

Table 16.1 Marijuana Use in the Past Year, Marijuana Use in the Past Month, and Average Annual Incidence Estimates (Expressed as Percentages of the At-Risk Population) of First Use of Marijuana in Iowa among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs

| State/Substate Region | Marijuana Use in the Past Year | | Marijuana Use in the Past Month | | First Use of Marijuana ¹ | |
|-----------------------|--------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------------|-------------------------|
| | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval |
| Iowa | 9.23 | (8.15 - 10.44) | 4.98 | (4.20 - 5.90) | 1.74 | (1.53 - 1.96) |
| Central | 9.38 | (7.47 - 11.71) | 5.42 | (4.07 - 7.19) | 1.99 | (1.60 - 2.47) |
| North Central | 10.05 | (7.96 - 12.61) | 5.39 | (4.00 - 7.22) | 1.96 | (1.53 - 2.49) |
| Northeast | 9.33 | (7.70 - 11.28) | 5.24 | (4.10 - 6.68) | 1.65 | (1.33 - 2.04) |
| Northwest | 8.16 | (6.39 - 10.35) | 4.33 | (3.19 - 5.85) | 1.48 | (1.17 - 1.88) |
| Southeast | 9.73 | (7.94 - 11.87) | 4.72 | (3.53 - 6.27) | 1.86 | (1.50 - 2.30) |
| Southwest | 8.40 | (6.45 - 10.87) | 4.64 | (3.33 - 6.43) | 1.43 | (1.11 - 1.85) |

NOTE: For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

NOTE: Estimates along with the 95 percent Bayesian confidence (credible) intervals are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

¹ Average annual initiation of marijuana (%) = $100 * \{ [X_1 \div (0.5 * X_1 + X_2)] \div 2 \}$, where X_1 is the number of marijuana initiates in the past 24 months and X_2 is the number of individuals who never used marijuana (with the at-risk population defined as $0.5 * X_1 + X_2$). Both of the computation components, X_1 and X_2 , are based on a survey-weighted hierarchical Bayes estimation approach. The age group is based on a respondent's age at the time of the interview, not his or her age at first use. The Bayesian confidence (credible) intervals presented for Average Annual Estimates of First Use of Marijuana use a simultaneous solution for First Use of Marijuana and Never Used Marijuana outcomes, which had age group-specific random effects that were allowed to be correlated across the two outcomes. The associated Markov Chain Monte Carlo chains were used to calculate the posterior variance. For details, see Section B of the "2015-2016 NSDUH: Guide to State Tables and Summary of Small Area Estimation Methodology" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

Table 16.2 Cocaine Use in the Past Year and Heroin Use in the Past Year in Iowa among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs

| State/Substate Region | Cocaine Use in the Past Year | | Heroin Use in the Past Year | |
|-----------------------|------------------------------|-------------------------|-----------------------------|-------------------------|
| | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval |
| Iowa | 1.05 | (0.76 - 1.46) | 0.15 | (0.07 - 0.31) |
| Central | 1.13 | (0.67 - 1.88) | 0.12 | (0.05 - 0.29) |
| North Central | 1.06 | (0.61 - 1.84) | 0.16 | (0.07 - 0.38) |
| Northeast | 1.20 | (0.75 - 1.92) | 0.15 | (0.06 - 0.35) |
| Northwest | 0.86 | (0.50 - 1.49) | 0.16 | (0.07 - 0.36) |
| Southeast | 1.04 | (0.61 - 1.76) | 0.15 | (0.06 - 0.34) |
| Southwest | 0.87 | (0.48 - 1.55) | 0.14 | (0.06 - 0.33) |

NOTE: For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

NOTE: Estimates along with the 95 percent Bayesian confidence (credible) intervals are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

Table 16.3 Alcohol Use in the Past Month, Underage Alcohol Use in the Past Month, and Alcohol Use Disorder in the Past Year in Iowa among Individuals Aged 12 or Older or Aged 12 to 20, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs

| State/Substate Region | Alcohol Use in the Past Month (12 or Older) | | Underage Alcohol Use in the Past Month (12 to 20) | | Alcohol Use Disorder in the Past Year ¹ (12 or Older) | |
|-----------------------|---|-------------------------|---|-------------------------|--|-------------------------|
| | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval |
| Iowa | 57.41 | (55.15 - 59.65) | 23.33 | (20.96 - 25.88) | 6.41 | (5.53 - 7.43) |
| Central | 58.04 | (53.74 - 62.21) | 19.91 | (16.61 - 23.69) | 6.70 | (5.17 - 8.64) |
| North Central | 56.73 | (51.67 - 61.66) | 28.01 | (23.45 - 33.07) | 6.09 | (4.65 - 7.94) |
| Northeast | 59.28 | (55.61 - 62.84) | 25.00 | (21.65 - 28.67) | 7.02 | (5.56 - 8.82) |
| Northwest | 59.00 | (54.41 - 63.44) | 24.92 | (21.07 - 29.20) | 6.55 | (4.96 - 8.60) |
| Southeast | 54.03 | (49.93 - 58.07) | 21.66 | (18.20 - 25.58) | 5.70 | (4.42 - 7.33) |
| Southwest | 57.30 | (51.88 - 62.56) | 21.08 | (17.39 - 25.31) | 6.07 | (4.53 - 8.10) |

NOTE: For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

NOTE: Estimates along with the 95 percent Bayesian confidence (credible) intervals are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

¹ Alcohol Use Disorder is defined as meeting criteria for alcohol dependence or abuse. Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

Table 16.4 Cigarette Use in the Past Month and Tobacco Product Use in the Past Month in Iowa among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs

| State/Substate Region | Cigarette Use in the Past Month | | Tobacco Product Use in the Past Month ¹ | |
|-----------------------|---------------------------------|-------------------------|--|-------------------------|
| | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval |
| Iowa | 21.68 | (19.92 - 23.54) | 27.50 | (25.60 - 29.48) |
| Central | 20.18 | (17.13 - 23.60) | 25.42 | (22.15 - 28.99) |
| North Central | 20.12 | (16.72 - 24.01) | 26.38 | (22.82 - 30.27) |
| Northeast | 21.46 | (18.61 - 24.61) | 27.25 | (24.26 - 30.46) |
| Northwest | 22.44 | (19.01 - 26.29) | 29.18 | (25.40 - 33.27) |
| Southeast | 22.84 | (19.80 - 26.19) | 28.09 | (24.96 - 31.44) |
| Southwest | 23.02 | (19.29 - 27.24) | 29.28 | (25.41 - 33.47) |

NOTE: For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

NOTE: Estimates along with the 95 percent Bayesian confidence (credible) intervals are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

¹ Tobacco Products include cigarettes, smokeless tobacco (i.e., snuff, dip, chewing tobacco, or "snus"), cigars, or pipe tobacco.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

Table 16.5 Serious Mental Illness in the Past Year, Any Mental Illness in the Past Year, and Received Mental Health Services in the Past Year in Iowa among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs

| State/Substate Region | Serious Mental Illness in the Past Year ¹ | | Any Mental Illness in the Past Year ¹ | | Received Mental Health Services in the Past Year ² | |
|-----------------------|--|-------------------------|--|-------------------------|---|-------------------------|
| | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval |
| Iowa | 4.17 | (3.49 - 4.98) | 17.47 | (15.94 - 19.12) | 16.44 | (14.88 - 18.13) |
| Central | 4.06 | (3.10 - 5.30) | 17.69 | (15.08 - 20.65) | 16.70 | (14.12 - 19.63) |
| North Central | 4.39 | (3.37 - 5.69) | 17.63 | (15.01 - 20.58) | 16.36 | (13.70 - 19.42) |
| Northeast | 4.28 | (3.24 - 5.64) | 17.94 | (15.40 - 20.80) | 17.51 | (14.99 - 20.36) |
| Northwest | 3.61 | (2.67 - 4.87) | 16.00 | (13.40 - 19.00) | 14.95 | (12.57 - 17.70) |
| Southeast | 4.50 | (3.43 - 5.88) | 17.86 | (15.28 - 20.78) | 15.96 | (13.55 - 18.71) |
| Southwest | 4.01 | (2.95 - 5.43) | 17.16 | (14.28 - 20.49) | 16.76 | (13.98 - 19.96) |

NOTE: For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

NOTE: Estimates along with the 95 percent Bayesian confidence (credible) intervals are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

¹ Mental illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, assessed by the Mental Health Surveillance Study (MHSS) *Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition—Research Version—Axis I Disorders* (MHSS-SCID), which is based on the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Any mental illness (AMI) includes adults with any mental disorder regardless of whether their disorder resulted in functional impairment. Serious mental illness (SMI) includes adults with any mental disorder that resulted in serious functional impairment. For details, see Section B of the "2015-2016 NSDUH: Guide to State Tables and Summary of Small Area Estimation Methodology" at <https://www.samhsa.gov/data/>.

