Table 22.1 Any Illicit Drug Use in Past Month and Any Illicit Drug Use Other Than Marijuana in Past Month in Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

	Any Illicit D	Any Illicit Drug Use in Past Month		Drug Use Other Than ana in Past Month
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Massachusetts	9.37	(8.23 - 10.64)	3.65	(3.08 - 4.31)
Boston	12.15	(9.60 - 15.28)	4.51	(3.41 - 5.93)
Central	8.50	(6.58 - 10.91)	3.37	(2.50 - 4.52)
Metrowest	8.68	(7.03 - 10.67)	3.62	(2.80 - 4.68)
Northeast	8.36	(6.65 - 10.45)	3.26	(2.49 - 4.27)
Southeast	9.36	(7.50 - 11.62)	3.61	(2.75 - 4.71)
Western	10.38	(8.24 - 13.00)	3.78	(2.91 - 4.91)

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.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

Table 22.2 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 Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

			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
Massachusetts	7.74	(6.73 - 8.89)	2.00	(1.77 - 2.27)	28.46	(25.97 - 31.10)
Boston	9.66	(7.45 - 12.44)	2.09	(1.56 - 2.81)	29.62	(25.01 - 34.69)
Central	7.51	(5.74 - 9.77)	1.97	(1.50 - 2.57)	29.15	(24.67 - 34.08)
Metrowest	6.70	(5.27 - 8.50)	2.06	(1.63 - 2.59)	22.91	(19.38 - 26.88)
Northeast	7.22	(5.57 - 9.31)	1.55	(1.20 - 2.01)	29.42	(25.19 - 34.04)
Southeast	7.71	(6.12 - 9.67)	1.91	(1.51 - 2.42)	30.10	(25.95 - 34.59)
Western	8.90	(6.93 - 11.35)	2.79	(2.06 - 3.77)	32.85	(27.81 - 38.32)

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.

Average Annual Rate = [100*{(Number of Marijuana Initiates in past 24 months)/[(Number of Marijuana Initiates in past 24 months * 0.5) + Number of persons who never used marijuana]/2]. Both the computation components, Number of Marijuana Initiates in past 24 months and Number of persons who never used marijuana, 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 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 22.3 Marijuana Use in Past Year, Cocaine Use in Past Year, and Nonmedical Use of Pain Relievers in Past Year in Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

		Marijuana Use in Past Year		Cocaine Use in Past Year		ical Use of Pain rs in Past Year
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Massachusetts	14.70	(13.14 - 16.42)	2.78	(2.22 - 3.48)	4.97	(4.17 - 5.91)
Boston	17.04	(13.71 - 20.98)	3.70	(2.62 - 5.19)	5.11	(3.76 - 6.91)
Central	13.61	(10.78 - 17.05)	2.61	(1.89 - 3.60)	4.38	(3.24 - 5.89)
Metrowest	13.63	(11.23 - 16.44)	2.51	(1.81 - 3.49)	4.93	(3.79 - 6.38)
Northeast	12.97	(10.54 - 15.87)	2.50	(1.80 - 3.48)	4.81	(3.64 - 6.32)
Southeast	15.60	(12.81 - 18.86)	2.95	(2.15 - 4.04)	5.48	(4.22 - 7.08)
Western	16.78	(13.59 - 20.54)	2.76	(1.99 - 3.82)	4.95	(3.76 - 6.50)

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 22.4 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 Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

		cohol Use Past Month			Having Fiv of an Alc	s of Great Risk of ve or More Drinks oholic Beverage v Twice a Week
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Massachusetts	60.52	(57.90 - 63.08)	27.82	(25.60 - 30.14)	34.46	(31.99 - 37.02)
Boston	58.27	(52.64 - 63.69)	30.49	(26.39 - 34.93)	37.92	(33.31 - 42.75)
Central	55.29	(49.34 - 61.10)	28.45	(24.25 - 33.06)	33.99	(29.41 - 38.89)
Metrowest	65.24	(60.75 - 69.48)	26.58	(23.09 - 30.39)	32.35	(28.29 - 36.70)
Northeast	59.94	(55.26 - 64.45)	26.59	(23.00 - 30.51)	36.15	(31.92 - 40.61)
Southeast	62.25	(57.64 - 66.64)	27.01	(23.58 - 30.75)	32.46	(28.58 - 36.60)
Western	57.39	(51.45 - 63.13)	30.01	(25.71 - 34.69)	35.99	(31.53 - 40.72)

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 22.5 Alcohol Use in Past Month and Binge Alcohol Use in Past Month among Persons Aged 12 to 20 in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 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	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval		
Massachusetts	34.14	(31.67 - 36.69)	24.07	(21.82 - 26.47)		
Boston	33.55	(28.47 - 39.05)	20.95	(16.78 - 25.85)		
Central	31.18	(26.62 - 36.13)	24.61	(20.38 - 29.38)		
Metrowest	35.30	(31.28 - 39.54)	24.68	(20.91 - 28.88)		
Northeast	33.48	(29.07 - 38.19)	22.57	(18.68 - 27.00)		
Southeast	33.99	(29.70 - 38.56)	24.14	(20.44 - 28.27)		
Western	36.71	(31.84 - 41.87)	27.19	(23.10 - 31.70)		

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 22.6 Cigarette Use in Past Month, Any Tobacco Product Use in Past Month, and Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day in Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

		arette Use Past Month		acco Product Use Past Month ¹	of Smoki	ns of Great Risk ng One or More igarettes Per Day
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Massachusetts	21.87	(19.79 - 24.09)	25.76	(23.58 - 28.07)	76.26	(74.00 - 78.39)
Boston	24.91	(21.25 - 28.98)	27.62	(23.67 - 31.96)	77.68	(74.51 - 80.55)
Central	22.83	(19.41 - 26.65)	27.41	(23.43 - 31.79)	73.95	(70.02 - 77.54)
Metrowest	18.51	(15.78 - 21.60)	22.27	(19.19 - 25.70)	78.10	(74.92 - 80.97)
Northeast	21.73	(18.57 - 25.27)	25.37	(21.87 - 29.23)	76.14	(72.69 - 79.28)
Southeast	22.80	(19.79 - 26.11)	27.28	(23.80 - 31.07)	75.51	(71.93 - 78.78)
Western	22.92	(19.62 - 26.59)	27.01	(23.25 - 31.13)	75.18	(71.39 - 78.62)

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 Any Tobacco product includes cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.

