

**Table 23.1 Any Illicit Drug Use in Past Month and Any Illicit Drug Use Other Than Marijuana in Past Month in Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	Any Illicit Drug Use in Past Month		Any Illicit Drug Use Other Than Marijuana in Past Month	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	9.18	(8.53 - 9.87)	3.55	(3.19 - 3.94)
Bay	8.06	(6.15 - 10.49)	3.56	(2.73 - 4.63)
Detroit City	12.06	(9.97 - 14.52)	3.77	(2.84 - 5.00)
Genesee	11.97	(9.57 - 14.88)	4.12	(3.11 - 5.44)
Kalamazoo	10.13	(8.35 - 12.23)	3.73	(2.97 - 4.68)
Kent	8.05	(6.50 - 9.94)	3.52	(2.80 - 4.41)
Lakeshore	9.24	(7.53 - 11.28)	3.45	(2.75 - 4.33)
Macomb	8.59	(7.10 - 10.37)	3.19	(2.52 - 4.03)
Mid South	8.65	(7.22 - 10.33)	3.64	(2.94 - 4.50)
Northern	7.93	(6.47 - 9.70)	3.40	(2.69 - 4.29)
Oakland	8.31	(6.96 - 9.90)	2.98	(2.35 - 3.76)
Pathways	11.66	(8.99 - 14.99)	3.89	(2.97 - 5.07)
Saginaw	8.22	(6.26 - 10.72)	3.39	(2.59 - 4.42)
Southeast	9.55	(8.09 - 11.25)	3.99	(3.21 - 4.95)
St. Clair	7.66	(5.96 - 9.80)	3.29	(2.51 - 4.31)
Washtenaw	9.00	(7.31 - 11.05)	3.64	(2.87 - 4.61)
Western	7.46	(5.51 - 10.02)	3.47	(2.60 - 4.62)

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: 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, 2002, 2003, and 2004.

**Table 23.2 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 Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	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	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	7.31	(6.72 - 7.94)	2.06	(1.91 - 2.21)	36.39	(35.10 - 37.70)
Bay	6.32	(4.73 - 8.40)	1.70	(1.30 - 2.22)	38.18	(33.12 - 43.52)
Detroit City	9.12	(7.42 - 11.16)	2.15	(1.74 - 2.66)	42.85	(39.13 - 46.66)
Genesee	9.23	(7.24 - 11.70)	2.31	(1.83 - 2.93)	37.34	(33.02 - 41.88)
Kalamazoo	7.94	(6.41 - 9.79)	2.29	(1.85 - 2.84)	38.41	(34.48 - 42.50)
Kent	6.04	(4.76 - 7.64)	2.21	(1.78 - 2.74)	38.00	(33.87 - 42.32)
Lakeshore	7.88	(6.31 - 9.80)	2.16	(1.79 - 2.60)	39.83	(36.19 - 43.58)
Macomb	7.00	(5.62 - 8.69)	1.87	(1.52 - 2.30)	34.69	(30.92 - 38.67)
Mid South	6.67	(5.50 - 8.07)	2.61	(2.17 - 3.13)	33.36	(30.04 - 36.86)
Northern	6.66	(5.37 - 8.24)	2.15	(1.78 - 2.60)	38.11	(34.26 - 42.12)
Oakland	7.24	(5.97 - 8.77)	1.78	(1.47 - 2.16)	29.74	(26.52 - 33.17)
Pathways	9.11	(6.86 - 12.00)	2.62	(1.94 - 3.54)	36.96	(31.88 - 42.35)
Saginaw	6.56	(4.81 - 8.88)	1.92	(1.43 - 2.57)	40.86	(35.70 - 46.22)
Southeast	7.06	(5.86 - 8.49)	1.79	(1.50 - 2.13)	36.77	(33.53 - 40.14)
St. Clair	6.22	(4.69 - 8.20)	1.67	(1.27 - 2.20)	41.63	(36.56 - 46.87)
Washtenaw	7.59	(6.09 - 9.42)	1.97	(1.50 - 2.58)	29.59	(25.92 - 33.54)
Western	5.83	(4.17 - 8.08)	1.45	(1.00 - 2.10)	39.49	(33.84 - 45.43)

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.

<sup>1</sup> Average Annual Rate =  $[100 * \{(\text{Number of Marijuana Initiates in past 24 months}) / [(\text{Number of Marijuana Initiates in past 24 months} * 0.5) + \text{Number of persons who never used marijuana}]\} / 2]$ . 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, 2002, 2003, and 2004.

**Table 23.3 Marijuana Use in Past Year, Cocaine Use in Past Year, and Nonmedical Use of Pain Relievers in Past Year in Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	Marijuana Use in Past Year		Cocaine Use in Past Year		Nonmedical Use of Pain Relievers in Past Year	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
Michigan	12.54	(11.78 - 13.34)	2.56	(2.24 - 2.93)	5.33	(4.83 - 5.87)
Bay	10.80	(8.58 - 13.50)	2.26	(1.66 - 3.06)	5.53	(4.22 - 7.21)
Detroit City	14.98	(12.66 - 17.64)	3.53	(2.40 - 5.16)	3.98	(3.03 - 5.22)
Genesee	14.62	(12.07 - 17.62)	2.88	(2.10 - 3.93)	6.31	(4.92 - 8.07)
Kalamazoo	14.48	(12.23 - 17.07)	2.92	(2.18 - 3.91)	6.03	(4.92 - 7.38)
Kent	11.84	(9.80 - 14.23)	2.63	(1.98 - 3.48)	5.14	(4.03 - 6.52)
Lakeshore	12.34	(10.49 - 14.45)	2.34	(1.79 - 3.07)	5.41	(4.43 - 6.59)
Macomb	11.86	(9.91 - 14.14)	2.39	(1.80 - 3.16)	5.43	(4.31 - 6.83)
Mid South	12.20	(10.50 - 14.13)	2.45	(1.89 - 3.16)	5.37	(4.45 - 6.47)
Northern	11.97	(10.17 - 14.05)	2.23	(1.71 - 2.92)	5.85	(4.71 - 7.25)
Oakland	12.12	(10.38 - 14.11)	2.47	(1.89 - 3.23)	4.64	(3.76 - 5.70)
Pathways	13.97	(11.23 - 17.26)	2.56	(1.90 - 3.46)	6.33	(4.86 - 8.20)
Saginaw	10.75	(8.31 - 13.80)	2.57	(1.86 - 3.54)	4.85	(3.67 - 6.37)
Southeast	12.37	(10.59 - 14.41)	2.51	(1.96 - 3.21)	5.66	(4.61 - 6.94)
St. Clair	11.36	(9.12 - 14.06)	2.28	(1.71 - 3.04)	4.58	(3.47 - 6.03)
Washtenaw	12.96	(10.88 - 15.37)	2.45	(1.85 - 3.23)	6.00	(4.75 - 7.54)
Western	8.80	(6.61 - 11.62)	2.08	(1.52 - 2.85)	5.10	(3.78 - 6.83)

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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

**Table 23.4 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 Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	Alcohol Use in Past Month		Binge Alcohol Use in Past Month <sup>1</sup>		Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	52.93	(51.51 - 54.34)	24.52	(23.41 - 25.66)	38.65	(37.32 - 39.99)
Bay	48.80	(43.42 - 54.21)	24.94	(21.54 - 28.68)	36.63	(32.43 - 41.05)
Detroit City	39.44	(35.58 - 43.43)	22.64	(19.82 - 25.74)	49.02	(45.39 - 52.66)
Genesee	52.18	(47.59 - 56.74)	24.67	(21.46 - 28.19)	39.76	(35.92 - 43.72)
Kalamazoo	54.47	(50.30 - 58.58)	27.59	(24.61 - 30.77)	36.66	(33.10 - 40.37)
Kent	52.10	(47.77 - 56.40)	24.32	(21.39 - 27.52)	41.07	(37.14 - 45.11)
Lakeshore	50.80	(47.02 - 54.57)	23.42	(20.81 - 26.25)	39.47	(36.04 - 43.00)
Macomb	58.23	(54.31 - 62.06)	25.91	(23.00 - 29.04)	36.14	(32.87 - 39.54)
Mid South	51.08	(47.48 - 54.66)	23.19	(20.70 - 25.88)	35.35	(32.04 - 38.81)
Northern	52.03	(47.76 - 56.26)	27.32	(24.45 - 30.40)	35.37	(32.00 - 38.90)
Oakland	59.25	(55.78 - 62.64)	24.00	(21.59 - 26.58)	38.91	(35.73 - 42.18)
Pathways	56.04	(49.97 - 61.93)	28.50	(24.56 - 32.80)	35.92	(31.27 - 40.86)
Saginaw	52.52	(46.81 - 58.17)	24.17	(20.64 - 28.09)	38.62	(34.22 - 43.21)
Southeast	53.73	(50.19 - 57.22)	22.51	(20.17 - 25.03)	38.43	(35.27 - 41.70)
St. Clair	52.25	(46.77 - 57.68)	25.32	(21.77 - 29.23)	38.56	(34.25 - 43.06)
Washtenaw	62.52	(58.39 - 66.48)	25.99	(23.03 - 29.18)	38.18	(34.44 - 42.06)
Western	47.39	(41.00 - 53.86)	24.45	(20.79 - 28.52)	33.80	(29.30 - 38.61)

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.

<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, 2002, 2003, and 2004.

**Table 23.5 Alcohol Use in Past Month and Binge Alcohol Use in Past Month among Persons Aged 12 to 20 in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	Alcohol Use in Past Month among Persons Aged 12 to 20		Binge Alcohol Use in Past Month among Persons Aged 12 to 20 <sup>1</sup>	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	30.47	(29.28 - 31.69)	20.79	(19.75 - 21.86)
Bay	32.55	(28.04 - 37.41)	23.45	(19.72 - 27.64)
Detroit City	21.31	(18.46 - 24.48)	11.70	(9.72 - 14.03)
Genesee	30.88	(27.17 - 34.86)	21.46	(18.25 - 25.06)
Kalamazoo	34.85	(31.10 - 38.80)	26.79	(23.45 - 30.41)
Kent	29.44	(25.93 - 33.20)	19.25	(16.37 - 22.51)
Lakeshore	31.40	(28.18 - 34.81)	20.84	(18.14 - 23.82)
Macomb	32.77	(29.14 - 36.62)	22.52	(19.45 - 25.92)
Mid South	29.40	(26.25 - 32.77)	19.25	(16.56 - 22.26)
Northern	36.29	(32.86 - 39.85)	26.70	(23.57 - 30.09)
Oakland	29.71	(26.54 - 33.09)	20.92	(18.20 - 23.92)
Pathways	36.76	(31.89 - 41.91)	26.34	(22.17 - 30.99)
Saginaw	31.09	(26.22 - 36.43)	22.03	(17.91 - 26.79)
Southeast	29.41	(26.61 - 32.38)	19.05	(16.63 - 21.73)
St. Clair	29.94	(25.61 - 34.66)	22.01	(18.36 - 26.16)
Washtenaw	32.90	(28.95 - 37.10)	22.20	(18.66 - 26.19)
Western	28.81	(24.00 - 34.14)	22.73	(18.89 - 27.09)

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.

<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, 2002, 2003, and 2004.

**Table 23.6 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 Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	Cigarette Use in 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	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	28.17	(26.94 - 29.43)	32.33	(31.02 - 33.67)	71.13	(69.88 - 72.34)
Bay	30.14	(26.39 - 34.17)	34.98	(30.73 - 39.48)	68.15	(64.43 - 71.66)
Detroit City	30.67	(27.44 - 34.10)	33.40	(30.02 - 36.96)	72.91	(70.04 - 75.61)
Genesee	29.34	(25.91 - 33.02)	32.88	(29.28 - 36.70)	70.25	(66.81 - 73.48)
Kalamazoo	30.24	(26.95 - 33.75)	35.37	(31.85 - 39.06)	70.82	(67.94 - 73.55)
Kent	26.72	(23.72 - 29.95)	30.40	(27.16 - 33.84)	72.62	(69.52 - 75.52)
Lakeshore	28.21	(25.36 - 31.23)	31.83	(28.67 - 35.15)	70.91	(68.00 - 73.66)
Macomb	26.99	(24.04 - 30.16)	31.20	(27.89 - 34.73)	71.25	(68.21 - 74.11)
Mid South	29.56	(26.83 - 32.45)	34.45	(31.32 - 37.73)	68.15	(65.28 - 70.89)
Northern	28.67	(25.65 - 31.90)	33.81	(30.48 - 37.30)	68.89	(65.75 - 71.86)
Oakland	24.52	(21.94 - 27.30)	28.67	(25.88 - 31.64)	73.85	(71.13 - 76.40)
Pathways	30.77	(26.93 - 34.90)	36.53	(31.81 - 41.53)	70.17	(66.47 - 73.63)
Saginaw	27.75	(24.20 - 31.61)	32.10	(28.09 - 36.40)	70.32	(66.66 - 73.72)
Southeast	29.21	(26.51 - 32.06)	33.10	(30.27 - 36.06)	71.66	(68.94 - 74.24)
St. Clair	30.43	(26.69 - 34.44)	34.61	(30.57 - 38.89)	68.32	(64.71 - 71.71)
Washtenaw	23.10	(20.37 - 26.07)	26.63	(23.49 - 30.01)	74.59	(71.68 - 77.28)
Western	28.02	(23.99 - 32.44)	33.50	(29.05 - 38.27)	69.74	(65.90 - 73.33)

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.

<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, 2002, 2003, and 2004.

**Table 23.7 Alcohol Dependence in Past Year and Any Illicit Drug Dependence in Past Year in Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	Alcohol Dependence in Past Year		Any Illicit Drug Dependence in Past Year <sup>1</sup>	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	3.71	(3.30 - 4.17)	2.09	(1.82 - 2.41)
Bay	3.34	(2.50 - 4.47)	1.68	(1.22 - 2.31)
Detroit City	4.79	(3.62 - 6.31)	3.19	(2.26 - 4.49)
Genesee	3.59	(2.71 - 4.74)	2.25	(1.66 - 3.03)
Kalamazoo	4.56	(3.51 - 5.91)	2.17	(1.63 - 2.87)
Kent	4.25	(3.27 - 5.53)	2.26	(1.70 - 3.01)
Lakeshore	3.46	(2.72 - 4.40)	1.90	(1.43 - 2.53)
Macomb	3.61	(2.79 - 4.65)	1.77	(1.33 - 2.34)
Mid South	3.65	(2.91 - 4.58)	1.93	(1.48 - 2.52)
Northern	3.37	(2.62 - 4.33)	1.73	(1.31 - 2.27)
Oakland	3.39	(2.67 - 4.30)	2.28	(1.74 - 2.99)
Pathways	3.73	(2.77 - 5.01)	1.95	(1.42 - 2.67)
Saginaw	3.45	(2.55 - 4.65)	1.86	(1.32 - 2.62)
Southeast	3.67	(2.87 - 4.68)	1.98	(1.52 - 2.56)
St. Clair	3.08	(2.28 - 4.13)	1.78	(1.31 - 2.42)
Washtenaw	3.40	(2.58 - 4.47)	2.13	(1.59 - 2.84)
Western	3.45	(2.51 - 4.73)	1.76	(1.27 - 2.43)

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 4<sup>th</sup> edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>1</sup> Any Illicit Drug includes marijuana/hashish, 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, 2002, 2003, and 2004.