² Mental health services are defined as having received inpatient treatment/counseling or outpatient treatment/counseling or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

Table 16.6 Had Serious Thoughts of Suicide in the Past Year and Major Depressive Episode in the Past Year in Iowa among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs

| State/Substate Region | Had Serious Thoughts of Suicide in the Past Year ¹ | | Major Depressive Episode in the Past Year ² | |
|-----------------------|---|-------------------------|--|-------------------------|
| | Estimate | 95% Confidence Interval | Estimate | 95% Confidence Interval |
| Iowa | 3.91 | (3.25 - 4.70) | 6.72 | (5.85 - 7.72) |
| Central | 3.97 | (3.00 - 5.23) | 6.75 | (5.34 - 8.49) |
| North Central | 3.92 | (3.03 - 5.07) | 6.93 | (5.48 - 8.73) |
| Northeast | 4.09 | (3.17 - 5.25) | 7.10 | (5.66 - 8.88) |
| Northwest | 3.37 | (2.55 - 4.44) | 5.56 | (4.31 - 7.15) |
| Southeast | 4.13 | (3.19 - 5.32) | 7.06 | (5.67 - 8.75) |
| Southwest | 3.72 | (2.78 - 4.96) | 6.57 | (5.10 - 8.43) |

NOTE: For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

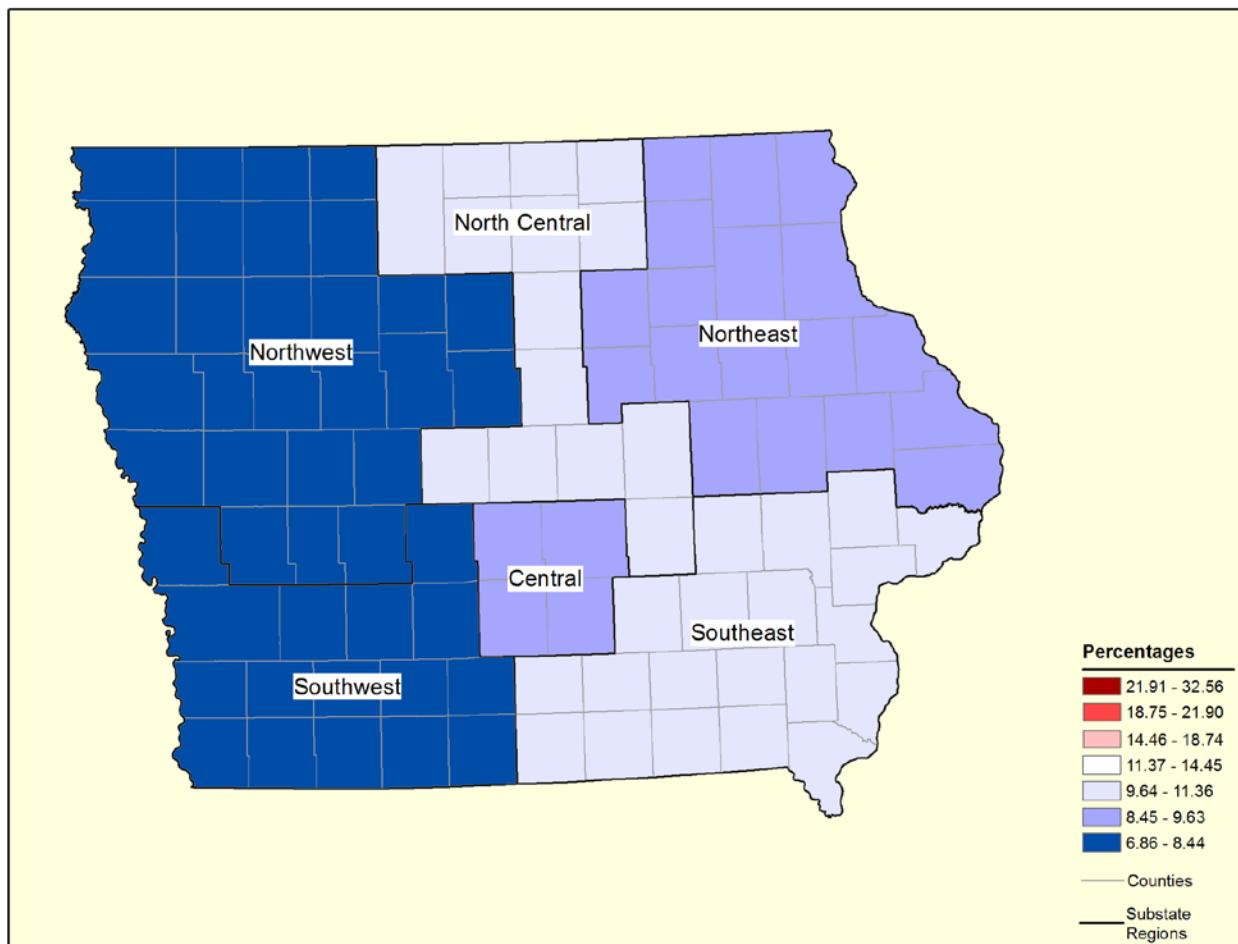
NOTE: Estimates along with the 95 percent Bayesian confidence (credible) intervals are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

¹ Respondents were asked, "At any time in the past 12 months, did you seriously think about trying to kill yourself?" If they answered "Yes," they were categorized as having serious thoughts of suicide in the past year.

² Major depressive episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when an individual experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. For details, see Section B in the "2015-2016 National Survey on Drug Use and Health: Guide to State Tables and Summary of Small Area Estimation Methodology" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

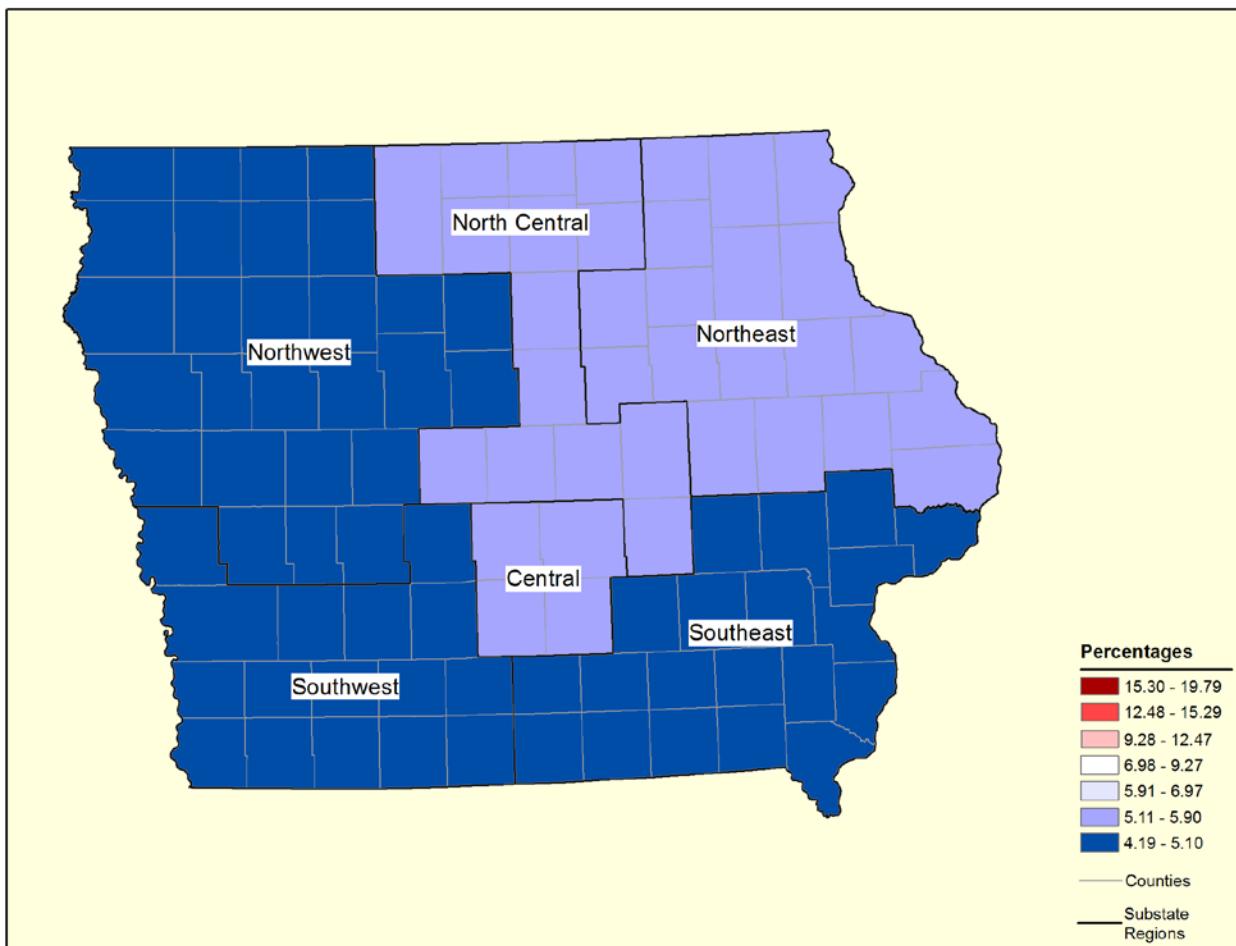
Figure 16.1 Marijuana Use in the Past Year among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

