Table 35.1 Illicit Drug Use in Past Month and Illicit Drug Use Other Than Marijuana in Past Month in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Illicit Drug Use in Past Month		Illicit Drug Use Other Than Marij in Past Month		
State/Substate Region	95% Prediction Estimate Interval		Estimate	95% Prediction Interval	
North Dakota	6.04	(5.08 - 7.17)	2.53	(1.98 - 3.24)	
Badlands and West Central Lake Region and South	5.84	(4.40 - 7.71)	2.40	(1.67 - 3.45)	
Central	4.91	(3.48 - 6.88)	2.44	(1.62 - 3.65)	
North Central and Northwest	4.98	(3.65 - 6.75)	2.51	(1.69 - 3.70)	
Northeast	6.67	(5.08 - 8.70)	2.93	(2.03 - 4.22)	
Southeast	7.29	(5.85 - 9.05)	2.53	(1.78 - 3.59)	

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

NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Table 35.2 Marijuana Use in Past Month, Average Annual Rate of First Use of Marijuana, and Perceptions of Great Risk of Smoking Marijuana Once a Month in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Marijuana Use in Past Month		Average Annual Rate of First Use of Marijuana ¹		Perceptions of Great Risk of Smoking Marijuana Once a Month	
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
North Dakota	4.70	(3.90 - 5.66)	1.54	(1.33 - 1.77)	39.38	(36.75 - 42.07)
Badlands and West Central Lake Region and South	4.80	(3.57 - 6.42)	1.35	(1.06 - 1.73)	39.66	(35.01 - 44.50)
Central	3.58	(2.51 - 5.08)	1.18	(0.91 - 1.53)	46.07	(40.78 - 51.45)
North Central and Northwest	3.39	(2.41 - 4.76)	1.32	(1.02 - 1.71)	42.82	(37.77 - 48.01)
Northeast	4.58	(3.36 - 6.21)	1.78	(1.34 - 2.35)	37.24	(32.68 - 42.03)
Southeast	6.20	(4.83 - 7.93)	2.01	(1.58 - 2.55)	34.00	(29.86 - 38.40)

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

¹ Average annual rate = $100*\{[X_1 \div (0.5 * X_1 + X_2)] \div 2\}$, where X_1 is the number of marijuana initiates in the past 24 months and X_2 is the number of persons who never used marijuana. Both of the computation components, X_1 and X_2 , are based on a survey-weighted hierarchical Bayes estimation approach. Note that 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 prediction intervals for Average Annual Rate 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.

Table 35.3 Marijuana Use in Past Year, Cocaine Use in Past Year, and Nonmedical Use of Pain Relievers in Past Year in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Marijuana Use in Past Year		Cocaine l	Use in Past Year	Nonmedical Use of Pain Relievers in Past Year	
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
North Dakota	8.40	(7.39 - 9.54)	1.58	(1.19 - 2.10)	4.09	(3.43 - 4.87)
Badlands and West Central Lake Region and South	7.89	(6.29 - 9.85)	1.36	(0.91 - 2.04)	4.20	(3.17 - 5.54)
Central	6.26	(4.70 - 8.29)	1.37	(0.89 - 2.10)	3.63	(2.61 - 5.03)
North Central and Northwest	6.52	(5.05 - 8.37)	1.43	(0.94 - 2.17)	4.09	(3.04 - 5.49)
Northeast	8.77	(7.03 - 10.90)	1.91	(1.27 - 2.87)	4.56	(3.39 - 6.10)
Southeast	11.22	(9.30 - 13.49)	1.86	(1.25 - 2.75)	3.99	(3.05 - 5.22)

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

Table 35.4 Alcohol Use in Past Month, Binge Alcohol Use in Past Month, and Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Alcohol Use in Past Month				Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week	
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
North Dakota	59.13	(56.45 - 61.75)	30.96	(28.68 - 33.34)	33.49	(31.04 - 36.03)
Badlands and West Central Lake Region and South	59.31	(54.55 - 63.90)	29.15	(25.52 - 33.06)	35.10	(31.25 - 39.14)
Central	48.95	(43.57 - 54.36)	28.66	(24.49 - 33.23)	34.07	(29.73 - 38.69)
North Central and Northwest	54.55	(49.08 - 59.91)	29.67	(25.82 - 33.82)	32.41	(28.33 - 36.77)
Northeast	62.33	(57.11 - 67.28)	33.03	(29.05 - 37.27)	32.46	(28.50 - 36.69)
Southeast	66.30	(61.66 - 70.65)	33.90	(30.31 - 37.68)	32.80	(29.08 - 36.75)

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

¹ Binge Alcohol Use is defined as drinking five or more drinks 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.

Table 35.5 Alcohol Use in Past Month and Binge Alcohol Use in Past Month among Persons Aged 12 to 20 in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Alcohol Use in Past Month among Persons Aged 12 to 20		Binge Alcohol Use in Past Month among Persons Aged 12 to 20 ¹		
State/Substate Region	95% Prediction Estimate Interval		Estimate	95% Prediction Interval	
North Dakota	39.26	(36.81 - 41.76)	30.11	(27.89 - 32.41)	
Badlands and West Central Lake Region and South	37.64	(33.53 - 41.94)	29.32	(25.52 - 33.44)	
Central	30.84	(26.41 - 35.65)	24.70	(20.40 - 29.56)	
North Central and Northwest	37.93	(33.35 - 42.73)	29.54	(25.39 - 34.06)	
Northeast	43.50	(38.92 - 48.19)	33.26	(28.58 - 38.30)	
Southeast	44.13	(40.18 - 48.16)	32.56	(28.83 - 36.52)	

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

¹ Binge Alcohol Use is defined as drinking five or more drinks 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.

