

Data and Trends on Tobacco Use in Nebraska



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Introduction

Tobacco use is the leading cause of preventable death in the United States, responsible for over 400,000 deaths annually.¹ In Nebraska each year, over 2,200 adults die prematurely because of cigarette smoking and it is estimated that 36,000 Nebraskans now under the age of 18 will eventually die prematurely from cigarette smoking.² Smoking-related medical costs total \$591 million annually in Nebraska (including \$134 million of Nebraska's annual Medicaid expenditures).³ The annual cost of smoking-related lost productivity in Nebraska is \$500 million.⁴ While data is not available for the specific health and economic impacts of smokeless tobacco use in the state, the use of smokeless tobacco is related to higher risks of oral cancers, ulcers and heart disease.⁵

In addressing tobacco-related causes of diseases and deaths in Nebraska, Tobacco Free Nebraska (TFN) has adopted four main goal areas. According to the Centers for Disease Control and Prevention (CDC)⁶, the evidence indicates that we have the ability to reduce the health and economic burdens of tobacco use by funding and implementing strategies proven effective in these four goal areas identified by the CDC National Tobacco Control Program. The four main goal areas include:

1. Preventing the initiation of tobacco use among young people;
2. Eliminating exposure to secondhand smoke;
3. Helping people quit the use of tobacco; and
4. Reaching underserved populations.

¹ Centers for Disease Control and Prevention (CDC), 2008

² Nebraska Mortality Data Using SAMMEC formula

³ CDC, 2006

⁴ CDC, SAMMEC

⁵ National Cancer Institute

⁶ CDC, 2006

This report presents data on use, attitudes and consequences of tobacco in Nebraska. When available, trend data is provided to illustrate changes. Prevalence rates for Nebraska adults and youth are provided regarding cigarette smoking and smokeless tobacco use. The report also provides information on the illegal sale of tobacco products to minors, the health and financial costs associated with tobacco use in Nebraska, exposure to and attitudes regarding secondhand smoke and a number of other issues related to tobacco use. The final section provides an overview of the references and various data sets that were used to create the report.

Nebraska Statistical Summary

Adult tobacco use

- Adult cigarette smoking prevalence 18.4% (*BRFSS 2008*)

Adult cigarette smokers are defined as those having smoked at least 100 cigarettes in their lifetime and who currently smoke everyday or some days.

- Adult smokeless tobacco use prevalence 3.8% (*BRFSS 2008*)

Youth tobacco use

- Youth cigarette smoking prevalence 18.4% (*YRBS 2009*)

Adolescent cigarette smokers are defined as having smoked cigarettes on one or more of the past 30 days.

- Ever tried smoking cigarettes, even one or two puffs 45.1% (*YRBS 2009*)
- Smokeless tobacco use prevalence 10.9% (*YRBS 2009*)

Exposure to secondhand smoke

- Homes with a smoke-free rule 85.0% (*ATS/SCS 2009*)
- Smoke-free family vehicles 80.2% (*ATS/SCS 2009*)

Mortality and diseases associated with tobacco 2008*

- Smoking-related deaths AAR⁺ 219.3 / 100,000
- Smoking-related cancer deaths AAR 88.9 / 100,000
- Smoking-related cardiovascular diseases AAR 52.0/ 100,000
- Smoking-related respiratory diseases AAR 78.4/ 100,000

Sources: Adult Tobacco Survey/Social Climate Survey (ATS/SCS); Behavioral Risk Factor Surveillance System (BRFSS); Youth Risk Behavior Survey (YRBS); Nebraska Department of Health and Human Services, Vital Statistics.

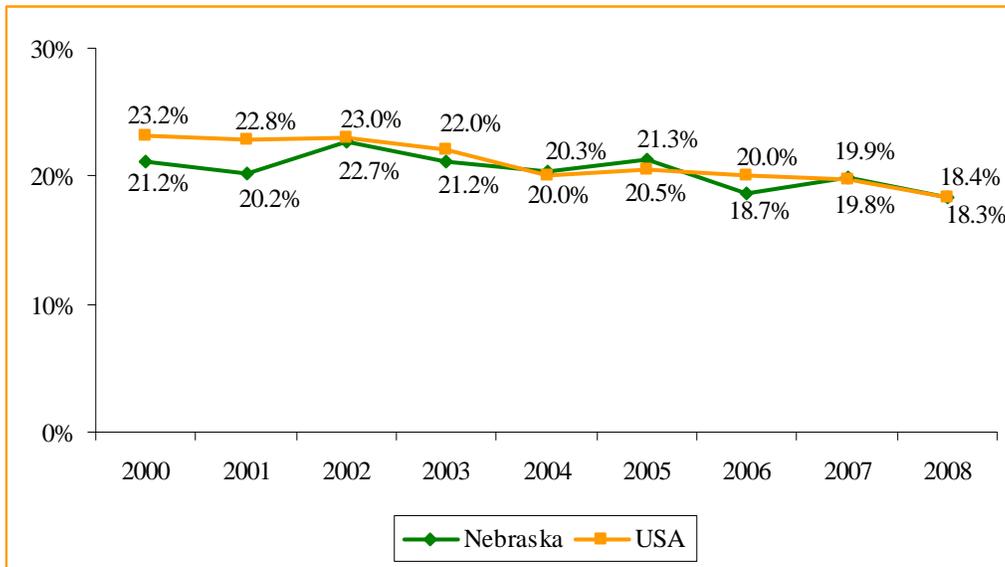
* *Smoking-related mortality rates for Nebraskans age 35 years and above*
+ AAR – Age adjusted rates

Adult Tobacco Use in Nebraska

Adult Smoking

Since 2000, Nebraska's adult (18 years and older) smoking rate has occasionally shifted but generally remained the same with an average rate of 20.4%. The national average is 21.4%. In 2008, the Nebraska smoking rate was down to 18.4%.

