

## 5.1 Adults and Tobacco

The Centers for Disease Control have found tobacco use is responsible for approximately 1 in 10 premature deaths among adults worldwide.<sup>1</sup> The global burden of deaths attributable to tobacco use each year is estimated to double from 5 million in 2005 to 10 million in 2020.<sup>2</sup> All the while, the Surgeon General released a report confirming smoking is the single greatest avoidable cause of disease and premature death killing an estimated 443,000 Americans each year.<sup>3</sup> In Kalamazoo County in 2010, tobacco use was or probably was a contributing factor in 30.3% of deaths among residents.<sup>4</sup>

For every person who dies of a smoking-attributable disease, 20 more people suffer with at least one serious illness from smoking.<sup>5</sup>

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<sup>1</sup> World No Tobacco Day, 2012, The Centers for Disease Control, accessed at [http://www.cdc.gov/tobacco/Global/WNTD/WNTD\\_2012.htm](http://www.cdc.gov/tobacco/Global/WNTD/WNTD_2012.htm)

<sup>2</sup> World No Tobacco Day, 2012, The Centers for Disease Control, accessed at [http://www.cdc.gov/tobacco/Global/WNTD/WNTD\\_2012.htm](http://www.cdc.gov/tobacco/Global/WNTD/WNTD_2012.htm)

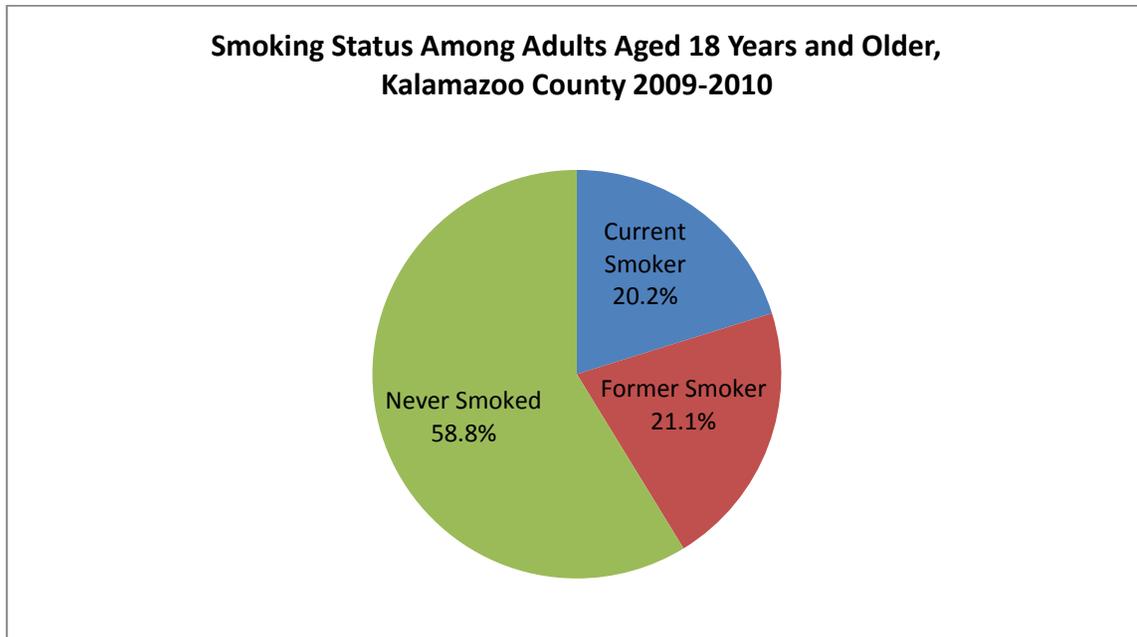
<sup>3</sup> The Health Consequences of Involuntary Exposure to Tobacco Smoke, A Report of the Surgeon General, U.S. Department of Health and Human Services, 2012, Department of Health and Human Services, accessed at <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/exec-summary.pdf>

<sup>4</sup> Michigan Department of Community Health, Division for Vital Records and Health Data Development, Resident Death File. Includes deaths for which contribution of tobacco to death was known (known for 1,329 deaths out of all 2,079 deaths).

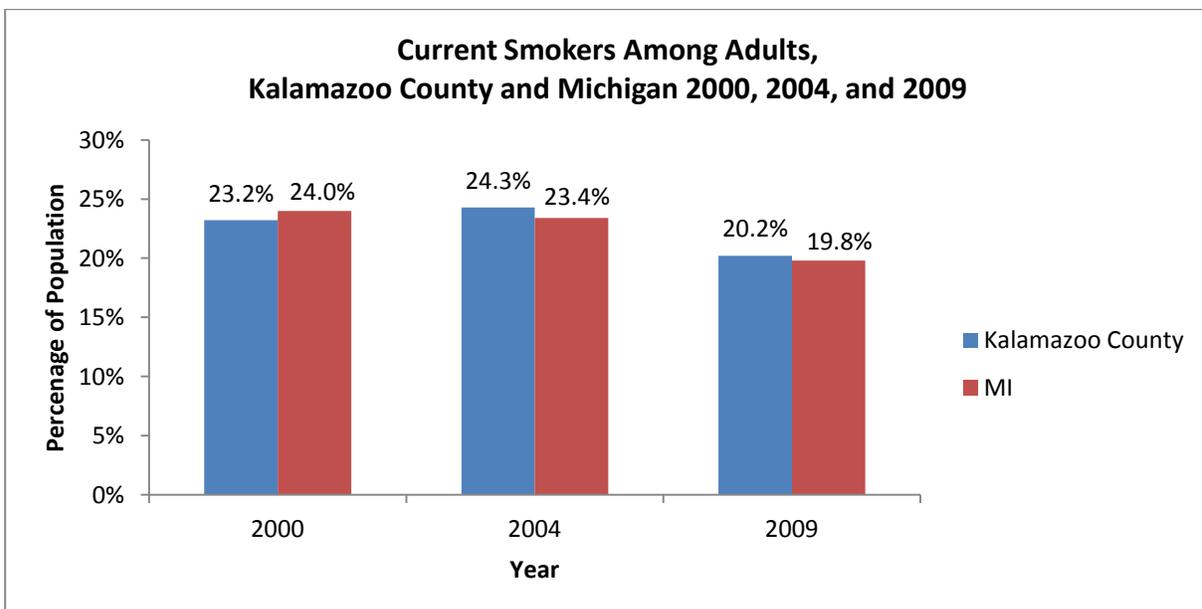
<sup>5</sup> CDC. Cigarette Smoking—Attributable Morbidity— United States, 2000. *MMWR* 2003;52:842–844. Available at: <http://www.cdc.gov/mmwr/PDF/wk/mm5235.pdf>

### 5.1.1 Smoking Status

In Kalamazoo County in 2009, one-fifth of adults (aged 18 years and older) were current smokers (20.2%) and 21.1% were former smokers. Smoking prevalence did not change significantly in Kalamazoo County between 2000 and 2004 (23.2% of adults were current smokers in 2000 vs. 24.3% in 2004), however it did decrease between 2004 and 2009. The percentage of adults who were current smokers was similar in Kalamazoo County and Michigan in 2009 (19.8% of adults reported this behavior in Michigan).