Table 35.6 Cigarette Use in Past Month, Tobacco Product Use in Past Month, and Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Cigarette Use in Past Month		Tobacco Product Use in Past Month ¹		Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day	
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
North Dakota	26.12	(24.03 - 28.33)	32.26	(30.06 - 34.53)	68.13	(65.63 - 70.54)
Badlands and West Central Lake Region and South	26.33	(23.04 - 29.90)	32.51	(28.94 - 36.30)	66.97	(63.06 - 70.66)
Central	24.19	(20.79 - 27.96)	30.72	(26.84 - 34.90)	67.94	(63.54 - 72.05)
North Central and Northwest	25.42	(21.99 - 29.18)	32.14	(28.35 - 36.18)	67.54	(63.22 - 71.58)
Northeast	27.79	(24.29 - 31.59)	33.86	(29.98 - 37.97)	69.53	(65.59 - 73.20)
Southeast	26.65	(23.56 - 30.00)	32.15	(28.87 - 35.62)	69.06	(65.46 - 72.44)

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

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

Table 35.7 Alcohol Dependence in Past Year and Illicit Drug Dependence in Past Year in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Alcohol De	pendence in Past Year	Illicit Drug Dependence in Past Year ¹		
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	
North Dakota	3.82	(3.17 - 4.60)	1.51	(1.17 - 1.96)	
Badlands and West Central Lake Region and South	3.53	(2.58 - 4.80)	1.37	(0.93 - 2.00)	
Central	3.12	(2.19 - 4.43)	1.31	(0.85 - 2.02)	
North Central and Northwest	3.57	(2.61 - 4.87)	1.48	(1.00 - 2.18)	
Northeast	4.18	(3.09 - 5.62)	1.73	(1.16 - 2.56)	
Southeast	4.50	(3.38 - 5.97)	1.69	(1.16 - 2.45)	

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

NOTE: Dependence is based on the definition found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

¹ Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Table 35.8 Alcohol Dependence or Abuse in Past Year, Illicit Drug Dependence or Abuse in Past Year, and Dependence on or Abuse of Illicit Drugs or Alcohol in Past Year in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Alcohol Dependence or Abuse in Past Year		Illicit Drug Dependence or Abuse in Past Year ¹		Dependence on or Abuse of Illicit Drugs or Alcohol in Past Year ¹	
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
North Dakota	9.91	(8.74 - 11.22)	2.20	(1.78 - 2.73)	10.91	(9.73 - 12.21)
Badlands and West Central Lake Region and South	9.31	(7.60 - 11.36)	2.06	(1.49 - 2.83)	10.10	(8.35 - 12.16)
Central	7.29	(5.68 - 9.30)	1.99	(1.36 - 2.90)	8.32	(6.55 - 10.51)
North Central and Northwest	9.65	(7.72 - 11.99)	2.02	(1.42 - 2.86)	10.78	(8.72 - 13.26)
Northeast	10.57	(8.66 - 12.86)	2.53	(1.81 - 3.51)	11.87	(9.84 - 14.26)
Southeast	11.88	(9.91 - 14.19)	2.43	(1.76 - 3.35)	12.84	(10.84 - 15.14)

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

NOTE: 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 Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Table 35.9 Needing But Not Receiving Treatment for Alcohol Use in Past Year and Needing But Not Receiving Treatment for Illicit Drug Use in Past Year in North Dakota among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

	Needing But I for Alcoh	Not Receiving Treatment ol Use in Past Year ¹	Needing But Not Receiving Treatment for Illicit Drug Use in Past Year ²		
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	
North Dakota	9.55	(8.41 - 10.83)	1.95	(1.57 - 2.42)	
Badlands and West Central Lake Region and South	8.84	(7.14 - 10.88)	1.80	(1.27 - 2.53)	
Central	7.01	(5.47 - 8.96)	1.75	(1.18 - 2.60)	
North Central and Northwest	9.31	(7.52 - 11.47)	1.83	(1.26 - 2.64)	
Northeast	10.33	(8.50 - 12.51)	2.30	(1.62 - 3.26)	
Southeast	11.51	(9.62 - 13.72)	2.11	(1.53 - 2.91)	

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

¹ Needing But Not Receiving Treatment refers to respondents classified as needing treatment for alcohol, but not receiving treatment for an alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

² Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs, but not receiving treatment for an illicit drug problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Table 35.10 Serious Psychological Distress in Past Year and Having at Least One Major Depressive Episode in Past Year in North Dakota among Persons Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

		sychological Distress n Past Year ¹	Having at Lea Episo	Having at Least One Major Depressive Episode in Past Year ²		
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval		
North Dakota	11.82	(10.40 - 13.41)	7.72	(6.54 - 9.10)		
Badlands and West Central Lake Region and South	11.24	(9.24 - 13.61)	7.25	(5.58 - 9.38)		
Central	12.32	(9.90 - 15.25)	7.86	(5.89 - 10.42)		
North Central and Northwest	11.50	(9.34 - 14.07)	7.01	(5.35 - 9.13)		
Northeast	11.72	(9.60 - 14.24)	8.13	(6.29 - 10.45)		
Southeast	12.37	(10.35 - 14.72)	8.34	(6.56 - 10.55)		

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

¹ Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. Because of questionnaire changes, these estimates are not comparable with estimates from the 2002-2004 substate report. For details, see Section B.7 of the report on *Substate Estimates from the 2004-2006 National Surveys on Drug Use and Health*. Data for SPD are not defined for 12 to 17 year olds; therefore, the estimates reflect only those aged 18 or older.

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 a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. There are minor wording differences in the questions in the adult and adolescent MDE modules. Therefore, data from youths aged 12 to 17 were not combined with data from persons aged 18 or older to get an overall estimate (12 or older).

