

Table 18.1 *Illicit Drug Use in the Past Month and Illicit Drug Use Other Than Marijuana in the Past Month* in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs

State/Substate Region	Illicit Drug Use in the Past Month		Illicit Drug Use Other Than Marijuana in the Past Month	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	9.54	(8.37 - 10.85)	3.07	(2.53 - 3.72)
Adanta, Cumberland River, and Lifeskills	8.16	(6.31 - 10.48)	2.94	(2.09 - 4.10)
Bluegrass, Comprehend, and North Key	9.60	(7.86 - 11.67)	2.92	(2.15 - 3.96)
Centerstone	11.35	(9.42 - 13.60)	3.78	(2.83 - 5.03)
Communicare and River Valley	9.35	(7.09 - 12.24)	3.16	(2.22 - 4.47)
Four Rivers and Pennyroyal	8.72	(6.53 - 11.57)	2.67	(1.87 - 3.80)
Kentucky River, Mountain, and Pathways	8.69	(6.58 - 11.40)	2.51	(1.72 - 3.65)

NOTE: For substate region definitions, see the "2016-2018 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.

NOTE: Illicit Drug Use includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Illicit Drug Use Other Than Marijuana includes the misuse of prescription psychotherapeutics or the use of cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

Table 18.2 *Marijuana Use in the Past Year, Marijuana Use in the Past Month, Average Annual Initiation Estimates (Expressed as Percentages of the At-Risk Population) of First Use of Marijuana, and Perceptions of Great Risk from Smoking Marijuana Once a Month in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*

State/Substate Region	Marijuana Use in the Past Year		Marijuana Use in the Past Month		First Use of Marijuana ¹		Perceptions of Great Risk from Smoking Marijuana Once a Month	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	12.86	(11.53 - 14.31)	7.82	(6.75 - 9.03)	1.85	(1.61 - 2.13)	26.90	(24.93 - 28.96)
Adanta, Cumberland River, and Lifeskills	10.19	(7.98 - 12.94)	6.65	(5.02 - 8.77)	1.54	(1.20 - 1.99)	32.16	(27.95 - 36.68)
Bluegrass, Comprehend, and North Key	13.04	(10.98 - 15.43)	8.04	(6.46 - 9.97)	2.14	(1.74 - 2.63)	23.43	(20.54 - 26.59)
Centerstone	16.10	(13.64 - 18.91)	9.15	(7.40 - 11.26)	2.10	(1.71 - 2.57)	24.40	(21.16 - 27.96)
Communicare and River Valley	11.86	(9.05 - 15.40)	7.52	(5.55 - 10.10)	1.74	(1.34 - 2.26)	27.25	(22.99 - 31.97)
Four Rivers and Pennyroyal	12.51	(9.62 - 16.11)	7.17	(5.17 - 9.87)	1.80	(1.36 - 2.39)	28.40	(23.83 - 33.46)
Kentucky River, Mountain, and Pathways	11.15	(8.48 - 14.53)	7.14	(5.13 - 9.85)	1.37	(1.03 - 1.81)	31.66	(26.67 - 37.11)

NOTE: For substate region definitions, see the "2016-2018 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 First Use of Marijuana is defined as follows: *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 the 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 "2017-2018 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, 2016, 2017, and 2018.

Table 18.3 Cocaine Use in the Past Year, Perceptions of Great Risk from Using Cocaine Once a Month, Heroin Use in the Past Year, and Perceptions of Great Risk from Trying Heroin Once or Twice in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs

State/Substate Region	Cocaine Use in the Past Year		Perceptions of Great Risk from Using Cocaine Once a Month		Heroin Use in the Past Year		Perceptions of Great Risk from Trying Heroin Once or Twice	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	1.68	(1.31-2.15)	76.03	(74.19 - 77.77)	0.42	(0.25 - 0.70)	88.62	(87.34 - 89.79)
Adanta, Cumberland River, and Lifeskills	1.44	(0.91-2.28)	79.38	(76.16 - 82.26)	0.42	(0.22 - 0.82)	89.55	(87.35 - 91.40)
Bluegrass, Comprehend, and North Key	1.95	(1.36-2.78)	73.09	(69.90 - 76.06)	0.40	(0.21 - 0.76)	87.91	(85.83 - 89.72)
Centerstone	1.88	(1.28-2.74)	72.88	(69.61 - 75.92)	0.45	(0.24 - 0.85)	88.76	(86.67 - 90.55)
Communicare and River Valley	1.53	(0.93-2.51)	77.67	(73.94 - 81.01)	0.43	(0.22 - 0.85)	87.34	(84.55 - 89.69)
Four Rivers and Pennyroyal	1.31	(0.79-2.16)	79.13	(75.42 - 82.42)	0.40	(0.20 - 0.82)	89.13	(86.71 - 91.16)
Kentucky River, Mountain, and Pathways	1.36	(0.84-2.21)	80.87	(77.42 - 83.91)	0.42	(0.22 - 0.83)	89.73	(87.27 - 91.75)

NOTE: For substate region definitions, see the "2016-2018 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, 2016, 2017, and 2018.

Table 18.4 *Methamphetamine Use in the Past Year and Pain Reliever Misuse in the Past Year* in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs

State/Substate Region	Methamphetamine Use in the Past Year		Pain Reliever Misuse in the Past Year ¹	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	1.11	(0.75 - 1.65)	4.34	(3.70 - 5.09)
Adanta, Cumberland River, and Lifeskills	1.42	(0.79 - 2.53)	4.47	(3.44 - 5.80)
Bluegrass, Comprehend, and North Key	0.89	(0.50 - 1.58)	4.14	(3.23 - 5.28)
Centerstone	1.03	(0.62 - 1.72)	4.35	(3.43 - 5.49)
Communicare and River Valley	1.32	(0.74 - 2.36)	4.54	(3.47 - 5.93)
Four Rivers and Pennyroyal	1.16	(0.62 - 2.16)	4.52	(3.44 - 5.93)
Kentucky River, Mountain, and Pathways	1.16	(0.62 - 2.16)	4.34	(3.27 - 5.74)

NOTE: For substate region definitions, see the "2016-2018 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 Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

Table 18.5 *Alcohol Use in the Past Month, Binge Alcohol Use in the Past Month, and Perceptions of Great Risk from Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*

State/Substate Region	Alcohol Use in the Past Month		Binge Alcohol Use in the Past Month ¹		Perceptions of Great Risk from Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	39.23	(37.03 - 41.47)	20.84	(19.07 - 22.72)	44.88	(42.73 - 47.05)
Adanta, Cumberland River, and Lifeskills	29.96	(25.75 - 34.54)	17.23	(14.30 - 20.61)	46.49	(42.43 - 50.61)
Bluegrass, Comprehend, and North Key	43.76	(40.08 - 47.52)	22.96	(20.07 - 26.12)	44.75	(41.37 - 48.19)
Centerstone	48.92	(45.06 - 52.80)	23.26	(20.36 - 26.44)	45.99	(42.51 - 49.52)
Communicare and River Valley	38.19	(33.19 - 43.45)	21.07	(17.41 - 25.25)	42.81	(38.59 - 47.14)
Four Rivers and Pennyroyal	33.58	(28.41 - 39.19)	17.77	(14.43 - 21.68)	44.47	(40.23 - 48.79)
Kentucky River, Mountain, and Pathways	27.38	(22.69 - 32.62)	18.08	(14.84 - 21.85)	42.97	(38.63 - 47.43)

NOTE: For substate region definitions, see the "2016-2018 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 Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

Table 18.6 *Alcohol Use in the Past Month and Binge Alcohol Use in the Past Month among Individuals Aged 12 to 20* in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs

State/Substate Region	Alcohol Use in the Past Month among Individuals Aged 12 to 20		Binge Alcohol Use in the Past Month among Individuals Aged 12 to 20 ¹	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	19.23	(17.00 - 21.67)	12.01	(10.41 - 13.83)
Adanta, Cumberland River, and Lifeskills	17.10	(13.35 - 21.63)	10.03	(7.50 - 13.29)
Bluegrass, Comprehend, and North Key	21.68	(18.10 - 25.74)	14.15	(11.40 - 17.43)
Centerstone	19.45	(15.91 - 23.56)	11.79	(9.25 - 14.91)
Communicare and River Valley	18.18	(13.99 - 23.29)	11.41	(8.51 - 15.13)
Four Rivers and Pennyroyal	18.54	(14.09 - 24.01)	10.69	(7.69 - 14.68)
Kentucky River, Mountain, and Pathways	16.76	(12.85 - 21.57)	11.24	(8.36 - 14.95)

NOTE: For substate region definitions, see the "2016-2018 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 Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

Table 18.7 Tobacco Product Use in the Past Month, Cigarette Use in the Past Month, and Perceptions of Great Risk from Smoking One or More Packs of Cigarettes per Day in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs

State/Substate Region	Tobacco Product Use in the Past Month ¹		Cigarette Use in the Past Month		Perceptions of Great Risk from Smoking One or More Packs of Cigarettes per Day	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	33.73	(31.61 - 35.91)	27.10	(25.12 - 29.17)	64.52	(62.38 - 66.60)
Adanta, Cumberland River, and Lifeskills	37.24	(33.21 - 41.46)	28.87	(24.82 - 33.29)	61.37	(57.66 - 64.96)
Bluegrass, Comprehend, and North Key	32.34	(29.28 - 35.55)	26.26	(23.20 - 29.55)	65.73	(62.60 - 68.74)
Centerstone	28.20	(25.17 - 31.45)	22.89	(20.15 - 25.87)	68.01	(65.09 - 70.81)
Communicare and River Valley	35.66	(31.24 - 40.35)	29.45	(25.16 - 34.14)	62.41	(58.46 - 66.21)
Four Rivers and Pennyroyal	35.23	(30.63 - 40.11)	28.33	(23.94 - 33.18)	64.36	(60.58 - 67.98)
Kentucky River, Mountain, and Pathways	40.05	(35.32 - 44.97)	31.73	(27.08 - 36.77)	61.23	(57.20 - 65.11)

NOTE: For substate region definitions, see the "2016-2018 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, 2016, 2017, and 2018.

Table 18.8 *Illicit Drug Use Disorder in the Past Year, Pain Reliever Use Disorder in the Past Year, Alcohol Use Disorder in the Past Year, and Substance Use Disorder in the Past Year* in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs

State/Substate Region	Illicit Drug Use Disorder in the Past Year ^{1,2}		Pain Reliever Use Disorder in the Past Year ²		Alcohol Use Disorder in the Past Year		Substance Use Disorder in the Past Year ^{1,2}	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	2.94	(2.42-3.55)	0.87	(0.64 - 1.18)	4.68	(3.90 - 5.61)	7.12	(6.16 - 8.21)
Adanta, Cumberland River, and Lifeskills	2.85	(2.09-3.87)	1.02	(0.60 - 1.76)	4.39	(3.19 - 6.03)	6.81	(5.21 - 8.86)
Bluegrass, Comprehend, and North Key	2.76	(2.06-3.69)	0.85	(0.52 - 1.41)	4.80	(3.68 - 6.23)	6.95	(5.53 - 8.71)
Centerstone	3.29	(2.51-4.30)	0.79	(0.48 - 1.29)	5.28	(4.01 - 6.91)	8.14	(6.61 - 9.98)
Communicare and River Valley	2.87	(2.05-4.01)	0.77	(0.44 - 1.33)	4.71	(3.36 - 6.57)	7.05	(5.33 - 9.27)
Four Rivers and Pennyroyal	2.81	(2.00-3.92)	0.88	(0.51 - 1.49)	4.03	(2.83 - 5.70)	6.15	(4.60 - 8.17)
Kentucky River, Mountain, and Pathways	2.99	(2.14-4.16)	0.97	(0.55 - 1.69)	4.12	(2.92 - 5.79)	6.87	(5.19 - 9.05)

NOTE: For substate region definitions, see the "2016-2018 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.

NOTE: Substance Use Disorder is defined as meeting criteria for illicit drug or 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).

¹ Illicit Drug Use includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine.

² Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

Table 18.9 *Needing But Not Receiving Treatment at a Specialty Facility for Illicit Drug Use in the Past Year, Needing But Not Receiving Treatment at a Specialty Facility for Alcohol Use in the Past Year, and Needing But Not Receiving Treatment at a Specialty Facility for Substance Use in the Past Year in Kentucky among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*

State/Substate Region	Needing But Not Receiving Treatment at a Specialty Facility for Illicit Drug Use in the Past Year ¹		Needing But Not Receiving Treatment at a Specialty Facility for Alcohol Use in the Past Year		Needing But Not Receiving Treatment at a Specialty Facility for Substance Use in the Past Year ¹	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Kentucky	2.40	(1.98 - 2.92)	4.54	(3.84 - 5.37)	6.24	(5.37 - 7.25)
Adanta, Cumberland River, and Lifeskills	2.30	(1.66 - 3.19)	4.24	(3.15 - 5.68)	5.85	(4.41 - 7.72)
Bluegrass, Comprehend, and North Key	2.31	(1.72 - 3.10)	4.61	(3.55 - 5.98)	6.15	(4.88 - 7.73)
Centerstone	2.71	(2.04 - 3.60)	5.16	(3.99 - 6.65)	7.05	(5.61 - 8.83)
Communicare and River Valley	2.41	(1.70 - 3.40)	4.55	(3.32 - 6.21)	6.31	(4.76 - 8.31)
Four Rivers and Pennyroyal	2.26	(1.58 - 3.21)	4.08	(2.96 - 5.61)	5.43	(4.01 - 7.31)
Kentucky River, Mountain, and Pathways	2.31	(1.63 - 3.24)	3.96	(2.82 - 5.52)	6.07	(4.48 - 8.17)

NOTE: For substate region definitions, see the "2016-2018 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.

NOTE: Respondents were classified as needing substance use treatment if they met the criteria for an illicit drug or alcohol use disorder as defined in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) or received treatment for illicit drug or alcohol use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient only], or mental health center). Needing But Not Receiving Substance Use Treatment refers to respondents who are classified as needing illicit drug or alcohol treatment, but who did not receive illicit drug or alcohol treatment at a specialty facility.

¹ Illicit Drug Use includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

Table 18.10 *Serious Mental Illness in the Past Year, Any Mental Illness in the Past Year, and Received Mental Health Services in the Past Year* in Kentucky among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 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
Kentucky	5.46	(4.65 - 6.40)	22.51	(20.57 - 24.57)	18.66	(16.89 - 20.57)
Adanta, Cumberland River, and Lifeskills	5.99	(4.63 - 7.72)	21.73	(18.50 - 25.35)	19.54	(16.57 - 22.90)
Bluegrass, Comprehend, and North Key	5.29	(4.20 - 6.66)	24.11	(21.13 - 27.36)	18.64	(16.15 - 21.41)
Centerstone	4.72	(3.72 - 5.96)	21.69	(18.94 - 24.71)	17.33	(14.85 - 20.13)
Communicare and River Valley	5.42	(4.16 - 7.03)	20.49	(17.21 - 24.21)	18.04	(15.10 - 21.41)
Four Rivers and Pennyroyal	5.50	(4.19 - 7.18)	21.64	(18.05 - 25.72)	18.72	(15.62 - 22.28)
Kentucky River, Mountain, and Pathways	6.63	(5.07 - 8.63)	23.85	(20.00 - 28.18)	20.66	(17.36 - 24.39)

NOTE: For substate region definitions, see the "2016-2018 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. As such, these estimates are based on indicators of AMI and SMI rather than direct measures of diagnostic status. For details, see Section B of the "2017-2018 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, 2016, 2017, and 2018.

