	19.7	2,254	19.6	2,219	19.4	2,283	19.8
18-25	298	18.2	296	18.0	301	18.3	280	17.1	316	19.2
26-49	934	21.2	950	21.6	944	21.4	910	20.6	958	21.8
50+	1,019	18.7	1,015	18.6	1,009	18.5	1,029	19.0	1,009	18.4
Middle Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	4,617	14.5	4,624	14.5	4,599	14.4	4,544	14.2	4,689	14.7
18-25	537	12.2	538	12.2	533	12.1	527	11.9	547	12.5
26-49	2,016	15.8	2,019	15.8	2,000	15.7	2,022	15.8	2,010	15.8
50+	2,063	14.0	2,067	14.0	2,067	14.0	1,995	13.5	2,131	14.4

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	5,403	15.3	5,476	15.5	5,468	15.5	5,155	14.6	5,651	16.0
18-25	736	14.6	743	14.7	746	14.8	679	13.4	794	15.8
26-49	2,314	16.6	2,336	16.8	2,338	16.8	2,342	16.8	2,285	16.5
50+	2,353	14.3	2,396	14.6	2,384	14.5	2,134	13.0	2,572	15.6
West North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,669	16.9	2,715	17.2	2,712	17.2	2,529	16.1	2,810	17.7
18-25	331	14.3	332	14.4	340	14.7	304	13.1	358	15.5
26-49	1,129	18.2	1,125	18.2	1,122	18.1	1,042	16.8	1,216	19.6
50+	1,209	16.6	1,258	17.3	1,251	17.2	1,183	16.4	1,236	16.9
South Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	6,825	14.1	6,862	14.2	6,811	14.1	6,618	13.8	7,033	14.5
18-25	756	11.7	759	11.7	767	11.8	734	11.3	778	12.1
26-49	2,796	14.6	2,798	14.6	2,793	14.5	2,698	14.1	2,894	15.0
50+	3,273	14.5	3,304	14.6	3,251	14.4	3,185	14.3	3,360	14.7
East South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,022	14.3	2,021	14.3	2,032	14.4	2,108	14.9	1,935	13.7
18-25	231	11.5	227	11.3	227	11.3	239	11.8	224	11.2
26-49	998	17.8	1,010	18.0	1,018	18.2	1,043	18.6	954	17.1
50+	792	12.1	784	12.0	788	12.0	827	12.6	758	11.5
West South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	3,335	11.8	3,376	11.9	3,403	12.0	3,341	11.9	3,329	11.7
18-25	411	9.6	415	9.7	427	9.9	387	9.0	434	10.2
26-49	1,590	13.0	1,607	13.1	1,595	13.0	1,576	13.0	1,604	13.0
50+	1,334	11.3	1,354	11.5	1,381	11.7	1,378	11.8	1,291	10.8

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,420	13.8	2,440	13.9	2,430	13.9	2,629	15.1	2,212	12.6 a
18-25	329	12.8	333	12.9	326	12.7	291	11.3	366	14.2 a
26-49	1,043	14.5	1,051	14.6	1,049	14.6	1,095	15.3	991	13.7
50+	1,049	13.6	1,056	13.7	1,054	13.7	1,242	16.2	855	11.0 a
Pacific										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	5,070	12.8	5,051	12.8	5,045	12.7	5,100	12.9	5,040	12.7
18-25	604	10.6	606	10.6	607	10.6	603	10.4	606	10.7
26-49	2,285	13.5	2,302	13.6	2,289	13.5	2,329	13.8	2,242	13.2
50+	2,180	12.9	2,143	12.6	2,149	12.7	2,168	12.9	2,193	12.8
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	154	14.8	153	14.7	147	14.0	148	14.4	161	15.2
Not Hispanic/Latino	2,097	20.1	2,108	20.2	2,107	20.2	2,071	19.8	2,122	20.3
Middle Atlantic										
Hispanic/Latino	503	11.3	485	10.9	471	10.6	453	10.2	553	12.4
Not Hispanic/Latino	4,113	15.0	4,139	15.1	4,128	15.0	4,091	14.9	4,136	15.1
East North Central										
Hispanic/Latino	229	9.1	234	9.3	235	9.4	208	8.4	249	9.9
Not Hispanic/Latino	5,174	15.8	5,241	16.0	5,233	15.9	4,947	15.1	5,402	16.5
West North Central										
Hispanic/Latino	68	8.7	63	8.0	61	7.7	54	7.0	82	10.4
Not Hispanic/Latino	2,601	17.3	2,652	17.7	2,651	17.7	2,474	16.6	2,727	18.1
South Atlantic										
Hispanic/Latino	466	7.7	466	7.7	440	7.3	434	7.3	498	8.1
Not Hispanic/Latino	6,360	15.1	6,396	15.1	6,371	15.1	6,184	14.7	6,535	15.4
East South Central										
Hispanic/Latino	65	14.0	61	13.0	63	13.5	*	*	*	*
Not Hispanic/Latino	1,956	14.3	1,960	14.3	1,969	14.4	2,036	14.9	1,876	13.7
West South Central										
Hispanic/Latino	490	6.5	508	6.7	501	6.6	453	6.1	527	6.9
Not Hispanic/Latino	2,845	13.7	2,868	13.8	2,902	14.0	2,888	14.0	2,802	13.4

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
Hispanic/Latino	356	9.4	351	9.2	347	9.1	369	9.8	344	9.0
Not Hispanic/Latino	2,064	15.1	2,089	15.3	2,083	15.2	2,260	16.6	1,868	13.6
Pacific										a
Hispanic/Latino	817	7.3	791	7.0	782	6.9	864	7.7	770	6.8
Not Hispanic/Latino	4,253	15.0	4,260	15.0	4,263	15.1	4,236	15.0	4,271	15.0
<b>Division by Race</b>										
New England										
White Only	2,067	20.9	2,074	20.9	2,079	21.0	2,038	20.6	2,096	21.2
Black Only	98	12.1	106	13.2	102	12.6	107	13.4	89	10.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	37	7.1	35	6.8	29	5.8	28	5.5	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	40	20.9	*	*	*	*	*	*	*	*
Middle Atlantic										
White Only	4,085	16.9	4,108	16.9	4,094	16.9	3,964	16.3	4,205	17.4
Black Only	368	8.1	358	7.9	348	7.6	383	8.4	353	7.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	54	2.4	47	2.0	46	2.0	70	3.0	39	1.7
AIAN Only	21	9.9	23	11.1	24	11.1	31	14.9	11	5.0
2 or More Races	79	15.7	77	15.3	78	15.3	*	*	75	14.7
East North Central										
White Only	4,912	16.7	4,970	16.9	4,963	16.9	4,634	15.7	5,190	17.6
Black Only	336	8.3	342	8.5	343	8.5	382	9.5	290	7.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	48	4.2	51	4.4	50	4.3	35	3.1	62	5.3
AIAN Only	*	*	*	*	35	18.7	*	*	*	*
2 or More Races	67	13.7	75	15.3	75	15.2	60	12.2	75	15.2
West North Central										
White Only	2,409	17.3	2,419	17.4	2,429	17.4	2,289	16.5	2,528	18.1
Black Only	111	11.3	122	12.4	119	12.1	101	10.3	122	12.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
South Atlantic										
White Only	5,746	16.4	5,786	16.5	5,769	16.4	5,602	16.0	5,890	16.7
Black Only	887	8.6	889	8.7	864	8.4	850	8.3	923	8.9
NHOPI Only	3	1.6	2	1.3	*	* *	*	*	*	*
Asian Only	84	5.0	80	4.8	67	4.0	91	5.5	76	4.5
AIAN Only	10	3.4	20	6.4	*	* *	6	2.1	14	4.7
2 or More Races	96	12.6	85	11.2	89	11.6	65	8.5	128	16.6 a
East South Central										
White Only	1,776	16.2	1,779	16.2	1,785	16.3	1,878	17.2	1,673	15.3
Black Only	204	7.4	203	7.3	207	7.5	173	6.3	235	8.5
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	*	*	*	* *	*	* *	*	*	*	*
2 or More Races	*	*	*	* *	*	* *	*	*	*	*
West South Central										
White Only	2,828	12.7	2,848	12.8	2,880	13.0	2,837	12.8	2,818	12.6
Black Only	353	8.9	372	9.4	360	9.1	342	8.7	364	9.1
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	35	3.2	36	3.3	33	3.0	35	3.1	36	3.3
AIAN Only	45	9.2	42	8.8	49	10.2	40	8.6	49	9.7
2 or More Races	62	12.8	69	14.2 a	74	15.4	83	18.0	41	8.0
Mountain										
White Only	2,191	14.4	2,206	14.5	2,198	14.5	2,383	15.8	2,000	13.1 a
Black Only	63	9.4	76	11.4	76	11.4	*	*	42	6.3 *
NHOPI Only	3	2.8	3	2.5	2	2.1	*	*	*	* *
Asian Only	*	*	48	8.7 *	48	8.7 *	*	*	*	* *
AIAN Only	50	8.5	46	7.8	48	8.0	49	8.2	52	8.8
2 or More Races	56	15.0	61	16.2	58	15.5	60	16.6	52	13.5
Pacific										
White Only	4,217	14.3	4,193	14.3	4,192	14.3	4,163	14.2	4,270	14.5
Black Only	199	9.3	203	9.5	196	9.1	234	11.0	163	7.6
NHOPI Only	31	5.7	30	5.6	29	5.4	28	7.2	34	4.9
Asian Only	309	5.6	308	5.6	307	5.6	311	5.6	307	5.7
AIAN Only	64	9.6	63	9.4	67	10.1	68	10.4	60	8.9
2 or More Races	251	18.3	253	18.5	254	18.6	296	21.8	207	14.9

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type by Age Group</b>										
Large Metro										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	18,718	13.9	19,190	14.0	19,392	14.0	18,551	13.8	18,884	13.9
18-25	2,248	11.7	2,286	11.8	2,327	11.9	2,135	11.1	2,361	12.4
26-49	8,480	14.5	8,706	14.7	8,762	14.6	8,536	14.6	8,424	14.4
50+	7,989	13.9	8,197	14.0	8,303	14.0	7,880	13.8	8,098	14.0
Small Metro, pop 250,000-1,000,000										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	7,652	15.3	7,723	15.3	7,472	15.1	7,728	15.3	7,576	15.2
18-25	940	12.7	962	12.9	943	12.8	920	12.3	959	13.1
26-49	3,164	16.2	3,190	16.2	3,100	16.0	3,122	15.8	3,207	16.6
50+	3,548	15.3	3,570	15.3	3,429	15.0	3,686	15.9	3,410	14.8
Small Metro, < 250,000 population										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	3,510	15.1	3,469	15.1	3,480	15.2	3,482	15.0	3,539	15.2
18-25	465	13.1	460	13.0	463	13.1	443	12.8	487	13.4
26-49	1,499	17.7	1,476	17.6	1,478	17.8	1,528	17.7	1,470	17.7
50+	1,546	13.8	1,533	13.8	1,539	13.9	1,511	13.5	1,581	14.0
Nonmetro, 20,000 or more urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,941	14.1	1,927	14.3	1,931	14.3	1,977	14.5	1,905	13.7
18-25	277	14.0	269	13.9	274	14.1	294	14.4	260	13.6
26-49	756	14.9	749	15.2	746	15.2	764	15.2	748	14.7
50+	908	13.5	910	13.7	911	13.8	920	13.9	896	13.1
Nonmetro, 2,500-19,999 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,290	13.9	2,073	13.7	2,031	13.9	1,957	12.6	2,623	14.9
18-25	262	13.1	235	12.7	230	13.1	221	11.4	303	14.7
26-49	982	17.5	886	17.7	870	18.0	857	16.8	1,107	18.2
50+	1,046	11.7	952	11.5	931	11.6	879	10.4	1,213	12.9

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, < 2,500 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	501	13.3	444	14.1	447	14.3	547	13.1	455	13.5
18-25	42	10.4	37	12.0	36	11.6	31	7.0	52	14.5
26-49	224	17.2	191	18.3	190	18.8	250	17.4	199	17.0
50+	235	11.4	215	12.1	222	12.3	266	11.7	205	11.1
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	2,130	8.2	2,151	8.2	2,143	8.1	2,122	8.1	2,137	8.2
Not Hispanic/Latino	16,588	15.2	17,039	15.4	17,248	15.4	16,429	15.2	16,747	15.3
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	605	8.1	567	7.6	514	7.0	461	6.4	749	9.6
Not Hispanic/Latino	7,047	16.6	7,155	16.6	6,957	16.4	7,267	16.8	6,827	16.3
Small Metro, < 250,000 population										
Hispanic/Latino	214	9.1	211	9.2	206	9.1	279	12.4	149	6.1
Not Hispanic/Latino	3,296	15.8	3,258	15.7	3,274	15.9	3,203	15.2	3,389	16.3
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	88	8.4	84	8.5	84	8.5	104	9.2	71	7.5
Not Hispanic/Latino	1,854	14.6	1,843	14.7	1,846	14.8	1,874	14.9	1,834	14.2
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	101	12.0	86	11.2	85	11.0	74	10.3	*	*
Not Hispanic/Latino	2,189	14.0	1,987	13.8	1,946	14.0	1,883	12.8	2,495	15.0
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	490	13.4	432	14.2	434	14.3	531	13.2	448	13.6
<b>County Type by Race</b>										
Large Metro										
White Only	15,973	16.0	16,329	16.1	16,532	16.1	15,759	15.8	16,188	16.2
Black Only	1,693	8.5	1,770	8.8	1,765	8.7	1,734	8.8	1,653	8.2
NHOPI Only	46	6.4	42	5.7	40	5.3	39	7.0	54	6.0
Asian Only	526	5.0	527	4.9	517	4.8	481	4.5	571	5.4
AIAN Only	114	8.7	135	10.3	145	10.2	127	9.3	102	8.0
2 or More Races	365	15.1	387	15.4	393	15.2	412	17.7	317	12.7

(continued)



Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
White Only	6,790	16.5	6,880	16.6	6,673	16.4	6,831	16.5	6,749	16.5
Black Only	509	9.8	496	9.5	465	9.0	551	10.5	467	9.2
NHOPI Only	9	3.7	9	3.6	8	3.3	7	3.1	12	4.2
Asian Only	83	4.4	81	4.3	64	3.4	113	5.8	54	2.9
AIAN Only	67	12.3	64	11.1	72	12.0	58	10.6	77	14.1
2 or More Races	193	17.4	193	17.0	189	17.5	170	15.5	217	19.2
Small Metro, < 250,000 population										
White Only	3,165	15.9	3,143	15.9	3,166	16.1	3,123	15.8	3,207	16.1
Black Only	190	8.9	190	9.2	176	9.0	170	7.5	209	10.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	68	11.9	42	8.2	42	8.2	*	*	*	*
AIAN Only	24	9.7	30	10.0	30	9.0	*	*	13	5.3
2 or More Races	64	16.7	64	18.4	66	18.4	65	18.0	*	*
Nonmetro, 20,000 or more urban pop										
White Only	1,750	14.8	1,738	15.0	1,734	15.0	1,771	15.1	1,729	14.6
Black Only	101	8.7	106	9.0	108	9.2	100	9.3	103	8.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	12	5.9	9	5.0	9	4.3	14	6.6	*	*
AIAN Only	28	11.3	21	7.9	*	*	*	*	*	*
2 or More Races	46	16.1	48	20.3	*	*	*	*	26	12.2
Nonmetro, 2,500-19,999 urban pop										
White Only	2,095	14.6	1,889	14.3	1,869	14.5	1,811	13.5	2,379	15.7
Black Only	103	6.9	88	6.6	78	6.0	61	4.6	146	8.8
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	38	12.5	28	11.8	*	*	*	*	28	8.6
2 or More Races	49	16.5	*	*	*	*	*	*	*	*
Nonmetro, < 2,500 urban pop										
White Only	457	13.8	405	14.3	413	14.6	495	13.5	419	14.1
Black Only	*	*	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	18	18.1	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	920	8.5	921	8.6	915	8.6	799	7.4	1,040	9.7 a
Female	1,618	15.7	1,627	15.8	1,607	15.9	1,584	15.3	1,652	16.2
Full-Time College Students										
Male	325	8.9	329	8.9	319	9.2	298	8.0	352	9.8
Female	677	15.9	678	15.9	634	15.8	658	15.8	695	15.9
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	595	8.4	592	8.4	597	8.3	501	7.1	689	9.6 a
Female	942	15.6	949	15.8	973	16.0 a	926	14.9	957	16.4
<b>Age Group by Gender</b>										
12+										
Male	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--
12-17										
Male	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--
18+										
Male	11,788	10.1	11,938	10.2 a	11,899	10.2	11,945	10.3	11,632	9.9
Female	22,824	18.2	22,887	18.2	22,853	18.2	22,298	17.8	23,350	18.5
18-25										
Male	1,514	8.8	1,514	8.8	1,518	8.8	1,403	8.1	1,625	9.5 a
Female	2,720	15.8	2,736	15.9	2,754	16.0	2,642	15.3	2,799	16.3
26-49										
Male	5,187	10.7	5,244	10.8 a	5,220	10.8	5,328	11.0	5,046	10.4
Female	9,919	19.8	9,953	19.9	9,926	19.8	9,729	19.5	10,108	20.2
50+										
Male	5,088	9.9	5,181	10.1 a	5,161	10.1	5,214	10.2	4,962	9.6
Female	10,185	17.5	10,197	17.5	10,173	17.5	9,927	17.2	10,443	17.8

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Age Group by Race</b>										
12+										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
12-17										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
18+										
White Only	30,230	15.9	30,383	16.0	30,388	16.0	29,790	15.7	30,670	16.1
Black Only	2,619	8.7	2,671	8.9	2,615	8.7	2,656	8.8	2,581	8.5
NHOPI Only	63	5.7	59	5.2	54	4.8	51	5.7	75	5.6
Asian Only	690	5.2	660	4.9	633	4.7	697	5.2	682	5.1
AIAN Only	289	10.5	294	10.7	303	11.0	299	11.0	279	10.0
2 or More Races	721	15.7	759	16.5	760	16.5	749	16.6	693	14.8
18-25										
White Only	3,570	14.1	3,583	14.1	3,589	14.1	3,388	13.3	3,751	14.9
Black Only	351	6.6	345	6.5	350	6.6	344	6.4	358	6.9
NHOPI Only	17	7.2	16	7.0	15	6.8	19	7.7	15	6.6
Asian Only	116	5.6	118	5.6	108	5.2	121	5.9	112	5.2
AIAN Only	46	8.9	51	9.8	59	10.9	39	7.6	54	10.1
2 or More Races	134	14.0	137	14.4	151	15.6	135	13.6	133	14.5
26-49										
White Only	13,044	17.5	13,115	17.5	13,115	17.5	12,940	17.3	13,149	17.6
Black Only	1,210	9.2	1,224	9.3	1,188	9.1	1,268	9.7	1,151	8.7
NHOPI Only	40	7.9	36	7.0	32	6.6	27	6.5	53	8.8
Asian Only	343	5.0	337	5.0	334	4.9	323	4.7	363	5.4
AIAN Only	126	9.5	134	9.9	134	9.9	141	10.5	112	8.5
2 or More Races	342	18.1	351	18.4	343	18.1	358	19.6	327	16.6

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
50+										
White Only	13,616	15.1	13,686	15.2	13,684	15.2	13,462	15.0	13,770	15.2
Black Only	1,058	9.0	1,102	9.4	1,076	9.1	1,044	9.0	1,072	9.0
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	230	5.1	205	4.6	191	4.2	254	5.5	207	4.8
AIAN Only	116	12.9	108	12.3	110	12.7	119	13.7	113	12.1
2 or More Races	245	14.1	270	15.6	267	15.4	257	15.1	234	13.1
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	--
Not Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	--
12-17										
Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	--
Not Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	--
18+										
Hispanic/Latino	3,149	8.3	3,112	8.2	3,045	8.0 a	3,055	8.1	3,242	8.5
Not Hispanic/Latino	31,464	15.4	31,713	15.5 a	31,707	15.5 a	31,187	15.3	31,740	15.5
18-25										
Hispanic/Latino	548	7.4	535	7.2	526	7.1 a	509	6.9	586	7.9
Not Hispanic/Latino	3,686	13.6	3,715	13.7 a	3,746	13.8 a	3,535	13.0	3,837	14.3 a
26-49										
Hispanic/Latino	1,562	8.1	1,574	8.1	1,537	7.9	1,583	8.2	1,540	7.9
Not Hispanic/Latino	13,544	17.1	13,623	17.2 a	13,609	17.2	13,473	17.1	13,615	17.2
50+										
Hispanic/Latino	1,039	9.3	1,002	9.0	982	8.8	962	8.8	1,116	9.8
Not Hispanic/Latino	14,234	14.5	14,375	14.6 a	14,352	14.6	14,179	14.5	14,288	14.4
<b>Pregnancy by Age Group</b>										
Female Aged 18-44 <sup>3</sup>										
15-17	--	--	--	-- --	--	-- --	--	--	--	--
18-25	2,710	15.8	2,726	15.9	2,743	16.0	2,635	15.3	2,785	16.3
26-44	7,623	19.3	7,647	19.3	7,633	19.3	7,533	19.2	7,713	19.3
Pregnant Female Aged 18-44										
15-17	--	--	--	-- --	--	-- --	--	--	--	--
18-25	68	9.1	65	8.8	66	8.7	82	9.9	54	8.2
26-44	186	12.5	187	12.4	188	12.5	144	10.2	228	14.7

