



State of Illinois  
Illinois Department of Public Health

---

# The Burden of Tobacco in Illinois

Prevalence, Impact and Cost

2013

# BURDEN OF TOBACCO

For more information on this report, please contact:

Illinois Department of Public Health  
Office of Health Promotion  
Division of Chronic Disease Prevention and Control  
Tobacco Prevention and Control Program  
535 W. Jefferson St., Second Floor  
Springfield, IL 62761-0001  
Phone: 217-782-3300  
800-547-0466 (hearing impaired use only)  
<http://www.idph.state.il.us/>

# BURDEN OF TOBACCO

## Table of Contents

Executive Summary .....	1
Smoking Prevalence .....	2
Adult Smoking Prevalence .....	3
Youth Smoking Prevalence .....	12
Smokeless Tobacco Use .....	15
Adult Smokeless Tobacco Use .....	16
Youth Smokeless Tobacco Use .....	18
Secondhand Smoke .....	20
Adult Secondhand Smoke Exposure.....	21
Youth Secondhand Smoke Exposure.....	25
Smoking Cessation .....	27
Adult Cessation.....	28
Youth Cessation.....	30
Mortality .....	33
Economic Cost.....	36
Policy Strategies .....	39
Data Sources .....	43
Appendix A.....	46
References.....	47

# BURDEN OF TOBACCO

## List of Figures

Figure 1. Adult Smoking Prevalence in Illinois, 1996-2010 .....	3
Figure 2. Adult Smoking Prevalence Rates of Selected States, 2010.....	3
Figure 3. Adult Smoking Status, Illinois, 2011 .....	4
Figure 4. Percent of Illinois Adults Who are Current Smokers, 2007-2009.....	5
Figure 5. Adult Smoking Prevalence in Illinois by Gender, 1996 - 2010 .....	6
Figure 6. Adult Smoking Prevalence in Illinois by Age, 1996 - 2010.....	6
Figure 7. Adult Smoking Prevalence in Illinois by Race, 1996 – 2010.....	7
Figure 8. Adult Smoking Prevalence in Illinois by Hispanic Ethnicity, 1996 – 2010.....	7
Figure 9. Adult Smoking Prevalence in Illinois by Education Level, 1996 – 2010 .....	8
Figure 10. Adult Smoking Prevalence in Illinois by Income Level, 1996 - 2010 .....	8
Figure 11. Adult Smoking Status by Disability Status, Illinois, 2010.....	9
Figure 12. Prevalence of Smoking Before, During and After Pregnancy, Illinois, 2009 .....	10
Figure 13. Prevalence of Smoking During the Last Three Months of Pregnancy, Illinois, 1998-2009.....	10
Figure 14. Prevalence of Smoking During the Last Three Months of Pregnancy by Select Demographics, Illinois, 2009 .....	11
Figure 15. Current Cigarette Use Among Students, Illinois, 2002-2010.....	12
Figure 16. High School Students Who Smoked at Least One Cigarette in Past 30 Days of Selected States, 2011 .....	12
Figure 17. Current Cigarette Use* Among Students by Gender, Illinois, 2002-2010.....	13
Figure 18. Current Cigarette Use* Among Students by Race/Ethnicity, Illinois, 2002-2010.....	13
Figure 19. Current Cigarette Use* Among Students by Grade, Illinois, 2002-2010.....	14
Figure 20. Youth Frequent Cigarette Use* by Grade, Illinois, 2002-2010.....	14
Figure 21. Illinois Adult Smokeless Tobacco Use by Select Demographics, 2011 .....	16
Figure 22. Adult Smokeless Tobacco Use of Select States, 2009 .....	17
Figure 23. Adult Cigarette Smokers Who Also Use Smokeless Tobacco Products of Select States, 2009.....	17
Figure 24. Middle School Current Smokeless Tobacco Use by Select Demographics, Illinois and U.S., 2010 .....	18
Figure 25. High School Current Smokeless Tobacco Use by Select Demographics, Illinois and U.S., 2010 .....	18
Figure 26. Illinois Youth Smokeless Tobacco Use, 2002-2010 .....	19
Figure 27. Current Smokeless Tobacco Users Who Live With Someone Who Uses Smokeless Tobacco, Illinois, 2010 .....	19
Figure 28. Illinois Adults Who Report Smoking Always Allowed in Home by Select Demographics, 2011 .....	21
Figure 29. Illinois Adults Who Report Smoking Always Allowed Indoors at Work by Select Demographics, 2011 .....	22

# BURDEN OF TOBACCO

Figure 30. Adults Who Report No One is Allowed to Smoke in Their Homes by Select States, 2006-2007 .....	23
Figure 31. Adults that Report Non-Smoking Work Environments by Select States, 2006-2007. 24	
Figure 32. Illinois Middle School Students Who Live With Someone Who Smokes by Select Demographics, 2010 .....	25
Figure 33. Illinois High School Students Who Live With Someone Who Smokes by Select Demographics, 2010 .....	25
Figure 34. Illinois Youth Who Rode in Car or Were in Same Room as Person Smoking on One or More Days of the Past Seven, 2010.....	26
Figure 35. Illinois Youth Who Definitely or Probably Think Smoke From Other People's Cigarettes is Harmful to Them, 2010.....	26
Figure 36. Adults Who Want to Quit Smoking for Good by Select Demographics, Illinois and U.S., 2011 and 2010.....	28
Figure 37. Adults Who Smoke With a Quit Attempt in Last 12 Months by Select Demographics, Illinois and U.S., 2011 and 2010.....	28
Figure 38. Illinois Adults Who Smoke With a Quit Attempt in Last 12 Months, 2005-2011 .....	29
Figure 39. Adults Who Used Effective Counseling and/or Medication for Smoking Cessation by Select Demographics, Illinois and U.S., 2011 and 2010 .....	29
Figure 40. Current Illinois Youth Smokers Who Want to Quit Smoking, 2002-2010 .....	30
Figure 41. Current Illinois Youth Smokers Who Want to Quit Smoking by Select Demographics, 2010.....	30
Figure 42. Current Illinois Youth Smokers With a Quit Attempt in Last 12 Months, 2002-2010	31
Figure 43. Current Illinois Youth Smokers Who Have Tried to Quit at Least Once in the Past 12 Months by Select Demographics, 2010 .....	31
Figure 44. Current Illinois Youth Smokers Who Think They Can Quit Smoking, 2002-2010....	32
Figure 45. Age-adjusted Smoking-Attributable Mortality Rate per 100,000 in Illinois, 2008.....	34
Figure 46. Age-adjusted Years of Potential Life Lost Rate per 100,000 in Illinois, 2008 .....	35
Figure 47. Smoking-Attributable Fractions of Total Health Care Expenditures, 2004 .....	37
Figure 48. Average Annual Smoking-Attributable Productivity Losses in Illinois, 2000-2004 ..	38
Figure 49. Cigarette Tax per Pack of Select States, 2012.....	41
Figure 50. Total State Tobacco-related Revenues* of Select States, 2010 .....	41
Figure 51. Total State and Federal Tobacco Control Appropriations as Percent of 2007 CDC Best Practices of Select States, 2010 .....	42

## List of Tables

Table 1. Number of Cigarettes Smoked Per Day by Adult Smokers, Illinois, 2011 .....	4
---	---

# BURDEN OF TOBACCO

## Executive Summary

In 1964, the U.S. Surgeon General's released a landmark report called *Smoking and Health* that concluded that smoking caused cancer. Nearly 50 years later, tobacco use is still the largest cause of preventable death, disease and disability in the United States.

In 2010, 19.3 percent of U.S. adults were current cigarette smokers and the highest smoking prevalence was observed in the Midwest (21.8%).<sup>1</sup> The proportion of daily smokers who smoked one to nine cigarettes per day increased from 16.4 percent to 21.8 percent during 2005—2010, whereas the proportion who smoked equal to or more than 30 cigarettes per day decreased from 12.7 percent to 8.3 percent.<sup>1</sup> Americans are still smoking, but are smoking less.

In the United States, tobacco use is responsible for approximately 443,000 deaths per year.<sup>2</sup> It is responsible for 30 percent of all cancer deaths, 33 percent of all deaths from cardiovascular disease, and 80 percent of deaths from chronic obstructive pulmonary disease (COPD).<sup>3</sup>

Smoking damages every organ in the body. When individuals inhale cigarette smoke, either directly or secondhand, they are inhaling more than 7,000 chemicals. Hundreds of these are hazardous, and at least 69 are known to cause cancer. The risk and severity of many adverse health outcomes caused by smoking are directly related to the duration and level of exposure to tobacco smoke.<sup>2</sup>

Smoking causes cancer, heart disease, stroke, lung diseases (including emphysema, bronchitis, and COPD), pregnancy complications, and other diseases. For every person who dies from a smoking-related disease, 20 more people suffer with at least one serious tobacco-related illness.

The consequences of smoking continue to be felt among nonsmokers as well. Thousands of nonsmokers die in the United States each year due to heart disease and lung cancer caused by secondhand smoke. There is no risk-free level of exposure to tobacco smoke.<sup>3</sup>

# BURDEN OF TOBACCO

## Smoking Prevalence

The 2010 U.S. Surgeon General's report states that cigarettes are the most common form of tobacco used. The evidence indicates that changing cigarette designs over the last five decades, including filtered, low-tar, and "light" variations, have not reduced overall disease risk among smokers and may have hindered prevention and cessation efforts.<sup>4</sup>

The prevalence of smoking among adults has continued to decrease over the years. However, the percent of adults who smoke is still far from the Healthy People 2020 goal of 12 percent. Data shows there are now more former smokers than current smokers in the United States due to tobacco prevention and control efforts.

The gap in smoking rates between male and female smokers has decreased. With more females smoking, they are sharing more of the burden from smoking related diseases. While the percentage of adults who smoke continues to decrease, disparities by income, education, sexual orientation, and race remain. There are higher percentages of adults who smoke in lower income, lower education, and minority groups.

Maternal cigarette smoking during pregnancy increases the risk for pregnancy complications, such as placental previa, placental abruption, and premature rupture of the membrane; and poor pregnancy outcomes, such as preterm delivery, restricted fetal growth, and sudden infant death syndrome (SIDS). Smoking during pregnancy resulted in an estimated 776 infant deaths in the United States annually during 2000—2004.<sup>4</sup>

The 2012 U.S. Surgeon General's report on preventing youth tobacco use states that after a steady decrease following the 1998 Tobacco Master Settlement Agreement, youth tobacco use is now declining more slowly. Initiation of smoking for most smokers begins in youth or young adulthood. Nearly 90 percent of smokers started smoking by age 18 and 99 percent of smokers had started by age 26.<sup>6</sup> Every day, 3,800 young people under the age of 18 smoke their first cigarette and 1,000 become daily smokers. For every tobacco related death, at least two youth or young adults become regular smokers.

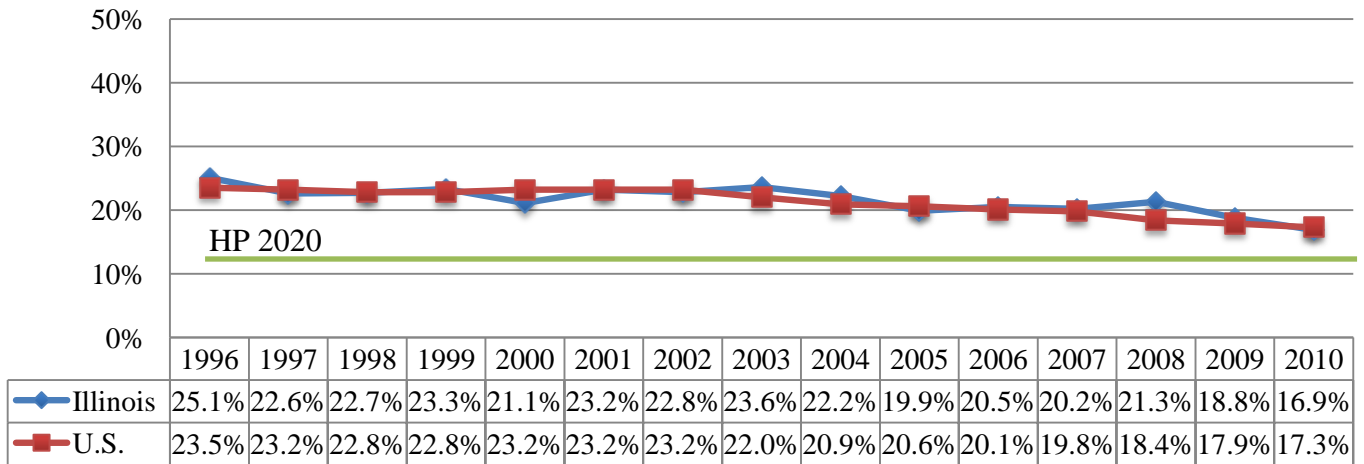
There are several social, environmental, and personal risk factors that increase the likelihood of tobacco use among youth. These risk factors are low socioeconomic status; use and approval of tobacco use by peers or siblings; exposure to smoking in movies; lack of skills to resist influences to tobacco use; smoking by parents or guardians and/or lack of parental support or involvement; accessibility, availability, and price of tobacco products; a perception that tobacco use is the norm; low levels of academic achievement; low self-image or self-esteem; exposure to tobacco advertising; and aggressive behavior.<sup>6</sup>

# BURDEN OF TOBACCO

## Adult Smoking Prevalence

Over the 15-year period, 1996 through 2010, the prevalence of smoking in Illinois has declined 32.7 percent, from 25.1 percent in 1996 to 16.9 percent in 2010. During that same period, the prevalence rate for the United States declined 26.4 percent. The Healthy People 2020 target for smoking prevalence is 12.0 percent.

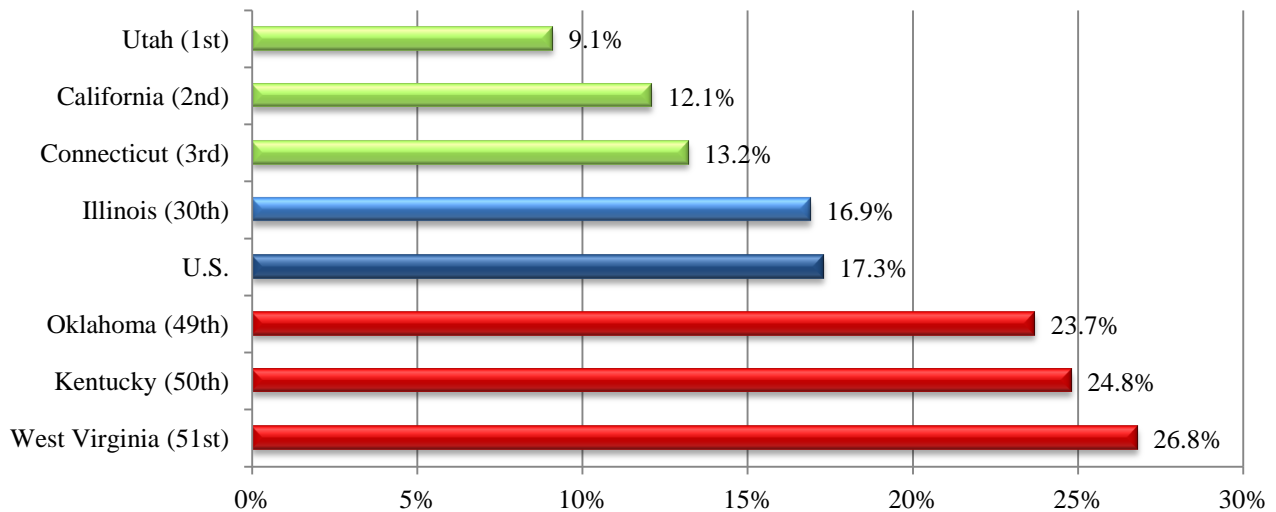
**Figure 1. Adult Smoking Prevalence in Illinois, 1996-2010**



Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC

In 2010, Illinois ranked 30<sup>th</sup> in smoking prevalence rates among the 50 states and the District of Columbia. Utah had the lowest rate of 9.1 percent while West Virginia had the highest rate of 26.8 percent. The rate for the United States was 17.3 percent.

**Figure 2. Adult Smoking Prevalence Rates of Selected States, 2010**



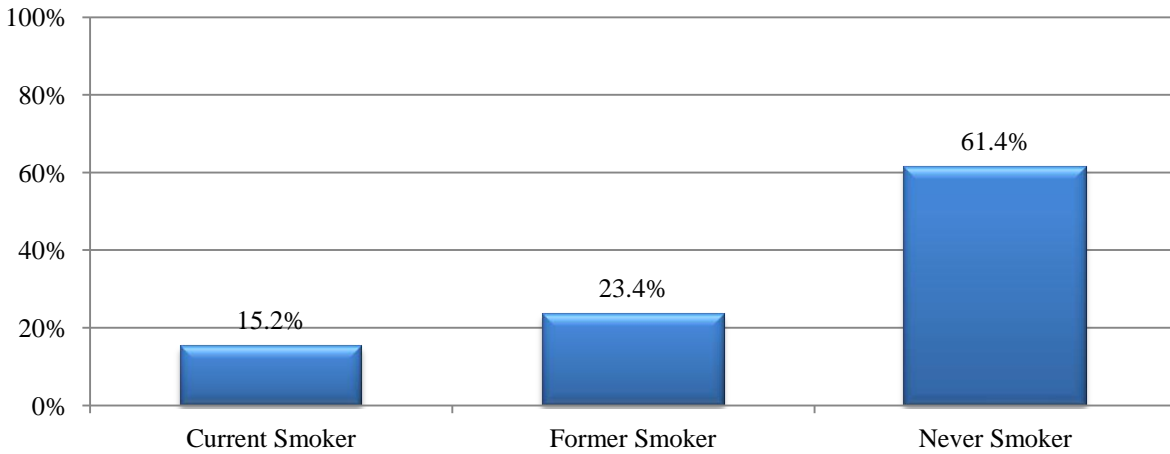
Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC



# BURDEN OF TOBACCO

Nationally, there are now more former smokers than current smokers. The same is true in Illinois. According to the Adult Tobacco Survey in 2011, 15.2 percent of adults in Illinois were current smokers, 23.4 percent were former smokers, and 61.4 percent never smoked.

**Figure 3. Adult Smoking Status, Illinois, 2011**



Source: Illinois Adult Tobacco Survey (ATS)

The average pack of cigarettes contains 20 cigarettes. Current smokers in Illinois smoke an average of 16 cigarettes per day, slightly less than a pack a day. Nearly half, 46.6 percent, of current smokers smoke less than 15 cigarettes a day, about 44 percent smoke 15 to 25 cigarettes daily, and 9.2 percent smoke more than 25 cigarettes a day. There is no safe number of cigarettes that can be smoked. Damage from tobacco smoke is immediate and even low levels of exposure to tobacco are sufficient to substantially increase the risk of adverse cardiac events.