Figure 1. Adult Smokers in Nebraska and USA, 2000 - 2008

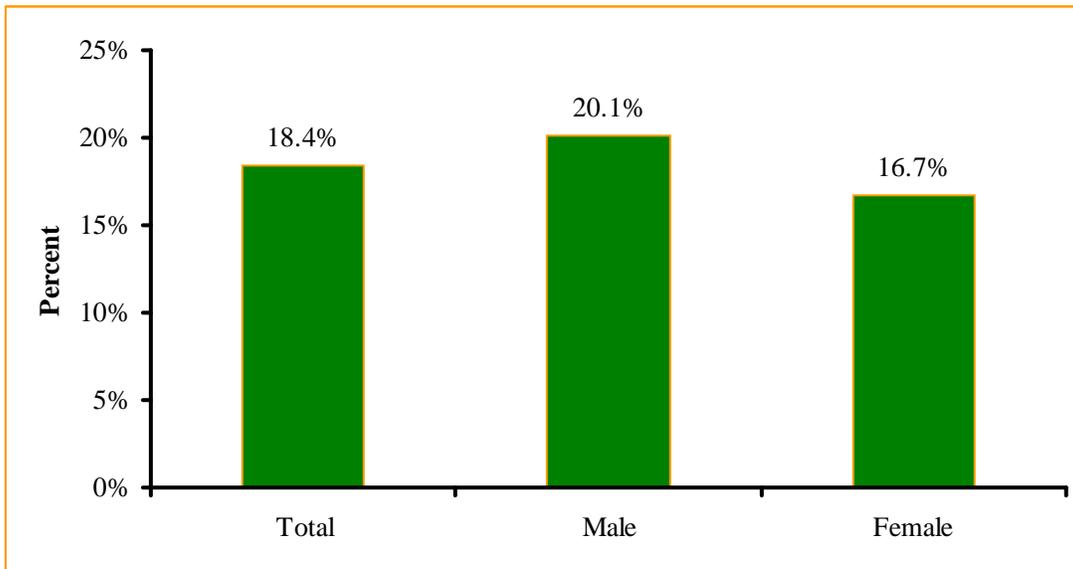


Source: Nebraska Behavioral Risk Factor Surveillance System

Gender/Age Differences

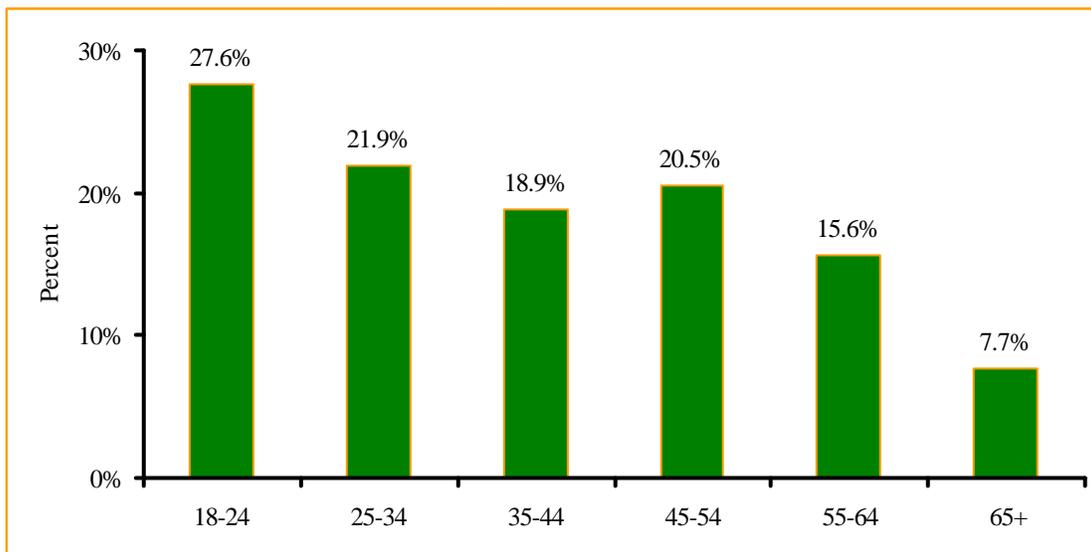
Data from the 2008 Nebraska Behavioral Risk Factor Surveillance System (BRFSS) suggests that Nebraska males (20.1%) are more likely to smoke than females (16.7%). Younger adults (ages 18-24) exhibit the highest smoking rates (27.6%) with the lowest being among the 65+ age group (7.7%). The sharp decline in the smoking rate after age 65 may be due to increased mortality attributable to smoking-related diseases.