(continued)

Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 18-44										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	2,642	16.1	2,661	16.2	2,677	16.3	2,553	15.6	2,731	16.7
26-44	7,437	19.5	7,460	19.6	7,445	19.6	7,389	19.5	7,485	19.5
<b>Pregnancy by Race</b>										
Female Aged 18-44 <sup>3</sup>										
White Only	8,914	21.3	8,937	21.4	8,951	21.4	8,725	20.9	9,103	21.7
Black Only	774	9.1	772	9.1	771	9.1	797	9.5	750	8.8
NHOPI Only	31	8.7	30	8.6	27	8.3	32	10.7	29	7.2
Asian Only	230	5.7	226	5.6	214	5.4	230	5.8	230	5.6
AIAN Only	98	13.0	107	13.7	110	13.6	108	14.3	88	11.7
2 or More Races	287	22.0	302	22.9	303	22.8	275	21.2	299	22.9
Pregnant Female Aged 18-44										
White Only	218	13.2	218	13.2	220	13.3	204	12.2	232	14.4
Black Only	26	7.4	24	6.8	24	6.8	16	4.4	35	10.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
Not Pregnant Female Aged 18-44										
White Only	8,696	21.6	8,719	21.7	8,730	21.7	8,521	21.3	8,870	22.0
Black Only	748	9.2	747	9.2	747	9.2	781	9.7	715	8.7
NHOPI Only	30	8.7	29	8.7	27	8.6	32	10.8	28	7.2
Asian Only	224	5.8	222	5.7	210	5.5	227	5.9	221	5.6
AIAN Only	97	13.5	106	14.2	109	14.0	108	14.9	87	12.0
2 or More Races	284	22.7	298	23.5	298	23.6	273	21.7	295	23.6
<b>Pregnancy by Hispanicity</b>										
Female Aged 18-44 <sup>3</sup>										
Hispanic/Latino	1,082	9.5	1,068	9.4	1,053	9.3	1,049	9.2	1,115	9.8
Not Hispanic/Latino	9,251	20.4	9,305	20.5	9,323	20.6	9,118	20.2	9,383	20.6
Pregnant Female Aged 18-44										
Hispanic/Latino	22	4.8	25	5.2	25	5.1	*	*	24	5.2
Not Hispanic/Latino	232	13.1	228	12.8	229	12.9	206	11.5	258	14.7

(continued)

**Table L.1 Past Year Mental Health Service Use (Inpatient, Outpatient, or Prescription Meds; Aged 18 or Older) (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 18-44										
Hispanic/Latino	1,060	9.7	1,043	9.6	1,028	9.4	1,029	9.4	1,091	9.9
Not Hispanic/Latino	9,019	20.7	9,077	20.8 <sup>a</sup>	9,094	20.9	8,913	20.6	9,125	20.8

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

# Appendix M: 2015-2016 NSDUH – Weighted Annual Averages Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) – AMDEYR2

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	16,152	6.7	16,209	6.7	16,230	6.7	16,079	6.7	16,225	6.7
18-25	3,630	10.6	3,639	10.6	3,633	10.6	3,554	10.3	3,705	10.9
26-49	7,282	7.4	7,327	7.5	7,367	7.5	7,329	7.5	7,236	7.4
50+	5,240	4.8	5,243	4.8	5,230	4.8	5,196	4.8	5,284	4.8
<b>Gender</b>										
Male	5,550	4.8	5,616	4.8	5,601	4.8	5,461	4.7	5,639	4.8
Female	10,602	8.5	10,593	8.5	10,629	8.5	10,618	8.5	10,586	8.5
<b>Hispanicity</b>										
Hispanic/Latino	1,969	5.2	1,973	5.2	1,963	5.2	1,801	4.8	2,137	5.6
Not Hispanic/Latino	14,183	7.0	14,237	7.0	14,267	7.0	14,278	7.0	14,088	6.9
<b>Race</b>										
White Only	13,383	7.1	13,399	7.1	13,385	7.1	13,306	7.0	13,461	7.1
Black Only	1,480	4.9	1,488	5.0	1,500	5.0	1,479	5.0	1,482	4.9
NHOPI Only	68	6.1	68	6.0	66	5.9	42	4.8	95	7.0
Asian Only	539	4.1	526	4.0	502	3.8	562	4.2	515	3.9
AIAN Only	179	6.5	189	6.9	243	8.9	169	6.3	188	6.7
2 or More Races	503	11.0	540	11.8	533	11.6	521	11.6	484	10.4
<b>Division</b>										
New England	852	7.4	851	7.4	848	7.4	867	7.6	837	7.3
Middle Atlantic	2,076	6.5	2,072	6.5	2,074	6.5	2,048	6.5	2,103	6.6
East North Central	2,346	6.7	2,398	6.8	2,389	6.8	2,340	6.7	2,352	6.7
West North Central	1,044	6.7	1,077	6.9	1,086	6.9	1,025	6.6	1,063	6.7
South Atlantic	3,359	7.0	3,312	6.9	3,315	6.9	3,359	7.0	3,359	6.9
East South Central	969	6.9	970	6.9	973	6.9	971	6.9	966	6.8
West South Central	1,708	6.1	1,732	6.1	1,748	6.2	1,827	6.5	1,588	5.6
Mountain	1,267	7.3	1,290	7.4	1,290	7.4	1,304	7.5	1,230	7.0
Pacific	2,532	6.4	2,507	6.4	2,506	6.4	2,338	6.0	2,726	6.9

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	8,645	6.4	8,839	6.5	8,940	6.5	8,651	6.5	8,639	6.4
Small Metro, pop 250,000-1,000,000	3,569	7.2	3,589	7.1	3,509	7.1	3,403	6.8	3,735	7.6
Small Metro, < 250,000 population	1,602	6.9	1,575	6.9	1,585	6.9	1,607	6.9	1,597	6.9
Nonmetro, 20,000 or more urban pop	1,004	7.3	990	7.4	987	7.4	1,098	8.1	911	6.6
Nonmetro, 2,500-19,999 urban pop	1,114	6.8	1,034	6.9	1,027	7.0	1,035	6.7	1,194	6.8
Nonmetro, < 2,500 urban pop	218	5.8	183	5.9	183	5.9	287	6.9	149	4.4
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	2,373	11.3	2,381	11.4	2,344	11.4	2,333	11.1	2,413	11.6
Full-Time College Students	913	11.6	915	11.5	850	11.4	882	11.3	944	11.9
Other Persons Aged 18 to 22 <sup>2</sup>	1,460	11.2	1,466	11.3	1,494	11.3	1,451	11.0	1,468	11.3
<b>Pregnancy</b>										
Female Aged 18-44 <sup>3</sup>	6,054	10.7	6,087	10.8	6,126	10.9	6,022	10.7	6,087	10.7
Pregnant Female Aged 18-44	147	6.6	148	6.6	148	6.6	149	6.7	146	6.6
Not Pregnant Female Aged 18-44	5,907	10.9	5,939	11.0	5,978	11.0	5,873	10.9	5,941	10.9
<b>Division by Age Group</b>										
New England										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	852	7.4	851	7.4	848	7.4	867	7.6	837	7.3
18-25	198	12.1	195	11.9	197	12.0	191	11.7	206	12.6
26-49	374	8.5	381	8.7	381	8.7	391	8.9	358	8.2
50+	280	5.1	274	5.0	271	5.0	285	5.3	274	5.0
Middle Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,076	6.5	2,072	6.5	2,074	6.5	2,048	6.5	2,103	6.6
18-25	458	10.5	458	10.5	459	10.5	453	10.3	463	10.7
26-49	903	7.1	909	7.2	910	7.2	857	6.7	950	7.5
50+	715	4.9	705	4.8	705	4.8	738	5.1	691	4.7

(continued)



Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	2,346	6.7	2,398	6.8	2,389	6.8	2,340	6.7	2,352	6.7
18-25	574	11.4	579	11.5	573	11.4	562	11.1	586	11.7
26-49	1,009	7.3	1,012	7.3	1,012	7.3	1,011	7.3	1,007	7.3
50+	763	4.7	806	4.9	804	4.9	767	4.7	759	4.6
West North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,044	6.7	1,077	6.9	1,086	6.9	1,025	6.6	1,063	6.7
18-25	250	10.9	253	11.0	253	11.0	207	9.1	293	12.8
26-49	461	7.5	468	7.6	470	7.6	467	7.6	454	7.3
50+	333	4.6	355	4.9	363	5.0	350	4.9	316	4.4
South Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	3,359	7.0	3,312	6.9	3,315	6.9	3,359	7.0	3,359	6.9
18-25	651	10.1	653	10.1	656	10.2	657	10.1	646	10.1
26-49	1,409	7.4	1,396	7.3	1,395	7.3	1,463	7.7	1,356	7.1
50+	1,298	5.8	1,263	5.6	1,264	5.6	1,239	5.6	1,357	6.0
East South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	969	6.9	970	6.9	973	6.9	971	6.9	966	6.8
18-25	200	10.0	195	9.8	200	10.0	180	9.0	220	11.1
26-49	473	8.5	474	8.5	472	8.5	434	7.8	512	9.2
50+	296	4.5	301	4.6	302	4.6	357	5.5	234	3.6
West South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,708	6.1	1,732	6.1	1,748	6.2	1,827	6.5	1,588	5.6
18-25	367	8.6	374	8.8	376	8.8	416	9.7	317	7.5
26-49	840	6.9	850	7.0	887	7.3	859	7.1	821	6.7
50+	501	4.3	508	4.3	485	4.1	552	4.7	450	3.8

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses			Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain											
12+	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--
18+	1,267	7.3	1,290	7.4	a	1,290	7.4	1,304	7.5	1,230	7.0
18-25	270	10.5	275	10.7	a	268	10.4	245	9.6	295	11.5
26-49	613	8.6	624	8.7	a	625	8.7	644	9.0	583	8.1
50+	383	5.0	391	5.1		398	5.2	415	5.5	352	4.6
Pacific											
12+	--	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--	--
18+	2,532	6.4	2,507	6.4		2,506	6.4	2,338	6.0	2,726	6.9
18-25	661	11.6	655	11.5		651	11.4	642	11.1	679	12.1
26-49	1,199	7.1	1,211	7.2		1,216	7.2	1,203	7.2	1,196	7.1
50+	672	4.0	640	3.8		639	3.8	493	3.0	851	5.0 a
<b>Division by Hispanicity</b>											
New England											
Hispanic/Latino	77	7.6	72	7.1		72	7.0	57	5.7	98	9.4
Not Hispanic/Latino	775	7.4	779	7.5		777	7.4	810	7.8	740	7.1
Middle Atlantic											
Hispanic/Latino	253	5.7	248	5.6		250	5.6	188	4.3	319	7.1
Not Hispanic/Latino	1,822	6.7	1,824	6.7		1,824	6.7	1,860	6.8	1,785	6.6
East North Central											
Hispanic/Latino	155	6.2	170	6.8		169	6.8	173	7.0	138	5.5
Not Hispanic/Latino	2,191	6.7	2,228	6.8		2,221	6.8	2,168	6.6	2,214	6.8
West North Central											
Hispanic/Latino	39	5.0	37	4.7		33	4.2	28	3.6	50	6.3
Not Hispanic/Latino	1,005	6.7	1,040	7.0		1,053	7.1 a	996	6.7	1,013	6.8
South Atlantic											
Hispanic/Latino	286	4.8	289	4.8		287	4.8	274	4.6	298	4.9
Not Hispanic/Latino	3,073	7.3	3,023	7.2		3,028	7.2	3,085	7.4	3,060	7.2
East South Central											
Hispanic/Latino	29	6.3	24	5.3		24	5.1	*	*	14	3.2 *
Not Hispanic/Latino	939	6.9	946	6.9		950	7.0	927	6.8	952	7.0
West South Central											
Hispanic/Latino	305	4.1	321	4.3		327	4.3	287	3.8	322	4.3
Not Hispanic/Latino	1,403	6.8	1,411	6.8		1,421	6.9	1,540	7.5	1,265	6.1

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
Hispanic/Latino	214	5.7	228	6.1	223	5.9	198	5.3	229	6.0
Not Hispanic/Latino	1,053	7.7	1,062	7.8	1,067	7.8	1,106	8.2	1,001	7.3
Pacific										
Hispanic/Latino	610	5.5	582	5.2	579	5.2	552	5.0	668	6.0
Not Hispanic/Latino	1,922	6.8	1,925	6.8	1,928	6.9	1,786	6.4	2,058	7.3
<b>Division by Race</b>										
New England										
White Only	741	7.5	738	7.5	741	7.5	762	7.7	719	7.3
Black Only	58	7.2	56	7.0	56	7.0	54	6.8	61	7.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	26	5.0	26	5.1	22	4.4	10	2.0	43	7.9
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	22	11.5	*	*	*	*	*	*	7	3.7
Middle Atlantic										
White Only	1,730	7.2	1,735	7.2	1,736	7.2	1,655	6.9	1,806	7.5
Black Only	213	4.7	211	4.7	213	4.7	256	5.7	169	3.7
NHOPI Only	9	8.1	9	7.9	9	7.8	*	*	*	*
Asian Only	70	3.1	64	2.8	63	2.8	78	3.4	63	2.8
AIAN Only	7	3.4	7	3.4	7	3.5	8	3.7	7	3.2
2 or More Races	46	9.1	45	8.9	45	8.8	48	9.6	44	8.5
East North Central										
White Only	2,036	7.0	2,064	7.0	2,061	7.0	2,011	6.9	2,062	7.1
Black Only	193	4.8	198	4.9	195	4.9	232	5.8	154	3.8
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	41	3.6	44	3.8	44	3.8	26	2.3	56	4.8
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	54	11.1	*	*	*	*	47	9.6	62	12.6
West North Central										
White Only	901	6.5	913	6.6	915	6.6	870	6.3	932	6.7
Black Only	62	6.3	71	7.3	71	7.2	54	5.5	69	7.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	23	5.4	23	5.5	22	5.2	28	6.5	18	4.4
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	34	13.8	*	*	*	*	*	*	26	10.3

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
South Atlantic										
White Only	2,610	7.5	2,597	7.4	2,606	7.4	2,721	7.8	2,499	7.1
Black Only	550	5.4	530	5.2	535	5.3	457	4.5	644	6.3
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	102	6.2	97	5.8	84	5.0	117	7.2	88	5.2
AIAN Only	10	3.4	18	5.7	*	*	3	1.0	18	5.9
2 or More Races	75	10.0	62	8.2	61	8.0	54	7.2	97	12.8
East South Central										
White Only	828	7.6	815	7.5	812	7.5	827	7.6	828	7.6
Black Only	106	3.8	111	4.0	118	4.3	97	3.5	114	4.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
West South Central										
White Only	1,444	6.5	1,452	6.6	1,424	6.4	1,555	7.1	1,332	6.0
Black Only	158	4.0	173	4.4	179	4.5	193	4.9	123	3.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	26	2.4	26	2.4	30	2.7	21	1.8	32	2.9
AIAN Only	42	8.6	42	8.7	71	14.9	26	5.5	*	*
2 or More Races	34	7.1	35	7.2	41	8.5	32	7.1	36	7.2
Mountain										
White Only	1,100	7.3	1,117	7.4	1,122	7.4	1,128	7.5	1,072	7.1
Black Only	55	8.4	53	8.1	51	7.8	52	8.0	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	42	7.6	37	6.8	35	6.3	*	*	23	4.2
AIAN Only	20	3.3	23	3.9	30	5.0	23	3.9	17	2.8
2 or More Races	39	10.5	48	13.0	41	11.0	26	7.2	52	13.7
Pacific										
White Only	1,994	6.8	1,968	6.7	1,967	6.7	1,776	6.1	2,212	7.5
Black Only	86	4.0	86	4.0	84	3.9	85	4.0	87	4.1
NHOPI Only	31	5.7	31	5.8	31	5.9	14	3.5	48	6.9
Asian Only	200	3.7	199	3.7	195	3.6	218	3.9	182	3.5
AIAN Only	46	6.9	47	7.1	53	8.1	42	6.4	49	7.3
2 or More Races	176	12.9	176	12.9	176	12.9	203	15.0	149	10.8

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type by Age Group</b>										
Large Metro										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	8,645	6.4	8,839	6.5	8,940	6.5	8,651	6.5	8,639	6.4
18-25	2,005	10.5	2,027	10.5	2,041	10.5	1,949	10.2	2,061	10.9
26-49	3,988	6.9	4,101	6.9	4,183	7.0	4,037	7.0	3,939	6.8
50+	2,652	4.6	2,710	4.7	2,716	4.6	2,666	4.7	2,639	4.6
Small Metro, pop 250,000-1,000,000										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	3,569	7.2	3,589	7.1	3,509	7.1	3,403	6.8	3,735	7.6
18-25	803	10.9	826	11.1	807	11.0	777	10.4	830	11.4
26-49	1,562	8.0	1,571	8.0	1,539	8.0	1,531	7.8	1,593	8.3
50+	1,203	5.2	1,192	5.1	1,163	5.1	1,095	4.8	1,312	5.7
Small Metro, < 250,000 population										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,602	6.9	1,575	6.9	1,585	6.9	1,607	6.9	1,597	6.9
18-25	351	9.9	345	9.8	347	9.9	327	9.5	374	10.3
26-49	743	8.8	737	8.9	735	8.9	813	9.5	672	8.1
50+	508	4.5	493	4.4	503	4.5	466	4.2	551	4.9
Nonmetro, 20,000 or more urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,004	7.3	990	7.4	987	7.4	1,098	8.1	911	6.6
18-25	200	10.2	192	10.0	194	10.1	207	10.3	193	10.1
26-49	416	8.2	413	8.4	409	8.4	429	8.6	402	7.9
50+	389	5.8	385	5.9	384	5.8	461	7.0	316	4.7
Nonmetro, 2,500-19,999 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	1,114	6.8	1,034	6.9	1,027	7.0	1,035	6.7	1,194	6.8
18-25	226	11.4	210	11.4	203	11.7	236	12.3	216	10.5
26-49	465	8.3	417	8.4	416	8.6	381	7.5	548	9.0
50+	424	4.8	407	4.9	407	5.1	417	5.0	430	4.6

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, < 2,500 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	--	--	--	--	--	--	--	--	--	--
18+	218	5.8	183	5.9	183	5.9	287	6.9	149	4.4
18-25	45	11.2	39	12.7	40	13.2	58	13.3	31	8.7
26-49	109	8.5	88	8.4	86	8.5	137	9.6	81	7.0
50+	64	3.1	56	3.2	57	3.2	91	4.0	37	2.0
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	1,294	5.0	1,334	5.1	1,340	5.1	1,257	4.8	1,332	5.2
Not Hispanic/Latino	7,351	6.8	7,504	6.8	7,600	6.8	7,394	6.9	7,307	6.7
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	447	6.0	416	5.6	404	5.6	316	4.4	577	7.4
Not Hispanic/Latino	3,122	7.4	3,173	7.4	3,105	7.4	3,087	7.2	3,158	7.6
Small Metro, < 250,000 population										
Hispanic/Latino	115	4.9	117	5.0	116	5.1	96	4.2	135	5.5
Not Hispanic/Latino	1,487	7.1	1,459	7.1	1,469	7.1	1,511	7.2	1,462	7.1
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	65	6.4	63	6.5	64	6.5	80	7.2	51	5.4
Not Hispanic/Latino	939	7.4	927	7.5	923	7.4	1,018	8.2	860	6.7
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	40	4.8	36	4.7	32	4.2	38	5.4	43	4.4
Not Hispanic/Latino	1,074	6.9	998	7.0	994	7.2	996	6.8	1,152	7.0
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	211	5.8	177	5.8	176	5.9	273	6.8	149	4.5
<b>County Type by Race</b>										
Large Metro										
White Only	6,820	6.9	6,948	6.9	6,988	6.8	6,793	6.8	6,848	6.9
Black Only	996	5.0	1,040	5.2	1,054	5.2	1,012	5.2	980	4.9
NHOPI Only	50	6.9	49	6.6	48	6.5	26	4.7	74	8.2
Asian Only	419	4.0	412	3.9	401	3.8	425	4.1	414	3.9
AIAN Only	79	6.0	85	6.6	139	9.9	83	6.1	75	6.0
2 or More Races	280	11.6	304	12.1	310	12.0	311	13.5	248	9.9