**Table 1. Number of Cigarettes Smoked Per Day by Adult Smokers, Illinois, 2011**

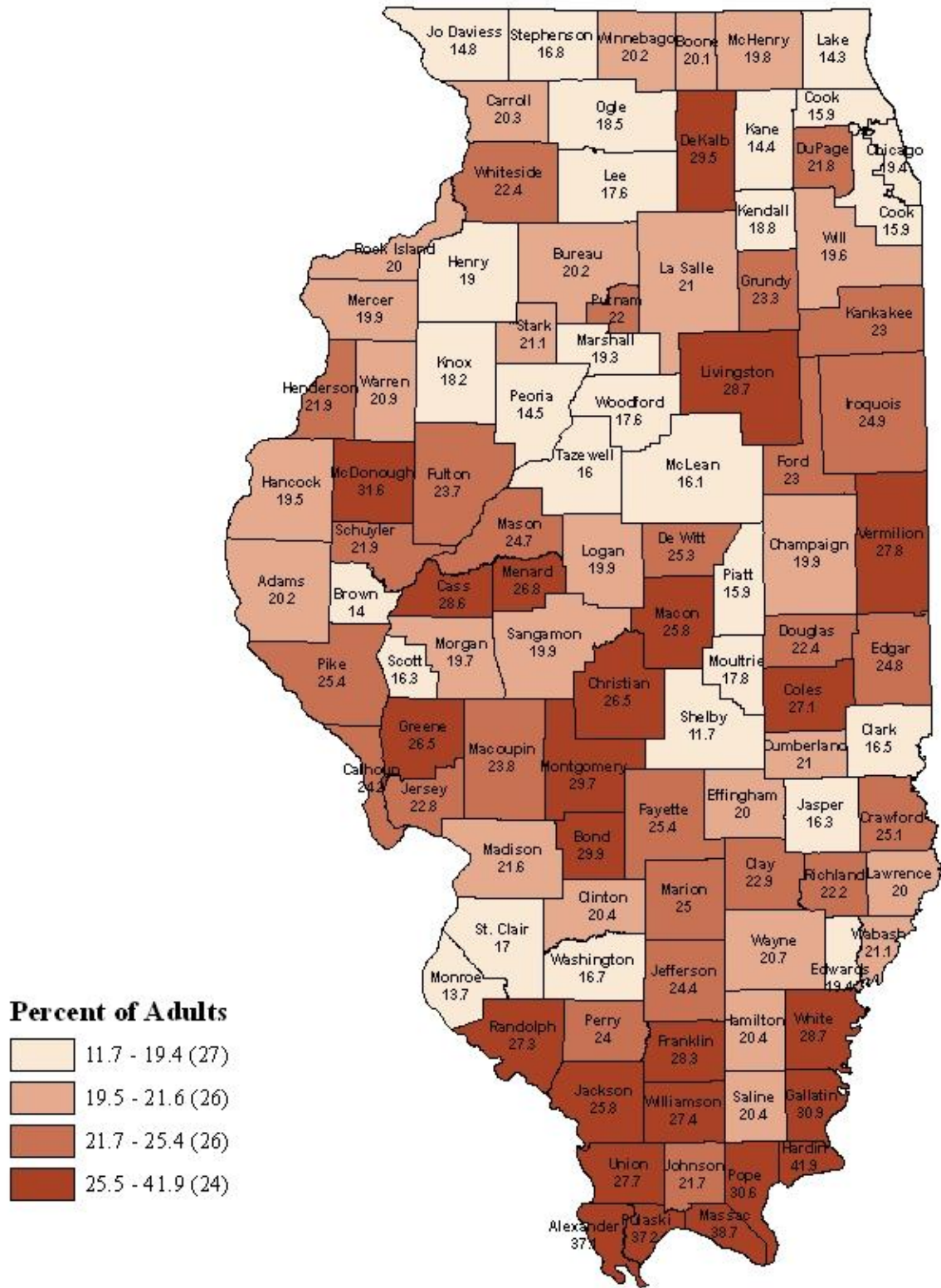
Number of Cigarettes Smoked Per Day	%
< 15 cigarettes	46.6%
15-25 cigarettes	44.1%
> 25 cigarettes	9.3%
<b>Mean number of cigarettes smoked per day</b>	<b>16</b>

Source: Illinois Adult Tobacco Survey (ATS)

The prevalence of adult smoking varies in the state from 11.7 percent in Shelby County to 41.9 percent in Hardin County. The map below shows a high smoking prevalence in the southernmost counties of the state. These southern counties also have high rates of adults with high blood pressure and heart disease mortality (Illinois Behavioral Risk Factor Surveillance System and National Center for Health Statistics).

# BURDEN OF TOBACCO

**Figure 4. Percent of Illinois Adults Who are Current Smokers, 2007-2009**

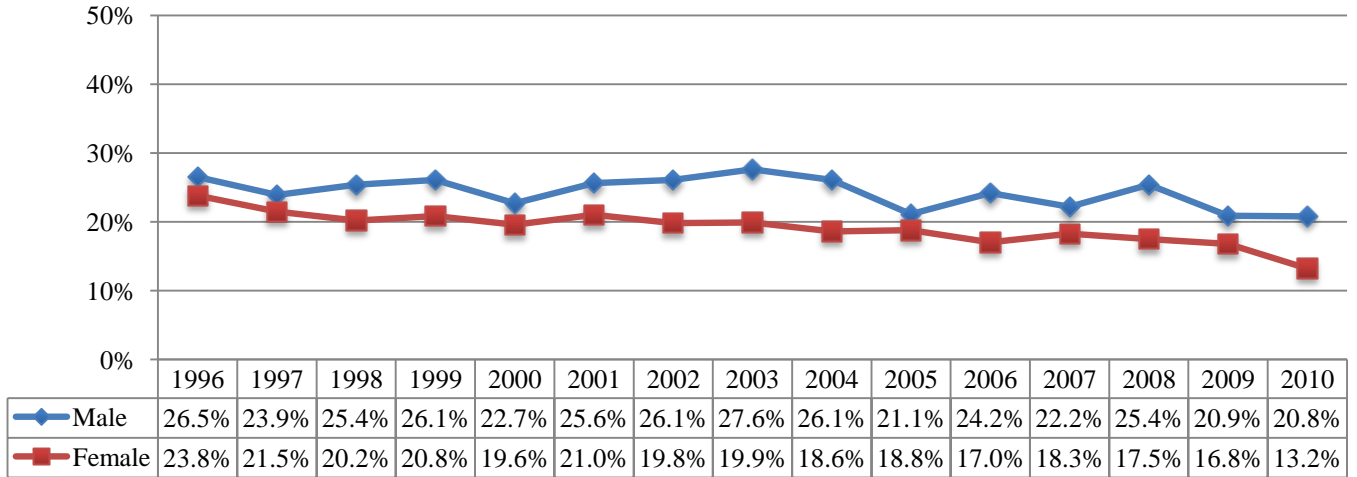


Source: Illinois County Behavioral Risk Factor Surveys  
 Note: Chicago and Cook County values are from 2009 annual BRFSS  
 \*See Appendix A for county level data

# BURDEN OF TOBACCO

From 1996 through 2010 men had higher smoking prevalence rates than women. Since 1996, the smoking prevalence rates for males declined from 26.5 percent to 20.8 percent and for females from 23.8 percent to 13.2 percent.

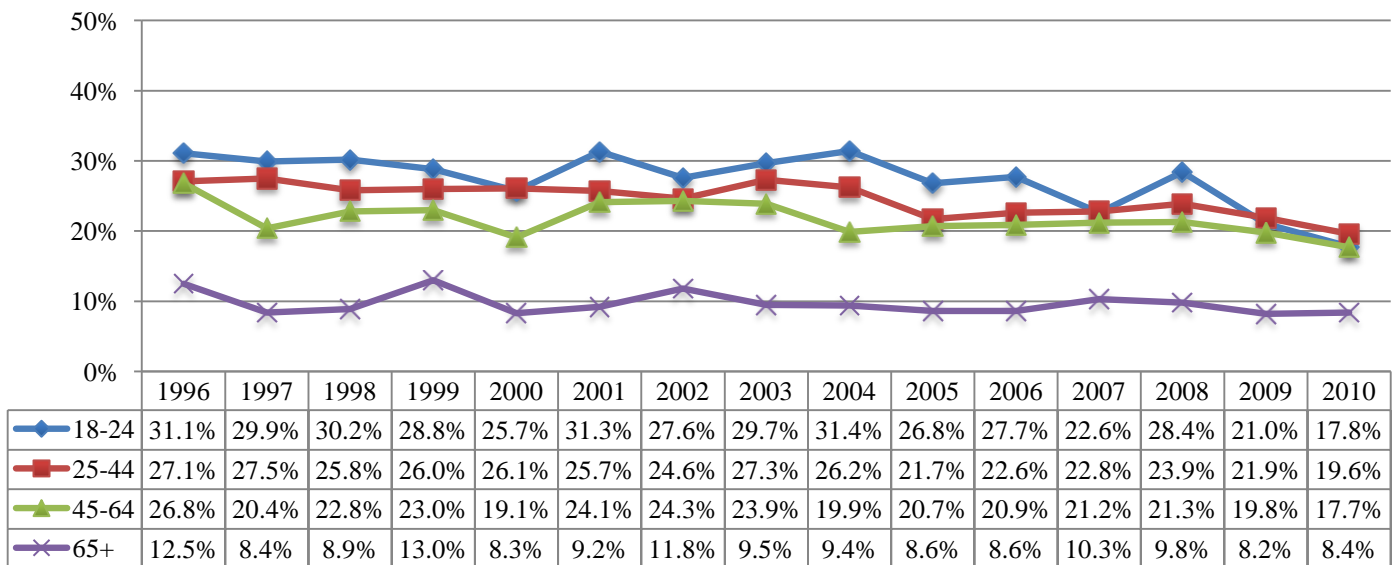
**Figure 5. Adult Smoking Prevalence in Illinois by Gender, 1996 - 2010**



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

From 1996 through 2010, the smoking prevalence rate for all age groups has decreased. The largest decrease is seen in the 18-24 year old age group from 31.1 percent to 17.8 percent.

**Figure 6. Adult Smoking Prevalence in Illinois by Age, 1996 - 2010**

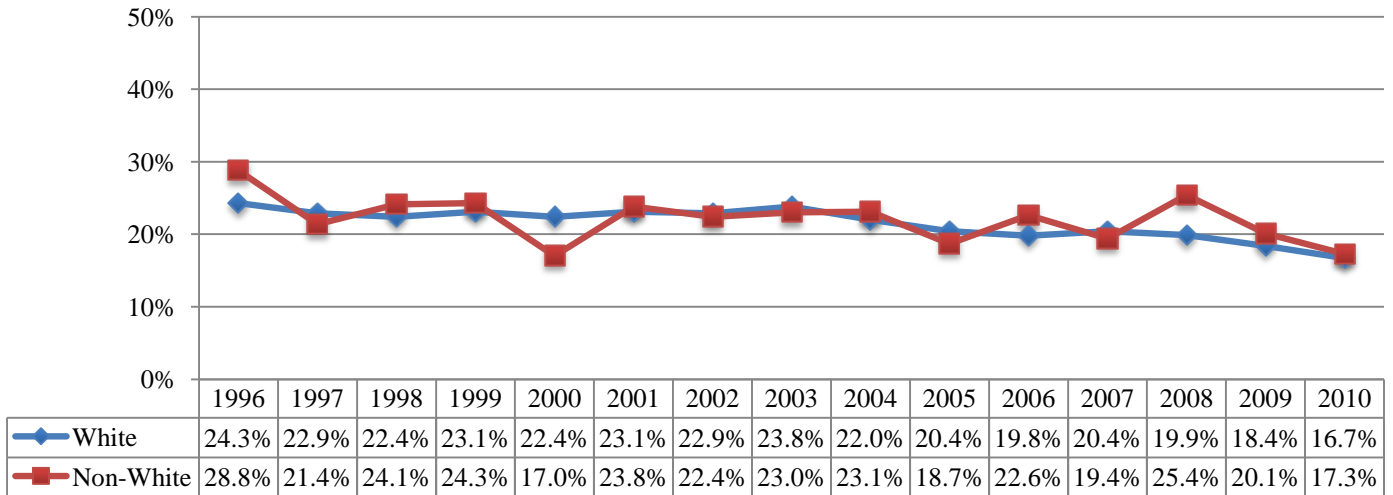


Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

# BURDEN OF TOBACCO

From 1996 to 2010, there was a decrease in prevalence rates for both whites and non-whites.

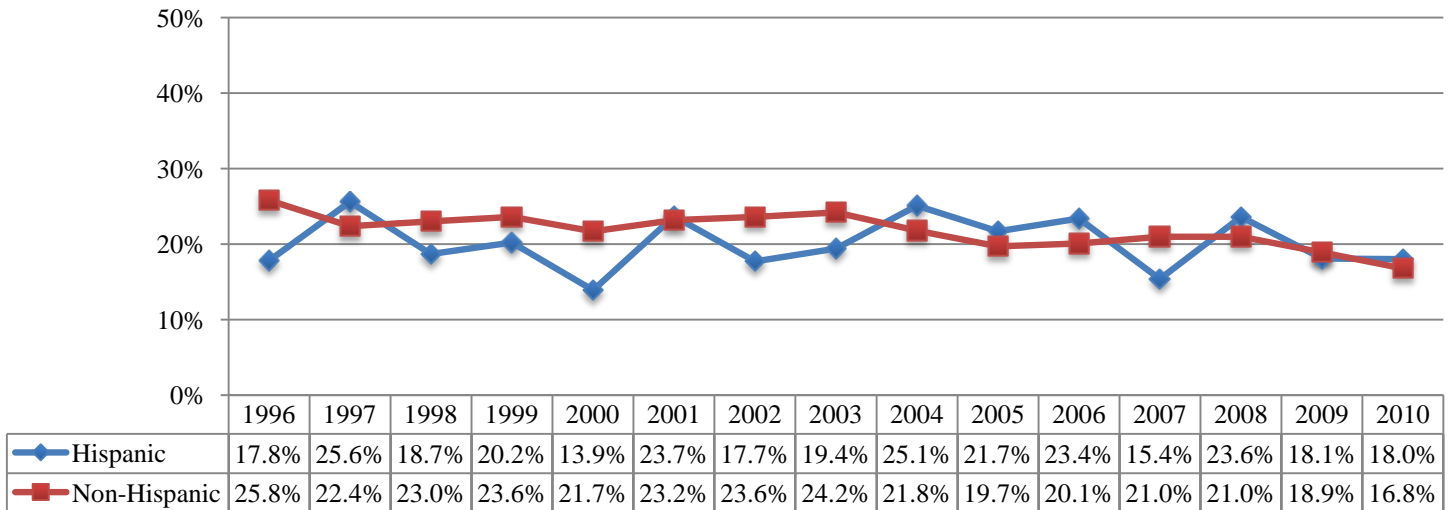
**Figure 7. Adult Smoking Prevalence in Illinois by Race, 1996 – 2010**



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

From 1996 through 2010, there was a decrease from 25.8 percent to 16.8 percent in the prevalence rates for non-Hispanics. In the same time period, prevalence rates for Hispanics have been unsteady with a slight increase from 17.8 percent to 18.0 percent.

**Figure 8. Adult Smoking Prevalence in Illinois by Hispanic Ethnicity, 1996 – 2010**

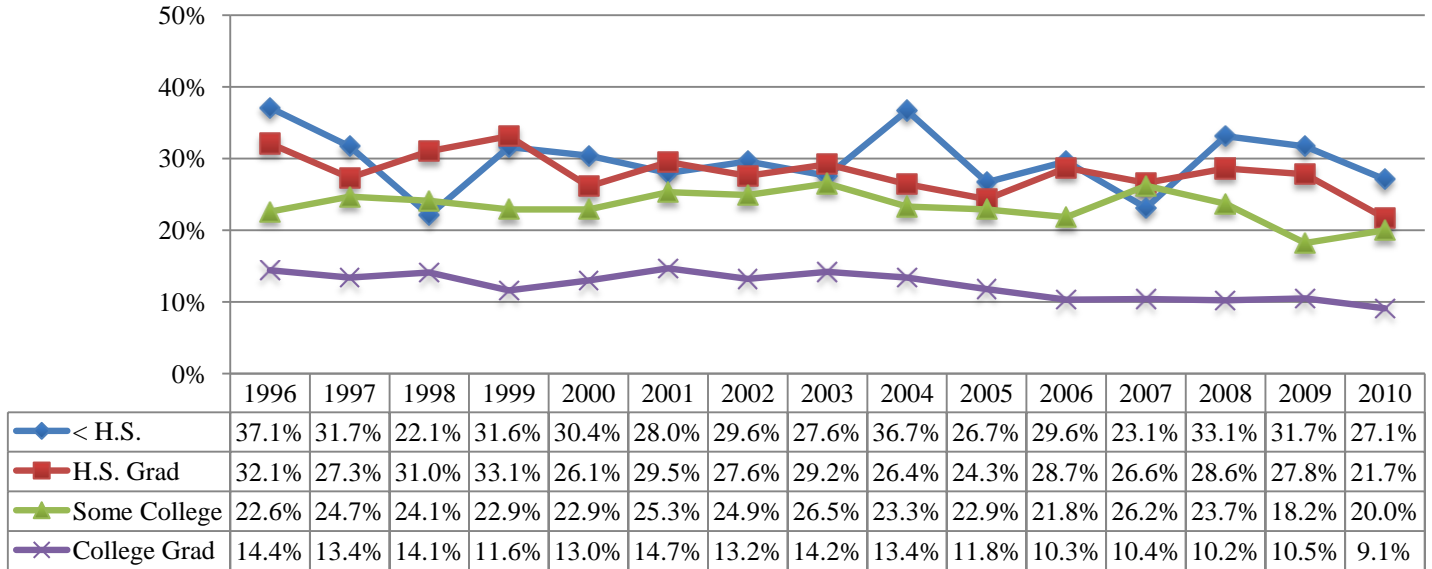


Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

# BURDEN OF TOBACCO

From 1996 through 2010, college graduates had the lowest smoking prevalence rates. Those with less than a high school degree had the highest rates.

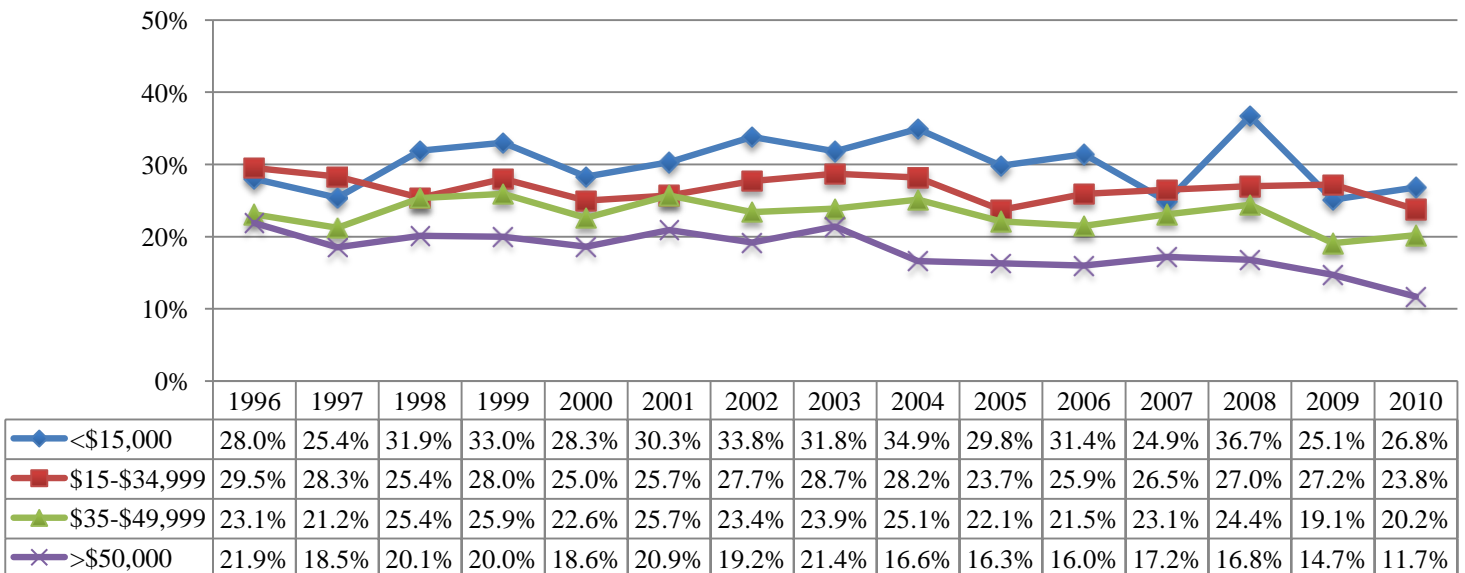
**Figure 9. Adult Smoking Prevalence in Illinois by Education Level, 1996 – 2010**



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

In Illinois, there is an inverse relationship between smoking and income – as income increases smoking prevalence rates decrease. This trend has remained consistent over the 15-year period, 1996-2010.

**Figure 10. Adult Smoking Prevalence in Illinois by Income Level, 1996 - 2010**



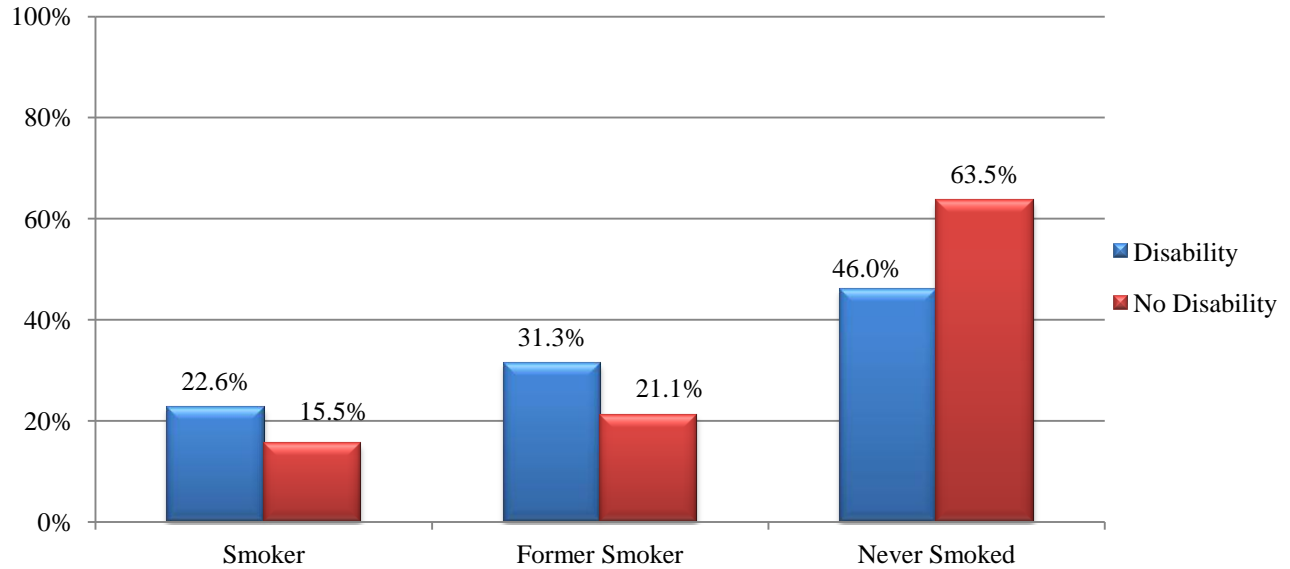
Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

# BURDEN OF TOBACCO

## Disability Status

Disability is defined as an adult with an activity limitation due to a physical, mental, or emotional problem and/or the use of special equipment for activities due to a health problem. In 2010, more adults with a disability were current or former smokers (22.6% and 31.3% respectively) than adults without a disability. Fewer adults with a disability were never smokers (46.0% and 63.5% respectively).