**Table 23.8 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 Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

State/Substate Region	Alcohol Dependence or Abuse in Past Year		Any Illicit Drug Dependence or Abuse in Past Year <sup>1</sup>		Dependence on or Abuse of Any Illicit Drug or Alcohol in Past Year <sup>1</sup>	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	8.17	(7.54 - 8.84)	3.15	(2.81 - 3.54)	9.88	(9.20 - 10.61)
Bay	7.95	(6.40 - 9.83)	2.94	(2.22 - 3.88)	9.12	(7.45 - 11.13)
Detroit City	8.31	(6.75 - 10.19)	4.08	(3.07 - 5.41)	11.24	(9.33 - 13.48)
Genesee	8.02	(6.49 - 9.87)	3.45	(2.64 - 4.48)	10.14	(8.46 - 12.11)
Kalamazoo	9.95	(8.36 - 11.81)	3.18	(2.52 - 4.00)	11.38	(9.69 - 13.31)
Kent	9.08	(7.54 - 10.89)	3.09	(2.42 - 3.94)	10.38	(8.75 - 12.27)
Lakeshore	8.07	(6.78 - 9.58)	3.20	(2.53 - 4.04)	9.63	(8.20 - 11.28)
Macomb	7.99	(6.62 - 9.60)	3.00	(2.35 - 3.81)	10.14	(8.56 - 11.98)
Mid South	8.37	(7.08 - 9.88)	2.99	(2.40 - 3.71)	9.82	(8.44 - 11.40)
Northern	8.58	(7.18 - 10.23)	2.99	(2.36 - 3.78)	9.98	(8.50 - 11.68)
Oakland	7.58	(6.32 - 9.07)	3.32	(2.64 - 4.17)	9.20	(7.81 - 10.80)
Pathways	8.94	(7.23 - 11.00)	3.04	(2.30 - 4.02)	10.53	(8.61 - 12.81)
Saginaw	7.69	(6.15 - 9.58)	3.06	(2.33 - 4.02)	9.30	(7.52 - 11.44)
Southeast	7.77	(6.50 - 9.27)	2.81	(2.21 - 3.56)	9.45	(8.02 - 11.12)
St. Clair	7.22	(5.82 - 8.92)	2.81	(2.14 - 3.67)	8.38	(6.82 - 10.26)
Washtenaw	7.77	(6.35 - 9.47)	3.17	(2.45 - 4.08)	9.47	(7.88 - 11.35)
Western	7.21	(5.67 - 9.14)	2.75	(2.06 - 3.66)	9.00	(7.25 - 11.12)

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 or abuse is based on definitions found in the 4<sup>th</sup> edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>1</sup> Any Illicit Drug includes marijuana/hashish, 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, 2002, 2003, and 2004.



**Table 23.9** *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 Michigan among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs*

State/Substate Region	Needing But Not Receiving Treatment for Alcohol Use in Past Year <sup>1</sup>		Needing But Not Receiving Treatment for Illicit Drug Use in Past Year <sup>2</sup>	
	Estimate	95% Prediction Interval	Estimate	95% Prediction Interval
<b>Michigan</b>	7.72	(7.11 - 8.38)	2.72	(2.43 - 3.04)
Bay	7.47	(6.00 - 9.27)	2.46	(1.90 - 3.16)
Detroit City	7.69	(6.25 - 9.42)	3.73	(2.84 - 4.88)
Genesee	7.49	(6.06 - 9.23)	2.91	(2.28 - 3.70)
Kalamazoo	9.21	(7.69 - 10.98)	2.80	(2.23 - 3.51)
Kent	8.59	(7.15 - 10.28)	2.86	(2.27 - 3.61)
Lakeshore	7.58	(6.30 - 9.10)	2.68	(2.16 - 3.32)
Macomb	7.52	(6.21 - 9.08)	2.51	(2.00 - 3.16)
Mid South	7.99	(6.79 - 9.39)	2.59	(2.10 - 3.20)
Northern	7.94	(6.58 - 9.54)	2.53	(2.04 - 3.14)
Oakland	7.28	(6.11 - 8.65)	2.71	(2.20 - 3.34)
Pathways	8.11	(6.55 - 10.00)	2.60	(1.99 - 3.38)
Saginaw	7.22	(5.76 - 9.02)	2.60	(1.99 - 3.39)
Southeast	7.47	(6.26 - 8.89)	2.54	(2.02 - 3.20)
St. Clair	6.90	(5.52 - 8.60)	2.31	(1.80 - 2.97)
Washtenaw	7.68	(6.32 - 9.30)	2.62	(2.08 - 3.31)
Western	6.99	(5.55 - 8.77)	2.36	(1.80 - 3.09)

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.

<sup>1</sup> 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).

<sup>2</sup> 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).

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

**Table 23.10** *Serious Psychological Distress in Past Year* in Michigan among Persons Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs

State/Substate Region	Serious Psychological Distress in Past Year	
	Estimate	95% Prediction Interval
<b>Michigan</b>	8.86	(8.05 - 9.74)
Bay	8.66	(6.66 - 11.18)
Detroit City	9.27	(7.37 - 11.60)
Genesee	8.95	(7.06 - 11.29)
Kalamazoo	9.38	(7.49 - 11.69)
Kent	9.15	(7.27 - 11.45)
Lakeshore	8.33	(6.73 - 10.26)
Macomb	8.99	(7.29 - 11.05)
Mid South	8.21	(6.64 - 10.11)
Northern	10.36	(8.21 - 13.00)
Oakland	8.11	(6.52 - 10.05)
Pathways	9.09	(6.91 - 11.85)
Saginaw	8.05	(6.19 - 10.39)
Southeast	9.07	(7.45 - 11.00)
St. Clair	8.62	(6.63 - 11.15)
Washtenaw	8.46	(6.74 - 10.57)
Western	8.14	(6.18 - 10.65)

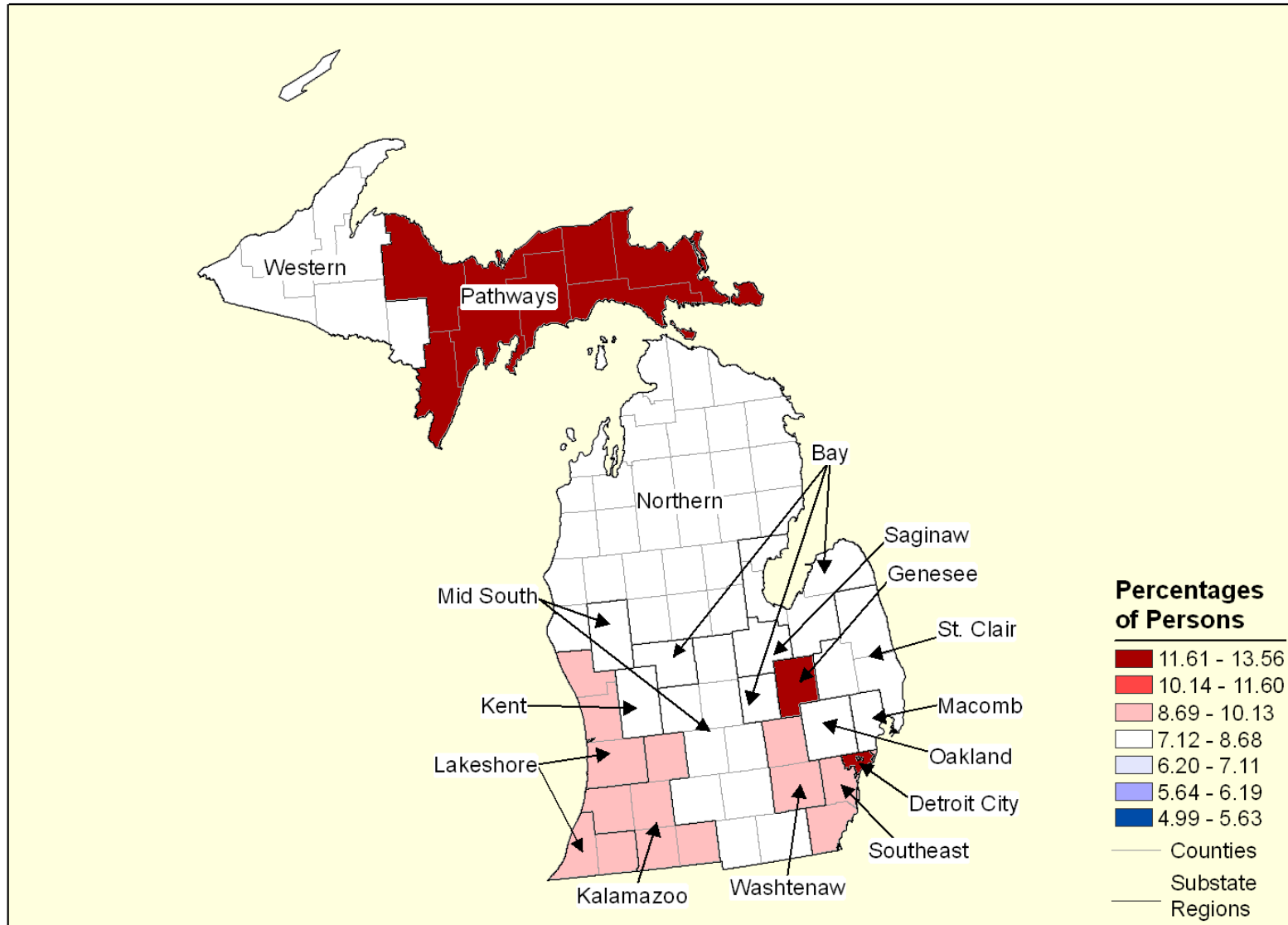
NOTE: For Substate Region definitions, see Section D of the report on *Substate Estimates from the 2002-2004 National Surveys on Drug Use and Health*.

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

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

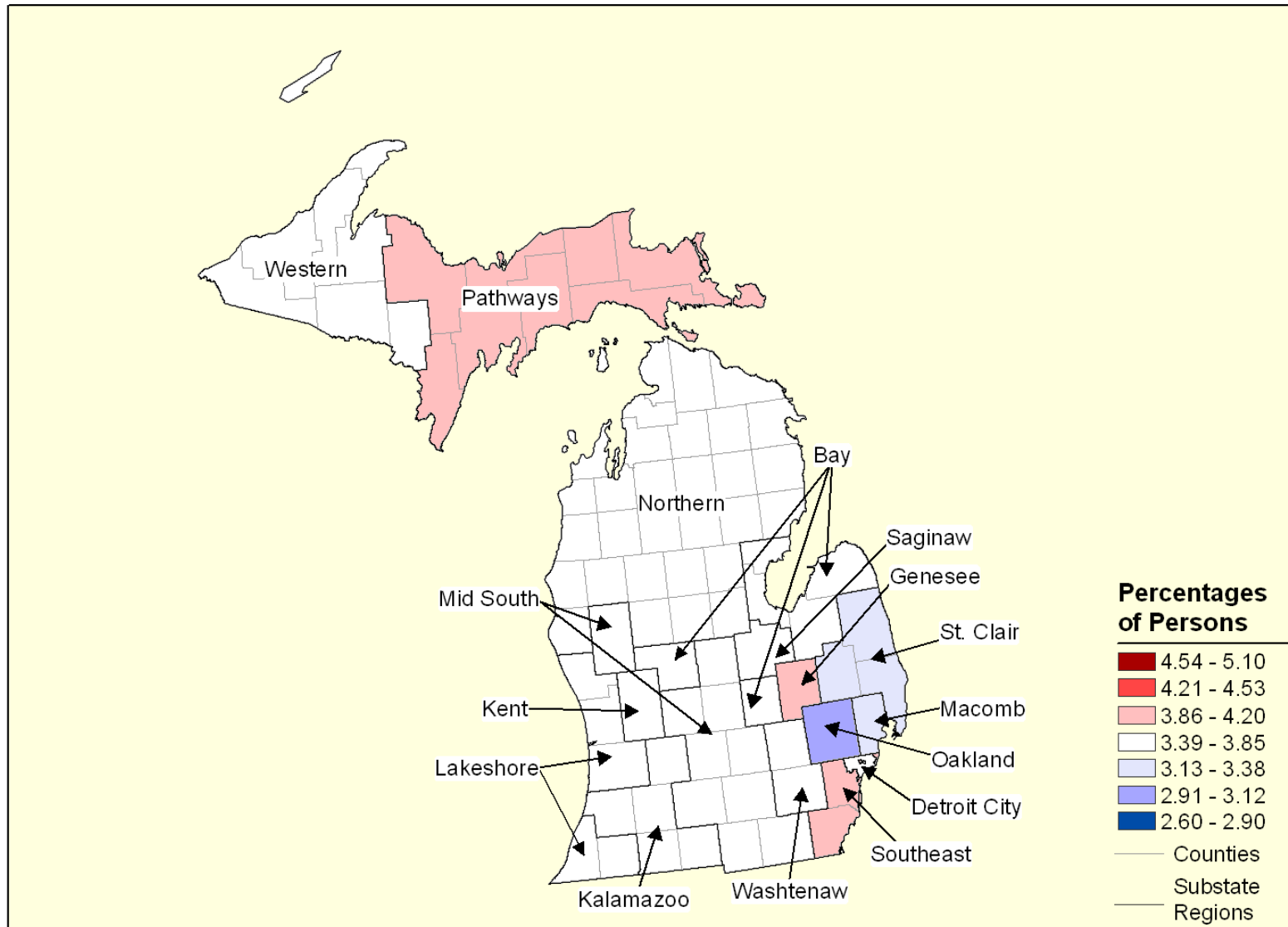
**Figure 23.1.1 Any Illicit Drug Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

