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	Marijuana Use in Past Month		Average Annual Rate of First Use of Marijuana <sup>1</sup>		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
Michigan	5.72	(5.23 - 6.25)	1.86	(1.73 - 2.00)	41.17	(39.65 - 42.71)
Bay and Saginaw	4.93	(3.80 - 6.37)	1.80	(1.45 - 2.23)	45.55	(41.46 - 49.71)
Detroit City	7.41	(5.92 - 9.25)	1.85	(1.51 - 2.26)	48.68	(44.93 - 52.44)
Genesee	6.15	(4.71 - 7.99)	1.99	(1.53 - 2.59)	43.74	(39.40 - 48.18)
Kalamazoo	5.62	(4.31 - 7.30)	1.85	(1.47 - 2.34)	39.99	(36.03 - 44.09)
Kent	6.03	(4.64 - 7.79)	2.59	(2.09 - 3.20)	41.20	(37.14 - 45.37)
Lakeshore	4.98	(3.93 - 6.31)	1.59	(1.28 - 1.97)	45.66	(41.71 - 49.67)
Macomb	5.30	(4.13 - 6.77)	1.55	(1.25 - 1.91)	39.19	(35.40 - 43.12)
Mid South	6.31	(5.26 - 7.55)	2.10	(1.76 - 2.50)	39.82	(36.57 - 43.16)
Northern	4.61	(3.65 - 5.81)	1.70	(1.40 - 2.06)	39.63	(35.82 - 43.57)
Oakland	4.84	(3.87 - 6.03)	1.82	(1.51 - 2.18)	36.33	(32.99 - 39.82)
Pathways and Western	6.07	(4.62 - 7.94)	2.17	(1.70 - 2.76)	39.52	(35.06 - 44.17)
Southeast	6.13	(5.00 - 7.49)	1.73	(1.45 - 2.06)	41.98	(38.53 - 45.51)
St. Clair	5.61	(4.27 - 7.33)	1.59	(1.22 - 2.06)	46.18	(41.46 - 50.97)
Washtenaw	6.22	(4.90 - 7.86)	2.25	(1.76 - 2.86)	30.99	(27.40 - 34.82)

<b>Table 23.1</b>	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 Michigan among Persons Aged 12 or Older, by
	Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

NOTE: For Substate Region definitions, see Section D of the report on Substate Estimates from the 1999-2001 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.

<sup>1</sup> Average Annual Rate = {(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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 1999, 2000, and 2001.

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	Illicit Drug Use in Past Month <sup>1</sup>		Any Illicit Drug Use Other Than Marijuana in Past Month <sup>1</sup>		Cocaine Use in Past Year	
State/Substate Region	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Michigan	7.20	(6.61 - 7.83)	2.69	(2.37 - 3.04)	1.46	(1.22 - 1.74)
Bay and Saginaw	7.15	(5.58 - 9.12)	2.65	(1.99 - 3.53)	1.32	(0.97 - 1.80)
Detroit City	9.49	(7.72 - 11.62)	2.60	(1.91 - 3.54)	1.51	(0.95 - 2.39)
Genesee	7.54	(5.73 - 9.85)	2.72	(2.03 - 3.64)	1.69	(1.13 - 2.51)
Kalamazoo	6.57	(5.16 - 8.34)	2.70	(2.02 - 3.60)	1.66	(1.22 - 2.25)
Kent	8.24	(6.49 - 10.42)	3.28	(2.50 - 4.30)	1.71	(1.20 - 2.42)
Lakeshore	6.68	(5.33 - 8.33)	3.04	(2.33 - 3.96)	1.42	(1.05 - 1.92)
Macomb	6.83	(5.39 - 8.61)	2.34	(1.77 - 3.09)	1.23	(0.85 - 1.76)
Mid South	7.12	(5.94 - 8.50)	2.56	(2.00 - 3.26)	1.72	(1.32 - 2.23)
Northern	5.78	(4.59 - 7.24)	2.19	(1.65 - 2.89)	1.17	(0.86 - 1.60)
Oakland	6.17	(5.07 - 7.49)	2.73	(2.12 - 3.51)	1.35	(0.95 - 1.90)
Pathways and Western	7.08	(5.48 - 9.11)	3.06	(2.28 - 4.10)	1.30	(0.95 - 1.77)
Southeast	7.77	(6.41 - 9.38)	2.73	(2.15 - 3.45)	1.58	(1.15 - 2.16)
St. Clair	6.78	(5.15 - 8.87)	2.54	(1.87 - 3.43)	1.36	(0.98 - 1.90)
Washtenaw	7.48	(6.04 - 9.23)	3.00	(2.28 - 3.93)	1.38	(1.02 - 1.87)