Figure 2. Adult Smokers in Nebraska by Gender – 2008



Source: Nebraska Behavioral Risk Factor Surveillance System

Figure 3. Adult Smokers in Nebraska by Age – 2008

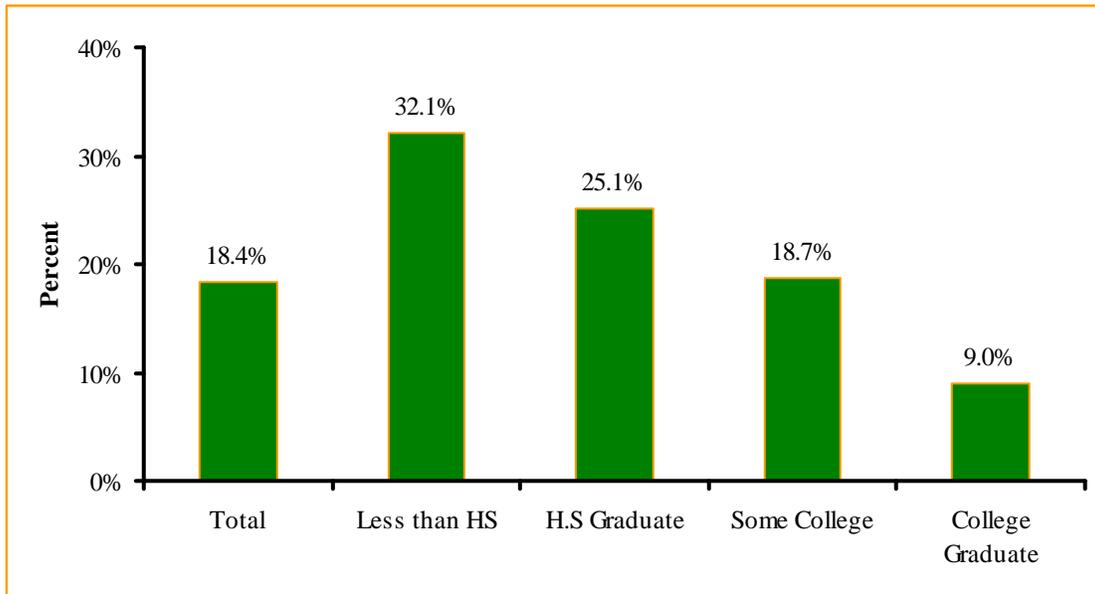


Source: Nebraska Behavioral Risk Factor Surveillance System

Education Differences

Data from the 2008 Nebraska Behavioral Risk Factor Surveillance System suggests that higher levels of education are generally related to lower rates of smoking. The 2008 data shows that smoking rates were highest among those with less than high school education (32.1%) and lowest among those with college education (9.0%).

Figure 4. Adult Smokers in Nebraska by Education – 2008

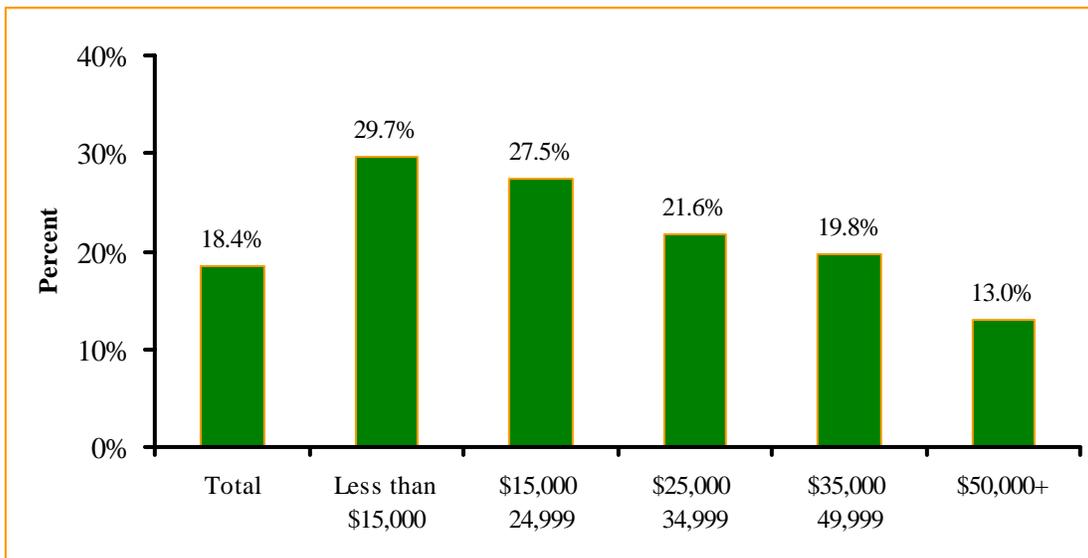


Source: Nebraska Behavioral Risk Factor Surveillance System

Income Differences

Income has been associated with smoking behavior. The 2008 Nebraska Behavioral Risk Factor Surveillance System suggests that adults in low income categories are generally more likely to smoke compared to those in high income brackets. Almost a third (29.7%) of those with income less than \$15,000 were likely to smoke compared to those about one in ten for those with incomes over \$50,000.