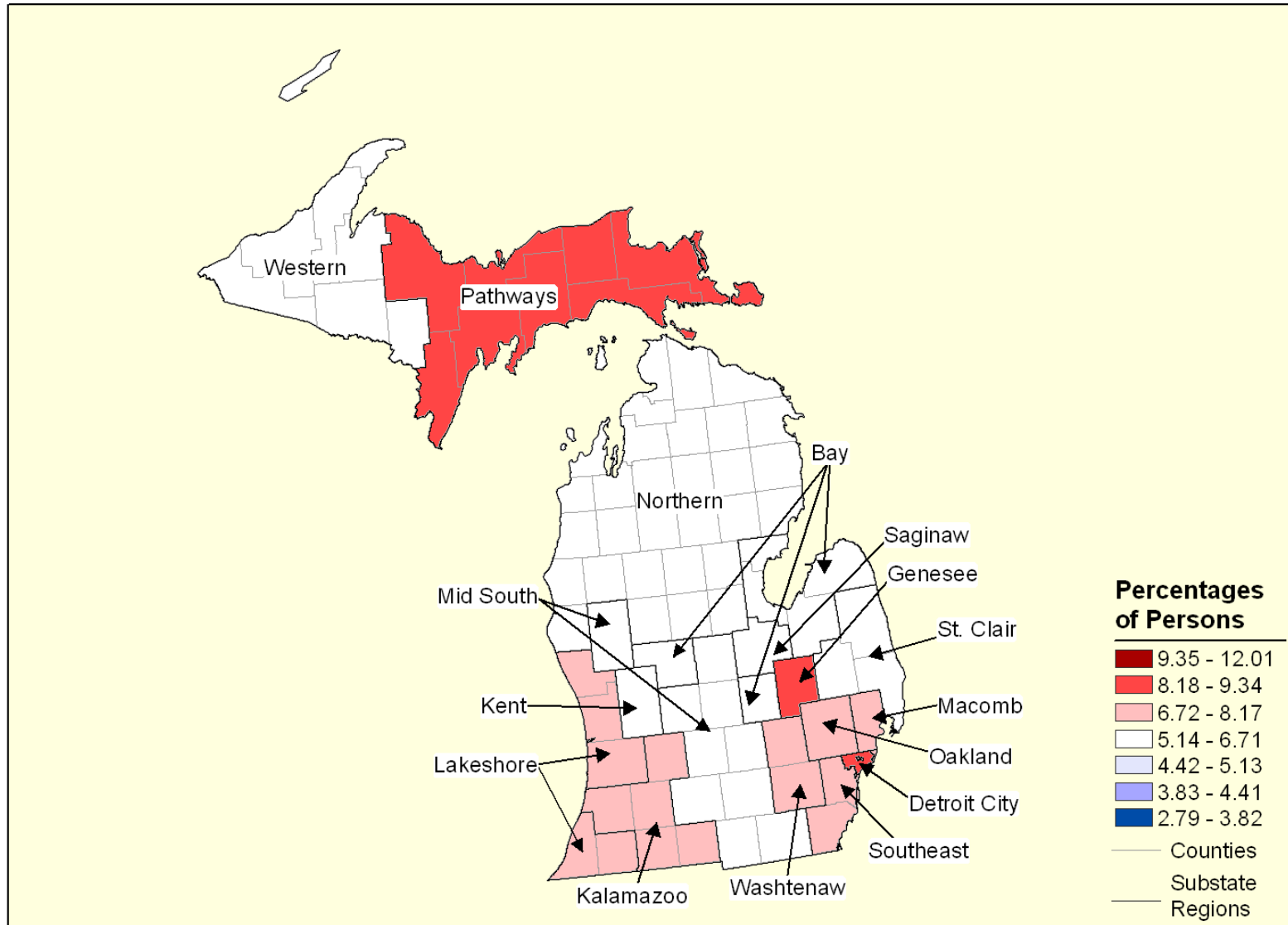
**Figure 23.1.2 Any Illicit Drug Use Other Than Marijuana in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

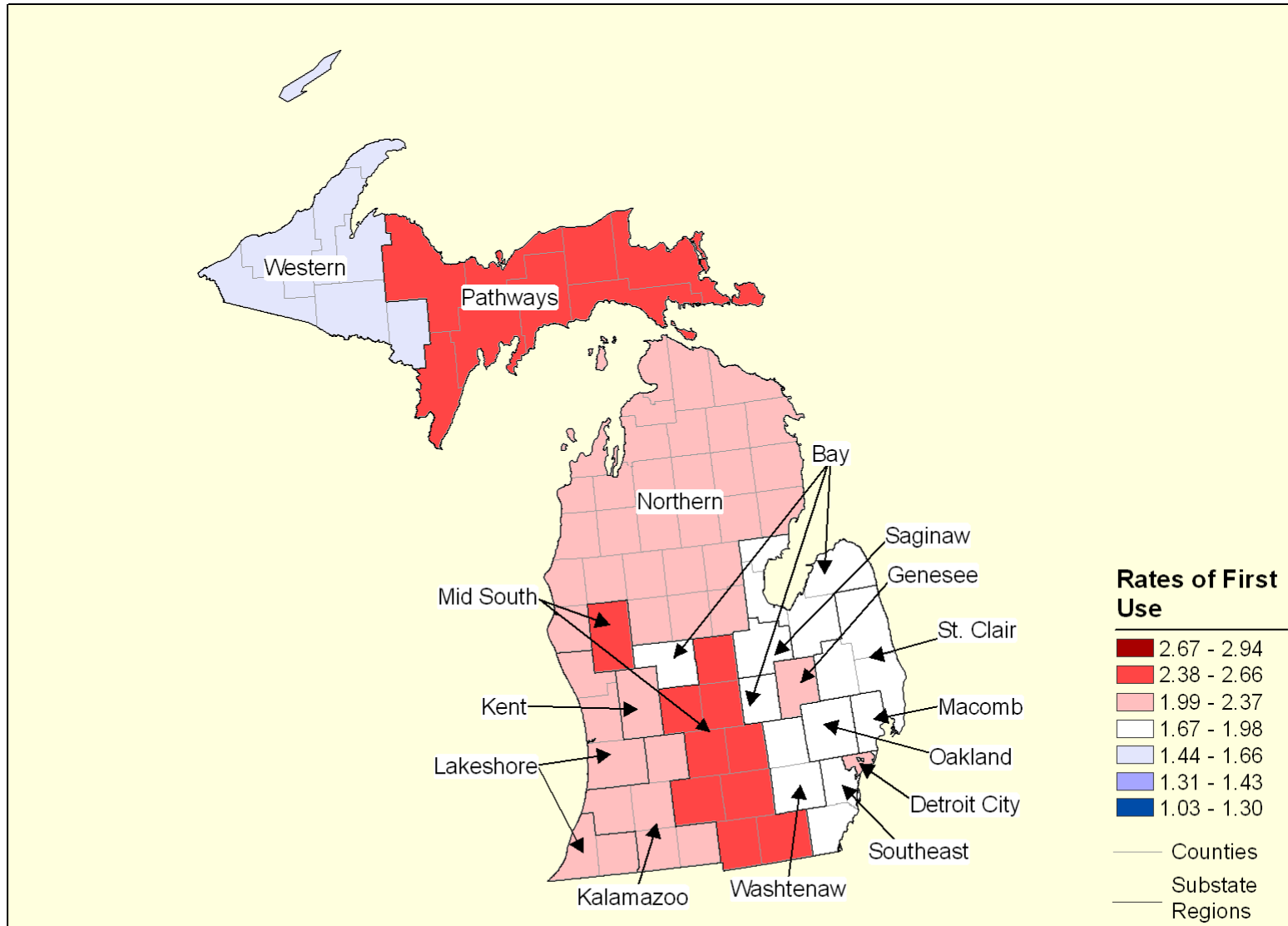
**Figure 23.2.1 Marijuana Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

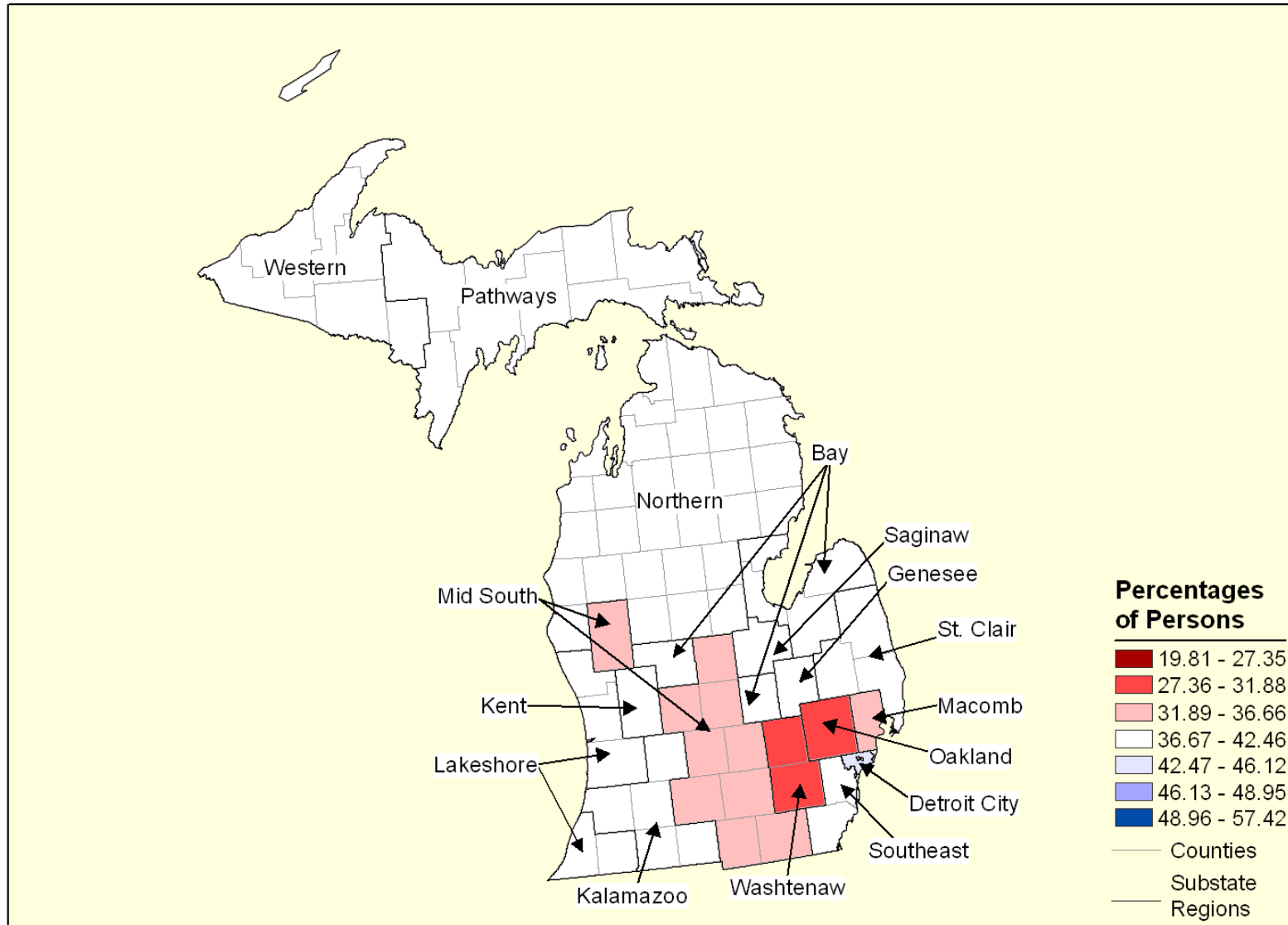
**Figure 23.2.2 First Use of Marijuana among Persons Aged 12 or Older in Michigan, by Substate Region: Average Annual Rates Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

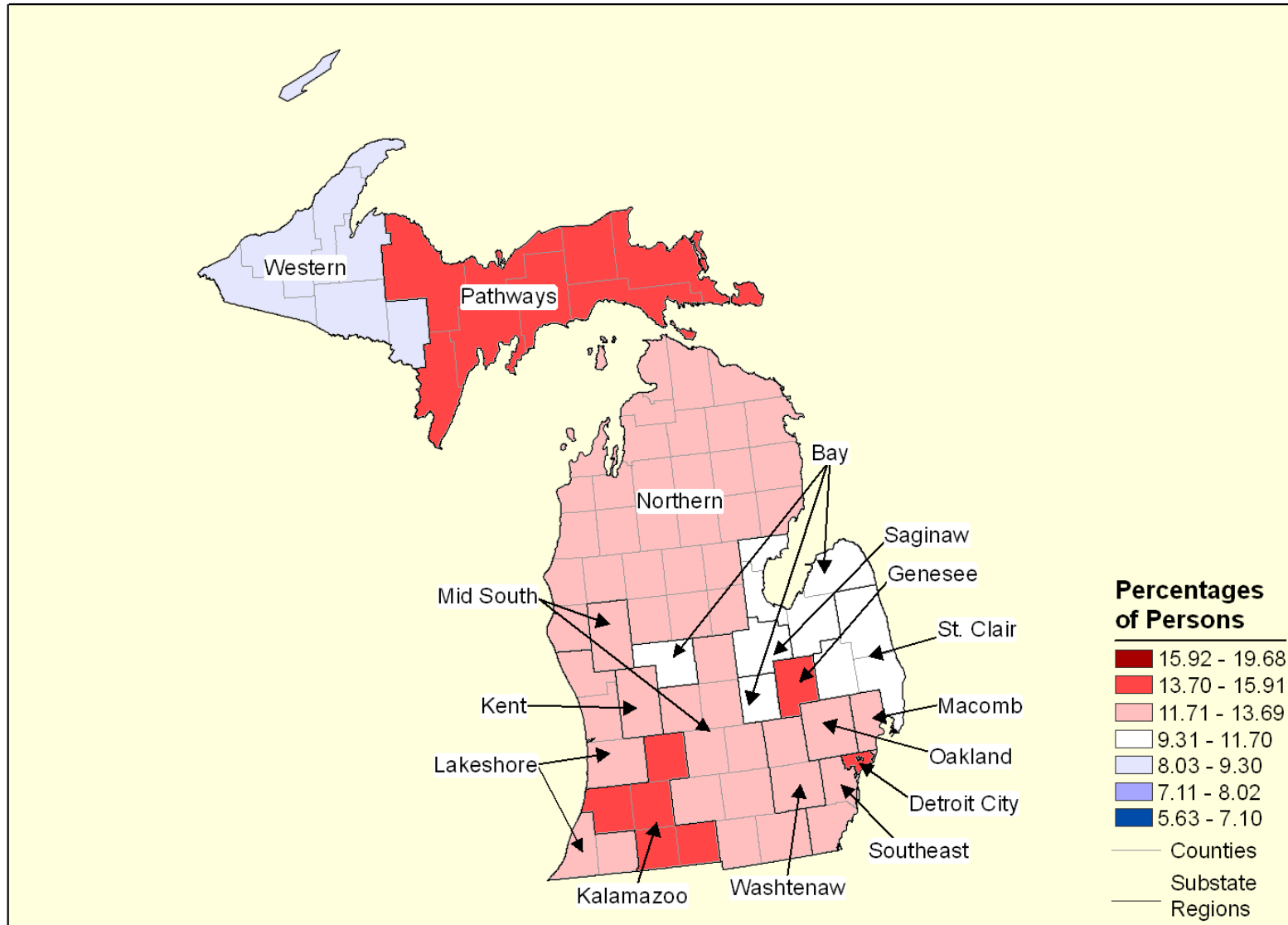
**Figure 23.2.3 Perceptions of Great Risk of Smoking Marijuana Once a Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