# Table 23.2Any Illicit Drug Use in Past Month, Any Illicit Drug Use Other than Marijuana in Past Month, and<br/>Cocaine Use in Past Year in Michigan among Persons Aged 12 or Older, by Substate Region:<br/>Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

NOTE: For Substate Region definitions, see Section D of the report on Substate Estimates from the 1999-2001 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.

<sup>1</sup> 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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 1999, 2000, and 2001.

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Table 23.3Alcohol Use in Past Month, Binge Alcohol Use in Past Month, and Perceptions of Great Risk of Having<br/>Five or More Drinks of an Alcoholic Beverage Once or Twice a Week in Michigan among Persons<br/>Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and<br/>2001 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
Michigan	49.04	(47.52 - 50.56)	21.85	(20.72 - 23.01)	43.94	(42.44 - 45.45)
Bay and Saginaw	50.15	(45.45 - 54.84)	23.13	(19.97 - 26.62)	42.19	(38.19 - 46.30)
Detroit City	38.76	(34.70 - 42.98)	20.92	(18.09 - 24.07)	52.04	(48.17 - 55.88)
Genesee	42.70	(37.80 - 47.74)	20.66	(17.57 - 24.14)	45.96	(41.61 - 50.36)
Kalamazoo	47.05	(42.46 - 51.70)	20.64	(17.78 - 23.83)	43.62	(39.66 - 47.67)
Kent	53.37	(48.65 - 58.04)	23.18	(19.99 - 26.71)	43.40	(39.42 - 47.47)
Lakeshore	45.87	(41.53 - 50.28)	21.62	(18.75 - 24.79)	42.70	(38.75 - 46.75)
Macomb	52.59	(48.30 - 56.84)	21.34	(18.66 - 24.28)	42.68	(38.88 - 46.57)
Mid South	47.64	(43.97 - 51.35)	21.36	(19.01 - 23.91)	41.90	(38.39 - 45.49)
Northern	48.60	(44.29 - 52.94)	21.96	(19.01 - 25.22)	39.40	(35.50 - 43.45)
Oakland	54.41	(50.83 - 57.95)	21.08	(18.60 - 23.79)	46.44	(42.92 - 49.98)
Pathways and Western	49.49	(43.74 - 55.25)	23.72	(20.18 - 27.66)	39.10	(34.62 - 43.77)
Southeast	48.74	(45.26 - 52.23)	22.22	(19.79 - 24.84)	44.38	(40.98 - 47.84)
St. Clair	50.14	(44.83 - 55.46)	22.44	(19.02 - 26.28)	41.90	(37.37 - 46.56)
Washtenaw	58.66	(54.17 - 63.01)	24.11	(21.09 - 27.42)	43.59	(39.71 - 47.54)

NOTE: For Substate Region definitions, see Section D of the report on Substate Estimates from the 1999-2001 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.

<sup>1</sup> 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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 1999, 2000, and 2001.