Table 18.11 *Had Serious Thoughts of Suicide in the Past Year and Major Depressive Episode in the Past Year in Kentucky among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 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
Kentucky	4.70	(3.93 - 5.62)	7.93	(6.87 - 9.14)
Adanta, Cumberland River, and Lifeskills	4.71	(3.64 - 6.08)	8.07	(6.36 - 10.19)
Bluegrass, Comprehend, and North Key	4.96	(3.92 - 6.26)	7.87	(6.43 - 9.61)
Centerstone	4.16	(3.27 - 5.29)	7.76	(6.32 - 9.49)
Communicare and River Valley	4.66	(3.58 - 6.04)	7.41	(5.81 - 9.41)
Four Rivers and Pennyroyal	4.77	(3.69 - 6.15)	7.87	(6.23 - 9.89)
Kentucky River, Mountain, and Pathways	5.07	(3.88 - 6.59)	8.80	(6.88 - 11.20)

NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

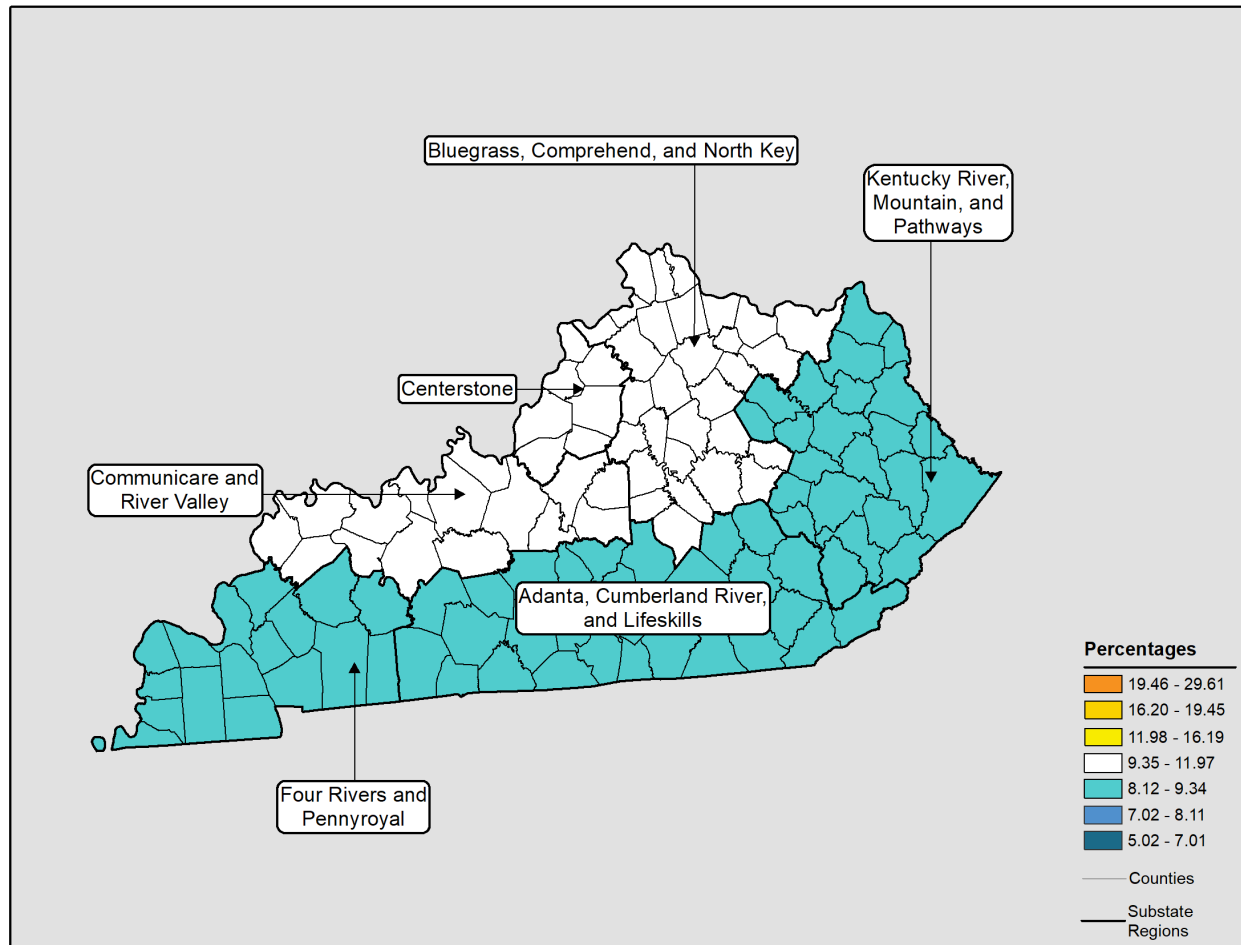
NOTE: Estimates along with the 95 percent Bayesian confidence (credible) intervals are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

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 5th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), 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 of the "2017-2018 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, 2016, 2017, and 2018.

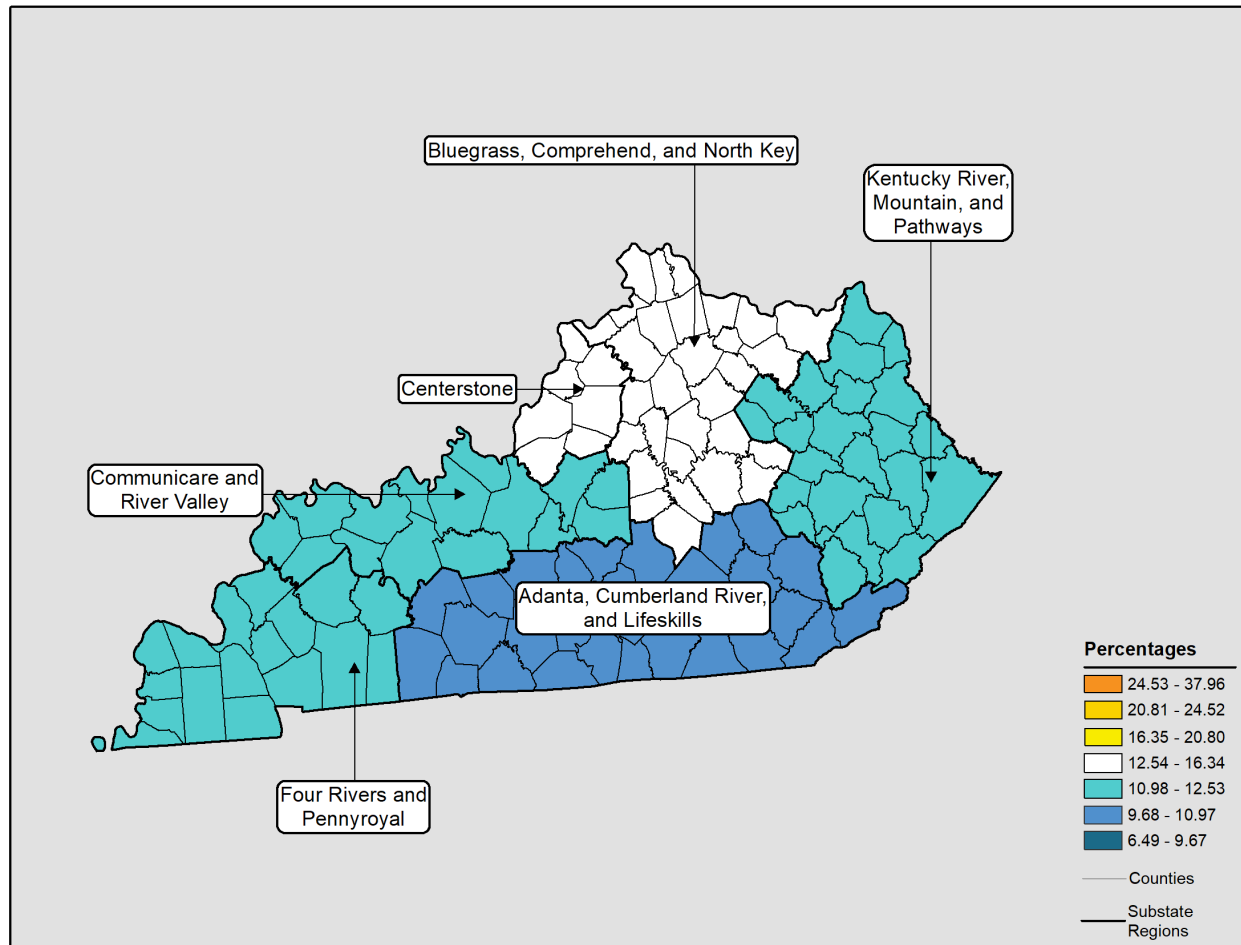
Figure 18.1 *Illicit Drug Use in the Past Month* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

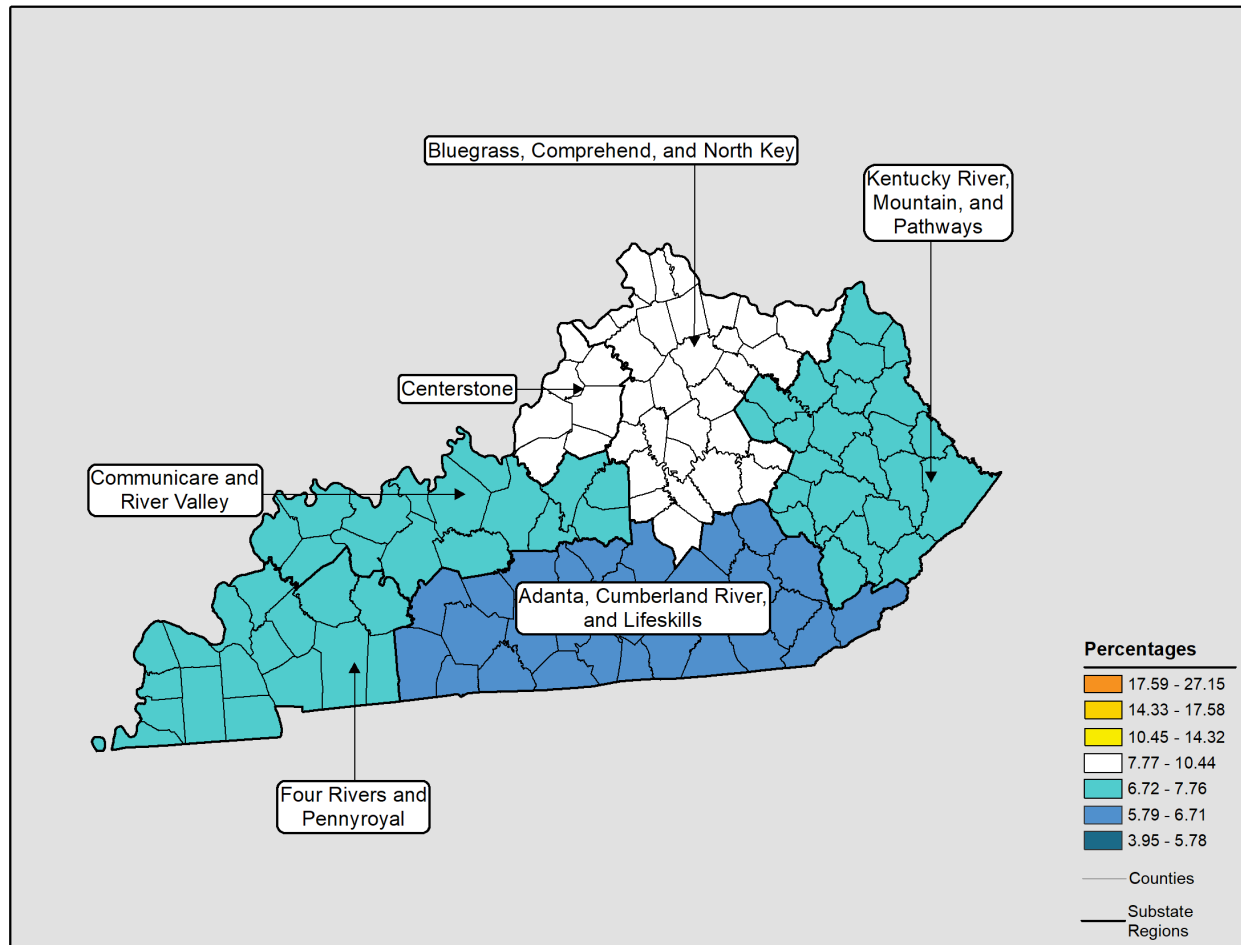
Figure 18.2 *Marijuana Use in the Past Year* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

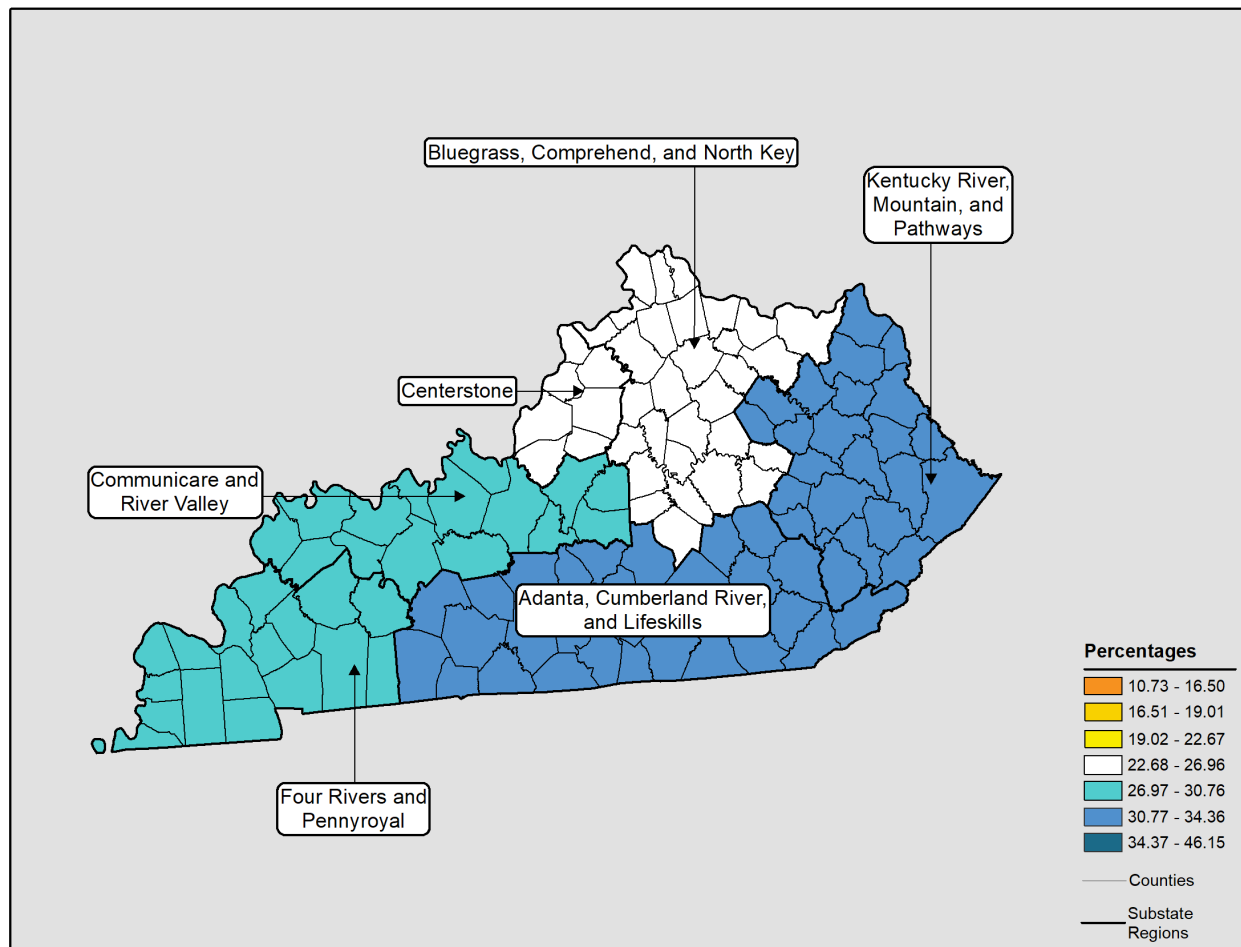
Figure 18.3 *Marijuana Use in the Past Month* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