**Figure 11. Adult Smoking Status by Disability Status, Illinois, 2010**



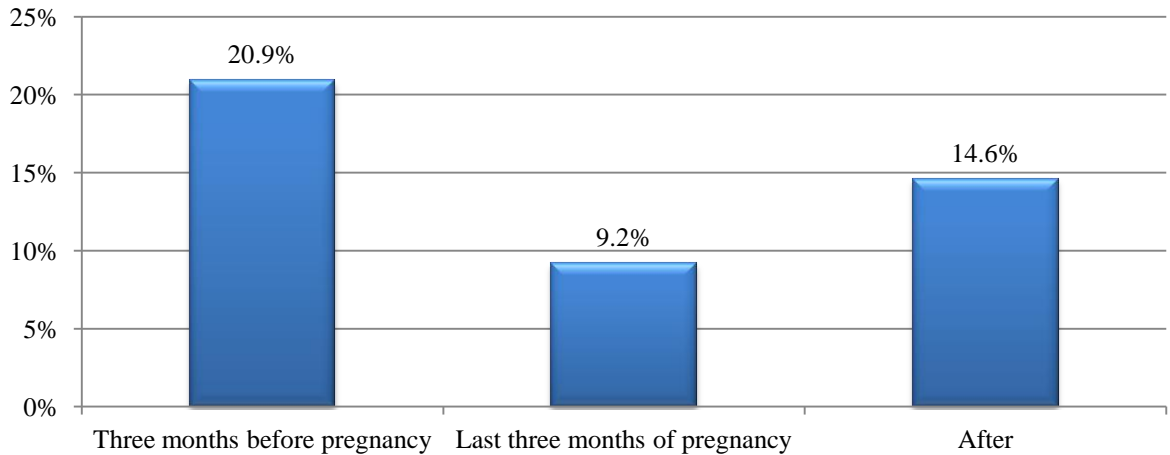
Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS)

# BURDEN OF TOBACCO

## Pregnant Women

According to the 2009 Illinois Pregnancy Risk Assessment Monitoring System (PRAMS) report, 20.9 percent of women smoked three months prior to their pregnancy, 9.2 percent of women smoked during the last three months of their pregnancy, and 14.6 percent of women smoked after their pregnancy.

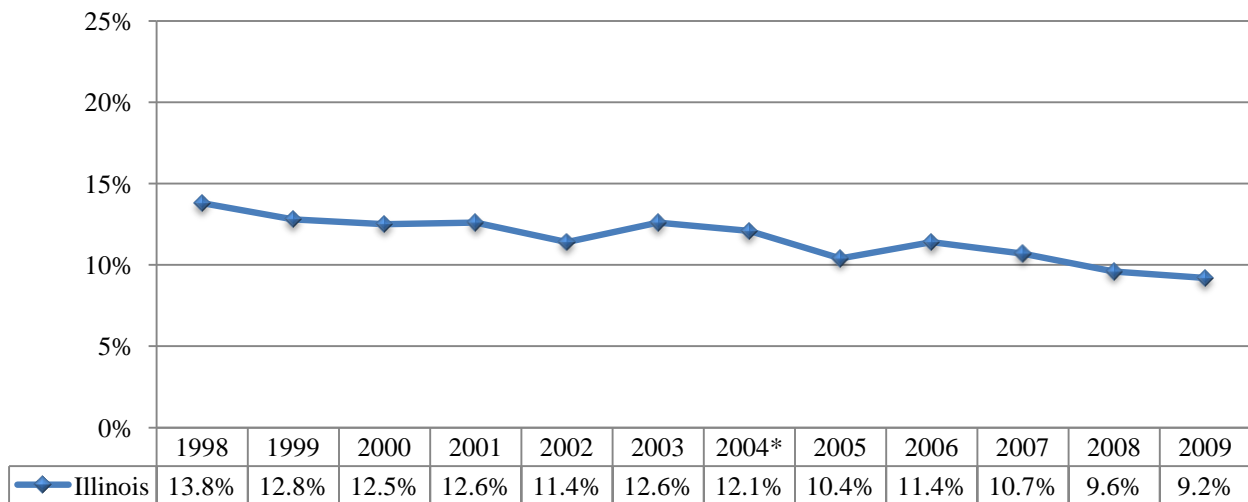
**Figure 12. Prevalence of Smoking Before, During and After Pregnancy, Illinois, 2009**



Source: Illinois Pregnancy Risk Assessment Monitoring System

From 1998 through 2009, there has been a decrease in the percent of women who report smoking during pregnancy from 13.8 percent to 9.2 percent.

**Figure 13. Prevalence of Smoking During the Last Three Months of Pregnancy, Illinois, 1998-2009**



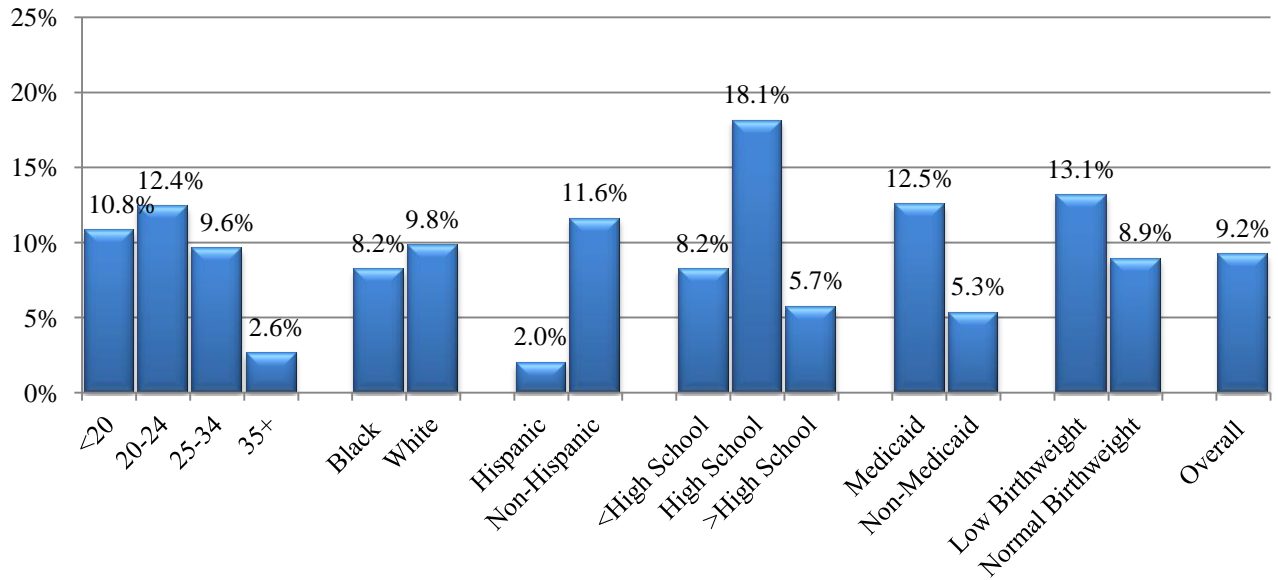
Source: Illinois Pregnancy Risk Assessment Monitoring System

\*Change in question response categories

# BURDEN OF TOBACCO

Women younger than the age of 35 had higher percentages of smoking during pregnancy than those older than the age of 35. There is not a significant difference by race of women smoking during pregnancy but there is a large difference by ethnicity with 11.6 percent of non-Hispanic compared to 2.0 percent of Hispanic women reporting smoking during pregnancy. Women with a high school education reported a significantly higher percentage of smoking during pregnancy. Women whose deliveries were paid for by Medicaid and those who gave birth to low birth weight babies reported higher percentages of smoking during pregnancy.

**Figure 14. Prevalence of Smoking During the Last Three Months of Pregnancy by Select Demographics, Illinois, 2009**



Source: Illinois Pregnancy Risk Assessment Monitoring System

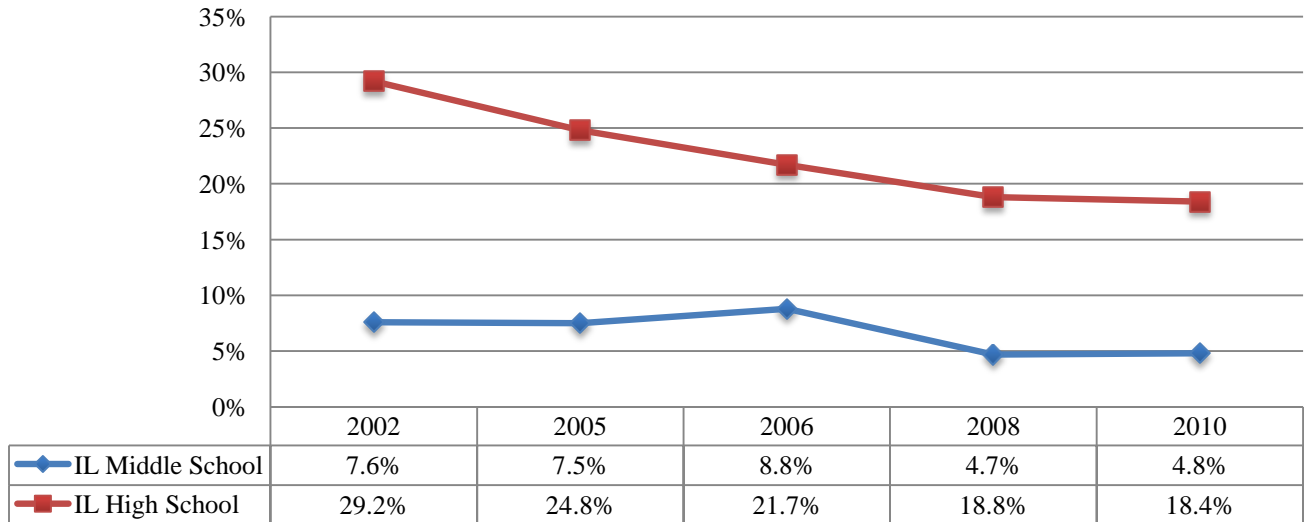


# BURDEN OF TOBACCO

## Youth Smoking Prevalence

From 2002 through 2010, current cigarette use by Illinois students decreased from 7.6 percent to 4.8 percent in middle school students and from 29.2 percent to 18.4 percent in high school students.

**Figure 15. Current Cigarette Use Among Students, Illinois, 2002-2010**

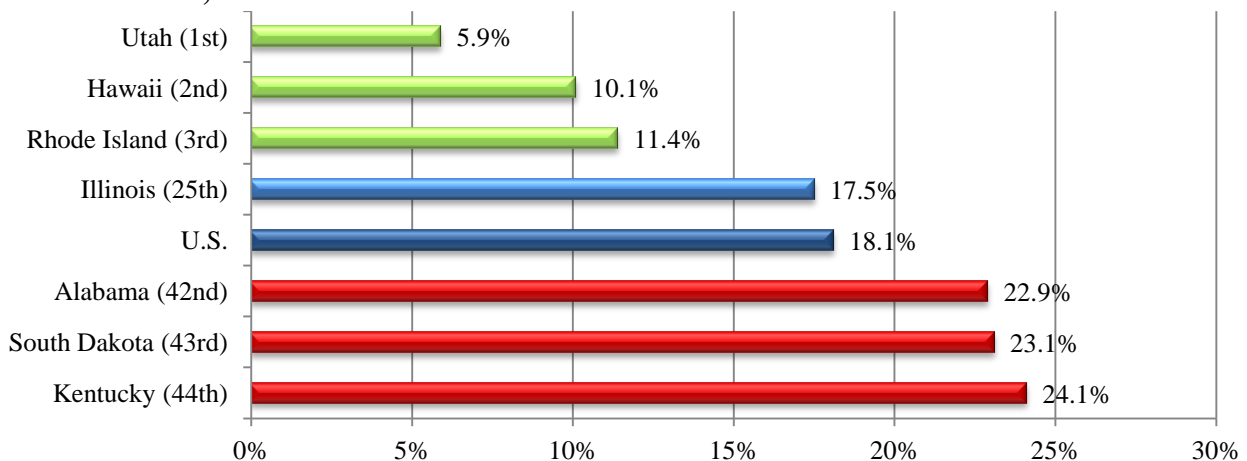


Source: Illinois Youth Tobacco Survey (YTS)

\*Use defined by smoked a cigarette at least once in the past 30 days

In 2011, Illinois ranked 25<sup>th</sup> for high school students who smoked at least one cigarette in the past 30 days among the states that completed the Youth Risk Behavior Survey with a prevalence rate of 17.5 percent. The highest rate was seen in Kentucky of 24.1 percent and the lowest rate was seen in Utah of 5.9 percent. The U.S. rate was 18.1 percent.

**Figure 16. High School Students Who Smoked at Least One Cigarette in Past 30 Days of Selected States, 2011**

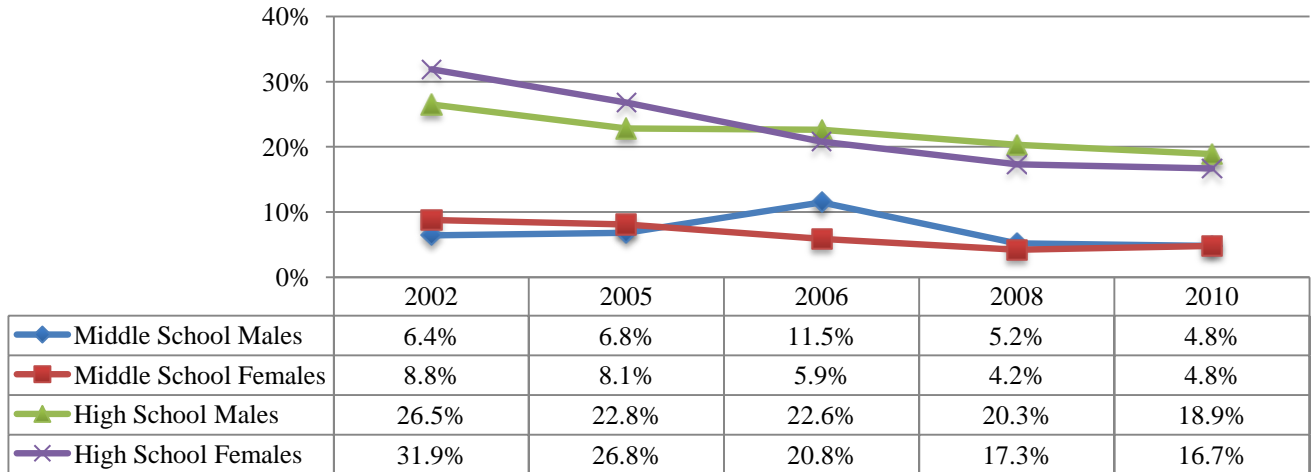


Source: Youth Risk Behavior Survey (YRBS)

# BURDEN OF TOBACCO

From 2002 through 2008, females had higher current cigarette use prevalence rates than males in both middle and high school students. By 2010, the difference disappeared among middle school students but remained for high school students. Female current cigarette use prevalence rates decreased more than males in both middle and high school students over the eight-year period.

**Figure 17. Current Cigarette Use\* Among Students by Gender, Illinois, 2002-2010**

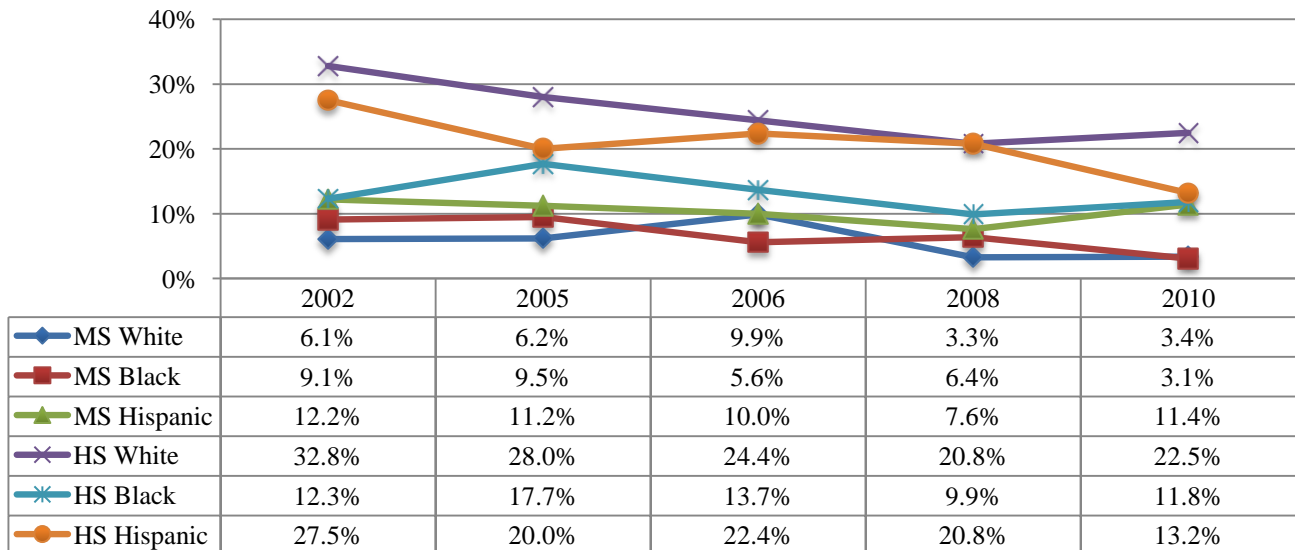


Source: Illinois Youth Tobacco Survey (YTS)

\*Use defined as “smoked a cigarette at least once in the past 30 days”

From 2002 through 2010, high school white students had the highest prevalence rate of current cigarette use with a 2010 rate of 22.5 percent. Over this period all racial/ethnic groups decreased their current cigarette use prevalence rates.

**Figure 18. Current Cigarette Use\* Among Students by Race/Ethnicity, Illinois, 2002-2010**



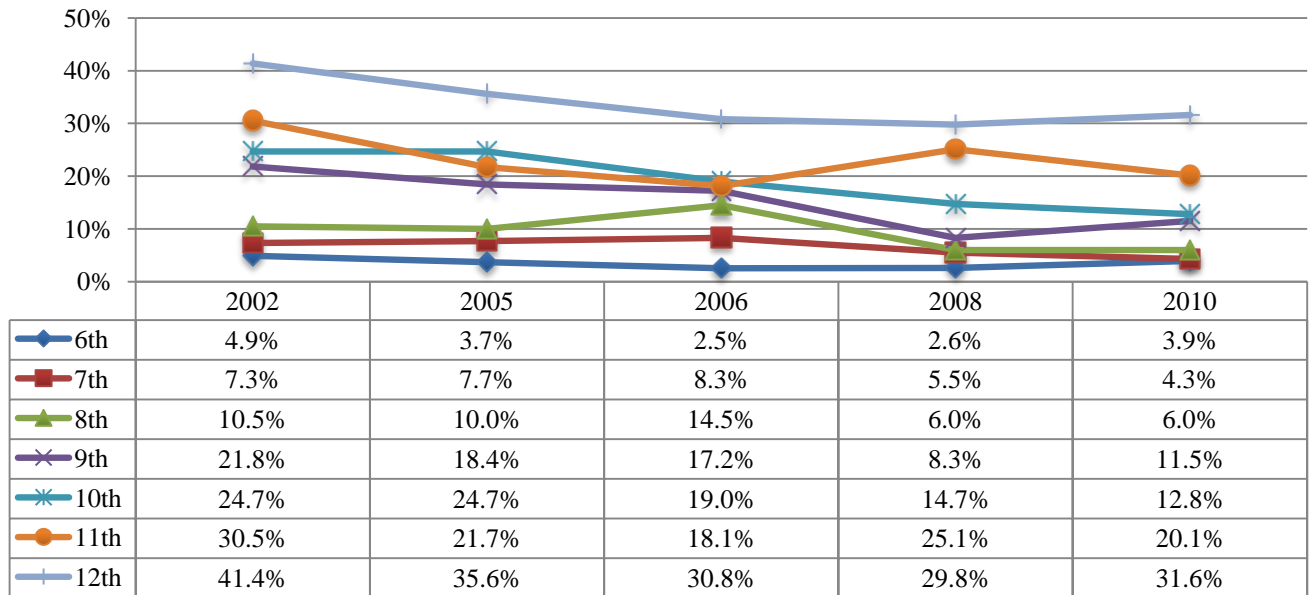
Source: Illinois Youth Tobacco Survey (YTS)

\*Use defined as “smoked a cigarette at least once in the past 30 days”

# BURDEN OF TOBACCO

From 2002 through 2010, students in 12<sup>th</sup> grade had the highest prevalence rate of current cigarette use. During this same period, every grade showed a decrease in current cigarette use.