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by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs							
		arette Use Past Month	Any Tobacco Product Use in Past Month <sup>1</sup>		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	
Michigan	27.45	(26.21 - 28.73)	31.73	(30.43 - 33.07)	66.84	(65.53 - 68.12)	
Bay and Saginaw	27.32	(23.91 - 31.01)	32.35	(28.69 - 36.23)	65.16	(60.94 - 69.16)	
Detroit City	31.25	(27.73 - 35.01)	33.71	(30.09 - 37.53)	69.22	(65.58 - 72.63)	
Genesee	28.78	(25.13 - 32.73)	32.51	(28.46 - 36.85)	67.62	(63.11 - 71.82)	
Kalamazoo	26.53	(23.21 - 30.14)	31.56	(27.81 - 35.57)	67.05	(63.07 - 70.80)	
Kent	27.22	(23.89 - 30.82)	31.35	(27.74 - 35.20)	66.88	(62.97 - 70.57)	
Lakeshore	25.18	(21.95 - 28.71)	29.48	(25.97 - 33.25)	65.45	(61.74 - 68.98)	
Macomb	28.01	(24.77 - 31.49)	32.45	(29.07 - 36.02)	66.92	(63.28 - 70.36)	
Mid South	27.67	(24.85 - 30.69)	32.42	(29.25 - 35.77)	65.23	(61.91 - 68.41)	
Northern	30.58	(27.02 - 34.39)	36.42	(32.56 - 40.47)	64.52	(60.65 - 68.20)	
Oakland	22.90	(20.33 - 25.69)	25.48	(22.71 - 28.47)	70.31	(66.91 - 73.50)	
Pathways and Western	29.34	(25.15 - 33.92)	35.86	(31.09 - 40.92)	63.51	(58.66 - 68.10)	
Southeast	28.32	(25.44 - 31.39)	32.76	(29.66 - 36.01)	66.15	(62.87 - 69.29)	
St. Clair	28.47	(24.61 - 32.66)	33.51	(29.17 - 38.15)	68.99	(64.56 - 73.09)	
Washtenaw	24.10	(21.05 - 27.43)	28.66	(25.36 - 32.20)	66.98	(62.83 - 70.88)	

# Table 23.4Cigarette Use in Past Month, Any Tobacco Product Use in Past Month, and Perceptions of Great Risk<br/>of Smoking One or More Packs of Cigarettes Per Day in Michigan among Persons Aged 12 or Older,<br/>by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

NOTE: For Substate Region definitions, see Section D of the report on Substate Estimates from the 1999-2001 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.

<sup>1</sup> Any Tobacco product includes cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 1999, 2000, and 2001.

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Figure 23.1.1 *Marijuana Use in Past Month* among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