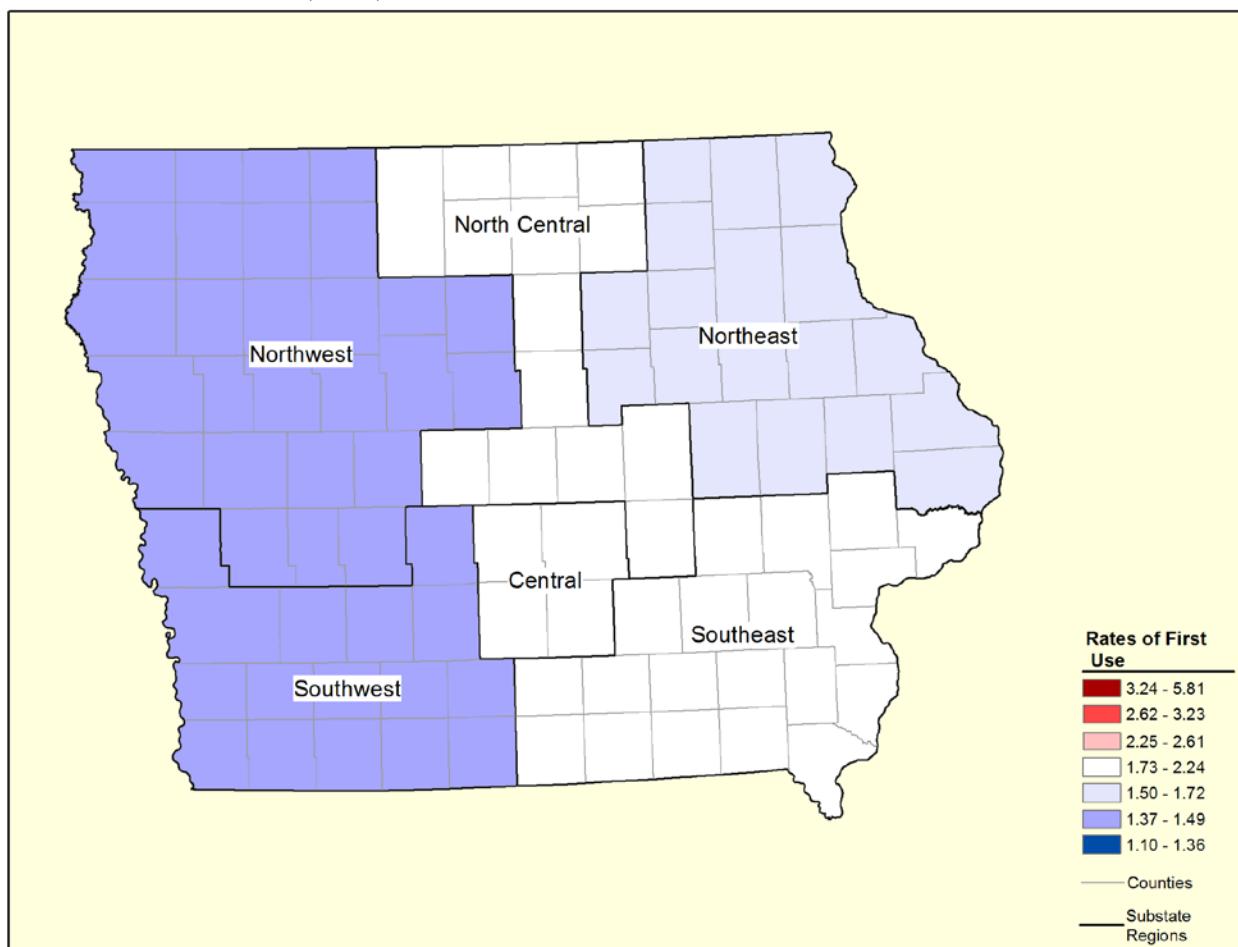
Figure 16.2 Marijuana Use in the Past Month among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

Figure 16.3 First Use of Marijuana among Individuals Aged 12 or Older in Iowa, by Substate Region: Average Annual Incidence Estimates (Expressed as Percentages of the At-Risk Population) Based on 2014, 2015, and 2016 NSDUHs

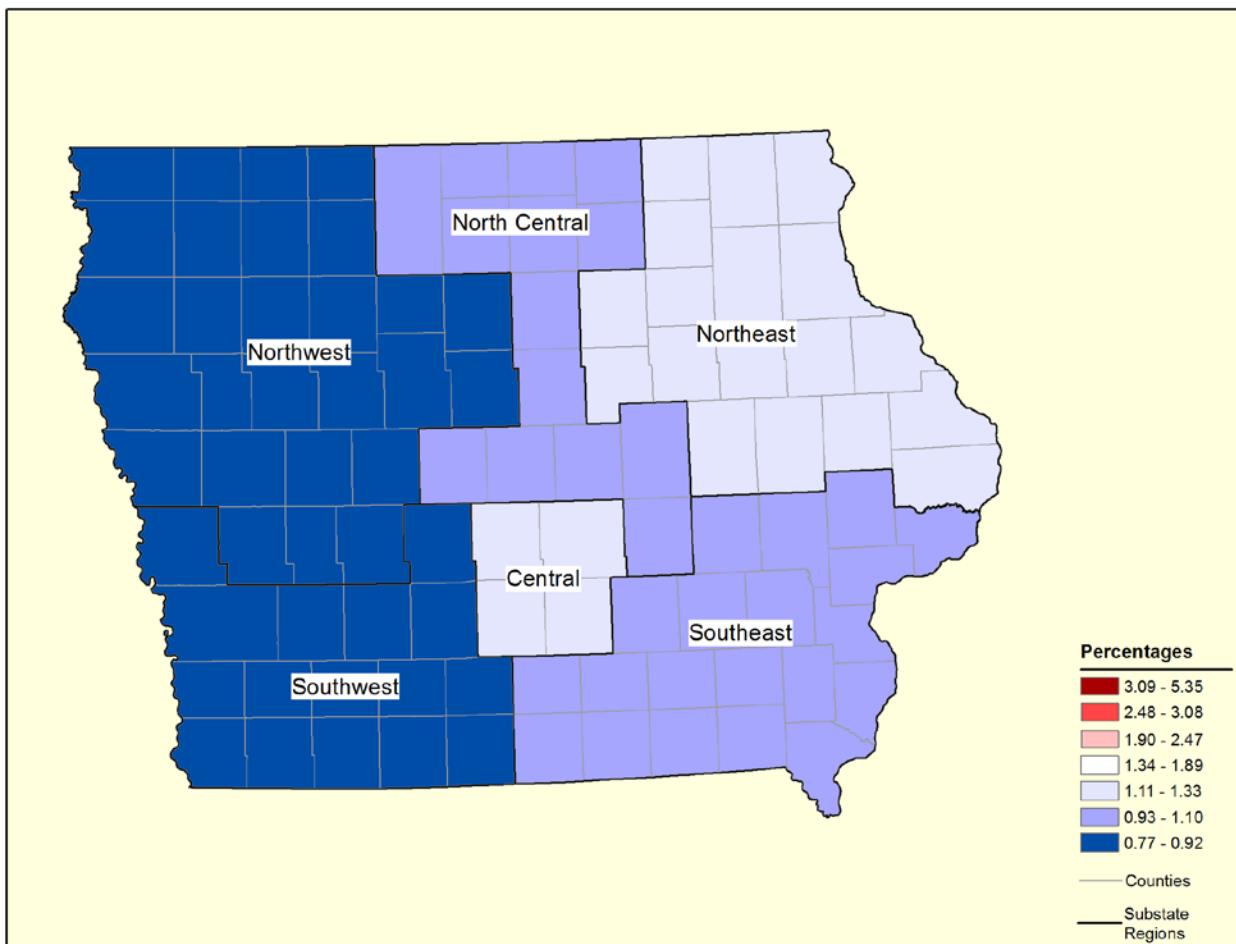


NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages.