Figure 5. Adult Smokers in Nebraska by Income – 2008



Source: Nebraska Behavioral Risk Factor Surveillance System

Smoking Before, During and After Pregnancy

The 2006 Surgeon General’s Report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*,⁷ concluded that there is no risk-free level of exposure to secondhand smoke and that on average children are exposed to more secondhand smoke than adults. Infants and young children are significantly more affected by secondhand smoke because their bodies are still developing. Secondhand smoke is also a known cause of Sudden Infant Death Syndrome (SIDS), asthma, bronchitis, pneumonia, middle ear infections and other diseases.

Data from the Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS) shows a decline in infants that are exposed to secondhand smoke from 6.3 % in 2004 to 3.7% in 2007 (Table 1). PRAMS data also shows that more than a quarter of Nebraska women smoked before they got pregnant with the smoking rate dropping during pregnancy, and climbing again after pregnancy.

Table 1. Infants Exposure to Secondhand Smoke & Smoking Before, During and After Pregnancy, 2004 – 2007

Birth Year	Infants Exposed to Secondhand Smoke	Smoked Before Pregnancy	Smoked During Pregnancy	Smoked After Pregnancy
2004	6.3%	26.10%	16.01%	20.82%
2005	5.7%	25.78%	15.17%	20.05%
2006	3.3%	26.21%	14.92%	19.22%
2007	3.7%	27.8%	14.7%	20.2%

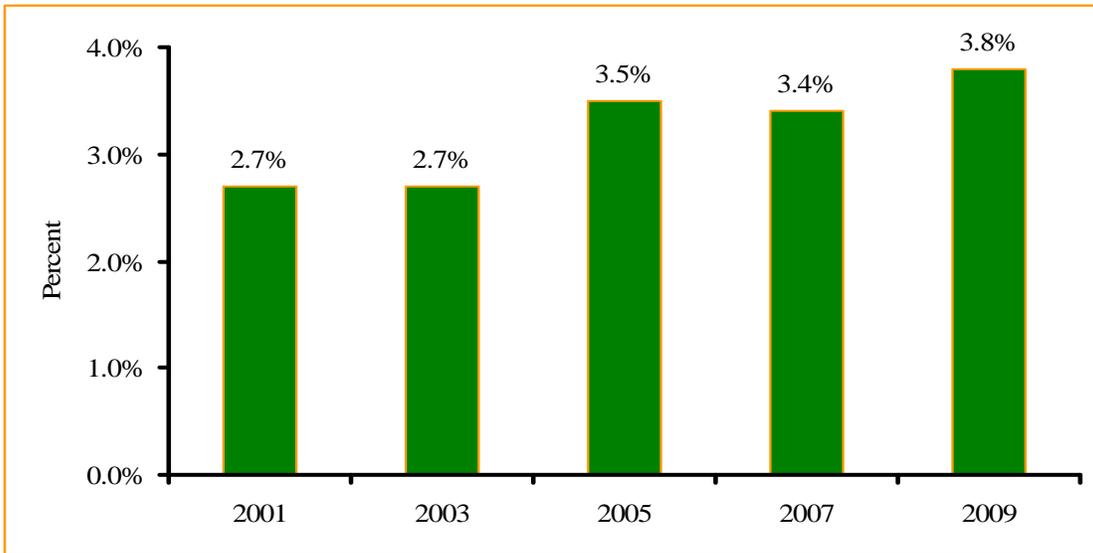
Source: Nebraska Pregnancy Risk Assessment Monitoring System

⁷ U.S. Department of Health and Human Services, 2006

Adult Smokeless Tobacco Use

The Adult Tobacco Survey/Social Climate Survey (ATS/SCS) data shows that adult smokeless tobacco use in Nebraska has remained relatively low. The average smokeless tobacco use rate between 2001 and 2009 is 3.2% for all adult Nebraskans.

Figure 6. Adult Smokeless Tobacco Users in Nebraska



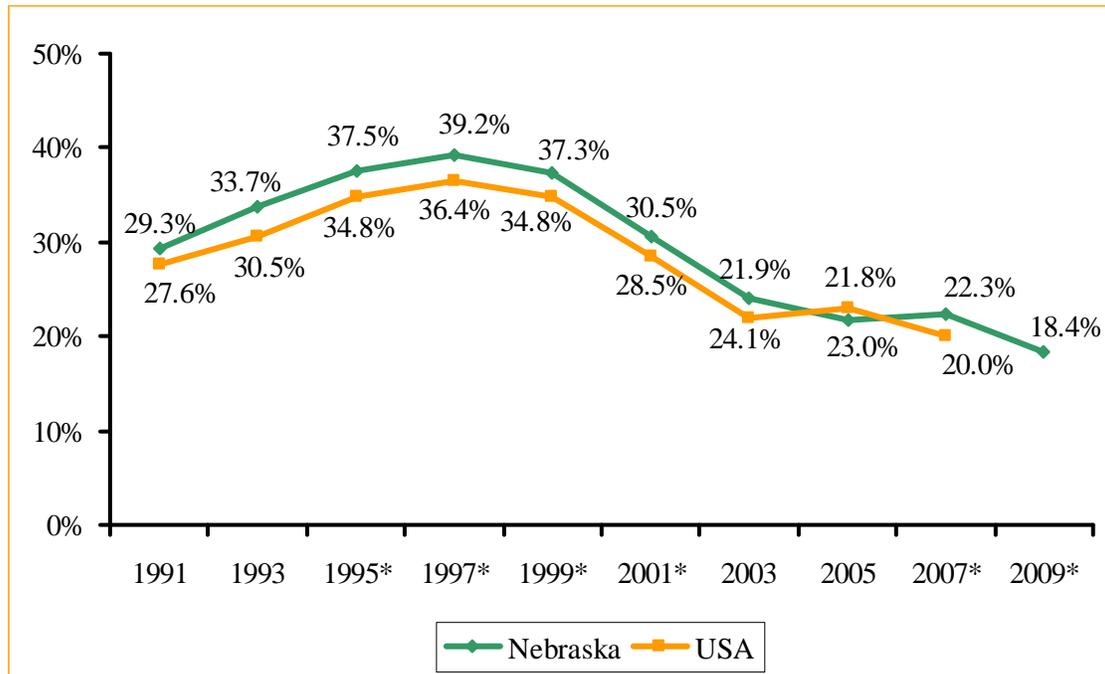
Source: Adult Tobacco Survey/Social Climate Survey (ATS/SCS)