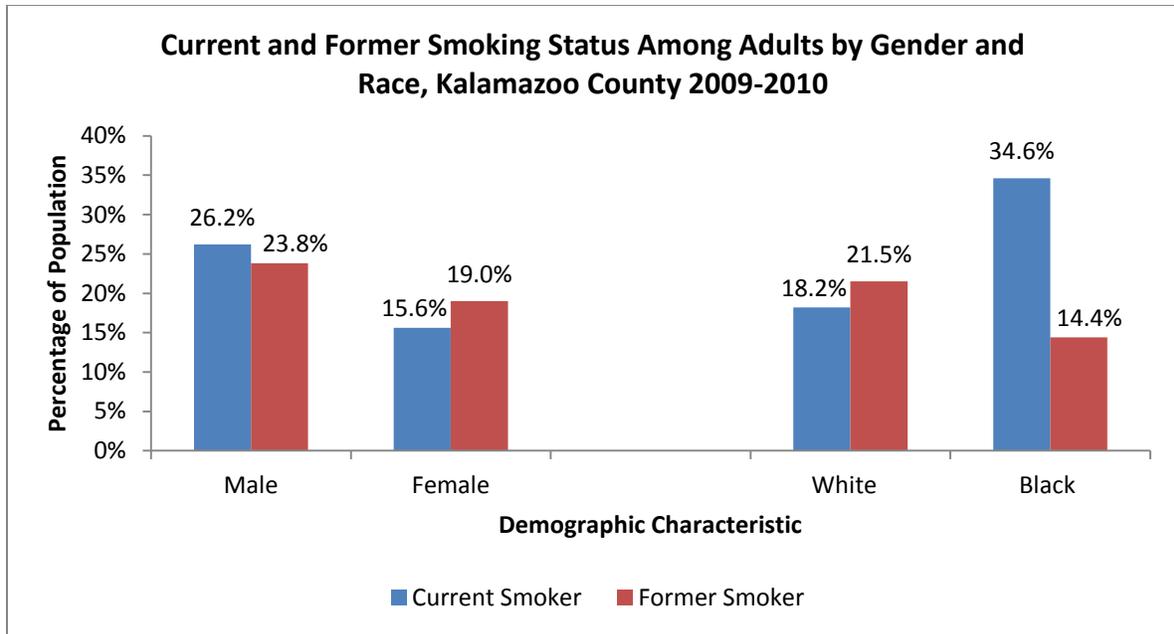


Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey



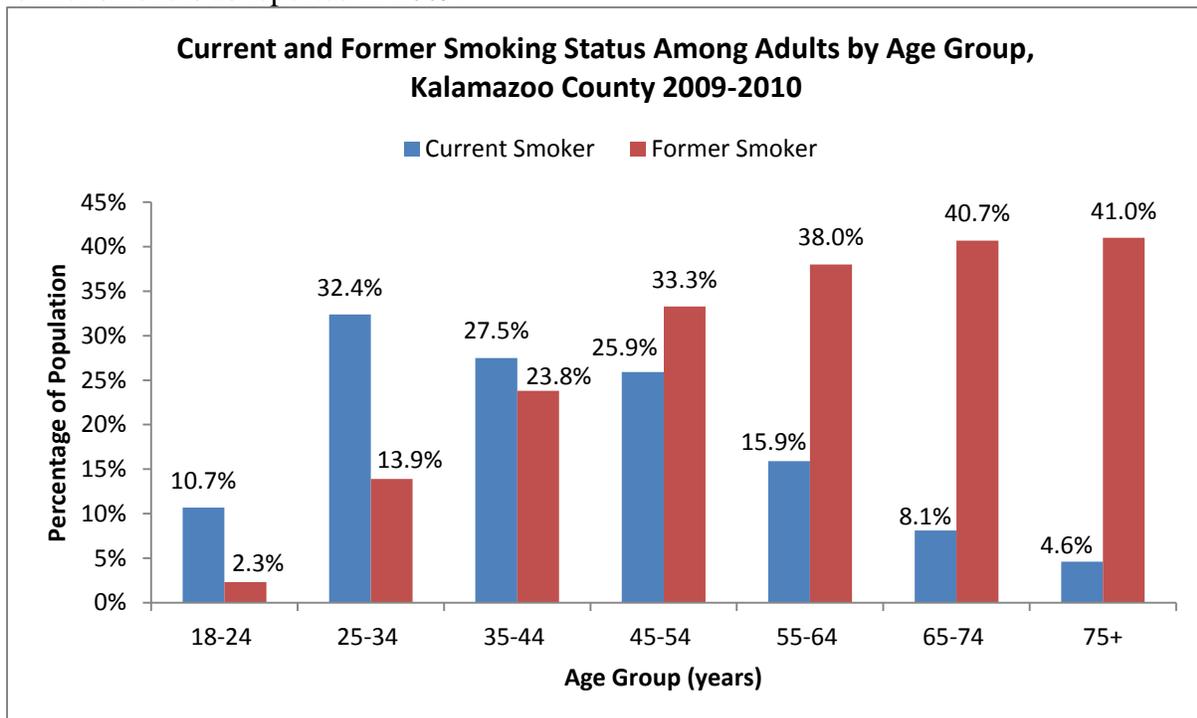
Source: Kalamazoo County and Michigan 2000, 2004, and 2009 Behavioral Risk Factor Survey

Black adults were over twice as likely to be current smokers as white adults, and white adults were slightly more likely to be former smokers in Kalamazoo County in 2009. The percentage of males who were current smokers was greater than that of females; the percentage of females who were former smokers was also lower than that of males in 2009.



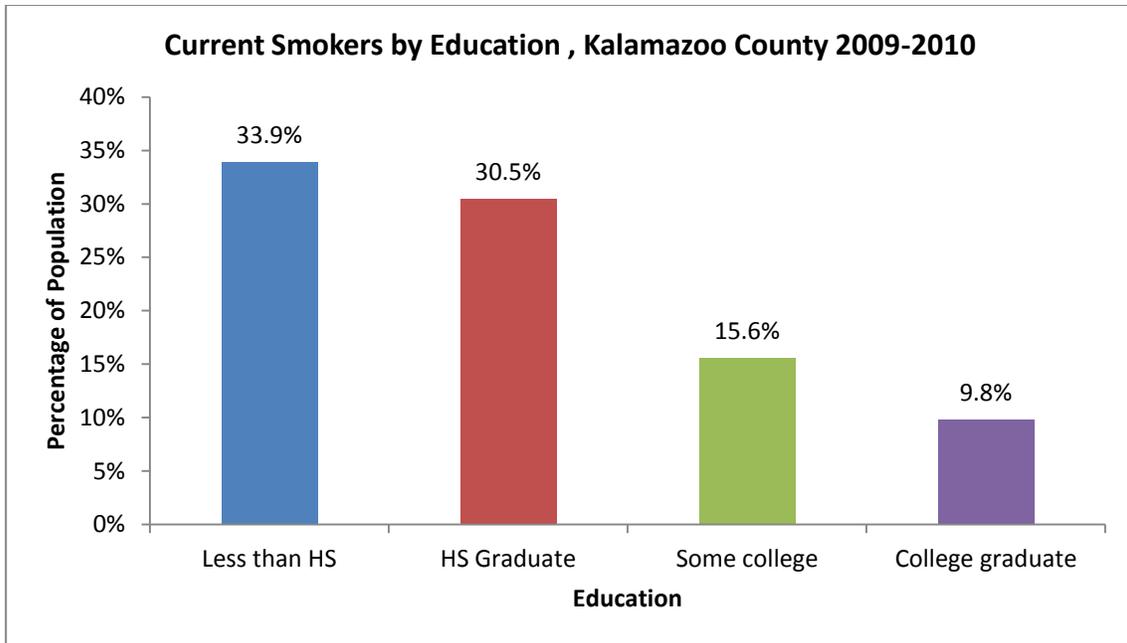
Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

Younger adults were more likely to be current smokers, and older adults were more likely to be former smokers as reported in 2009.

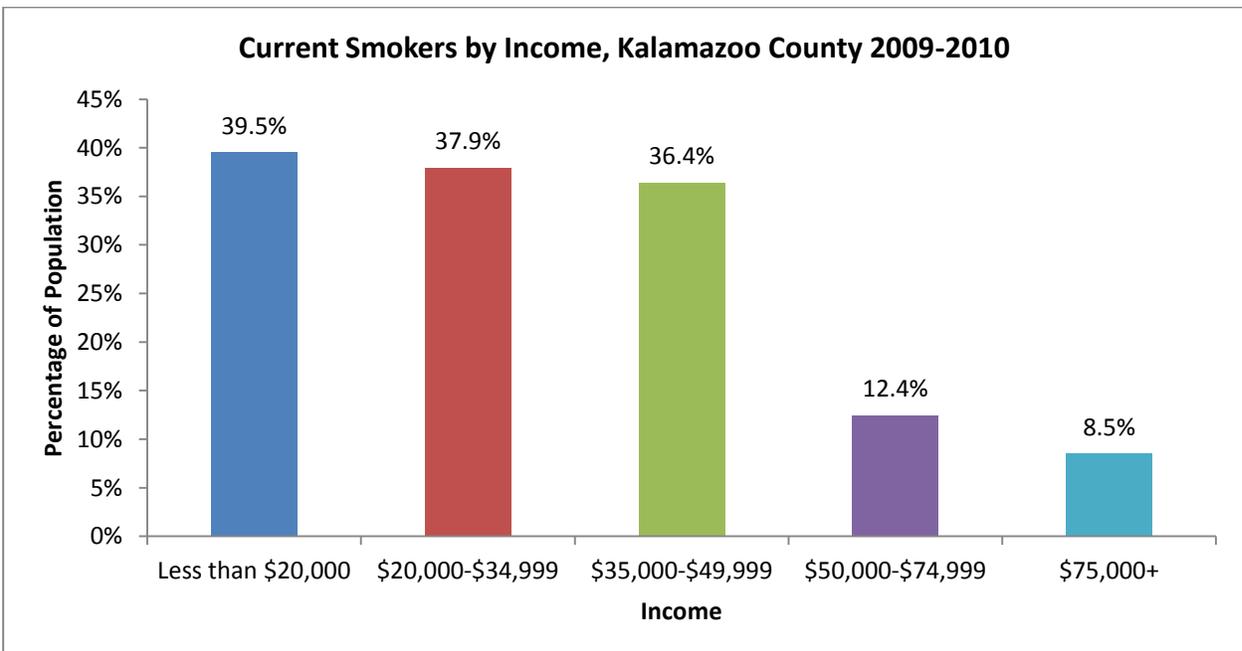


Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

Smoking prevalence varied by educational attainment and income level; the percentage of adults who were current smokers was highest among those with the least education and lowest incomes. The percentage of adults who were former smokers, however, was similar across education and income levels.

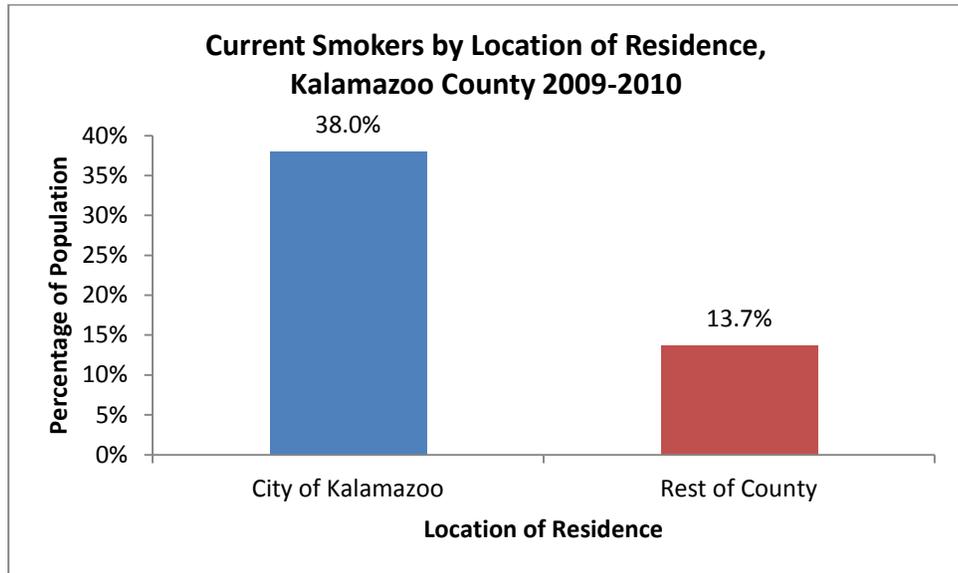


Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

A greater proportion of adults living in the City of Kalamazoo were current smokers compared to adults in the rest of Kalamazoo County in 2009.