For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

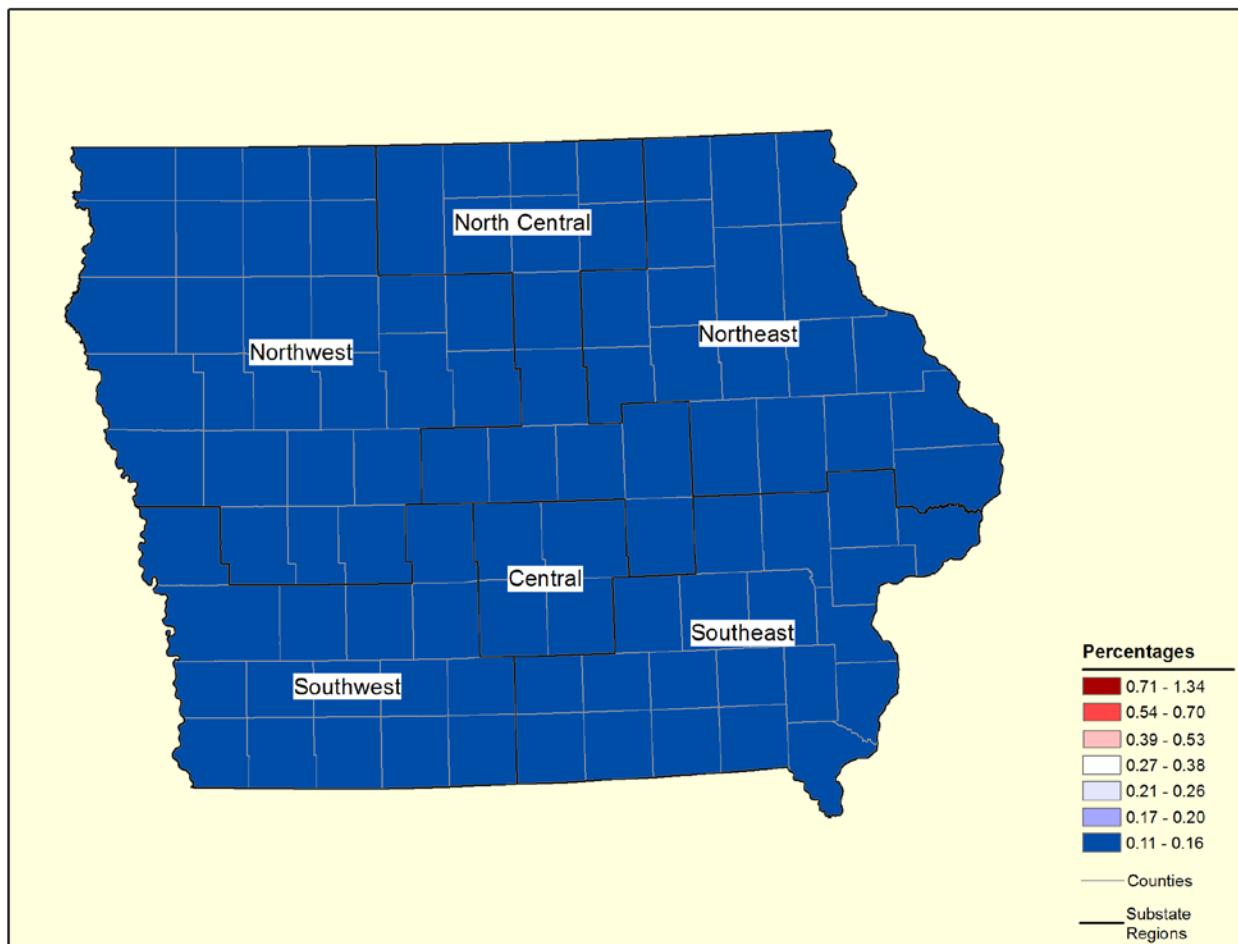
Figure 16.4 Cocaine Use in the Past Year among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

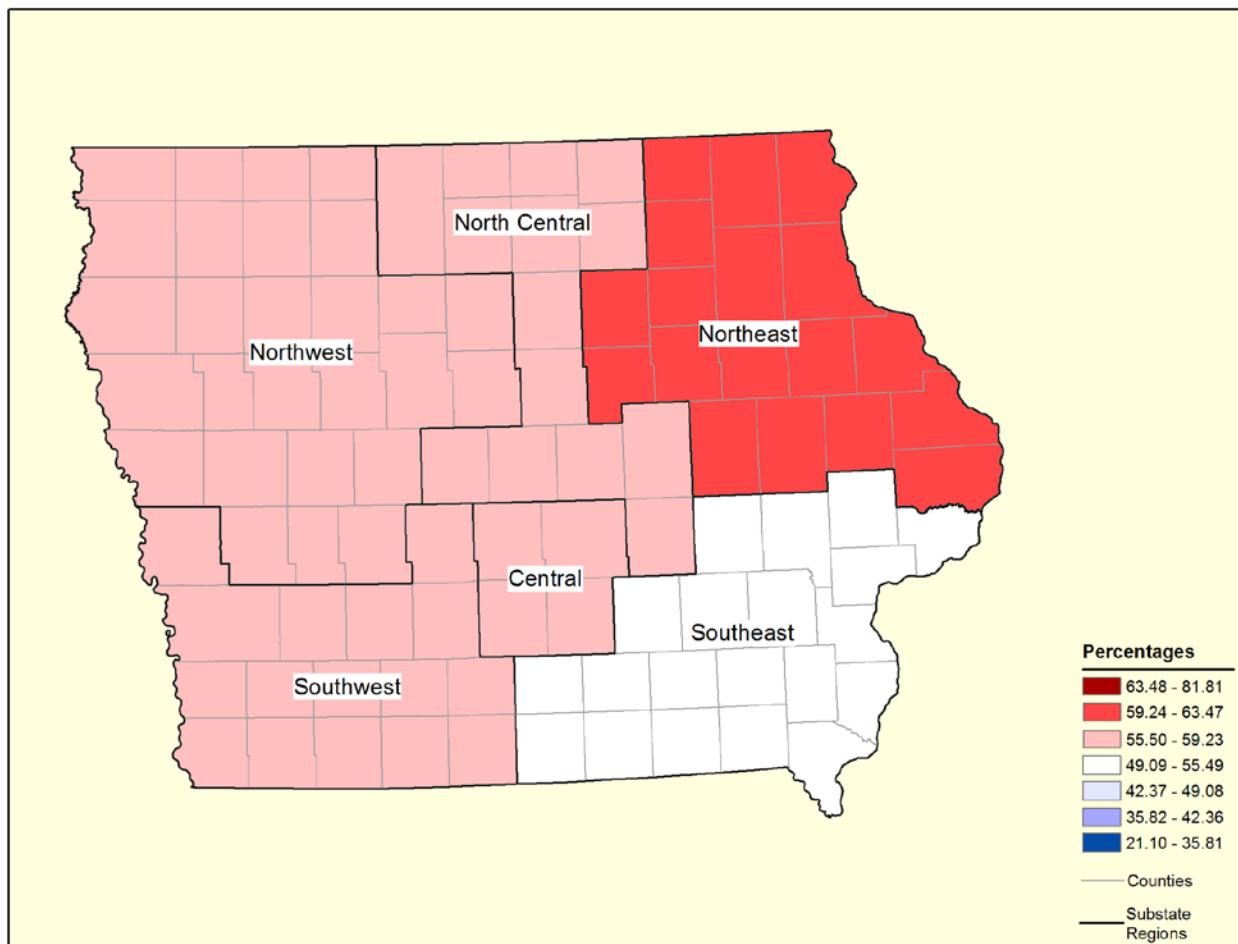
Figure 16.5 Heroin Use in the Past Year among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