**Figure 19. Current Cigarette Use\* Among Students by Grade, Illinois, 2002-2010**

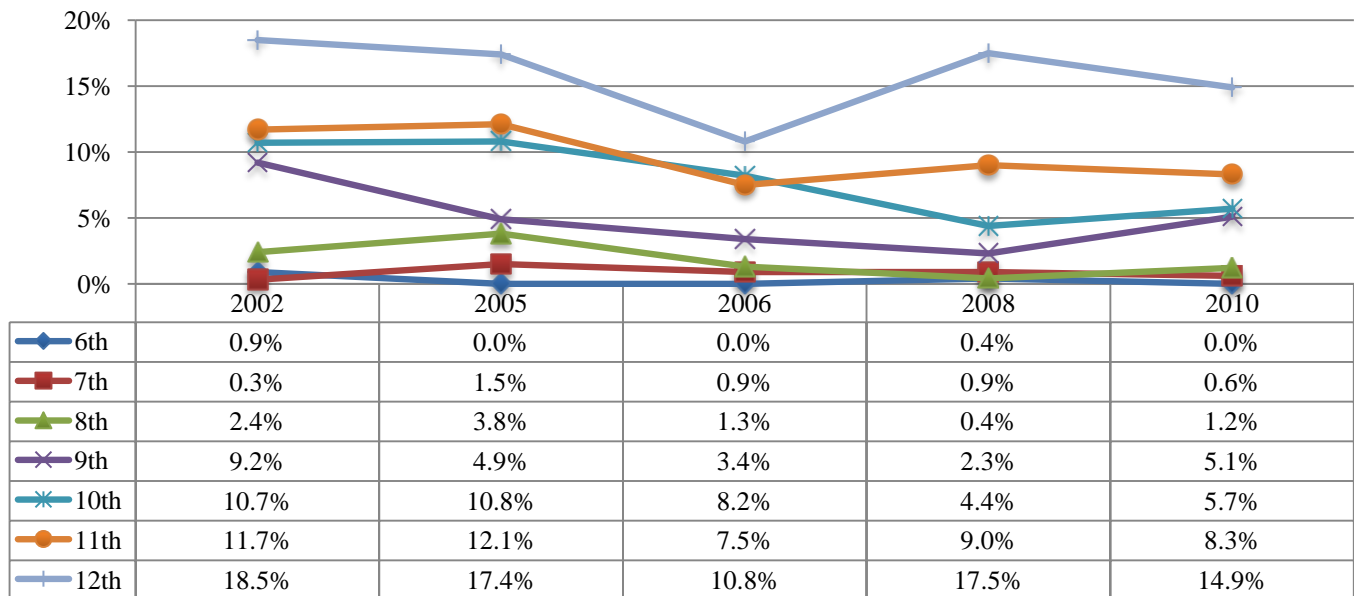


Source: Illinois Youth Tobacco Survey (YTS)

\*Use defined as “smoked a cigarette at least once in the past 30 days”

From 2002 through 2010, 12<sup>th</sup> grade students had the highest prevalence rate of frequent cigarette smoking as defined by smoking on 20 or more of the past 30 days. All grades, except seventh, had a decrease in frequent cigarette use prevalence from 2002 to 2010.

**Figure 20. Youth Frequent Cigarette Use\* by Grade, Illinois, 2002-2010**



Source: Illinois Youth Tobacco Survey (YTS)

\*Smoked cigarettes on 20 or more of the past 30 days

## **Smokeless Tobacco Use**

Smokeless tobacco is not a safe alternative to smoking cigarettes. Smokeless tobacco contains 28 cancer-causing agents (carcinogens) and is a known cause of human cancer. Smokeless tobacco use increases the risk of developing oral cavity cancer, esophageal cancer and pancreatic cancer.<sup>6</sup> Smokeless tobacco use also may cause other diseases, such as heart disease, gum disease, and oral lesions. Smokeless tobacco use during pregnancy increases the risks for preeclampsia (i.e., a condition that may include high blood pressure, fluid retention, and swelling), premature birth, and low birth weight. Smokeless tobacco use by men causes reduced sperm count and abnormal sperm cells.

There are two main types of smokeless tobacco in the United States, chewing tobacco and snuff. The tobacco industry also has developed newer smokeless tobacco products, such as snus, lozenges, tablets, tabs, strips, and sticks. Tobacco companies promote smokeless tobacco products as less dangerous alternatives to smoking. The U.S. Surgeon General, National Cancer Institute, National Toxicology Program, and World Health Organization have all stated that smokeless tobacco products are harmful to one's health by increasing the risk of developing oral cancer.<sup>5</sup>

National data reports show that smokeless tobacco use has increased. For example, among men aged 18–25 years in the United States smokeless tobacco use increased from 3.1 percent in 2002 to 3.7 percent in 2007.<sup>8</sup> Prevalence of smokeless tobacco use among men in some states, such as West Virginia (17.1%) and Wyoming (16.9%), has nearly reached the national level of smoking prevalence among all adults (20.8%).

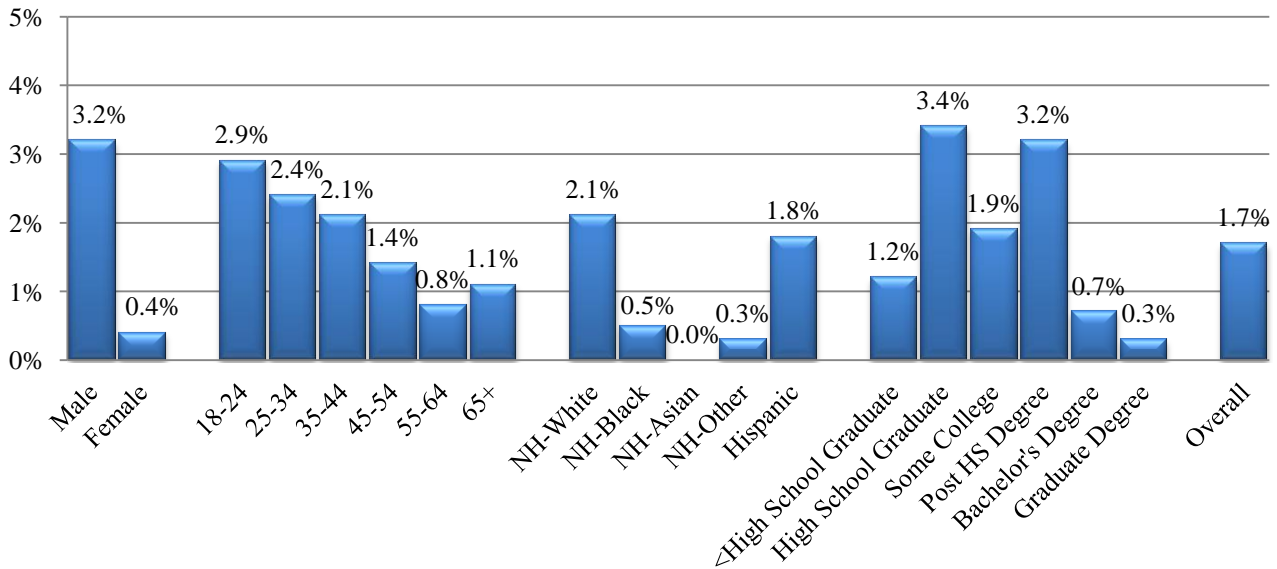
Smokeless tobacco product marketing has increased from \$250.8 million in 2005 to \$444.2 million in 2010.<sup>7</sup> Some tobacco companies are marketing smokeless tobacco products to encourage smokers who may otherwise quit to instead use its smokeless products in smoke-free settings.

# BURDEN OF TOBACCO

## Adult Smokeless Tobacco Use

In 2011, the overall prevalence of smokeless tobacco use in Illinois was 1.7 percent. The highest prevalence of smokeless tobacco use was seen in men (3.2%), whites (2.1%), and those aged 18 to 24 (2.9%). An inverse relationship is seen between age and smokeless tobacco use with the highest prevalence rate in the youngest age category. In 2011, there was no relationship observed between education level and smokeless tobacco use. The education level with the highest prevalence was those with a high school degree (3.4 percent). According to the Illinois Behavioral Risk Factor Surveillance System, adults with a disability have a higher prevalence of using smokeless tobacco than adults without a disability (2.7% and 2.2% respectively: data not shown).

**Figure 21. Illinois Adult Smokeless Tobacco Use by Select Demographics, 2011**

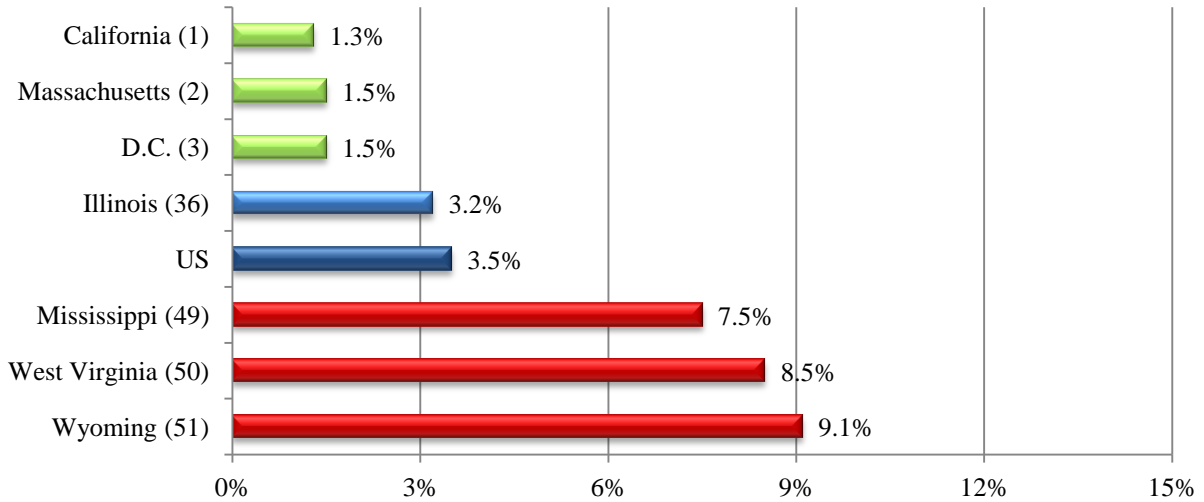


Source: Illinois Adult Tobacco Survey (ATS)

# BURDEN OF TOBACCO

In 2009, Illinois ranked 36<sup>th</sup> for smokeless tobacco use prevalence out of the 50 states and the District of Columbia with a prevalence rate of 3.2 percent. The highest smokeless tobacco use prevalence was observed in Wyoming (9.1%) and the lowest in California (1.3%).

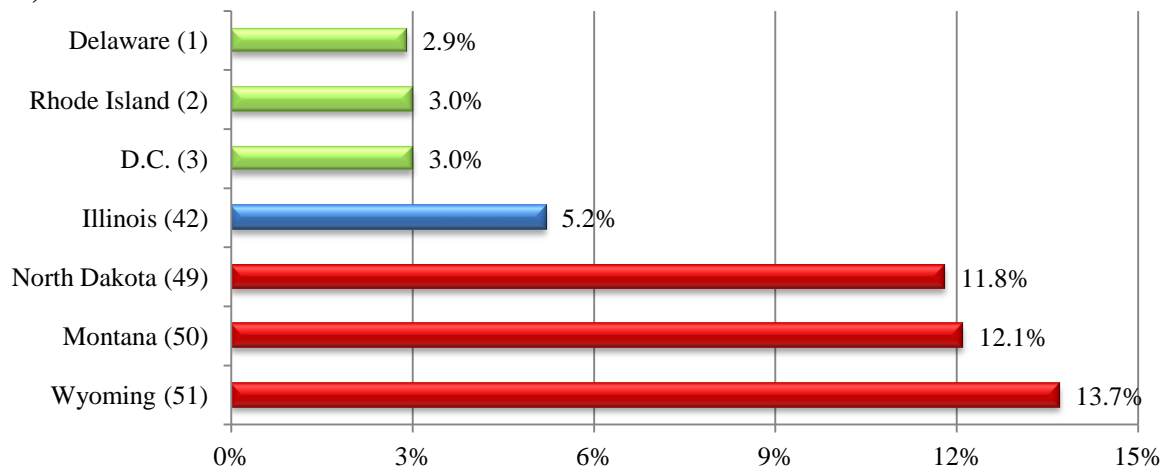
**Figure 22. Adult Smokeless Tobacco Use of Select States, 2009**



Source: U.S. Centers for Disease Control and Prevention. *State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults — United States, 2009*. Morbidity and Mortality Weekly Report 59.43 2009 : 1400-6.

In 2009, Illinois ranked 42<sup>nd</sup> for adults who smoked cigarettes and used smokeless tobacco products with 5.2 percent. The highest prevalence was reported in Wyoming (13.7%) and the lowest in Delaware (2.9%).

**Figure 23. Adult Cigarette Smokers Who Also Use Smokeless Tobacco Products of Select States, 2009**



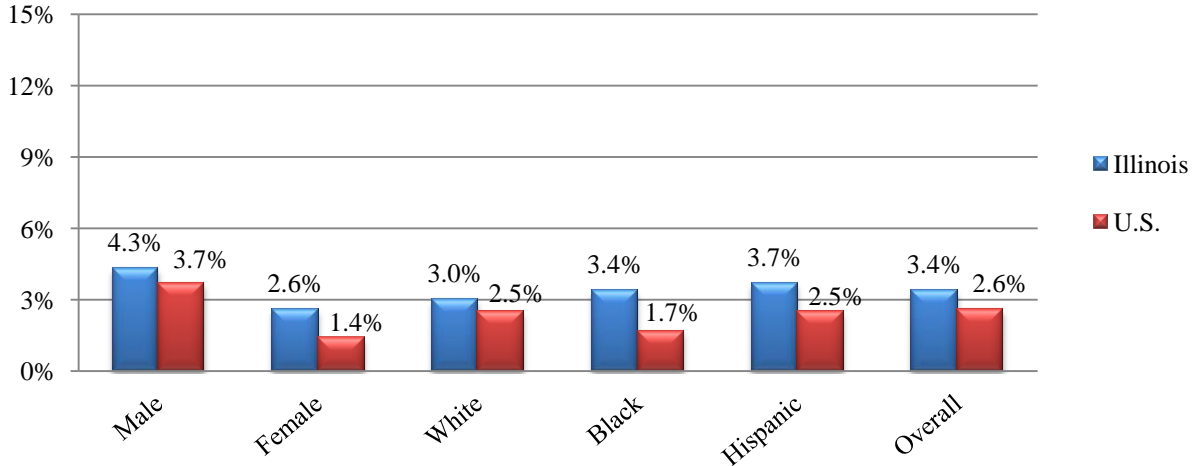
Source: U.S. Centers for Disease Control and Prevention. *State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults — United States, 2009*. Morbidity and Mortality Weekly Report 59.43 2009 : 1400-6.

# BURDEN OF TOBACCO

## Youth Smokeless Tobacco Use

In 2010, Illinois had higher prevalence rates of smokeless tobacco use among middle school students for all gender and race/ethnicity groups compared to the United States.

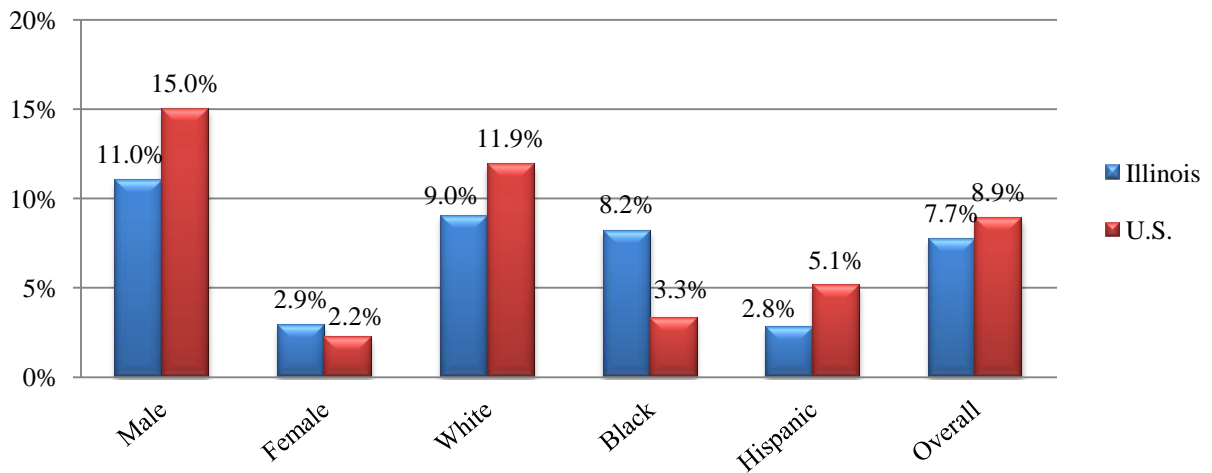
**Figure 24. Middle School Current Smokeless Tobacco Use by Select Demographics, Illinois and U.S., 2010**



Source: Illinois Youth Tobacco Survey (YTS); CDC. 2010 Tobacco Use Among Middle and High School Students—United States, 2000–2009. MMWR.59(33) 1063–8.

In 2010, Illinois had lower prevalence rates of smokeless tobacco use in high school students for all gender and race/ethnicity groups, except females and blacks, when compared to the United States.

**Figure 25. High School Current Smokeless Tobacco Use by Select Demographics, Illinois and U.S., 2010**

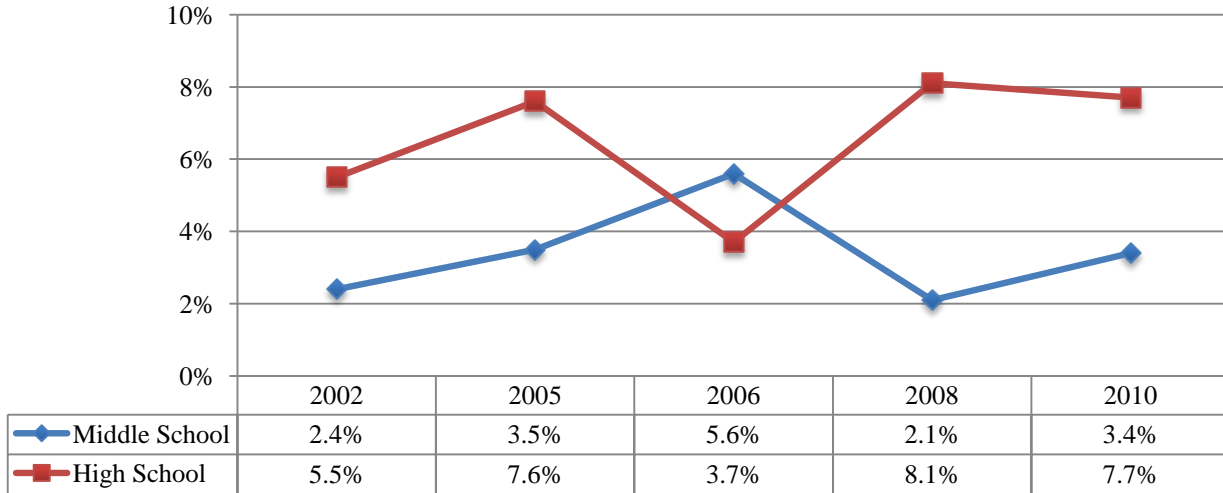


Source: Illinois Youth Tobacco Survey (YTS); U.S. Centers for Disease Control and Prevention. *Tobacco Use Among Middle and High School Students—United States, 2000–2009*. Morbidity and Mortality Weekly Report 59.33 2010 : 1063–8.

# BURDEN OF TOBACCO

From 2002 through 2010, smokeless tobacco use has fluctuated but an increase has been seen among middle school and high school students. During this time period, smokeless tobacco use has increased from 2.4 percent to 3.4 percent in middle school students and from 5.5 percent to 7.7 percent in high school students.