Figure 35.1.1 *Illicit Drug Use in Past Month* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

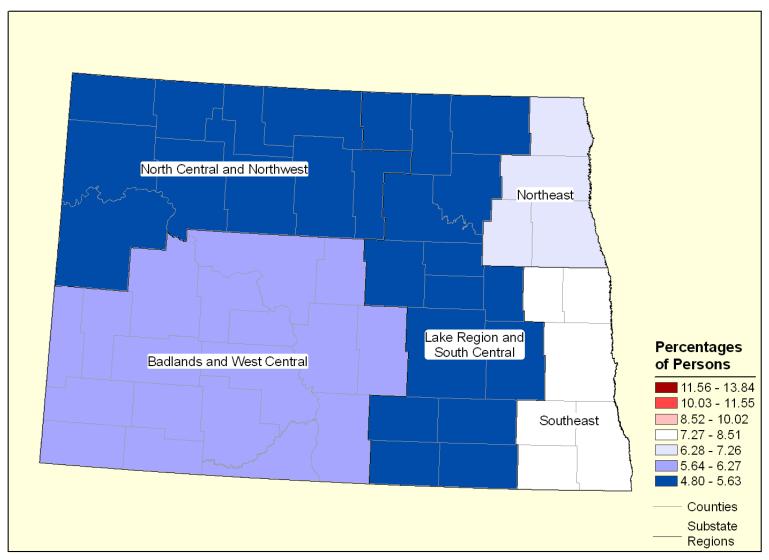


Figure 35.1.2 *Illicit Drug Use Other Than Marijuana in Past Month* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

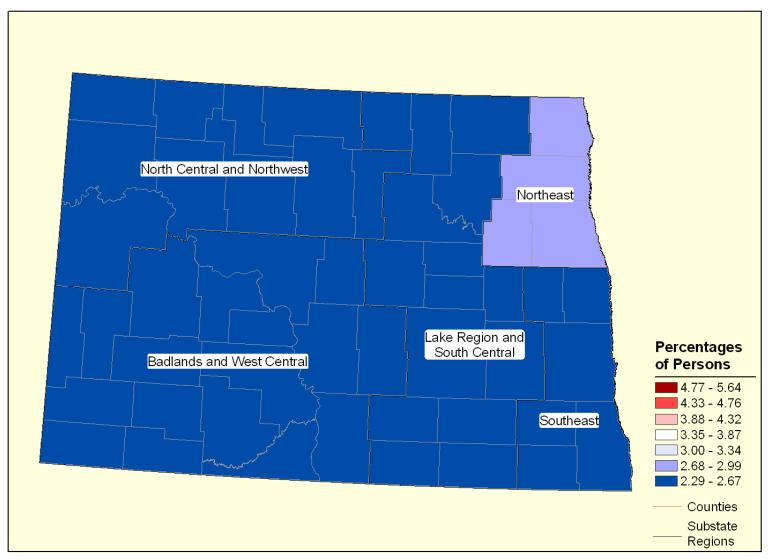


Figure 35.2.1 *Marijuana Use in Past Month* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

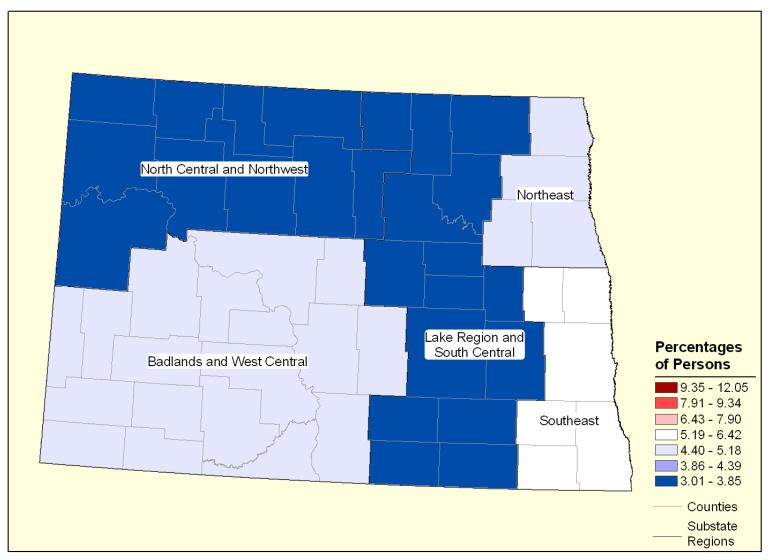


Figure 35.2.2 First Use of Marijuana among Persons Aged 12 or Older in North Dakota, by Substate Region: Average Annual Rates Based on 2004, 2005, and 2006 NSDUHs

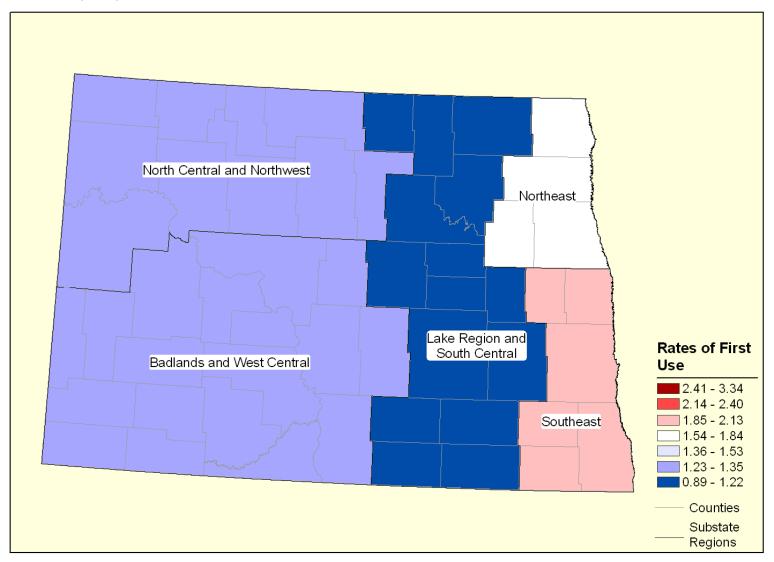


Figure 35.2.3 *Perceptions of Great Risk of Smoking Marijuana Once a Month* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