MASSACHUSETTS

Table 22.7 Alcohol Dependence in Past Year and Any Illicit Drug Dependence in Past Year in Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

	Alcohol De	Alcohol Dependence in Past Year		it Drug Dependence n Past Year ¹
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Massachusetts	3.94	(3.24 - 4.77)	2.29	(1.87 - 2.80)
Boston	5.11	(3.75 - 6.93)	2.99	(2.17 - 4.12)
Central	3.42	(2.45 - 4.76)	2.05	(1.47 - 2.85)
Metrowest	4.15	(3.10 - 5.55)	2.12	(1.56 - 2.87)
Northeast	3.48	(2.54 - 4.75)	2.20	(1.60 - 3.02)
Southeast	3.67	(2.75 - 4.89)	2.27	(1.64 - 3.12)
Western	4.02	(2.98 - 5.40)	2.34	(1.70 - 3.21)

NOTE: For Substate Region definitions, see Section D of the report on Substate Estimates from the 2002-2004 National Surveys on Drug Use and Health.

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 Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

Table 22.8 Alcohol Dependence or Abuse in Past Year, Any Illicit Drug Dependence or Abuse in Past Year, and Dependence on or Abuse of Any Illicit Drug or Alcohol in Past Year in Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

		Alcohol Dependence or Abuse in Past Year		Any Illicit Drug Dependence or Abuse in Past Year ¹		Dependence on or Abuse of Any Illicit Drug or Alcohol in Past Year ¹	
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	
Massachusetts	8.33	(7.29 - 9.51)	3.55	(2.98 - 4.22)	10.26	(9.08 - 11.57)	
Boston	9.69	(7.73 - 12.07)	4.04	(3.04 - 5.37)	12.09	(9.86 - 14.74)	
Central	7.99	(6.37 - 9.97)	3.34	(2.52 - 4.42)	9.98	(8.02 - 12.36)	
Metrowest	8.68	(7.02 - 10.68)	3.35	(2.58 - 4.36)	10.20	(8.39 - 12.35)	
Northeast	7.58	(6.04 - 9.48)	3.52	(2.68 - 4.61)	9.71	(7.88 - 11.91)	
Southeast	7.90	(6.40 - 9.72)	3.65	(2.78 - 4.77)	9.72	(7.93 - 11.85)	
Western	8.55	(6.84 - 10.65)	3.53	(2.71 - 4.59)	10.55	(8.65 - 12.82)	

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 Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

MASSACHUSETTS

Table 22.9 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 Massachusetts among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

		Needing But Not Receiving Treatment for Alcohol Use in Past Year ¹		Not Receiving Treatment Orug Use in Past Year ²
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Massachusetts	7.81	(6.79 - 8.97)	3.03	(2.55 - 3.60)
Boston	9.09	(7.30 - 11.26)	3.85	(2.89 - 5.11)
Central	7.50	(5.89 - 9.50)	2.87	(2.17 - 3.80)
Metrowest	8.23	(6.69 - 10.10)	2.72	(2.11 - 3.49)
Northeast	7.12	(5.69 - 8.89)	2.89	(2.23 - 3.75)
Southeast	7.28	(5.83 - 9.05)	3.08	(2.40 - 3.95)
Western	8.00	(6.39 - 9.96)	3.13	(2.42 - 4.04)

NOTE: For Substate Region definitions, see Section D of the report on Substate Estimates from the 2002-2004 National Surveys on Drug Use and Health.

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), inhalants, hallucinogens, heroin, or prescription-type psychotherapeutic (nonmedical use).

Table 22.10 Serious Psychological Distress in Past Year in Massachusetts among Persons Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

	Serious Psychological Distress in Past Year				
State/Substate Region	Estimate	95% Prediction Interval			
Massachusetts	8.66	(7.37 - 10.15)			
Boston	9.89	(7.67 - 12.65)			
Central	8.49	(6.43 - 11.12)			
Metrowest	8.47	(6.57 - 10.85)			
Northeast	8.78	(6.78 - 11.31)			
Southeast	8.48	(6.58 - 10.88)			
Western	8.08	(6.18 - 10.51)			

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: Serious Psychological Distress (SPD) was referred to as Serious Mental Illness (SMI) in prior NSDUH reports.

Figure 22.1.1 Any Illicit Drug Use in Past Month among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

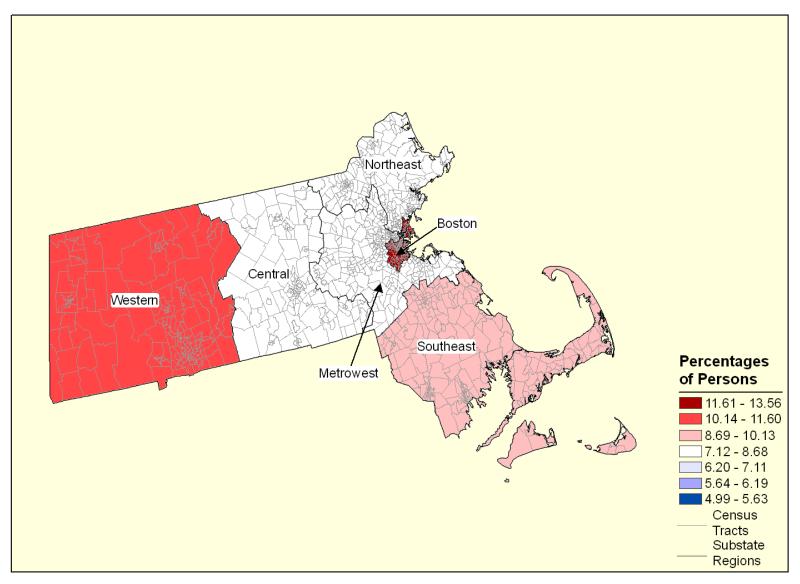


Figure 22.1.2 Any Illicit Drug Use Other Than Marijuana in Past Month among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