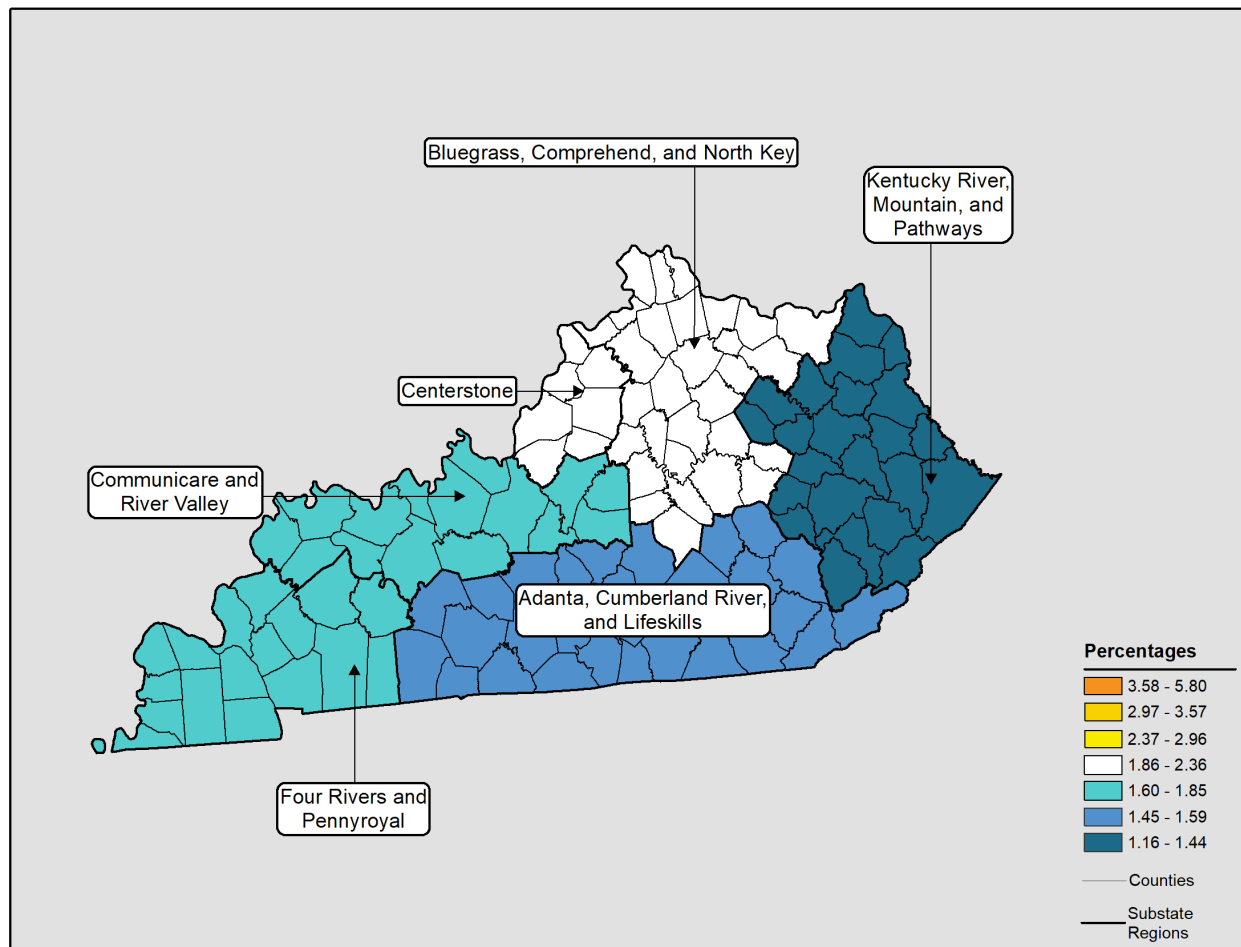
Figure 18.4 *Perceptions of Great Risk from Smoking Marijuana Once a Month among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



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 "2016-2018 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, 2016, 2017, and 2018.

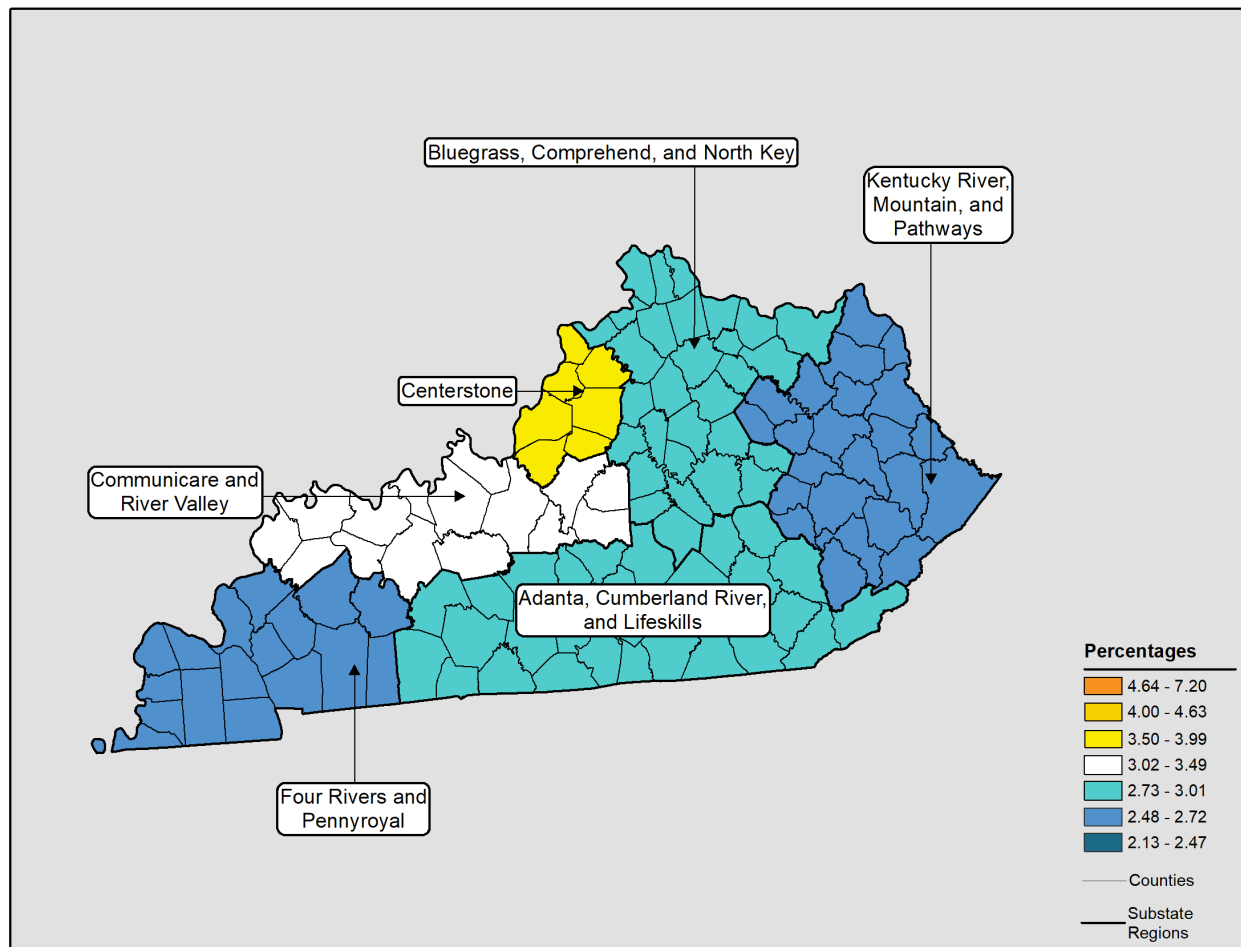
Figure 18.5 *First Use of Marijuana* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Average Annual Initiation Estimates (Expressed as Percentages of the At-Risk Population) Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

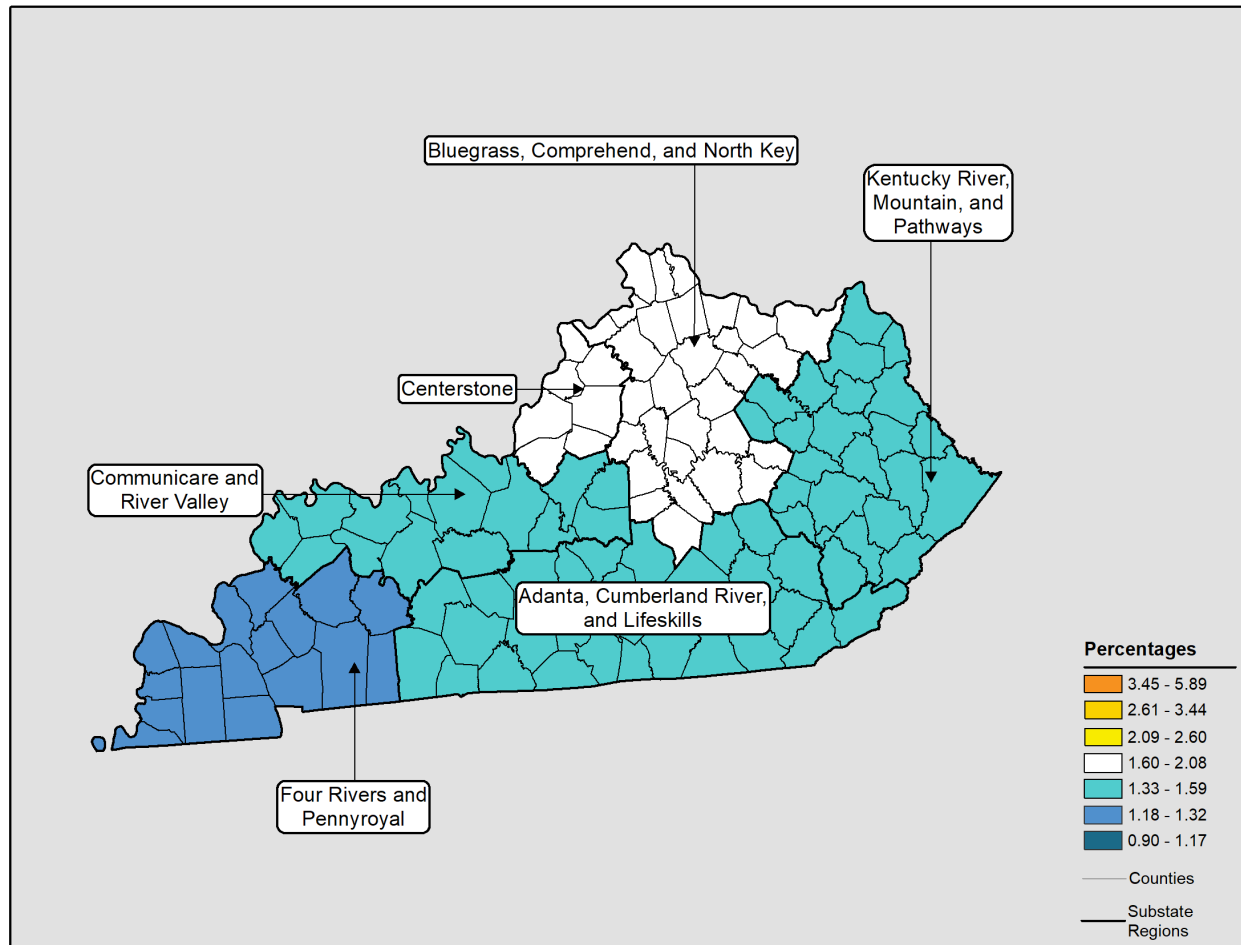
Figure 18.6 *Illicit Drug Use Other Than Marijuana in the Past Month* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

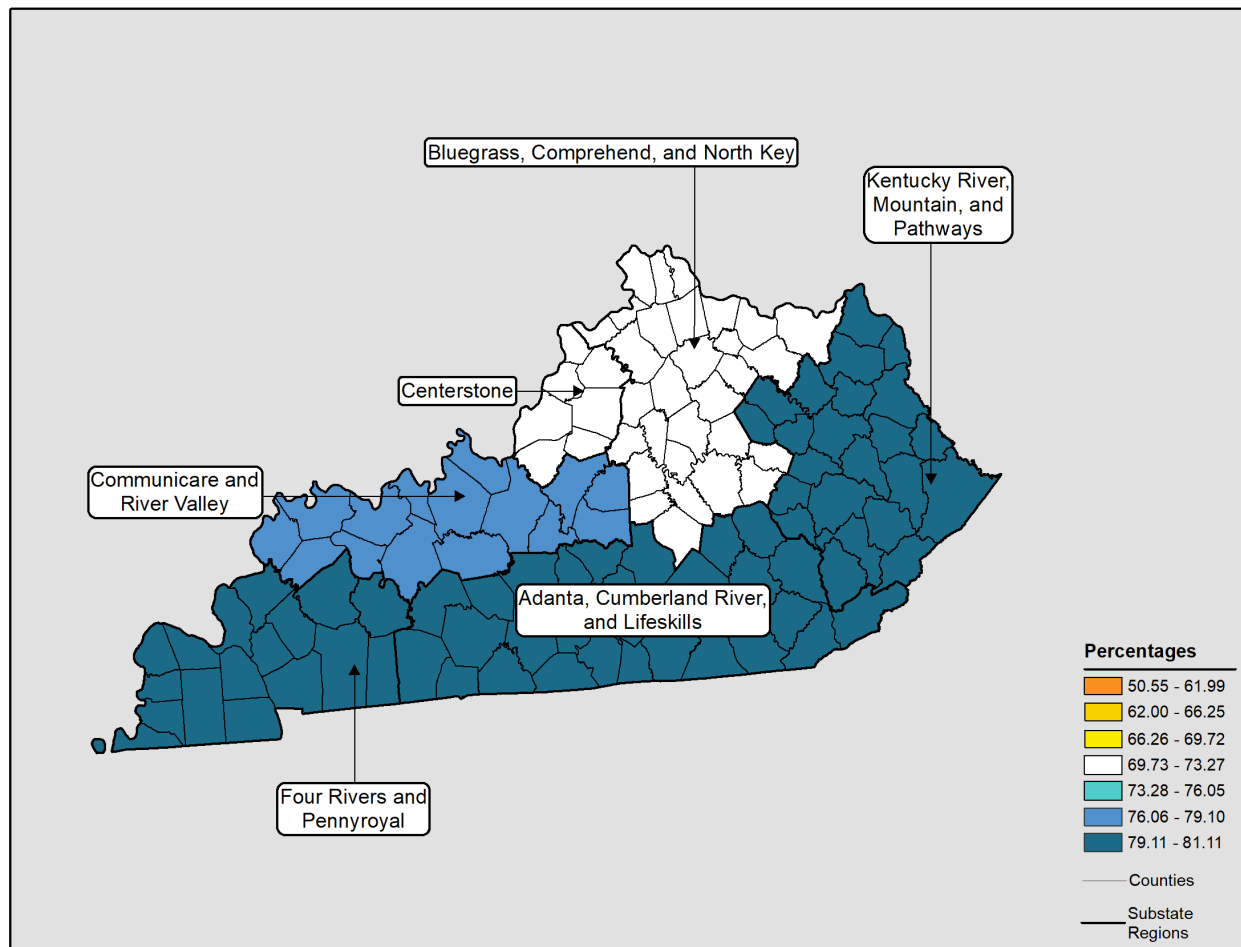
Figure 18.7 Cocaine Use in the Past Year among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