Youth Tobacco Use in Nebraska

Youth Smoking

Adolescent smoking rates experienced a sharp decline between 1997 (39.2%) and 2009 (18.4%). Figure 7 shows the trend in youth smoking rates from 1991 to 2009.

Figure 7. Nebraska Youth Who Smoked on One or More of the Past 30 Days



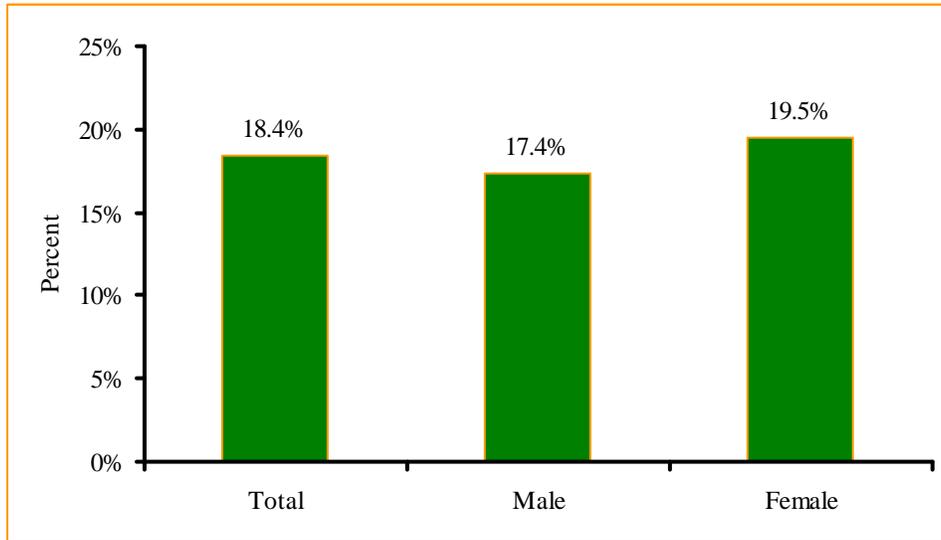
Sources: Nebraska Youth Risk Behavior Survey; CDC Youth Behavior Surveillance System

*Nebraska data not weighted due to low response rates

Youth Smoking by Gender and Grade

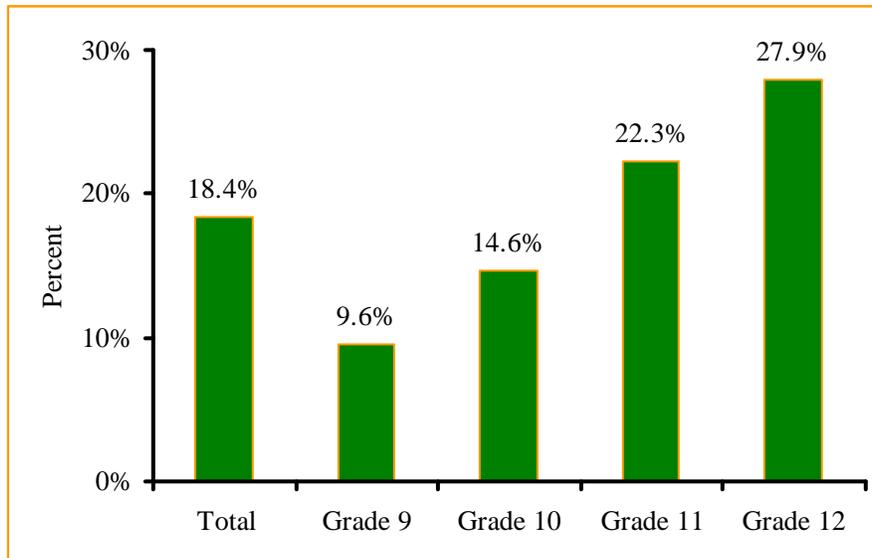
The smoking rate for females at 19.5% is slightly higher than for males at 17.4%. Additionally, youth smoking rates increase by grade from 9.6% of 9th graders to 27.9% of 12th graders reporting that they smoked in the past 30 days.