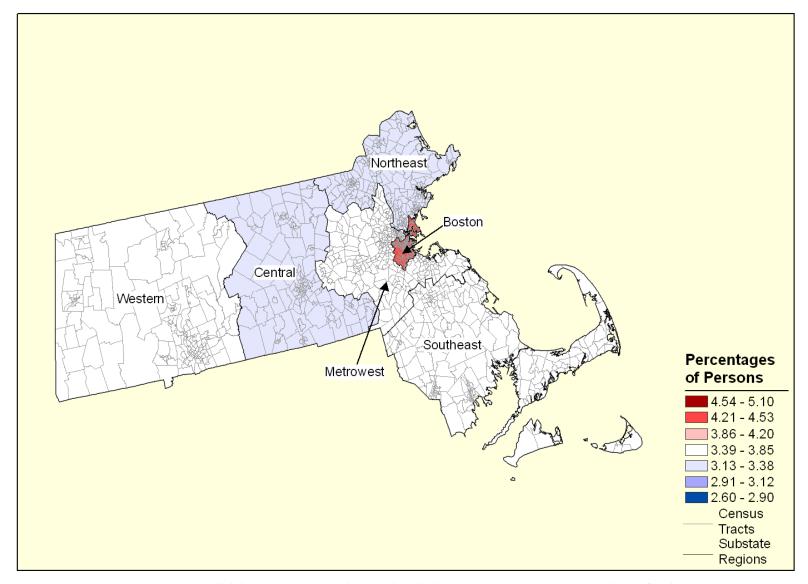


Figure 22.2.1 *Marijuana Use in Past Month* among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

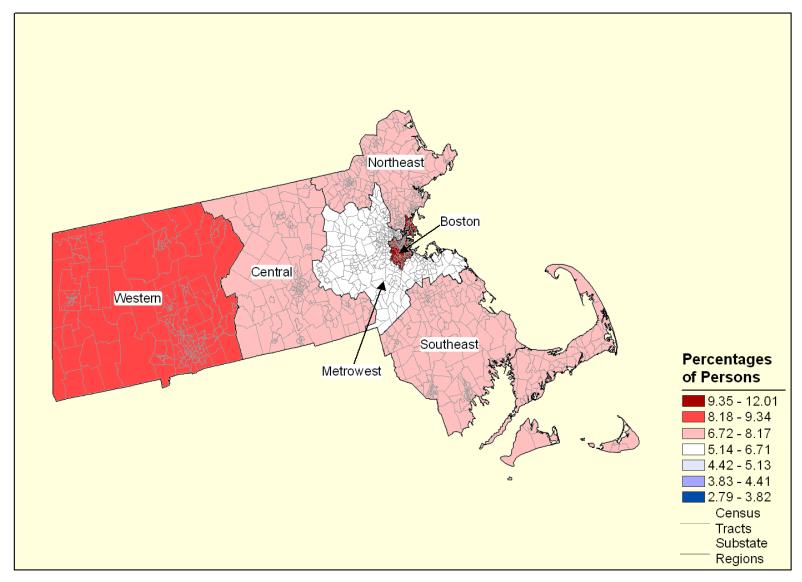


Figure 22.2.2 First Use of Marijuana among Persons Aged 12 or Older in Massachusetts, by Substate Region: Average Annual Rates Based on 2002, 2003, and 2004 NSDUHs

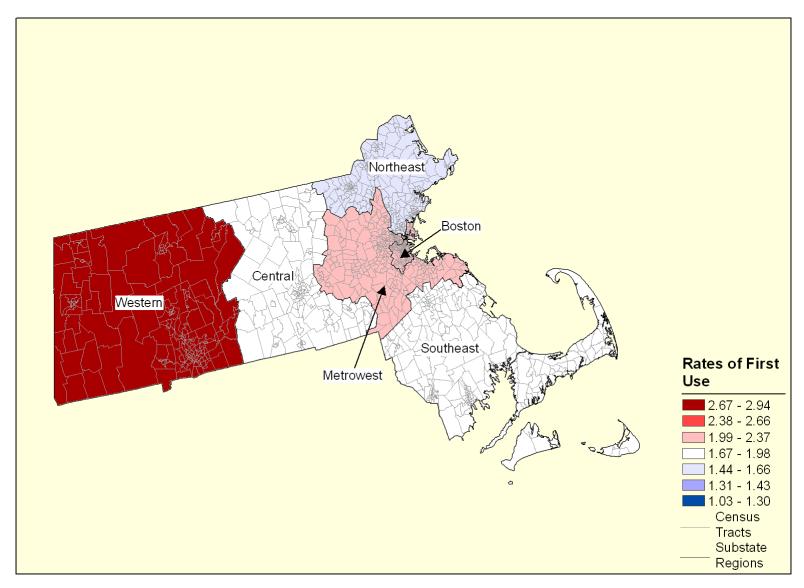


Figure 22.2.3 Perceptions of Great Risk of Smoking Marijuana Once a Month among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