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
White Only	3,071	7.5	3,090	7.5	3,034	7.5	2,965	7.2	3,176	7.8
Black Only	235	4.6	232	4.5	232	4.5	202	3.9	268	5.3
NHOPI Only	14	5.5	15	5.6	14	5.6	10	4.7	17	6.0
Asian Only	81	4.3	79	4.2	62	3.4	92	4.8	70	3.9
AIAN Only	40	7.3	48	8.5	44	7.2	10	2.0	69	12.6
2 or More Races	129	11.5	124	11.0	123	11.4	123	11.2	134	11.9
Small Metro, < 250,000 population										
White Only	1,397	7.1	1,390	7.1	1,401	7.1	1,396	7.1	1,398	7.0
Black Only	110	5.2	90	4.4	87	4.5	114	5.0	107	5.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	30	5.3	26	5.2	25	5.0	35	5.7	24	4.8
AIAN Only	21	8.6	26	8.8	31	9.3	*	*	15	6.0
2 or More Races	40	10.6	39	11.3	37	10.5	29	8.1	52	12.8
Nonmetro, 20,000 or more urban pop										
White Only	906	7.7	890	7.7	885	7.7	980	8.4	831	7.1
Black Only	64	5.5	64	5.4	66	5.6	74	7.0	53	4.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	5	2.8	6	3.0	6	2.9	6	2.7	*	*
AIAN Only	8	3.3	11	4.2	11	4.5	10	4.8	*	*
2 or More Races	20	7.0	18	7.8	18	7.8	26	7.5	13	6.1
Nonmetro, 2,500-19,999 urban pop										
White Only	989	7.0	908	6.9	904	7.1	905	6.8	1,073	7.1
Black Only	70	4.7	57	4.2	56	4.3	68	5.1	72	4.3
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	20	6.6	13	5.3	*	*	*	*	13	3.9
2 or More Races	32	11.1	*	*	*	*	*	*	*	*
Nonmetro, < 2,500 urban pop										
White Only	201	6.1	173	6.2	173	6.2	267	7.4	135	4.6
Black Only	4	1.8	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	10	10.3	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	886	8.3	883	8.2	873	8.2	869	8.1	903	8.4
Female	1,487	14.6	1,497	14.7	1,471	14.7	1,465	14.2	1,510	14.9
Full-Time College Students										
Male	301	8.3	301	8.2	287	8.3	313	8.4	289	8.1
Female	612	14.4	614	14.4	563	14.1	569	13.8	655	15.1
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	585	8.2	582	8.3	586	8.2	556	7.9	614	8.6
Female	875	14.6	884	14.8	908	15.0	895	14.5	855	14.8
<b>Age Group by Gender</b>										
12+										
Male	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--
12-17										
Male	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--
18+										
Male	5,550	4.8	5,616	4.8	5,601	4.8	5,461	4.7	5,639	4.8
Female	10,602	8.5	10,593	8.5	10,629	8.5	10,618	8.5	10,586	8.5
18-25										
Male	1,339	7.8	1,339	7.8	1,334	7.8	1,321	7.6	1,357	7.9
Female	2,291	13.4	2,300	13.5	2,298	13.4	2,233	13.0	2,349	13.8
26-49										
Male	2,553	5.3	2,576	5.3	2,588	5.4	2,486	5.2	2,620	5.4
Female	4,729	9.5	4,751	9.6	4,779	9.6	4,843	9.7	4,616	9.3
50+										
Male	1,658	3.3	1,701	3.3	1,678	3.3	1,654	3.3	1,662	3.2
Female	3,582	6.2	3,542	6.1	3,552	6.1	3,542	6.2	3,622	6.2

(continued)



Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Age Group by Race</b>										
12+										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
12-17										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
18+										
White Only	13,383	7.1	13,399	7.1	13,385	7.1	13,306	7.0	13,461	7.1
Black Only	1,480	4.9	1,488	5.0	1,500	5.0	1,479	5.0	1,482	4.9
NHOPI Only	68	6.1	68	6.0	66	5.9	42	4.8	95	7.0
Asian Only	539	4.1	526	4.0	502	3.8	562	4.2	515	3.9
AIAN Only	179	6.5	189	6.9	243	8.9	169	6.3	188	6.7
2 or More Races	503	11.0	540	11.8	533	11.6	521	11.6	484	10.4
18-25										
White Only	2,891	11.4	2,897	11.5	2,903	11.5	2,843	11.2	2,938	11.7
Black Only	351	6.7	351	6.7	352	6.7	334	6.3	368	7.1
NHOPI Only	23	9.8	23	10.0	23	10.1	18	7.5	*	*
Asian Only	193	9.2	194	9.3	183	8.9	185	9.1	201	9.4
AIAN Only	32	6.1	33	6.3	34	6.3	33	6.4	31	5.8
2 or More Races	141	14.8	141	14.9	138	14.3	142	14.3	140	15.3
26-49										
White Only	5,965	8.0	5,985	8.0	5,970	8.0	6,064	8.2	5,865	7.9
Black Only	723	5.5	742	5.7	751	5.8	714	5.5	733	5.6
NHOPI Only	36	7.1	36	7.1	35	7.2	23	5.5	49	8.1
Asian Only	246	3.6	242	3.6	244	3.6	212	3.1	279	4.1
AIAN Only	99	7.5	105	7.9	152	11.3	112	8.5	85	6.5
2 or More Races	214	11.4	216	11.3	216	11.4	203	11.2	225	11.5

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
50+										
White Only	4,528	5.0	4,517	5.0	4,512	5.0	4,398	4.9	4,658	5.2
Black Only	406	3.5	394	3.4	398	3.4	431	3.7	381	3.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	100	2.3	89	2.0	75	1.7	165	3.6	35	0.8
AIAN Only	48	5.3	50	5.7	57	6.6	25	2.8	72	7.5
2 or More Races	148	8.5	183	10.6	180	10.4	177	10.4	119	6.7
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
Not Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
12-17										
Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
Not Hispanic/Latino	--	--	--	-- --	--	-- --	--	--	--	-- --
18+										
Hispanic/Latino	1,969	5.2	1,973	5.2	1,963	5.2	1,801	4.8	2,137	5.6
Not Hispanic/Latino	14,183	7.0	14,237	7.0	14,267	7.0	14,278	7.0	14,088	6.9
18-25										
Hispanic/Latino	644	8.8	638	8.7	627	8.5 a	589	8.0	700	9.5
Not Hispanic/Latino	2,985	11.1	3,001	11.1	3,006	11.2	2,965	10.9	3,005	11.2
26-49										
Hispanic/Latino	834	4.3	837	4.3	845	4.4	865	4.5	802	4.2
Not Hispanic/Latino	6,449	8.2	6,490	8.2	6,522	8.3	6,464	8.2	6,434	8.2
50+										
Hispanic/Latino	491	4.4	497	4.5	491	4.4	347	3.2	635	5.6
Not Hispanic/Latino	4,749	4.9	4,746	4.9	4,739	4.8	4,849	5.0	4,649	4.7
<b>Pregnancy by Age Group</b>										
Female Aged 18-44 <sup>3</sup>										
15-17	--	--	--	-- --	--	-- --	--	--	--	-- --
18-25	2,279	13.4	2,288	13.4	2,286	13.4	2,218	12.9	2,339	13.8
26-44	3,775	9.6	3,799	9.6	3,840	9.8 a	3,803	9.7	3,747	9.4
Pregnant Female Aged 18-44										
15-17	--	--	--	-- --	--	-- --	--	--	--	-- --
18-25	59	8.1	59	8.0	59	7.8	72	8.8	47	7.2
26-44	88	5.9	88	5.9	89	5.9	77	5.4	99	6.4

(continued)

Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 18-44										
15-17	--	--	--	--	--	--	--	--	--	--
18-25	2,219	13.6	2,229	13.7	2,227	13.7	2,147	13.2	2,292	14.1
26-44	3,687	9.7	3,711	9.8	3,751	9.9	3,726	9.9	3,649	9.6
<b>Pregnancy by Race</b>										
Female Aged 18-44 <sup>3</sup>										
White Only	4,849	11.7	4,868	11.7	4,893	11.8	4,873	11.7	4,826	11.6
Black Only	637	7.6	643	7.6	649	7.7	624	7.5	650	7.7
NHOPI Only	34	9.8	34	10.0	33	10.1	29	9.9	*	* *
Asian Only	252	6.3	249	6.3	238	6.0	223	5.7	282	6.9
AIAN Only	70	9.4	75	9.8	100	12.6	82	11.2	58	7.7
2 or More Races	211	16.3	217	16.5	212	16.1	190	14.7	232	17.8
Pregnant Female Aged 18-44										
White Only	118	7.2	117	7.2	118	7.2	126	7.6	109	6.8
Black Only	18	5.1	17	4.7	17	4.9	17	4.8	18	5.6
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
Not Pregnant Female Aged 18-44										
White Only	4,732	11.8	4,751	11.9	4,775	12.0	4,747	11.9	4,717	11.8
Black Only	619	7.7	626	7.8	631	7.8	607	7.6	632	7.7
NHOPI Only	29	8.4	29	8.6	28	8.9	29	10.0	28	7.3
Asian Only	252	6.6	249	6.5	238	6.3	223	5.9	282	7.2
AIAN Only	69	9.7	74	10.1	100	13.0	81	11.6	58	7.9
2 or More Races	205	16.5	211	16.8	206	16.3	186	15.0	225	18.1
<b>Pregnancy by Hispanicity</b>										
Female Aged 18-44 <sup>3</sup>										
Hispanic/Latino	885	7.8	882	7.8	875	7.7	834	7.4	936	8.2
Not Hispanic/Latino	5,169	11.5	5,205	11.5	5,250	11.6	5,188	11.6	5,151	11.4
Pregnant Female Aged 18-44										
Hispanic/Latino	21	4.7	24	5.1	24	5.0	24	5.4	18	4.0
Not Hispanic/Latino	126	7.2	124	7.0	124	7.0	124	7.0	127	7.3

(continued)

**Table M.1 Past Year Major Depressive Episode (MDE) in Adults (Aged 18 or Older) (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 18-44										
Hispanic/Latino	864	7.9	859	7.9	851	7.8	810	7.5	918	8.4
Not Hispanic/Latino	5,043	11.6	5,081	11.7	5,126	11.8 <sup>a</sup>	5,063	11.8	5,023	11.5

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

## Appendix N: 2015-2016 NSDUH – Weighted Annual Averages Past Month Pain Reliever Use – PNRNMMON

**Table N.1 Past Month Pain Reliever Use**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Age Group</b>										
12+	3,562	1.3	3,528	1.3	3,511	1.3	3,775	1.4	3,350	1.2
12-17	258	1.0	259	1.0	255	1.0	276	1.1	239	1.0
18+	3,305	1.4	3,269	1.3	3,256	1.3	3,499	1.4	3,111	1.3
18-25	730	2.1	733	2.1	739	2.1	829	2.4	631	1.8
26-49	1,716	1.7	1,674	1.7	1,664	1.7	1,846	1.9	1,585	1.6
50+	859	0.8	862	0.8	853	0.8	824	0.8	895	0.8
<b>Gender</b>										
Male	1,901	1.5	1,860	1.4	1,852	1.4	2,110	1.6	1,692	1.3
Female	1,662	1.2	1,668	1.2	1,660	1.2	1,665	1.2	1,658	1.2
<b>Hispanicity</b>										
Hispanic/Latino	596	1.4	602	1.4	589	1.3	688	1.6	503	1.1
Not Hispanic/Latino	2,967	1.3	2,926	1.3	2,923	1.3	3,087	1.4	2,847	1.3
<b>Race</b>										
White Only	2,928	1.4	2,906	1.4	2,895	1.4	3,060	1.5	2,795	1.3
Black Only	431	1.3	438	1.3	437	1.3	462	1.4	400	1.2
NHOPI Only	12	0.9	12	0.9	13	1.0	12	1.1	12	0.8
Asian Only	34	0.2	30	0.2	30	0.2	57	0.4	12	0.1
AIAN Only	35	1.1	34	1.1	31	1.0	36	1.1	35	1.1
2 or More Races	122	2.2	107	1.9	105	1.9	149	2.7	96	1.7
<b>Division</b>										
New England	162	1.3	169	1.3	167	1.3	157	1.2	167	1.3
Middle Atlantic	419	1.2	426	1.2	429	1.2	448	1.3	389	1.1
East North Central	548	1.4	554	1.4	556	1.4	608	1.6	489	1.2
West North Central	182	1.0	167	1.0	169	1.0	198	1.1	165	0.9
South Atlantic	711	1.3	702	1.3	698	1.3	740	1.4	683	1.3
East South Central	271	1.7	256	1.6	252	1.6	309	2.0	234	1.5
West South Central	378	1.2	369	1.2	360	1.1	451	1.4	306	1.0
Mountain	296	1.5	291	1.5	288	1.5	353	1.8	238	1.2
Pacific	595	1.4	593	1.4	594	1.4	512	1.2	679	1.5

(continued)

**Table N.1 Past Month Pain Reliever Use (continued)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>County Type</b>										
Large Metro	1,859	1.2	1,900	1.2	1,910	1.2	1,980	1.3	1,737	1.2
Small Metro, pop 250,000-1,000,000	789	1.4	781	1.4	766	1.4	731	1.3	847	1.5
Small Metro, < 250,000 population	416	1.6	396	1.6	395	1.6	515	2.0	317	1.2 a
Nonmetro, 20,000 or more urban pop	206	1.3	199	1.3	194	1.3	227	1.5	184	1.2
Nonmetro, 2,500-19,999 urban pop	248	1.4	214	1.3	212	1.3	260	1.5	235	1.2
Nonmetro, < 2,500 urban pop	45	1.1	37	1.1	34	1.0	62	1.3	28	0.8
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	418	2.0	418	2.0	416	2.0	444	2.1	392	1.9
Full-Time College Students	102	1.3	105	1.3	103	1.4 a	99	1.3	104	1.3
Other Persons Aged 18 to 22 <sup>2</sup>	317	2.4	313	2.4	313	2.3	345	2.6	288	2.2
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	1,015	1.6	1,016	1.6	1,020	1.6	1,029	1.6	1,001	1.6
Pregnant Female Aged 15-44	22	1.0	23	1.0	23	1.0	19	0.8	25	1.1
Not Pregnant Female Aged 15-44	993	1.6	993	1.6	997	1.6	1,009	1.7	977	1.6
<b>Division by Age Group</b>										
New England										
12+	162	1.3	169	1.3 a	167	1.3 a	157	1.2	167	1.3
12-17	9	0.8	9	0.9	9	0.9	9	0.9	9	0.8
18+	153	1.3	160	1.4 a	158	1.4 a	148	1.3	158	1.4
18-25	25	1.5	26	1.6	25	1.5	31	1.9	18	1.1
26-49	81	1.8	82	1.8	82	1.8	77	1.7	84	1.9
50+	47	0.9	52	1.0 a	51	0.9 a	39	0.7	56	1.0
Middle Atlantic										
12+	419	1.2	426	1.2	429	1.2 a	448	1.3	389	1.1
12-17	15	0.5	15	0.5	15	0.5	20	0.7	10	0.3
18+	404	1.3	411	1.3	414	1.3 a	428	1.3	379	1.2
18-25	86	1.9	85	1.9	87	2.0	90	2.0	81	1.8
26-49	206	1.6	210	1.6	211	1.6	253	2.0	159	1.2
50+	112	0.8	116	0.8 a	116	0.8 a	85	0.6	138	0.9
East North Central										
12+	548	1.4	554	1.4	556	1.4	608	1.6	489	1.2
12-17	36	1.0	36	1.0	36	1.0	41	1.1	31	0.8
18+	512	1.4	518	1.5	520	1.5	567	1.6	458	1.3
18-25	131	2.6	128	2.5	129	2.5	146	2.9	116	2.3
26-49	269	1.9	270	1.9	269	1.9	299	2.1	239	1.7
50+	113	0.7	121	0.7	122	0.7	123	0.7	103	0.6

(continued)

**Table N.1 Past Month Pain Reliever Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
12+	182	1.0	167	1.0	169	1.0	198	1.1	165	0.9
12-17	23	1.4	19	1.1	19	1.2	29	1.8	18	1.1
18+	158	1.0	148	0.9	150	0.9	169	1.1	147	0.9
18-25	34	1.5	34	1.4	36	1.5	45	1.9	24	1.0
26-49	72	1.2	74	1.2	73	1.2	89	1.4	55	0.9
50+	52	0.7	41	0.6	41	0.6	35	0.5	69	0.9
South Atlantic										
12+	711	1.3	702	1.3	698	1.3	740	1.4	683	1.3
12-17	44	0.9	47	1.0	48	1.0	39	0.8	49	1.0
18+	667	1.4	655	1.4	650	1.3	701	1.5	634	1.3
18-25	120	1.8	120	1.8	122	1.9	142	2.2	98	1.5
26-49	338	1.8	324	1.7	322	1.7	361	1.9	316	1.6
50+	209	0.9	210	0.9	207	0.9	198	0.9	221	1.0
East South Central										
12+	271	1.7	256	1.6	252	1.6	309	2.0	234	1.5
12-17	21	1.4	22	1.5	21	1.4	19	1.3	23	1.6
18+	250	1.8	234	1.6	231	1.6	289	2.0	211	1.5
18-25	69	3.4	72	3.6	72	3.5	81	4.0	58	2.9
26-49	157	2.8	137	2.4	134	2.4	176	3.1	139	2.5
50+	23	0.4	25	0.4	25	0.4	33	0.5	14	0.2
West South Central										
12+	378	1.2	369	1.2	360	1.1	451	1.4	306	1.0
12-17	52	1.6	52	1.6	51	1.5	56	1.7	47	1.4
18+	327	1.1	317	1.1	309	1.1	394	1.4	259	0.9
18-25	85	2.0	87	2.0	83	1.9	101	2.3	68	1.6
26-49	177	1.4	165	1.3	161	1.3	190	1.6	164	1.3
50+	65	0.5	66	0.6	65	0.5	103	0.9	27	0.2
Mountain										
12+	296	1.5	291	1.5	288	1.5	353	1.8	238	1.2
12-17	26	1.4	27	1.4	26	1.4	29	1.5	23	1.2
18+	269	1.5	264	1.5	262	1.5	324	1.9	215	1.2
18-25	51	2.0	51	2.0	52	2.0	50	1.9	52	2.0
26-49	136	1.9	135	1.9	136	1.9	145	2.0	127	1.7
50+	82	1.1	77	1.0	75	1.0	129	1.7	36	0.5

(continued)

**Table N.1 Past Month Pain Reliever Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pacific										
12+	595	1.4	593	1.4	594	1.4	512	1.2	679	1.5
12-17	31	0.8	30	0.8	31	0.8	34	0.8	29	0.7
18+	564	1.4	562	1.4	563	1.4	478	1.2	650	1.6
18-25	129	2.2	131	2.3	133	2.3	144	2.5	115	2.0
26-49	279	1.6	278	1.6	277	1.6	256	1.5	303	1.8
50+	156	0.9	154	0.9	152	0.9	79	0.5	232	1.4
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	21	1.8	22	1.8	21	1.7	23	1.9	20	1.6
Not Hispanic/Latino	141	1.2	147	1.3	146	1.3	134	1.2	147	1.3
Middle Atlantic										
Hispanic/Latino	63	1.2	65	1.3	66	1.3	70	1.4	56	1.1
Not Hispanic/Latino	356	1.2	361	1.2	364	1.2	378	1.3	333	1.1
East North Central										
Hispanic/Latino	44	1.5	48	1.6	47	1.6	60	2.0	28	1.0
Not Hispanic/Latino	504	1.4	506	1.4	509	1.4	548	1.5	460	1.3
West North Central										
Hispanic/Latino	13	1.4	11	1.2	11	1.2	4	0.5	*	*
Not Hispanic/Latino	169	1.0	156	0.9	157	1.0	194	1.2	143	0.9
South Atlantic										
Hispanic/Latino	70	1.0	70	1.0	62	0.9	95	1.4	45	0.6
Not Hispanic/Latino	641	1.4	633	1.4	636	1.4	644	1.4	638	1.4
East South Central										
Hispanic/Latino	21	3.7	21	3.8	19	3.5	30	5.4	11	2.0
Not Hispanic/Latino	251	1.7	235	1.5	232	1.5	279	1.8	223	1.5
West South Central										
Hispanic/Latino	105	1.2	103	1.2	97	1.1	123	1.4	87	1.0
Not Hispanic/Latino	273	1.2	267	1.2	262	1.1	328	1.4	219	1.0
Mountain										
Hispanic/Latino	92	2.1	94	2.1	94	2.1	105	2.4	79	1.7
Not Hispanic/Latino	204	1.4	197	1.3	194	1.3	248	1.7	159	1.1
Pacific										
Hispanic/Latino	167	1.3	169	1.3	170	1.3	178	1.4	155	1.2
Not Hispanic/Latino	429	1.4	424	1.4	424	1.4	333	1.1	524	1.7

(continued)