**Figure 23.3.1 Marijuana Use in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

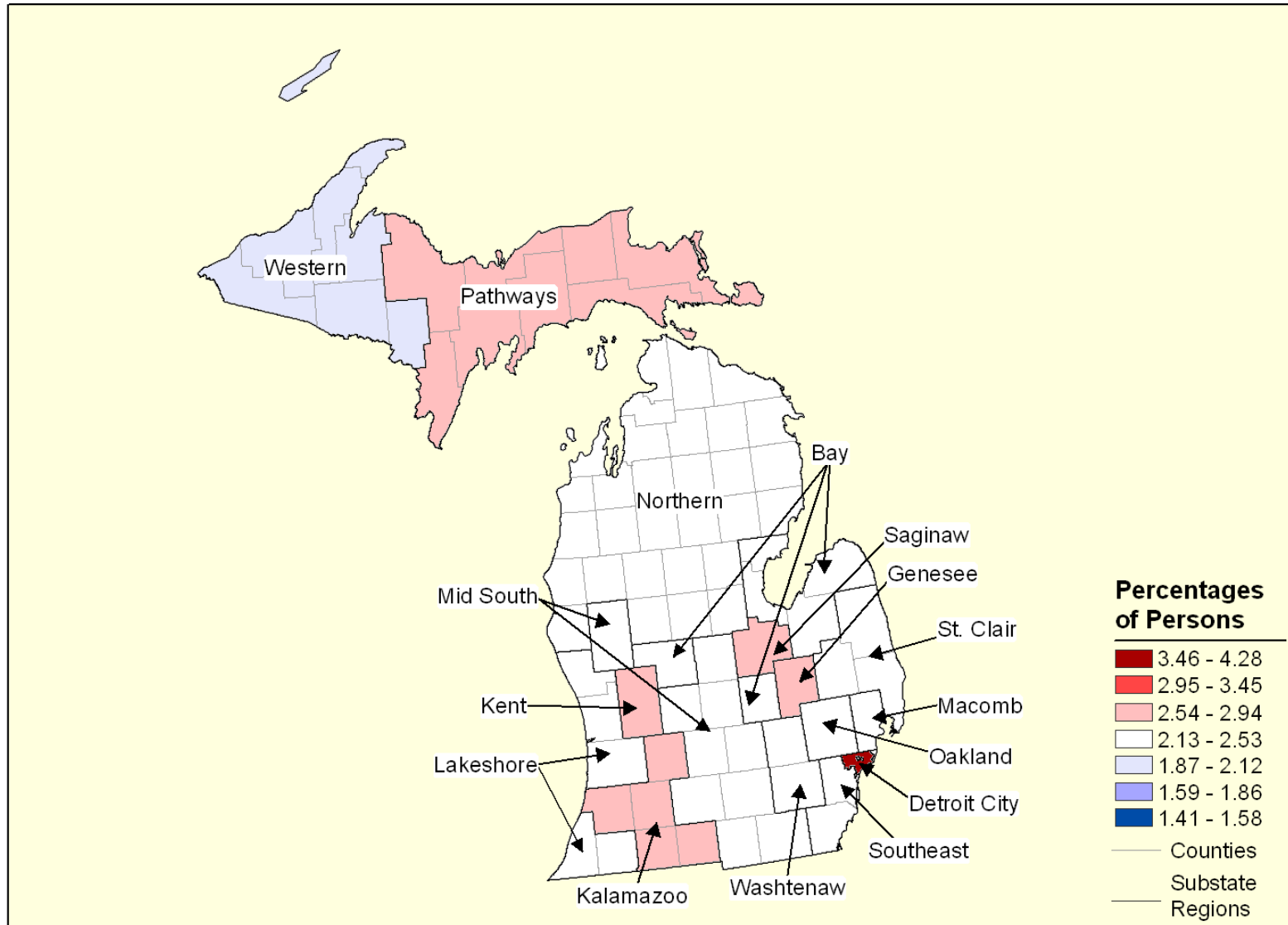


NOTE: The legend's ranges were created by dividing 340 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see Section D of the report on *Substate Estimates from the 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.



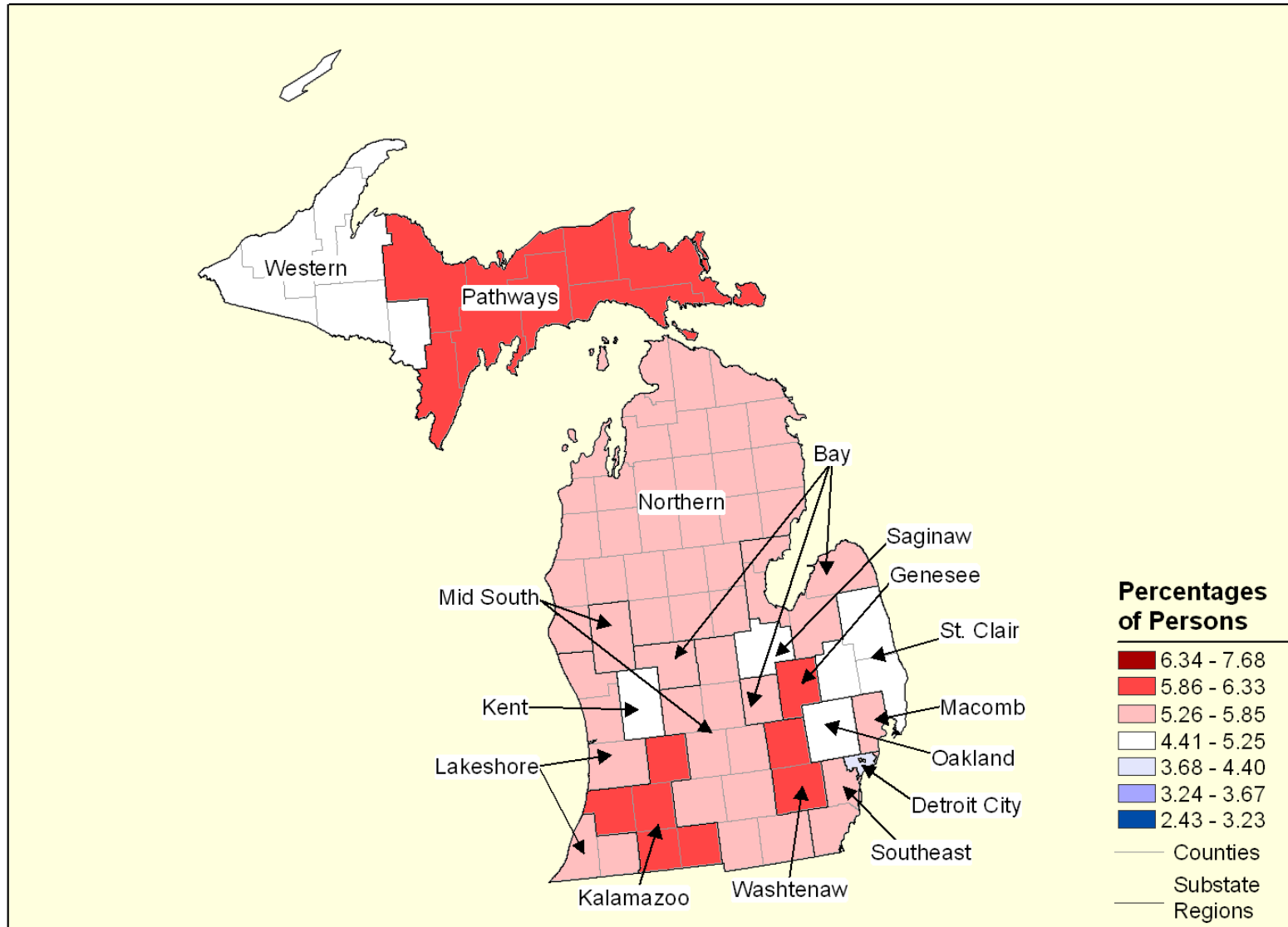
**Figure 23.3.2 Cocaine Use in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

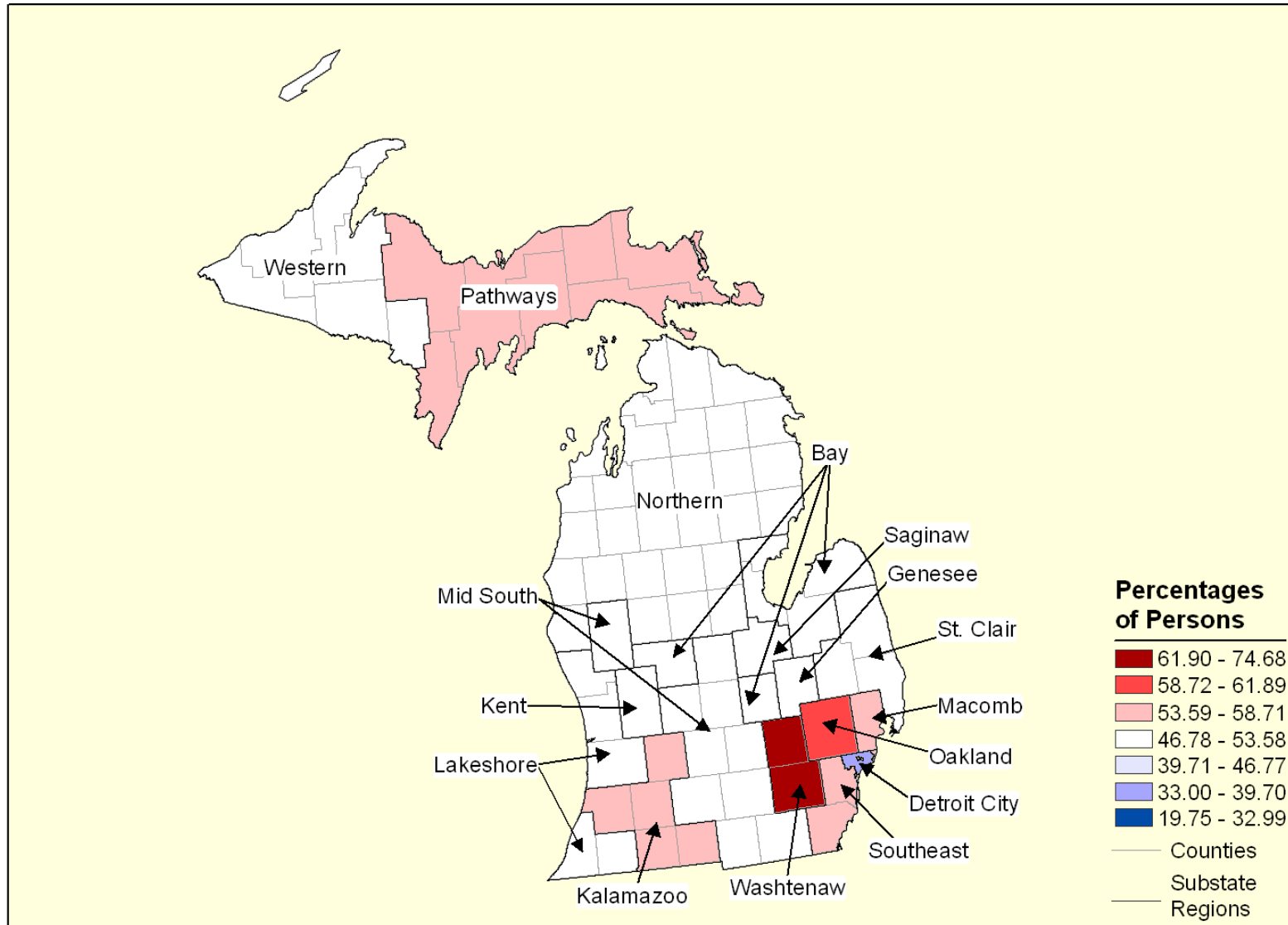
**Figure 23.3.3 Nonmedical Use of Pain Relievers in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