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

### Smoking Status Among Adults Aged 18 Years and Older, Kalamazoo County 2009-2010

Demographic Characteristics	Current Smoker <sup>a</sup>		Former Smoker <sup>b</sup>		Never Smoked	
	%	95% C.I.	%	95% C.I.	%	95% C.I.
<b>Total</b>	20.2	(15.4 - 26.0)	21.1	(16.6 - 26.3)	58.8	(51.1 - 66.0)
<b>Age</b>						
18-24 years	10.7	(3.5 - 28.0)	2.3	(0.4 - 13.8)	87.0	(69.4 - 95.2)
25-34 years	32.4	(18.4 - 50.3)	13.9	(7.4 - 24.7)	53.7	(38.1 - 68.6)
35-44 years	27.5	(18.6 - 38.6)	23.8	(15.6 - 34.5)	48.7	(38.0 - 59.6)
45-54 years	25.9	(18.1 - 35.6)	33.3	(24.1 - 43.9)	40.8	(31.8 - 50.5)
55-64 years	15.9	(10.2 - 24.0)	38.0	(28.1 - 48.9)	46.1	(35.0 - 57.6)
65-74 years	8.1	(4.2 - 15.2)	40.7	(31.2 - 50.9)	51.2	(41.2 - 61.1)
75 years +	4.6	(1.8 - 11.4)	41.0	(29.5 - 53.6)	54.4	(42.3 - 66.0)
<b>Gender</b>						
Male	26.2	(17.7 - 36.9)	23.8	(16.7 - 32.7)	50.0	(38.0 - 62.1)
Female	15.6	(10.9 - 21.7)	19.0	(13.8 - 25.6)	65.4	(56.0 - 73.8)
<b>Race</b>						
White non-Hispanic	18.2	(13.4 - 24.1)	21.5	(16.5 - 27.4)	60.4	(52.0 - 68.2)
Black non-Hispanic	34.6	(16.5 - 58.6)	14.4	(6.0 - 30.6)	51.0	(29.6 - 72.1)
<b>Education</b>						
Less than HS	33.9	(12.3 - 65.3)	8.8	(3.0 - 23.2)	57.3	(25.4 - 84.1)
HS Graduate	30.5	(20.5 - 42.6)	23.7	(15.9 - 33.6)	45.9	(34.4 - 57.9)
Some college	15.6	(9.9 - 23.6)	25.0	(16.5 - 35.9)	59.5	(46.0 - 71.6)
College graduate	9.8	(5.8 - 15.9)	19.8	(14.8 - 26.0)	70.4	(63.0 - 76.9)
<b>Income</b>						
Less than \$20,000	39.5	(25.4 - 55.5)	22.4	(13.3 - 35.2)	38.1	(23.6 - 55.1)
\$20,000-\$34,999	37.9	(24.8 - 53.0)	18.6	(10.8 - 30.2)	43.5	(29.7 - 58.5)
\$35,000-\$49,999	36.4	(18.6 - 59.0)	18.1	(9.3 - 32.2)	45.5	(27.7 - 64.5)
\$50,000-\$74,999	12.4	(6.4 - 22.8)	26.5	(16.6 - 39.4)	61.1	(46.5 - 73.9)
\$75,000+	8.5	(3.7 - 18.1)	24.5	(15.2 - 37.2)	67.0	(52.4 - 78.9)
<b>City/Out-County</b>						
City of Kalamazoo	38.0	(27.0 - 50.3)	22.2	(15.3 - 31.1)	39.8	(29.8 - 50.8)
Rest of County	13.7	(8.8 - 20.8)	21.4	(15.0 - 29.7)	64.9	(53.9 - 74.5)
<b>Within City of Kalamazoo</b>						
White in City	35.9	(23.1 - 51.1)	24.0	(15.6 - 35.1)	40.1	(27.5 - 54.1)
Black in City	42.9	(22.0 - 66.7)	19.0	(8.0 - 38.7)	38.1	(21.5 - 58.1)

<sup>a</sup> Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.

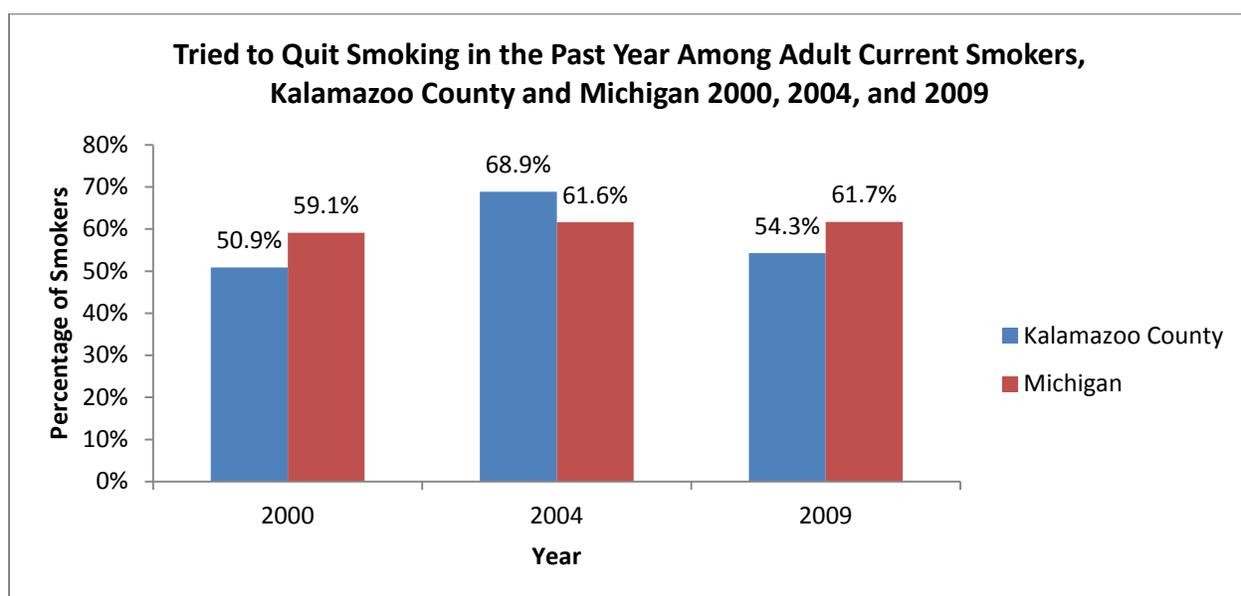
<sup>b</sup> Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life, but they do not smoke cigarettes now.

Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

## 5.1.2 Cessation Attempts

Nicotine dependence is the most common form of chemical dependence in the United States.<sup>6</sup> Research suggests that nicotine is as addictive as heroin, cocaine, or alcohol.<sup>7</sup> Examples of nicotine withdrawal symptoms include irritability, anxiety, difficulty concentrating, and increased appetite.<sup>8</sup> Quitting tobacco use is difficult and may require multiple attempts, as users often relapse because of withdrawal symptoms.<sup>9</sup>

In Kalamazoo County in 2009, 54.3% of adult current smokers tried to quit smoking one day or longer in the past year. This is similar to the percentage who tried to quit in 2000 (50.9% of current smokers tried to quit in the past year), and lower than the estimated percentage who tried to quit in 2004. The percentage of current smokers who attempted to quit was slightly lower in Kalamazoo County than in Michigan in 2009 (61.7% of current smokers in Michigan had tried to quit in the past year).



Source: Kalamazoo County and Michigan 2000, 2004, and 2009 Behavioral Risk Factor Survey

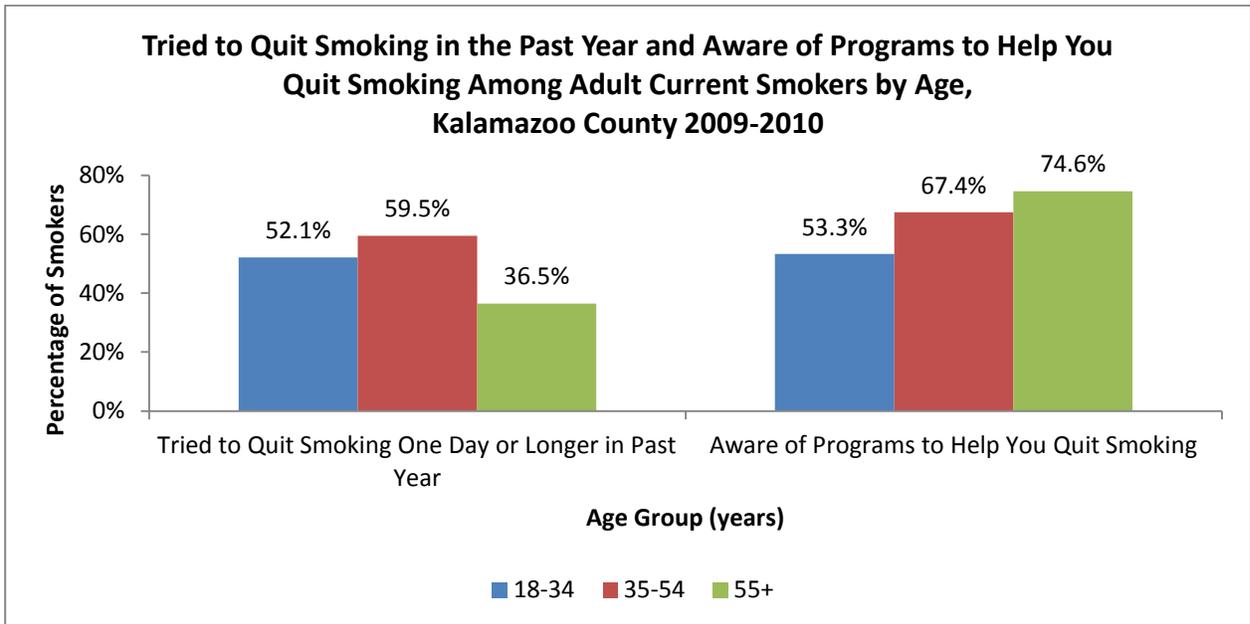
<sup>6</sup> American Society of Addiction Medicine. Nicotine Dependence and Tobacco. Public Policy of ASAM; 2011 Available at [http://www.asam.org/ppol/NICOTINE\\_DEPENDENCE\\_&\\_TOBACCO\\_10-11\\_\(1\).htm](http://www.asam.org/ppol/NICOTINE_DEPENDENCE_&_TOBACCO_10-11_(1).htm).