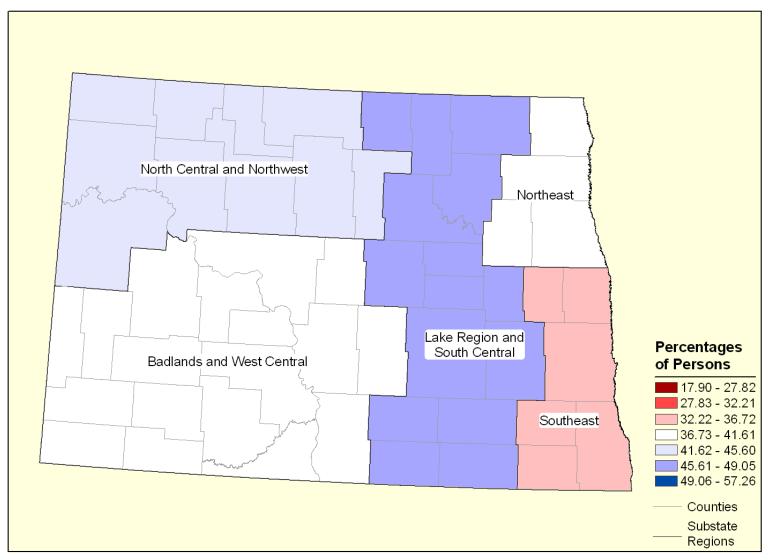


Figure 35.3.1 *Marijuana Use in Past Year* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

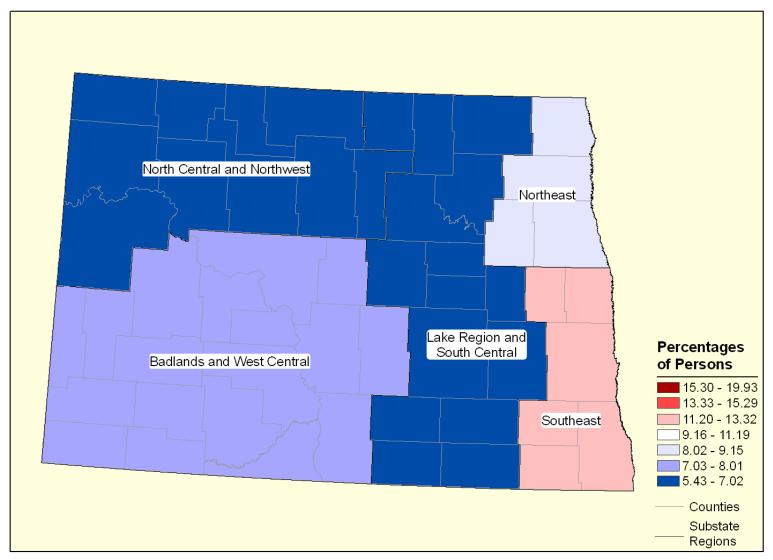


Figure 35.3.2 *Cocaine Use in Past Year* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

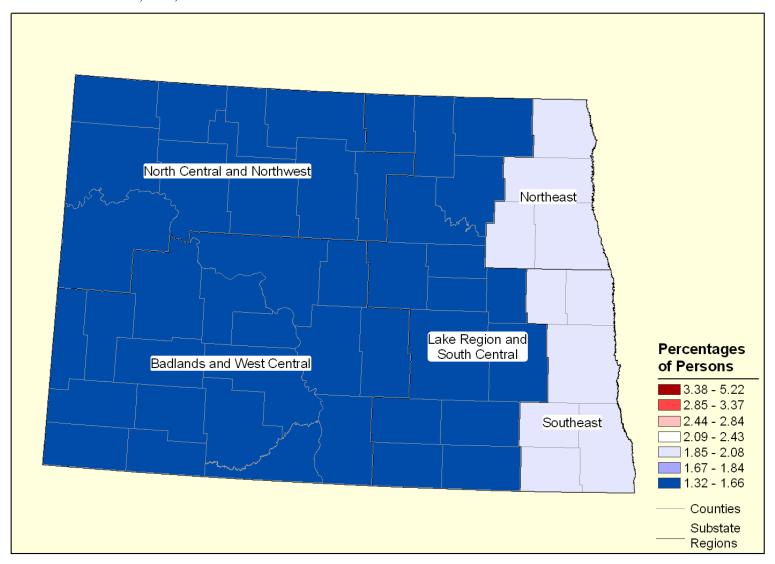


Figure 35.3.3 *Nonmedical Use of Pain Relievers in Past Year* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

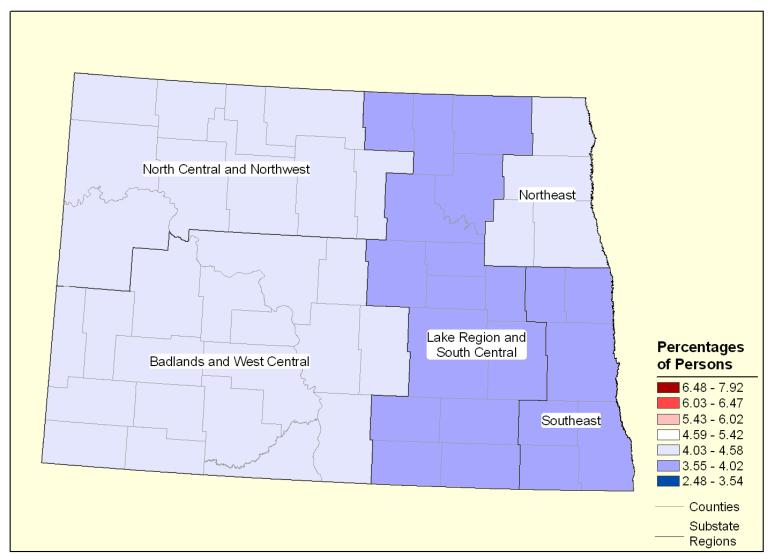


Figure 35.4.1 *Alcohol Use in Past Month* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