Figure 8. Percent Smoked on One or More of the Past 30 Days by Gender– 2009*



Sources: Nebraska Youth Risk Behavior Survey
*Nebraska data not weighted due to low response rates

Figure 9. Percent Smoked on One or More of the Past 30 Days by Grade– 2009*

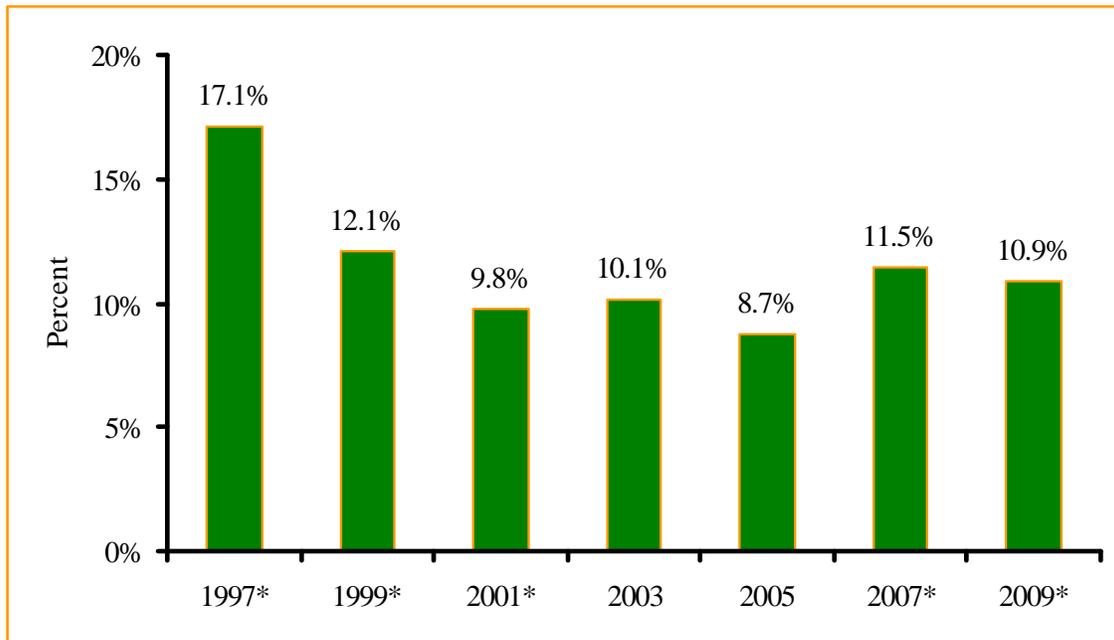


Sources: Nebraska Youth Risk Behavior Survey
*Nebraska data not weighted due to low response rates

Youth Smokeless Tobacco Use

Similar to youth smoking behavior, the use of smokeless tobacco (chewing tobacco, snuff or dip) by youth experienced a sharp decline between 1997 (17.1%) and 2005 (8.7%). However, in 2007, smokeless tobacco use among youth increased to 11.5%. In 2009, the rate declined slightly to 10.9%.

Figure 10. Nebraska Male Youth Who Used Smokeless Tobacco on



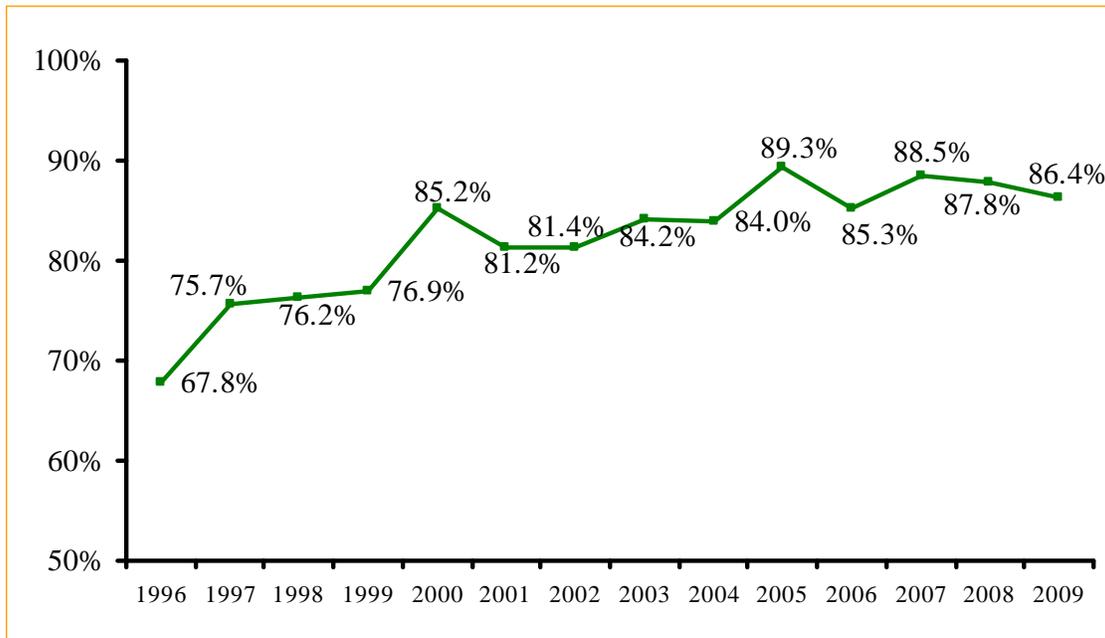
Source: Nebraska Youth Risk Behavior Survey

*Data not weighted due to a low response rate

Sale of Tobacco Products to Minors

The Nebraska State Patrol conducts random, unannounced compliance checks of tobacco retailers to determine the State's compliance rate as required by the federal Substance Abuse and Treatment Block Grant. In 1996, only 67.8% of tobacco retailers checked complied with the law that restricts the sale of tobacco products to minors. Since then, compliance has substantially increased with 86.4% of retailers complying with the law in 2009.