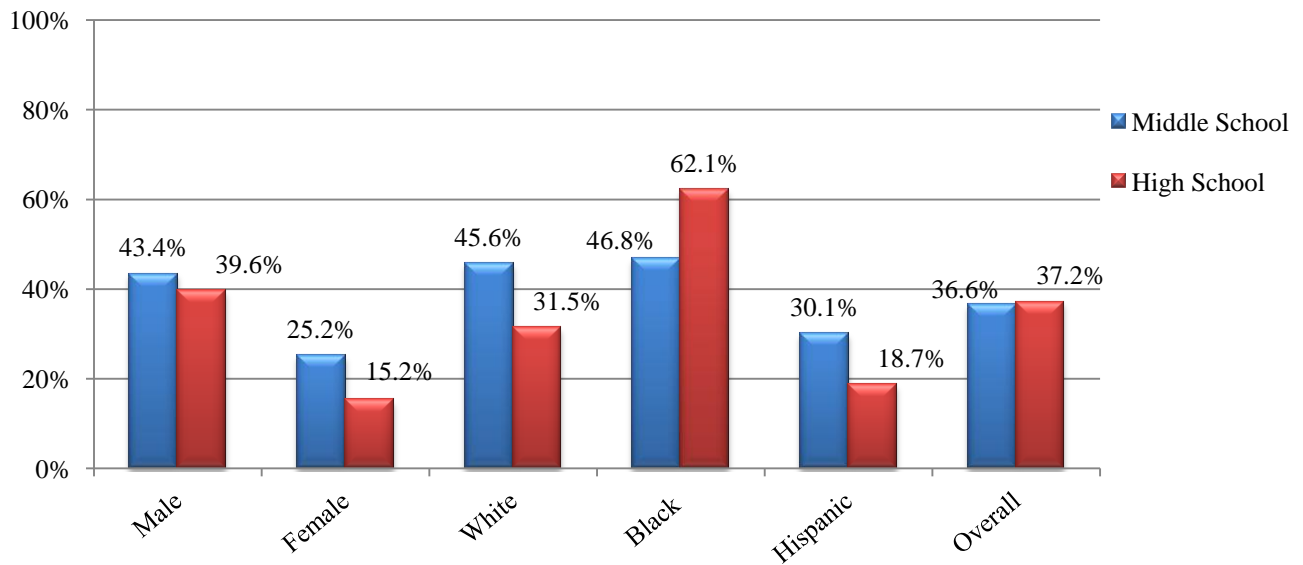
**Figure 26. Illinois Youth Smokeless Tobacco Use, 2002-2010**



Source: Illinois Youth Tobacco Survey (YTS)

In 2010, 36.6 percent and 37.2 percent of current middle and high school smokeless tobacco users lived with someone who used smokeless tobacco.

**Figure 27. Current Smokeless Tobacco Users Who Live With Someone Who Uses Smokeless Tobacco, Illinois, 2010**



Source: Illinois Youth Tobacco Survey (YTS)



# BURDEN OF TOBACCO

## **Secondhand Smoke**

Secondhand smoke is the combination of smoke from the burning end of a cigarette and the smoke exhaled by smokers. Secondhand smoke contains more than 4,000 chemicals. The National Toxicology Program states at least 250 chemicals in secondhand smoke are toxic or cancer-causing agents (carcinogens).<sup>11</sup> Secondhand smoke has been designated by several national and international agencies as a known human carcinogen.

There is no risk-free level of exposure to secondhand smoke. Breathing secondhand smoke can cause lung cancer, heart disease, and acute respiratory symptoms, such as wheezing and coughing. Even brief secondhand smoke exposure can damage the cardiovascular system in a way that could increase the likelihood of having a heart attack or cause an asthma attack.

Secondhand smoke causes numerous health problems in infants and children, including severe asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS). Studies show older children whose parents smoke get sick more often.<sup>6</sup> Children exposed to secondhand smoke have more common occurrences of wheezing, coughing, asthma attacks, and ear infections.

Exposure to secondhand smoke causes nearly 50,000 deaths each year among adults in the United States. Each year secondhand smoke is responsible for 3,400 lung cancer deaths, 46,000 heart disease deaths, and 430 SIDS deaths.<sup>11</sup>

Exposure to secondhand smoke has steadily decreased in the United States over time. The decrease in exposure to secondhand smoke over the last 20 years is due to the growing number of laws that ban smoking in workplaces and public places, the increase in the number of households with smoke-free home rules, and the decreases in adult and youth smoking rates.

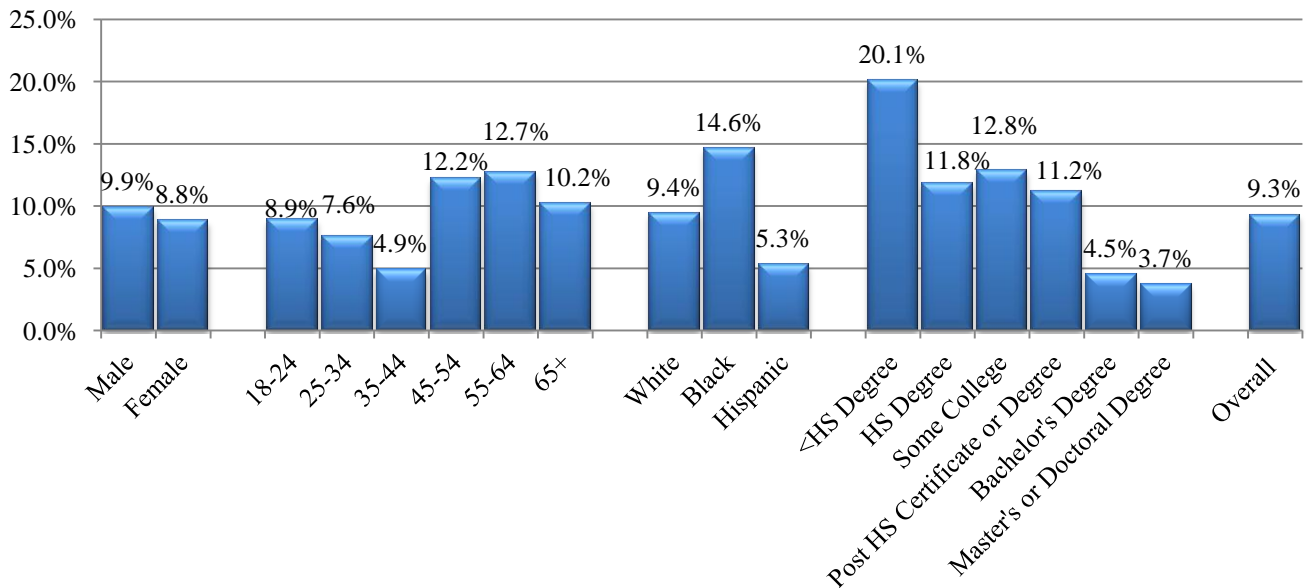
Disparities in exposure to secondhand smoke still remain. Nationally, African-American male workers, construction workers, blue collar workers, and service workers are among some of the groups who continue to experience particularly high levels of secondhand smoke exposure relative to other workers.<sup>12</sup> Secondhand smoke exposure tends to be high for persons with low incomes. In 2007-2008, 60.5 percent of persons living below the poverty level in the United States were exposed to secondhand smoke.<sup>13</sup>

# BURDEN OF TOBACCO

## Adult Secondhand Smoke Exposure

In 2011, 9.3 percent of Illinois adults always allowed smoking in their home. More males (9.9%) than females (8.8%) reported smoking allowed in their home. The age groups with the highest prevalence of allowing smoking in their home were the 45-54 (12.2%) and 55-64 (12.7%) age groups. By demographic group, blacks had the highest prevalence of reporting smoking allowed in their home with 14.6 percent. By education level, individuals with less than a high school degree had the highest prevalence of smoking allowed in their home at 20.1 percent.

**Figure 28. Illinois Adults Who Report Smoking Always Allowed in Home by Select Demographics, 2011**

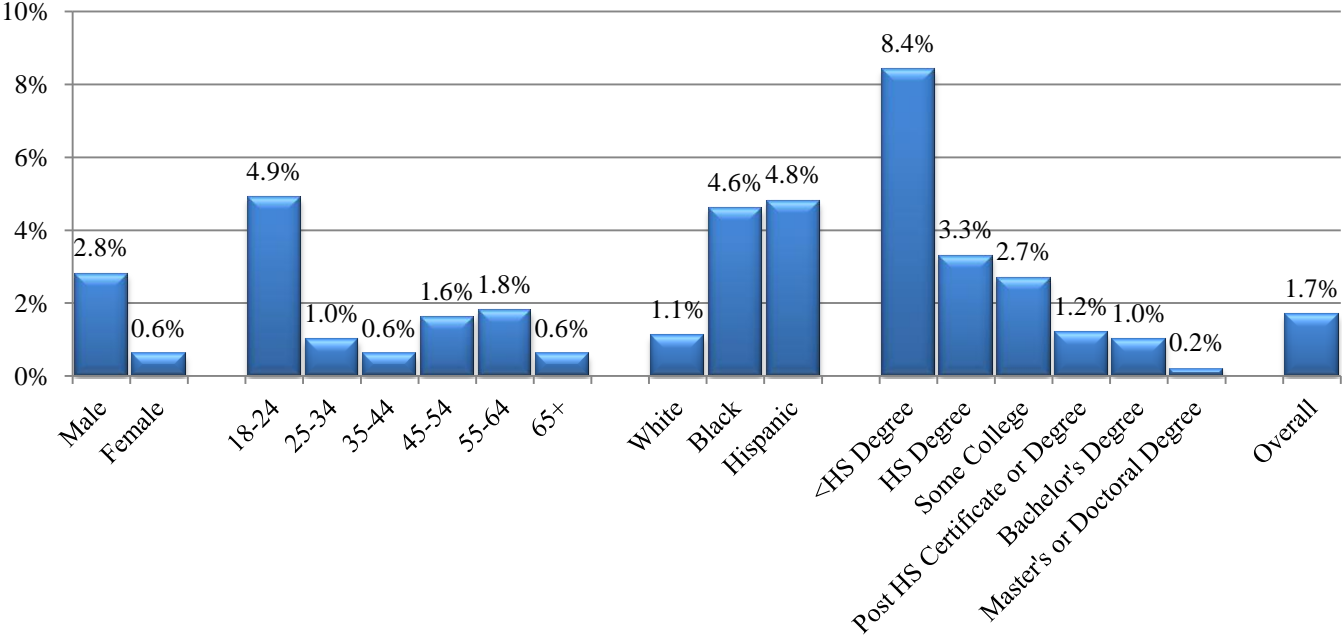


Source: Illinois Adult Tobacco Survey (ATS)

# BURDEN OF TOBACCO

Despite the provisions of the Smoke-Free Illinois Act, which were designed to protect workers, some Illinois adults still reported smoking was always allowed indoors at work. In 2011, 1.7 percent of adults reported smoking was always allowed indoors at work. More males (2.8%) than females (0.6%) reported smoking was always allowed at work. The age group with the highest prevalence of reporting smoking always allowed at work was the 18-24 year age group (4.9%). By demographic group, whites had the lowest prevalence of reporting smoking was always allowed at work with 1.1 percent. By education level, individuals with less than a high school degree reported the highest prevalence of smoking always allowed at work with 8.4 percent

**Figure 29. Illinois Adults Who Report Smoking Always Allowed Indoors at Work by Select Demographics, 2011**

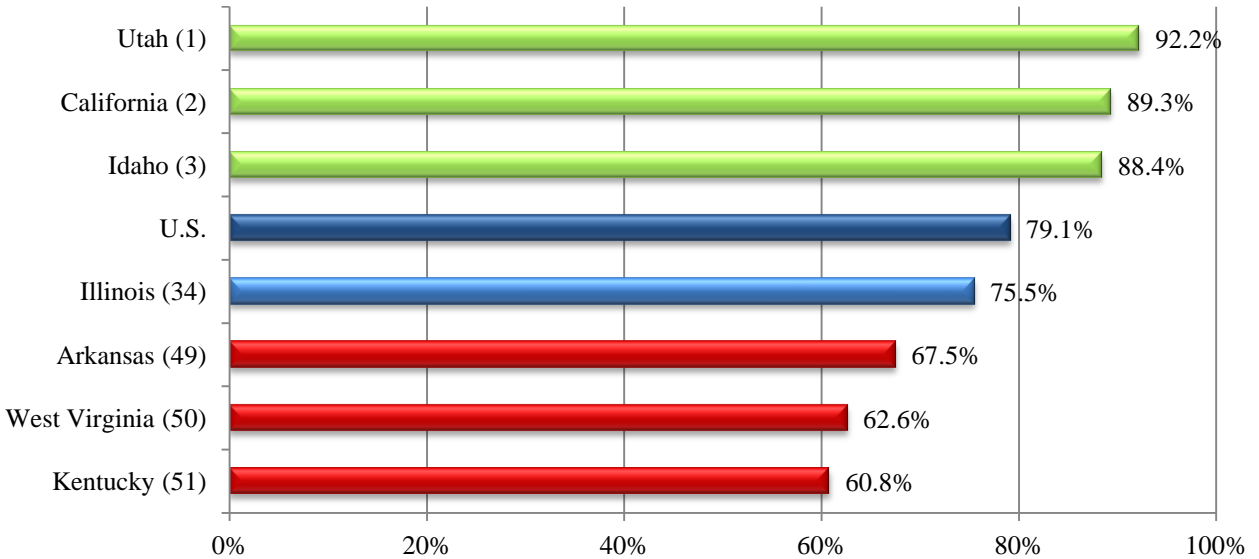


Source: Illinois Adult Tobacco Survey (ATS)

# BURDEN OF TOBACCO

In 2006-2007, Illinois ranked 34<sup>th</sup> out of the 50 states and the District of Columbia for the prevalence of adults who reported no one was allowed to smoke in their homes. The highest prevalence was seen in Utah with 92.2 percent of adults and the lowest prevalence was seen in Kentucky with 60.8 percent of adults reporting that smoking was not allowed in their home.

**Figure 30. Adults Who Report No One is Allowed to Smoke in Their Homes by Select States, 2006-2007**

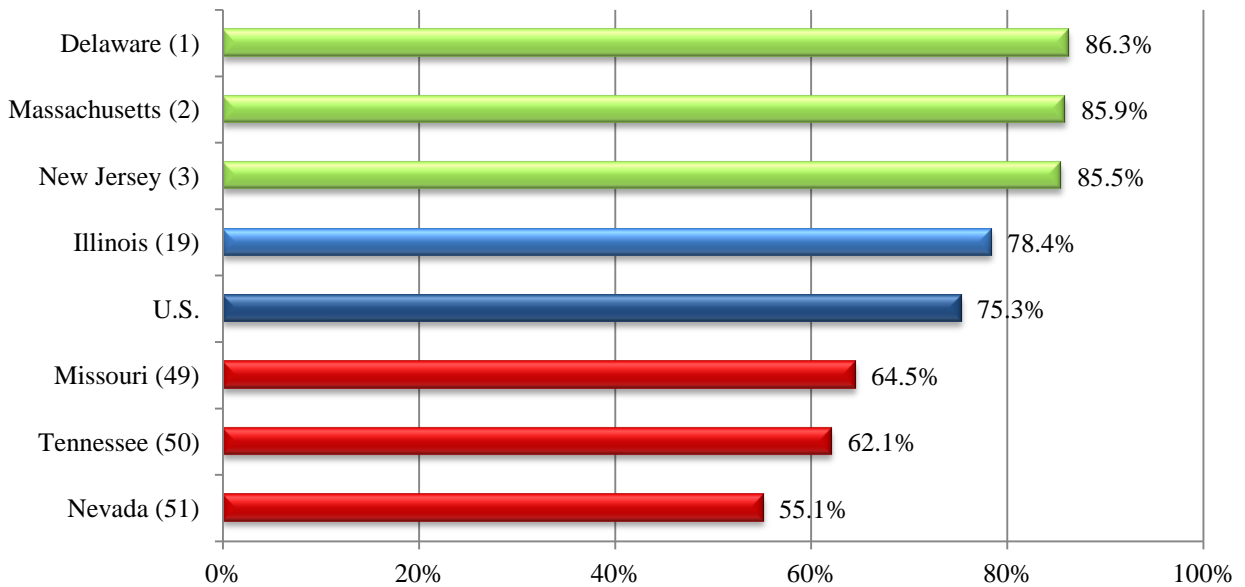


Source: Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2006-2007

# BURDEN OF TOBACCO

In 2006-2007, Illinois ranked 19<sup>th</sup> out of the 50 states and the District of Columbia for the prevalence of adults who report working in a non-smoking environment with 75.3 percent. The highest prevalence was reported in Delaware with 86.3 percent and the lowest prevalence was reported in Nevada with 55.1 percent of adults reporting working in a non-smoking environment. The top three states all had comprehensive smoke-free laws banning smoking indoors when this survey was administered. At the time of this survey, Illinois did not have a comprehensive smoke-free law banning smoking in indoor places. The Smoke-Free Illinois Act was effective on Jan. 1, 2008.

**Figure 31. Adults that Report Non-Smoking Work Environments by Select States, 2006-2007**



Source: Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2006-2007

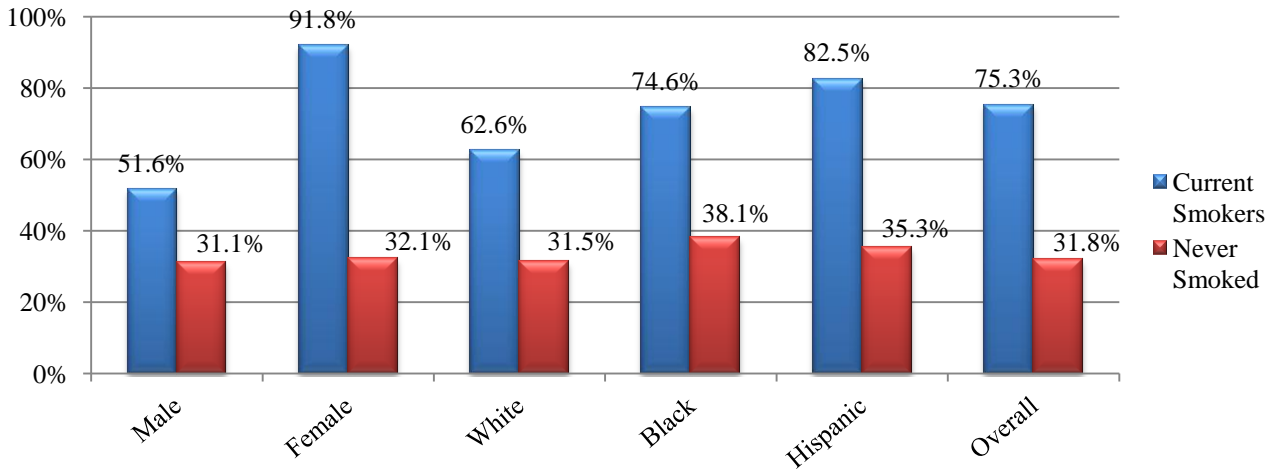
Note: This data was collected before the Smoke-free Illinois Act was enacted in 2008.

# BURDEN OF TOBACCO

## Youth Secondhand Smoke Exposure

In 2010, current middle school smokers had a much higher prevalence rate (75.3%) of living with someone who smokes than middle school never smokers (31.8%). Female current smokers had a much higher prevalence rate (91.8%) than male current smokers (51.6%) of living with someone who smokes.

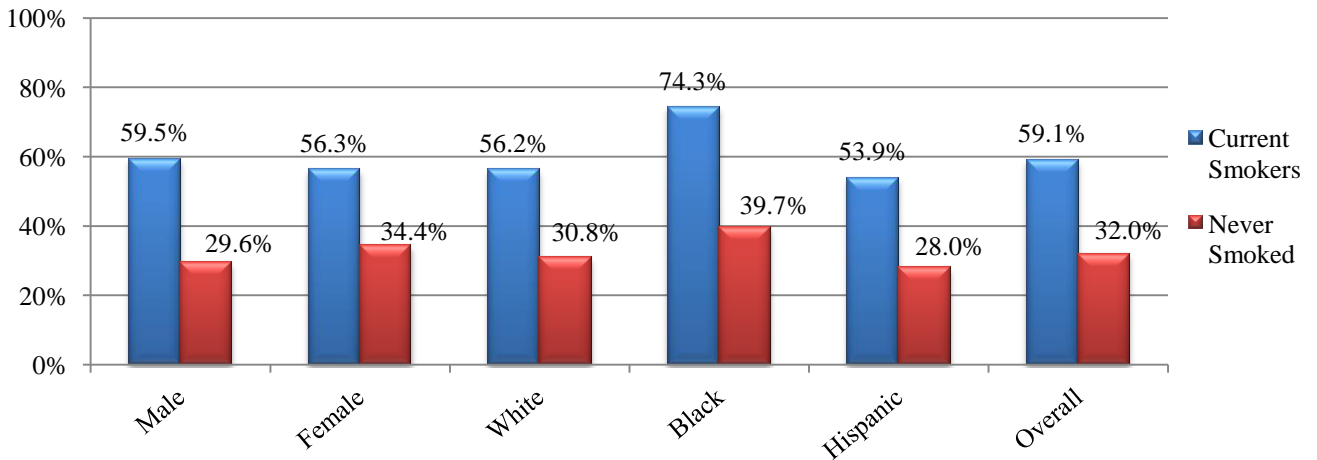
**Figure 32. Illinois Middle School Students Who Live With Someone Who Smokes by Select Demographics, 2010**



Source: Illinois Youth Tobacco Survey (YTS)

In 2010, current high school smokers had a higher prevalence rate (59.1%) of living with someone who smokes than high school never smokers (32.0%). Black current smokers (74.3%) had a higher prevalence rate than white current smokers (56.2%) or Hispanic current smokers (53.9%) of living with someone who smoked.