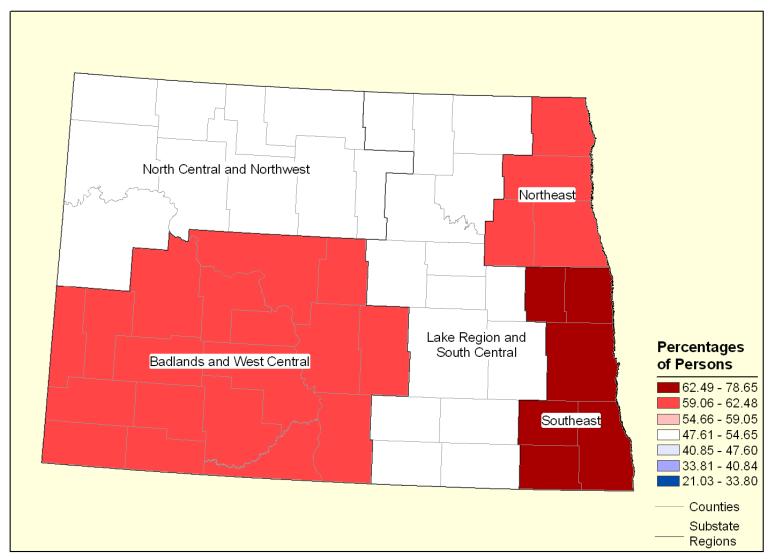


Figure 35.4.2 Binge Alcohol Use in Past Month among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

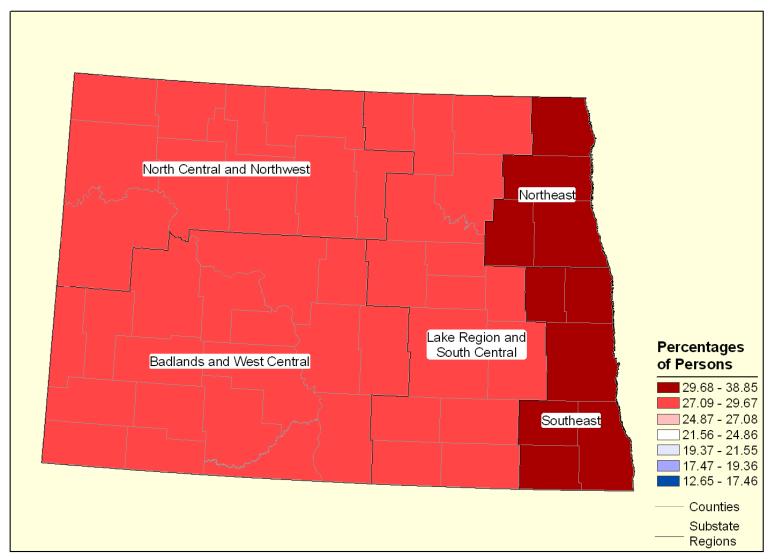


Figure 35.4.3 Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

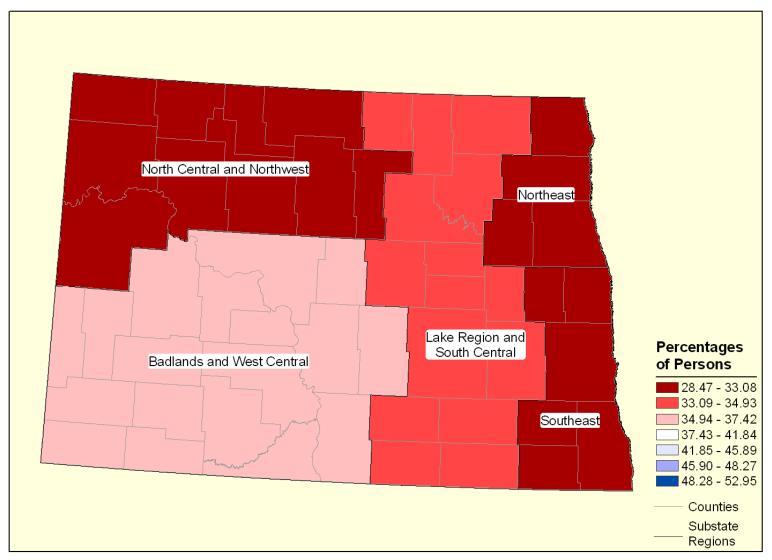


Figure 35.5.1 Alcohol Use in Past Month among Persons Aged 12 to 20 in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

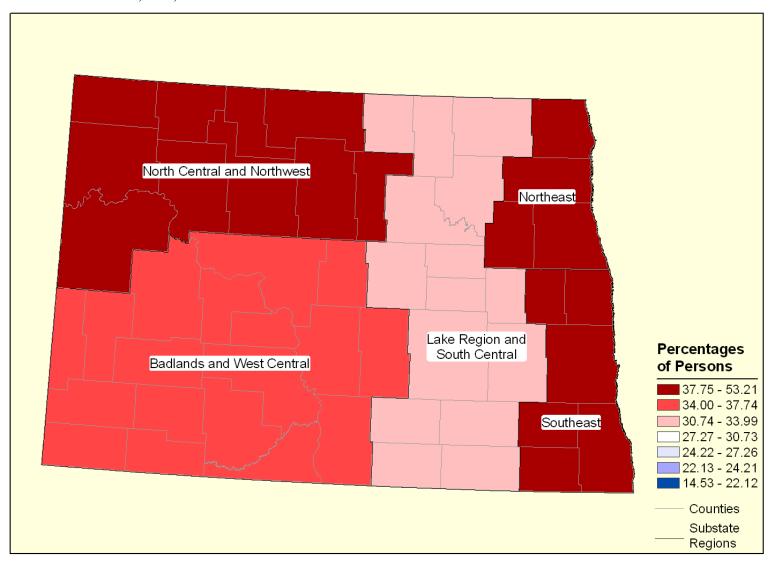


Figure 35.5.2 Binge Alcohol Use in Past Month among Persons Aged 12 to 20 in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