Figure 11. Statewide Compliance Rate for Sales of Tobacco Products



Source: Nebraska Annual Synar Report

Smoker and Non-Smoker Perceptions Regarding Youth and Tobacco Use

The 2009 Nebraska Adult Tobacco Survey and Social Climate Survey (ATS/SCS) included a number of questions about adult smoker and non-smoker perceptions regarding youth tobacco use.

Table 2. Adult Perception of Youth Tobacco Use in Nebraska

Adult perception of youth and tobacco use	Total	Smoker	Non-smoker
Laws banning the sale of tobacco to minors are adequately enforced	51.0%	63.4%	48.4%
Agree or strongly agree that:			
<ul style="list-style-type: none"> It is very important to keep stores from selling tobacco to minors 	93.5%	96.1%	93.0%
<ul style="list-style-type: none"> Tobacco use by teenagers is perceived as a serious problem in my community 	81.4%	73.8%	83.1%
<ul style="list-style-type: none"> Parents should not allow children under 18 to smoke 	92.2%	92.7%	92.1%
<ul style="list-style-type: none"> Children are more likely to smoke if their parents smoke 	85.4%	71.9%	88.2%
<ul style="list-style-type: none"> It is important to keep cigarettes out of the reach of children 	97.4%	96.0%	97.7%
Parents who talked to their children about tobacco:			
<ul style="list-style-type: none"> Who ever talked to their child about tobacco 	67.6%	74.2%	66.0%
<ul style="list-style-type: none"> In the last 6 months, parents who told their child that they cannot use tobacco 	62.3%	71.4%	60.1%

Source: Nebraska ATS/SCS

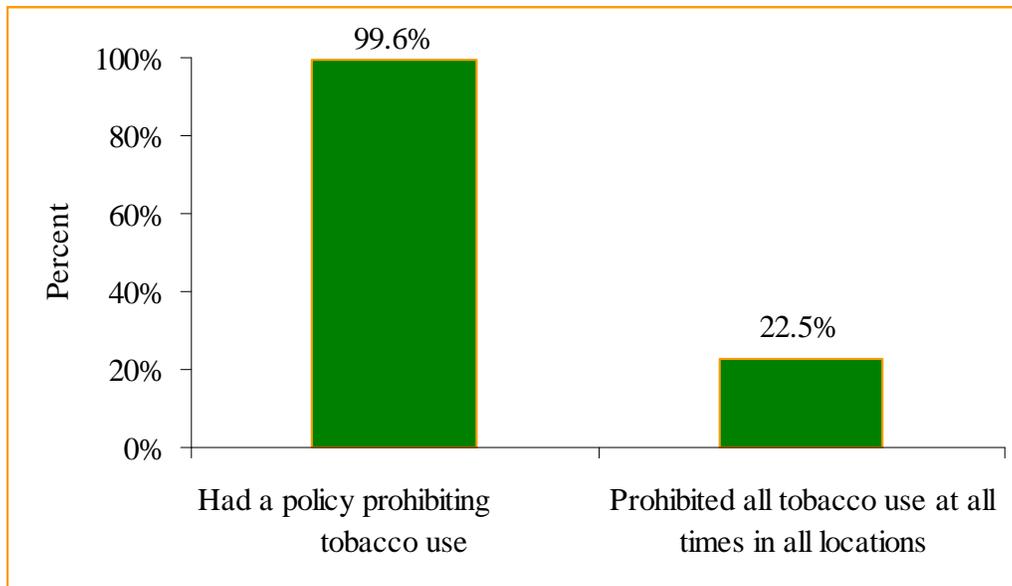
Tobacco Policies in Nebraska Schools

Prohibition of Tobacco Use

The Centers for Disease Control and Prevention (CDC) School Health Profile report provides information on health education practices and school health policies, including policies on tobacco use regarding students, staff and visitors to schools. The 2008 Nebraska School Health Profile surveyed 208 public schools with a response rate of 77.0% for principals and 74.0% for lead health education teachers.

The survey showed that almost all public schools (99.6%) have adopted a policy that prohibited the use of all tobacco. However, only about a fourth (22.5%) of schools prohibited tobacco use at all times in all locations (e.g., campus-wide as well as at off-campus school sponsored events).