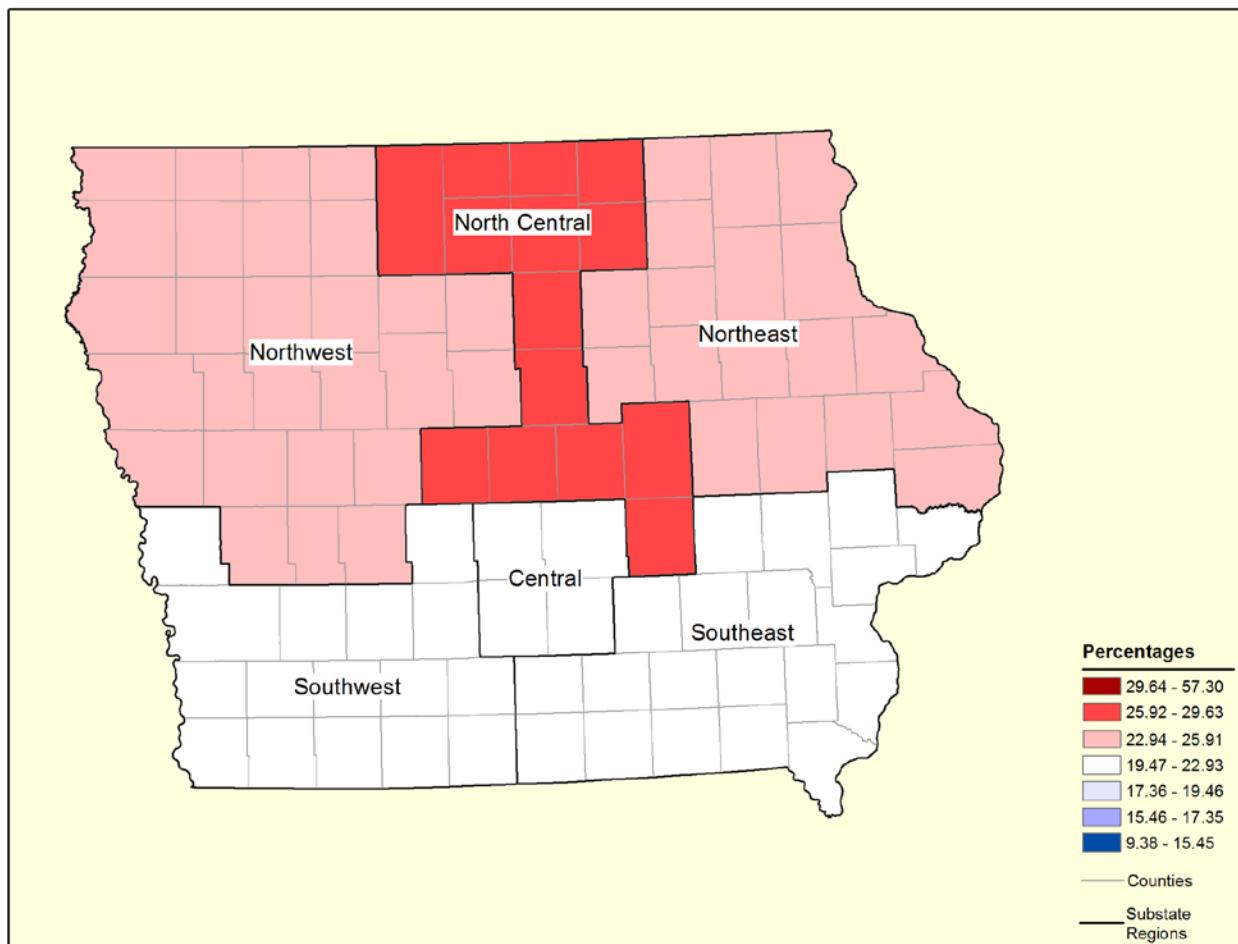
Figure 16.6 Alcohol Use in the Past Month among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

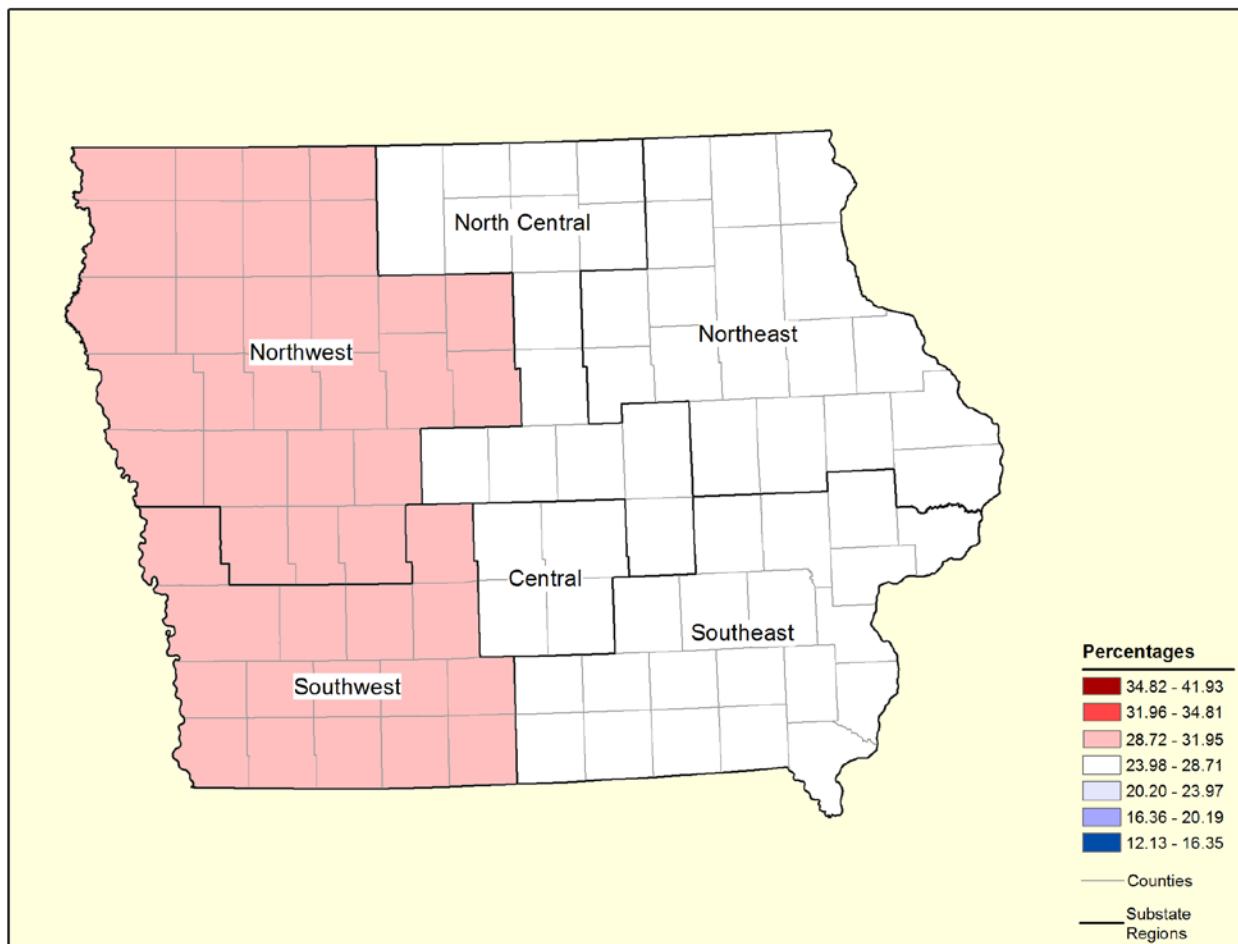
Figure 16.7 Alcohol Use in the Past Month among Individuals Aged 12 to 20 in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