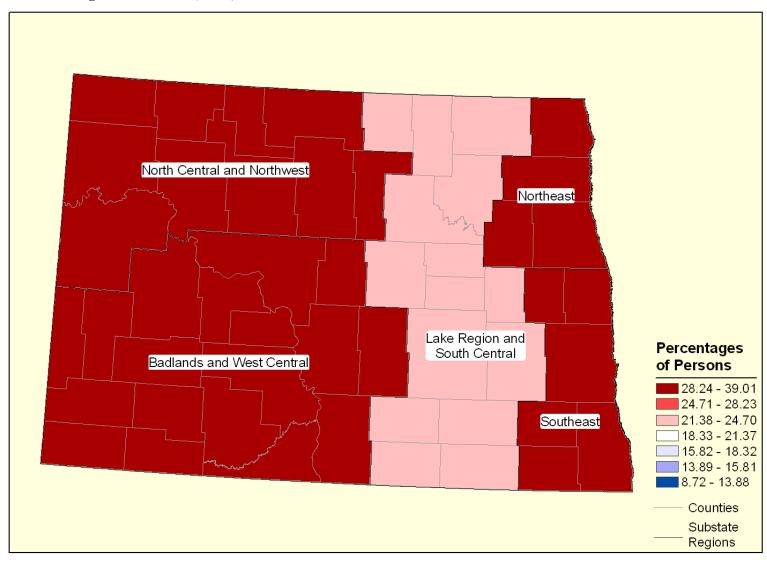


Figure 35.6.1 *Cigarette Use in Past Month* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

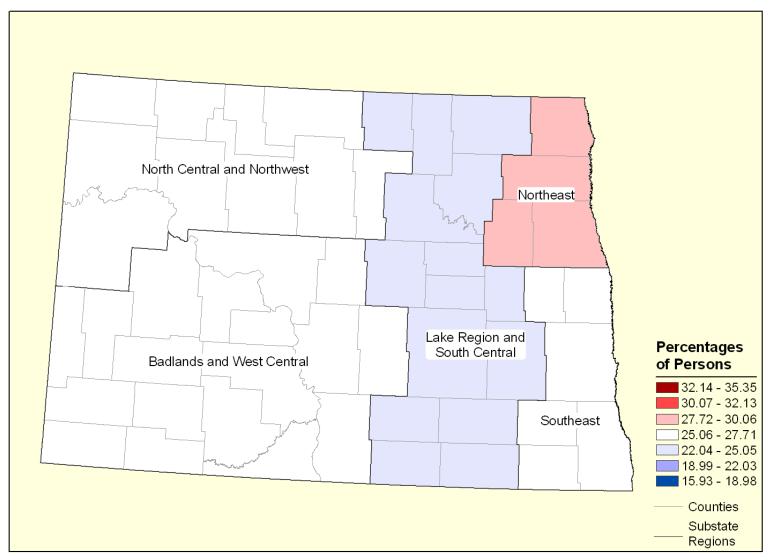


Figure 35.6.2 *Tobacco Product Use in Past Month* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

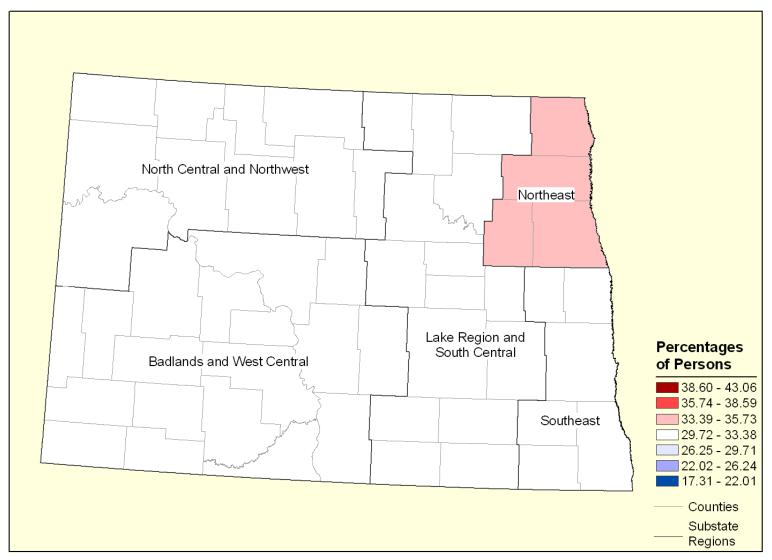


Figure 35.6.3 Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

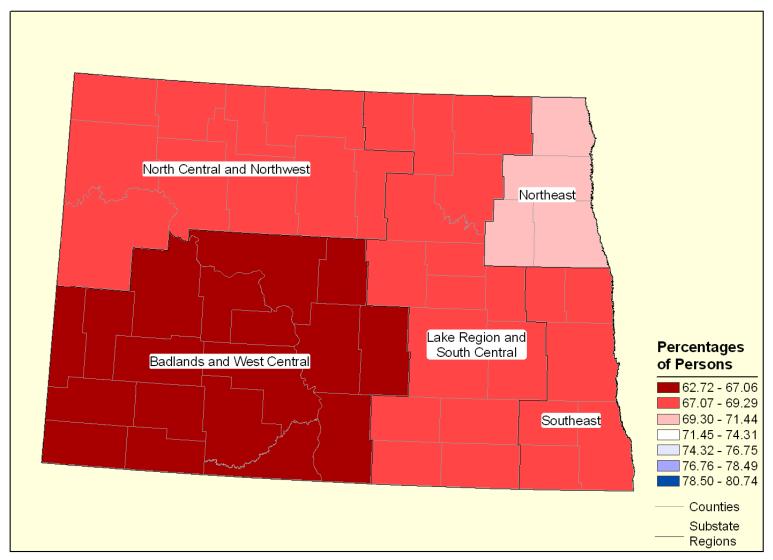


Figure 35.7.1 Alcohol Dependence in Past Year among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