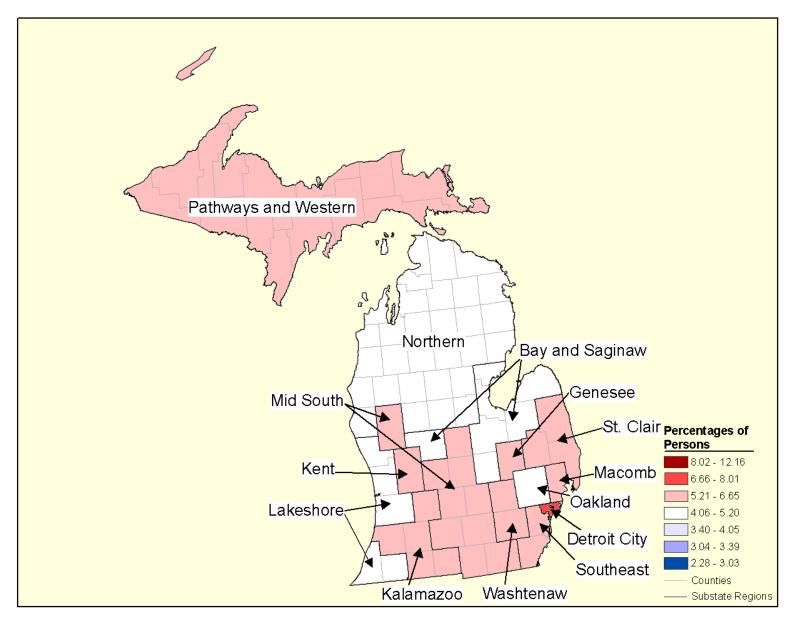
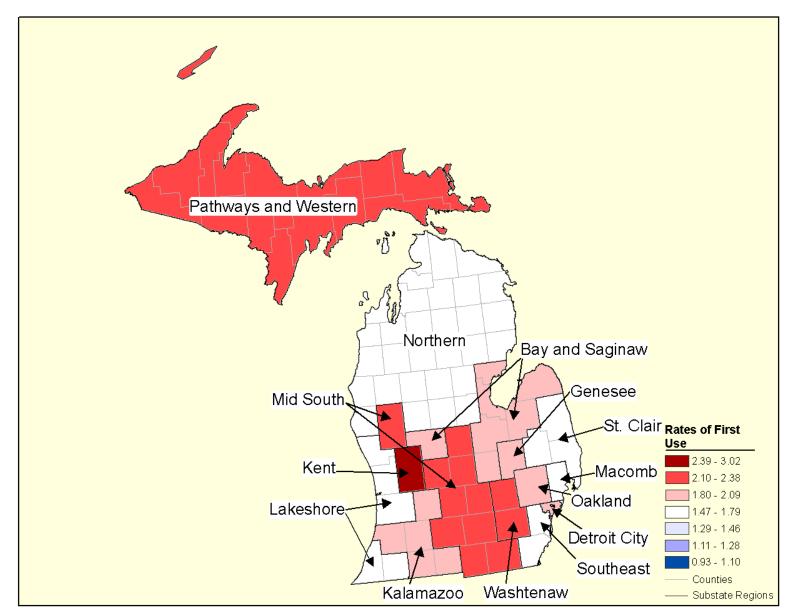


Figure 23.1.2 *First Use of Marijuana* among Persons Aged 12 or Older in Michigan, by Substate Region: Average Annual Rates Based on 1999, 2000, and 2001 NSDUHs



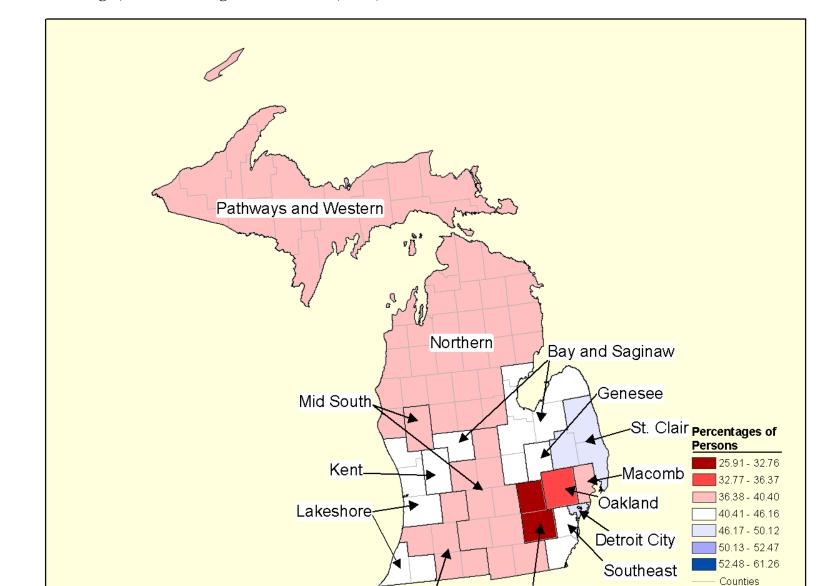


Figure 23.1.3 *Perceptions of Great Risk of Smoking Marijuana Once a Month* among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