**Figure 33. Illinois High School Students Who Live With Someone Who Smokes by Select Demographics, 2010**

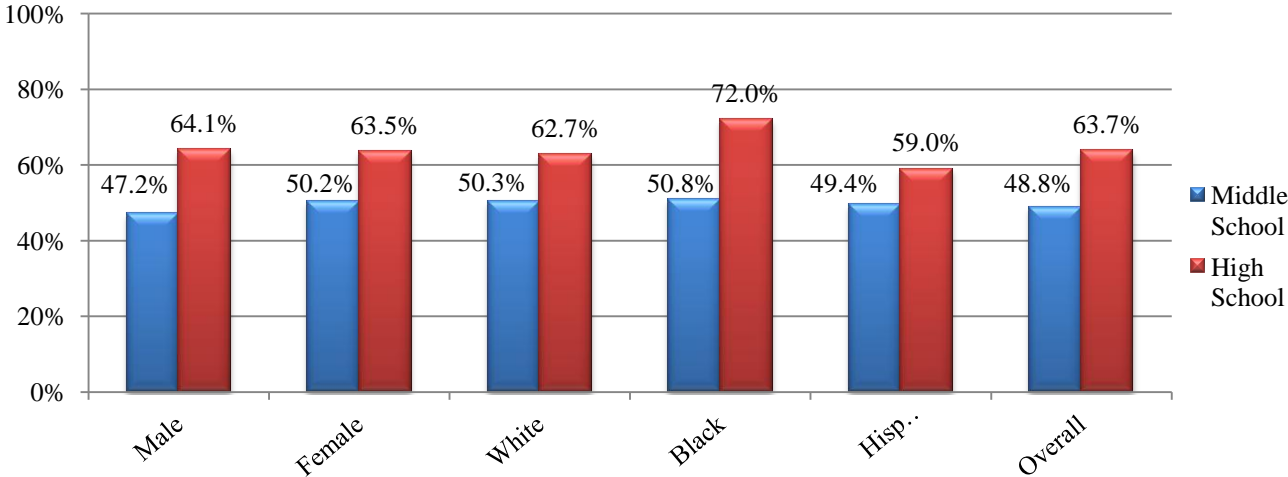


Source: Illinois Youth Tobacco Survey (YTS)

# BURDEN OF TOBACCO

In 2010, more high school students (63.7%) than middle school students (48.8%) were exposed to secondhand smoke from riding in a car or being in the same room with someone who was smoking. The group that reported the highest prevalence of being around someone else who was smoking was the high school black group with 72.0 percent.

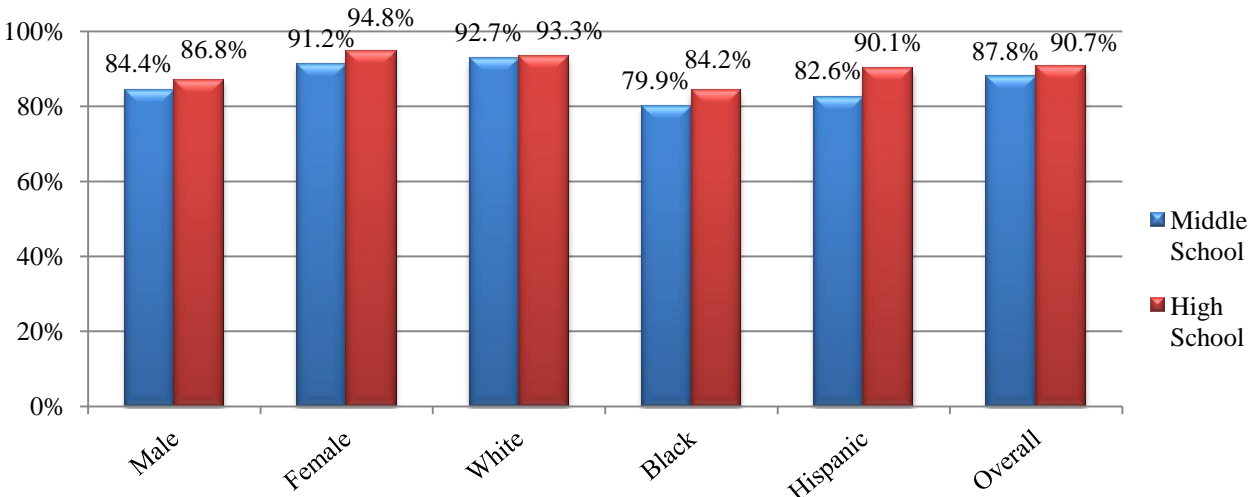
**Figure 34. Illinois Youth Who Rode in Car or Were in Same Room as Person Smoking on One or More Days of the Past Seven, 2010**



Source: Illinois Youth Tobacco Survey (YTS)

In 2010, slightly more high school students (90.7%) than middle school students (87.8%) definitely or probably thought smoke from other people’s cigarettes was harmful to them.

**Figure 35. Illinois Youth Who Definitely or Probably Think Smoke From Other People's Cigarettes is Harmful to Them, 2010**



Source: Illinois Youth Tobacco Survey (YTS)

## Smoking Cessation

Quitting tobacco is difficult and may require multiple attempts. Tobacco use can lead to nicotine dependence and serious health problems. Tobacco dependence is a chronic condition that often requires repeated interventions, but effective treatments and helpful resources exist. Smokers can and do quit smoking. In fact, today there are more former smokers than current smokers.

Nicotine is the psychoactive drug in tobacco products that produces dependence. Most smokers are dependent on nicotine. Nicotine dependence is the most common form of chemical dependence in the United States.<sup>14</sup> Research suggests nicotine may be as addictive as heroin, cocaine, or alcohol. Youth are sensitive to nicotine and can feel dependent earlier than adults. Because of nicotine addiction, about three out of four teen smokers end up smoking into adulthood, even if they intend to quit after a few years.<sup>6</sup>

Breaking free from nicotine dependence is not the only reason to quit smoking. Cessation can significantly reduce the risk of suffering from smoking-related diseases. Fortunately, people who stop smoking greatly reduce their risk for disease and premature death. Although the health benefits are greater for people who stop at earlier ages, cessation is beneficial at all ages. Smokers who quit before age 30 will undo much of the health damage caused by tobacco use.<sup>6</sup>

The majority of cigarette smokers quit without using evidence-based cessation treatments. However, the following treatments are proven effective for smokers who want help to quit: brief clinical interventions (i.e., when a doctor takes 10 minutes or less to deliver advice and assistance about quitting), counseling (e.g., individual, group, or telephone counseling), behavioral cessation therapies (e.g., training in problem solving), and treatments with more person-to-person contact and intensity (e.g., more time with counselors).<sup>15</sup>

Cessation medications found to be effective for treating tobacco dependence include the following: over-the-counter (e.g., nicotine patch, gum, lozenge) and prescription (e.g., nicotine inhaler, nasal spray) nicotine replacement products and prescription non-nicotine medications, such as bupropion SR (Zyban<sup>®</sup>) and varenicline tartrate (Chantix<sup>®</sup>).<sup>15</sup>

The combination of medication and counseling is more effective for smoking cessation than either medication or counseling alone.

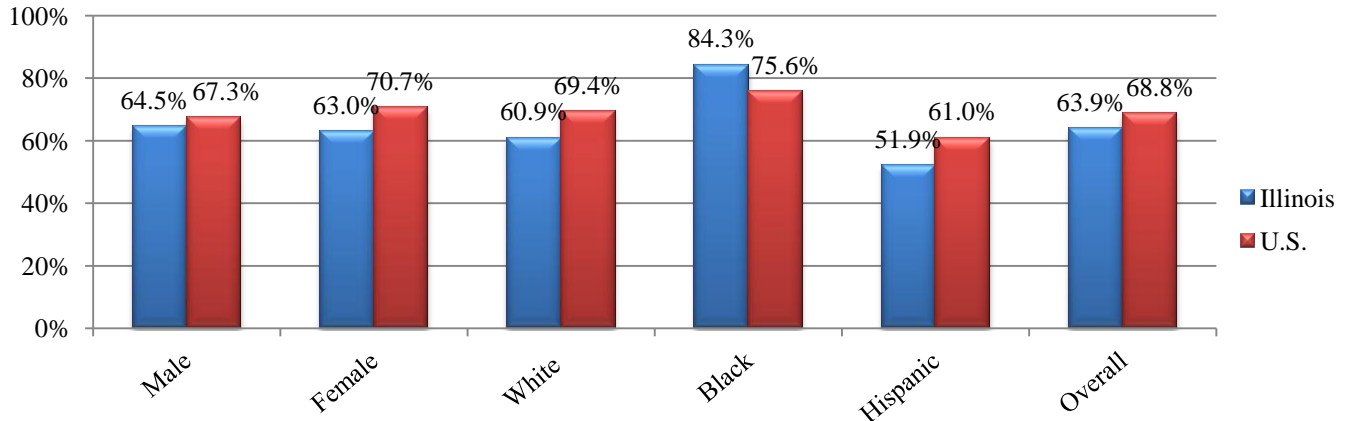


# BURDEN OF TOBACCO

## Adult Cessation

Compared to the United States, Illinois has lower percentages of adults who want to quit smoking for good for every demographic except blacks. In Illinois, blacks have a higher percentage (84.3%) of people who want to quit permanently compared to the national percentage (75.6%).

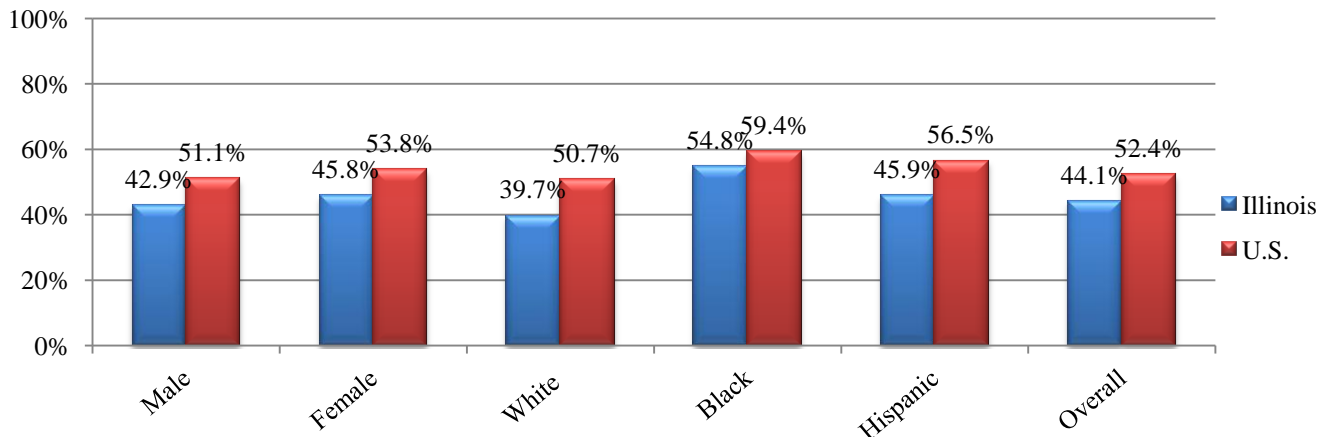
**Figure 36. Adults Who Want to Quit Smoking for Good by Select Demographics, Illinois and U.S., 2011 and 2010**



Source: Illinois Adult Tobacco Survey (ATS); National Health Interview Survey

While 63.9 percent of smokers want to quit for good, only 44.1 percent had a quit attempt in the last year. According to the Illinois Behavioral Risk Factor Surveillance System, more adult smokers with a disability than without wanted to quit. Compared to the United States, Illinois has lower percentages of adults with a quit attempt in the past 12 months for all gender and race/ethnicity groups. This shows that fewer Illinois adult smokers have attempted to quit smoking than the national average.

**Figure 37. Adults Who Smoke With a Quit Attempt in Last 12 Months by Select Demographics, Illinois and U.S., 2011 and 2010**

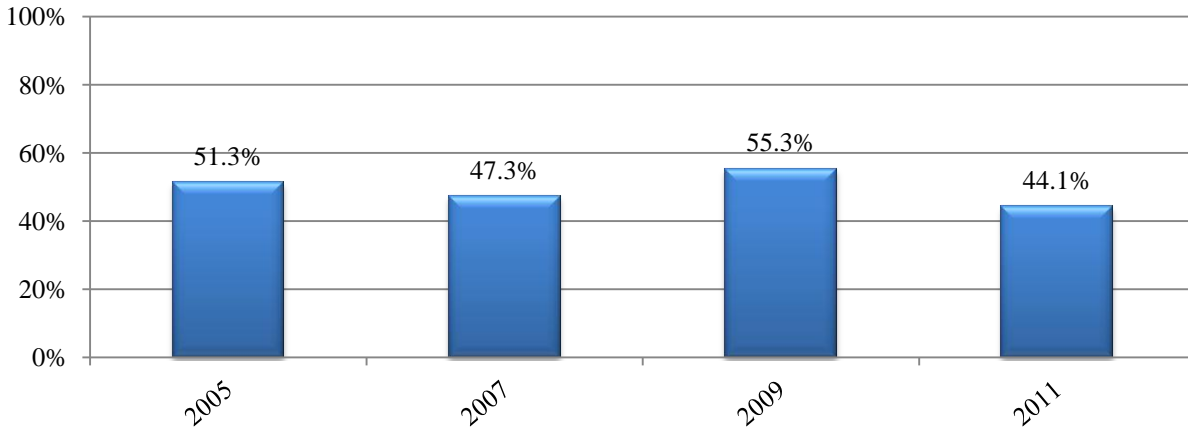


Source: Illinois Adult Tobacco Survey (ATS); U.S. Centers for Disease Control and Prevention. *Quitting Smoking Among Adults—United States, 2001-2010*. Morbidity and Mortality Weekly Report 60.44 (2011) : 1513-9.

# BURDEN OF TOBACCO

From 2005 through 2011, the percent of adults in Illinois who have had a quit attempt in the last 12 months has declined.

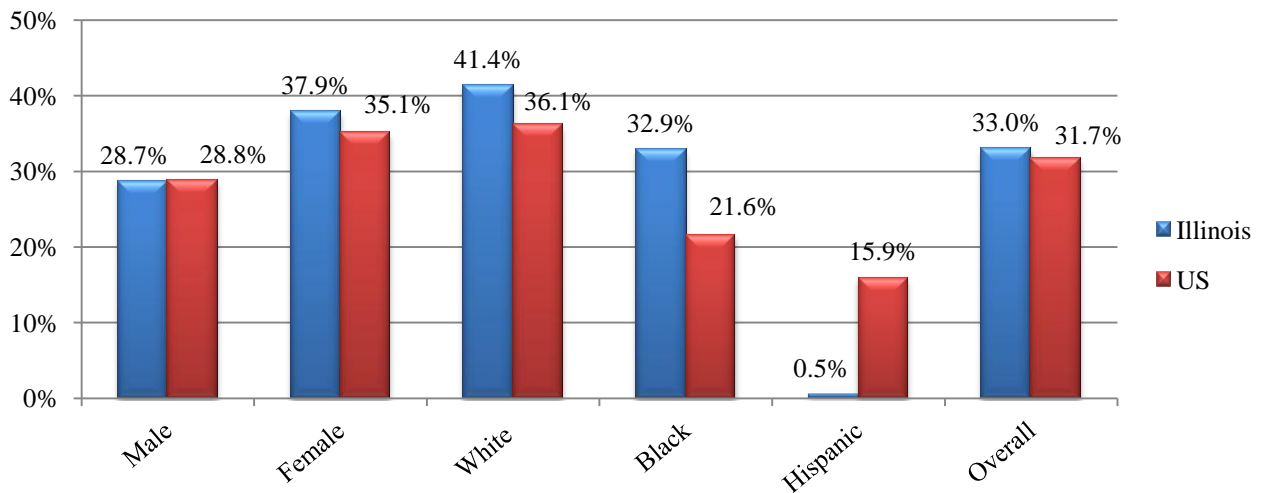
**Figure 38. Illinois Adults Who Smoke With a Quit Attempt in Last 12 Months, 2005-2011**



Source: Illinois Adult Tobacco Survey (ATS)

Compared to the United States, adults in Illinois had higher or similar percentages of using effective smoking cessation counseling or medication, except for Hispanics. Hispanics in Illinois had a much lower percentage (0.5%) than the United States (15.9%) for using an effective cessation treatment.

**Figure 39. Adults Who Used Effective Counseling and/or Medication for Smoking Cessation by Select Demographics, Illinois and U.S., 2011 and 2010**



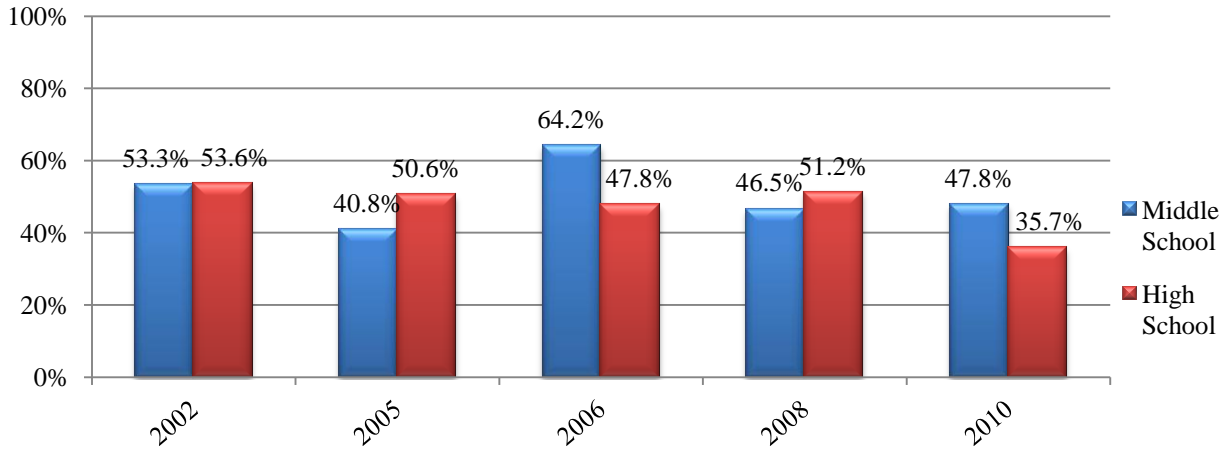
Source: Illinois Adult Tobacco Survey (ATS); National Health Interview Survey

# BURDEN OF TOBACCO

## Youth Cessation

From 2002 through 2010, the percent of current youth smokers who want to quit smoking has declined.

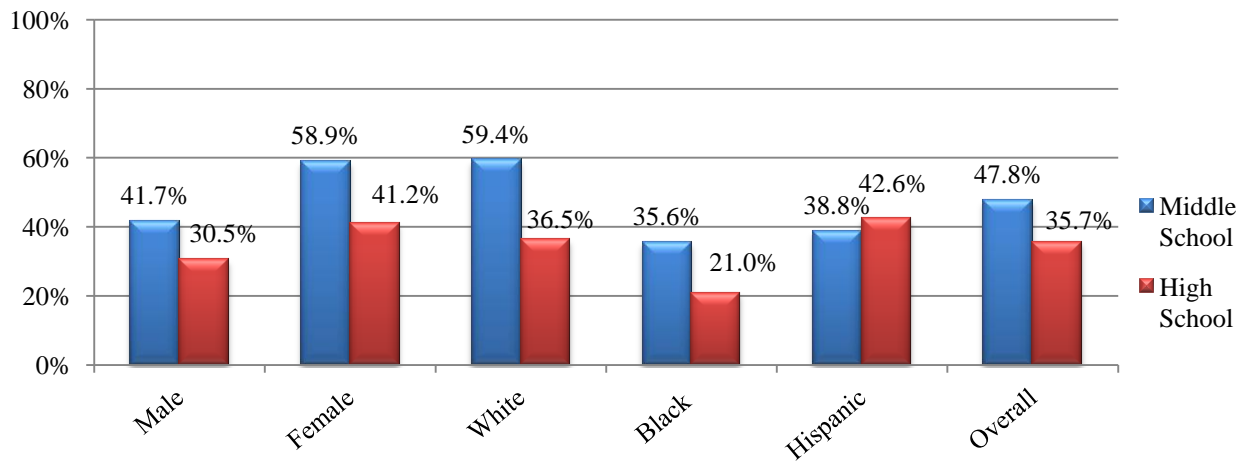
**Figure 40. Current Illinois Youth Smokers Who Want to Quit Smoking, 2002-2010**



Source: Illinois Youth Tobacco Survey (YTS)

Middle school current smokers have higher percentages than high school current smokers for wanting to quit smoking for good, except in the Hispanic demographic.