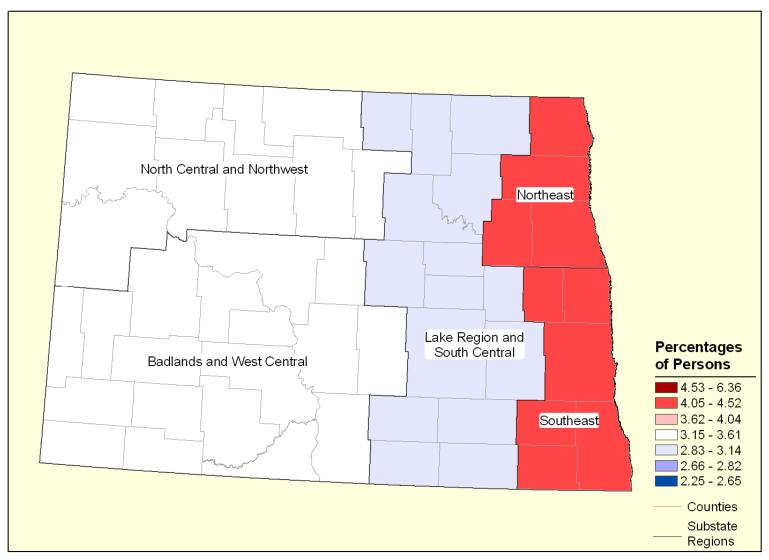


Figure 35.7.2 *Illicit Drug Dependence in Past Year* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

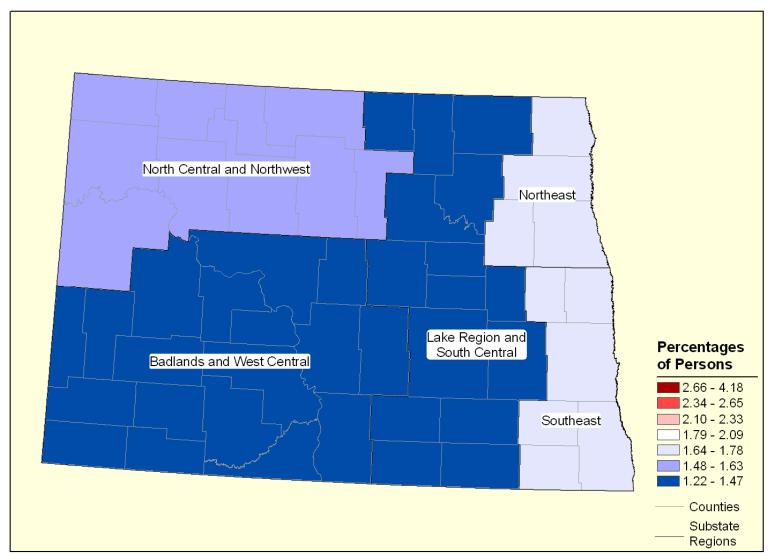


Figure 35.8.1 *Alcohol Dependence or Abuse in Past Year* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

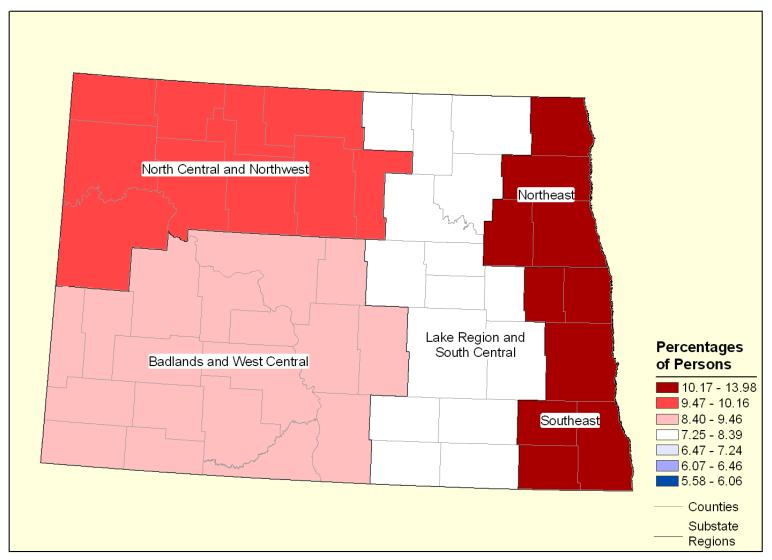


Figure 35.8.2 *Illicit Drug Dependence or Abuse in Past Year* among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

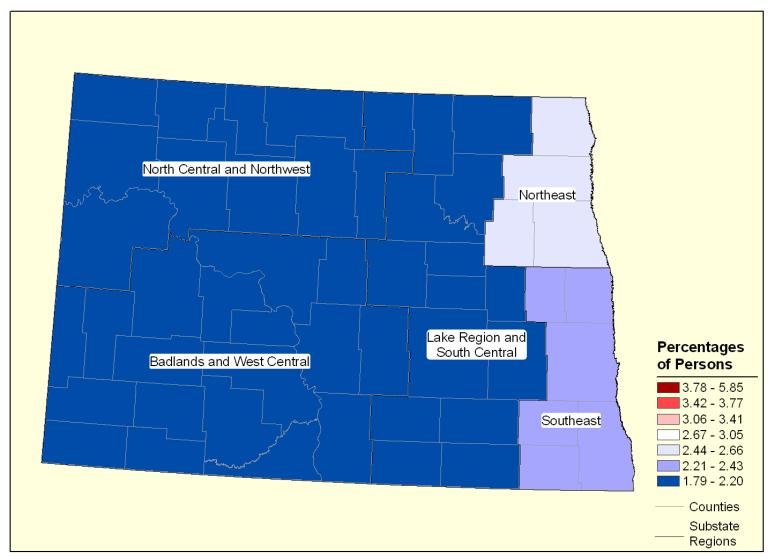


Figure 35.8.3 Dependence on or Abuse of Illicit Drugs or Alcohol in Past Year among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