<sup>7</sup> U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young People: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2012. Available at [http://www.cdc.gov/tobacco/sgr/sgr\\_2012/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2012/index.htm).

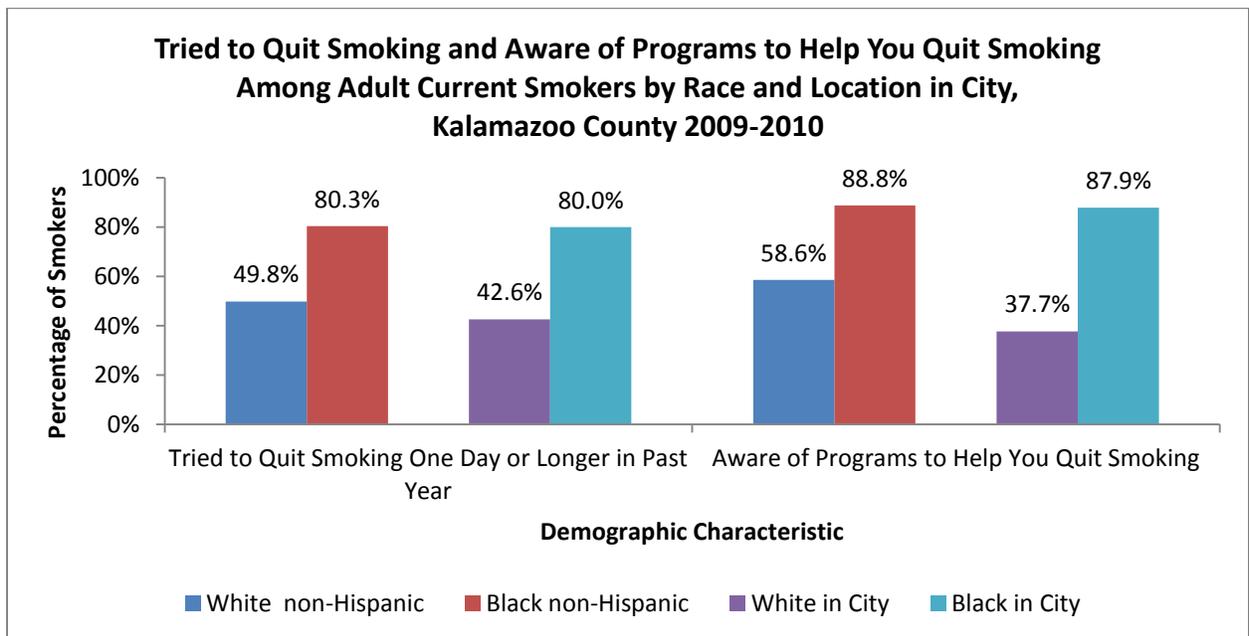
<sup>8</sup> CDC. The Health Consequences of Smoking: Nicotine Addiction: A Report of the Surgeon General 2012. Rockville, MD: U.S. Department of Health and Human Services, CDC, Center for Health Promotion and Education, Office on Smoking and Health; 2012. Available at [http://www.cdc.gov/tobacco/sgr/sgr\\_2012/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2012/index.htm).

<sup>9</sup> CDC. Reducing Tobacco Use: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, CDC, Office on Smoking and Health; 2012. Available at [http://www.cdc.gov/tobacco/sgr/sgr\\_2012/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2012/index.htm).

Current smokers who were younger were more likely to have tried to quit in the past year than older current smokers; however current smokers who were older were more likely to be aware of programs to help them quit smoking. A greater proportion of black smokers and black adults in the city of Kalamazoo had tried to quit and/or knew about programs to aid in quitting than white smokers.

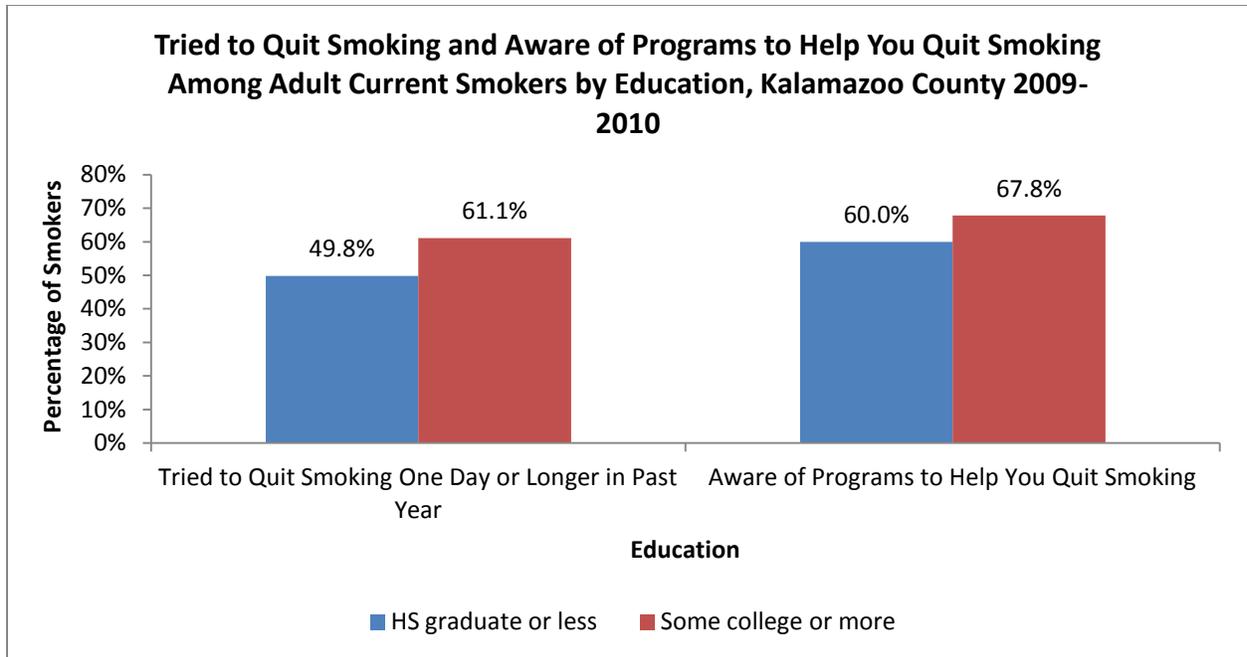


Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

The percentage of people who tried to quit smoking in the past year among adult current smokers did not vary much by gender or income. However, smokers with more education were more likely to have tried to quit and/or be aware of programs to help them quit smoking than current smokers with less education.



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

**Cessation Attempts in the Past 12 Months Among Current Smokers,  
Kalamazoo County 2009-2010**

Demographic Characteristic	Tried to Quit Smoking One Day or Longer in Past Year <sup>a</sup>		Aware of Programs to Help You Quit Smoking <sup>b</sup>	
	%	95% C.I.	%	95% C.I.
<b>Total</b>	54.3	(41.0 - 67.1)	63.1	(47.7 - 76.2)
<b>Age</b>				
18-34 years	52.1	(25.2 - 77.9)	53.3	(23.5 - 81.0)
35-54 years	59.5	(44.1 - 73.2)	67.4	(50.2 - 81.0)
55 years +	36.5	(20.6 - 56.0)	74.6	(56.4 - 86.9)
<b>Gender</b>				
Male	56.3	(36.5 - 74.2)	63.3	(41.5 - 80.7)
Female	51.7	(36.4 - 66.6)	62.8	(43.2 - 79.0)
<b>Race</b>				
White non-Hispanic	49.8	(35.8 - 63.7)	58.6	(42.0 - 73.5)
Black non-Hispanic	80.3	(47.7 - 94.8)	88.8	(64.2 - 97.2)
<b>Education</b>				
HS graduate or less	49.8	(30.9 - 68.8)	60.0	(37.8 - 78.8)
Some college or more	61.1	(45.5 - 74.6)	67.8	(50.3 - 81.4)
<b>Income</b>				
Less than \$35,000	54.1	(37.0 - 70.3)	63.1	(43.8 - 79.0)
\$35,000+	58.3	(34.5 - 78.8)	59.9	(32.6 - 82.2)
<b>City/Out-County</b>				
City of Kalamazoo	52.1	(31.0 - 72.5)	57.4	(34.3 - 77.7)
Rest of County	60.9	(40.5 - 78.1)	72.2	(50.4 - 87.0)
<b>Within City of Kalamazoo</b>				
White in City	42.6	(20.4 - 68.3)	37.7	(17.9 - 62.7)
Black in City	80.0	(46.8 - 94.8)	87.9	(60.9 - 97.1)

<sup>a</sup> Among all current smokers, the proportion who reported that during the past 12 months, they had tried to quit smoking for one day or longer.