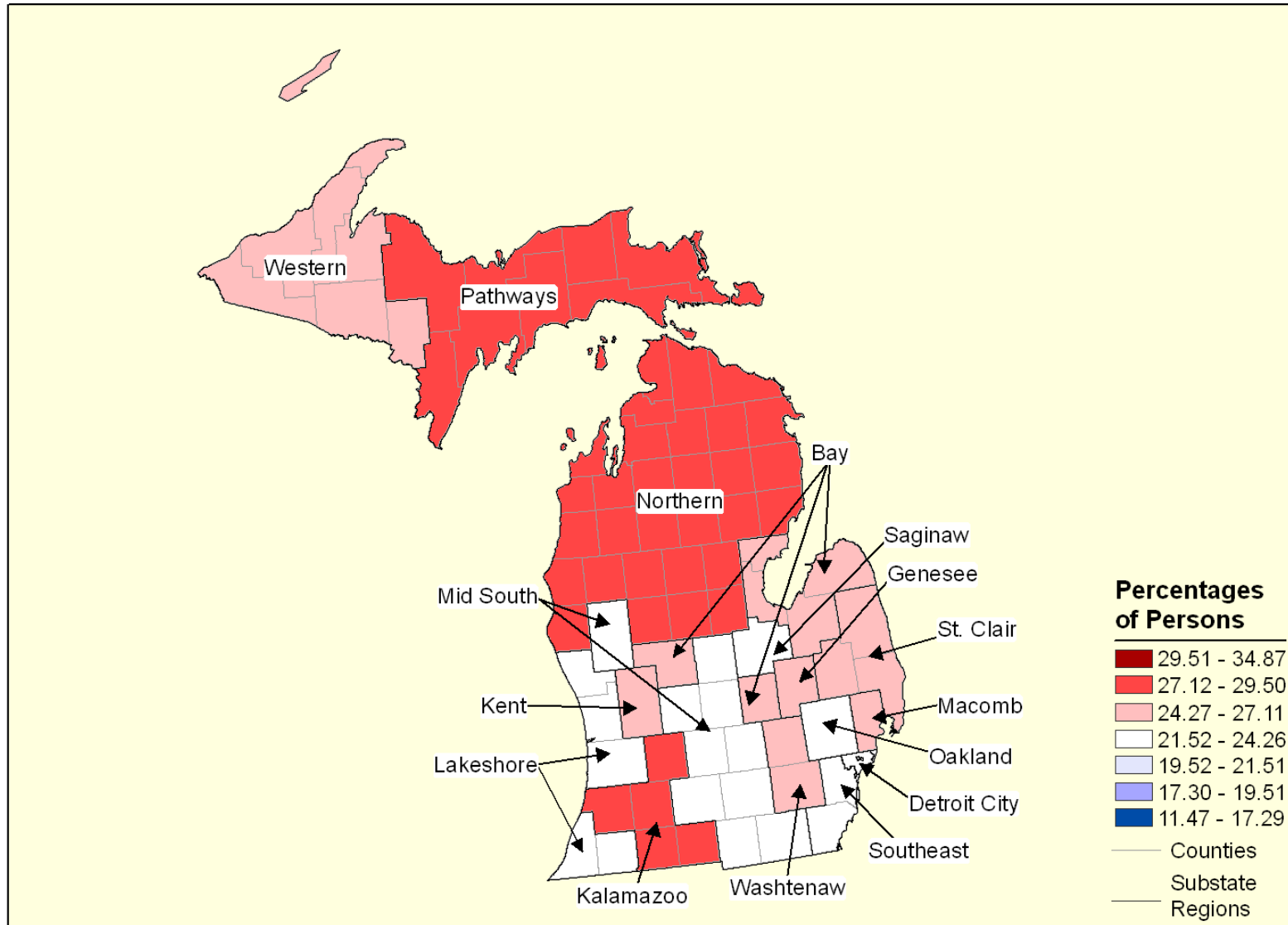
**Figure 23.4.1 Alcohol Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

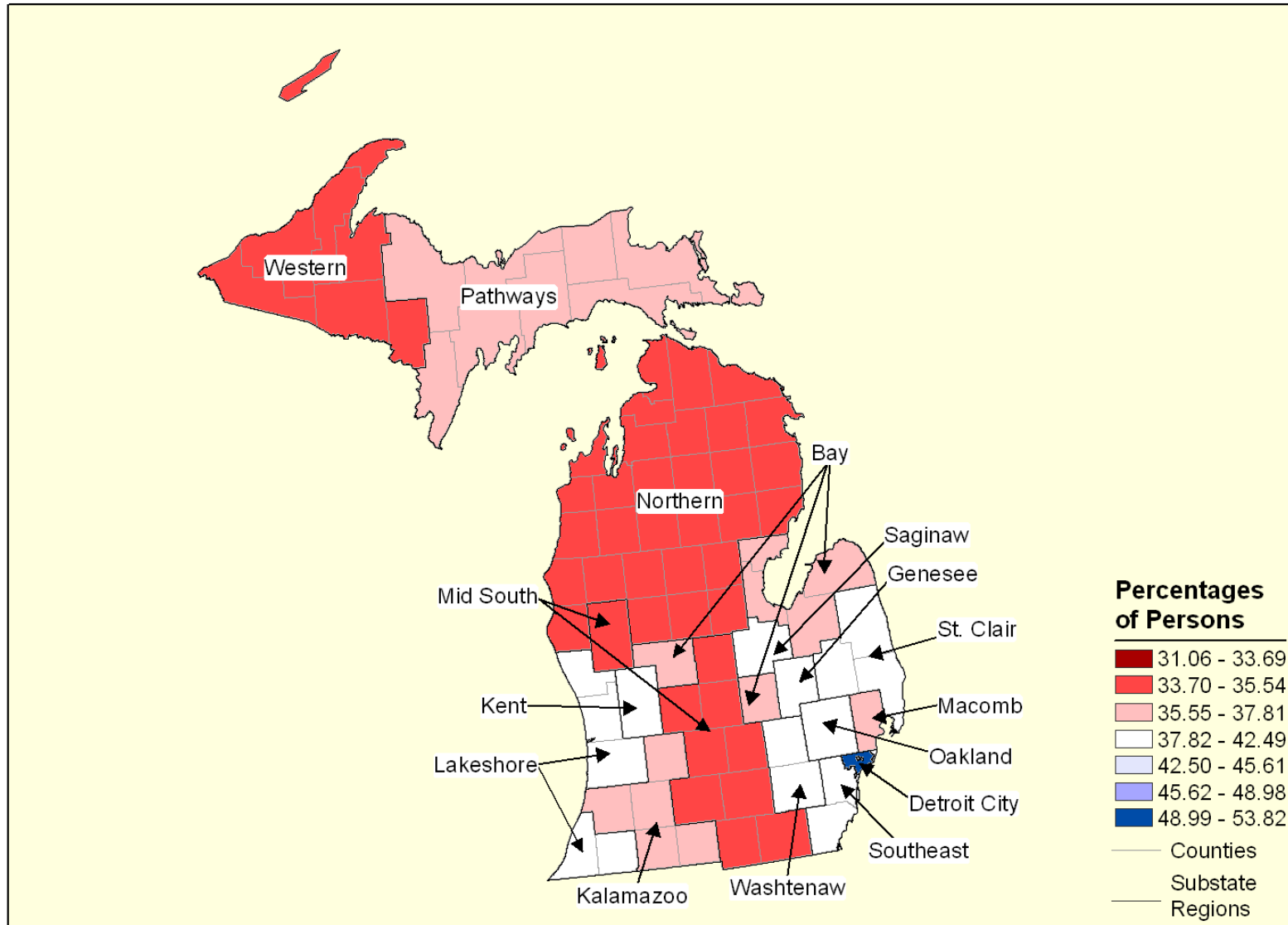
**Figure 23.4.2 Binge Alcohol Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

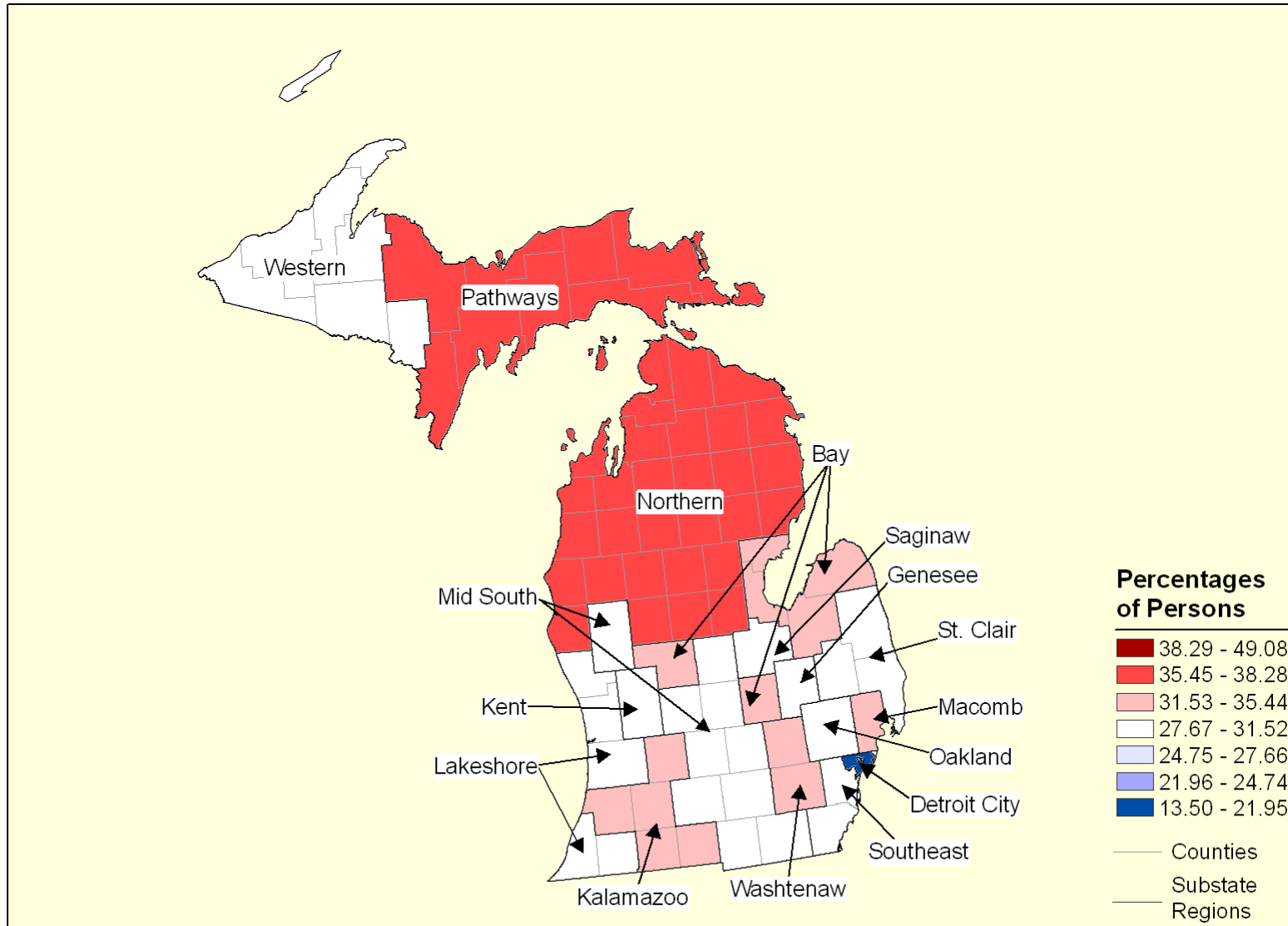
**Figure 23.4.3 Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

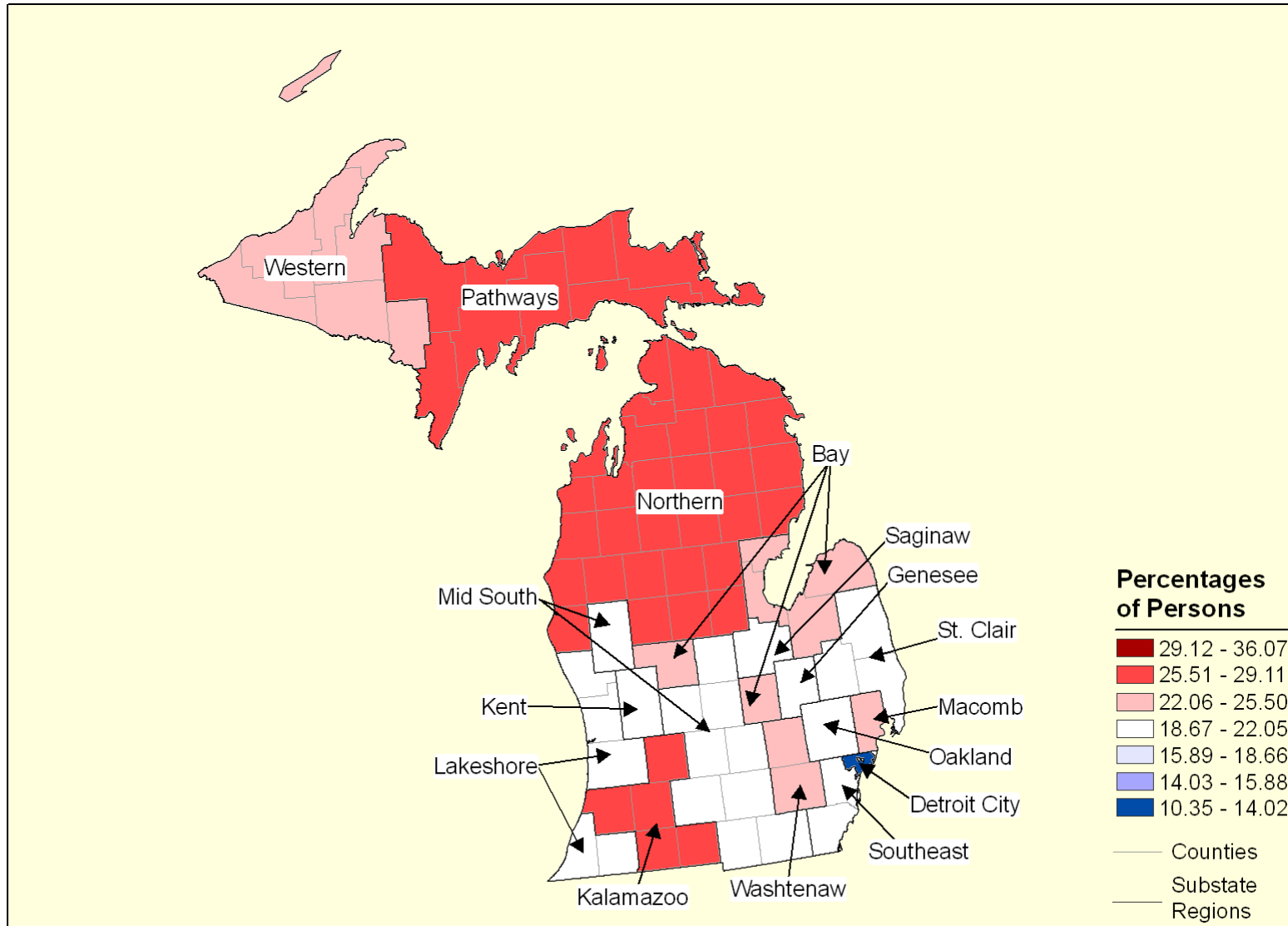
**Figure 23.5.1 Alcohol Use in Past Month among Persons Aged 12 to 20 in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