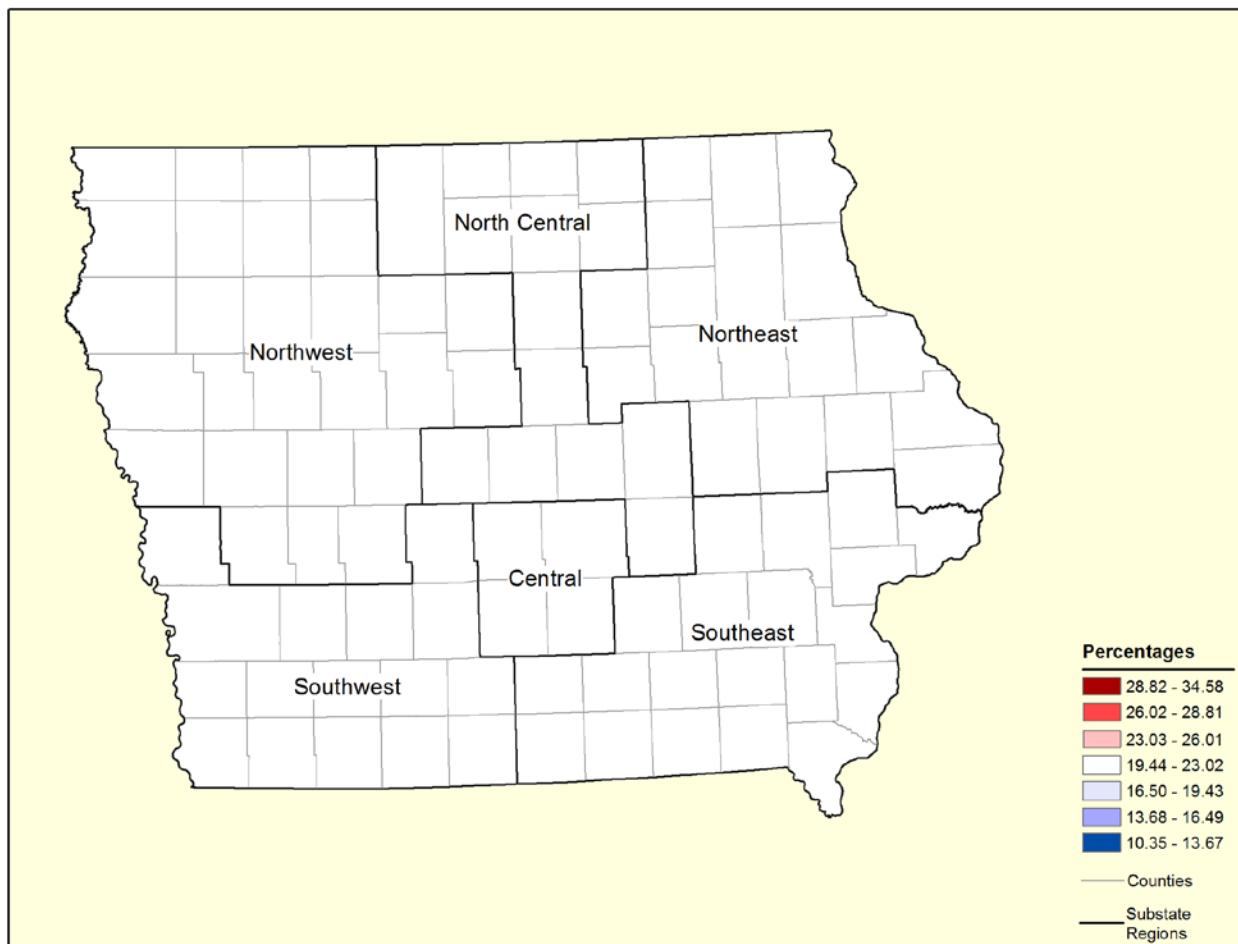
Figure 16.8 Tobacco Product Use in the Past Month among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

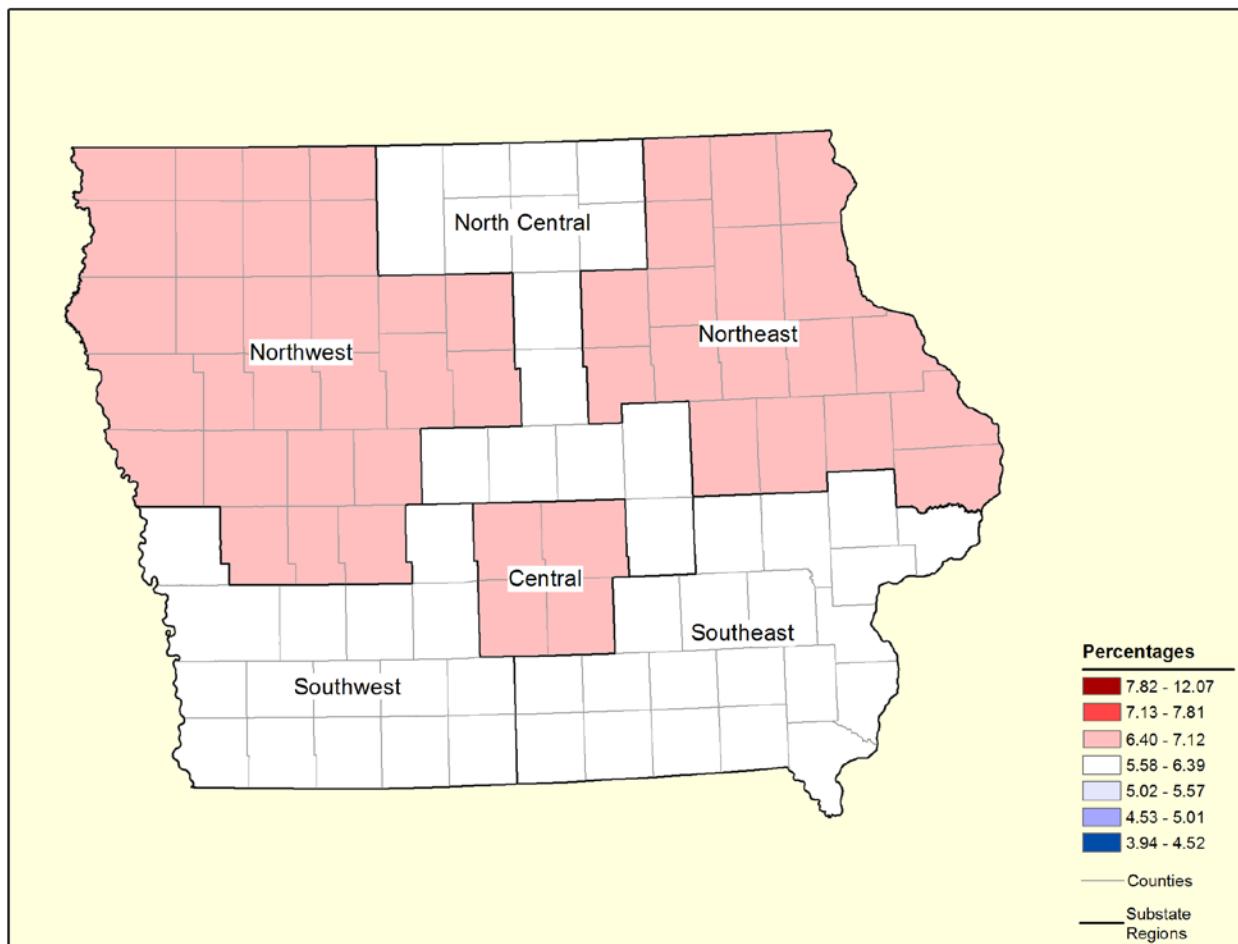
Figure 16.9 Cigarette Use in the Past Month among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

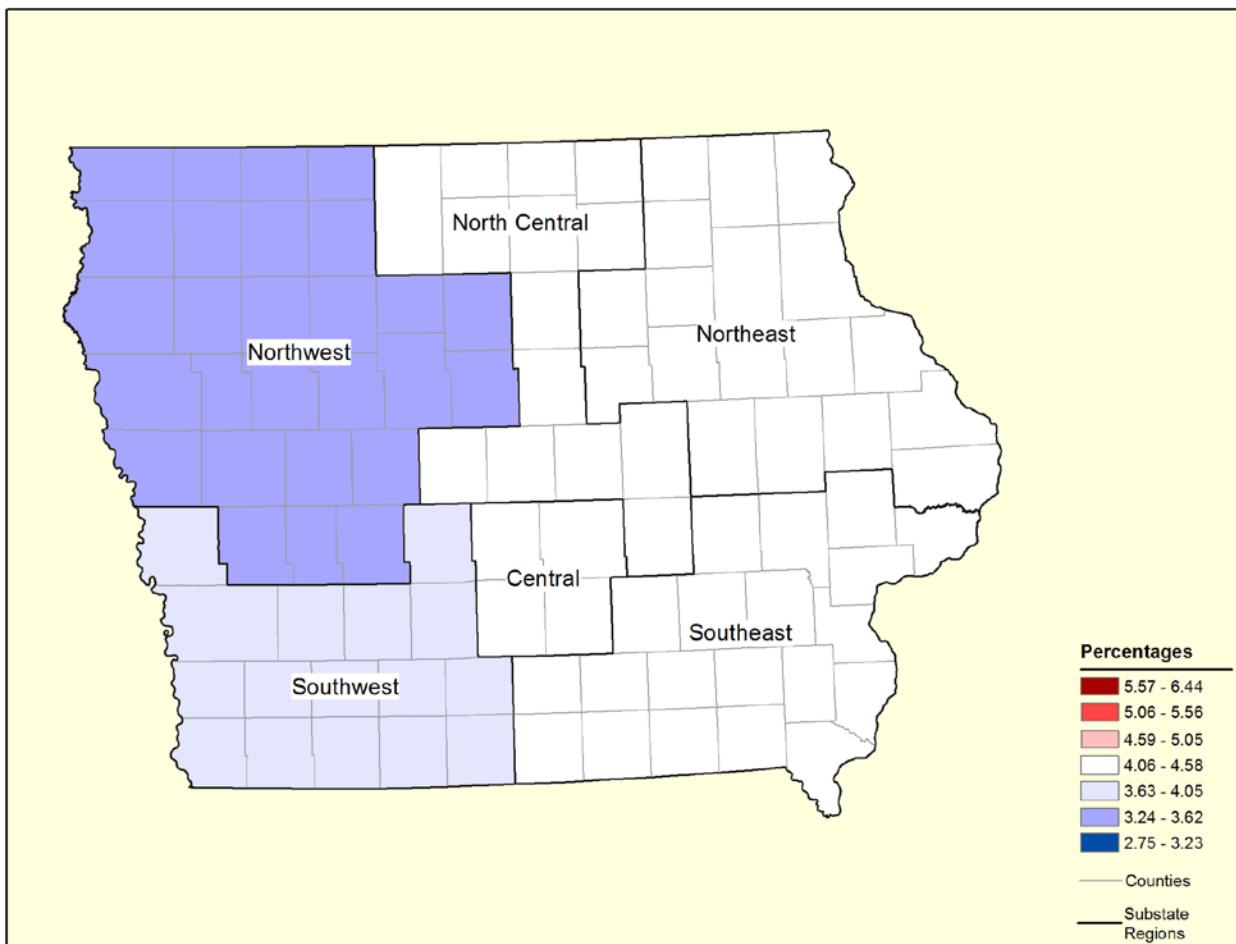
Figure 16.10 Alcohol Use Disorder in the Past Year among Individuals Aged 12 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