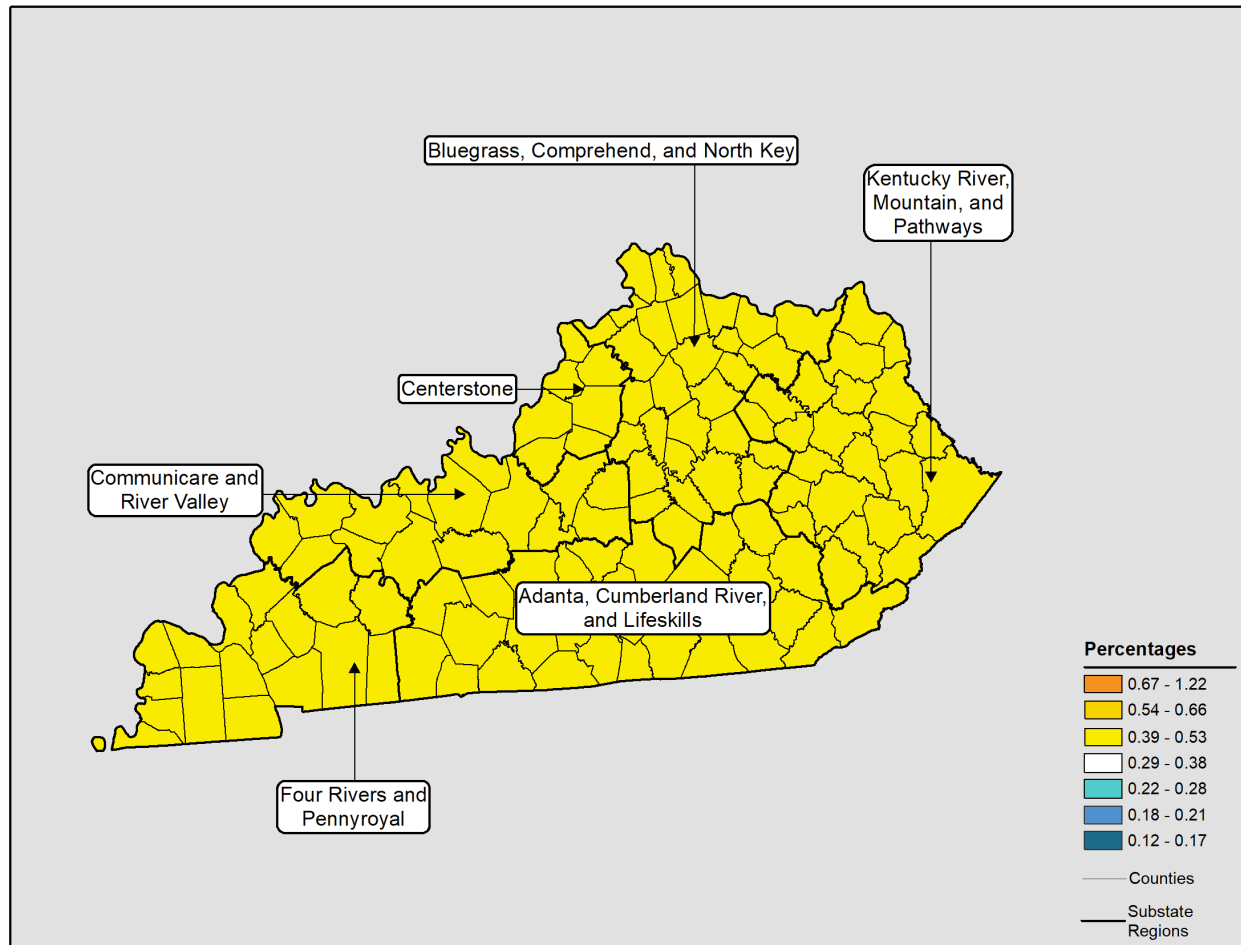
Figure 18.8 *Perceptions of Great Risk from Using Cocaine Once a Month among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



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 "2016-2018 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, 2016, 2017, and 2018.

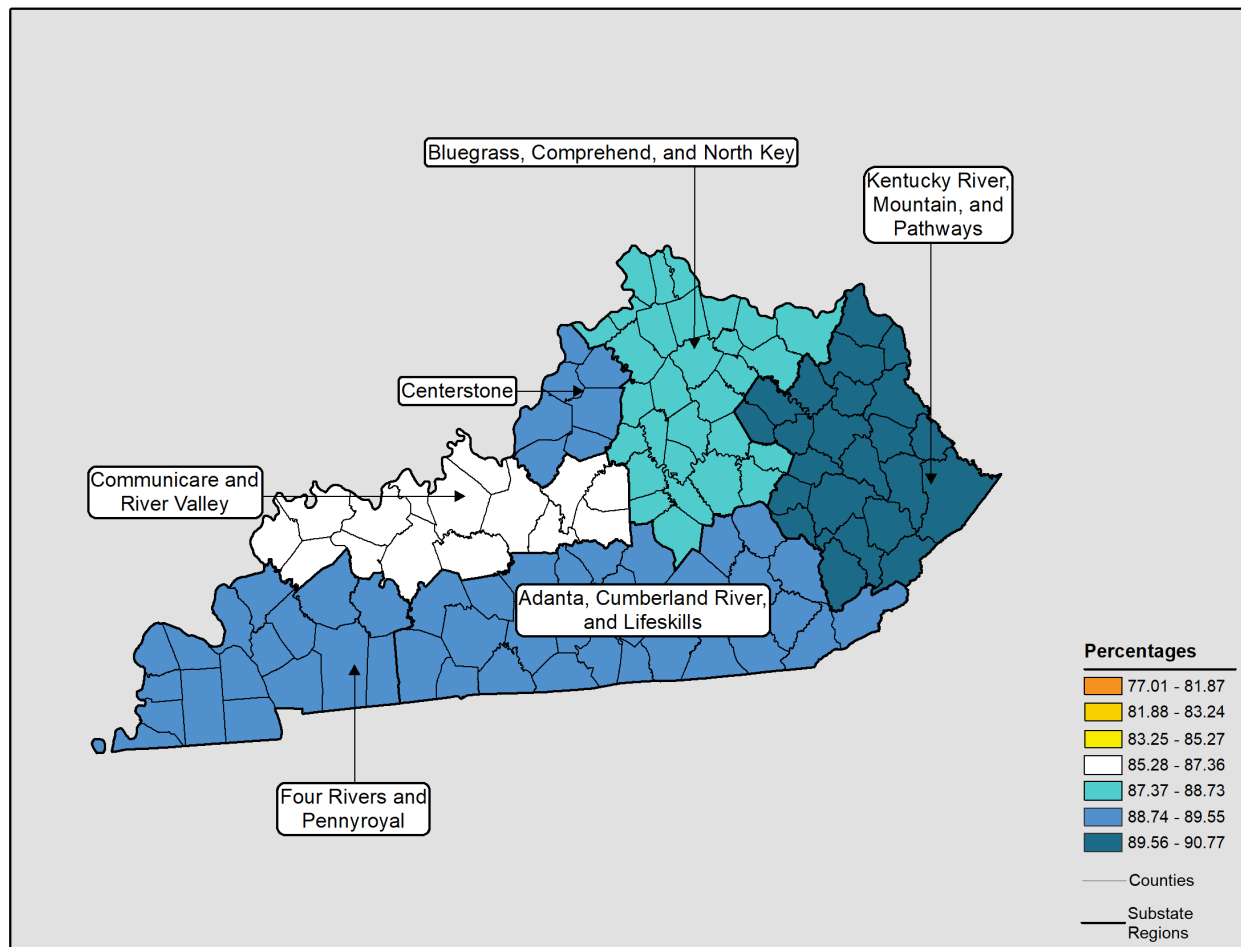
Figure 18.9 Heroin Use in the Past Year among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

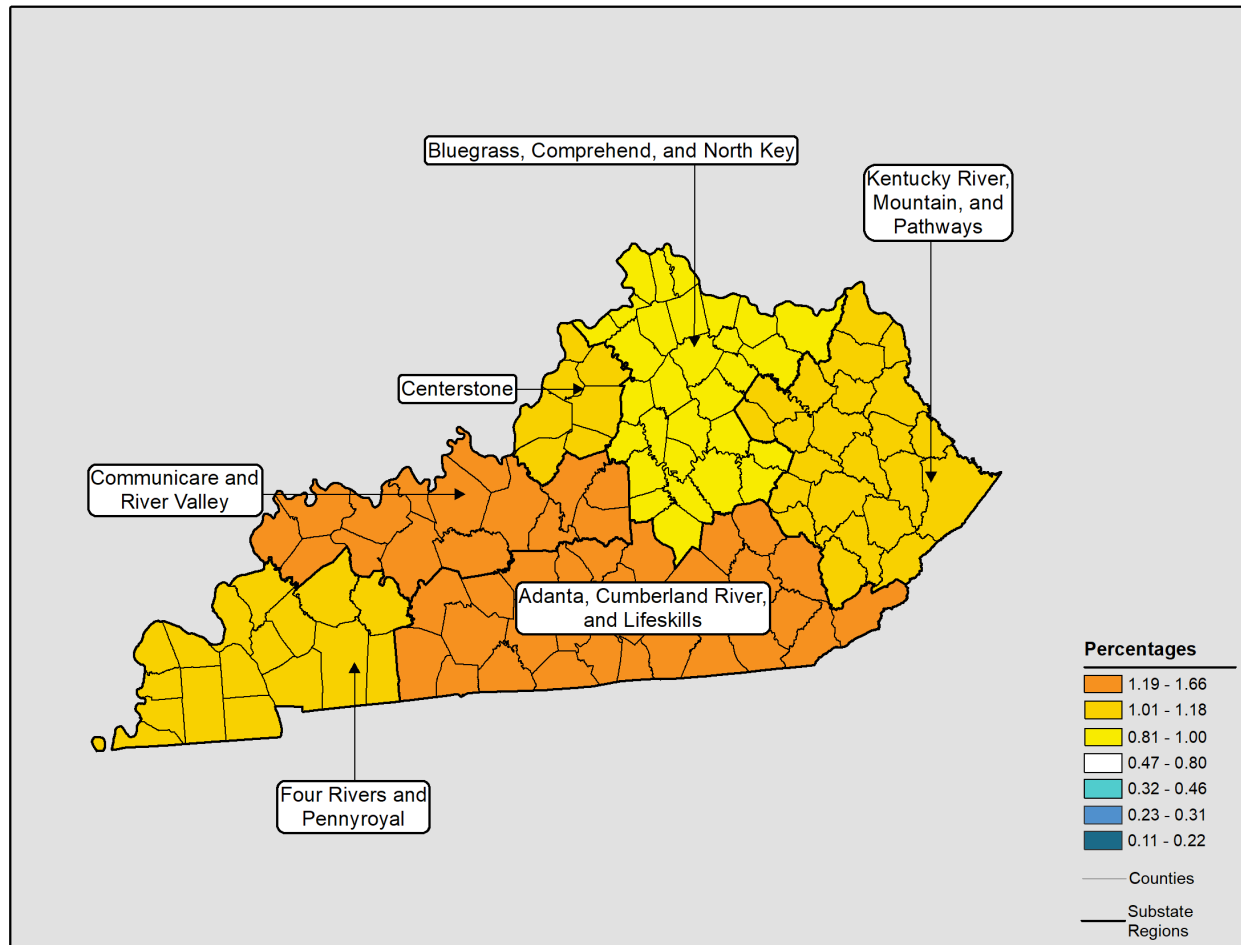
Figure 18.10 *Perceptions of Great Risk from Trying Heroin Once or Twice among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



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 "2016-2018 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, 2016, 2017, and 2018.

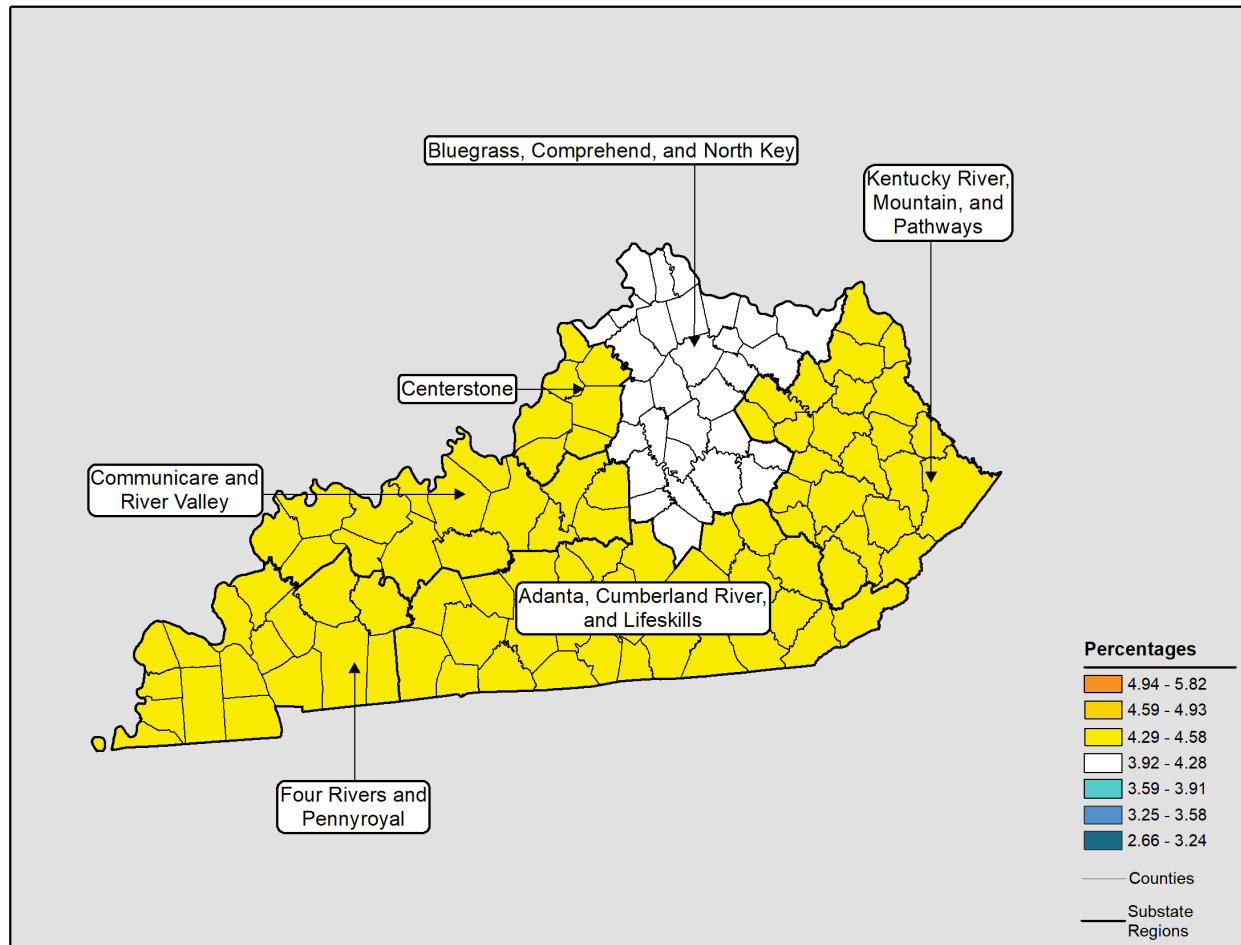
Figure 18.11 *Methamphetamine Use in the Past Year* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