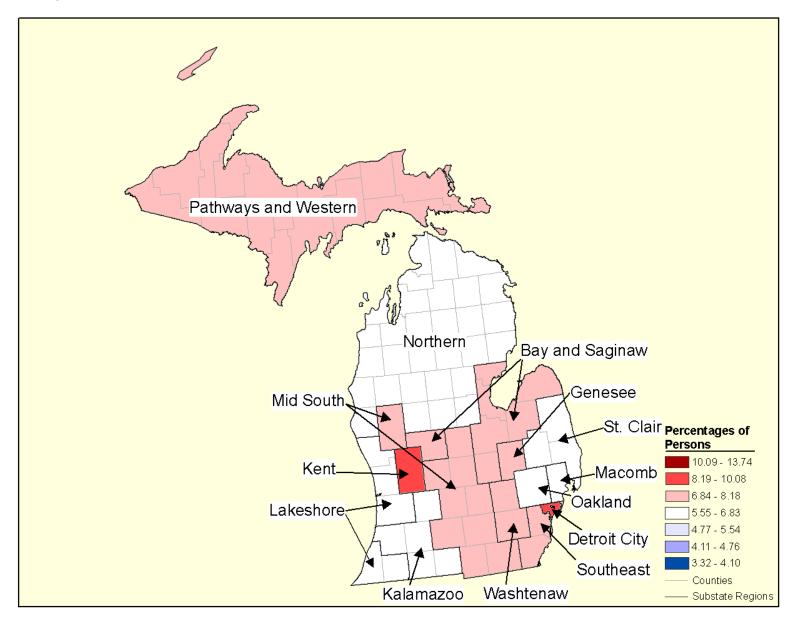
NOTE: The legend's ranges were created by dividing 331 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see Section D of the report on *Substate Estimates from the 1999-2001 National Surveys on Drug Use and Health*. Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 1999, 2000, and 2001.

Kalamazoo

Washtenaw

—— Substate Regions

Figure 23.2.1 Any Illicit Drug Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs



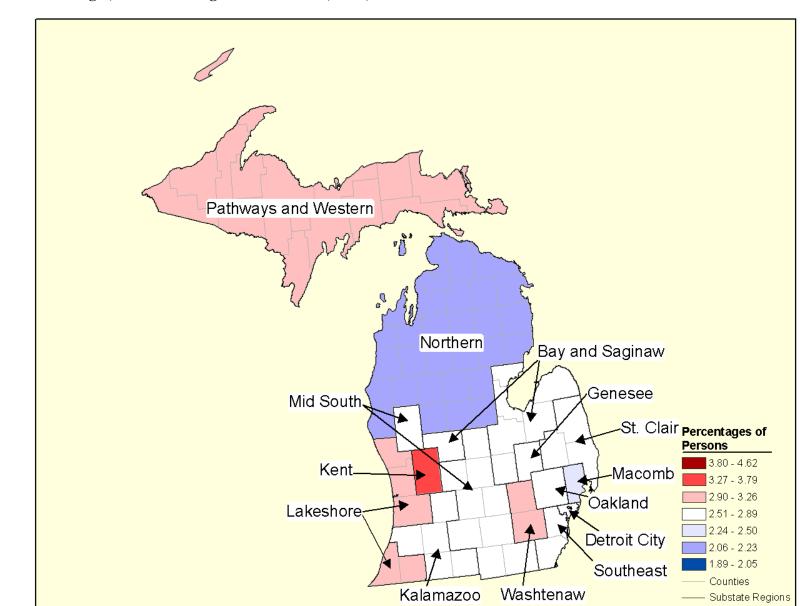


Figure 23.2.2 Any Illicit Drug Use Other Than Marijuana in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

Figure 23.2.3 *Cocaine Use in Past Year* among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