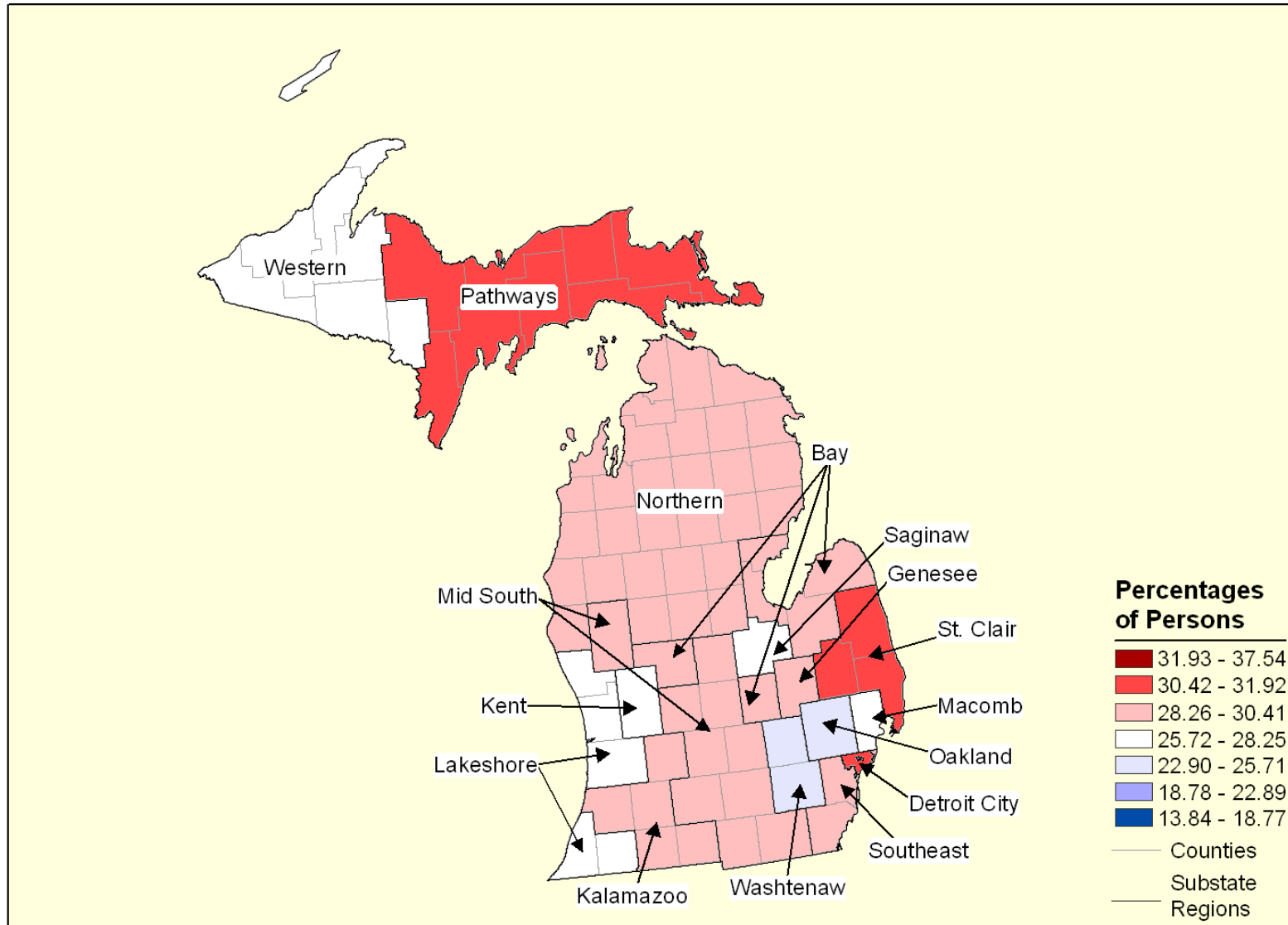
**Figure 23.5.2 Binge Alcohol Use in Past Month among Persons Aged 12 to 20 in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

**Figure 23.6.1 Cigarette Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

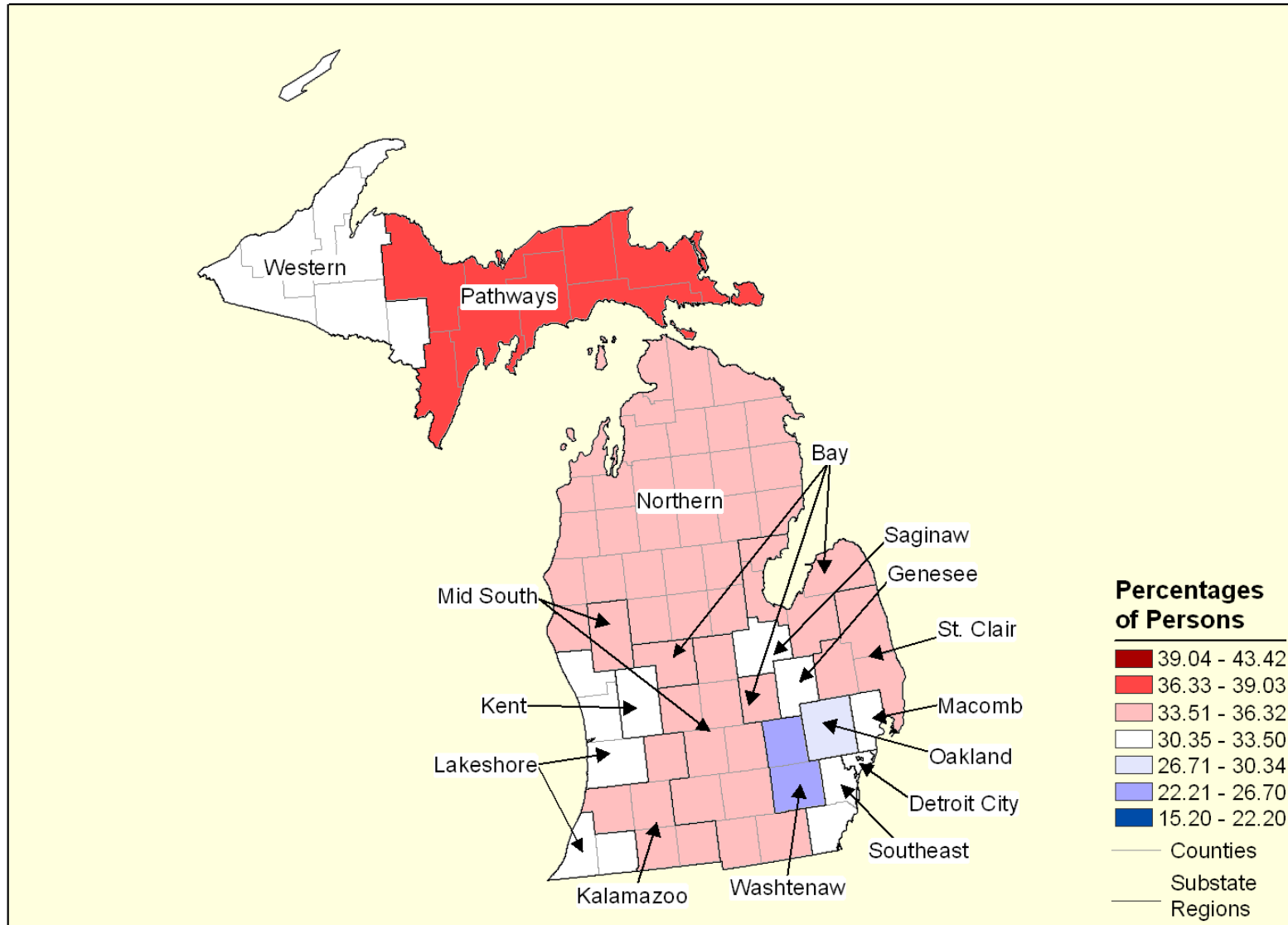


NOTE: The legend's ranges were created by dividing 340 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see Section D of the report on *Substate Estimates from the 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.



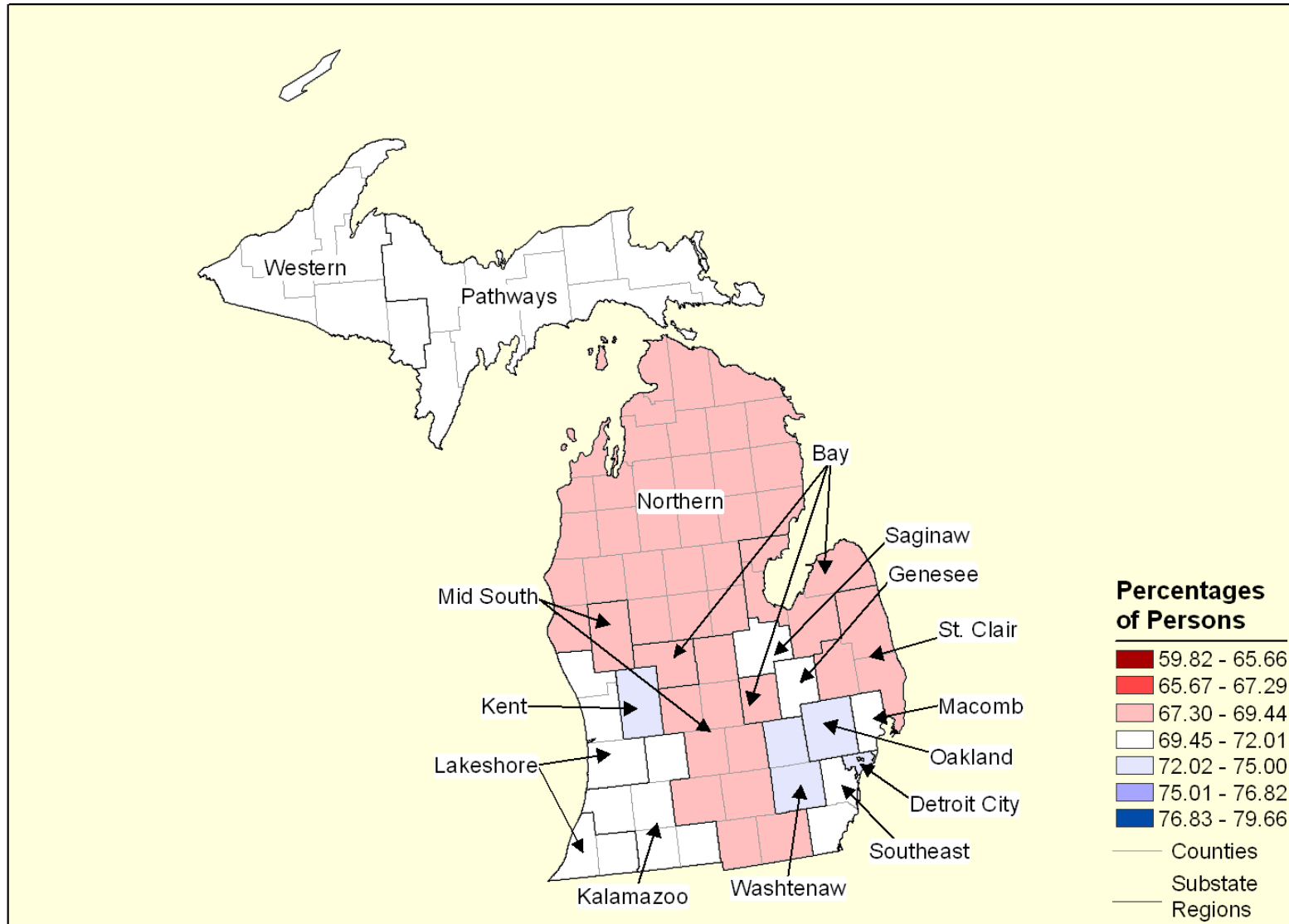
**Figure 23.6.2 Any Tobacco Product Use in Past Month among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

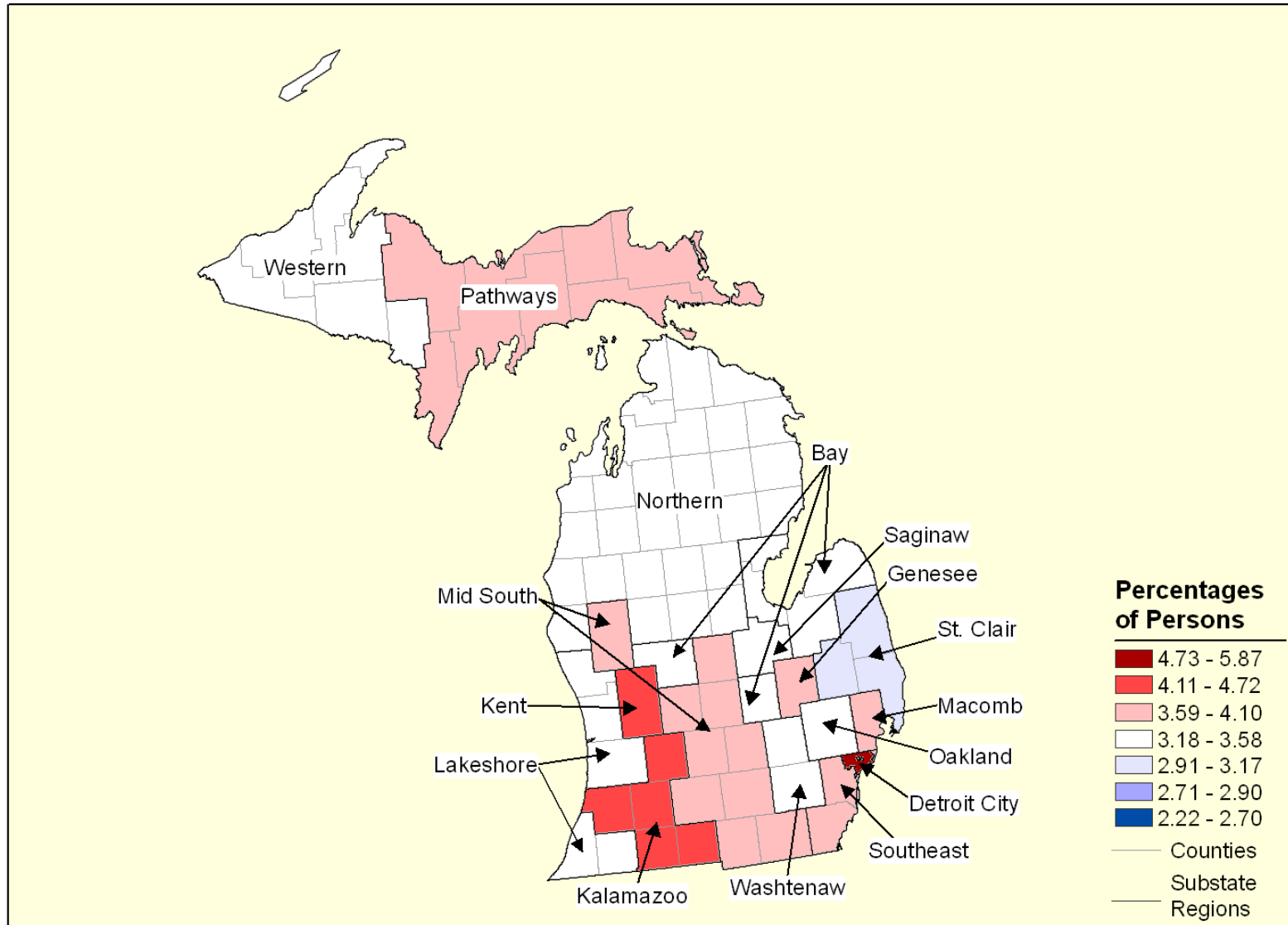
**Figure 23.6.3 Perceptions of Great Risk of Smoking One or More Packs of Cigarettes Per Day among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