Table N.1 Past Month Pain Reliever Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Division by Race</b>										
New England										
White Only	145	1.3	150	1.4	a	149	1.4	a	137	1.3
Black Only	12	1.3	13	1.4		12	1.3		15	1.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	0	0.1	0	0.1		0	0.1		*	*
AIAN Only	0	0.5	0	0.2		0	0.2		0	0.7
2 or More Races	5	2.1	5	2.4		4	2.0		4	2.1
Middle Atlantic										
White Only	356	1.3	363	1.4		365	1.4	a	368	1.4
Black Only	52	1.0	52	1.0		53	1.0		65	1.3
NHOPI Only	2	1.1	2	1.2		2	1.2		*	*
Asian Only	3	0.1	3	0.1		3	0.1		6	0.2
AIAN Only	2	0.8	2	0.7		2	0.7		3	1.2
2 or More Races	5	0.8	5	0.8		5	0.9		4	0.7
East North Central										
White Only	484	1.5	487	1.5		487	1.5		535	1.6
Black Only	40	0.9	42	0.9	a	42	0.9	a	46	1.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	2	0.1	2	0.2		2	0.2		4	0.3
AIAN Only	5	2.4	6	2.7		*	*	*	0	0.2
2 or More Races	17	2.7	17	2.7		17	2.8		20	3.4
West North Central										
White Only	141	0.9	140	0.9		142	0.9		147	1.0
Black Only	21	1.8	21	1.9		21	1.9		18	1.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	3	1.6	4	1.6		3	1.3		*	*
2 or More Races	*	*	3	0.8	*	3	0.8	*	*	*
South Atlantic										
White Only	536	1.4	524	1.4		522	1.4		574	1.5
Black Only	158	1.4	159	1.4		161	1.4		155	1.4
NHOPI Only	0	0.2	0	0.1		0	0.1		*	*
Asian Only	3	0.2	3	0.2		3	0.2		*	*
AIAN Only	4	1.2	6	1.6		5	1.3		*	*
2 or More Races	9	1.0	9	1.0		7	0.7		7	0.8

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Table N.1 Past Month Pain Reliever Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East South Central										
White Only	227	1.9	218	1.8	215	1.8	272	2.3	182	1.5
Black Only	33	1.1	33	1.0	31	1.0	22	0.7	45	1.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	0	0.1	0	0.1	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
West South Central										
White Only	284	1.1	271	1.1	263	1.1	312	1.3	256	1.0
Black Only	78	1.7	81	1.8	81	1.8	115	2.6	40	0.9
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	4	0.3	4	0.3	3	0.3	*	*	*	* *
AIAN Only	3	0.5	3	0.5	2	0.4	3	0.6	2	0.4
2 or More Races	10	1.7	11	1.8	10	1.6	13	2.2	8	1.3
Mountain										
White Only	245	1.5	244	1.4	242	1.4	288	1.7	202	1.2
Black Only	21	2.8	21	2.7	21	2.7	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	4	0.7 *
AIAN Only	8	1.1	9	1.3	7	1.1	9	1.4	6	0.9
2 or More Races	4	0.9	4	0.9	4	0.9	4	0.9	4	0.9
Pacific										
White Only	511	1.6	508	1.6	508	1.6	428	1.3	593	1.8
Black Only	17	0.7	16	0.7	16	0.7	5	0.2	29	1.2
NHOPI Only	8	1.3	8	1.3	8	1.3	6	1.3	10	1.2
Asian Only	5	0.1	5	0.1	5	0.1	10	0.2	1	0.0
AIAN Only	5	0.7	5	0.7	6	0.8	7	0.9	4	0.5
2 or More Races	49	3.0	50	3.0	50	3.1	56	3.5	42	2.5
County Type by Age Group										
Large Metro										
12+	1,859	1.2	1,900	1.2	1,910	1.2	1,980	1.3	1,737	1.2
12-17	117	0.8	122	0.9	122	0.8	131	0.9	103	0.7
18+	1,742	1.3	1,778	1.3	1,788	1.3	1,849	1.4	1,634	1.2
18-25	326	1.7	334	1.7	340	1.7	373	1.9	278	1.5
26-49	917	1.6	926	1.6	934	1.5	963	1.6	871	1.5
50+	499	0.9	518	0.9	514	0.9	513	0.9	485	0.8

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Table N.1 Past Month Pain Reliever Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, pop 250,000-1,000,000										
12+	789	1.4	781	1.4	766	1.4	731	1.3	847	1.5
12-17	80	1.5	79	1.5	78	1.5	79	1.5	81	1.5
18+	709	1.4	703	1.4	688	1.4	652	1.3	766	1.5
18-25	164	2.2	171	2.3	168	2.3	163	2.1	165	2.2
26-49	373	1.9	354	1.8	347	1.8	373	1.9	372	1.9
50+	173	0.7	177	0.8	172	0.8	116	0.5	229	1.0
Small Metro, < 250,000 population										
12+	416	1.6	396	1.6	395	1.6	515	2.0	317	1.2
12-17	21	1.0	21	1.0	19	0.9	27	1.2	15	0.7
18+	395	1.7	375	1.6	376	1.6	488	2.1	302	1.3
18-25	109	3.0	108	3.0	109	3.1	139	4.0	78	2.1
26-49	200	2.4	191	2.3	188	2.3	258	3.0	142	1.7
50+	86	0.8	77	0.7	78	0.7	91	0.8	81	0.7
Nonmetro, 20,000 or more urban pop										
12+	206	1.3	199	1.3	194	1.3	227	1.5	184	1.2
12-17	14	1.0	15	1.1	14	1.0	15	1.0	13	0.9
18+	192	1.4	183	1.4	180	1.3	212	1.5	171	1.2
18-25	63	3.2	63	3.2	62	3.1	85	4.2	42	2.2
26-49	77	1.5	78	1.6	75	1.5	82	1.6	72	1.4
50+	51	0.8	42	0.6	43	0.7	45	0.7	57	0.8
Nonmetro, 2,500-19,999 urban pop										
12+	248	1.4	214	1.3	212	1.3	260	1.5	235	1.2
12-17	17	1.1	17	1.2	17	1.2	18	1.2	16	1.0
18+	231	1.4	197	1.3	195	1.3	242	1.6	219	1.2
18-25	60	3.0	51	2.7	52	3.0	61	3.1	58	2.8
26-49	135	2.4	113	2.3	112	2.3	149	2.9	121	2.0
50+	36	0.4	33	0.4	31	0.4	32	0.4	40	0.4
Nonmetro, < 2,500 urban pop										
12+	45	1.1	37	1.1	34	1.0	62	1.3	28	0.8
12-17	8	2.3	5	1.7	5	1.8	*	*	9	2.9
18+	37	1.0	32	1.0	29	0.9	55	1.3	19	0.6
18-25	9	2.2	6	2.0	6	2.1	7	1.7	10	2.8
26-49	14	1.1	12	1.1	9	0.8	21	1.5	6	0.5
50+	14	0.7	14	0.8	14	0.8	26	1.1	2	0.1

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**Table N.1 Past Month Pain Reliever Use (continued)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	404	1.3	413	1.4	414	1.4	479	1.6	329	1.1
Not Hispanic/Latino	1,455	1.2	1,487	1.2	1,496	1.2	1,501	1.3	1,409	1.2
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	107	1.2	109	1.2	98	1.1	128	1.5	86	0.9
Not Hispanic/Latino	682	1.5	673	1.4	668	1.4	603	1.3	762	1.7 a
Small Metro, < 250,000 population										
Hispanic/Latino	59	2.2	55	2.0	54	2.0	51	1.9	67	2.3
Not Hispanic/Latino	357	1.6	342	1.5	341	1.5	465	2.0	250	1.1 a
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	10	0.8	10	0.9	9	0.7	9	0.7	11	1.0
Not Hispanic/Latino	196	1.4	188	1.4	185	1.3	218	1.6	173	1.2
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	12	1.2	11	1.2	10	1.2	17	2.0	7	0.6
Not Hispanic/Latino	236	1.4	203	1.3	202	1.3	243	1.5	229	1.3
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	* *	*	* *	*	*	*	*
Not Hispanic/Latino	41	1.0	33	1.0	29	0.9	56	1.3	25	0.7
<b>County Type by Race</b>										
Large Metro										
White Only	1,472	1.3	1,506	1.3	1,514	1.3	1,523	1.4	1,421	1.3
Black Only	296	1.3	305	1.3	309	1.3	335	1.5	257	1.1
NHOPI Only	4	0.5	4	0.5	4	0.5	7	1.0	1	0.1
Asian Only	29	0.2	25	0.2	25	0.2	52	0.5	6	0.1
AIAN Only	13	0.9	14	0.9	14	0.8	16	1.0	10	0.7
2 or More Races	44	1.5	45	1.5	44	1.4	46	1.6	42	1.4
Small Metro, pop 250,000-1,000,000										
White Only	665	1.5	660	1.4	644	1.4	610	1.3	720	1.6
Black Only	76	1.3	76	1.3	78	1.3	68	1.1	83	1.4
NHOPI Only	6	2.0	6	2.0	6	2.1	*	*	9	2.9 *
Asian Only	4	0.2	4	0.2	4	0.2	3	0.2	4	0.2
AIAN Only	7	1.2	4	0.7	5	0.8	10	1.5	5	0.8
2 or More Races	32	2.3	31	2.3	28	2.1	37	2.8	26	1.9

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**Table N.1 Past Month Pain Reliever Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses			Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Small Metro, < 250,000 population											
White Only	351	1.6	348	1.6		351	1.6	432	2.0	270	1.2 a
Black Only	30	1.2	28	1.2		23	1.0	33	1.3	26	1.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*
Asian Only	1	0.1	1	0.2		1	0.2	*	*	2	0.3 *
AIAN Only	3	1.2	1	0.4		1	0.4	1	0.2	6	2.1
2 or More Races	*	*	16	3.7	*	17	3.7	*	*	11	2.3 *
Nonmetro, 20,000 or more urban pop											
White Only	176	1.4	167	1.3		163	1.3	196	1.5	155	1.2
Black Only	14	1.1	14	1.1		13	1.0	14	1.2	14	1.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*
Asian Only	1	0.3	0	0.2		0	0.2	1	0.5	*	*
AIAN Only	5	1.7	6	2.0		*	*	3	1.2	*	*
2 or More Races	11	3.1	11	3.8	a	12	4.1	13	3.0	8	3.2
Nonmetro, 2,500-19,999 urban pop											
White Only	226	1.4	196	1.4		194	1.4	240	1.6	213	1.3
Black Only	15	0.9	13	0.9		13	0.9	11	0.7	18	1.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*	*
AIAN Only	3	0.9	4	1.4		4	2.8	4	1.2	3	0.7
2 or More Races	3	1.0	1	0.4		2	0.6	5	1.7	2	0.4
Nonmetro, < 2,500 urban pop											
White Only	38	1.0	30	1.0		29	0.9	60	1.5	16	0.5
Black Only	1	0.3	1	0.5		1	0.5	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*	*
AIAN Only	3	2.9	4	5.1		*	*	2	2.2	4	3.3
2 or More Races	3	2.5	*	*	*	*	*	*	*	*	*
<b>College Enrollment by Gender</b>											
Persons Aged 18 to 22 <sup>1</sup>											
Male	221	2.0	216	2.0		214	2.0	248	2.3	194	1.8
Female	197	1.9	202	2.0		202	2.0	196	1.9	199	1.9
Full-Time College Students											
Male	50	1.4	51	1.4		49	1.4	60	1.6	40	1.1
Female	52	1.2	54	1.3	a	54	1.3 a	39	0.9	64	1.5

(continued)

Table N.1 Past Month Pain Reliever Use (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	171	2.4	165	2.3	165	2.3	188	2.6	154	2.1
Female	146	2.4	148	2.4	148	2.4	157	2.5	134	2.3
<b>Age Group by Gender</b>										
12+										
Male	1,901	1.5	1,860	1.4	1,852	1.4	2,110	1.6	1,692	1.3 a
Female	1,662	1.2	1,668	1.2	1,660	1.2	1,665	1.2	1,658	1.2
12-17										
Male	96	0.8	96	0.8	95	0.7	112	0.9	80	0.6
Female	161	1.3	163	1.3	160	1.3	164	1.3	159	1.3
18+										
Male	1,805	1.5	1,764	1.5	1,757	1.5	1,998	1.7	1,612	1.4 a
Female	1,500	1.2	1,505	1.2	1,500	1.2	1,501	1.2	1,499	1.2
18-25										
Male	394	2.3	393	2.3	392	2.2	458	2.6	331	1.9 a
Female	335	1.9	341	2.0	347	2.0 a	371	2.1	300	1.7
26-49										
Male	975	2.0	937	1.9 a	927	1.9 a	1,097	2.3	854	1.8 a
Female	740	1.5	737	1.5	737	1.5	749	1.5	731	1.5
50+										
Male	435	0.8	435	0.8	438	0.9	443	0.9	426	0.8
Female	425	0.7	427	0.7	415	0.7	381	0.7	468	0.8
<b>Age Group by Race</b>										
12+										
White Only	2,928	1.4	2,906	1.4	2,895	1.4	3,060	1.5	2,795	1.3
Black Only	431	1.3	438	1.3	437	1.3	462	1.4	400	1.2
NHOPI Only	12	0.9	12	0.9	13	1.0	12	1.1	12	0.8
Asian Only	34	0.2	30	0.2	30	0.2	57	0.4	12	0.1
AIAN Only	35	1.1	34	1.1	31	1.0	36	1.1	35	1.1
2 or More Races	122	2.2	107	1.9	105	1.9	149	2.7	96	1.7
12-17										
White Only	188	1.0	186	1.0	185	1.0	208	1.1	168	0.9
Black Only	45	1.2	47	1.3 a	45	1.2	42	1.1	49	1.3
NHOPI Only	1	0.5	1	0.5	1	0.5	*	*	1	0.7 *
Asian Only	2	0.2	2	0.2	2	0.2	4	0.3	*	* *
AIAN Only	3	0.8	5	1.2	4	1.1	3	0.7	3	0.9
2 or More Races	18	1.9	18	1.9	17	1.8	19	2.1	17	1.8

(continued)

**Table N.1 Past Month Pain Reliever Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18+										
White Only	2,739	1.4	2,721	1.4	2,709	1.4	2,851	1.5	2,627	1.4
Black Only	385	1.3	391	1.3	392	1.3	420	1.4	351	1.1
NHOPI Only	11	0.9	11	1.0	12	1.0	11	1.2	11	0.8
Asian Only	32	0.2	28	0.2	28	0.2	53	0.4	12	0.1
AIAN Only	32	1.2	29	1.0	27	1.0	33	1.2	32	1.1
2 or More Races	104	2.3	89	1.9	88	1.9	130	2.9	78	1.7
18-25										
White Only	596	2.3	599	2.3	601	2.4	676	2.6	516	2.0 a
Black Only	90	1.7	91	1.7	94	1.8	103	1.9	77	1.5
NHOPI Only	6	2.4	6	2.5	6	2.7	6	2.5	*	* *
Asian Only	3	0.1	3	0.1	3	0.1	4	0.2	2	0.1
AIAN Only	8	1.5	8	1.4	8	1.5	9	1.7	7	1.4
2 or More Races	27	2.8	28	2.9	26	2.7	30	3.0	23	2.5
26-49										
White Only	1,463	1.9	1,432	1.9	1,428	1.9	1,593	2.1	1,332	1.8
Black Only	154	1.2	150	1.1	147	1.1	138	1.1	171	1.3
NHOPI Only	4	0.8	4	0.8	5	0.9 a	*	*	6	0.9 *
Asian Only	14	0.2	14	0.2	14	0.2	19	0.3	10	0.1
AIAN Only	21	1.5	17	1.3	14	1.1	23	1.7	19	1.4
2 or More Races	59	3.1	57	2.9	57	3.0	71	3.9	48	2.4
50+										
White Only	681	0.8	690	0.8	681	0.8	583	0.6	778	0.9
Black Only	141	1.2	151	1.3 a	151	1.3 a	178	1.5	103	0.9
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	11	0.2 *	11	0.2 *	*	*	*	* *
AIAN Only	4	0.4	4	0.4	4	0.5	2	0.2	*	* *
2 or More Races	18	1.0	5	0.3	5	0.3	*	*	8	0.4 *
Age Group by Hispanicity										
12+										
Hispanic/Latino	596	1.4	602	1.4	589	1.3	688	1.6	503	1.1 a
Not Hispanic/Latino	2,967	1.3	2,926	1.3	2,923	1.3	3,087	1.4	2,847	1.3
12-17										
Hispanic/Latino	63	1.1	63	1.1	62	1.1	70	1.2	57	1.0
Not Hispanic/Latino	194	1.0	196	1.0	193	1.0	207	1.1	182	1.0

(continued)

**Table N.1 Past Month Pain Reliever Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18+										
Hispanic/Latino	532	1.4	539	1.4	526	1.4	619	1.6	446	1.2
Not Hispanic/Latino	2,773	1.3	2,730	1.3	2,730	1.3	2,880	1.4	2,665	1.3
18-25										
Hispanic/Latino	142	1.9	146	2.0	147	2.0	152	2.0	132	1.8
Not Hispanic/Latino	588	2.2	588	2.2	592	2.2	676	2.5	499	1.8
26-49										
Hispanic/Latino	322	1.7	319	1.6	312	1.6	367	1.9	277	1.4
Not Hispanic/Latino	1,394	1.8	1,355	1.7	1,352	1.7	1,479	1.9	1,308	1.6
50+										
Hispanic/Latino	68	0.6	74	0.7	67	0.6	100	0.9	36	0.3
Not Hispanic/Latino	791	0.8	788	0.8	786	0.8	724	0.7	858	0.9
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	100	1.6	102	1.6	101	1.6	101	1.6	99	1.6
18-25	335	1.9	340	2.0	346	2.0	370	2.1	299	1.7
26-44	580	1.5	574	1.4	572	1.4	557	1.4	603	1.5
Pregnant Female Aged 15-44										
15-17	*	*	*	*	*	*	*	*	*	*
18-25	5	0.7	5	0.7	5	0.7	10	1.2	1	0.1
26-44	15	1.0	15	1.0	15	1.0	6	0.4	23	1.5
Not Pregnant Female Aged 15-44										
15-17	98	1.6	100	1.6	99	1.6	98	1.6	98	1.6
18-25	330	2.0	335	2.0	341	2.1	361	2.2	298	1.8
26-44	566	1.5	559	1.5	557	1.5	551	1.5	580	1.5
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	852	1.8	848	1.8	850	1.8	855	1.8	849	1.8
Black Only	105	1.1	110	1.2	111	1.2	108	1.1	103	1.1
NHOPI Only	5	1.3	6	1.4	6	1.5	6	1.7	4	1.0
Asian Only	6	0.1	5	0.1	6	0.1	2	0.1	9	0.2
AIAN Only	6	0.7	7	0.8	8	0.9	8	1.0	4	0.4
2 or More Races	41	2.7	40	2.6	39	2.5	49	3.2	33	2.1

(continued)



**Table N.1 Past Month Pain Reliever Use (continued)**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses			Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses			2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent		Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pregnant Female Aged 15-44												
White Only	19	1.1	20	1.2	a	20	1.2	a	13	0.8	24	1.5
Black Only	*	*	*	*	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*	*	*
Not Pregnant Female Aged 15-44												
White Only	834	1.9	828	1.8		831	1.9		842	1.9	825	1.8
Black Only	103	1.1	109	1.2		109	1.2		104	1.2	103	1.1
NHOPI Only	5	1.4	6	1.5		6	1.6	a	6	1.8	4	1.0
Asian Only	6	0.1	5	0.1		6	0.1		2	0.1	9	0.2
AIAN Only	6	0.7	7	0.9		8	0.9		8	1.0	4	0.5
2 or More Races	39	2.6	39	2.6		38	2.5		46	3.1	32	2.2
<b>Pregnancy by Hispanicity</b>												
Female Aged 15-44 <sup>3</sup>												
Hispanic/Latino	184	1.4	187	1.5		188	1.5		201	1.6	167	1.3
Not Hispanic/Latino	831	1.7	829	1.6		832	1.7		828	1.7	834	1.6
Pregnant Female Aged 15-44												
Hispanic/Latino	5	1.0	5	1.0		5	1.0		*	*	*	*
Not Hispanic/Latino	17	1.0	18	1.0		18	1.0		17	0.9	18	1.0
Not Pregnant Female Aged 15-44												
Hispanic/Latino	179	1.4	182	1.5		183	1.5		198	1.6	161	1.3
Not Hispanic/Latino	814	1.7	811	1.7		814	1.7		811	1.7	816	1.7

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

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## Appendix O: 2015-2016 NSDUH – Weighted Annual Averages Substance Use Disorder – UDPYILAL