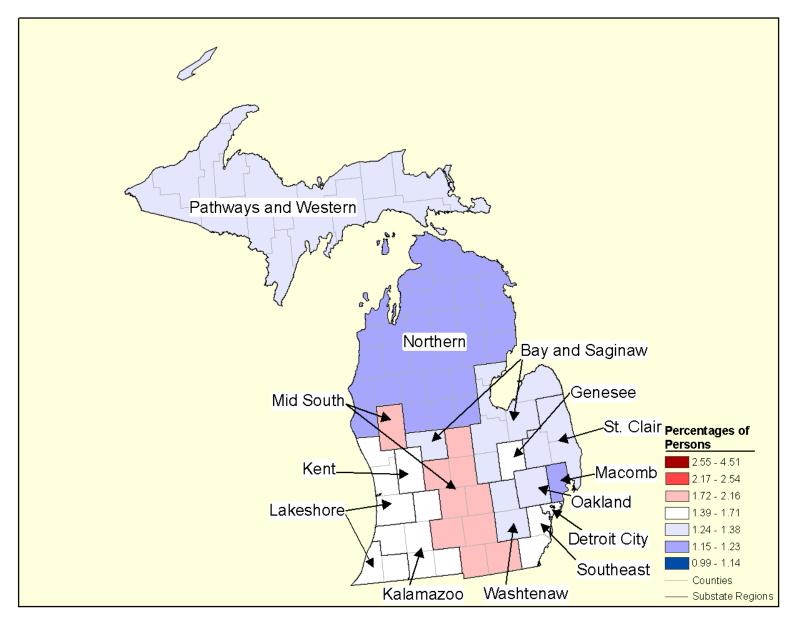


Figure 23.3.1 *Alcohol Use in Past Month* among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs

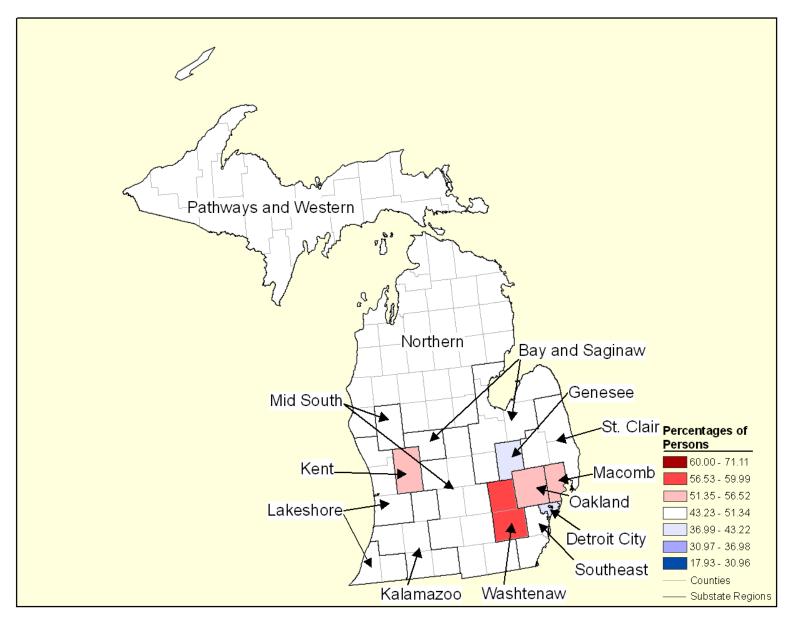
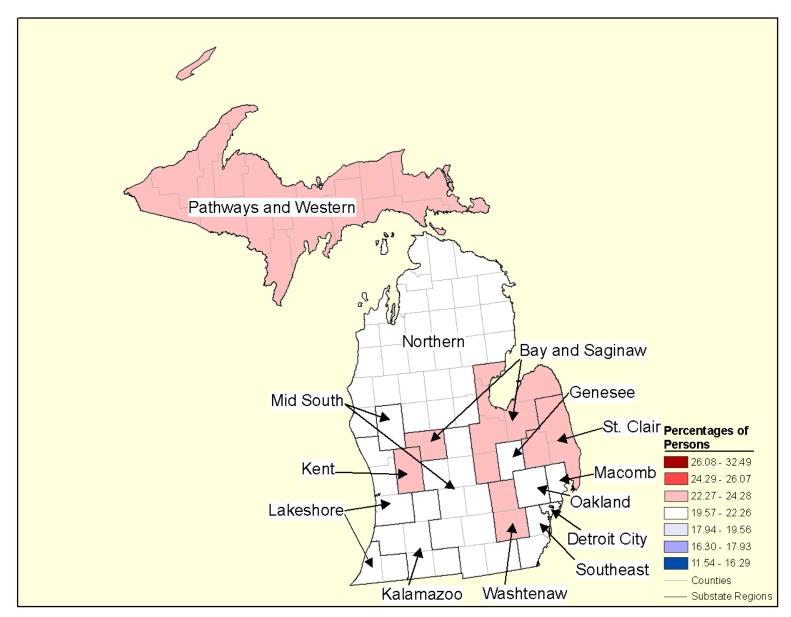