<sup>b</sup> Among all current smokers, the proportion who reported that they were aware of local programs or services available to help them quit smoking, such as telephone quit lines, local health clinic services, or cessation classes.

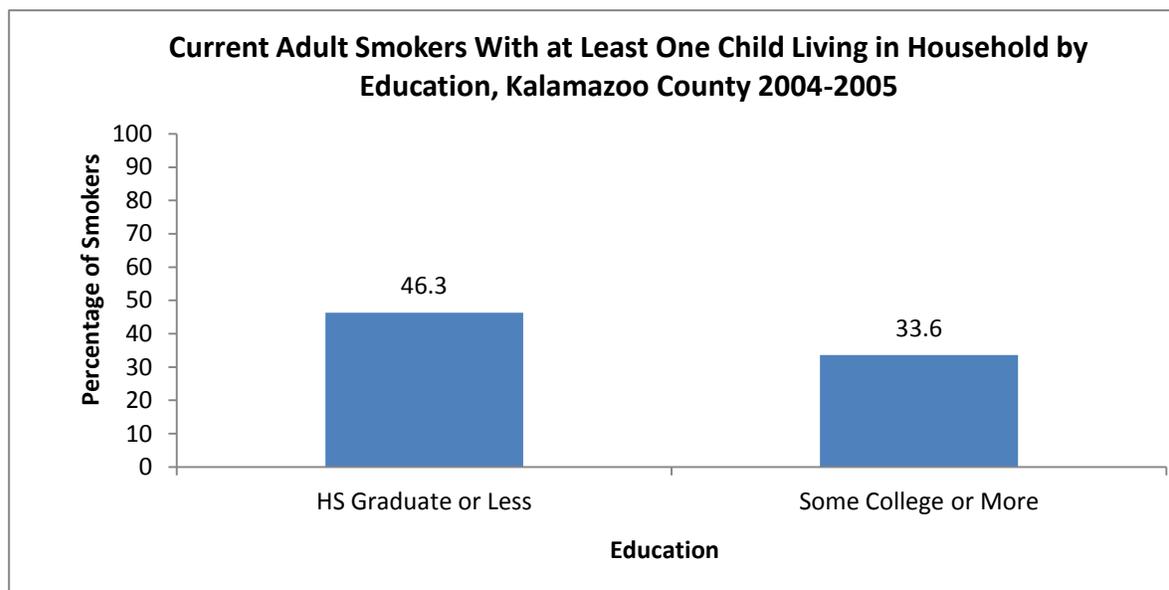
Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

### 5.1.3 Secondhand Smoke

Secondhand smoke is a known human carcinogen (cancer-causing agent). More than 50 compounds in secondhand smoke have been identified as known or reasonably anticipated human carcinogens. Secondhand smoke contains at least 250 chemicals that are known to be toxic or carcinogenic.<sup>10</sup>

Secondhand smoke causes sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more frequent and severe asthma attacks in children. Secondhand smoke exposure causes respiratory symptoms in children and slows their lung growth.<sup>11</sup>

In Kalamazoo County in 2004, 40.3% of current smokers had at least one child under the age of 18 living with them in the household. Current smokers with less education were more likely to have a child living with them; 46.3% of current smokers with a high school diploma or less had children in their household, compared to 33.6% of current smokers who had attended some college or had more education.



Source: Kalamazoo County 2004-2005 Behavioral Risk Factor Survey

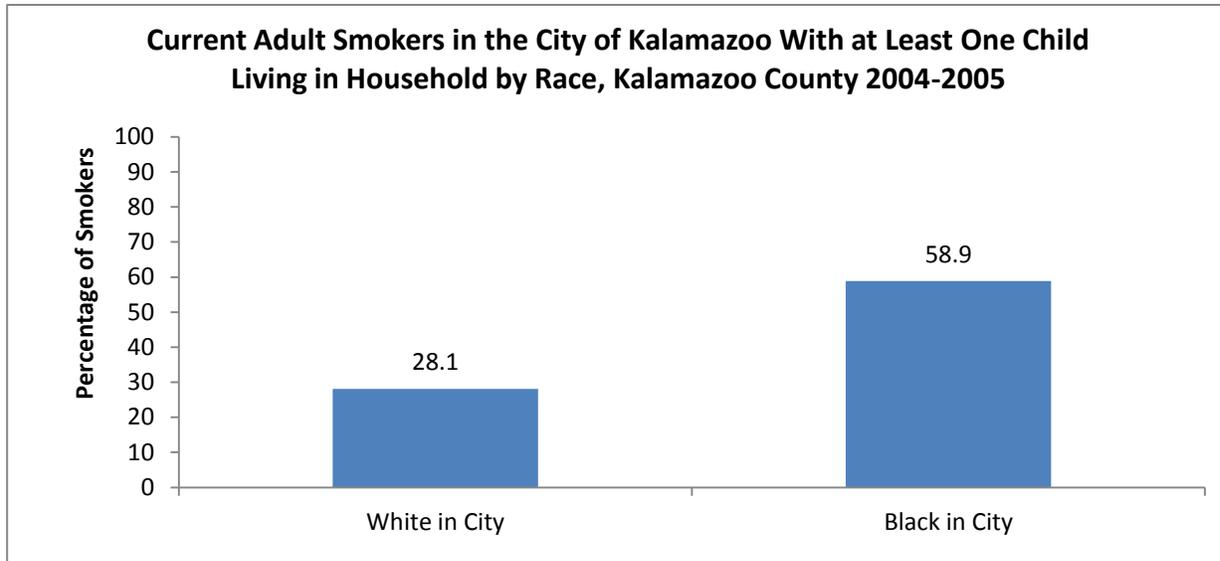
<sup>10</sup> National Toxicology Program. 9th Report on Carcinogens, 2000. Research Triangle Park, NC: U.S. Department of Health and Human Services, National Institute of Environmental Health Sciences, 2000.

<http://ntp.niehs.nih.gov/ntp/roc/eleventh/profiles/s176toba.pdf>

<sup>11</sup> U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.

<http://www.surgeongeneral.gov/library/secondhandsmoke/report/>

Among current smokers living in the City of Kalamazoo, the presence of children in the household differed by race. Among the black population who were current smokers, 58.9% had at least one child in the household, and among the white population of current smokers in the City of Kalamazoo, 28.1% had at least one child living in the household.



Source: Kalamazoo County 2004-2005 Behavioral Risk Factor Survey

**Current Smokers Living with a Child in the Household, Kalamazoo County 2004-2005\*\***

Demographic Characteristics	Current Smokers With at Least One Child Living in Household <sup>a</sup>	
	%	95% C.I.
<b>Total</b>	40.3	(32.3 - 48.3)
<b>Age</b>		
18-34 years	50.9	(37.7 - 64.2)
35-54 years	42.2	(30.3 - 54.1)
55 years +	5.7	*
<b>Gender</b>		
Male	36.9	(24.9 - 49.0)
Female	43.4	(32.8 - 54.0)
<b>Race</b>		
White	37.0	(28.1 - 45.9)
Black	51.8	(30.9 - 72.7)
<b>Education</b>		
HS graduate or less	46.3	(35.1 - 57.4)
Some college or more	33.6	(22.5 - 44.7)
<b>Income</b>		
Less than \$35,000	40.2	(29.7 - 50.7)
\$35,000+	47.5	(33.6 - 61.4)
<b>City/Out-County</b>		
City of Kalamazoo	38.3	(27.2 - 49.3)
Rest of County	42.3	(30.6 - 53.9)
<b>Within City of Kalamazoo</b>		
White in City	28.1	(15.2 - 40.9)
Black in City	58.9	(39.8 - 77.9)

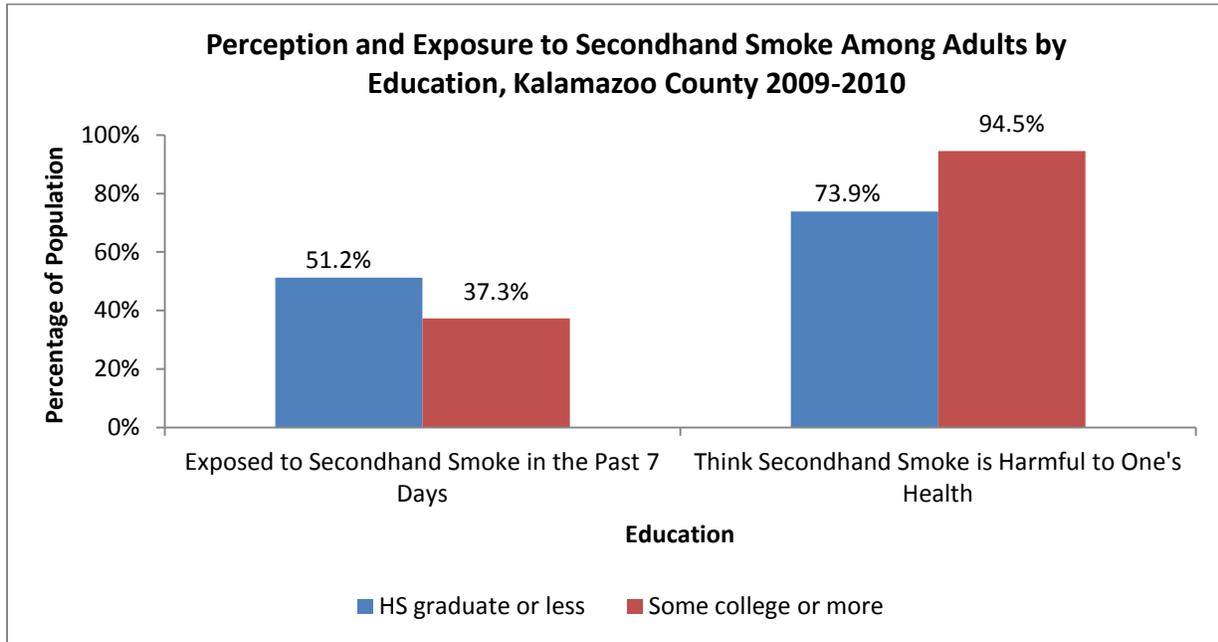
<sup>a</sup> Among all current smokers, the proportion who reported there was at least one child under 18 years of age living in their household.