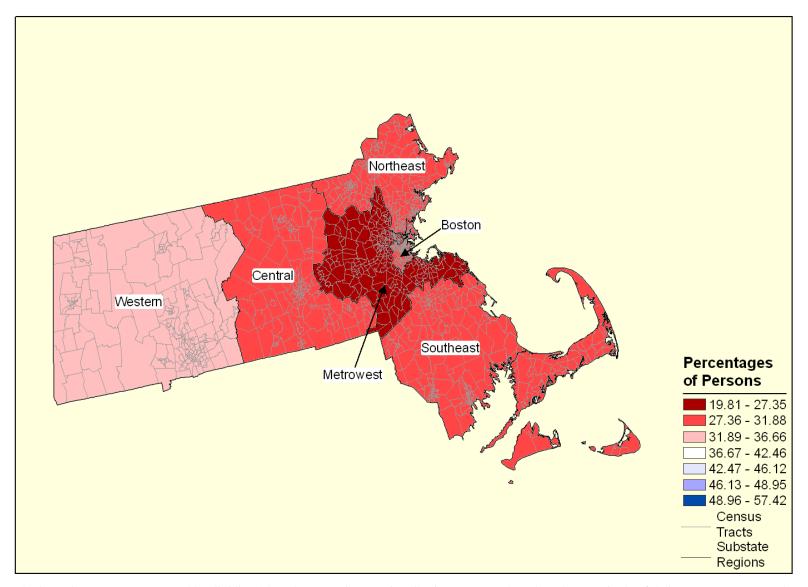


Figure 22.3.1 *Marijuana Use in Past Year* among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

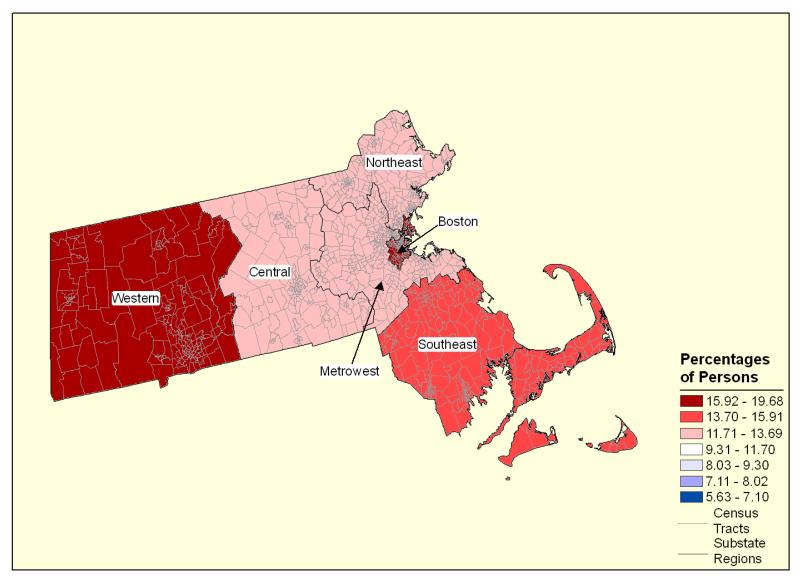


Figure 22.3.2 *Cocaine Use in Past Year* among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

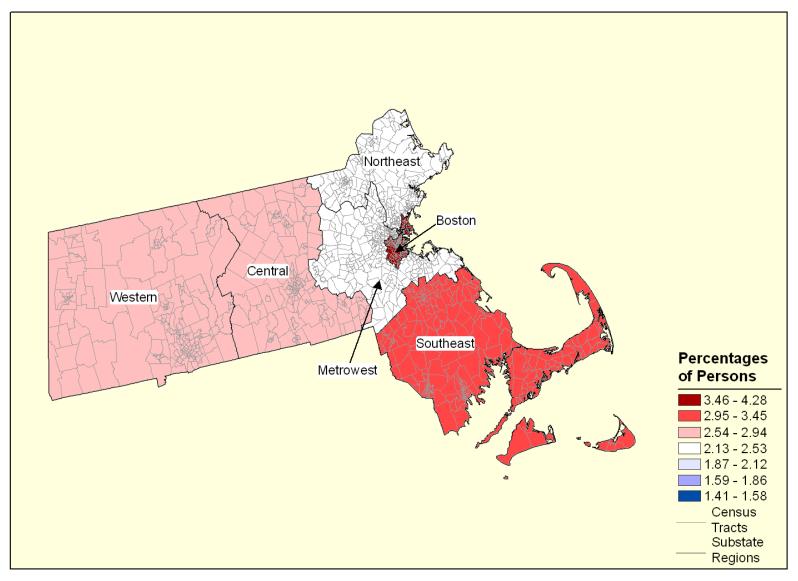


Figure 22.3.3 *Nonmedical Use of Pain Relievers in Past Year* among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

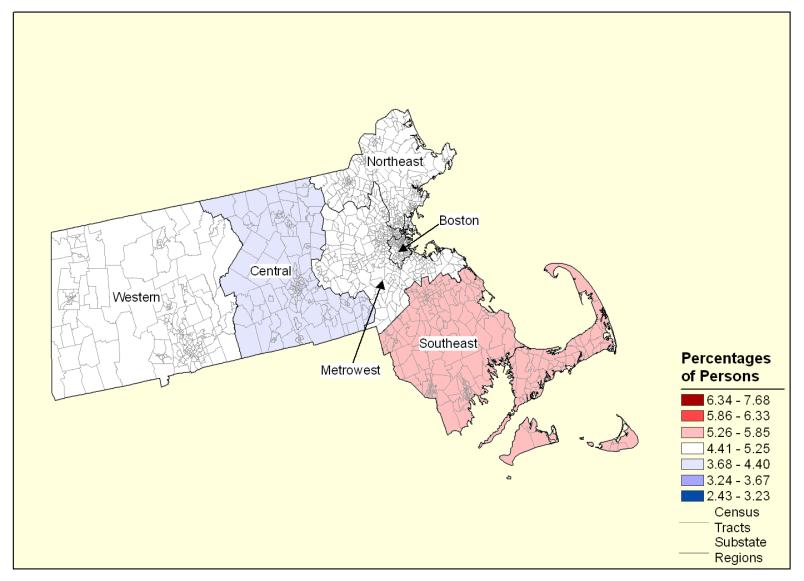


Figure 22.4.1 *Alcohol Use in Past Month* among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