**Table O.1 Substance Use Disorder**

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Age Group</b>										
12+	20,461	7.6	20,568	7.7	20,543	7.6	20,810	7.8	20,112	7.5
12-17	1,148	4.6	1,156	4.6	1,152	4.6	1,233	5.0	1,064	4.3
18+	19,312	7.9	19,412	8.0	19,391	8.0	19,577	8.1	19,048	7.8
18-25	5,282	15.2	5,326	15.3	5,305	15.3	5,327	15.3	5,236	15.1
26-49	9,512	9.6	9,495	9.6	9,503	9.6	9,710	9.8	9,315	9.4
50+	4,519	4.1	4,591	4.2	4,583	4.2	4,540	4.2	4,497	4.1
<b>Gender</b>										
Male	12,839	9.9	12,925	9.9	12,909	9.9	13,275	10.2	12,402	9.5
Female	7,622	5.5	7,643	5.5	7,635	5.5	7,535	5.5	7,710	5.6
<b>Hispanicity</b>										
Hispanic/Latino	3,289	7.5	3,308	7.5	3,288	7.5	3,570	8.2	3,008	6.8
Not Hispanic/Latino	17,172	7.6	17,260	7.7	17,256	7.7	17,240	7.7	17,104	7.6
<b>Race</b>										
White Only	16,403	7.8	16,461	7.9	16,448	7.8	16,818	8.0	15,987	7.6
Black Only	2,564	7.5	2,595	7.6	2,595	7.6	2,512	7.4	2,615	7.6
NHOPI Only	81	6.2	79	6.0	73	5.6	90	8.2	71	4.7
Asian Only	563	3.8	567	3.8	555	3.7	585	3.9	542	3.7
AIAN Only	312	9.8	317	10.0	326	10.3	321	10.2	304	9.5
2 or More Races	538	9.7	549	9.9	546	9.8	484	8.9	592	10.5
<b>Division</b>										
New England	1,256	9.9	1,275	10.1	1,259	10.0	1,241	9.8	1,270	10.0
Middle Atlantic	2,590	7.4	2,616	7.4	2,592	7.4	2,633	7.5	2,547	7.2
East North Central	3,025	7.7	3,059	7.8	3,059	7.8	3,048	7.8	3,001	7.7
West North Central	1,297	7.4	1,297	7.4	1,308	7.5	1,308	7.5	1,286	7.3
South Atlantic	3,757	7.1	3,725	7.0	3,718	7.0	3,769	7.1	3,745	7.0
East South Central	1,004	6.4	1,033	6.6	1,022	6.5	1,100	7.0	909	5.8
West South Central	2,139	6.7	2,156	6.8	2,182	6.9	2,268	7.2	2,010	6.3
Mountain	1,525	7.8	1,540	7.9	1,535	7.9	1,477	7.6	1,572	8.0
Pacific	3,868	8.8	3,866	8.8	3,870	8.8	3,965	9.1	3,772	8.6

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>County Type</b>										
Large Metro	11,852	7.9	12,029	7.9	12,122	7.9	12,094	8.1	11,611	7.7
Small Metro, pop 250,000-1,000,000	4,141	7.4	4,203	7.5	4,126	7.5	4,169	7.4	4,112	7.4
Small Metro, < 250,000 population	2,013	7.9	2,033	8.0 a	2,032	8.1 a	2,026	7.9	2,001	7.8
Nonmetro, 20,000 or more urban pop	1,088	7.1	1,079	7.2	1,070	7.2	1,149	7.6	1,027	6.7
Nonmetro, 2,500-19,999 urban pop	1,157	6.4	1,041	6.3	1,011	6.3	1,162	6.8	1,152	6.0
Nonmetro, < 2,500 urban pop	210	5.1	183	5.3	181	5.3	210	4.6	210	5.7
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	3,182	15.0	3,201	15.1	3,143	15.1	3,204	15.1	3,160	15.0
Full-Time College Students	1,166	14.7	1,186	14.8	1,099	14.7	1,157	14.6	1,175	14.7
Other Persons Aged 18 to 22 <sup>2</sup>	2,016	15.2	2,015	15.3	2,044	15.3	2,047	15.3	1,985	15.1
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	5,440	8.6	5,458	8.6	5,461	8.6	5,470	8.7	5,410	8.5
Pregnant Female Aged 15-44	169	7.4	171	7.4	174	7.5	201	8.8	136	6.0
Not Pregnant Female Aged 15-44	5,272	8.6	5,287	8.7	5,287	8.7	5,269	8.7	5,274	8.6
<b>Division by Age Group</b>										
New England										
12+	1,256	9.9	1,275	10.1	1,259	10.0	1,241	9.8	1,270	10.0
12-17	55	5.1	55	5.1	55	5.2	53	5.0	56	5.3
18+	1,201	10.4	1,220	10.5	1,203	10.4	1,188	10.3	1,214	10.5
18-25	314	19.0	314	19.0	308	18.6	282	17.1	346	20.9
26-49	538	12.1	534	12.0	524	11.8	593	13.3	483	10.9
50+	349	6.4	372	6.8 a	371	6.8 a	312	5.7	386	7.0
Middle Atlantic										
12+	2,590	7.4	2,616	7.4 a	2,592	7.4	2,633	7.5	2,547	7.2
12-17	112	3.7	114	3.8	114	3.7	130	4.3	95	3.1
18+	2,477	7.7	2,502	7.8	2,479	7.7	2,503	7.8	2,452	7.6
18-25	741	16.7	743	16.8	737	16.6	769	17.2	713	16.2
26-49	1,184	9.2	1,190	9.3	1,173	9.1	1,174	9.1	1,193	9.3
50+	553	3.7	569	3.8 a	569	3.8 a	560	3.8	546	3.7

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH		
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	
East North Central											
12+	3,025	7.7	3,059	7.8	a	3,059	7.8	3,048	7.8	3,001	7.7
12-17	179	4.8	177	4.8		178	4.8	198	5.3	159	4.3
18+	2,846	8.0	2,881	8.1	a	2,881	8.1	2,850	8.0	2,842	8.0
18-25	786	15.5	792	15.6		793	15.6	835	16.4	738	14.6
26-49	1,340	9.6	1,353	9.7		1,352	9.7	1,317	9.4	1,362	9.8
50+	720	4.4	737	4.5		736	4.5	699	4.3	741	4.5
West North Central											
12+	1,297	7.4	1,297	7.4		1,308	7.5	1,308	7.5	1,286	7.3
12-17	78	4.7	77	4.7		77	4.7	74	4.5	82	5.0
18+	1,219	7.7	1,221	7.7		1,231	7.8	1,234	7.8	1,205	7.6
18-25	356	15.3	354	15.3		353	15.2	364	15.7	347	15.0
26-49	570	9.2	574	9.2		581	9.3	579	9.3	561	9.0
50+	294	4.0	293	4.0		296	4.1	291	4.0	297	4.0
South Atlantic											
12+	3,757	7.1	3,725	7.0		3,718	7.0	3,769	7.1	3,745	7.0
12-17	179	3.8	185	3.9	a	185	3.9	186	4.0	172	3.6
18+	3,578	7.4	3,540	7.3		3,533	7.3	3,582	7.4	3,573	7.3
18-25	961	14.7	977	14.9	a	972	14.9	964	14.6	958	14.8
26-49	1,772	9.2	1,719	8.9	a	1,715	8.9	1,828	9.5	1,715	8.9
50+	845	3.7	845	3.7		846	3.7	790	3.5	900	3.9
East South Central											
12+	1,004	6.4	1,033	6.6		1,022	6.5	1,100	7.0	909	5.8
12-17	54	3.7	53	3.6		52	3.6	60	4.1	47	3.2
18+	951	6.7	980	6.9		969	6.8	1,040	7.3	862	6.0
18-25	267	13.2	275	13.6		271	13.4	264	13.0	270	13.4
26-49	524	9.3	529	9.4		524	9.3	548	9.8	500	8.9
50+	160	2.4	176	2.7		174	2.6	227	3.5	92	1.4
West South Central											a
12+	2,139	6.7	2,156	6.8		2,182	6.9	2,268	7.2	2,010	6.3
12-17	160	4.8	161	4.9		161	4.9	187	5.7	133	4.0
18+	1,979	6.9	1,995	7.0		2,020	7.1	2,081	7.4	1,877	6.6
18-25	571	13.2	579	13.4		567	13.1	566	13.0	576	13.3
26-49	1,015	8.3	1,016	8.3		1,052	8.6	1,087	8.9	943	7.6
50+	393	3.3	400	3.4		401	3.4	428	3.6	358	3.0

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Mountain										
12+	1,525	7.8	1,540	7.9	1,535	7.9	1,477	7.6	1,572	8.0
12-17	117	6.1	118	6.1	116	6.0	117	6.1	117	6.1
18+	1,408	8.0	1,422	8.1	1,419	8.1	1,361	7.8	1,454	8.2
18-25	416	16.1	418	16.1	421	16.3	368	14.2	464	17.9
26-49	669	9.2	677	9.3	670	9.2	670	9.3	667	9.1
50+	323	4.2	327	4.2	328	4.2	322	4.2	324	4.1
Pacific										
12+	3,868	8.8	3,866	8.8	3,870	8.8	3,965	9.1	3,772	8.6
12-17	215	5.3	215	5.4	214	5.3	227	5.6	202	5.0
18+	3,654	9.2	3,651	9.2	3,656	9.2	3,738	9.4	3,570	8.9
18-25	870	15.1	874	15.1	883	15.3	914	15.7	826	14.4
26-49	1,902	11.2	1,903	11.2	1,912	11.2	1,912	11.3	1,892	11.1
50+	882	5.2	873	5.1	861	5.0	911	5.4	853	5.0
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	93	7.7	91	7.5	87	7.2	105	8.8	82	6.7
Not Hispanic/Latino	1,162	10.2	1,185	10.4	1,172	10.2	1,136	9.9	1,188	10.4
Middle Atlantic										
Hispanic/Latino	412	8.1	414	8.2	407	8.0	396	7.9	428	8.4
Not Hispanic/Latino	2,178	7.2	2,202	7.3	2,186	7.3	2,237	7.4	2,119	7.1
East North Central										
Hispanic/Latino	260	8.8	262	8.9	262	8.9	248	8.5	272	9.1
Not Hispanic/Latino	2,764	7.6	2,797	7.7	2,796	7.7	2,800	7.7	2,729	7.5
West North Central										
Hispanic/Latino	71	7.5	68	7.2	69	7.3	77	8.3	64	6.7
Not Hispanic/Latino	1,226	7.4	1,229	7.4	1,239	7.5	1,231	7.4	1,222	7.4
South Atlantic										
Hispanic/Latino	374	5.5	377	5.5	370	5.4	392	5.8	357	5.1
Not Hispanic/Latino	3,383	7.3	3,348	7.2	3,348	7.2	3,377	7.3	3,388	7.3
East South Central										
Hispanic/Latino	42	7.5	43	7.8	42	7.5	50	9.0	34	6.1
Not Hispanic/Latino	963	6.3	990	6.5	980	6.5	1,050	6.9	875	5.8

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West South Central										
Hispanic/Latino	592	6.7	603	6.8	600	6.8	739	8.5	445	5.0 a
Not Hispanic/Latino	1,547	6.7	1,553	6.8	1,582	6.9	1,529	6.7	1,566	6.8
Mountain										
Hispanic/Latino	324	7.3	328	7.4	330	7.4	333	7.6	314	7.0
Not Hispanic/Latino	1,201	8.0	1,211	8.1	1,205	8.0	1,144	7.7	1,258	8.3
Pacific										
Hispanic/Latino	1,122	8.6	1,122	8.6	1,121	8.6	1,230	9.5	1,013	7.7
Not Hispanic/Latino	2,747	8.9	2,744	8.9	2,748	8.9	2,735	8.9	2,759	8.9
<b>Division by Race</b>										
New England										
White Only	1,098	10.1	1,100	10.2	1,089	10.1	1,076	9.9	1,119	10.3
Black Only	79	8.6	83	9.1	79	8.6	79	8.7	79	8.5
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	22	3.7	24	4.2	26	4.6	28	4.9	16	2.7
AIAN Only	2	3.2	1	2.3	2	2.5	3	5.1	1	1.4
2 or More Races	*	*	*	* *	*	* *	*	*	*	*
Middle Atlantic										
White Only	1,984	7.5	2,005	7.6	1,994	7.5	2,070	7.8	1,899	7.2
Black Only	434	8.5	435	8.5	423	8.3	411	8.0	458	8.9
NHOPI Only	8	5.6	8	5.7	8	5.7	*	*	*	*
Asian Only	91	3.6	93	3.7	92	3.7	94	3.8	88	3.5
AIAN Only	16	6.9	18	7.7	18	7.7	15	6.3	*	*
2 or More Races	56	8.9	56	9.0	57	9.2	30	4.9	81	12.8 a
East North Central										
White Only	2,537	7.8	2,556	7.9	2,559	7.9	2,539	7.8	2,535	7.8
Black Only	372	8.1	387	8.4 a	383	8.3	394	8.6	350	7.6
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	28	2.2	29	2.2	29	2.3	47	3.7	9	0.7 a
AIAN Only	19	8.6	21	9.8	21	9.7	14	6.7	23	10.5
2 or More Races	66	10.7	64	10.3	64	10.3	50	8.3	81	13.0

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	1,117	7.3	1,128	7.4	1,131	7.4	1,123	7.3	1,111	7.2
Black Only	88	7.8	88	7.8	89	7.9	76	6.8	101	8.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	26	5.3	25	5.1	26	5.2	40	8.1	12	2.5
AIAN Only	38	17.2	30	13.7	*	*	*	*	*	*
2 or More Races	26	8.6	23	7.8	22	7.3	20	6.7	31	10.3
South Atlantic										
White Only	2,798	7.3	2,748	7.2	2,741	7.2	2,861	7.5	2,735	7.1
Black Only	801	6.9	812	7.0	816	7.1	759	6.6	843	7.2
NHOPI Only	8	4.0	8	4.1	7	4.2	*	*	*	*
Asian Only	63	3.3	65	3.5	63	3.3	61	3.3	65	3.4
AIAN Only	18	5.3	20	5.8	17	4.8	21	6.0	16	4.5
2 or More Races	69	7.6	72	7.9	74	8.1	62	6.9	77	8.3
East South Central										
White Only	809	6.7	845	7.0	842	7.0	930	7.7	688	5.7
Black Only	164	5.2	161	5.1	158	5.0	149	4.8	180	5.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	10	4.4	10	4.2	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	14	7.1	11	5.4	10	4.9	*	*	*	*
West South Central										
White Only	1,672	6.7	1,690	6.8	1,701	6.9	1,780	7.2	1,563	6.3
Black Only	314	7.0	320	7.1	334	7.4	354	7.9	274	6.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	48	3.9	48	3.9	41	3.3	43	3.5	53	4.2
AIAN Only	50	8.9	47	8.4	56	10.1	50	9.0	50	8.8
2 or More Races	43	7.3	42	7.1	44	7.5	31	5.3	55	9.1
Mountain										
White Only	1,297	7.7	1,303	7.7	1,305	7.7	1,263	7.6	1,331	7.8
Black Only	69	9.1	70	9.3	71	9.4	62	8.4	76	9.8
NHOPI Only	7	4.5	7	4.6	6	4.3	*	*	*	*
Asian Only	22	3.5	21	3.3	21	3.3	19	3.1	24	3.8
AIAN Only	79	11.8	87	12.8	83	12.2	73	10.9	86	12.6
2 or More Races	51	11.2	53	11.7	50	11.1	53	12.0	48	10.5

(continued)



Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Pacific										
White Only	3,091	9.5	3,086	9.5	3,085	9.5	3,176	9.8	3,007	9.2
Black Only	241	10.1	239	10.0	242	10.1	228	9.5	255	10.6
NHOPI Only	36	5.8	35	5.8	34	5.6	42	9.2	*	* *
Asian Only	253	4.3	251	4.2	252	4.2	247	4.1	259	4.4
AIAN Only	83	10.6	86	11.1	88	11.3	96	12.5	69	8.8
2 or More Races	164	10.0	168	10.2	169	10.3	177	10.9	152	9.1
<b>County Type by Age Group</b>										
Large Metro										
12+	11,852	7.9	12,029	7.9	12,122	7.9	12,094	8.1	11,611	7.7
12-17	638	4.5	652	4.6	649	4.5	685	4.9	592	4.2
18+	11,214	8.3	11,377	8.3	11,473	8.2	11,409	8.4	11,019	8.1
18-25	2,982	15.5	3,026	15.5	3,037	15.4	2,972	15.3	2,992	15.6
26-49	5,739	9.8	5,820	9.8	5,884	9.8	5,865	10.0	5,614	9.5
50+	2,493	4.3	2,532	4.3	2,552	4.3	2,572	4.5	2,414	4.2
Small Metro, pop 250,000-1,000,000										
12+	4,141	7.4	4,203	7.5	4,126	7.5	4,169	7.4	4,112	7.4
12-17	255	4.8	256	4.8	254	4.9	276	5.1	233	4.4
18+	3,886	7.7	3,947	7.8	3,873	7.8	3,894	7.7	3,878	7.8
18-25	1,084	14.5	1,106	14.7	1,079	14.5	1,096	14.5	1,073	14.6
26-49	1,825	9.3	1,835	9.3	1,808	9.3	1,816	9.2	1,833	9.4
50+	977	4.2	1,006	4.3	986	4.3	982	4.2	972	4.2
Small Metro, < 250,000 population										
12+	2,013	7.9	2,033	8.0	2,032	8.1	2,026	7.9	2,001	7.8
12-17	97	4.4	100	4.6	102	4.7	97	4.4	96	4.5
18+	1,917	8.2	1,933	8.4	1,930	8.4	1,929	8.3	1,904	8.1
18-25	595	16.6	607	17.0	612	17.2	609	17.5	581	15.8
26-49	889	10.5	883	10.5	869	10.4	961	11.1	816	9.8
50+	432	3.8	442	4.0	449	4.0	358	3.2	506	4.5

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 20,000 or more urban pop										
12+	1,088	7.1	1,079	7.2	1,070	7.2	1,149	7.6	1,027	6.7
12-17	71	4.9	69	5.0	68	4.9	75	5.3	66	4.6
18+	1,018	7.4	1,010	7.5	1,002	7.4	1,074	7.8	962	6.9
18-25	284	14.3	281	14.4	284	14.5	319	15.5	249	12.9
26-49	422	8.3	399	8.1	402	8.2	442	8.8	403	7.9
50+	312	4.6	330	5.0	316	4.8	313	4.7	310	4.5
Nonmetro, 2,500-19,999 urban pop										
12+	1,157	6.4	1,041	6.3	1,011	6.3	1,162	6.8	1,152	6.0
12-17	70	4.5	63	4.4	63	4.6	80	5.5	61	3.6
18+	1,086	6.5	978	6.4	949	6.4	1,082	6.9	1,091	6.2
18-25	283	14.1	259	13.9	244	13.9	275	14.1	290	14.0
26-49	543	9.7	468	9.3	454	9.3	530	10.3	556	9.1
50+	260	2.9	251	3.0	250	3.1	276	3.3	244	2.6
Nonmetro, < 2,500 urban pop										
12+	210	5.1	183	5.3	181	5.3	210	4.6	210	5.7
12-17	18	5.3	16	5.9	16	5.8	20	5.4	16	5.1
18+	192	5.1	167	5.3	165	5.3	190	4.5	193	5.7
18-25	54	13.3	47	15.1	48	15.5	*	*	50	14.0
26-49	93	7.1	90	8.5	87	8.5	95	6.5	92	7.9
50+	45	2.2	30	1.7	30	1.7	38	1.7	51	2.8
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	2,218	7.4	2,255	7.4	2,262	7.4	2,439	8.1	1,997	6.7
Not Hispanic/Latino	9,634	8.0	9,774	8.0	9,860	8.0	9,654	8.1	9,615	8.0
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	646	7.4	646	7.4	626	7.3	653	7.8	639	7.0
Not Hispanic/Latino	3,495	7.5	3,556	7.5	3,501	7.5	3,516	7.4	3,473	7.5
Small Metro, < 250,000 population										
Hispanic/Latino	229	8.4	227	8.4	222	8.3	253	9.7	205	7.1
Not Hispanic/Latino	1,784	7.8	1,806	8.0	1,810	8.0	1,773	7.7	1,796	7.9
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	114	9.4	107	9.1	103	8.8	146	11.2	82	7.2
Not Hispanic/Latino	975	6.9	972	7.1	968	7.0	1,004	7.2	945	6.7

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	57	5.8	51	5.8	51	5.8	52	6.3	62	5.4
Not Hispanic/Latino	1,100	6.4	990	6.3	961	6.3	1,110	6.9	1,090	6.0
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	26	18.2	*	* *	*	* *	*	*	*	*
Not Hispanic/Latino	184	4.6	161	4.9	156	4.8	183	4.2	185	5.2
<b>County Type by Race</b>										
Large Metro										
White Only	9,184	8.3	9,303	8.3	9,366	8.3	9,437	8.6	8,930	8.1
Black Only	1,753	7.8	1,788	7.9	1,798	7.8	1,763	7.9	1,743	7.7
NHOPI Only	46	5.4	45	5.2	42	4.9	51	7.4	41	4.1
Asian Only	467	4.0	469	4.0	465	3.9	487	4.2	447	3.8
AIAN Only	130	8.6	135	8.9	159	9.6	139	8.9	121	8.2
2 or More Races	273	9.4	289	9.6	292	9.4	216	7.6	330	11.0
Small Metro, pop 250,000-1,000,000										
White Only	3,468	7.6	3,509	7.7	3,440	7.7	3,522	7.7	3,413	7.6
Black Only	391	6.6	404	6.8	401	6.8	359	6.0	422	7.2
NHOPI Only	26	8.6	25	8.3	23	7.7	26	9.6	*	* *
Asian Only	72	3.4	74	3.5	69	3.4	69	3.2	74	3.6
AIAN Only	46	7.3	49	7.4	58	8.4	45	7.2	46	7.5
2 or More Races	139	10.3	141	10.2	136	10.3	147	11.1	131	9.5
Small Metro, < 250,000 population										
White Only	1,717	7.9	1,729	8.0	1,734	8.1	1,734	8.0	1,699	7.8
Black Only	180	7.5	180	7.6	169	7.6	182	7.1	179	7.8
NHOPI Only	4	5.5	*	* *	*	* *	*	*	*	* *
Asian Only	18	2.9	20	3.6 a	19	3.4	19	2.8	17	3.0
AIAN Only	38	13.1	43	12.4	47	12.0	30	10.6	*	* *
2 or More Races	57	11.8	57	12.9	58	12.9	55	12.4	58	11.4
Nonmetro, 20,000 or more urban pop										
White Only	920	7.1	909	7.1	908	7.1	978	7.5	862	6.6
Black Only	111	8.3	105	7.9	107	8.0	98	8.0	123	8.6
NHOPI Only	4	6.2	3	5.3	2	4.6	*	*	*	* *
Asian Only	4	1.8	2	1.1	2	1.1	4	1.8	4	1.9
AIAN Only	27	9.7	36	12.0 a	28	10.8	32	13.8	21	6.7
2 or More Races	23	6.6	23	7.8 a	22	7.6	31	7.2	15	5.7