Figure 23.3.2 *Binge Alcohol Use in Past Month* among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs



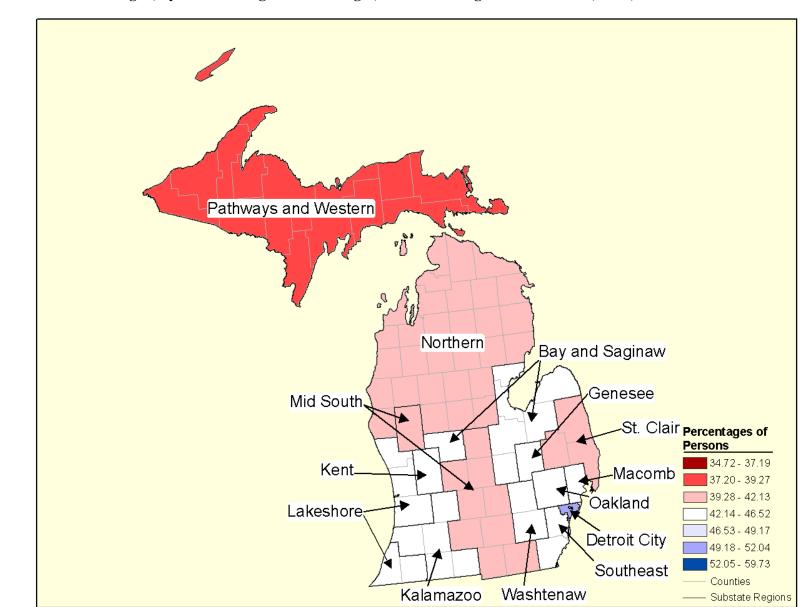


Figure 23.3.3 Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs



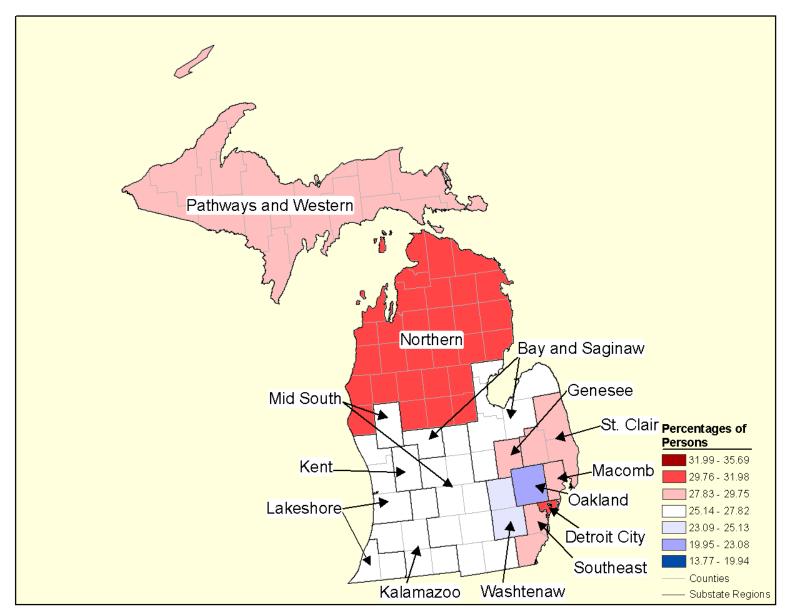
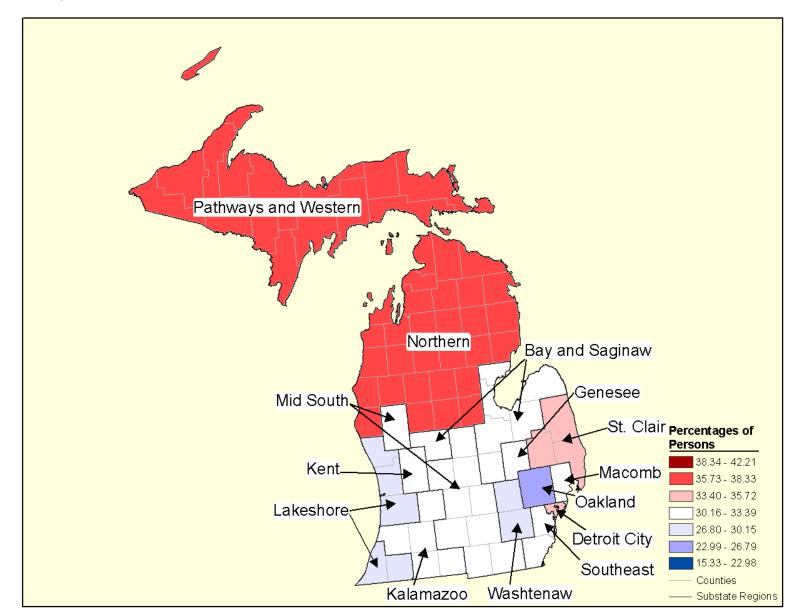