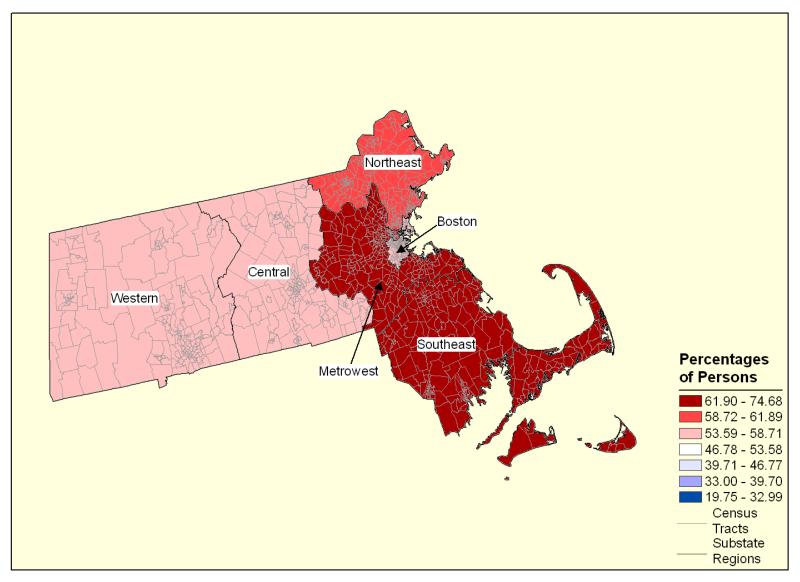


Figure 22.4.2 Binge Alcohol Use in Past Month among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

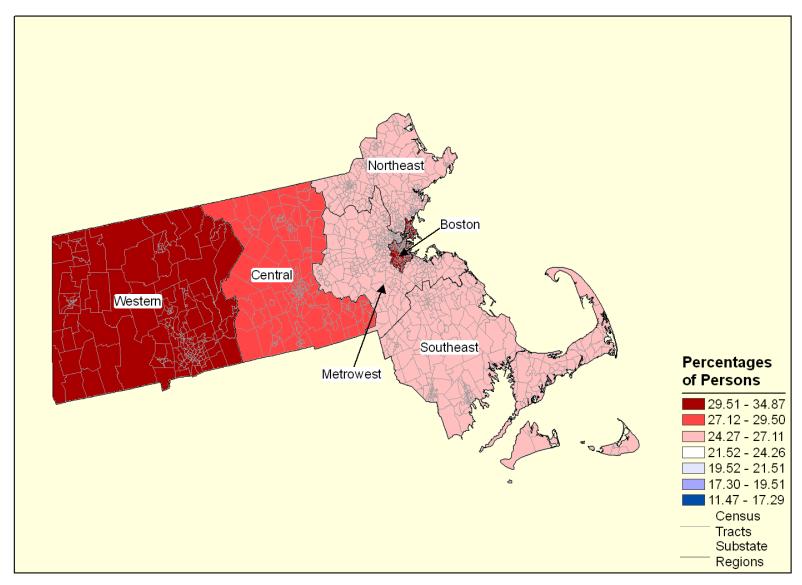


Figure 22.4.3 Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

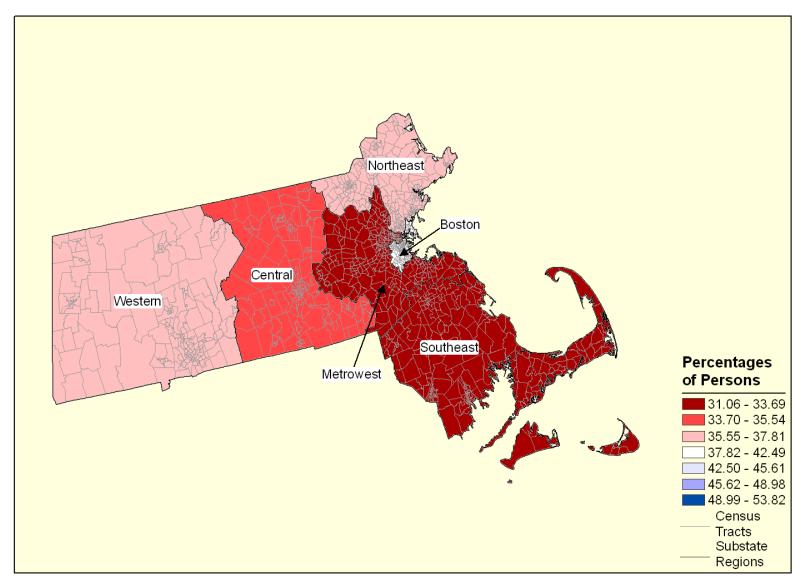


Figure 22.5.1 Alcohol Use in Past Month among Persons Aged 12 to 20 in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

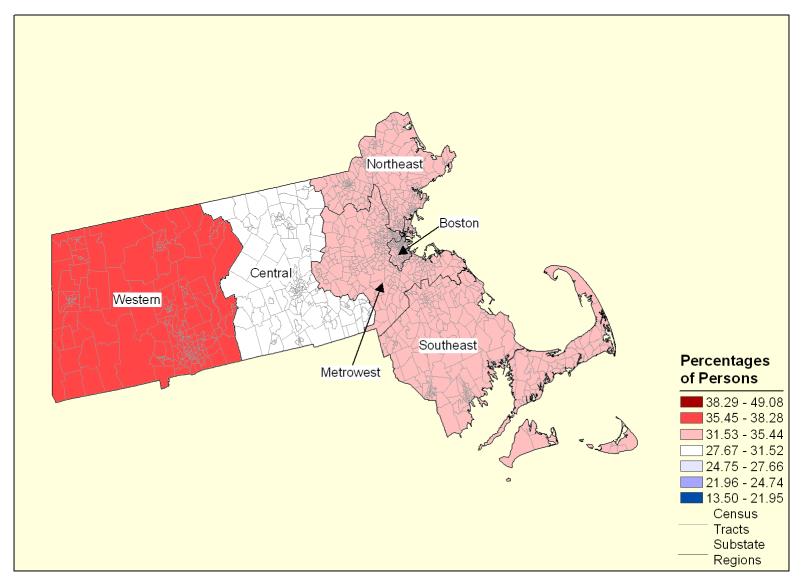


Figure 22.5.2 Binge Alcohol Use in Past Month among Persons Aged 12 to 20 in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