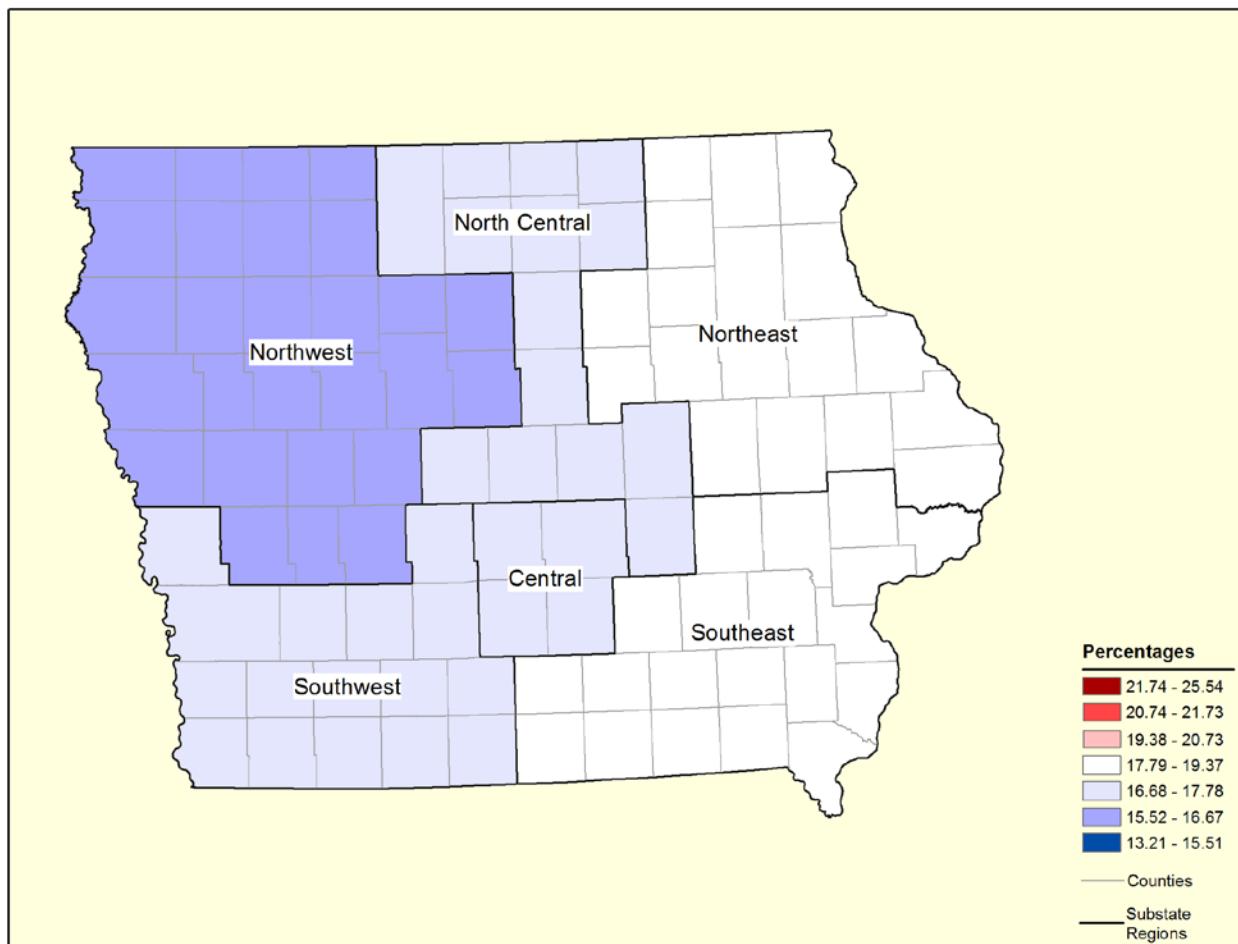
Figure 16.11 Serious Mental Illness in the Past Year among Adults Aged 18 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

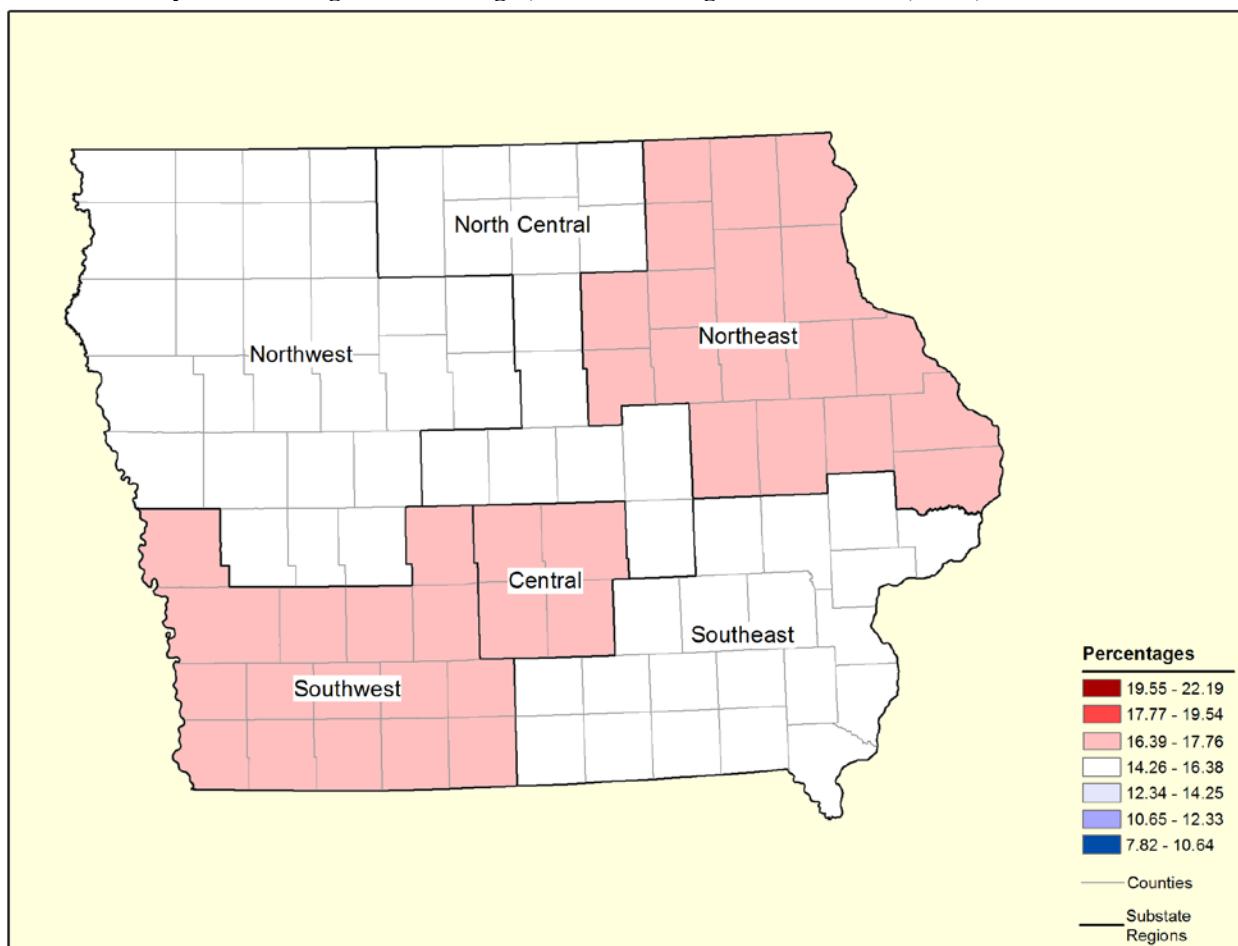
Figure 16.12 Any Mental Illness in the Past Year among Adults Aged 18 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