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Nonmetro, 2,500-19,999 urban pop										
White Only	954	6.1	864	6.0	851	6.1	981	6.7	926	5.6
Black Only	110	6.5	99	6.5	99	6.7	89	5.9	132	7.1
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	52	14.3	42	14.8	*	* *	58	16.9	46	12.0
2 or More Races	37	10.8	33	10.6	32	11.3	28	9.8	*	* *
Nonmetro, < 2,500 urban pop										
White Only	161	4.4	146	4.7	149	4.8	166	4.1	156	4.8
Black Only	*	*	*	* *	*	* *	*	*	*	*
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	*	*	*	* *	*	* *	*	*	*	*
AIAN Only	20	17.9	*	* *	*	* *	17	17.1	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	1,805	16.6	1,815	16.7	1,795	16.8	1,816	16.7	1,794	16.5
Female	1,377	13.3	1,386	13.4	1,348	13.3	1,388	13.3	1,366	13.4
Full-Time College Students										
Male	619	16.9	631	17.0	596	17.2	656	17.5	581	16.2
Female	547	12.8	555	13.0	502	12.5	501	12.0	593	13.6
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	1,186	16.5	1,184	16.6	1,198	16.6	1,160	16.3	1,213	16.7
Female	830	13.7	831	13.8	846	13.8	888	14.2	772	13.2
<b>Age Group by Gender</b>										
12+										
Male	12,839	9.9	12,925	9.9	12,909	9.9	13,275	10.2	12,402	9.5 a
Female	7,622	5.5	7,643	5.5	7,635	5.5	7,535	5.5	7,710	5.6
12-17										
Male	560	4.4	570	4.5 a	567	4.5	611	4.8	509	4.0 a
Female	588	4.8	586	4.8	586	4.8	622	5.1	555	4.5
18+										
Male	12,279	10.5	12,355	10.5	12,342	10.5	12,664	10.8	11,893	10.1
Female	7,034	5.6	7,057	5.6	7,049	5.6	6,913	5.5	7,155	5.7

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
Male	3,079	17.6	3,100	17.8	3,100	17.8	3,149	18.0	3,008	17.3
Female	2,203	12.7	2,226	12.9	2,205	12.8	2,178	12.5	2,228	12.9
26-49										
Male	6,177	12.7	6,162	12.7	6,151	12.6	6,441	13.3	5,913	12.1
Female	3,336	6.6	3,332	6.6	3,352	6.7	3,269	6.5	3,402	6.8
50+										
Male	3,023	5.9	3,093	6.0	3,091	6.0	3,074	6.0	2,973	5.7
Female	1,495	2.6	1,498	2.6	1,492	2.5	1,466	2.5	1,525	2.6
<b>Age Group by Race</b>										
12+										
White Only	16,403	7.8	16,461	7.9	16,448	7.8	16,818	8.0	15,987	7.6
Black Only	2,564	7.5	2,595	7.6	2,595	7.6	2,512	7.4	2,615	7.6
NHOPI Only	81	6.2	79	6.0	73	5.6	90	8.2	71	4.7
Asian Only	563	3.8	567	3.8	555	3.7	585	3.9	542	3.7
AIAN Only	312	9.8	317	10.0	326	10.3	321	10.2	304	9.5
2 or More Races	538	9.7	549	9.9	546	9.8	484	8.9	592	10.5
12-17										
White Only	895	4.9	897	4.9	897	4.9	969	5.3	821	4.5
Black Only	133	3.6	136	3.6	135	3.6	137	3.7	130	3.5
NHOPI Only	12	6.5	11	6.4	10	6.4	*	*	7	4.0
Asian Only	35	2.6	34	2.6	34	2.6	32	2.5	37	2.7
AIAN Only	18	4.6	21	5.2	19	4.8	20	4.8	17	4.3
2 or More Races	56	6.0	57	6.1	56	6.1	58	6.4	53	5.6
18+										
White Only	15,508	8.1	15,564	8.1	15,551	8.1	15,849	8.3	15,166	7.9
Black Only	2,430	8.0	2,459	8.1	2,459	8.1	2,375	7.9	2,486	8.1
NHOPI Only	69	6.1	68	5.9	63	5.5	73	8.1	65	4.7
Asian Only	529	3.9	532	3.9	521	3.9	553	4.1	505	3.8
AIAN Only	294	10.6	297	10.7	307	11.1	301	11.0	287	10.2
2 or More Races	483	10.4	492	10.6	490	10.6	426	9.4	539	11.5

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
White Only	4,127	16.1	4,158	16.3	a 4,138	16.2	4,130	16.1	4,125	16.2
Black Only	698	13.1	705	13.2	709	13.3	721	13.4	675	12.8
NHOPI Only	24	10.2	25	10.7	25	10.6	31	12.7	17	7.4
Asian Only	171	8.0	173	8.1	164	7.8	185	8.9	157	7.2
AIAN Only	93	17.7	97	18.3	101	18.5	91	17.6	95	17.7
2 or More Races	168	17.5	169	17.6	168	17.3	169	16.9	168	18.1
26-49										
White Only	7,624	10.2	7,610	10.1	7,627	10.2	7,723	10.3	7,525	10.0
Black Only	1,141	8.6	1,140	8.6	1,123	8.5	1,204	9.2	1,079	8.1
NHOPI Only	44	8.5	41	8.0	37	7.4	40	9.3	*	* *
Asian Only	307	4.5	305	4.5	304	4.4	339	4.9	275	4.0
AIAN Only	153	11.4	159	11.7	173	12.7	185	13.7	121	9.1 a
2 or More Races	243	12.7	240	12.5	240	12.6	219	11.9	267	13.5
50+										
White Only	3,756	4.1	3,797	4.2	3,786	4.2	3,996	4.4	3,515	3.9
Black Only	591	5.0	615	5.2	a 627	5.3	450	3.8	732	6.1 a
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	51	1.1	54	1.2	53	1.2	29	0.6	73	1.7
AIAN Only	48	5.3	41	4.6	34	3.9	25	2.9	71	7.5
2 or More Races	71	4.1	83	4.8	81	4.6	37	2.2	105	5.8
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	3,289	7.5	3,308	7.5	3,288	7.5	3,570	8.2	3,008	6.8 a
Not Hispanic/Latino	17,172	7.6	17,260	7.7	17,256	7.7	17,240	7.7	17,104	7.6
12-17										
Hispanic/Latino	296	5.1	290	5.0	288	5.0	327	5.7	265	4.5
Not Hispanic/Latino	852	4.5	866	4.5	a 864	4.5	905	4.7	799	4.2
18+										
Hispanic/Latino	2,993	7.8	3,018	7.9	3,000	7.9	3,243	8.6	2,743	7.1 a
Not Hispanic/Latino	16,320	7.9	16,393	8.0	16,391	8.0	16,334	8.0	16,305	7.9
18-25										
Hispanic/Latino	1,043	14.0	1,051	14.1	1,040	13.9	1,085	14.6	1,002	13.4
Not Hispanic/Latino	4,238	15.5	4,275	15.7	a 4,265	15.6	4,242	15.5	4,234	15.6

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
Hispanic/Latino	1,577	8.1	1,585	8.1	1,587	8.2	1,654	8.5	1,500	7.7
Not Hispanic/Latino	7,935	10.0	7,910	10.0	7,916	10.0	8,056	10.2	7,814	9.8
50+										
Hispanic/Latino	372	3.3	383	3.4	373	3.3	504	4.6	241	2.1
Not Hispanic/Latino	4,146	4.2	4,208	4.3	4,210	4.3	4,036	4.1	4,256	4.3
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	473	7.5	469	7.5	469	7.5	525	8.5	421	6.6
18-25	2,192	12.7	2,215	12.9	2,194	12.7	2,167	12.5	2,217	13.0
26-44	2,775	7.0	2,775	7.0	2,798	7.0	2,778	7.1	2,772	6.9
Pregnant Female Aged 15-44										
15-17	*	*	*	*	*	*	*	*	*	*
18-25	81	10.9	81	10.9	81	10.7	115	13.8	48	7.2
26-44	84	5.6	86	5.7	89	5.9	84	5.9	84	5.4
Not Pregnant Female Aged 15-44										
15-17	470	7.5	465	7.5	465	7.5	522	8.5	417	6.6
18-25	2,111	12.8	2,134	13.0	2,112	12.8	2,052	12.4	2,169	13.2
26-44	2,691	7.0	2,688	7.0	2,709	7.1	2,695	7.1	2,687	7.0
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	4,278	9.2	4,294	9.2	4,288	9.2	4,206	9.1	4,349	9.3
Black Only	678	7.2	673	7.1	673	7.1	698	7.4	658	6.9
NHOPI Only	25	6.3	26	6.6	24	6.3	42	11.7	8	1.9
Asian Only	180	4.1	179	4.1	173	4.0	218	5.0	142	3.1
AIAN Only	96	11.1	100	11.4	116	12.6	112	13.1	79	9.2
2 or More Races	184	12.0	186	12.1	188	12.1	194	12.8	174	11.3
Pregnant Female Aged 15-44										
White Only	139	8.3	141	8.4	144	8.5	157	9.2	122	7.4
Black Only	21	5.7	22	5.8	21	5.6	32	8.5	9	2.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

Table O.1 Substance Use Disorder (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
Not Pregnant Female Aged 15-44										
White Only	4,138	9.2	4,153	9.3	4,144	9.2	4,050	9.1	4,227	9.4
Black Only	657	7.2	651	7.2	652	7.2	665	7.4	649	7.0
NHOPI Only	25	6.4	25	6.7	23	6.4	41	11.7	8	2.0 <sup>a</sup>
Asian Only	177	4.1	176	4.1	170	4.0	212	5.0	142	3.3
AIAN Only	94	11.4	98	11.6	113	12.8	111	13.5	77	9.2
2 or More Races	180	12.2	183	12.3	184	12.4	190	12.9	171	11.6
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	867	6.7	870	6.8	862	6.7	926	7.2	808	6.3
Not Hispanic/Latino	4,573	9.1	4,588	9.1	4,599	9.1	4,544	9.1	4,602	9.1
Pregnant Female Aged 15-44										
Hispanic/Latino	25	5.3	29	6.0	30	5.9	28	5.9	23	4.7
Not Hispanic/Latino	143	8.0	142	7.8	144	8.0	173	9.5	113	6.4
Not Pregnant Female Aged 15-44										
Hispanic/Latino	842	6.8	841	6.8	833	6.8	898	7.3	786	6.3
Not Hispanic/Latino	4,430	9.1	4,446	9.2	4,454	9.2	4,371	9.1	4,489	9.2

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.



## Appendix P: 2015-2016 NSDUH – Weighted Annual Averages Past Year Specialty Substance Use Treatment – TXYRSPILAL

**Table P.1 Past Year Specialty Substance Use Treatment**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	2,287	0.9	2,298	0.9	2,255	0.8	2,346	0.9	2,229	0.8
12-17	85	0.3	87	0.4	88	0.4	80	0.3	89	0.4
18+	2,203	0.9	2,211	0.9	2,167	0.9	2,266	0.9	2,140	0.9
18-25	400	1.2	400	1.2	401	1.2	417	1.2	383	1.1
26-49	1,305	1.3	1,293	1.3	1,275	1.3	1,330	1.3	1,280	1.3
50+	498	0.5	518	0.5	491	0.4	520	0.5	477	0.4
<b>Gender</b>										
Male	1,453	1.1	1,479	1.1	1,433	1.1	1,528	1.2	1,378	1.1
Female	834	0.6	819	0.6	823	0.6	818	0.6	851	0.6
<b>Hispanicity</b>										
Hispanic/Latino	361	0.8	379	0.9	357	0.8	340	0.8	382	0.9
Not Hispanic/Latino	1,926	0.9	1,919	0.9	1,899	0.8	2,006	0.9	1,847	0.8
<b>Race</b>										
White Only	1,778	0.8	1,769	0.8	1,740	0.8	1,768	0.8	1,789	0.9
Black Only	353	1.0	377	1.1	358	1.0	377	1.1	329	1.0
NHOPI Only	9	0.7	9	0.7	8	0.6	14	1.3	4	0.3
Asian Only	37	0.2	35	0.2	37	0.3	53	0.4	21	0.1
AIAN Only	36	1.1	40	1.2	44	1.4	44	1.4	29	0.9
2 or More Races	74	1.3	69	1.3	69	1.2	91	1.7	56	1.0
<b>Division</b>										
New England	156	1.2	156	1.2	145	1.1	172	1.4	140	1.1
Middle Atlantic	354	1.0	354	1.0	339	1.0	336	1.0	371	1.1
East North Central	312	0.8	313	0.8	311	0.8	263	0.7	361	0.9
West North Central	156	0.9	167	1.0	169	1.0	140	0.8	172	1.0
South Atlantic	406	0.8	390	0.7	384	0.7	433	0.8	379	0.7
East South Central	153	1.0	152	1.0	151	1.0	185	1.2	122	0.8
West South Central	227	0.7	239	0.8	229	0.7	263	0.8	191	0.6
Mountain	158	0.8	161	0.8	164	0.8	158	0.8	158	0.8
Pacific	365	0.8	367	0.8	364	0.8	397	0.9	334	0.8

(continued)

Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>County Type</b>										
Large Metro	1,218	0.8	1,244	0.8	1,224	0.8	1,199	0.8	1,238	0.8
Small Metro, pop 250,000-1,000,000	519	0.9	525	0.9	498	0.9	565	1.0	473	0.9
Small Metro, < 250,000 population	215	0.8	211	0.8	217	0.9	242	0.9	188	0.7
Nonmetro, 20,000 or more urban pop	140	0.9	129	0.9	127	0.9	142	0.9	139	0.9
Nonmetro, 2,500-19,999 urban pop	169	0.9	163	1.0	164	1.0	166	1.0	171	0.9
Nonmetro, < 2,500 urban pop	26	0.6	25	0.7	25	0.7	33	0.7	20	0.5
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	205	1.0	207	1.0	211	1.0 a	203	1.0	207	1.0
Full-Time College Students	37	0.5	37	0.5	38	0.5 a	27	0.3	47	0.6
Other Persons Aged 18 to 22 <sup>2</sup>	168	1.3	169	1.3	173	1.3	175	1.3	160	1.2
<b>Pregnancy</b>										
Female Aged 15-44 <sup>3</sup>	586	0.9	576	0.9	586	0.9	605	1.0	568	0.9
Pregnant Female Aged 15-44	32	1.4	32	1.4	32	1.4	35	1.5	28	1.2
Not Pregnant Female Aged 15-44	555	0.9	544	0.9	554	0.9	570	0.9	540	0.9
<b>Division by Age Group</b>										
New England										
12+	156	1.2	156	1.2	145	1.1	172	1.4	140	1.1
12-17	3	0.2	3	0.2 a	3	0.2 a	4	0.4	1	0.1
18+	153	1.3	154	1.3	142	1.2	168	1.5	139	1.2
18-25	26	1.6	26	1.6	27	1.6	25	1.5	27	1.6
26-49	98	2.2	97	2.2	87	2.0	106	2.4	90	2.0
50+	29	0.5	31	0.6	28	0.5	36	0.7	23	0.4
Middle Atlantic										
12+	354	1.0	354	1.0	339	1.0	336	1.0	371	1.1
12-17	7	0.2	7	0.2	7	0.2	6	0.2	8	0.3
18+	347	1.1	346	1.1	332	1.0	330	1.0	363	1.1
18-25	61	1.4	61	1.4	61	1.4	59	1.3	62	1.4
26-49	205	1.6	201	1.6	187	1.5	189	1.5	222	1.7
50+	81	0.5	84	0.6	84	0.6	82	0.6	80	0.5

(continued)

Table P.1 Past Year Specialty Substance Use Treatment (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	312	0.8	313	0.8	311	0.8	263	0.7	361	0.9
12-17	17	0.5	16	0.4	16	0.4	23	0.6	10	0.3
18+	295	0.8	297	0.8	295	0.8	240	0.7	351	1.0
18-25	66	1.3	67	1.3	66	1.3	67	1.3	65	1.3
26-49	174	1.2	171	1.2	169	1.2	147	1.0	201	1.4
50+	56	0.3	58	0.4	59	0.4	27	0.2	85	0.5
West North Central										
12+	156	0.9	167	1.0	169	1.0	140	0.8	172	1.0
12-17	12	0.7	12	0.7	12	0.7	13	0.8	11	0.7
18+	144	0.9	155	1.0	158	1.0	128	0.8	161	1.0
18-25	31	1.3	32	1.4	33	1.4	28	1.2	34	1.5
26-49	84	1.4	91	1.5	93	1.5	60	1.0	109	1.7
50+	29	0.4	32	0.4	32	0.4	40	0.5	18	0.2
South Atlantic										
12+	406	0.8	390	0.7	384	0.7	433	0.8	379	0.7
12-17	17	0.4	18	0.4	18	0.4	18	0.4	17	0.4
18+	388	0.8	372	0.8	366	0.8	415	0.9	362	0.7
18-25	76	1.2	75	1.1	76	1.2	74	1.1	79	1.2
26-49	255	1.3	251	1.3	249	1.3	273	1.4	237	1.2
50+	57	0.3	46	0.2	41	0.2	68	0.3	46	0.2
East South Central										
12+	153	1.0	152	1.0	151	1.0	185	1.2	122	0.8
12-17	1	0.1	2	0.1	2	0.1	*	*	3	0.2
18+	152	1.1	150	1.1	149	1.0	185	1.3	120	0.8
18-25	27	1.3	29	1.4	27	1.3	34	1.7	20	1.0
26-49	107	1.9	101	1.8	102	1.8	132	2.3	82	1.5
50+	18	0.3	20	0.3	20	0.3	19	0.3	17	0.3
West South Central										
12+	227	0.7	239	0.8	229	0.7	263	0.8	191	0.6
12-17	4	0.1	5	0.1	7	0.2	*	*	8	0.3
18+	223	0.8	234	0.8	222	0.8	263	0.9	183	0.6
18-25	34	0.8	31	0.7	30	0.7	35	0.8	32	0.7
26-49	98	0.8	95	0.8	100	0.8	111	0.9	84	0.7
50+	91	0.8	108	0.9	92	0.8	117	1.0	66	0.6

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Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Mountain										
12+	158	0.8	161	0.8	164	0.8	158	0.8	158	0.8
12-17	11	0.6	12	0.6	11	0.6	7	0.4	16	0.8
18+	147	0.8	149	0.8	153	0.9	151	0.9	142	0.8
18-25	31	1.2	31	1.2	32	1.2	36	1.4	26	1.0
26-49	89	1.2	90	1.2	91	1.3	88	1.2	91	1.2
50+	27	0.3	28	0.4	29	0.4	28	0.4	25	0.3
Pacific										
12+	365	0.8	367	0.8	364	0.8	397	0.9	334	0.8
12-17	12	0.3	13	0.3	13	0.3	10	0.3	15	0.4
18+	353	0.9	354	0.9	351	0.9	387	1.0	319	0.8
18-25	49	0.8	48	0.8	49	0.9	59	1.0	38	0.7
26-49	194	1.1	196	1.2	196	1.2	225	1.3	164	1.0
50+	110	0.6	110	0.6	106	0.6	103	0.6	117	0.7
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	19	1.6	21	1.7	17	1.4	12	1.0	27	2.2
Not Hispanic/Latino	137	1.2	135	1.2	127	1.1	160	1.4	113	1.0
Middle Atlantic										
Hispanic/Latino	49	1.0	51	1.0	45	0.9	38	0.8	60	1.2
Not Hispanic/Latino	305	1.0	303	1.0	295	1.0	298	1.0	311	1.0
East North Central										
Hispanic/Latino	31	1.0	30	1.0	29	1.0	9	0.3	52	1.7 a
Not Hispanic/Latino	282	0.8	283	0.8	282	0.8	254	0.7	309	0.9
West North Central										
Hispanic/Latino	4	0.5	3	0.3	3	0.3	6	0.6	3	0.3
Not Hispanic/Latino	152	0.9	164	1.0 a	166	1.0 a	134	0.8	169	1.0
South Atlantic										
Hispanic/Latino	28	0.4	31	0.5	25	0.4	49	0.7	7	0.1 a
Not Hispanic/Latino	377	0.8	359	0.8	359	0.8	383	0.8	371	0.8
East South Central										
Hispanic/Latino	2	0.3	*	* *	*	* *	*	*	0	0.0 *
Not Hispanic/Latino	152	1.0	149	1.0	151	1.0	181	1.2	122	0.8