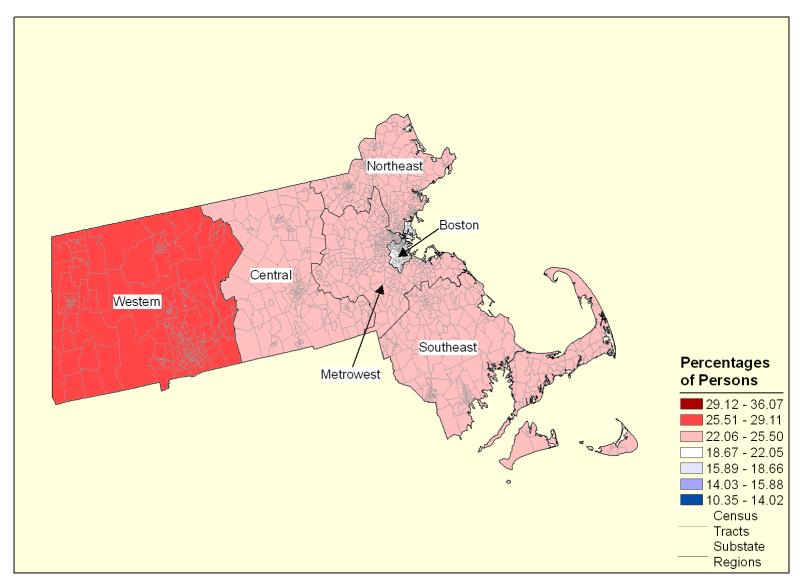


Figure 22.6.1 Cigarette Use in Past Month among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

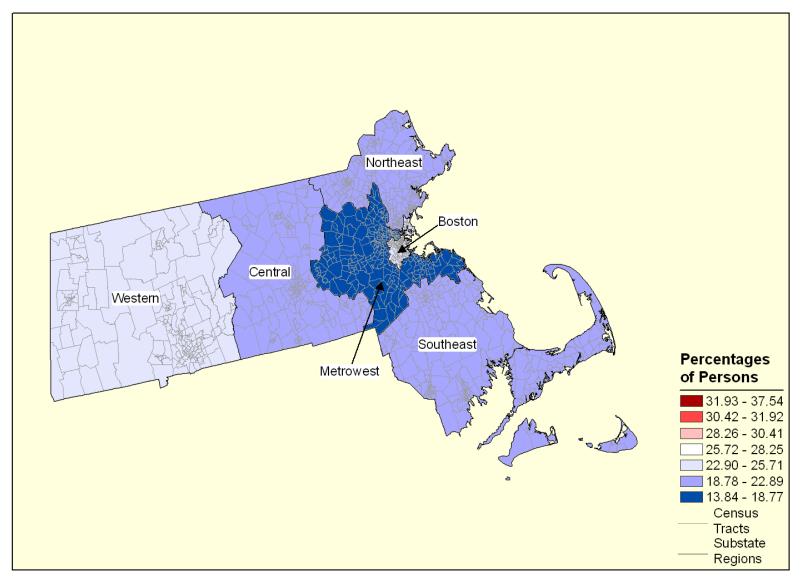


Figure 22.6.2 Any Tobacco Product Use in Past Month among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

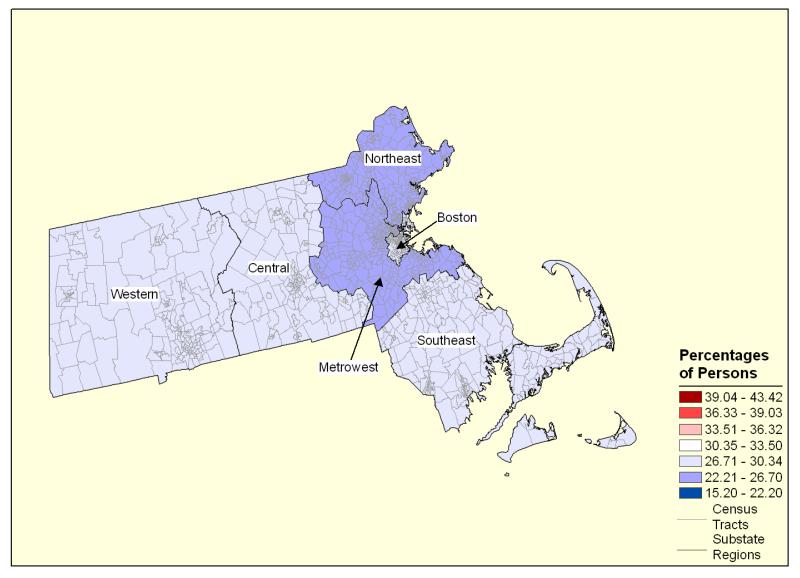


Figure 22.6.3 Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

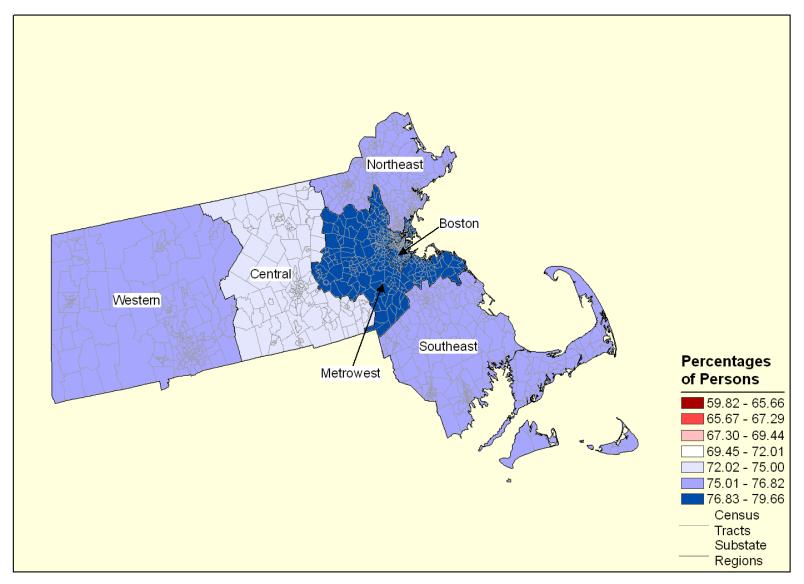


Figure 22.7.1 Alcohol Dependence in Past Year among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