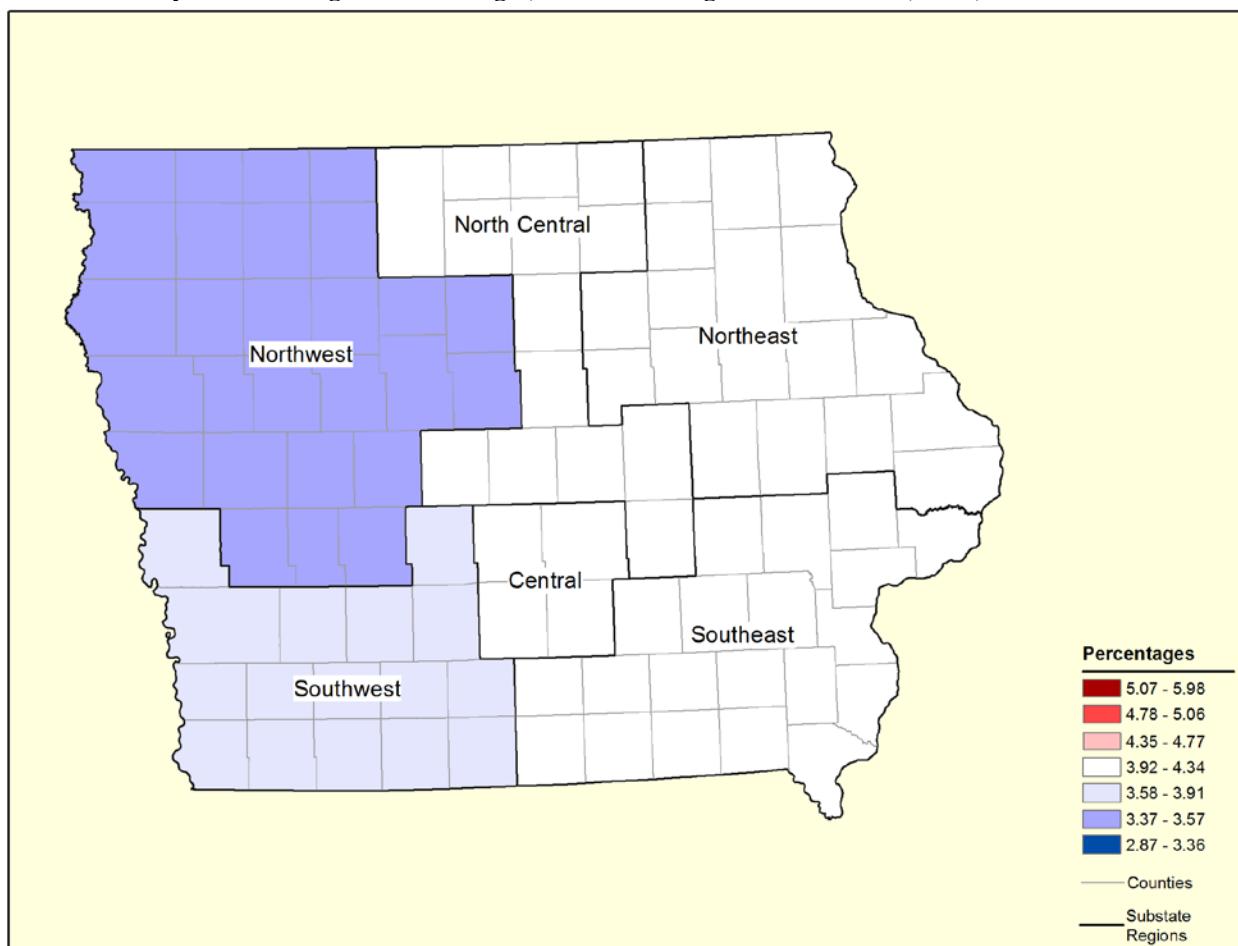
Figure 16.13 Received Mental Health Services in the Past Year among Adults Aged 18 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

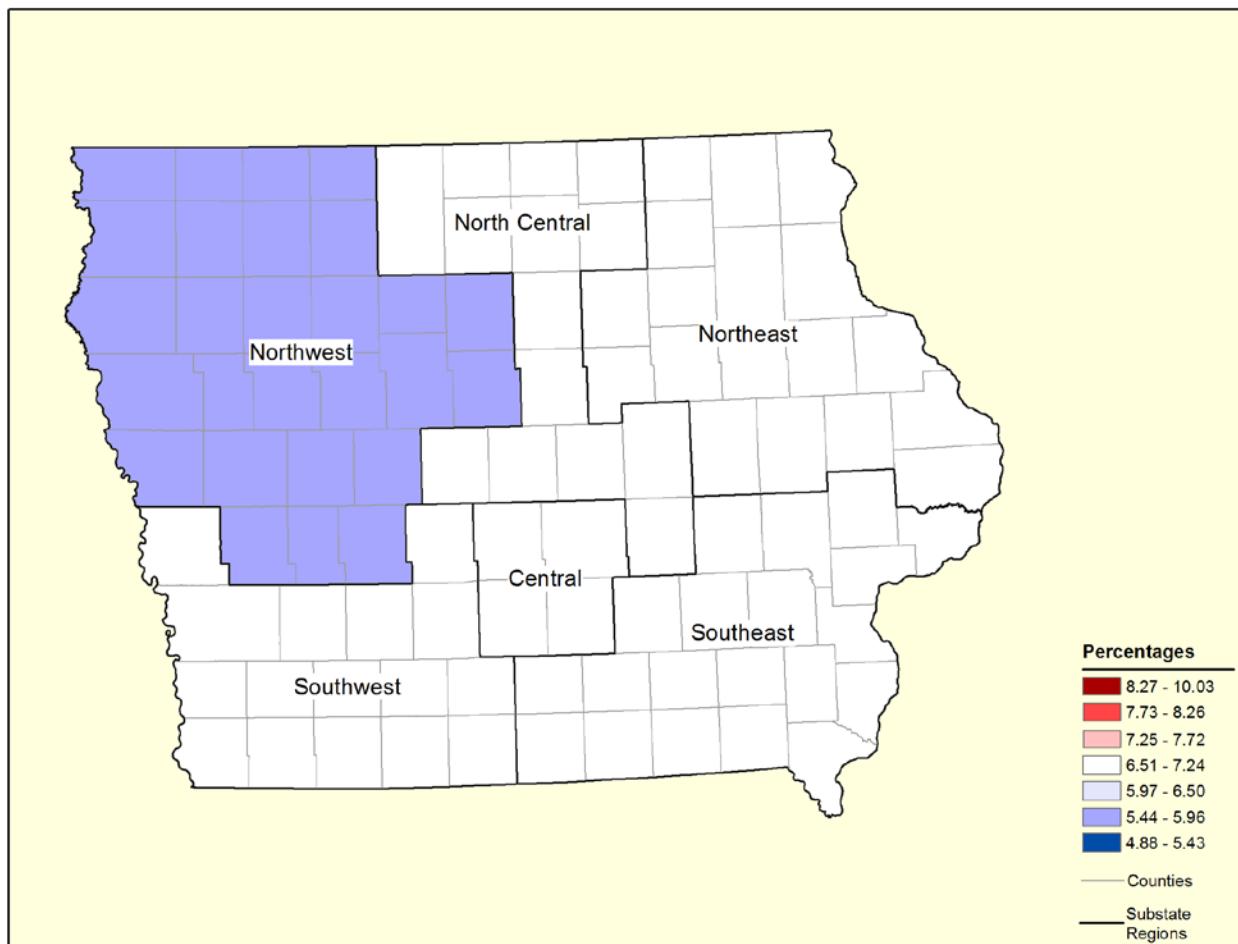
Figure 16.14 Had Serious Thoughts of Suicide in the Past Year among Adults Aged 18 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.

Figure 16.15 Major Depressive Episode in the Past Year among Adults Aged 18 or Older in Iowa, by Substate Region: Percentages, Annual Averages Based on 2014, 2015, and 2016 NSDUHs



NOTE: The legend's ranges were created by dividing 395 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see the "2014-2016 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016.