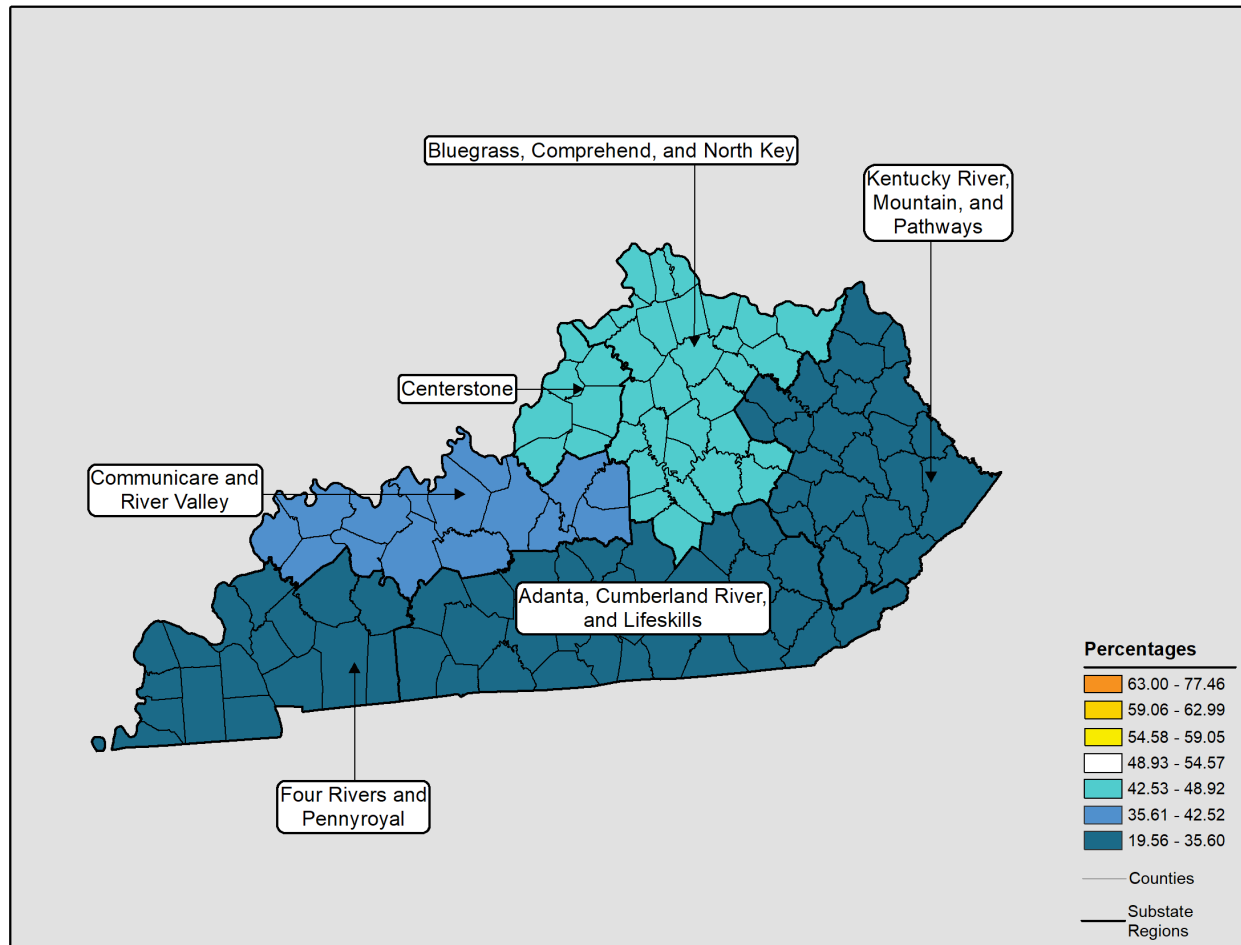
Figure 18.12 *Pain Reliever Misuse in the Past Year* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

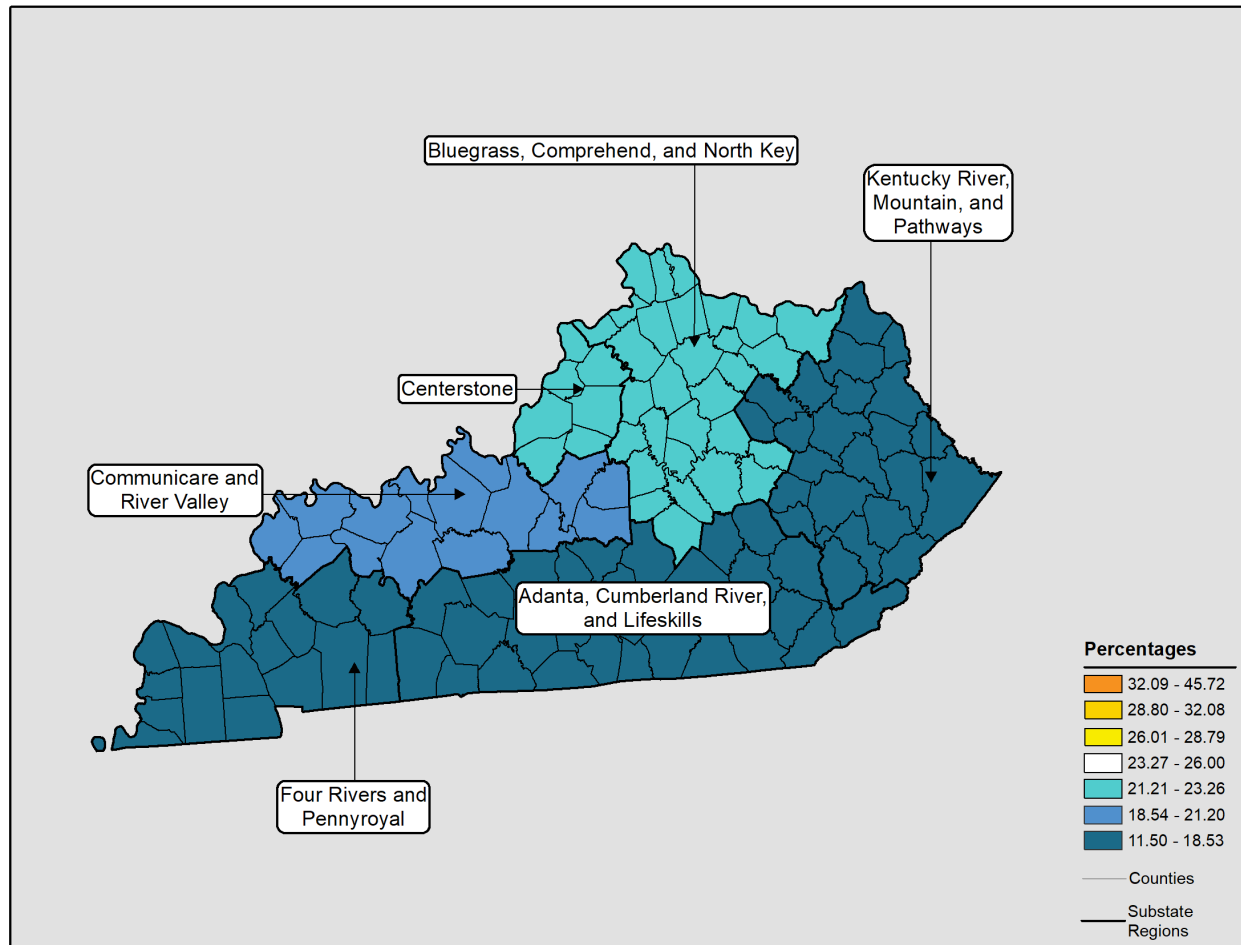
Figure 18.13 *Alcohol Use in the Past Month* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

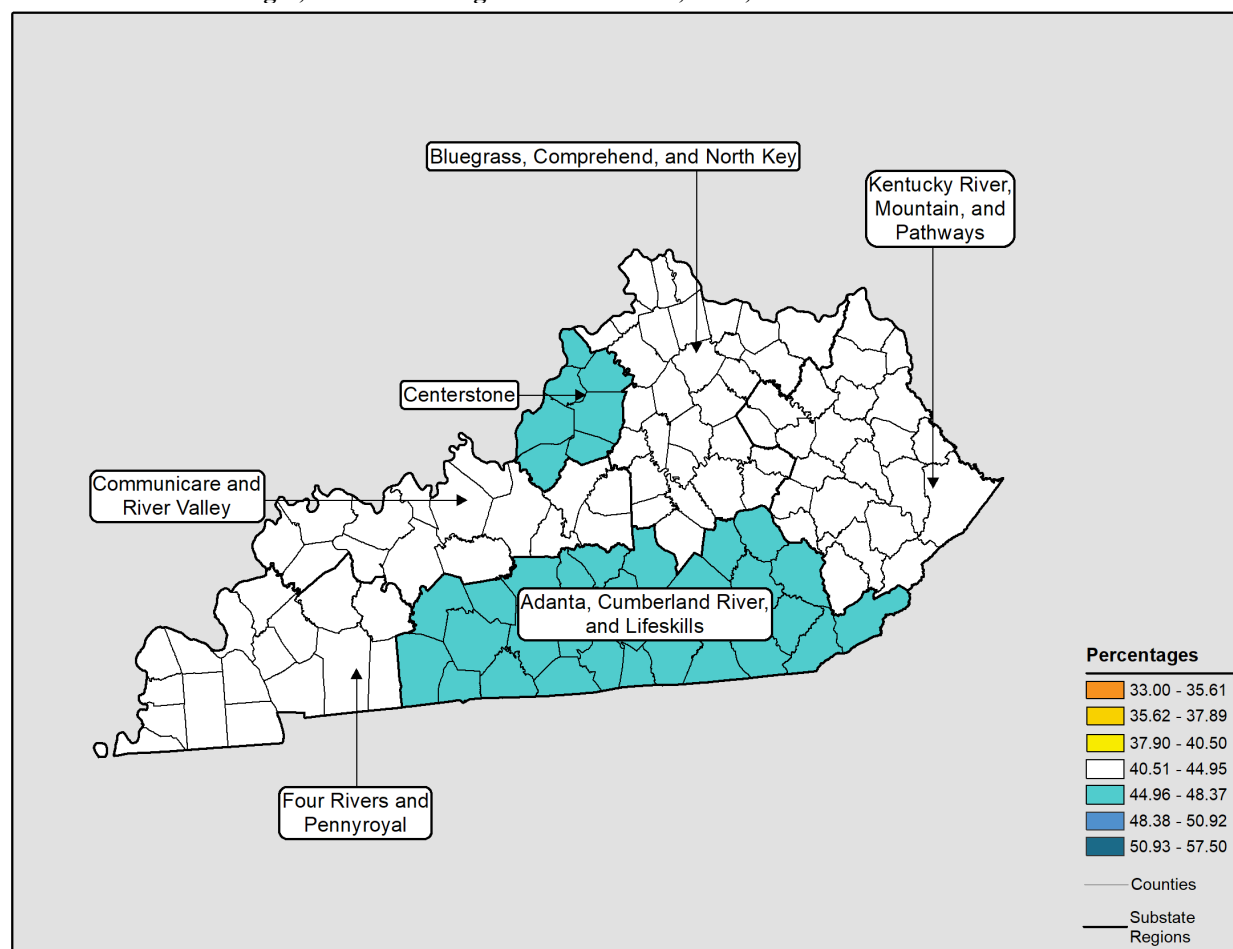
Figure 18.14 *Binge Alcohol Use in the Past Month* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

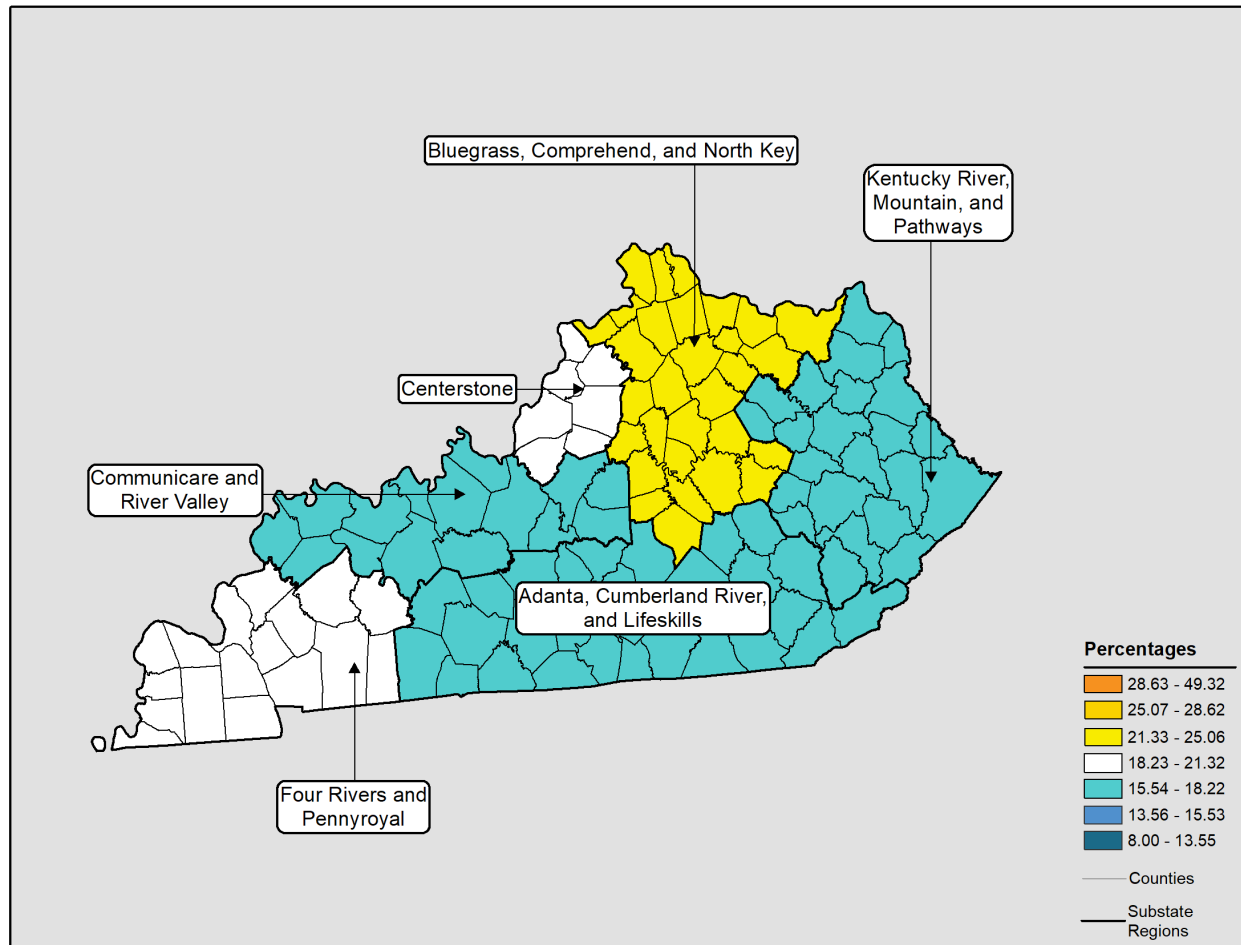
Figure 18.15 *Perceptions of Great Risk from Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



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 "2016-2018 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, 2016, 2017, and 2018.

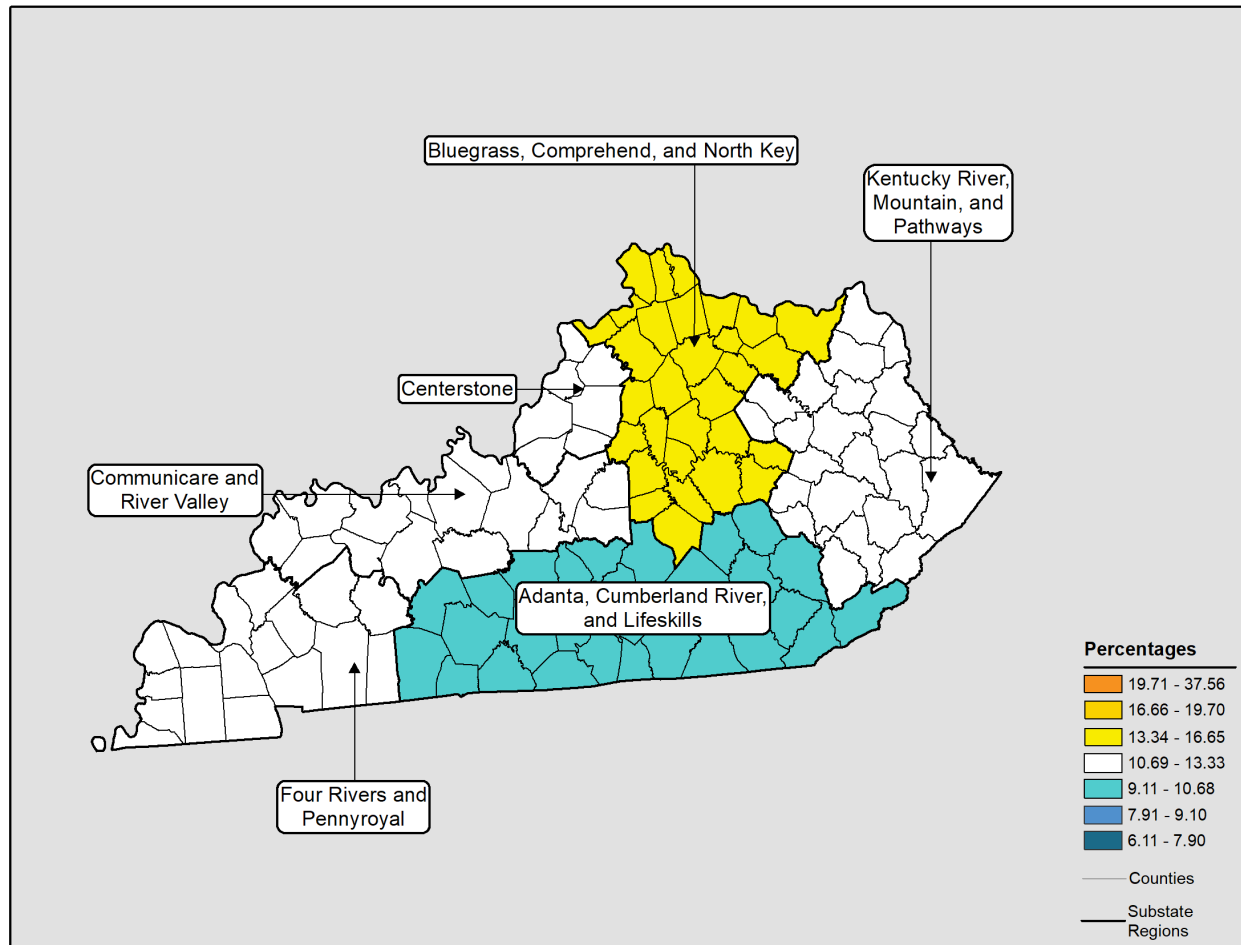
Figure 18.16 *Alcohol Use in the Past Month among Individuals Aged 12 to 20 in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



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 "2016-2018 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, 2016, 2017, and 2018.