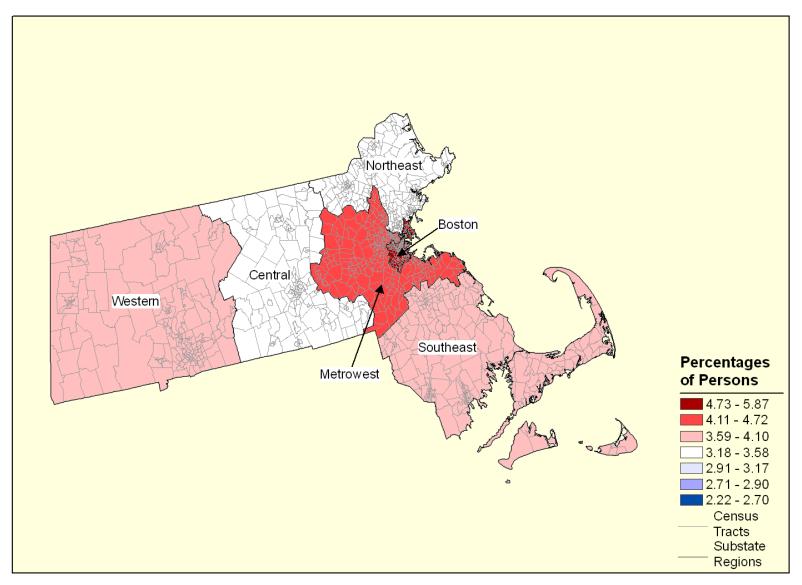


Figure 22.7.2 Any Illicit Drug Dependence in Past Year among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

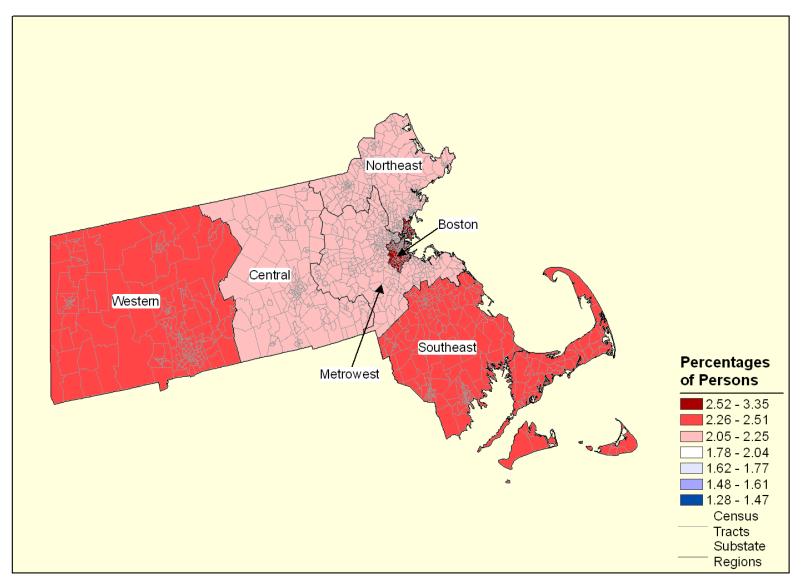


Figure 22.8.1 Alcohol Dependence or Abuse in Past Year among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

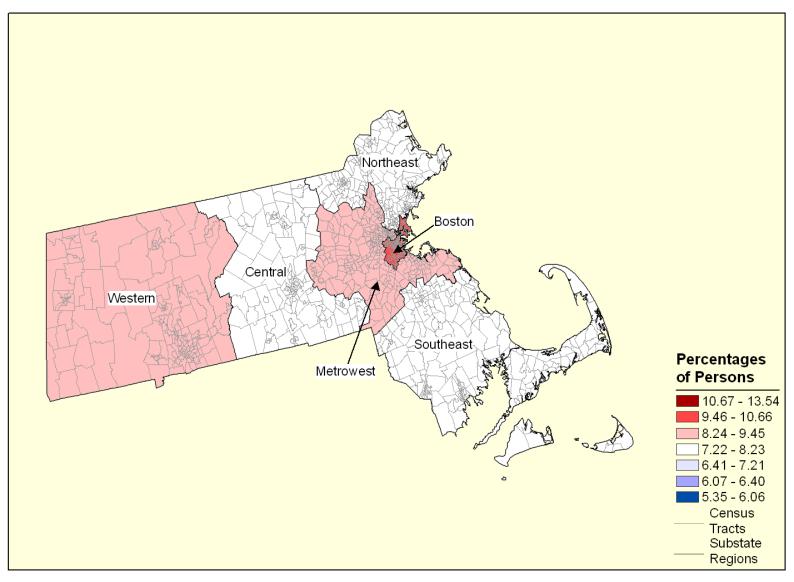


Figure 22.8.2 Any Illicit Drug Dependence or Abuse in Past Year among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