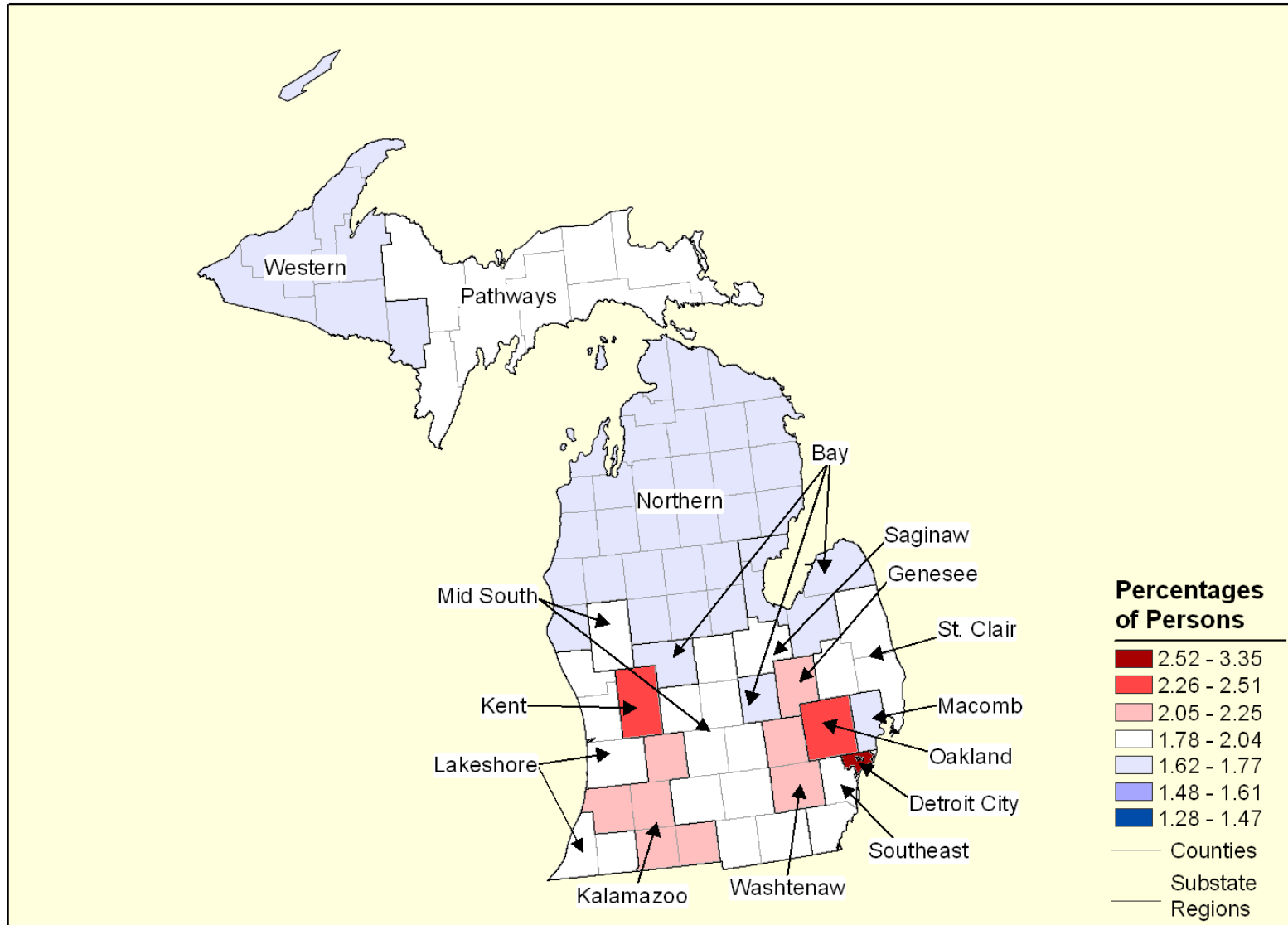
**Figure 23.7.1 Alcohol Dependence in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

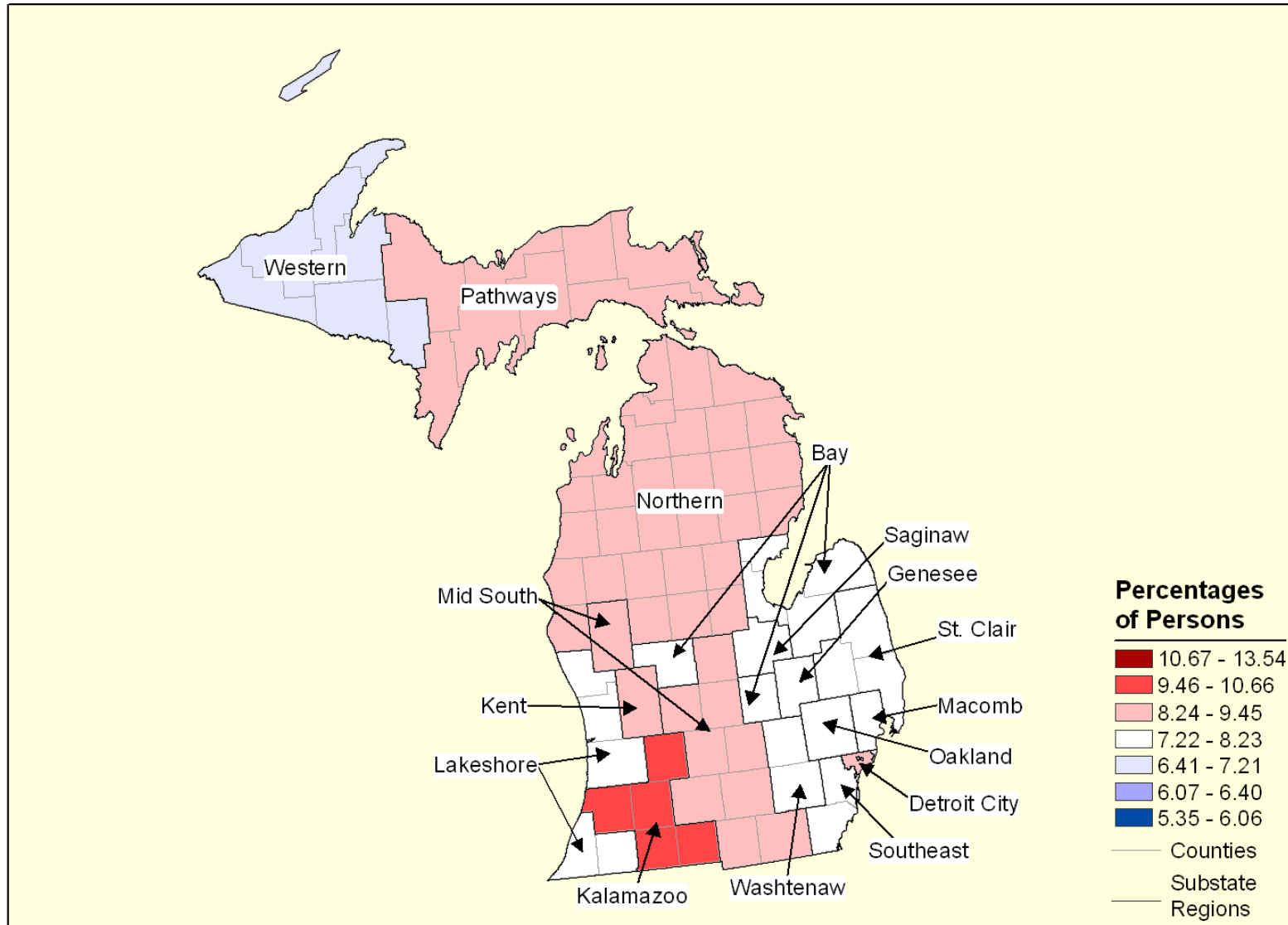
**Figure 23.7.2 Any Illicit Drug Dependence in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

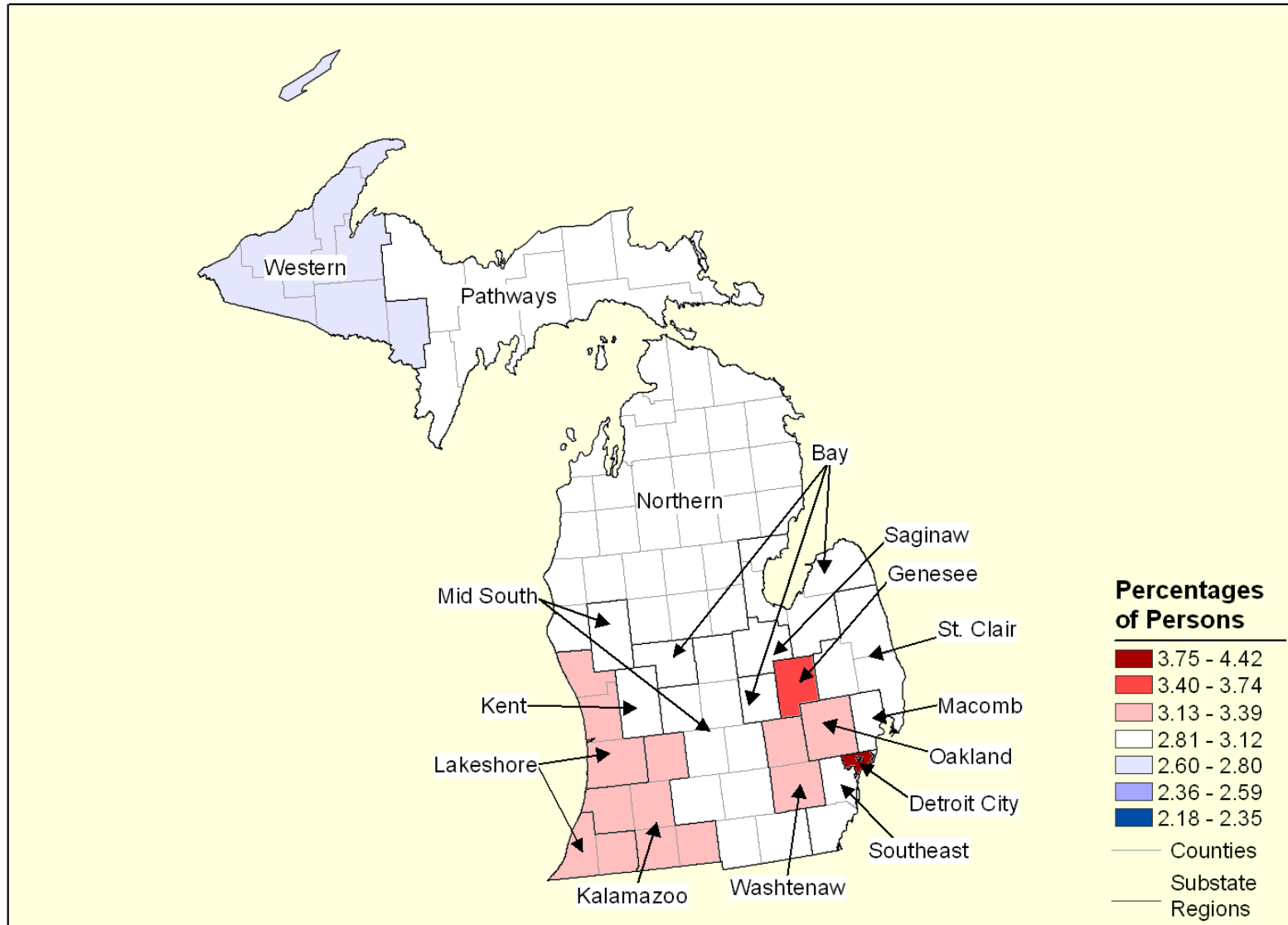
**Figure 23.8.1 Alcohol Dependence or Abuse in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