**Figure 41. Current Illinois Youth Smokers Who Want to Quit Smoking by Select Demographics, 2010**

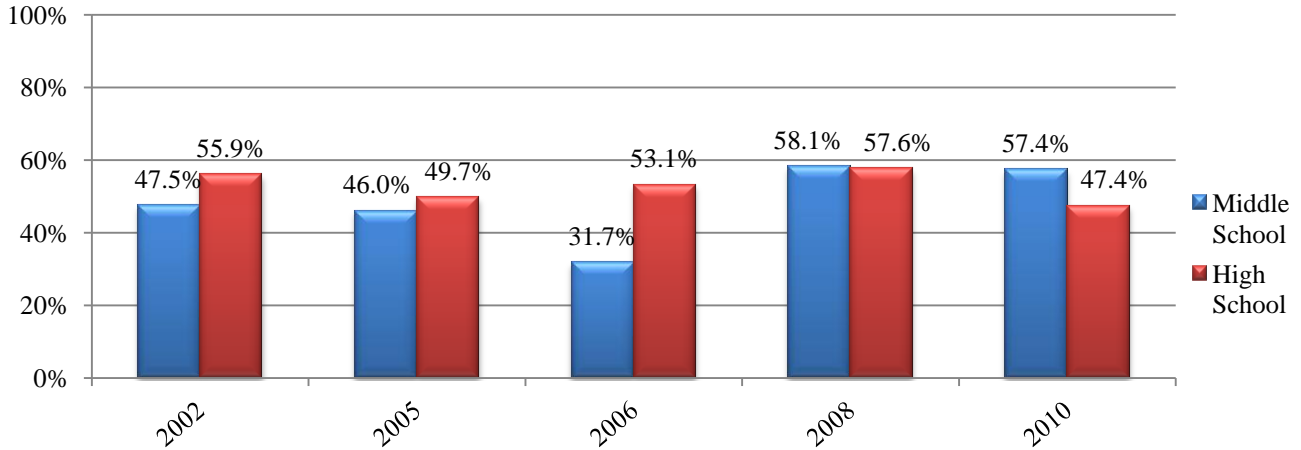


Source: Illinois Youth Tobacco Survey (YTS)

# BURDEN OF TOBACCO

From 2002 through 2010, the percent of middle school students with a quit attempt in the last 12 months has increased from 47.5 percent to 57.4 percent. The percent of high school students with a quit attempt in the last 12 months has decreased from 55.9 percent to 47.4 percent.

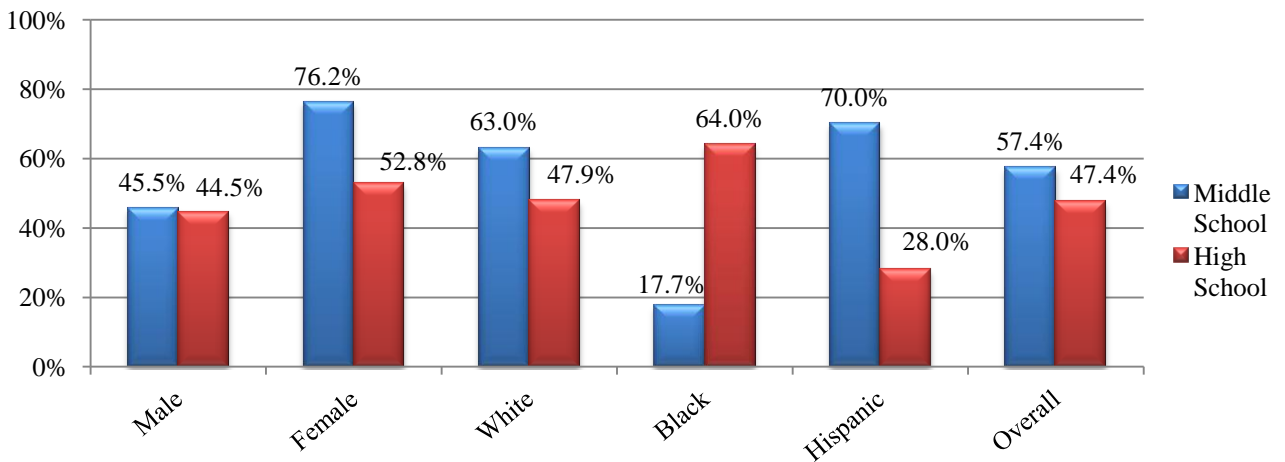
**Figure 42. Current Illinois Youth Smokers With a Quit Attempt in Last 12 Months, 2002-2010**



Source: Illinois Youth Tobacco Survey (YTS)

Middle school current smokers have higher percentages than high school current smokers for having tried to quit at least once in the past 12 months except in the black demographic. Black high school current smokers had a much higher percentage of 64.0 percent than black middle school current smokers (17.7%) for having tried to quit at least once in the past 12 months. Middle school Hispanics have a much higher percentage (70.0%) of attempting to quit smoking in the past 12 months compared to high school Hispanics (28.0%).

**Figure 43. Current Illinois Youth Smokers Who Have Tried to Quit at Least Once in the Past 12 Months by Select Demographics, 2010**

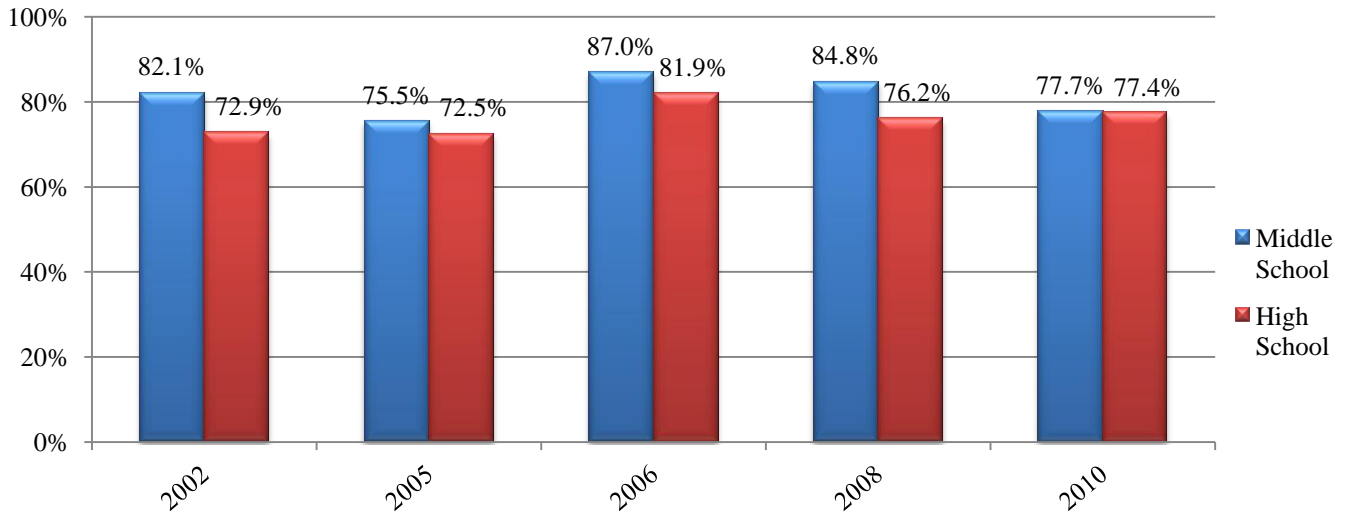


Source: Illinois Youth Tobacco Survey (YTS)

# BURDEN OF TOBACCO

From 2002 through 2010, the percent of current youth smokers who think they can quit smoking if they wanted to has remained high. In middle school students, there was a decrease in those who thought they could quit smoking from 82.1 percent to 77.7 percent. In high school students there was an increase in those who thought they could quit smoking from 72.9 percent to 77.4 percent.

**Figure 44. Current Illinois Youth Smokers Who Think They Can Quit Smoking, 2002-2010**



Source: Illinois Youth Tobacco Survey (YTS)

# BURDEN OF TOBACCO

## **Mortality**

In the United States, tobacco use is responsible for about one in five deaths. During 2000-2004, smoking resulted in an estimated annual average of 269,655 deaths among males and 173,940 deaths among females in the United States.<sup>2</sup> More than 1,000 people die every day from cigarettes and one-half of all long-term smokers die from smoking-related diseases. A large proportion of these deaths are from cancers, early heart attacks, and chronic lung diseases. The smoking attributable mortality among adults age 35 and over annually in the United States is more than 160,000 deaths from cancer, nearly 130,000 deaths from cardiovascular diseases, and slightly more than 100,000 deaths from respiratory diseases (excluding deaths from secondhand smoke and from residential fires).<sup>2</sup> The three leading specific causes of smoking-attributable death were lung cancer with 128,922 deaths, ischemic heart disease with 126,005 deaths, and chronic obstructive pulmonary disease (COPD) with 92,915 deaths. Additionally, nearly 800 infant deaths were reported from maternal smoking during pregnancy. Every year in the United States cigarette smoking results in an estimated 5.1 million years of potential life lost.

## **Cancer**

Smoking causes cancer. There is evidence of a causal relationship between smoking and cancers of the lung, larynx, oral cavity, pharynx, esophagus, pancreas, bladder, kidney, cervix, and stomach, and acute myeloid leukemia. There is also evidence to suggest a causal relationship between smoking and colorectal and liver cancers. Smoking accounts for almost 90 percent of lung cancer deaths in men and 80 percent of lung cancer deaths in women.<sup>3</sup> Lung cancer is the leading cause of cancer death in the United States for both men and women. Lung cancer is the most preventable form of cancer death.

## **Cardiovascular Diseases**

Smoking is responsible for approximately 130,000 premature deaths annually from cardiovascular disease (CVD).<sup>2</sup> In the United States, smoking accounts for 33 percent of all deaths from CVD and 20 percent of deaths from ischemic heart disease in persons older than 35 years of age.<sup>17</sup> Cigarette smokers are two to four times more likely to develop coronary heart disease (CHD), the leading cause of death in the United States, than nonsmokers.<sup>3</sup> Studies showed an increased risk of having CHD at all levels of cigarette smoking, and increased risks were evident even for persons who smoked fewer than five cigarettes per day.

## **Respiratory**

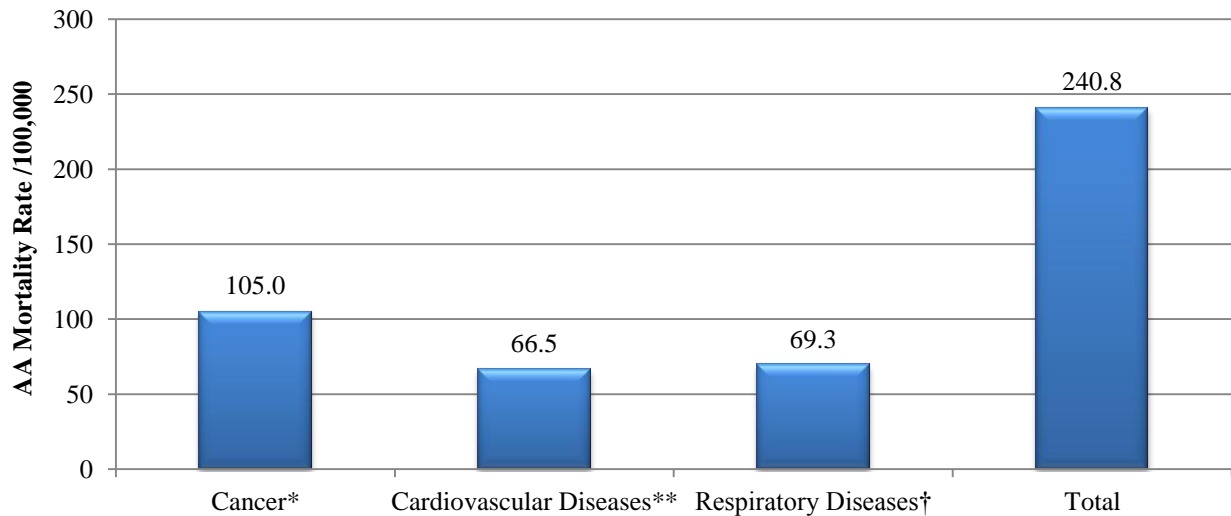
Smoking is a major cause of respiratory deaths from COPD, pneumonia, influenza, and bronchitis. Smoking is the cause of nearly 80 percent of all deaths from COPD.<sup>2</sup> COPD refers to a group of diseases that cause airflow blockage and breathing related problems including emphysema, chronic bronchitis, and, in some cases, asthma. Secondhand smoke in early childhood and intrauterine exposure could cause COPD. Smoking cessation is the single most cost effective way to reduce exposure to COPD risk factors.

# BURDEN OF TOBACCO

In 2008, a total of 16,392 deaths in Illinois adults aged 35 and older were attributed to smoking. Of these, 7,047 were from cancers, 4,692 were from cardiovascular diseases, and 4,653 were from respiratory diseases. In Illinois, lung cancer is the leading cause of cancer deaths in men and women, responsible for 30 percent of all cancer deaths in men and more than 20 percent of all cancer deaths in women.<sup>16</sup>

The smoking attributable mortality rate is the number of deaths caused by smoking per 100,000 persons aged 35 years and older for disease categories where cigarette smoking is a primary risk factor. In 2008, the age-adjusted smoking attributable mortality rate for Illinois adults aged 35 and older was 240.8 per 100,000.

**Figure 45. Age-adjusted Smoking-Attributable Mortality Rate per 100,000 in Illinois, 2008**



Source: CDC Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)

\*Cancers-lip, oral cavity, pharynx, esophagus, stomach, pancreas, larynx, trachea, lung, bronchus, cervix uteri, kidney and renal pelvis, and urinary bladder

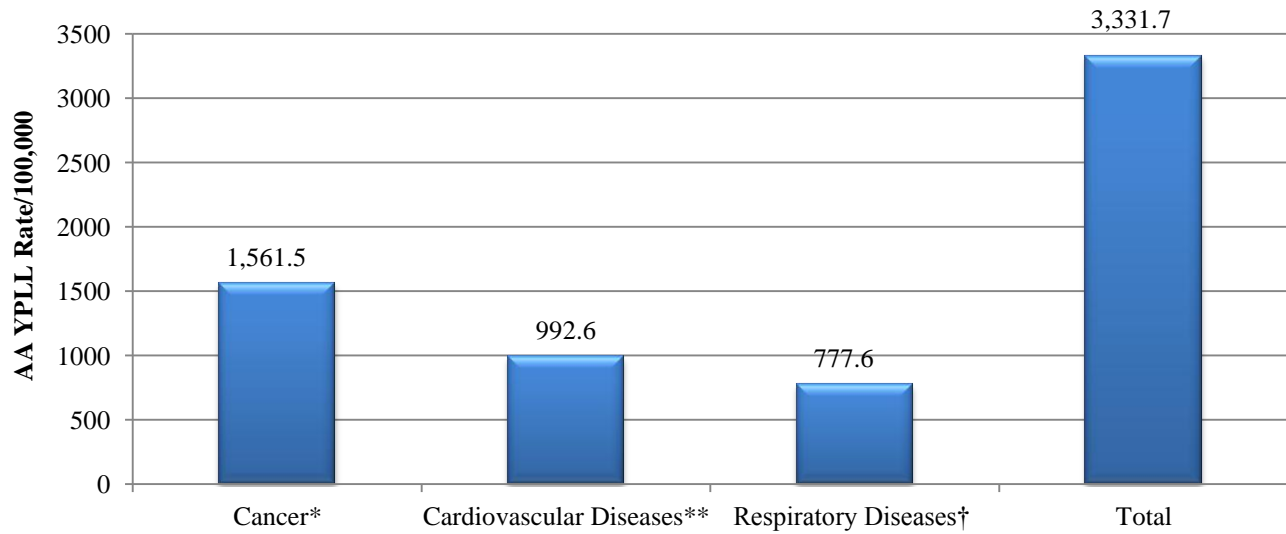
\*\*Cardiovascular Diseases-ischemic heart disease, other heart disease, cerebrovascular disease, atherosclerosis, aortic aneurysm, and other arterial disease

†Respiratory Diseases-pneumonia, influenza, bronchitis, emphysema, chronic airway obstruction

# BURDEN OF TOBACCO

Years of Potential Life Lost (YPLL) are the total number of years lost because of premature deaths attributable to cigarette smoking. The YPLL rate is the smoking-attributable years of potential life lost per 100,000 persons aged 35 years and older for diseases caused by cigarette smoking. In 2008, the age-adjusted YPLL for Illinois adults aged 35 and older was 3,331.7 per 100,000.

**Figure 46. Age-adjusted Years of Potential Life Lost Rate per 100,000 in Illinois, 2008**



Source: CDC Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)

\*Cancers-lip, oral cavity, pharynx, esophagus, stomach, pancreas, larynx, trachea, lung, bronchus, cervix uteri, kidney and renal pelvis, and urinary bladder

\*\*Cardiovascular Diseases-ischemic heart disease, other heart disease, cerebrovascular disease, atherosclerosis, aortic aneurysm, and other arterial disease

†Respiratory Diseases-pneumonia, influenza, bronchitis, emphysema, chronic airway obstruction



# BURDEN OF TOBACCO

## **Economic Cost**

Tobacco use imposes an enormous economic burden. That can be divided into two main categories: direct costs and indirect costs.

Direct costs represent the monetary value of goods and services consumed as a result of tobacco use and tobacco-related illnesses. Since tobacco use can lead to illness in smokers and non-smokers, the need for health care services results in significant financial costs.

Health care costs include hospitalizations, physician services, nursing home care, home health care, medications, medical supplies and equipment, and services of other health care providers due to the treatment of smoking-related diseases.

Non-health care costs of smoking include transportation to health care providers, care-giving by non-health providers (such as family members assisting sick smokers), property losses from fires caused by smoking, cleaning clothes and air of smoke, business expenses to hire and train replacements for sick smokers, and insurance premiums for fire and accident insurance.

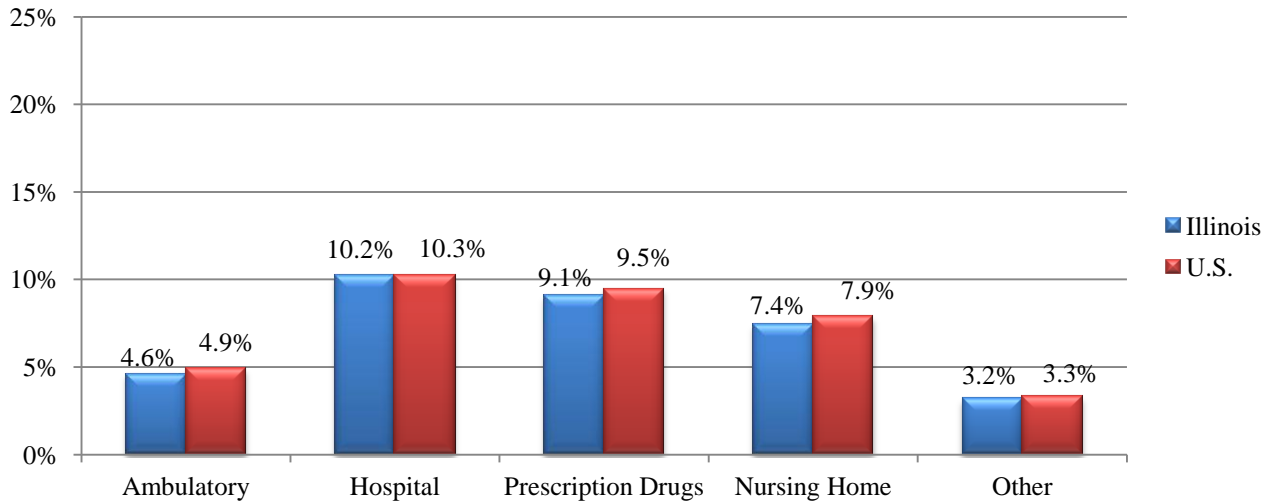
In the United States, during 2001-2004, average annual smoking-attributable health care expenditures were approximately \$96 billion and productivity losses were \$97 billion.<sup>3</sup>

Accounting for direct health care expenditures and productivity losses, the total economic burden of smoking is approximately \$193 billion per year.

# BURDEN OF TOBACCO

Of the total health care expenditures in Illinois in 2004, 4.6 percent of ambulatory, 10.2 percent of hospital, 9.1 percent of prescription drugs, 7.4 percent of nursing home, and 3.2 percent of other health care costs were attributable to smoking. This equates to almost \$4 billion in health care expenditures due to smoking. In 2004, Illinois had lower fractions of health care expenditures attributable to smoking than the U.S. average.