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Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
West South Central										
Hispanic/Latino	55	0.6	69	0.8	65	0.7	67	0.8	43	0.5
Not Hispanic/Latino	172	0.7	170	0.7	164	0.7	196	0.9	148	0.6
Mountain										
Hispanic/Latino	30	0.7	30	0.7	30	0.7	31	0.7	28	0.6
Not Hispanic/Latino	129	0.9	131	0.9	134	0.9	128	0.9	130	0.9
Pacific										
Hispanic/Latino	143	1.1	143	1.1	143	1.1	125	1.0	161	1.2
Not Hispanic/Latino	222	0.7	224	0.7	221	0.7	272	0.9	173	0.6
<b>Division by Race</b>										
New England										
White Only	120	1.1	121	1.1	114	1.1	123	1.1	118	1.1
Black Only	27	3.0	27	2.9	22	2.4	37	4.1	17	1.9
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	3	0.6	4	0.7	5	0.8	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	5	2.4	5	2.1	4	1.8	*	*	*	*
Middle Atlantic										
White Only	263	1.0	262	1.0	258	1.0	245	0.9	281	1.1
Black Only	80	1.6	81	1.6	71	1.4	83	1.6	76	1.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	2	0.1	2	0.1	2	0.1	1	0.1	3	0.1
AIAN Only	1	0.3	1	0.5	1	0.5	0	0.2	*	*
2 or More Races	8	1.3	7	1.2	7	1.2	7	1.1	9	1.5
East North Central										
White Only	246	0.8	244	0.8	242	0.7	211	0.6	281	0.9
Black Only	53	1.1	55	1.2	56	1.2	38	0.8	67	1.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	2	0.1	2	0.2	2	0.1	3	0.3	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	8	1.3	8	1.3	8	1.3	5	0.8	12	1.9

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Table P.1 Past Year Specialty Substance Use Treatment (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	120	0.8	124	0.8	123	0.8	129	0.8	112	0.7
Black Only	21	1.9	27	2.4	26	2.3	7	0.6	35	3.1
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	6	2.5	*	*	*	*	1	0.6	*	*
2 or More Races	9	3.0	9	3.0	8	2.8	3	1.0	15	4.9
South Atlantic										
White Only	308	0.8	291	0.8	288	0.8	328	0.9	288	0.7
Black Only	90	0.8	94	0.8	91	0.8	96	0.8	85	0.7
NHOPI Only	0	0.2	0	0.2	0	0.1	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	1	0.4	2	0.6	1	0.3	2	0.5	1	0.2
2 or More Races	6	0.6	3	0.4	3	0.4	7	0.8	5	0.5
East South Central										
White Only	124	1.0	125	1.0	122	1.0	140	1.2	108	0.9
Black Only	17	0.5	18	0.6	17	0.6	22	0.7	11	0.3
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*
West South Central										
White Only	167	0.7	170	0.7	165	0.7	170	0.7	163	0.7
Black Only	49	1.1	60	1.3	59	1.3	73	1.6	24	0.5
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	7	1.2	4	0.8	*	*	*	*	2	0.3
2 or More Races	1	0.2	1	0.2	1	0.2	*	*	2	0.3
Mountain										
White Only	143	0.8	143	0.8	143	0.8	140	0.8	146	0.9
Black Only	2	0.3	3	0.4	3	0.4	0	0.0	5	0.6
NHOPI Only	0	0.2	0	0.2	0	0.2	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	10	1.4	12	1.8	16	2.3	13	2.0	6	0.9
2 or More Races	3	0.6	3	0.6	3	0.6	4	1.0	1	0.3

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Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Pacific										
White Only	287	0.9	289	0.9	285	0.9	282	0.9	293	0.9
Black Only	15	0.6	13	0.5	13	0.5	21	0.9	9	0.4
NHOPI Only	8	1.2	8	1.2	7	1.1	*	*	3	0.4
Asian Only	19	0.3	19	0.3	19	0.3	28	0.5	11	0.2
AIAN Only	9	1.1	10	1.3	12	1.5	11	1.4	7	0.9
2 or More Races	27	1.7	29	1.7	28	1.7	45	2.8	10	0.6
<b>County Type by Age Group</b>										
Large Metro										
12+	1,218	0.8	1,244	0.8	1,224	0.8	1,199	0.8	1,238	0.8
12-17	44	0.3	45	0.3	47	0.3	40	0.3	48	0.3
18+	1,174	0.9	1,199	0.9	1,177	0.8	1,158	0.9	1,190	0.9
18-25	222	1.1	223	1.1	226	1.1	240	1.2	204	1.1
26-49	668	1.1	683	1.1	667	1.1	645	1.1	692	1.2
50+	284	0.5	293	0.5	285	0.5	274	0.5	295	0.5
Small Metro, pop 250,000-1,000,000										
12+	519	0.9	525	0.9	498	0.9	565	1.0	473	0.9
12-17	17	0.3	18	0.3	18	0.4	19	0.4	16	0.3
18+	502	1.0	506	1.0	480	1.0	546	1.1	457	0.9
18-25	77	1.0	79	1.0	78	1.1	69	0.9	85	1.2
26-49	305	1.6	304	1.5	300	1.5	349	1.8	260	1.3
50+	120	0.5	124	0.5	102	0.4	127	0.5	113	0.5
Small Metro, < 250,000 population										
12+	215	0.8	211	0.8	217	0.9	242	0.9	188	0.7
12-17	6	0.3	6	0.3	6	0.3	5	0.2	6	0.3
18+	209	0.9	205	0.9	211	0.9	237	1.0	181	0.8
18-25	37	1.0	36	1.0	38	1.1	42	1.2	33	0.9
26-49	131	1.5	124	1.5	125	1.5	145	1.7	117	1.4
50+	41	0.4	45	0.4	48	0.4	50	0.4	31	0.3

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Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 20,000 or more urban pop										
12+	140	0.9	129	0.9	127	0.9	142	0.9	139	0.9
12-17	8	0.5	8	0.5	8	0.6	7	0.5	9	0.6
18+	133	1.0	122	0.9	120	0.9	135	1.0	130	0.9
18-25	34	1.7	35	1.8	33	1.7	32	1.6	35	1.8
26-49	83	1.6	70	1.4	70	1.4	74	1.5	92	1.8
50+	16	0.2	16	0.2	16	0.2	29	0.4	3	0.1
Nonmetro, 2,500-19,999 urban pop										
12+	169	0.9	163	1.0	164	1.0	166	1.0	171	0.9
12-17	8	0.5	8	0.6	8	0.6	7	0.5	8	0.5
18+	161	1.0	155	1.0	157	1.1	159	1.0	163	0.9
18-25	22	1.1	19	1.0	18	1.0	27	1.4	17	0.8
26-49	102	1.8	97	1.9	99	2.0	92	1.8	112	1.8
50+	37	0.4	40	0.5	40	0.5	39	0.5	35	0.4
Nonmetro, < 2,500 urban pop										
12+	26	0.6	25	0.7	25	0.7	33	0.7	20	0.5
12-17	2	0.6	2	0.8	2	0.7	2	0.5	2	0.7
18+	24	0.6	23	0.7	23	0.7	31	0.7	17	0.5
18-25	8	2.0	8	2.7	8	2.6	6	1.4	10	2.7
26-49	16	1.2	15	1.4	15	1.5	24	1.7	8	0.7
50+	*	*	*	*	*	*	*	*	*	*
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	216	0.7	233	0.8	221	0.7	196	0.6	236	0.8
Not Hispanic/Latino	1,002	0.8	1,011	0.8	1,003	0.8	1,002	0.8	1,002	0.8
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	83	0.9	83	0.9	73	0.9	70	0.8	96	1.1
Not Hispanic/Latino	436	0.9	442	0.9	425	0.9	495	1.0	377	0.8
Small Metro, < 250,000 population										
Hispanic/Latino	30	1.1	31	1.1	32	1.2	31	1.2	*	*
Not Hispanic/Latino	184	0.8	180	0.8	185	0.8	210	0.9	158	0.7
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	25	2.1	26	2.3	24	2.1	37	2.8	14	1.2
Not Hispanic/Latino	115	0.8	103	0.7	103	0.7	105	0.8	125	0.9

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Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	5	0.5	5	0.6	5	0.6	5	0.6	5	0.5
Not Hispanic/Latino	164	1.0	158	1.0	159	1.0	161	1.0	166	0.9
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	25	0.6	24	0.7	24	0.7	33	0.7	18	0.5
<b>County Type by Race</b>										
Large Metro										
White Only	907	0.8	911	0.8	909	0.8	841	0.8	973	0.9
Black Only	241	1.1	260	1.1	244	1.1	256	1.1	226	1.0
NHOPI Only	6	0.7	6	0.7	6	0.7	*	*	1	0.1
Asian Only	23	0.2	23	0.2	23	0.2	34	0.3	13	0.1
AIAN Only	9	0.6	11	0.7	10	0.6	13	0.8	5	0.4
2 or More Races	32	1.1	33	1.1	32	1.0	43	1.5	20	0.7
Small Metro, pop 250,000-1,000,000										
White Only	407	0.9	412	0.9	387	0.9	423	0.9	391	0.9
Black Only	74	1.2	78	1.3	75	1.3	91	1.5	56	1.0
NHOPI Only	3	0.9	3	1.0	2	0.8	2	0.9	3	1.0
Asian Only	7	0.3	8	0.4	8	0.4	9	0.4	5	0.3
AIAN Only	6	1.0	7	1.1	8	1.1	8	1.2	5	0.7
2 or More Races	22	1.7	18	1.3	18	1.4	32	2.4	13	0.9
Small Metro, < 250,000 population										
White Only	180	0.8	178	0.8	180	0.8	213	1.0	147	0.7
Black Only	20	0.8	20	0.9	19	0.8	12	0.5	27	1.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	4	0.7	*	*	*	*	3	0.4
AIAN Only	3	1.2	4	1.3	8	2.0	3	0.9	4	1.5
2 or More Races	5	1.0	5	1.0	5	1.1	4	0.8	7	1.3
Nonmetro, 20,000 or more urban pop										
White Only	124	1.0	111	0.9	109	0.9	118	0.9	130	1.0
Black Only	7	0.5	7	0.5	7	0.6	9	0.8	5	0.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	5	2.0	7	2.5	7	2.7	7	3.2	4	1.1
2 or More Races	4	1.1	4	1.3	4	1.4	7	1.6	0	0.1

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Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 2,500-19,999 urban pop										
White Only	139	0.9	137	0.9	135	1.0	144	1.0	134	0.8
Black Only	11	0.7	12	0.8	12	0.8	9	0.6	14	0.7
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	9	2.5	*	*	*	*	*	*	*	*
2 or More Races	9	2.6	8	2.7	8	2.7	*	*	14	3.6
Nonmetro, < 2,500 urban pop										
White Only	21	0.6	20	0.7	20	0.7	29	0.7	14	0.4
Black Only	*	*	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	3	2.6	3	3.7	*	*	3	3.0	3	2.3
2 or More Races	2	1.7	*	*	*	*	*	*	*	*
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	127	1.2	129	1.2	130	1.2	115	1.1	139	1.3
Female	78	0.8	77	0.8	81	0.8	88	0.8	68	0.7
Full-Time College Students										
Male	21	0.6	21	0.6	22	0.6	9	0.2	34	0.9
Female	16	0.4	16	0.4	16	0.4	19	0.5	13	0.3
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	106	1.5	108	1.5	108	1.5	107	1.5	105	1.4
Female	62	1.0	61	1.0	65	1.1	69	1.1	55	0.9
<b>Age Group by Gender</b>										
12+										
Male	1,453	1.1	1,479	1.1	1,433	1.1	1,528	1.2	1,378	1.1
Female	834	0.6	819	0.6	823	0.6	818	0.6	851	0.6
12-17										
Male	49	0.4	50	0.4	50	0.4	44	0.3	54	0.4
Female	36	0.3	37	0.3	38	0.3	36	0.3	35	0.3
18+										
Male	1,404	1.2	1,429	1.2	1,383	1.2	1,484	1.3	1,324	1.1
Female	799	0.6	782	0.6	785	0.6	782	0.6	816	0.6

(continued)

Table P.1 Past Year Specialty Substance Use Treatment (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
Male	257	1.5	257	1.5	253	1.5	266	1.5	247	1.4
Female	143	0.8	143	0.8	148	0.9	151	0.9	136	0.8
26-49										
Male	830	1.7	830	1.7	806	1.7	852	1.8	808	1.7
Female	475	0.9	464	0.9	469	0.9	478	1.0	472	0.9
50+										
Male	317	0.6	342	0.7	324	0.6	366	0.7	269	0.5
Female	181	0.3	176	0.3	168	0.3	154	0.3	208	0.4
<b>Age Group by Race</b>										
12+										
White Only	1,778	0.8	1,769	0.8	1,740	0.8	1,768	0.8	1,789	0.9
Black Only	353	1.0	377	1.1	358	1.0	377	1.1	329	1.0
NHOPI Only	9	0.7	9	0.7	8	0.6	14	1.3	4	0.3
Asian Only	37	0.2	35	0.2	37	0.3	53	0.4	21	0.1
AIAN Only	36	1.1	40	1.2	44	1.4	44	1.4	29	0.9
2 or More Races	74	1.3	69	1.3	69	1.2	91	1.7	56	1.0
12-17										
White Only	60	0.3	61	0.3	63	0.3	57	0.3	63	0.3
Black Only	12	0.3	13	0.4	13	0.3	10	0.3	14	0.4
NHOPI Only	1	0.5	1	0.6	1	0.5	1	0.6	*	*
Asian Only	1	0.1	1	0.1	1	0.1	2	0.2	0	0.0
AIAN Only	1	0.3	1	0.4	2	0.4	2	0.4	1	0.2
2 or More Races	9	1.0	9	1.0	9	1.0	8	0.9	10	1.1
18+										
White Only	1,718	0.9	1,707	0.9	1,677	0.9	1,711	0.9	1,726	0.9
Black Only	341	1.1	364	1.2	345	1.1	366	1.2	315	1.0
NHOPI Only	8	0.7	8	0.7	7	0.6	13	1.4	3	0.2
Asian Only	36	0.3	34	0.2	36	0.3	51	0.4	21	0.2
AIAN Only	35	1.3	38	1.4	42	1.5	42	1.5	28	1.0
2 or More Races	64	1.4	60	1.3	60	1.3	83	1.8	46	1.0

(continued)

Table P.1 Past Year Specialty Substance Use Treatment (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
18-25										
White Only	320	1.3	318	1.2	319	1.2	346	1.3	294	1.2
Black Only	40	0.7	41	0.8	40	0.8	36	0.7	43	0.8
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	15	0.7	16	0.7	17	0.8	13	0.6	17	0.8
AIAN Only	8	1.5	8	1.6	8	1.4	5	0.9	12	2.2
2 or More Races	15	1.5	15	1.6	16	1.6	13	1.3	17	1.8
26-49										
White Only	1,056	1.4	1,041	1.4	1,038	1.4	1,029	1.4	1,083	1.4
Black Only	166	1.3	172	1.3	156	1.2	185	1.4	147	1.1
NHOPI Only	6	1.2	6	1.2	5	1.1	*	*	3	0.5 *
Asian Only	17	0.3	15	0.2	17	0.2	31	0.5	3	0.0
AIAN Only	25	1.9	28	2.0	30	2.2	37	2.7	14	1.0
2 or More Races	34	1.8	31	1.6	30	1.6	38	2.1	29	1.5
50+										
White Only	342	0.4	348	0.4	321	0.4	335	0.4	349	0.4
Black Only	135	1.1	150	1.3	149	1.3	145	1.2	125	1.0
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	3	0.1	3	0.1	3	0.1	7	0.1	*	* *
AIAN Only	2	0.2	2	0.3	*	* *	1	0.1	3	0.3
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	361	0.8	379	0.9	357	0.8	340	0.8	382	0.9
Not Hispanic/Latino	1,926	0.9	1,919	0.9	1,899	0.8	2,006	0.9	1,847	0.8
12-17										
Hispanic/Latino	13	0.2	13	0.2	13	0.2	8	0.1	17	0.3
Not Hispanic/Latino	72	0.4	74	0.4	75	0.4	72	0.4	72	0.4
18+										
Hispanic/Latino	348	0.9	366	1.0	343	0.9	331	0.9	365	0.9
Not Hispanic/Latino	1,854	0.9	1,845	0.9	1,824	0.9	1,934	0.9	1,774	0.9
18-25										
Hispanic/Latino	57	0.8	59	0.8	57	0.8	73	1.0	41	0.5
Not Hispanic/Latino	343	1.3	341	1.3	345	1.3	344	1.3	343	1.3

(continued)

Table P.1 Past Year Specialty Substance Use Treatment (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
Hispanic/Latino	184	0.9	187	1.0	174	0.9	137	0.7	230	1.2
Not Hispanic/Latino	1,121	1.4	1,106	1.4	1,101	1.4	1,192	1.5	1,050	1.3
50+										
Hispanic/Latino	108	1.0	120	1.1	112	1.0	121	1.1	95	0.8
Not Hispanic/Latino	390	0.4	398	0.4	379	0.4	399	0.4	382	0.4
<b>Pregnancy by Age Group</b>										
Female Aged 15-44 <sup>3</sup>										
15-17	32	0.5	33	0.5	32	0.5	34	0.6	29	0.5
18-25	140	0.8	140	0.8	145	0.8	151	0.9	130	0.8
26-44	414	1.0	403	1.0	409	1.0	420	1.1	409	1.0
Pregnant Female Aged 15-44										
15-17	*	*	*	*	*	*	*	*	*	*
18-25	10	1.4	10	1.3	10	1.3	16	1.9	5	0.8
26-44	19	1.3	20	1.3	20	1.3	17	1.2	22	1.4
Not Pregnant Female Aged 15-44										
15-17	30	0.5	31	0.5	30	0.5	32	0.5	28	0.4
18-25	130	0.8	130	0.8	135	0.8	135	0.8	125	0.8
26-44	395	1.0	383	1.0	389	1.0	403	1.1	387	1.0
<b>Pregnancy by Race</b>										
Female Aged 15-44 <sup>3</sup>										
White Only	485	1.0	473	1.0	477	1.0	496	1.1	473	1.0
Black Only	56	0.6	56	0.6	58	0.6	64	0.7	48	0.5
NHOPI Only	3	0.7	3	0.7	2	0.6	*	*	*	*
Asian Only	9	0.2	7	0.2	9	0.2	13	0.3	6	0.1
AIAN Only	13	1.5	16	1.8	20	2.2	10	1.2	15	1.8
2 or More Races	21	1.4	20	1.3	19	1.2	18	1.2	24	1.6
Pregnant Female Aged 15-44										
White Only	24	1.4	24	1.4	25	1.5	29	1.7	20	1.2
Black Only	6	1.6	6	1.6	6	1.6	6	1.5	5	1.6
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

**Table P.1 Past Year Specialty Substance Use Treatment (continued)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Not Pregnant Female Aged 15-44										
White Only	460	1.0	449	1.0	453	1.0	467	1.0	454	1.0
Black Only	51	0.6	51	0.6	52	0.6	59	0.7	43	0.5
NHOPI Only	3	0.7	3	0.8	2	0.6	*	*	*	*
Asian Only	9	0.2	7	0.2	9	0.2	13	0.3	6	0.1
AIAN Only	12	1.4	15	1.8	20	2.2	10	1.2	14	1.6
2 or More Races	20	1.4	20	1.3	18	1.2	18	1.2	22	1.5
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-44 <sup>3</sup>										
Hispanic/Latino	55	0.4	56	0.4	57	0.4	57	0.4	52	0.4
Not Hispanic/Latino	532	1.1	519	1.0	529	1.0	548	1.1	515	1.0
Pregnant Female Aged 15-44										
Hispanic/Latino	3	0.5	3	0.5	3	0.5	5	1.1	*	*
Not Hispanic/Latino	29	1.6	29	1.6	30	1.6	30	1.6	28	1.6
Not Pregnant Female Aged 15-44										
Hispanic/Latino	52	0.4	54	0.4	54	0.4	52	0.4	52	0.4
Not Hispanic/Latino	503	1.0	491	1.0	499	1.0	518	1.1	487	1.0