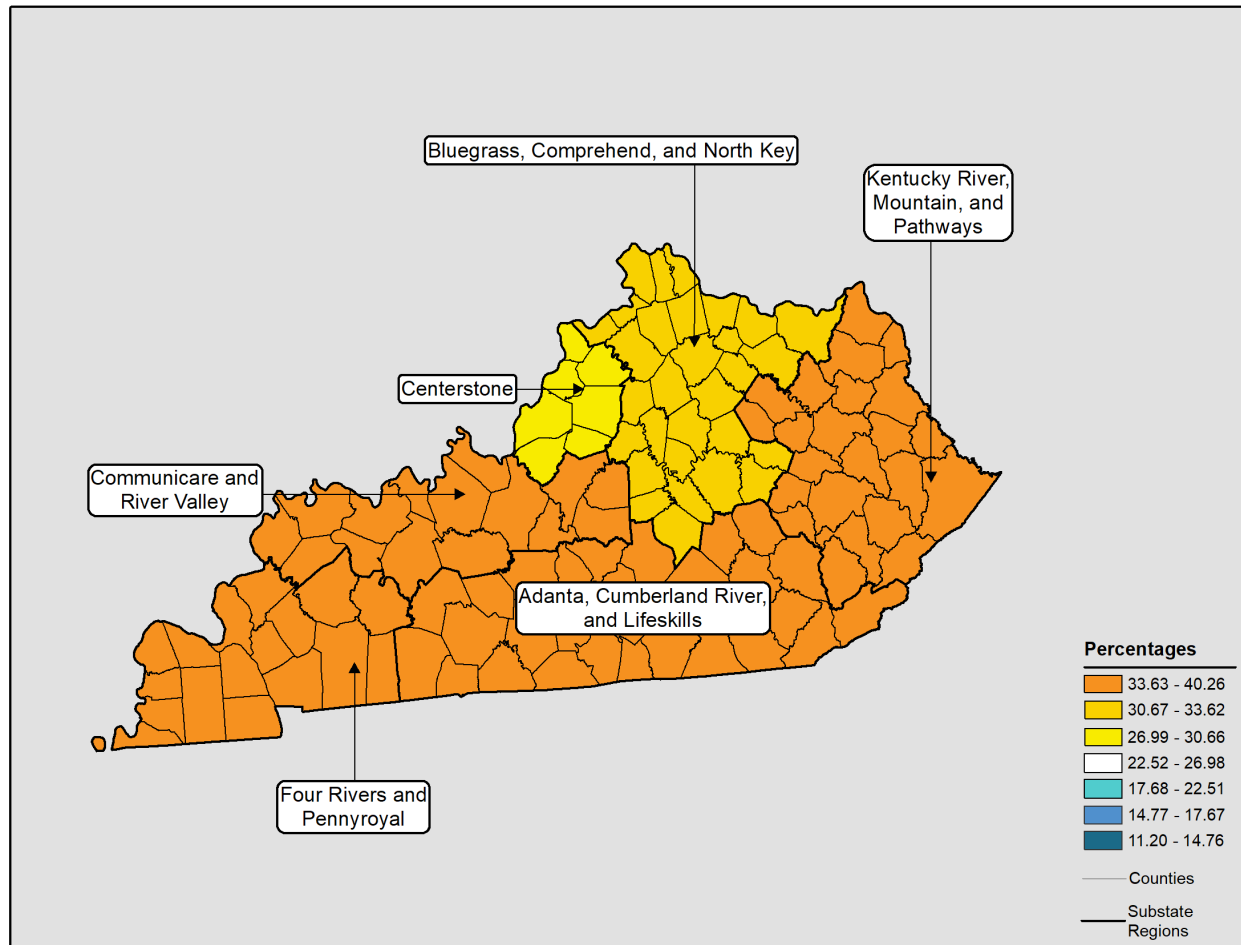
Figure 18.17 Binge Alcohol Use in the Past Month among Individuals Aged 12 to 20 in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

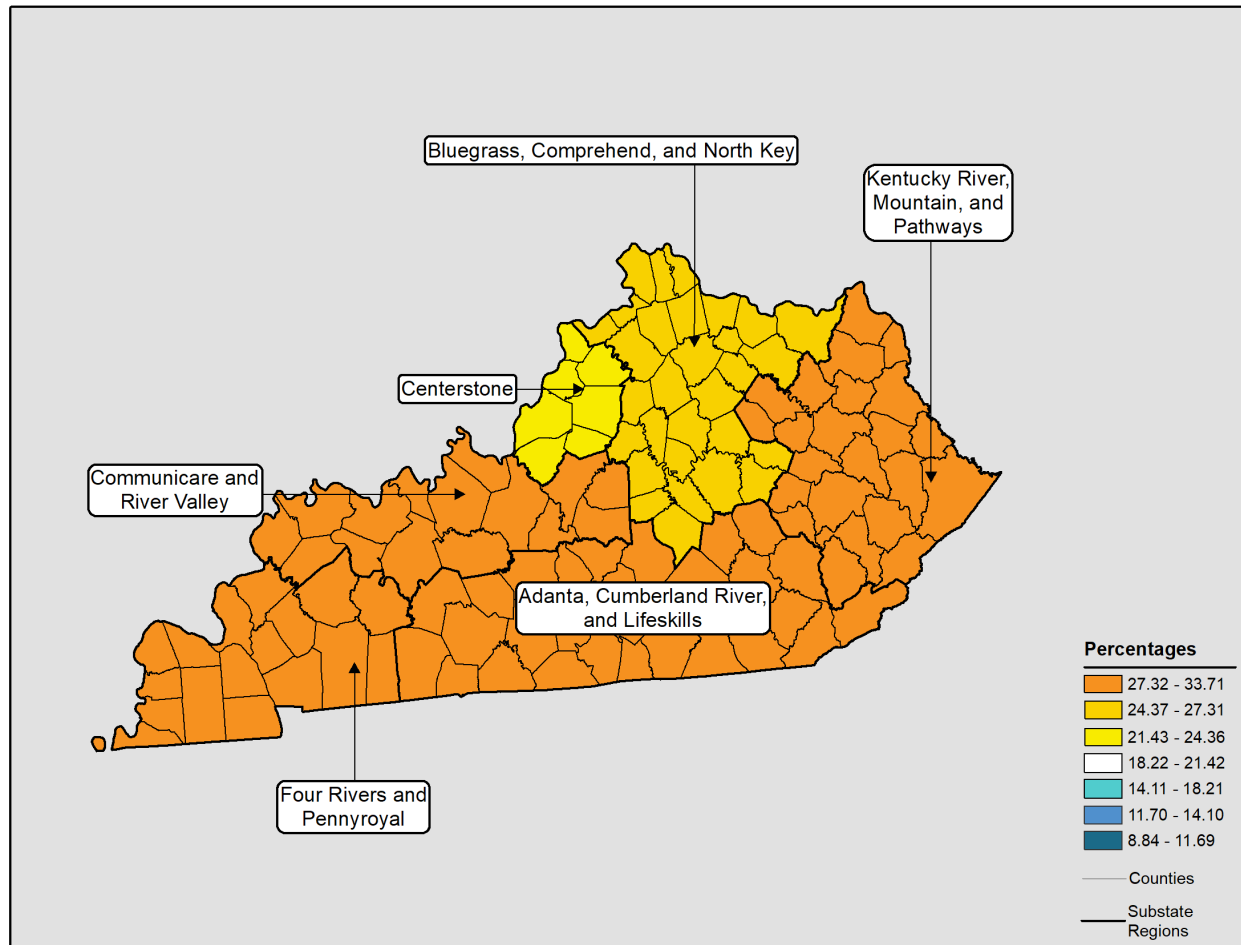
Figure 18.18 Tobacco Product Use in the Past Month among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

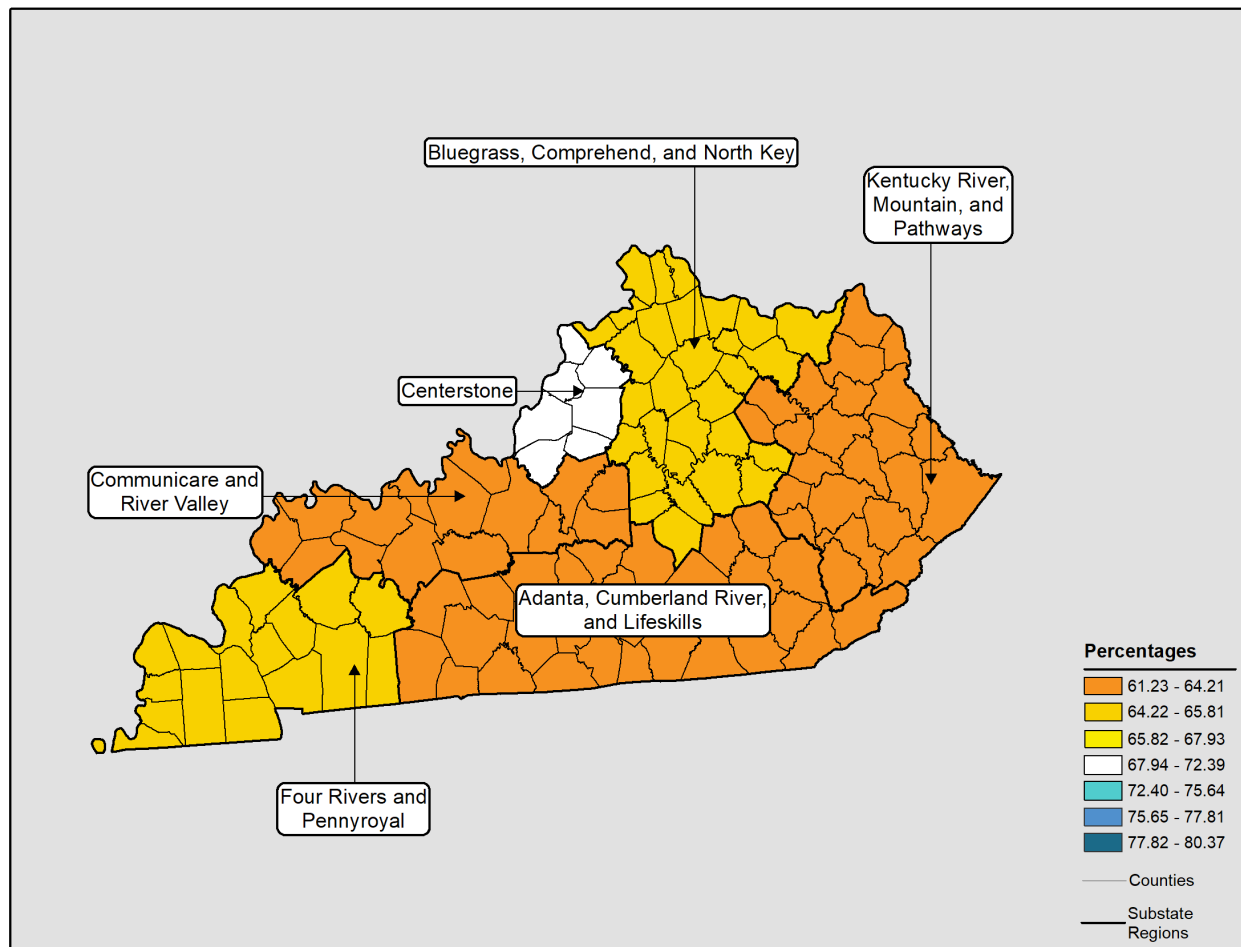
Figure 18.19 Cigarette Use in the Past Month among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

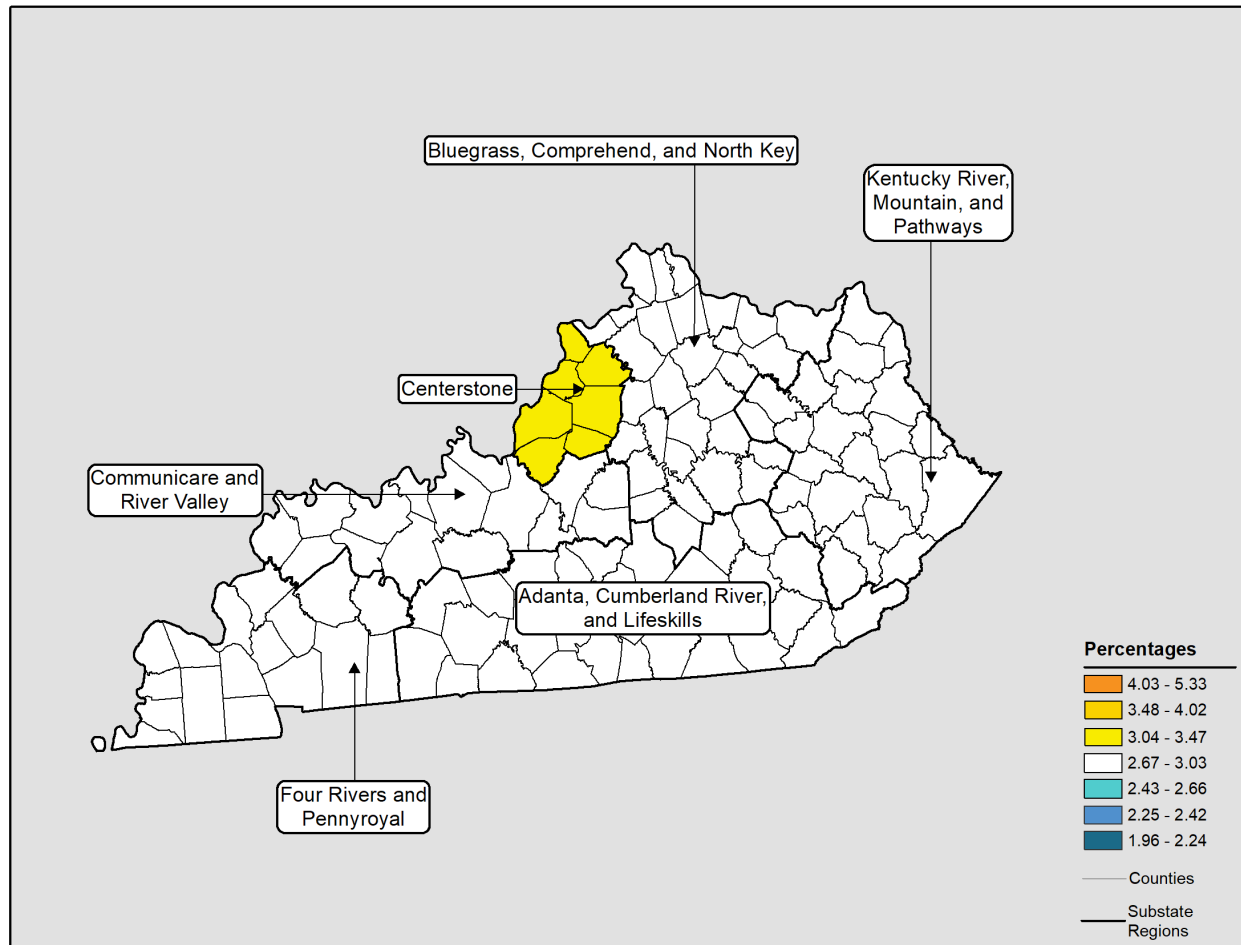
Figure 18.20 *Perceptions of Great Risk from Smoking One or More Packs of Cigarettes per Day among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



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 "2016-2018 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, 2016, 2017, and 2018.