\*Confidence interval exceeds possible limits

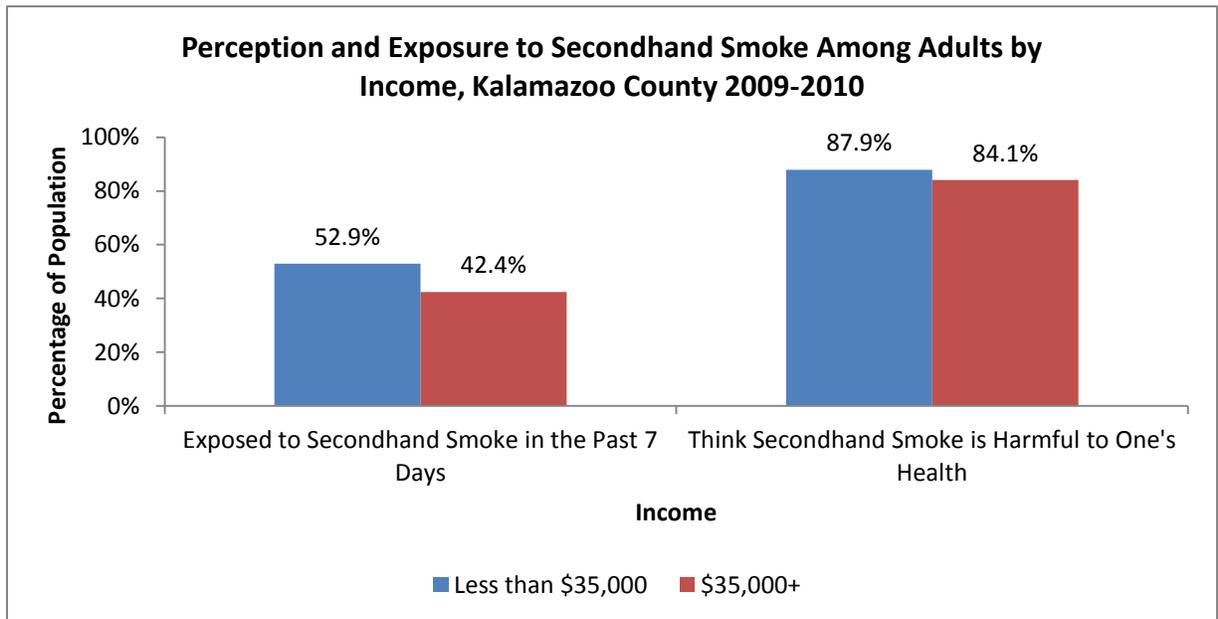
\*\*Indicator not asked in 2009-2010 survey

Source: Kalamazoo County 2004 Behavioral Risk Factor Survey

In Kalamazoo County in 2009, 42.5% of the population had been exposed to secondhand smoke in the past week and 86.9% of the population thinks secondhand smoke is harmful to one’s health. The proportion of the population exposed to secondhand smoke and their perception of secondhand smoke did not vary much by age group, gender, race, or location within the county. The proportion of the population exposed to secondhand smoke was greater for those with less education and lower incomes.



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

## Secondhand Smoke Exposure and Perception of Harm, Kalamazoo County 2009-2010

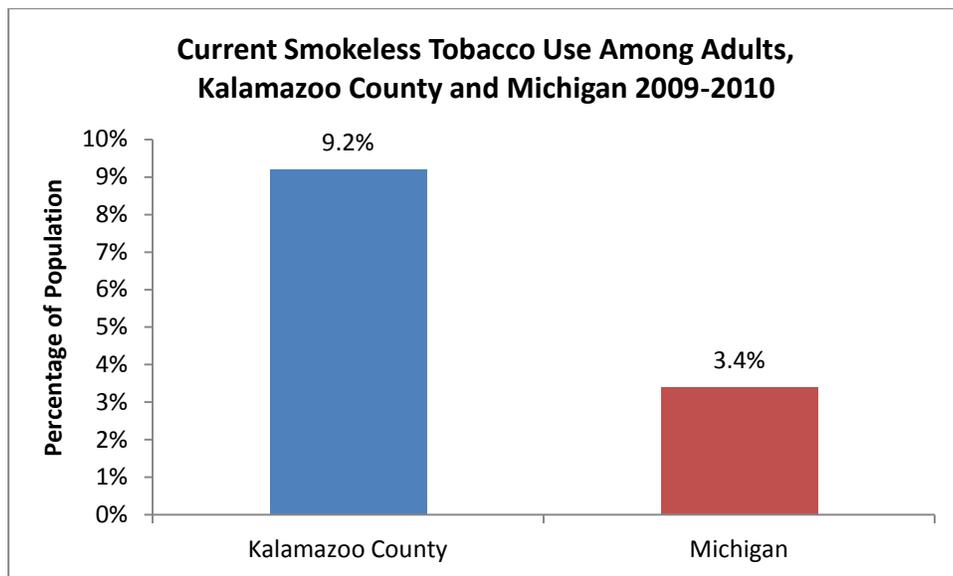
Demographic Characteristic	Exposed to Secondhand Smoke in the Past 7 Days <sup>a</sup>		Think Secondhand Smoke is Harmful to One's Health <sup>b</sup>	
	%	95% C.I.	%	95% C.I.
<b>Total</b>	42.5	(34.9 - 50.4)	86.9	(72.9 - 94.3)
<b>Age</b>				
18-34 years	41.6	(26.4 - 58.5)	80.8	(48.1 - 95.0)
35-54 years	47.0	(39.7 - 54.4)	91.2	(84.3 - 95.2)
55 years +	34.5	(26.9 - 42.9)	90.2	(77.6 - 96.1)
<b>Gender</b>				
Male	49.5	(37.7 - 61.4)	88.3	(79.9 - 93.5)
Female	37.6	(28.0 - 48.3)	85.8	(59.1 - 96.2)
<b>Race</b>				
White non-Hispanic	42.1	(33.8 - 50.9)	85.0	(69.1 - 93.5)
Black non-Hispanic	42.3	(22.6 - 64.7)	97.3	(92.3 - 99.1)
<b>Education</b>				
HS graduate or less	51.2	(35.6 - 66.6)	73.9	(45.5 - 90.5)
Some college or more	37.3	(29.3 - 46.1)	94.5	(90.0 - 97.0)
<b>Income</b>				
Less than \$35,000	52.9	(42.3 - 63.3)	87.9	(78.1 - 93.7)
\$35,000+	42.4	(32.1 - 53.5)	84.1	(60.3 - 94.9)
<b>City/Out-County</b>				
City of Kalamazoo	50.4	(39.3 - 61.4)	94.8	(90.7 - 97.1)
Rest of County	43.6	(31.9 - 56.1)	82.2	(60.1 - 93.4)
<b>Within City of Kalamazoo</b>				
White in City	51.9	(38.3 - 65.2)	93.7	(87.7 - 96.9)
Black in City	49.5	(28.4 - 70.7)	96.3	(89.7 - 98.7)
<p><sup>a</sup> Among all adults, have been exposed to secondhand smoke (smoke from someone else's cigarette, cigar, or pipe) in the past seven days. Exposures could have been inside their home, in a car, at work, or other public place. (Does not include person's own smoke, if a current smoker; current smokers are included as individuals who may or may not have been exposed to smoke from others in this calculation.)</p> <p><sup>b</sup> Among all adults, the proportion who reported that breathing smoke from other people's cigarettes is "Very harmful" or "Somewhat harmful" to one's health.</p>				

Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

### 5.1.4 Smokeless Tobacco

According to the Centers for Disease Control and Prevention, smokeless tobacco is not a safe alternative to smoking cigarettes. The two main types of smokeless tobacco in the United States are chewing tobacco and snuff, both of which can cause cancer, oral health problems, reproductive health problems, and nicotine addiction.<sup>12</sup>

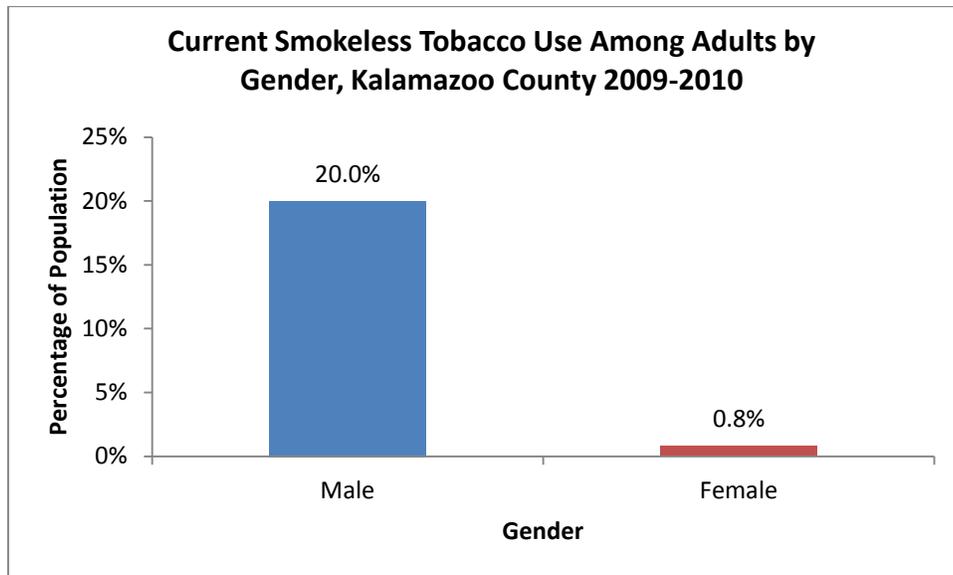
Among adults in Kalamazoo County, 9.2% of the population currently used smokeless tobacco in 2009. Among current smokers in Kalamazoo County, 15.1% used smokeless tobacco when smoking was prohibited. The proportion of the population using smokeless tobacco was higher in Kalamazoo County than in Michigan (3.4% of the population use smokeless tobacco in Michigan).