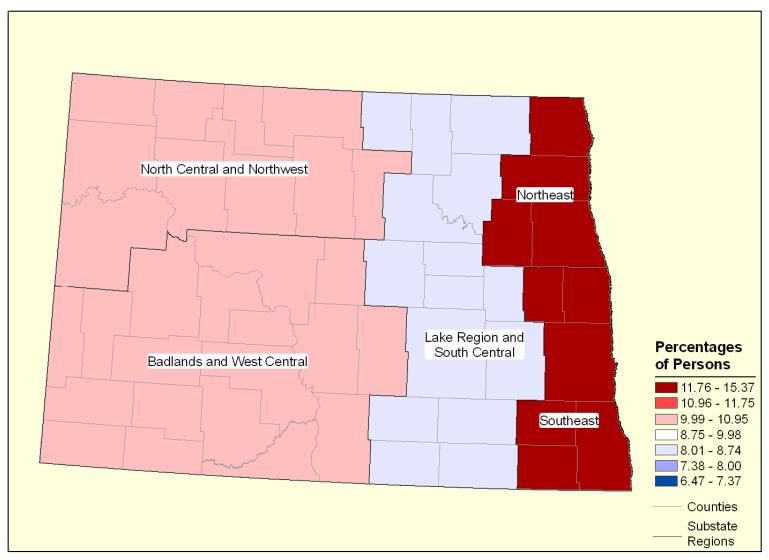


Figure 35.9.1 Needing But Not Receiving Treatment for Alcohol Use in Past Year among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

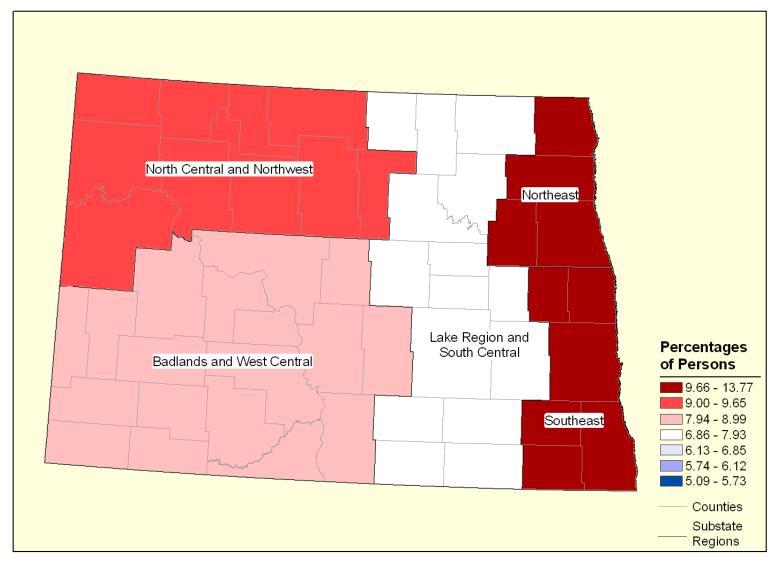


Figure 35.9.2 Needing But Not Receiving Treatment for Illicit Drug Use in Past Year among Persons Aged 12 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

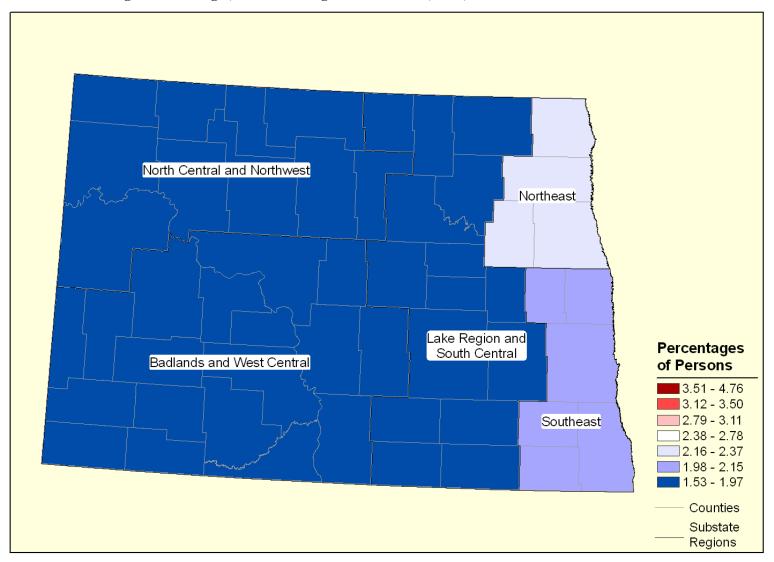


Figure 35.10.1 Serious Psychological Distress in Past Year among Persons Aged 18 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

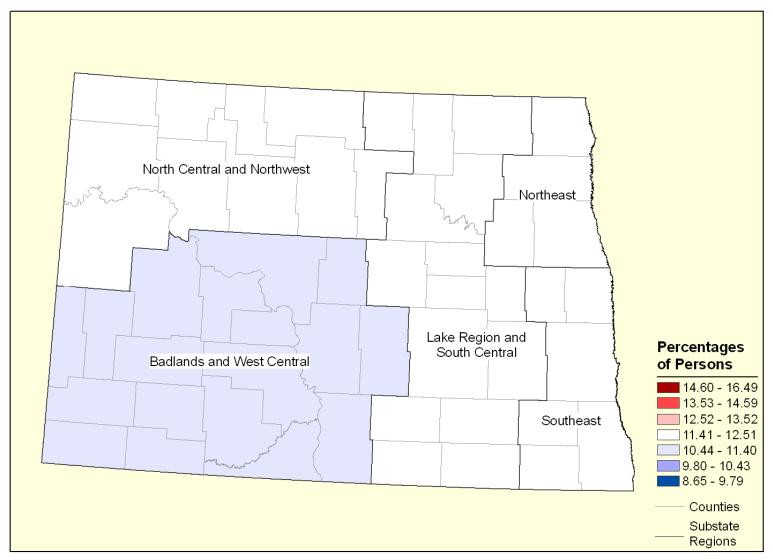


Figure 35.10.2 *Having at Least One Major Depressive Episode in Past Year* among Persons Aged 18 or Older in North Dakota, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs