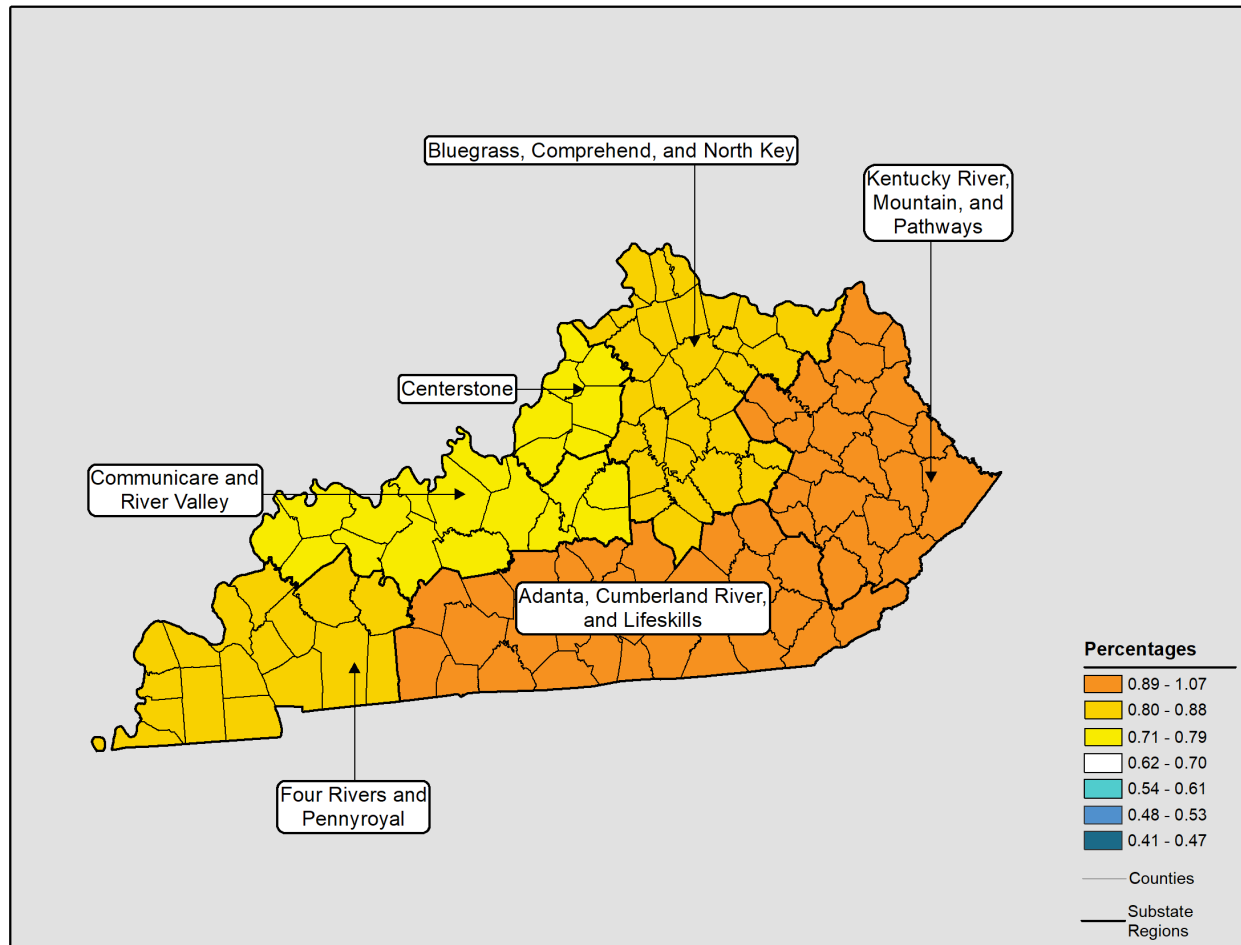
Figure 18.21 *Illicit Drug Use Disorder in the Past Year* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

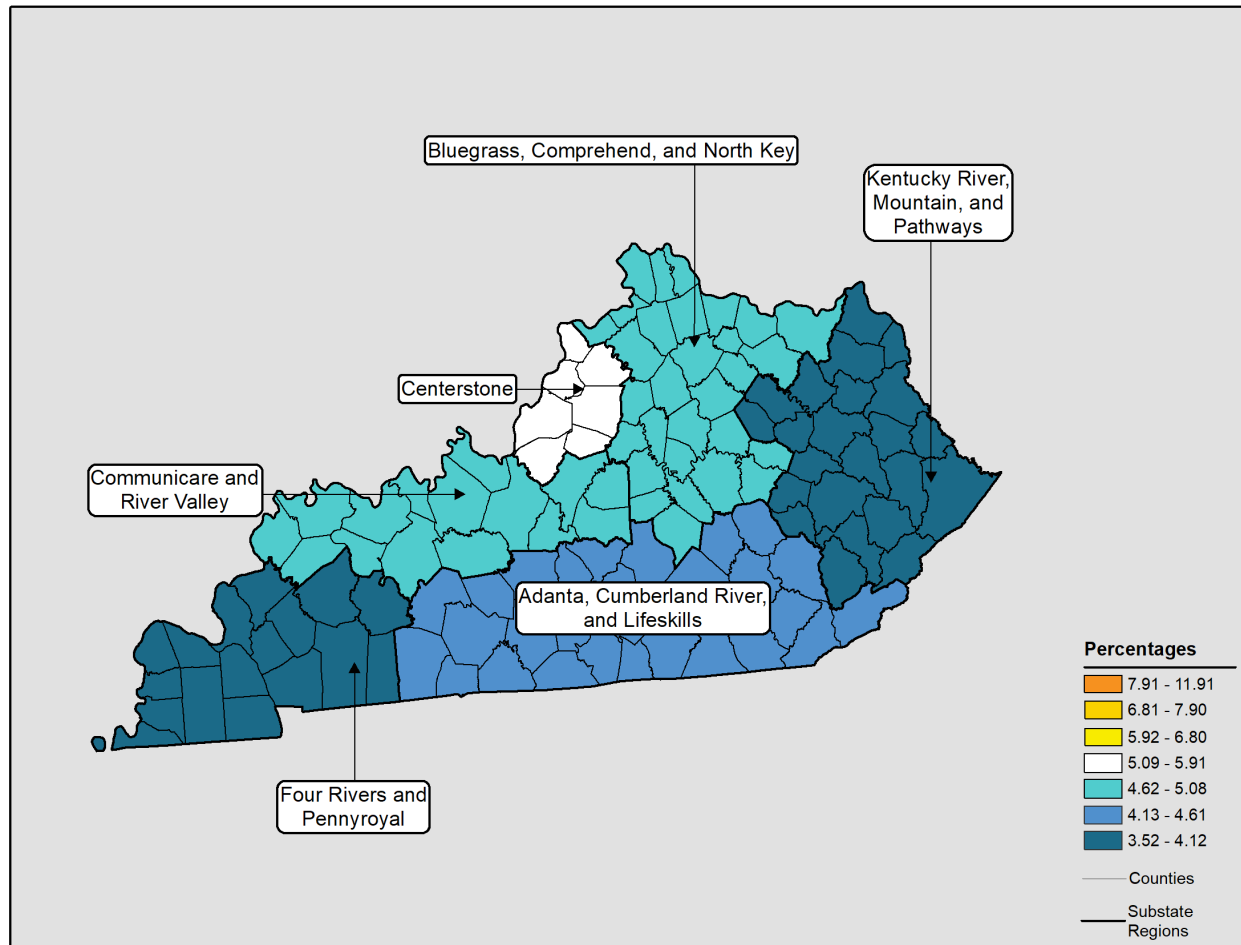
Figure 18.22 *Pain Reliever Use Disorder in the Past Year* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

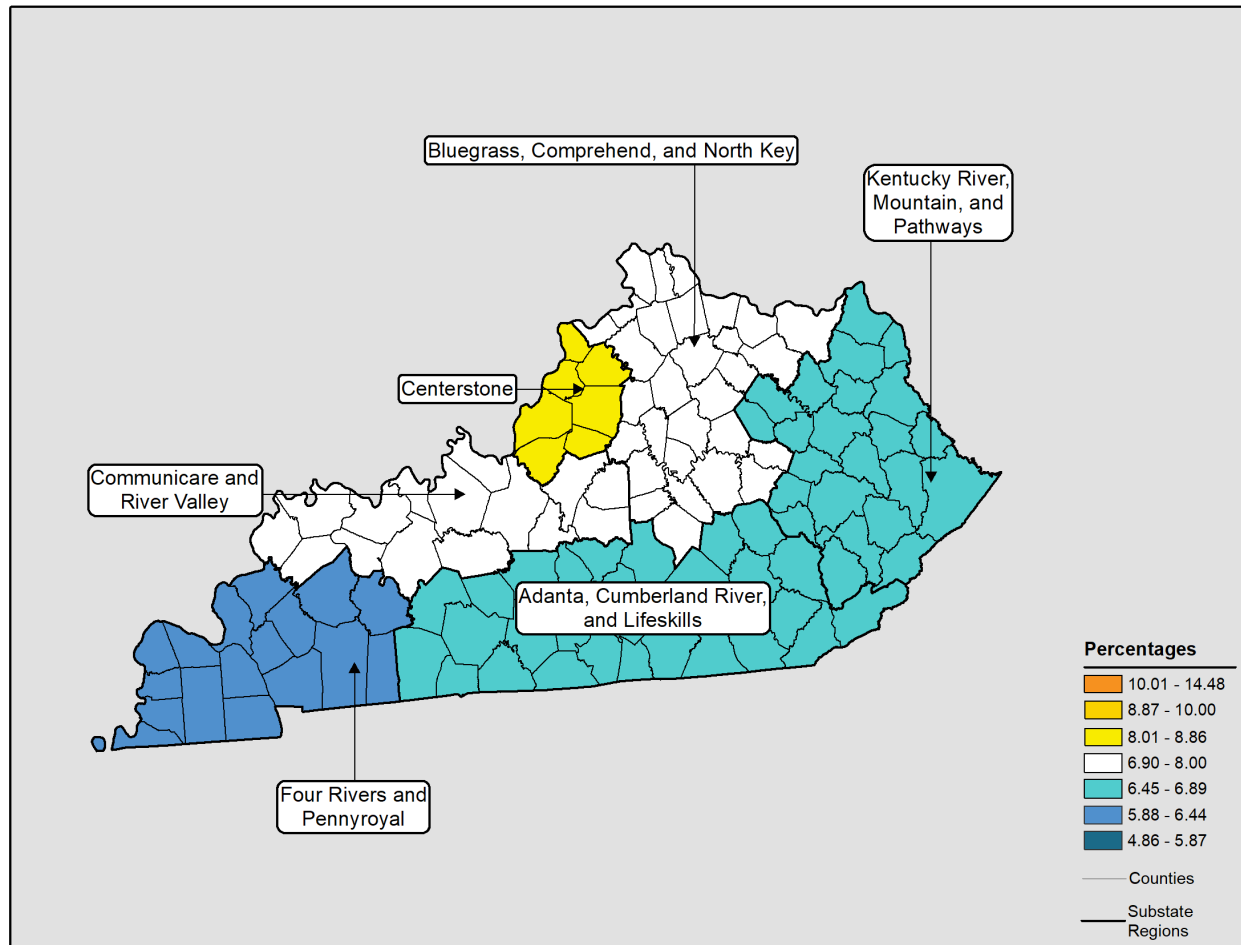
Figure 18.23 *Alcohol Use Disorder in the Past Year* among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

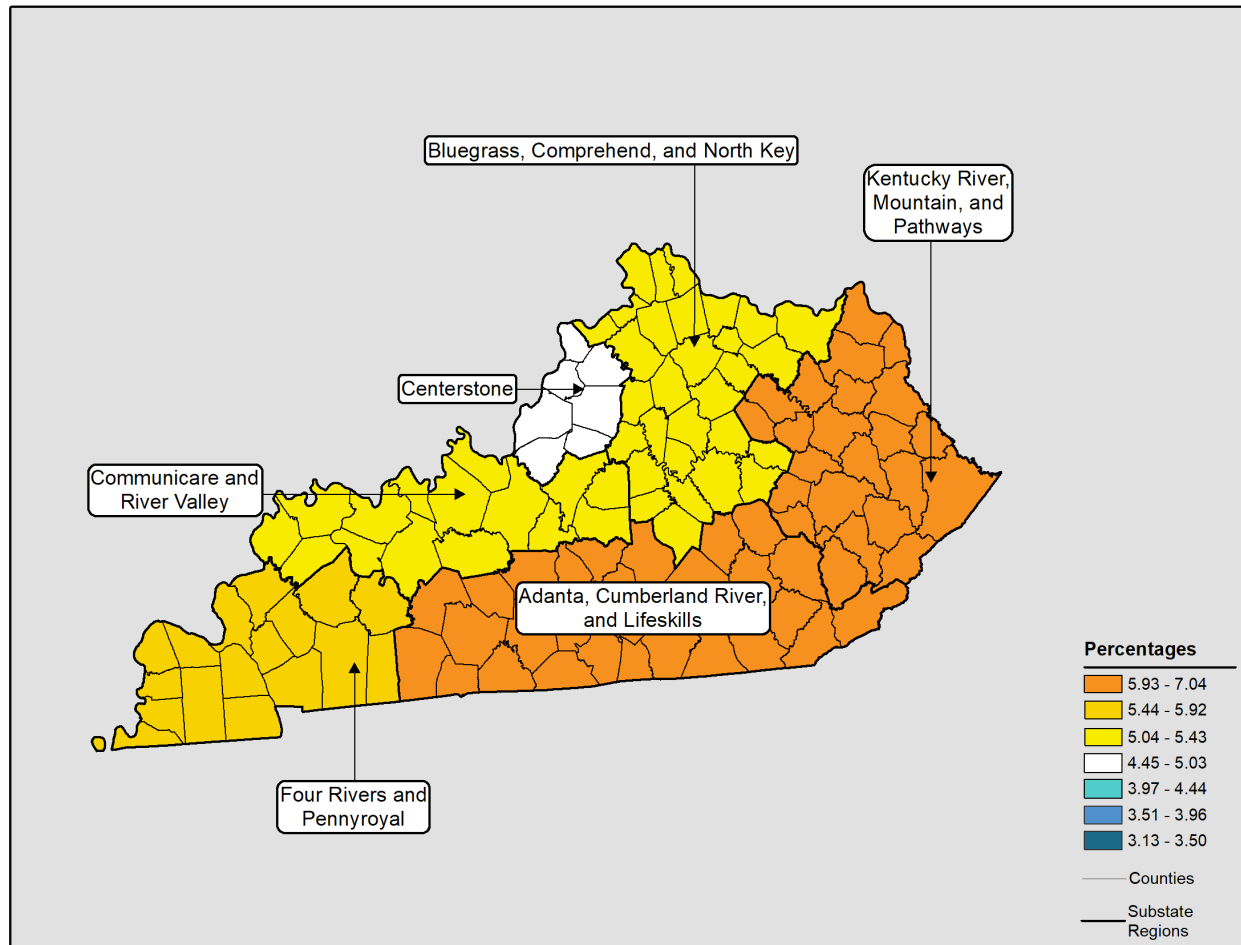
Figure 18.24 Substance Use Disorder in the Past Year among Individuals Aged 12 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