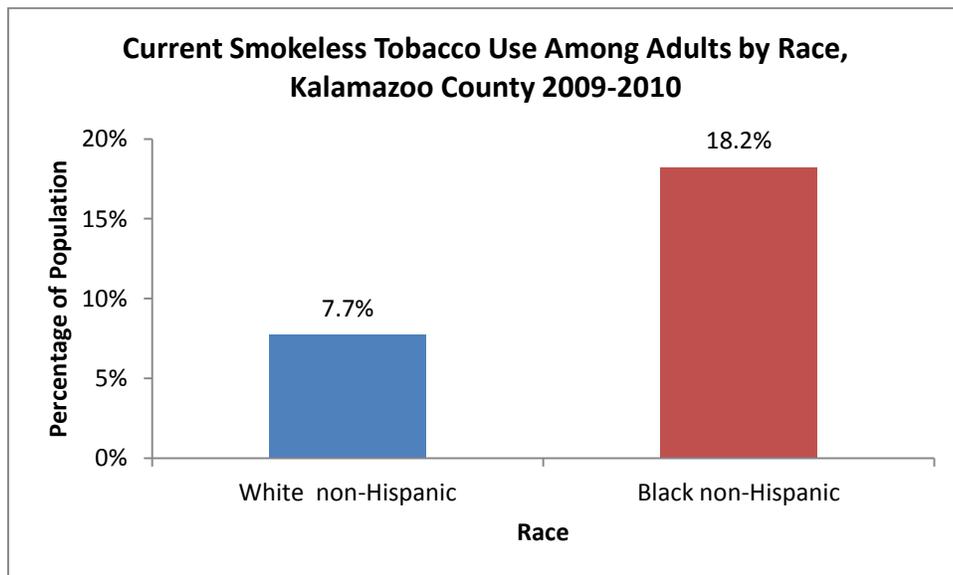
Source: Kalamazoo County and Michigan 2009-2010 Behavioral Risk Factor Survey

<sup>12</sup> CDC. Smokeless Tobacco Fact Sheet, 2012.  
Available at: [http://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/smokeless/smokeless\\_facts/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/smokeless_facts/index.htm)

Current smokeless tobacco use did not vary much by income or location within the county. However, men are 25 times more likely to use smokeless tobacco than women and black adults are 2.4 times more likely to use smokeless tobacco than white adults.

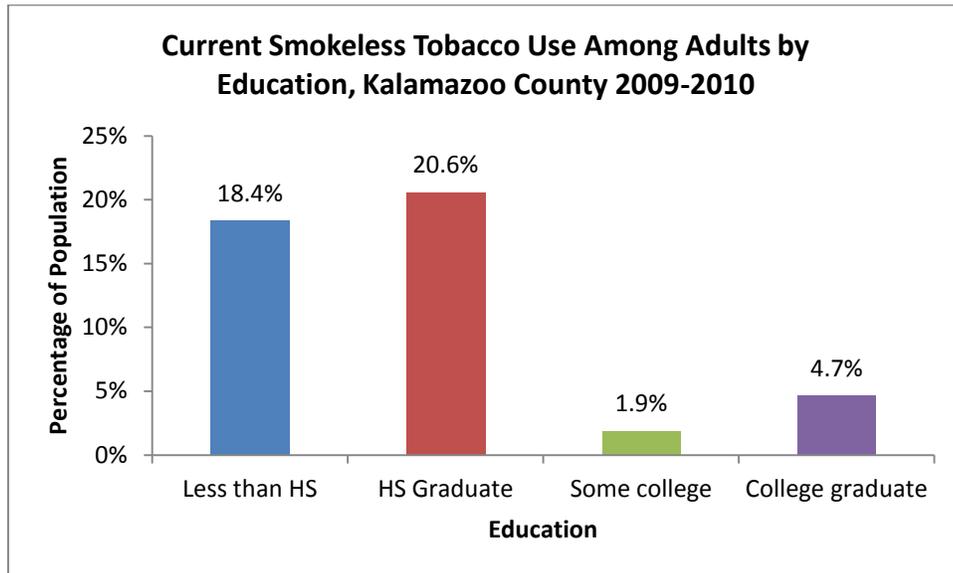


Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

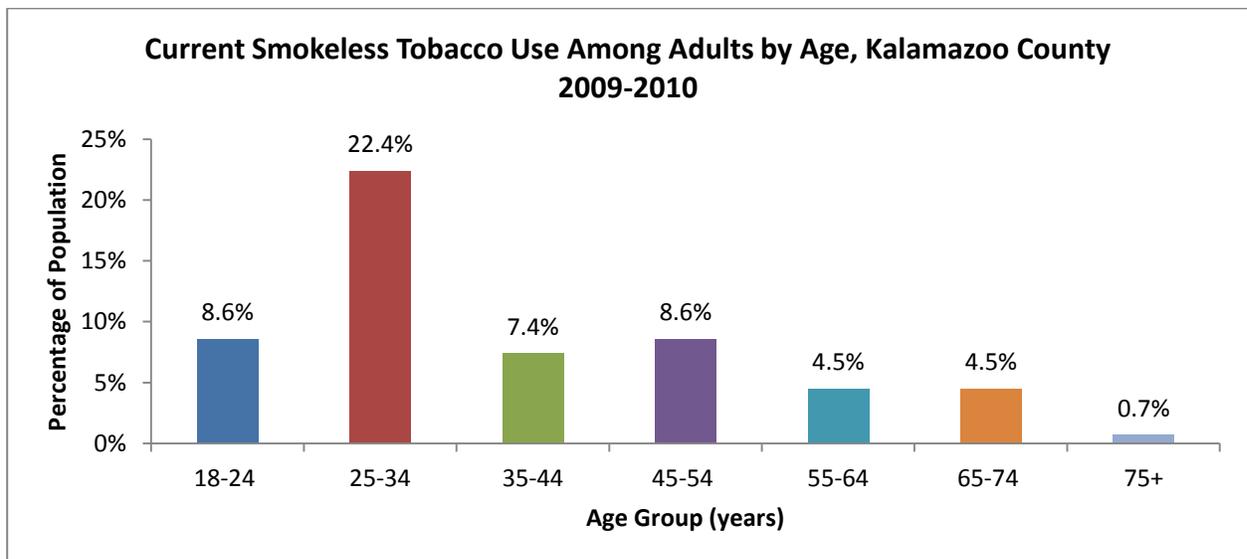


Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

Among adults in Kalamazoo County, generally those with less education are more likely to use smokeless tobacco than those with more education. Smokeless tobacco was similar across age groups, with exception among those between 25-34 years of age, which had a higher percentage of smokeless tobacco users, and adults aged 75 years and older, which had a lower percentage of smokeless tobacco users.



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

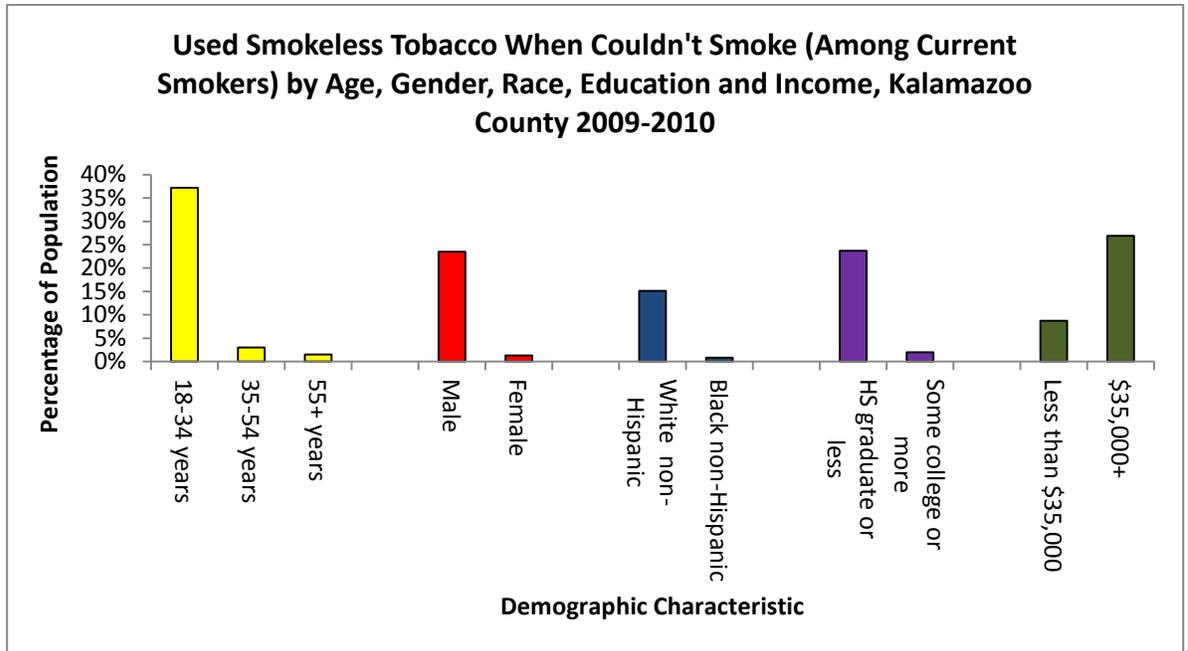
**Smokeless Tobacco Use Among Adults, Kalamazoo County 2009-2010**