**Figure 47. Smoking-Attributable Fractions of Total Health Care Expenditures, 2004**

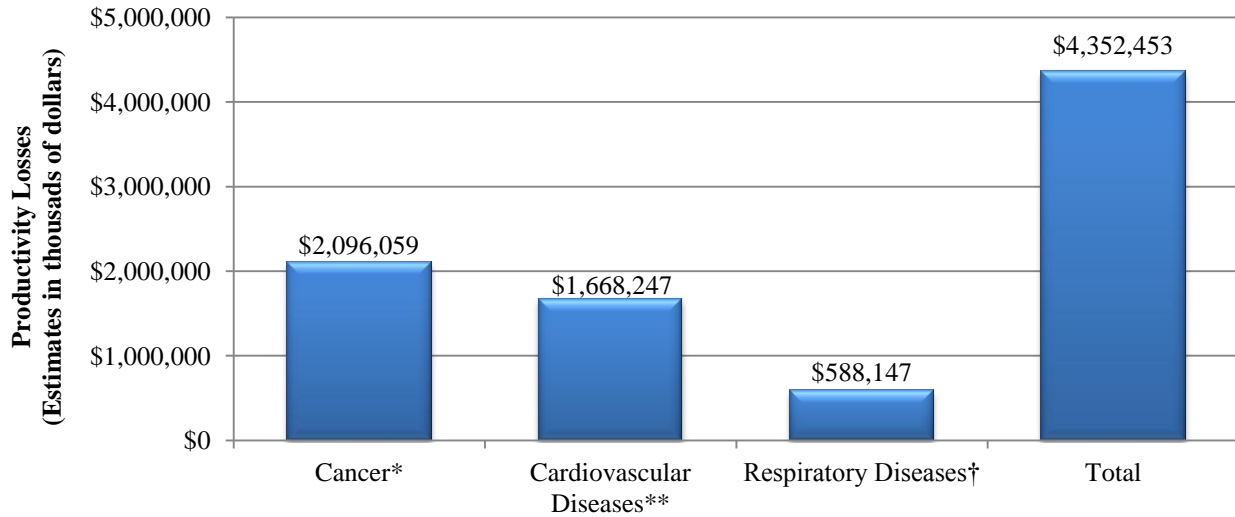


Source: CDC Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)

# BURDEN OF TOBACCO

The CDC's Smoking Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) application estimates that annually in Illinois more than \$4 billion of lost productivity are due to smoking attributable mortality.

**Figure 48. Average Annual Smoking-Attributable Productivity Losses in Illinois, 2000-2004**



Source: CDC Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)

\*Cancers-lip, oral cavity, pharynx, esophagus, stomach, pancreas, larynx, trachea, lung, bronchus, cervix uteri, kidney and renal pelvis, and urinary bladder

\*\*Cardiovascular Diseases-ischemic heart disease, other heart disease, cerebrovascular disease, atherosclerosis, aortic aneurysm, and other arterial disease

†Respiratory Diseases-pneumonia, influenza, bronchitis, emphysema, chronic airway obstruction

# BURDEN OF TOBACCO

## Policy Strategies

Enhanced efforts are needed to accelerate the decline in cigarette smoking among adults. Population-based prevention strategies, such as smoke-free policies, tobacco taxes and media campaigns, in concert with clinical cessation interventions, can help decrease cigarette smoking and reduce the health burden and economic impact of tobacco-related diseases in the United States.<sup>1</sup>

Smoke-free policies and excise taxes are among two recommendations from the Community Preventive Services Task Force to affect change at the population level. Tobacco prevention and control efforts should include:

- Clean indoor air legislation prohibiting tobacco use in indoor public and private workplaces.
- Federal, state and local efforts to increase tobacco product excise taxes as an effective public health intervention to promote tobacco use cessation and to reduce the initiation of tobacco use among youth.

Additionally, sustaining funding for state level tobacco prevention and control programs is a priority as they play a critical role in implementing policy strategies and other recommended activities to decrease the number of people using and suffering from tobacco.

### *Smoke-Free Illinois Act*

Enacted on January 1, 2008, the Smoke-Free Illinois Act (SFIA) prohibits smoking in enclosed public places and places of employment and within 15 feet of entrances, exits, windows that open, and ventilation intakes. Illinois was the 13th state to have a comprehensive smoke-free law prohibiting smoking in workplaces, restaurants, bars, theaters, museums, schools, private clubs, casinos, and other enclosed public places.

### *Tobacco Legislation*

As of December 2012, there are currently 25 states with comprehensive smoke-free laws enacted and 37 states with a smoke-free law banning smoking in at least one location - workplaces, restaurants, or bars.

In May 2012, legislation was passed to increase the cigarette tax an additional \$1 per pack of cigarettes. Illinois now has a cigarette excise tax of \$1.98 per pack, ranking it 16<sup>th</sup> among the 50 states and the District of Columbia. Before this \$1 increase, Illinois ranked 32<sup>nd</sup> among the 50 states and the District of Columbia.

A 10 percent increase in price has been estimated to reduce overall cigarette consumption among adolescents and young adults by about 4 percent.<sup>18</sup> Cigarette price hikes can lead to significant reductions in smoking prevalence by increasing cessation among smokers and reducing smoking initiation among potential young smokers.

# BURDEN OF TOBACCO

## *Tobacco Funding*

In fiscal year 2013, states will collect \$25.7 billion from tobacco taxes and legal settlements, but will only spend 1.8 percent (\$459.5 million) on tobacco control programs to prevent kids from smoking and helping smokers quit.<sup>19</sup> Investing only about 15 percent of the \$25.3 billion, \$3.7 billion, would fund every state tobacco control program at CDC-recommended levels.

## *Tobacco Advertising: A Losing Battle*

The tobacco industry spends \$23 million every day on marketing its products.<sup>18</sup> This is the amount the health community is up against. This amount is a decrease from previous years. The amount spent on cigarette advertising and promotion by the largest cigarette companies in the United States declined from \$8.53 billion in 2009 to \$8.05 billion in 2010, according to a report by the Federal Trade Commission.<sup>20</sup> Major manufacturers of smokeless tobacco products in the United States have decreased their spending on advertising and promotion since 2008. The advertising amount spent on smokeless tobacco products went from \$547.8 million in 2008 to \$444.2 million in 2010<sup>10</sup>.

The largest spending category in both 2009 and 2010 was on price discounts paid to cigarette retailers or wholesalers in order to reduce the consumer price of cigarettes. This category accounted for 78.2 percent and 80.7 percent, respectively, of total spending on advertising and promotion in those years.

# BURDEN OF TOBACCO

In 2012, Illinois ranked 16<sup>th</sup> among the 50 states and the District of Columbia in cigarette taxes with \$1.98 per pack. The highest tax is in New York with \$4.35 per pack of cigarettes. The lowest tax is Missouri with \$0.17 per pack of cigarettes.

**Figure 49. Cigarette Tax per Pack of Select States, 2012**



Source: CDC State Tobacco Activities Tracking and Evaluation System (STATE)

In 2010, for state tobacco-related revenues, Illinois ranked ninth among the 50 states and the District of Columbia with revenues of \$833.6 million. The state with the highest tobacco-related revenue was New York at \$2,061.8 million. The state with the lowest amount of tobacco-related revenue was Wyoming at \$39.6 million.

**Figure 50. Total State Tobacco-related Revenues\* of Select States, 2010**



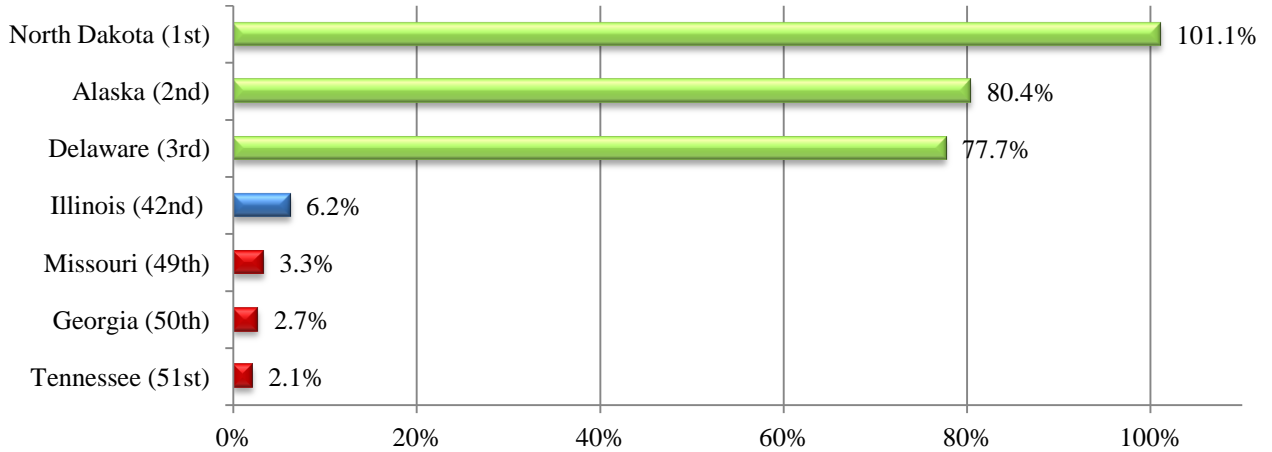
Source: U.S. Centers for Disease Control and Prevention. *State Tobacco Revenues Compared with Tobacco Control Appropriations — United States, 1998–2010*. Morbidity and Mortality Weekly Report 61.20 (2012) : 370-4.

\*Revenues in millions of dollars

# BURDEN OF TOBACCO

In 2010, for CDC recommended tobacco control funding, Illinois ranked 42<sup>nd</sup> among the 50 states and the District of Columbia with tobacco control funding of \$9.7 million or 6.2 percent of the CDC recommended funding level of \$157 million. The state with the highest recommended funding was North Dakota at 101.1 percent. The state with the lowest amount of recommended funding was Tennessee at 2.1 percent.

**Figure 51. Total State and Federal Tobacco Control Appropriations as Percent of 2007 CDC Best Practices of Select States, 2010**



Source: U.S. Centers for Disease Control and Prevention. *State Tobacco Revenues Compared with Tobacco Control Appropriations — United States, 1998–2010*. Morbidity and Mortality Weekly Report 61.20 (2012) : 370-4.

## Data Sources

### Adult Tobacco Survey

The Adult Tobacco Survey (ATS) is a state-administered, random-digit dialed telephone survey of the non-institutionalized U.S. population aged 18 years and older. ATS collects data on tobacco use, smoking cessation, secondhand smoke exposure, risk perception and social influences, health influences, and tobacco-related policy issues in the United States. ATS was developed primarily for evaluation of state tobacco control programs rather than for surveillance and offers states a great deal of flexibility in terms of when and how often the surveys can be conducted. In Illinois, the ATS is conducted every other year on years ending in odd numbers.

### Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The BRFSS is a cross-sectional telephone survey conducted by state health departments with technical and methodological assistance provided by the CDC. Every year, states conduct monthly telephone surveillance using a standardized questionnaire to determine the distribution of risk behaviors and health practices among non-institutionalized adults. The states forward the responses to the CDC, where the monthly data are aggregated for each state. The data are returned to the states, and then published on the BRFSS website. In addition, Illinois regularly conducts risk factor surveillance of each county. The county level data is used extensively at the sub-state/local governmental areas to formulate public health policies and prevention and health promotion programs. For more information on BRFSS, refer to <http://www.cdc.gov/brfss/index.htm>.

### National Health Interview Survey

The National Health Interview Survey (NHIS) has monitored the health of the nation since 1957. NHIS data on a broad range of health topics are collected through personal household interviews. For more than 50 years, the U.S. Census Bureau has been the data collection agent for the National Health Interview Survey. Survey results have been instrumental in providing data to track health status, health care access, and progress toward achieving national health objectives. For more information on NHIS, refer to <http://www.cdc.gov/nchs/nhis.htm>.

### Pregnancy Risk Assessment Monitoring System

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance project of the CDC and state health departments. PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. For more information on PRAMS, refer to <http://www.cdc.gov/prams/>. The PRAMS sample of women who have had a recent live birth is drawn from the state's birth certificate file. Each participating state samples between 1,300 and 3,400 women per year. Women from some groups are sampled at a higher rate to ensure adequate data are available in smaller but higher risk populations.



# BURDEN OF TOBACCO

Selected women are first contacted by mail. If there is no response to repeated mailings, women are contacted and interviewed by telephone. Data collection procedures and instruments are standardized to allow comparisons between states.

## **Smoking-Attributable Mortality, Morbidity, and Economic Costs**

The Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) application developed by the CDC contains two distinct Internet-based computational programs that can be used to estimate the disease impact of smoking on adults and infants. The Adult SAMMEC application provides users the ability to estimate Smoking-Attributable Mortality (SAM), Years of Potential Life Lost (YPLL), medical expenditures, productivity losses, SAM rate, and YPLL rate. For more information on SAMMEC, refer to <http://apps.nccd.cdc.gov/sammecc/index.asp>.

## **State Tobacco Activities Tracking and Evaluation System**

The State Tobacco Activities Tracking and Evaluation (STATE) System developed by the CDC is an electronic data warehouse containing up-to-date and historical state-level data on tobacco use prevention and control. The STATE System is designed to integrate many data sources to provide comprehensive summary data and facilitate research and consistent data interpretation. The STATE System was developed by the CDC in the Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. For more information on the STATE system, refer to <http://apps.nccd.cdc.gov/statesystem/Default/Default.aspx>.

## **Tobacco Use Supplement to the Current Population Survey**

The Tobacco Use Supplement to the Current Population Survey (TUS-CPS) is a National Cancer Institute (NCI) sponsored survey of tobacco use that has been administered as part of the U.S. Census Bureau's Current Population Survey in 1992-1993, 1995-1996, 1998-1999, 2000, 2001-2002, 2003, 2006-2007, and 2010-2011. The CDC was a co-sponsor with NCI from 2001-02 through 2006-07. The TUS-CPS is a key source of national, state, and sub-state level data from US households regarding smoking, use of tobacco products, and tobacco-related norms, attitudes, and policies. It uses a large, nationally representative sample that contains information on about 240,000 individuals within a given survey period. For more information on TUS-CPS, refer to <http://riskfactor.cancer.gov/studies/tus-cps/>.

## **Youth Risk Behavior Survey**

The Youth Risk Behavior Survey (YRBS) focuses on priority health-risk behaviors established during youth that result in the most significant mortality, disability, and social problems during both youth and adulthood. Topics include nutrition, tobacco use, alcohol and other drug use, physical activity, injuries, and sexual behavior resulting in sexually transmitted diseases and pregnancy. It uses a controlled sample design so data may be weighted for analysis. YRBS includes a national school-based survey conducted by CDC and state, territorial, and tribal as well as local surveys conducted by state, territorial, local education and health agencies, and

# BURDEN OF TOBACCO

tribal governments. For more information on YRBS, refer to <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>.

## **Youth Tobacco Survey**

The Youth Tobacco Survey (YTS) is a state-administered, school-based survey of students in grades six through 12. YTS collects data on tobacco use, tobacco knowledge and attitudes, exposure to tobacco media and advertising, access to tobacco, tobacco related school curricula, secondhand smoke exposure, tobacco initiation, and tobacco cessation. YTS was developed to provide states with the data needed to design, implement, and evaluate comprehensive tobacco control programs that work to prevent young people from beginning tobacco use and help those who have already started using tobacco to quit. In Illinois, the YTS is conducted every other year on years ending in even numbers.

# BURDEN OF TOBACCO

## Appendix A

Percent of Adults Who are Current Smokers

County	%	County	%	County	%
Adams	20.2	Hardin	41.9	Moultrie	17.8
Alexander	37.1	Henderson	21.9	Ogle	18.5
Bond	29.9	Henry	19.0	Peoria	14.5
Boone	20.1	Iroquois	24.9	Perry	24.0
Brown	14.0	Jackson	25.8	Piatt	15.9
Bureau	20.2	Jasper	16.3	Pike	25.4
Calhoun	24.2	Jefferson	24.4	Pope	30.6
Carroll	20.3	Jersey	22.8	Pulaski	37.2
Cass	28.6	Jo Daviess	14.8	Putnam	22.0
Champaign	19.9	Johnson	21.7	Randolph	27.3
Chicago	19.4	Kane	14.4	Richland	22.2
Christian	26.5	Kankakee	23.0	Rock Island	20.0
Clark	16.5	Kendall	18.8	St. Clair	17.0
Clay	22.9	Knox	18.2	Saline	20.4
Clinton	20.4	Lake	14.3	Sangamon	19.9
Coles	27.1	LaSalle	21.0	Schuyler	21.9
Cook	15.9	Lawrence	20.0	Scott	16.3
Crawford	25.1	Lee	17.6	Shelby	11.7
Cumberland	21.0	Livingston	28.7	Stark	21.1
DeKalb	29.5	Logan	19.9	Stephenson	16.8
DeWitt	25.3	McDonough	31.6	Tazewell	16.0
Douglas	22.4	McHenry	19.8	Union	27.7
DuPage	21.8	McLean	16.1	Vermilion	27.8
Edgar	24.8	Macon	25.8	Wabash	21.1
Edwards	19.4	Macoupin	23.8	Warren	20.9
Effingham	20.0	Madison	21.6	Washington	16.7
Fayette	25.4	Marion	25.0	Wayne	20.7
Ford	23.0	Marshall	19.3	White	28.7
Franklin	28.3	Mason	24.7	Whiteside	22.4
Fulton	23.7	Massac	38.7	Will	19.6
Gallatin	30.9	Menard	26.8	Williamson	27.4
Greene	26.5	Mercer	19.9	Winnebago	20.2
Grundy	23.3	Monroe	13.7	Woodford	17.6
Hamilton	20.4	Montgomery	29.7		
Hancock	19.5	Morgan	19.7		

Source: Illinois Behavior Risk Factor Surveillance System, 2007-2009

# BURDEN OF TOBACCO

## References

- <sup>1</sup> U.S. Centers for Disease Control and Prevention. *Vital Signs: Current Cigarette Smoking Among Adults Aged  $\geq 18$  Years --- United States, 2005--2010*. Morbidity and Mortality Weekly Report 60. 35 (2011) : 1207-12.
- <sup>2</sup> U.S. Centers for Disease Control and Prevention. *Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses --- United States, 2000--2004*. Morbidity and Mortality Weekly Report 57. 45 (2008) : 1226-8.
- <sup>3</sup> United States. Department of Health and Human Services. *The Health Consequences of Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004.
- <sup>4</sup> United States. Department of Health and Human Services. *How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010.
- <sup>5</sup> U.S. Centers for Disease Control and Prevention. *Trends in Smoking Before, During, and After Pregnancy --- Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 31 Sites, 2000—2005*. Morbidity and Mortality Weekly Report 58.SS-4 (2009) : 1-31.
- <sup>6</sup> United States. Department of Health and Human Services. *Preventing Tobacco Use among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.
- <sup>7</sup> National Cancer Institute. *Smokeless Tobacco and Cancer*. National Cancer Institute, 2010.
- <sup>8</sup> Boonn, Anne. *Smokeless Tobacco in the United States*. Campaign for Tobacco Free Kids, 2012.
- <sup>9</sup> U.S. Centers for Disease Control and Prevention. *State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults---United States, 2009*. Morbidity and Mortality Weekly Report 59.43 (2010) : 1400-6.
- <sup>10</sup> Federal Trade Commission. *Smokeless Tobacco Report for 2009 and 2010*. Washington D.C.: Federal Trade Commission, 2012.

# BURDEN OF TOBACCO

<sup>11</sup> United States. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.

<sup>12</sup> Arheart Kristopher, et al. *Declining Trends in Serum Cotinine Levels in U.S. Worker Groups: The Power of Policy*. *Journal of Occupational and Environmental Medicine* 50.1(2008) : 57–63.

<sup>13</sup> U.S. Centers for Disease Control and Prevention. *Vital Signs: Nonsmokers' Exposure to Secondhand Smoke—United States, 1999–2008*. *Morbidity and Mortality Weekly Report* 59.35 (2010) :1141–6.

<sup>14</sup> American Society of Addiction Medicine. *Public Policy Statement on Nicotine Dependence and Tobacco*. Chevy Chase: American Society of Addiction Medicine, 2010.

<sup>15</sup>United States. Department of Health and Human Services. *Treating Tobacco Use and Dependence: 2008 Update*. Clinical Practice Guideline. Rockville: U.S. Department of Health and Human Services, Public Health Service, 2008.

<sup>16</sup> Ma F, Shen T. *Top 10 Cancers in the State of Illinois*. Epidemiologic Report Series 10:06. Springfield: Illinois Department of Public Health, 2010.

<sup>17</sup> United States. Department of Health and Human Services. *How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.

<sup>18</sup> United States. Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.

<sup>19</sup> Campaign for Tobacco-Free Kids. *A Broken Promise to Our Children: The 1998 Tobacco Settlement 14 Years Later*. Washington, D.C.: Campaign for Tobacco-Free Kids, American Heart Association, American Cancer Society Cancer Action Network, American Lung Association, Robert Wood Johnson Foundation, and Americans for Nonsmokers' Rights, 2012.

<sup>20</sup>Federal Trade Commission. *Cigarette Report for 2009 and 2010*. Washington D.C.: Federal Trade Commission. 2012.