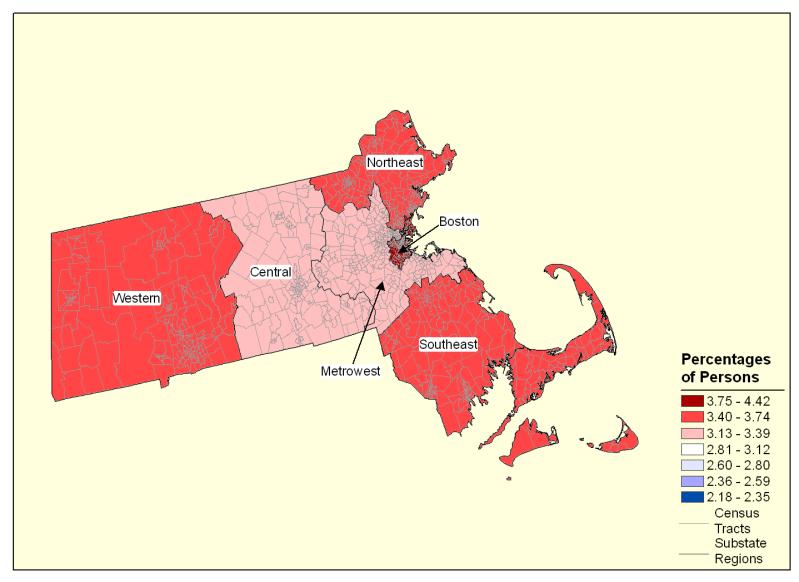


Figure 22.8.3 Dependence on or Abuse of Any Illicit Drug or Alcohol in Past Year among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

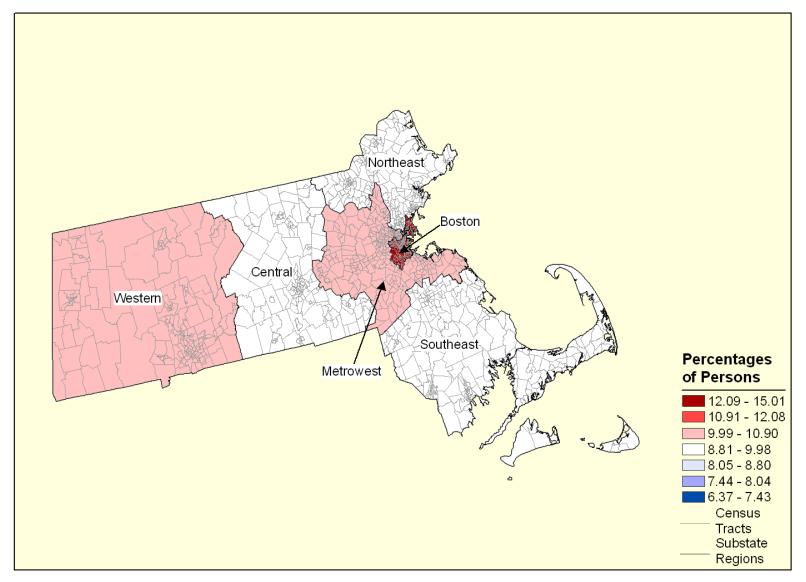


Figure 22.9.1 Needing But Not Receiving Treatment for Alcohol Use in Past Year among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

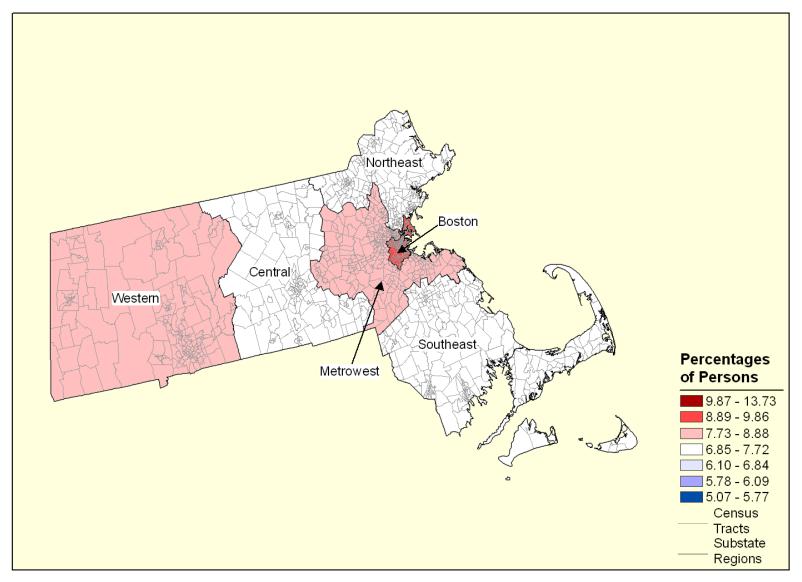


Figure 22.9.2 Needing But Not Receiving Treatment for Illicit Drug Use in Past Year among Persons Aged 12 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

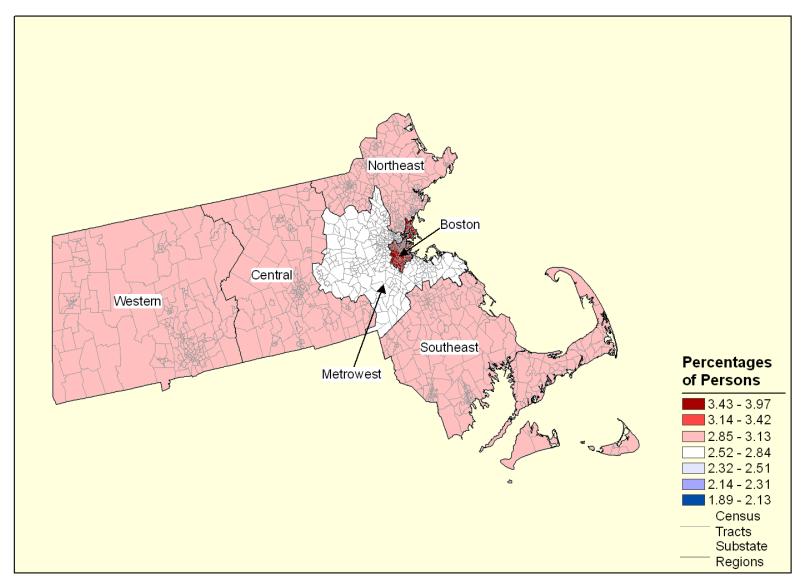


Figure 22.10 Serious Psychological Distress in Past Year among Persons Aged 18 or Older in Massachusetts, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