**Figure 23.8.2 Any Illicit Drug Dependence or Abuse in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs**

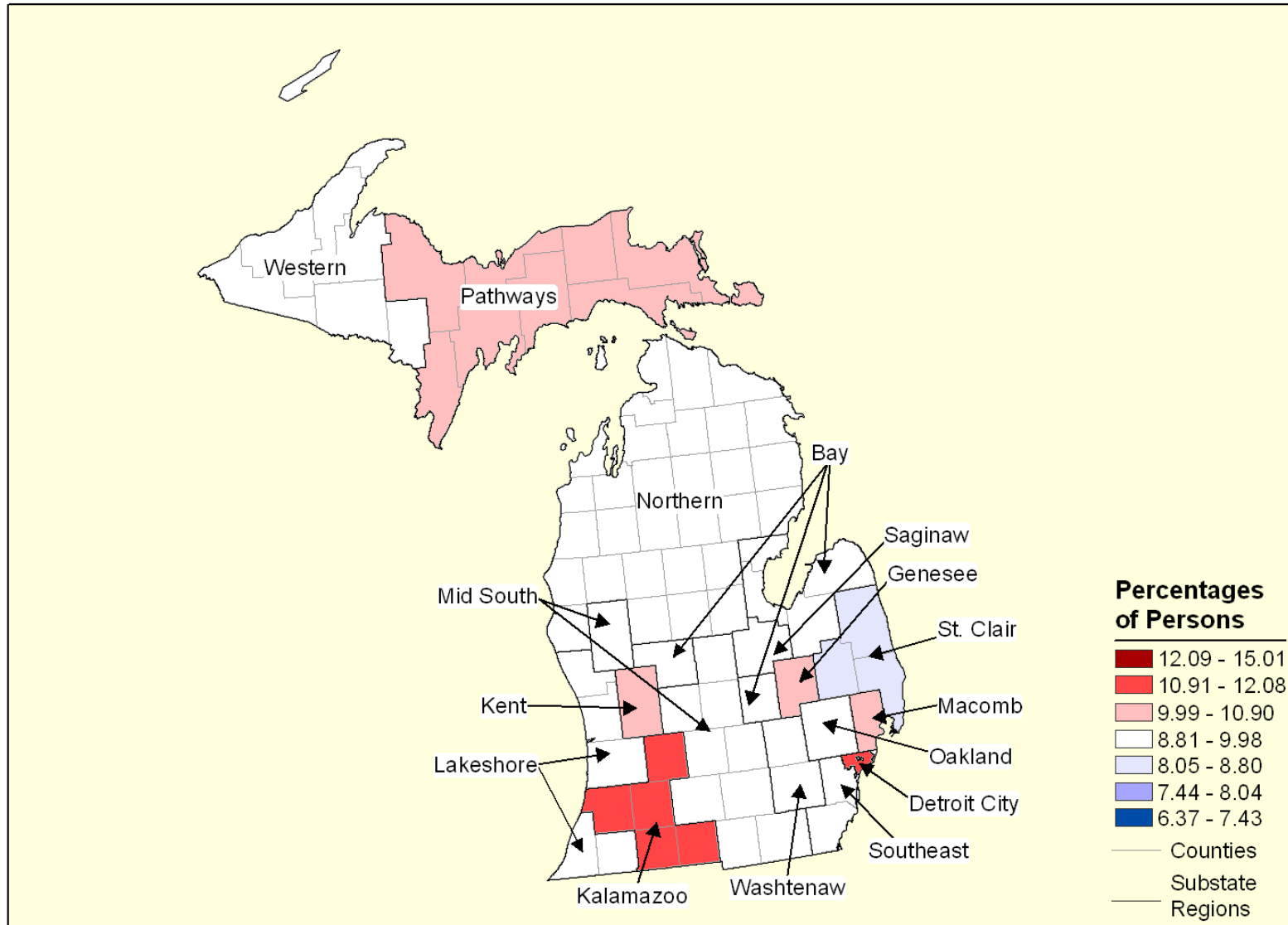


778

NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

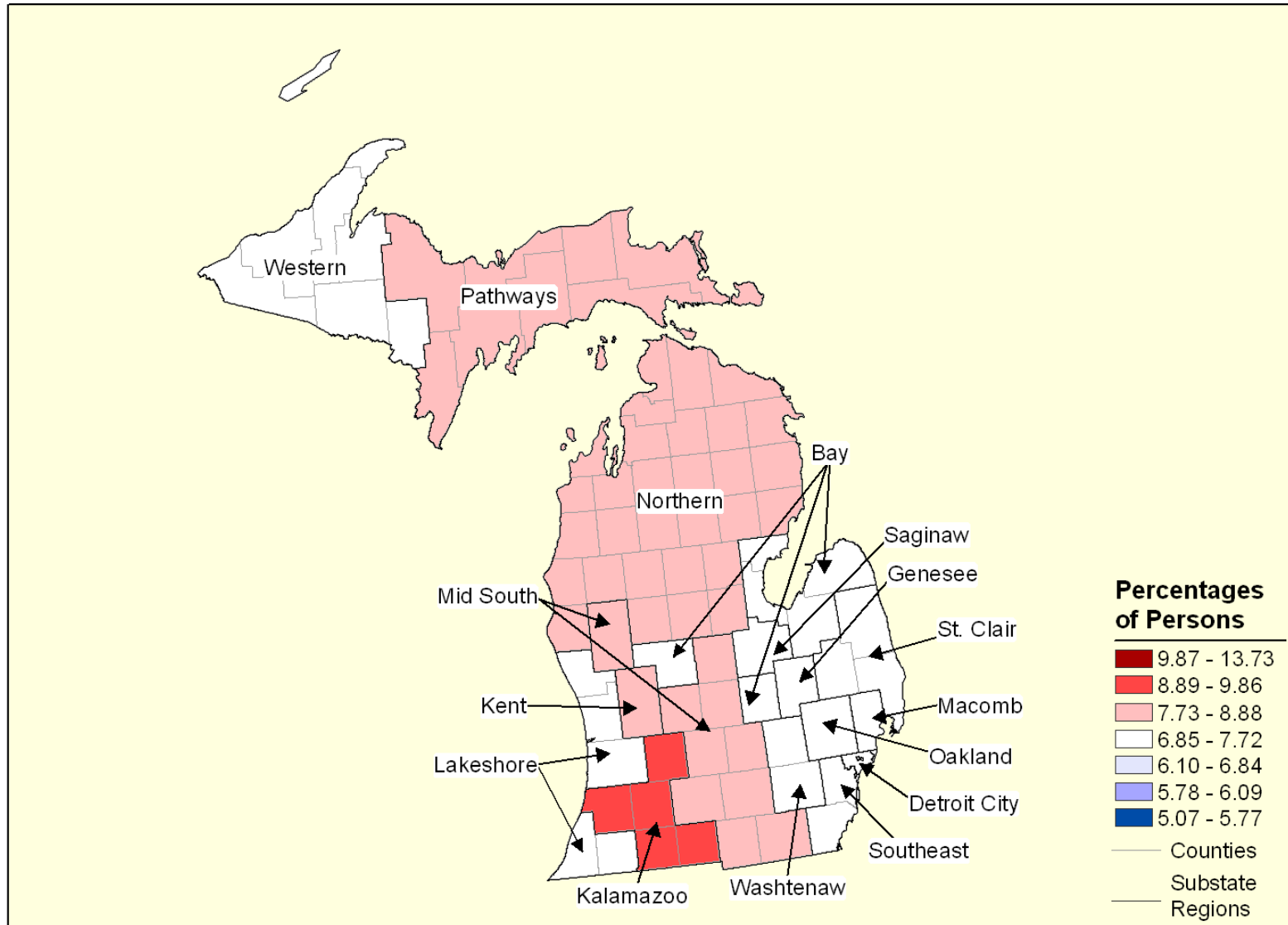
**Figure 23.8.3** *Dependence on or Abuse of Any Illicit Drug or Alcohol in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs*



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

**Figure 23.9.1** *Needing But Not Receiving Treatment for Alcohol Use in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs*

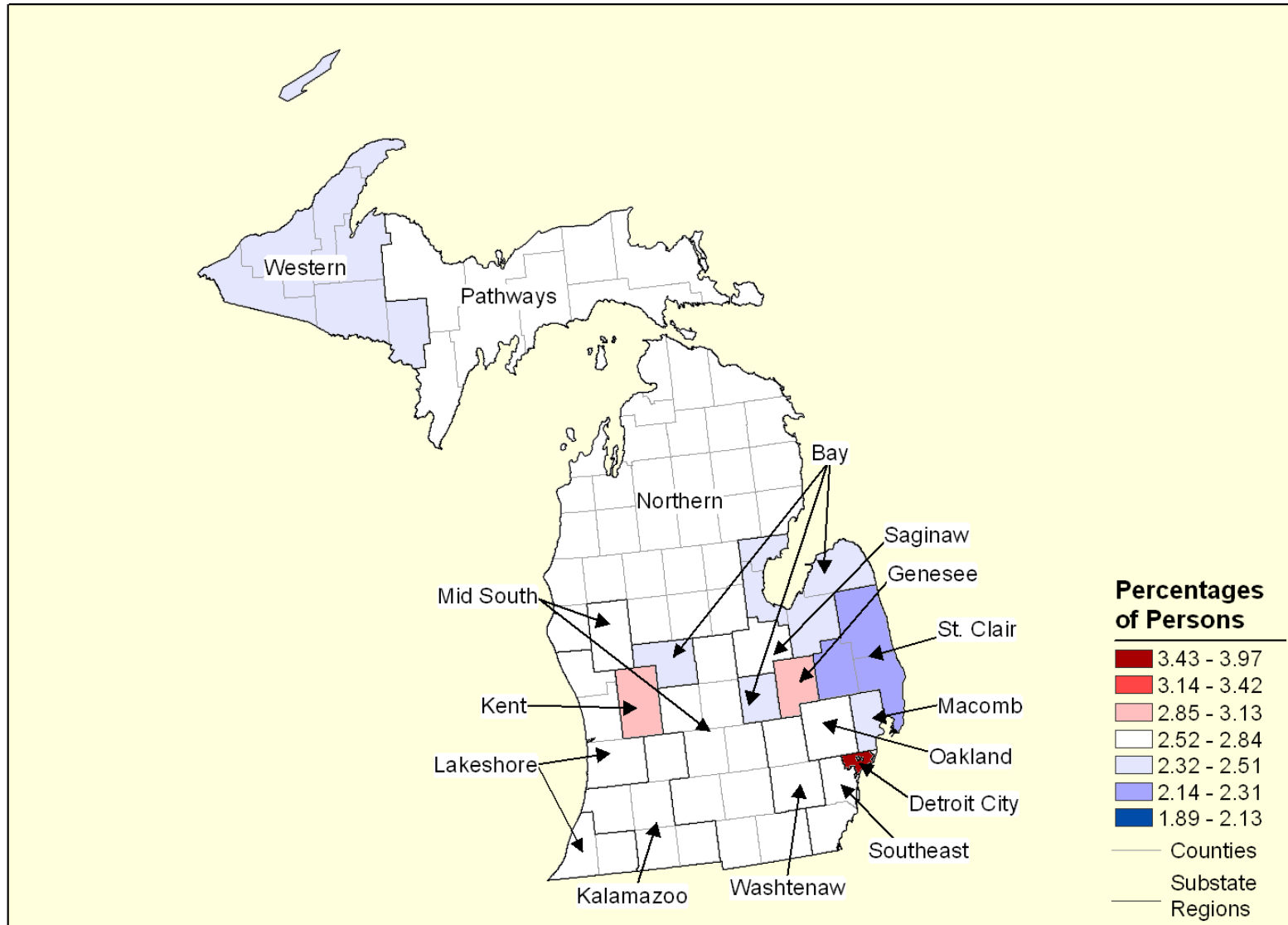


NOTE: The legend's ranges were created by dividing 340 substate regions, nationally, into 7 groups based on the magnitude of their percentages. For substate region definitions, see Section D of the report on *Substate Estimates from the 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.



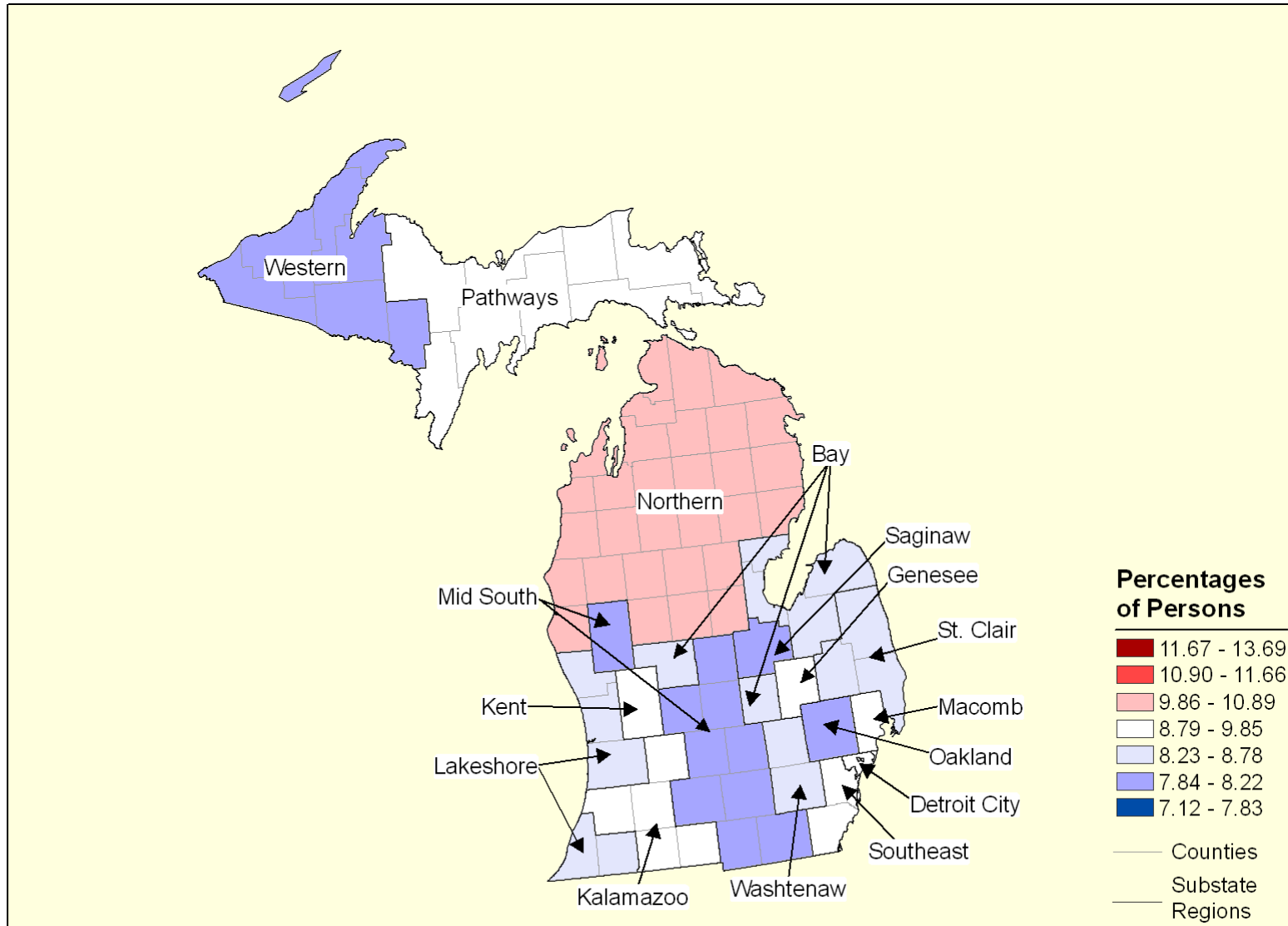
**Figure 23.9.2** *Needing But Not Receiving Treatment for Illicit Drug Use in Past Year among Persons Aged 12 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs*



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

**Figure 23.10** *Serious Psychological Distress in Past Year among Persons Aged 18 or Older in Michigan, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs*



NOTE: The legend's ranges were created by dividing 340 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 2002-2004 National Surveys on Drug Use and Health*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.