Figure 23.4.2 Any Tobacco Product Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs



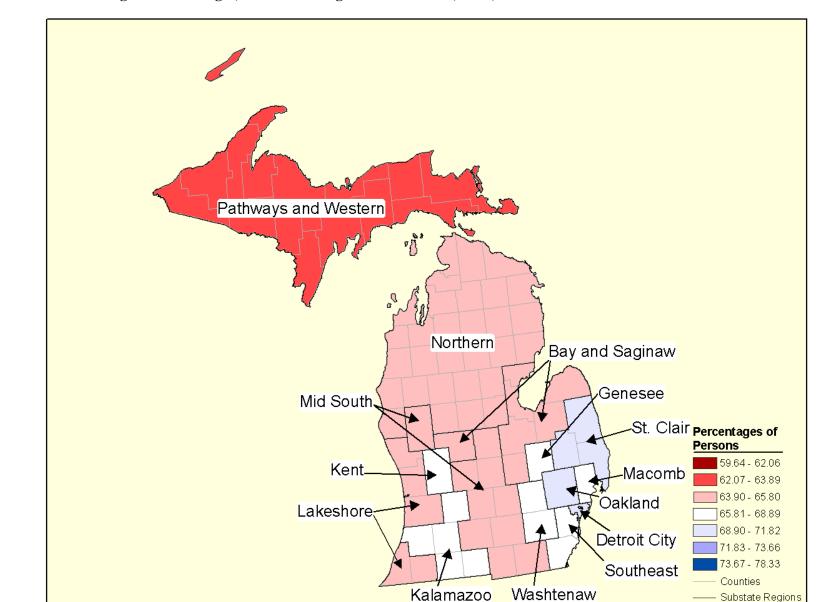


Figure 23.4.3 *Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day* among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 1999, 2000, and 2001 NSDUHs