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

## Appendix Q: 2015-2016 NSDUH – Weighted Annual Averages Past Year MDE in Youths (Aged 12 to 17) – YMDEYR2

**Table Q.1 Past Year MDE in Youths (Aged 12 to 17)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>Age Group</b>										
12+	--	--	--	--	--	--	--	--	--	--
12-17	3,060	12.6	3,064	12.6	3,066	12.7	3,031	12.5	3,089	12.8
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
<b>Gender</b>										
Male	755	6.1	753	6.1	760	6.1	725	5.8	786	6.4
Female	2,305	19.4	2,311	19.5	2,306	19.4	2,306	19.5	2,303	19.4
<b>Hispanicity</b>										
Hispanic/Latino	716	12.7	724	12.8	719	12.7	708	12.6	724	12.7
Not Hispanic/Latino	2,344	12.6	2,340	12.6	2,347	12.6	2,323	12.5	2,366	12.8
<b>Race</b>										
White Only	2,379	13.3	2,387	13.3	2,384	13.3	2,354	13.1	2,405	13.5
Black Only	336	9.3	333	9.2	333	9.2	333	9.2	339	9.4
NHOPI Only	18	10.2	19	11.7	18	11.8	24	12.9	11	7.1
Asian Only	142	11.1	143	11.2	145	11.3	125	10.1	158	12.1
AIAN Only	48	12.5	46	11.7	43	10.7	52	13.0	45	12.0
2 or More Races	137	15.3	136	15.1	142	15.8	143	16.1	131	14.5
<b>Division</b>										
New England	151	14.4	153	14.7	153	14.6	145	13.8	156	15.0
Middle Atlantic	342	11.6	342	11.6	341	11.5	328	11.1	356	12.1
East North Central	511	14.2	511	14.2	510	14.2	535	14.8	487	13.6
West North Central	220	13.7	214	13.3	215	13.4	196	12.3	243	15.1
South Atlantic	553	12.1	555	12.1	550	12.0	543	11.8	562	12.3
East South Central	149	10.5	149	10.4	148	10.4	144	10.1	154	10.8
West South Central	377	11.6	383	11.8	396	12.2	377	11.7	377	11.6
Mountain	247	13.2	247	13.2	247	13.2	256	13.7	239	12.7
Pacific	511	13.0	510	13.0	507	12.9	507	12.9	514	13.2

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
<b>County Type</b>										
Large Metro	1,713	12.5	1,745	12.5	1,769	12.6	1,698	12.4	1,728	12.7
Small Metro, pop 250,000-1,000,000	661	12.7	668	12.9	648	12.8	657	12.5	664	13.0
Small Metro, < 250,000 population	295	13.9	291	13.7	292	13.8	301	14.0	288	13.8
Nonmetro, 20,000 or more urban pop	166	12.0	157	11.5	159	11.8	164	11.8	169	12.2
Nonmetro, 2,500-19,999 urban pop	190	12.5	174	12.5	168	12.6	170	12.2	210	12.8
Nonmetro, < 2,500 urban pop	35	10.5	29	10.7	29	10.9	40	11.2	30	9.6
<b>College Enrollment</b>										
Persons Aged 18 to 22 <sup>1</sup>	--	--	--	--	--	--	--	--	--	--
Full-Time College Students	--	--	--	--	--	--	--	--	--	--
Other Persons Aged 18 to 22 <sup>2</sup>	--	--	--	--	--	--	--	--	--	--
<b>Pregnancy</b>										
Female Aged 15-17 <sup>3</sup>	1,458	23.7	1,457	23.8	1,456	23.7	1,441	23.6	1,474	23.7
Pregnant Female Aged 15-17	*	*	*	*	*	*	*	*	*	*
Not Pregnant Female Aged 15-17	1,455	23.8	1,454	23.9	1,453	23.9	1,439	23.8	1,471	23.8
<b>Division by Age Group</b>										
New England										
12+	--	--	--	--	--	--	--	--	--	--
12-17	151	14.4	153	14.7	153	14.6	145	13.8	156	15.0
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
Middle Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	342	11.6	342	11.6	341	11.5	328	11.1	356	12.1
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--

(continued)



Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
East North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	511	14.2	511	14.2	510	14.2	535	14.8	487	13.6
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
West North Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	220	13.7	214	13.3	215	13.4	196	12.3	243	15.1
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
South Atlantic										
12+	--	--	--	--	--	--	--	--	--	--
12-17	553	12.1	555	12.1	550	12.0	543	11.8	562	12.3
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
East South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	149	10.5	149	10.4	148	10.4	144	10.1	154	10.8
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
West South Central										
12+	--	--	--	--	--	--	--	--	--	--
12-17	377	11.6	383	11.8	396	12.2	377	11.7	377	11.6
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Mountain										
12+	--	--	--	--	--	--	--	--	--	--
12-17	247	13.2	247	13.2	247	13.2	256	13.7	239	12.7
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
Pacific										
12+	--	--	--	--	--	--	--	--	--	--
12-17	511	13.0	510	13.0	507	12.9	507	12.9	514	13.2
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
<b>Division by Hispanicity</b>										
New England										
Hispanic/Latino	24	15.9	25	16.6	25	16.5	24	16.4	*	* *
Not Hispanic/Latino	127	14.2	128	14.3	128	14.3	121	13.4	132	14.9
Middle Atlantic										
Hispanic/Latino	72	12.9	71	12.8	71	12.8	74	13.3	70	12.4
Not Hispanic/Latino	271	11.3	270	11.3	270	11.2	255	10.6	286	12.0
East North Central										
Hispanic/Latino	61	14.2	61	14.1	61	14.1	62	14.5	61	13.9
Not Hispanic/Latino	450	14.2	450	14.2	449	14.2	473	14.8	426	13.5
West North Central										
Hispanic/Latino	28	18.8	27	18.1	28	18.4	22	15.1	34	22.5
Not Hispanic/Latino	192	13.2	187	12.8	188	12.9	174	12.0	209	14.4
South Atlantic										
Hispanic/Latino	92	12.0	95	12.3	94	12.2	86	11.3	98	12.7
Not Hispanic/Latino	460	12.1	460	12.1	456	12.0	457	11.9	464	12.2
East South Central										
Hispanic/Latino	7	9.2	8	9.8	8	10.1	*	*	*	* *
Not Hispanic/Latino	142	10.5	141	10.5	140	10.4	135	10.0	149	11.1

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
West South Central										
Hispanic/Latino	146	12.1	150	12.4	146	12.2	153	12.8	139	11.5
Not Hispanic/Latino	231	11.4	233	11.5	250	12.3	224	11.0	237	11.7
Mountain										
Hispanic/Latino	77	12.5	78	12.6	78	12.6	74	11.9	81	13.0
Not Hispanic/Latino	170	13.6	169	13.6	169	13.5	182	14.6	158	12.6
Pacific										
Hispanic/Latino	208	12.4	209	12.5	208	12.4	205	12.2	211	12.5
Not Hispanic/Latino	303	13.5	301	13.5	299	13.4	302	13.4	304	13.6
<b>Division by Race</b>										
New England										
White Only	123	14.5	125	14.8	124	14.7	117	13.8	129	15.3
Black Only	*	*	*	*	*	*	9	8.8	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	4	17.0	4	16.7	*	*	*	*
Middle Atlantic										
White Only	246	11.6	247	11.7	246	11.7	247	11.7	244	11.6
Black Only	48	9.5	48	9.4	48	9.4	42	8.1	55	11.0
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	24	12.8	23	12.3	23	12.3	*	*	*	*
AIAN Only	5	18.2	5	18.1	5	18.1	*	*	*	*
2 or More Races	17	16.4	16	15.9	16	15.8	*	*	17	17.7
East North Central										
White Only	427	15.2	427	15.2	425	15.1	441	15.6	413	14.7
Black Only	48	9.5	49	9.7	49	9.7	59	11.7	37	7.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	11	8.7	11	8.8	11	8.9	*	*	*	*
AIAN Only	2	9.3	2	7.4	2	7.2	*	*	*	*
2 or More Races	21	18.2	21	18.4	21	18.5	*	*	21	17.1

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
West North Central										
White Only	189	14.3	183	13.8	183	13.8	161	12.3	216	16.3 a
Black Only	10	7.6	9	6.6	9	6.6	12	8.9	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	6	11.9	6	12.5	6	13.4	*	*	*	* *
South Atlantic										
White Only	405	13.6	410	13.8	408	13.7	395	13.2	415	14.0
Black Only	104	8.6	103	8.5	102	8.5	102	8.5	105	8.8
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	14	7.0	15	7.4	15	7.3	*	*	*	* *
AIAN Only	*	*	2	5.6 *	2	5.7 *	2	6.9	*	* *
2 or More Races	24	16.9	23	15.4	20	13.9 a	21	16.6	27	17.2
East South Central										
White Only	117	11.5	119	11.7	119	11.7	111	10.9	123	12.1
Black Only	26	7.8	26	7.7	26	7.6	26	7.4	27	8.2
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
West South Central										
White Only	300	12.4	304	12.6	307	12.7	300	12.5	300	12.4
Black Only	47	9.1	47	9.2	48	9.3	43	8.2	52	10.1
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	9	13.1	10	12.6	6	8.3	*	*	*	* *
2 or More Races	16	16.0	18	18.8 a	*	* *	19	16.6	*	* *
Mountain										
White Only	199	12.8	201	12.9	201	13.0	208	13.4	189	12.2
Black Only	*	*	13	15.0 *	13	14.6 *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	6	7.8	6	8.5	6	7.9	*	*	3	4.3 *
2 or More Races	14	18.3	13	16.8	12	16.3 a	14	18.4	13	18.1

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Pacific										
White Only	374	13.2	372	13.2	370	13.1	373	13.1	375	13.3
Black Only	26	11.0	26	11.2	26	11.1	30	12.8	22	9.3
NHOPI Only	7	10.4	7	11.5	7	11.1	*	*	*	* *
Asian Only	58	13.5	58	13.3	56	13.0	51	11.9	66	15.1
AIAN Only	15	14.4	15	14.6	14	13.8	14	13.0	15	16.0
2 or More Races	31	12.2	33	12.5	33	12.7	34	13.4	29	11.1
<b>County Type by Age Group</b>										
Large Metro										
12+	--	--	--	--	--	--	--	--	--	--
12-17	1,713	12.5	1,745	12.5	1,769	12.6	1,698	12.4	1,728	12.7
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
Small Metro, pop 250,000-1,000,000										
12+	--	--	--	--	--	--	--	--	--	--
12-17	661	12.7	668	12.9	648	12.8	657	12.5	664	13.0
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
Small Metro, < 250,000 population										
12+	--	--	--	--	--	--	--	--	--	--
12-17	295	13.9	291	13.7	292	13.8	301	14.0	288	13.8
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 20,000 or more urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	166	12.0	157	11.5	159	11.8	164	11.8	169	12.2
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
Nonmetro, 2,500-19,999 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	190	12.5	174	12.5	168	12.6	170	12.2	210	12.8
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
Nonmetro, < 2,500 urban pop										
12+	--	--	--	--	--	--	--	--	--	--
12-17	35	10.5	29	10.7	29	10.9	40	11.2	30	9.6
18+	--	--	--	--	--	--	--	--	--	--
18-25	--	--	--	--	--	--	--	--	--	--
26-49	--	--	--	--	--	--	--	--	--	--
50+	--	--	--	--	--	--	--	--	--	--
<b>County Type by Hispanicity</b>										
Large Metro										
Hispanic/Latino	486	13.0	493	13.1	492	12.9	498	13.1	474	12.9
Not Hispanic/Latino	1,227	12.3	1,252	12.3	1,278	12.4	1,200	12.1	1,254	12.6
Small Metro, pop 250,000-1,000,000										
Hispanic/Latino	150	12.5	153	12.9	150	12.8	143	12.2	156	12.8
Not Hispanic/Latino	511	12.8	515	12.9	498	12.8	514	12.6	508	13.0
Small Metro, < 250,000 population										
Hispanic/Latino	34	9.3	36	9.6	35	9.7	30	9.1	38	9.4
Not Hispanic/Latino	261	14.9	255	14.6	257	14.7	271	14.9	250	14.8
Nonmetro, 20,000 or more urban pop										
Hispanic/Latino	20	11.7	21	12.2	21	11.8	14	8.8	25	14.4
Not Hispanic/Latino	147	12.0	136	11.4	138	11.7	150	12.1	144	11.9

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 2,500-19,999 urban pop										
Hispanic/Latino	18	13.6	14	13.0	15	14.0	*	*	25	15.0 *
Not Hispanic/Latino	172	12.4	160	12.5	154	12.5	159	12.3	185	12.6
Nonmetro, < 2,500 urban pop										
Hispanic/Latino	*	*	*	*	*	*	*	*	*	*
Not Hispanic/Latino	27	8.9	22	9.2	23	9.5	29	9.0	25	8.9
<b>County Type by Race</b>										
Large Metro										
White Only	1,263	13.2	1,297	13.3	1,307	13.3	1,233	12.9	1,294	13.5
Black Only	219	9.3	218	9.2	219	9.1	225	9.4	213	9.2
NHOPI Only	14	12.9	14	13.5	14	13.3	*	*	*	*
Asian Only	112	11.1	113	11.1	115	11.2	101	10.3	123	11.8
AIAN Only	24	12.2	24	12.0	24	10.6	24	12.2	23	12.3
2 or More Races	81	17.3	80	16.6	90	18.0	96	19.7	66	14.6
Small Metro, pop 250,000-1,000,000										
White Only	536	13.5	544	13.6	528	13.5	542	13.4	530	13.5
Black Only	63	9.4	62	9.4	61	9.4	58	8.7	68	10.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	18	9.3	17	9.0	17	9.3	16	8.2	20	10.4
AIAN Only	8	11.8	9	12.4	10	13.5	*	*	8	12.2 *
2 or More Races	32	14.2	32	14.1	29	13.2	28	13.5	35	14.7
Small Metro, < 250,000 population										
White Only	244	14.3	243	14.3	242	14.4	258	14.8	230	13.8
Black Only	22	8.7	21	8.3	21	8.7	22	8.3	22	9.2
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	14	16.1	14	16.0	14	16.1	9	10.6	20	20.8
Nonmetro, 20,000 or more urban pop										
White Only	141	12.6	129	11.8	135	12.2	139	12.5	143	12.7
Black Only	16	10.8	17	11.6	16	11.4	16	11.3	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	3	9.5	*	*	*	*	*	*	*	*
2 or More Races	5	8.5	5	9.2	5	8.9	*	*	*	*

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Nonmetro, 2,500-19,999 urban pop										
White Only	163	13.2	149	13.1	147	13.2	146	12.6	179	13.6
Black Only	16	9.0	15	9.1	15	9.3	13	8.4	19	9.5
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	3	6.7	3	8.2	*	* *	*	*	*	* *
Nonmetro, < 2,500 urban pop										
White Only	32	11.2	26	11.1	26	11.1	36	11.6	28	10.8
Black Only	*	*	*	* *	*	* *	*	*	*	* *
NHOPI Only	*	*	*	* *	*	* *	*	*	*	* *
Asian Only	*	*	*	* *	*	* *	*	*	*	* *
AIAN Only	*	*	*	* *	*	* *	*	*	*	* *
2 or More Races	*	*	*	* *	*	* *	*	*	*	* *
<b>College Enrollment by Gender</b>										
Persons Aged 18 to 22 <sup>1</sup>										
Male	--	--	--	-- --	--	-- --	--	--	--	-- --
Female	--	--	--	-- --	--	-- --	--	--	--	-- --
Full-Time College Students										
Male	--	--	--	-- --	--	-- --	--	--	--	-- --
Female	--	--	--	-- --	--	-- --	--	--	--	-- --
Other Persons Aged 18 to 22 <sup>2</sup>										
Male	--	--	--	-- --	--	-- --	--	--	--	-- --
Female	--	--	--	-- --	--	-- --	--	--	--	-- --
<b>Age Group by Gender</b>										
12+										
Male	--	--	--	-- --	--	-- --	--	--	--	-- --
Female	--	--	--	-- --	--	-- --	--	--	--	-- --
12-17										
Male	755	6.1	753	6.1	760	6.1	725	5.8	786	6.4
Female	2,305	19.4	2,311	19.5	2,306	19.4	2,306	19.5	2,303	19.4
18+										
Male	--	--	--	-- --	--	-- --	--	--	--	-- --
Female	--	--	--	-- --	--	-- --	--	--	--	-- --

(continued)



Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
18-25										
Male	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--
26-49										
Male	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--
50+										
Male	--	--	--	--	--	--	--	--	--	--
Female	--	--	--	--	--	--	--	--	--	--
<b>Age Group by Race</b>										
12+										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
12-17										
White Only	2,379	13.3	2,387	13.3	2,384	13.3	2,354	13.1	2,405	13.5
Black Only	336	9.3	333	9.2	333	9.2	333	9.2	339	9.4
NHOPI Only	18	10.2	19	11.7	18	11.8	24	12.9	11	7.1
Asian Only	142	11.1	143	11.2	145	11.3	125	10.1	158	12.1
AIAN Only	48	12.5	46	11.7	43	10.7	52	13.0	45	12.0
2 or More Races	137	15.3	136	15.1	142	15.8	143	16.1	131	14.5
18+										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
18-25										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
26-49										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
50+										
White Only	--	--	--	--	--	--	--	--	--	--
Black Only	--	--	--	--	--	--	--	--	--	--
NHOPI Only	--	--	--	--	--	--	--	--	--	--
Asian Only	--	--	--	--	--	--	--	--	--	--
AIAN Only	--	--	--	--	--	--	--	--	--	--
2 or More Races	--	--	--	--	--	--	--	--	--	--
<b>Age Group by Hispanicity</b>										
12+										
Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
Not Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
12-17										
Hispanic/Latino	716	12.7	724	12.8	719	12.7	708	12.6	724	12.7
Not Hispanic/Latino	2,344	12.6	2,340	12.6	2,347	12.6	2,323	12.5	2,366	12.8
18+										
Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
Not Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
18-25										
Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
Not Hispanic/Latino	--	--	--	--	--	--	--	--	--	--

(continued)

Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)

Domains	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
26-49										
Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
Not Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
50+										
Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
Not Hispanic/Latino	--	--	--	--	--	--	--	--	--	--
<b>Pregnancy by Age Group</b>										
Female Aged 15-17 <sup>3</sup>										
15-17	1,458	23.7	1,457	23.8	1,456	23.7	1,441	23.6	1,474	23.7
18-25	--	--	--	--	--	--	--	--	--	--
26-44	--	--	--	--	--	--	--	--	--	--
Pregnant Female Aged 15-17										
15-17	*	*	*	*	*	*	*	*	*	*
18-25	--	--	--	--	--	--	--	--	--	--
26-44	--	--	--	--	--	--	--	--	--	--
Not Pregnant Female Aged 15-17										
15-17	1,455	23.8	1,454	23.9	1,453	23.9	1,439	23.8	1,471	23.8
18-25	--	--	--	--	--	--	--	--	--	--
26-44	--	--	--	--	--	--	--	--	--	--
<b>Pregnancy by Race</b>										
Female Aged 15-17 <sup>3</sup>										
White Only	1,146	25.6	1,147	25.7	1,142	25.6	1,146	25.8	1,146	25.3
Black Only	150	15.8	149	15.7	150	15.9	136	14.2	164	17.4
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	65	17.6	64	17.5	62	17.2	58	17.2	71	17.9
AIAN Only	25	25.1	23	22.5	23	22.1	*	*	24	23.2
2 or More Races	63	30.2	64	30.5	70	32.6	64	31.0	63	29.4
Pregnant Female Aged 15-17										
White Only	*	*	*	*	*	*	*	*	*	*
Black Only	*	*	*	*	*	*	*	*	*	*
NHOPI Only	*	*	*	*	*	*	*	*	*	*
Asian Only	*	*	*	*	*	*	*	*	*	*
AIAN Only	*	*	*	*	*	*	*	*	*	*
2 or More Races	*	*	*	*	*	*	*	*	*	*

(continued)

**Table Q.1 Past Year MDE in Youths (Aged 12 to 17) (continued)**

	FE Sample (2015+2016)		Subsample 1. Sample Excluding Description- Based Addresses		Subsample 2. Sample Excluding GQ, AIAN Tribal Areas, and Description-Based Addresses		2015 NSDUH		2016 NSDUH	
	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent	Total (Numbers in 1,000s)	Percent
<b>Domains</b>										
Not Pregnant Female Aged 15-17										
White Only	1,145	25.7	1,146	25.8	1,140	25.7	1,145	25.9	1,145	25.5
Black Only	149	15.9	147	15.8	148	16.0	135	14.4	162	17.4
NHOPI Only	*	*	*	* *	*	* *	*	*	*	*
Asian Only	65	17.6	64	17.5	62	17.2	58	17.2	71	18.0
AIAN Only	25	25.2	23	22.7	23	22.4	*	*	24	23.4 *
2 or More Races	63	30.3	64	30.6	70	32.7	64	31.1	63	29.5
<b>Pregnancy by Hispanicity</b>										
Female Aged 15-17 <sup>3</sup>										
Hispanic/Latino	305	22.3	308	22.6	306	22.4	324	23.7	287	20.8
Not Hispanic/Latino	1,152	24.1	1,149	24.1	1,150	24.1	1,118	23.6	1,187	24.6
Pregnant Female Aged 15-17										
Hispanic/Latino	*	*	*	* *	*	* *	*	*	*	*
Not Hispanic/Latino	*	*	*	* *	*	* *	*	*	*	*
Not Pregnant Female Aged 15-17										
Hispanic/Latino	305	22.5	307	22.9	306	22.7	324	24.0	287	21.1
Not Hispanic/Latino	1,150	24.2	1,147	24.2	1,147	24.2	1,115	23.7	1,184	24.6

\* = low precision; -- = not available; AIAN = American Indian or Alaska Native; FE = field enumeration; GQ = group quarters; NHOPI = Native Hawaiian or Other Pacific Islander; pop = population.

<sup>1</sup> Excludes those with unknown enrollment status.

<sup>2</sup> Other Persons include respondents aged 18 to 22 not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.

<sup>3</sup> Excludes those with unknown pregnancy status.

<sup>a</sup> The difference between this estimate and the person sample estimate is statistically significant at the .05 level.

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