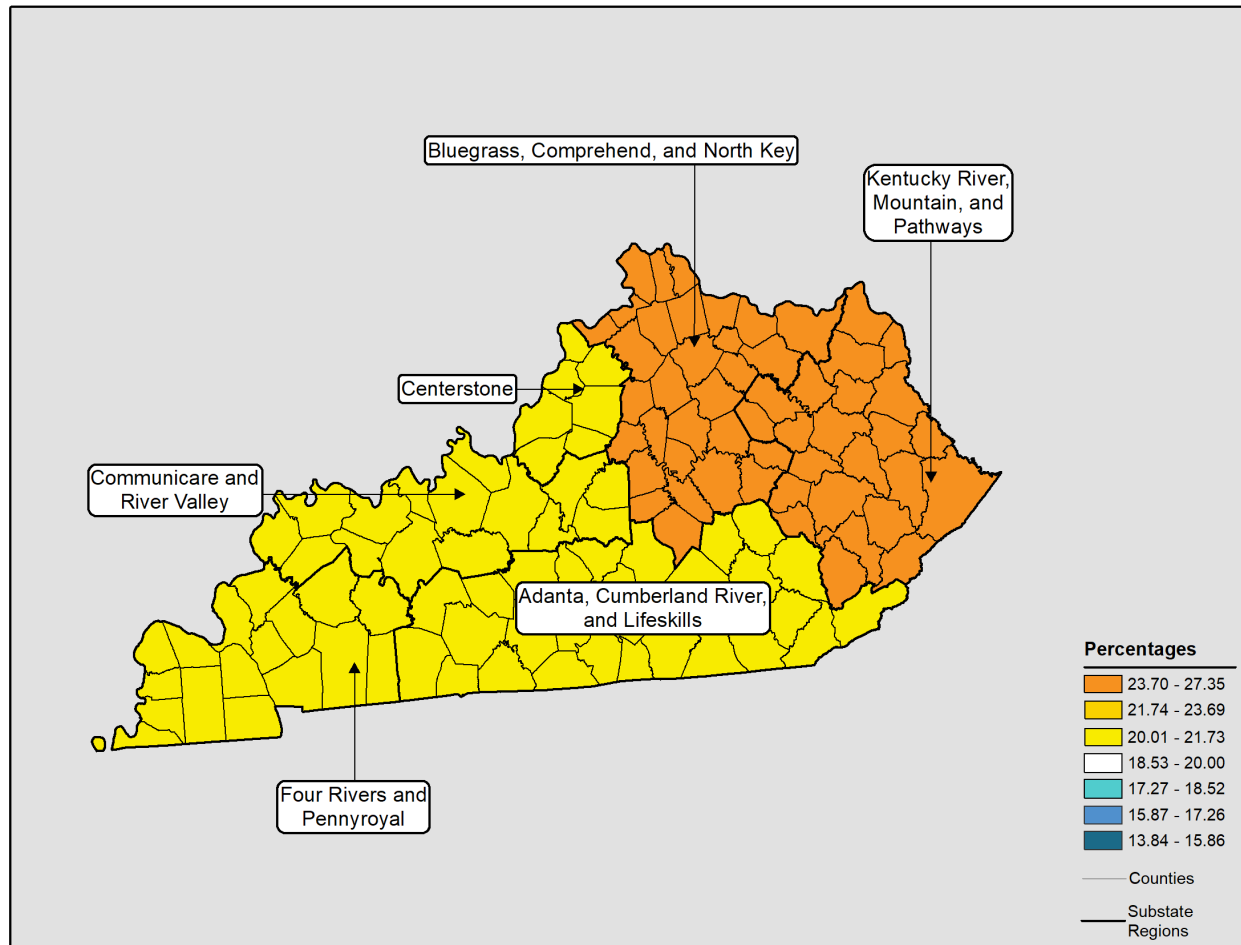
Figure 18.25 *Serious Mental Illness in the Past Year among Adults Aged 18 or Older in Kentucky,*
by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

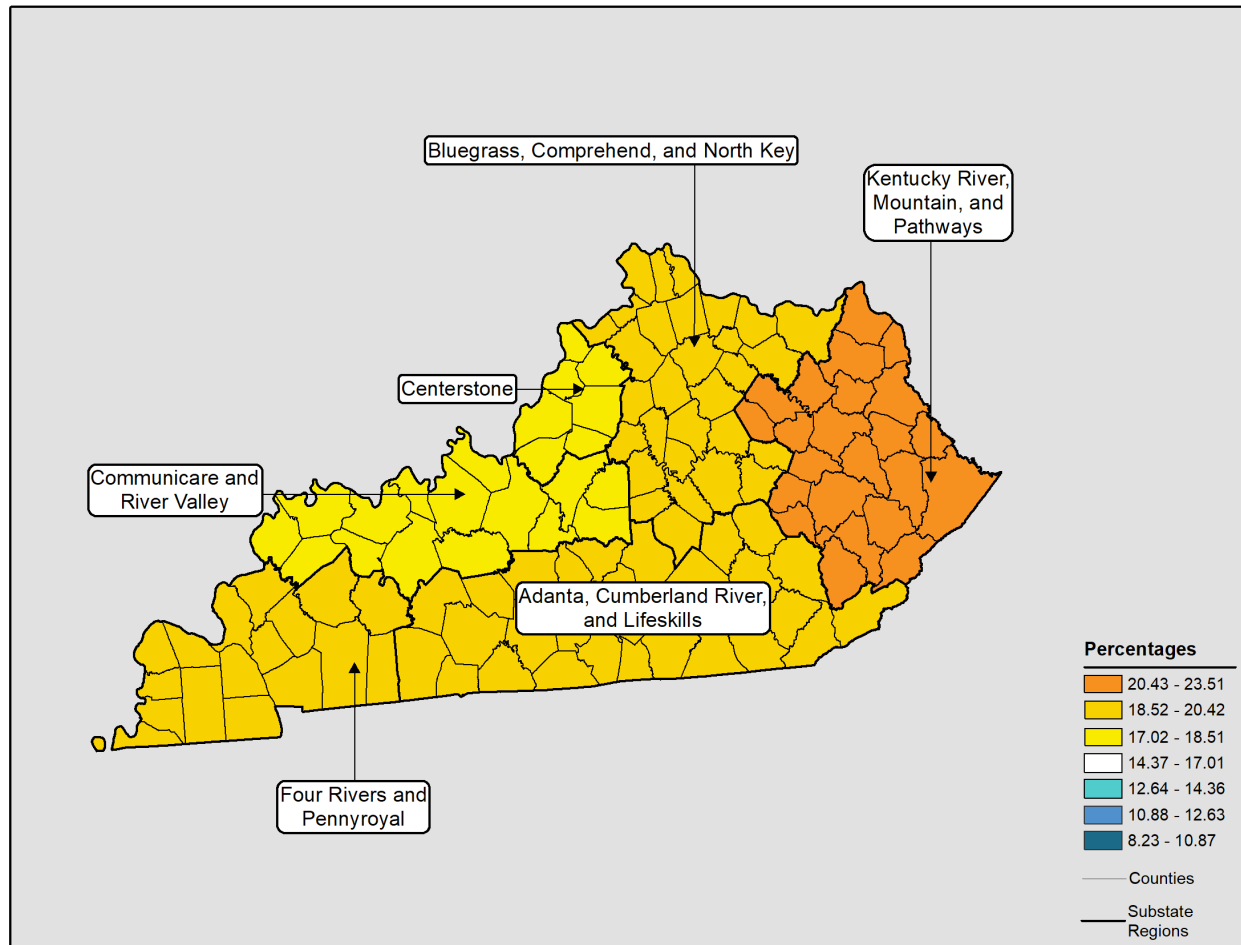
Figure 18.26 *Any Mental Illness in the Past Year* among Adults Aged 18 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

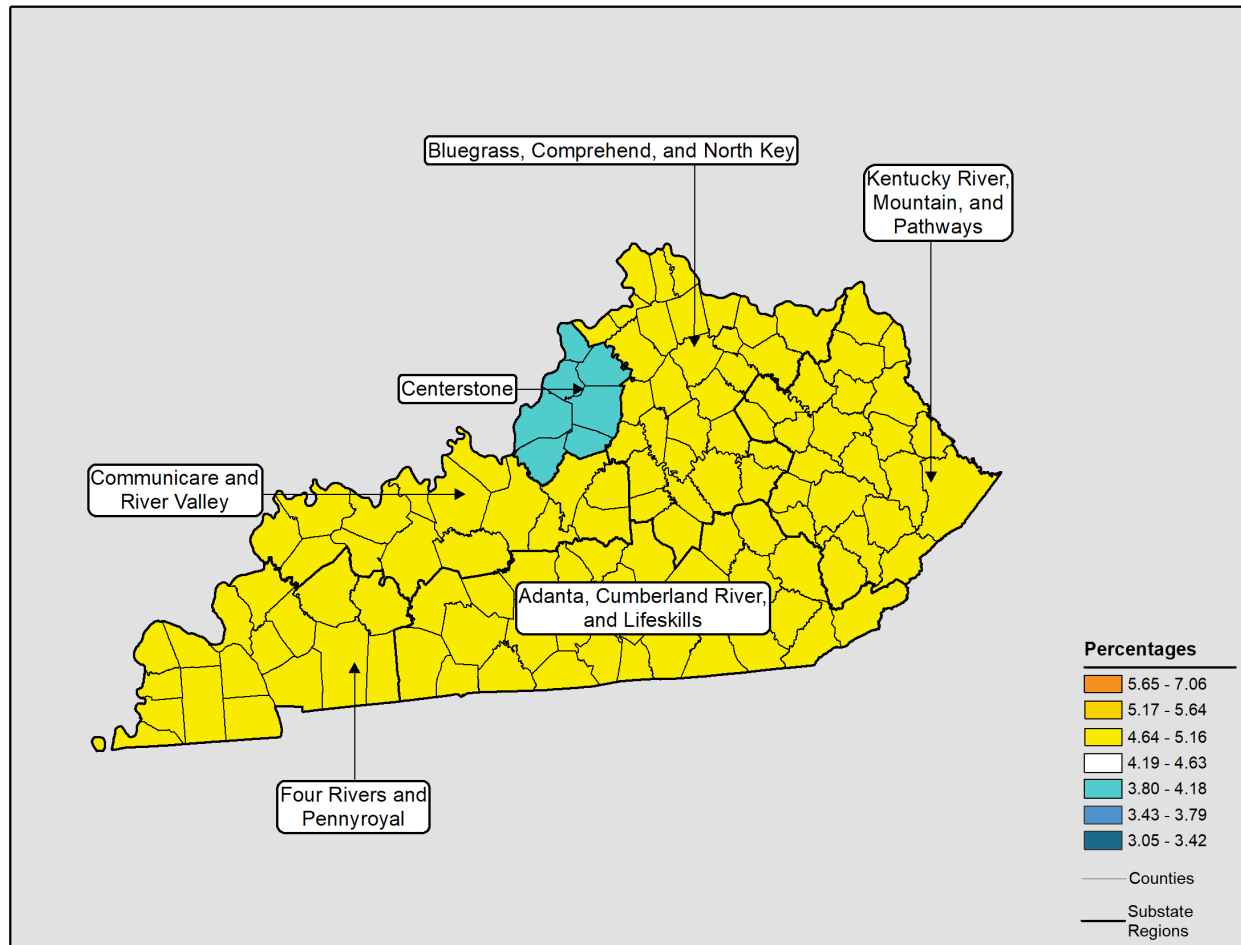
Figure 18.27 *Received Mental Health Services in the Past Year* among Adults Aged 18 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

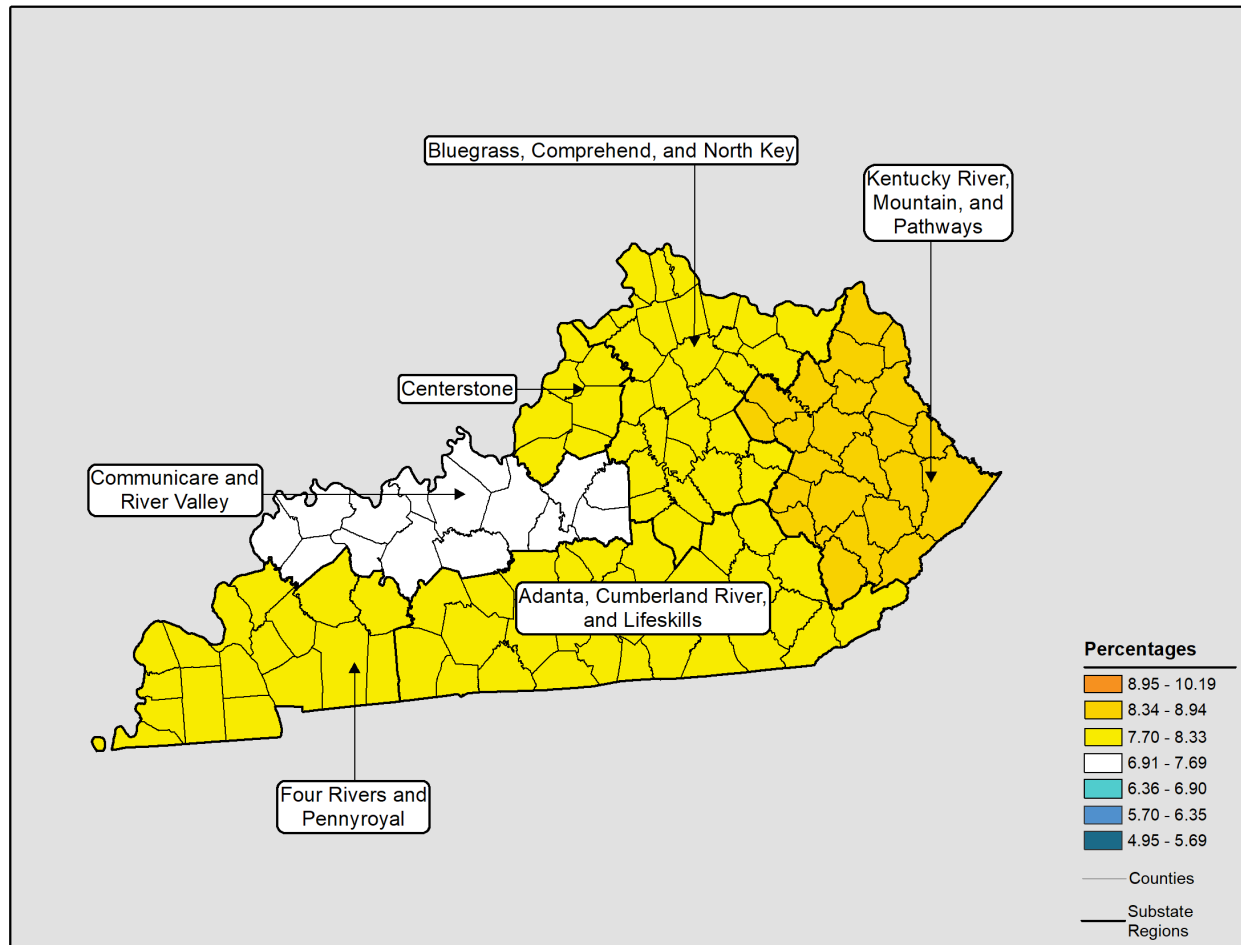
Figure 18.28 *Had Serious Thoughts of Suicide in the Past Year* among Adults Aged 18 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



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 "2016-2018 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, 2016, 2017, and 2018.

Figure 18.29 Major Depressive Episode in the Past Year among Adults Aged 18 or Older in Kentucky, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 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 "2016-2018 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, 2016, 2017, and 2018.