<b>Demographic Characteristics</b>	<b>Current Smokeless Tobacco Use<sup>a</sup></b>	
	<b>%</b>	<b>95% C.I.</b>
<b>Total</b>	9.2	(5.5 - 15.2)
<b>Age</b>		
18-24 years	8.6	(2.0 - 29.7)
25-34 years	22.4	(8.8 - 46.2)
35-44 years	7.4	(3.5 - 14.9)
45-54 years	8.6	(3.4 - 20.3)
55-64 years	4.5	(1.6 - 12.3)
65-74 years	4.5	(2.0 - 10.2)
75 years +	0.7	(0.2 - 2.6)
<b>Gender</b>		
Male	20.0	(12.1 - 31.2)
Female	0.8	(0.3 - 2.3)
<b>Race</b>		
White non-Hispanic	7.7	(4.4 - 13.3)
Black non-Hispanic	18.2	(4.2 - 53.1)
<b>Education</b>		
Less than HS	18.4	(4.0 - 54.8)
HS Graduate	20.6	(11.0 - 35.3)
Some college	1.9	(0.5 - 7.1)
College graduate	4.7	(2.2 - 9.7)
<b>Income</b>		
Less than \$20,000	16.2	(4.8 - 42.5)
\$20,000-\$34,999	7.8	(2.2 - 23.9)
\$35,000-\$49,999	11.3	(1.7 - 48.6)
\$50,000-\$74,999	2.4	(0.5 - 11.1)
\$75,000+	11.6	(5.3 - 23.7)
<b>City/Out-County</b>		
City of Kalamazoo	14.9	(6.2 - 31.8)
Rest of County	7.7	(3.9 - 14.7)
<b>Within City of Kalamazoo</b>		
White in City	13.1	(4.7 - 31.7)
Black in City	22.3	(4.7 - 62.7)

<sup>a</sup> Among all adults, the proportion who reported that they currently use chewing tobacco, snuff or snus, either every day or on some days.

Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

Among current smokers in 2009, the proportion that used smokeless tobacco when they couldn't smoke decreased with age. Males, white adults, adults with lower education, and adults with higher incomes had the highest proportion of current smokers who used smokeless tobacco when they couldn't smoke in Kalamazoo County.



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

**Use of Smokeless Tobacco When Smoking Not Allowed Among Adults,  
Kalamazoo County 2009-2010**

<b>Demographic Characteristic</b>	<b>Used Smokeless Tobacco When Couldn't Smoke (Among Current Smokers)<sup>b</sup></b>	
	<b>%</b>	<b>95% C.I.</b>
<b>Total</b>	15.1	(5.8 - 34.0)
<b>Age</b>		
18-34 years	37.2	(12.8 - 70.6)
35-54 years	3.0	(0.9 - 9.3)
55 years +	1.5	(0.3 - 7.8)
<b>Gender</b>		
Male	23.5	(8.9 - 49.1)
Female	1.3	(0.3 - 5.9)
<b>Race</b>		
White non-Hispanic	15.1	(4.9 - 38.2)
Black non-Hispanic	0.8	(0.2 - 4.6)
<b>Education</b>		
HS graduate or less	23.7	(8.8 - 50.1)
Some college or more	2.0	(0.6 - 6.6)
<b>Income</b>		
Less than \$35,000	8.7	(2.1 - 29.4)
\$35,000+	26.9	(7.8 - 61.7)
<b>City/Out-County</b>		
City of Kalamazoo	16.9	(4.5 - 46.9)
Rest of County	12.5	(2.2 - 47.6)
<b>Within City of Kalamazoo</b>		
White in City	26.8	(7.4 - 62.8)
Black in City	0.9	(0.1 - 5.1)
<p><sup>b</sup> Among all current smokers, the proportion who reported that they ever used chewing tobacco, snuff, dip or snus instead of smoking because they were in a place where smoking was not allowed.</p>		

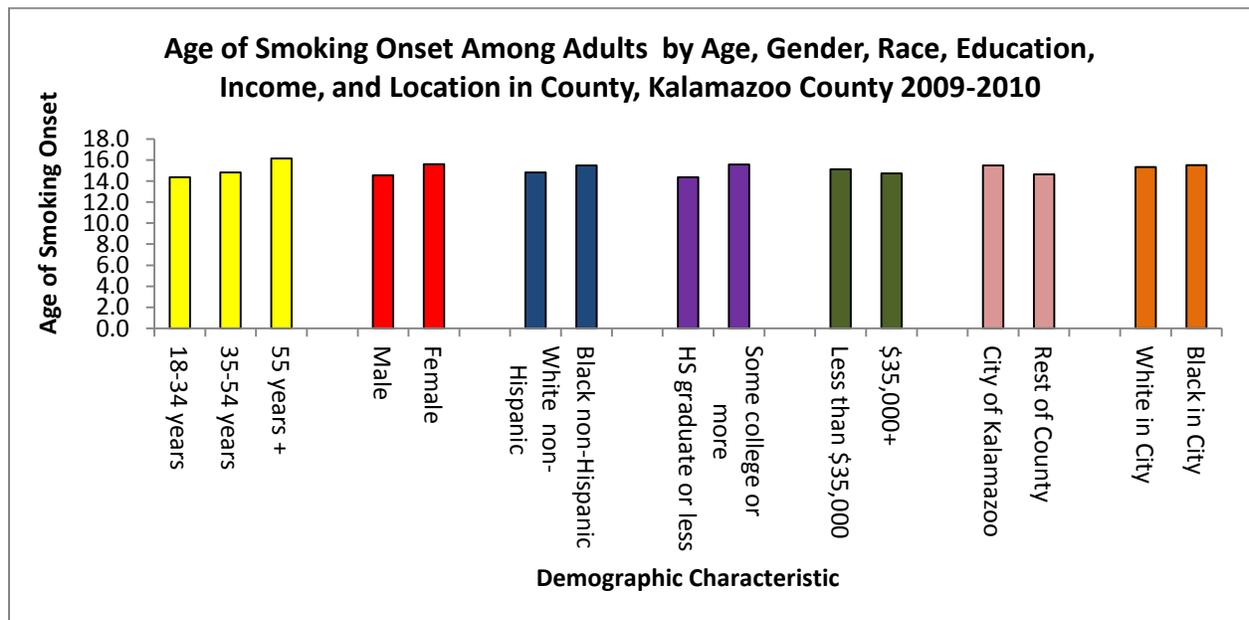
Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

## 5.1.5 Age of Smoking Onset

The Centers for Disease Control and Prevention state the age of smoking onset as a determinant for various chronic diseases. Young adults have the highest smoking rate of any age group in the United States and Canada, and recent data indicate that current smokers often initiated smoking as young adults.<sup>13</sup> The younger a person starts smoking, the greater the lifelong risk of developing smoking-related cancers. That is because young smokers are more likely to become addicted, and the more years a person smokes, the greater the risk of cancer and other chronic diseases.<sup>14</sup>

The average age of smoking onset among adults in Kalamazoo County was 15 years old according to the 2009 survey (Michigan and previous years' data not available).

Age of smoking onset remained fairly constant between age groups, gender, race, education, income, and location within the county. They all remained around 15 years or slightly younger when they started smoking with the exception of the 55 years and older age group where the average age of smoking onset was slightly higher at 16.2 years.



Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey

<sup>13</sup> CDC. Chronic Disease Risk Factors, 2012.

Available at: <http://www.cdc.gov/tobacco/youth/index.htm>

<sup>14</sup>National Cancer Institute. Cancer Trends Progress Report – Age of Smoking Initiation, 2012. Available at: [http://progressreport.cancer.gov/doc\\_detail.asp?pid=1&did=2007&chid=71&coid=703&mid#cancer](http://progressreport.cancer.gov/doc_detail.asp?pid=1&did=2007&chid=71&coid=703&mid#cancer)

**Age of Smoking Onset Among Adults, Kalamazoo County 2009-2010**

<b>Average Age When Started Smoking Among Current or Previous Smokers<sup>a</sup></b>		
<b>Demographic Characteristic</b>	<b>#</b>	<b>95% C.I.</b>
<b>Total</b>	15.0	(14.4 - 15.6)
<b>Age</b>		
18-34 years	14.4	(13.4 - 15.3)
35-54 years	14.8	(13.9 - 15.7)
55 years +	16.2	(15.4 - 16.9)
<b>Gender</b>		
Male	14.5	(13.7 - 15.4)
Female	15.6	(14.8 - 16.4)
<b>Race</b>		
White non-Hispanic	14.8	(14.2 - 15.4)
Black non-Hispanic	15.5	(13.2 - 17.8)
<b>Education</b>		
HS graduate or less	14.4	(13.7 - 15.0)
Some college or more	15.6	(14.6 - 16.5)
<b>Income</b>		
Less than \$35,000	15.1	(14.1 - 16.1)
\$35,000+	14.7	(14.0 - 15.5)
<b>City/Out-County</b>		
City of Kalamazoo	15.5	(14.5 - 16.5)
Rest of County	14.6	(13.9 - 15.4)
<b>Within City of Kalamazoo</b>		
White in City	15.3	(14.4 - 16.3)
Black in City	15.5	(13.0 - 18.0)

<sup>a</sup> Among all current or previous smokers, the average age reported when they first smoked a cigarette, even one or two puffs.

Source: Kalamazoo County 2009-2010 Behavioral Risk Factor Survey