Figure 12. Nebraska Schools Tobacco Prevention Policies – 2008

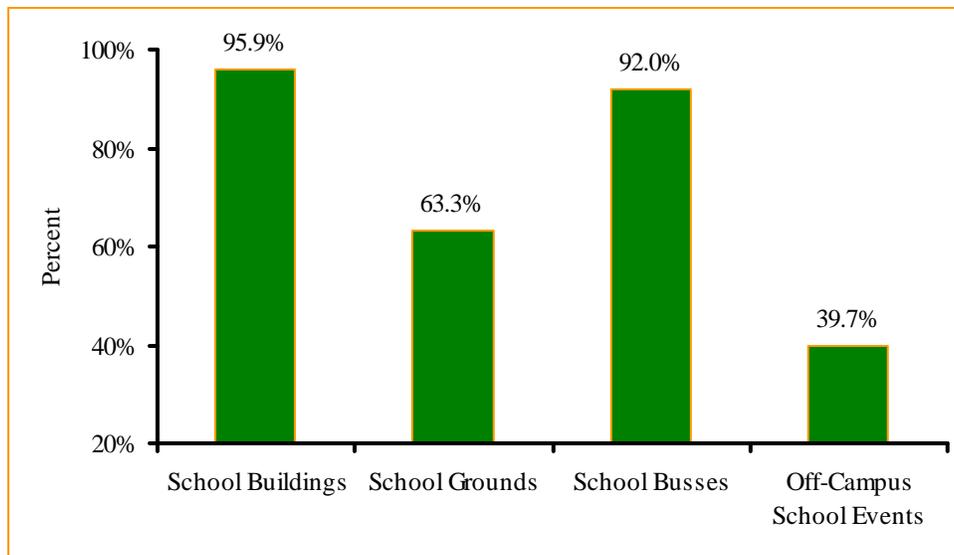


Source: CDC School Health Profile, 2008

Prohibition of Tobacco Use: School Buildings, Buses, Grounds and at Off-Campus School Events

A school comprehensive tobacco-use policy is designed to increase tobacco-free environments in schools, including all school facilities, property, vehicles, and events. Although almost all schools have adopted tobacco use policies, there is variation in coverage of areas where tobacco use is restricted for all. Almost all schools prohibit tobacco use in school buildings (95.9%) and school buses (92.2%). However, only two-thirds of the policies restrict tobacco use for all on school grounds (63.3%) and only 39.7% at off-campus school events.

Figure 13. Nebraska Schools with Policies that Prohibit Tobacco Use in School Buildings, on School Buses and at Off-Campus School Events – 2006



Source: CDC School Health Profile, 2008

Smoking-Related Costs in Nebraska

The CDC uses the Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) statistical software to estimate financial and health impacts. SAMMEC uses current information on cigarette smoking prevalence and scientific data for adults 35 years and older to calculate years of potential life lost, direct medical expenditures and lost productivity costs.

Preventable Deaths and Diseases Related to Smoking

An estimated, 2,272 adult Nebraskans lost their lives because of cigarette smoking in 2006. This section details the specific health impacts that smoking has on Nebraska.

Smoking-related deaths fall into three broadly defined categories: malignant neoplasms (cancers), cardiovascular disease (CVD) and respiratory disease (Table 3). A larger proportion of Nebraskans died from tobacco-related cancer (39.2%) than from tobacco-related CVD (24.7%) and respiratory diseases (36.1%). Data also shows that cancer accounted for 40.7% of smoking related-mortality among males and 36.9% among females. CVD accounted for about a quarter of tobacco-related mortalities among both males (25.4%) and females (23.6%). Tobacco-related respiratory diseases accounted for about a third of smoking-related mortality among males (33.9%) and slightly over a third among females (39.6%).

Table 3. Smoking-Attributable Deaths by Type of Disease and Gender – 2008

Disease	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Cancer	564	40.7%	327	36.9%	891	39.2%
Cardiovascular Disease	352	25.4%	209	23.6%	561	24.7%
Respiratory Disease	469	33.9%	351	39.6%	820	36.1%
Total	1385	100.0%	887	100.0%	2272	100.0%

Source: Nebraska Department of Health and Human Services, Vital Statistics

Tobacco-related cancers can be located on various parts of the body as shown in Table 4. The vast majority of tobacco-related cancer deaths involved cancers of the lungs and trachea (76.4%). Among the males, lung and trachea cancer accounted for 73.8% and 82.6% among females.

Table 4. Smoking-Attributable Cancer Deaths in Nebraska – 2008

Disease	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Oral Cavity	15	2.7%	8	2.4%	23.0	2.6%
Esophagus	45	8.0%	9	2.8%	54.0	6.1%
Stomach	10	1.8%	2	0.6%	12.0	1.3%
Pancreas	17	3.0%	23	7.0%	40.0	4.5%
Larynx	14	2.5%	4	1.2%	18.0	2.0%
Lung & Trachea	416	73.8%	270	82.6%	686.0	77.0%
Cervix	0	0.0%	2	0.6%	2.0	0.2%
Kidney/Renal	14	2.5%	1	0.3%	15.0	1.7%
Bladder	26	4.6%	6	1.8%	32.0	3.6%
Leukemia	7	1.2%	2	0.6%	9.0	1.0%
Total	564	100.0%	327	100.0%	891.0	100.0%

Source: Nebraska Department of Health and Human Services, Vital Statistics

Cardiovascular diseases accounted for about a quarter (24.7%) of smoking-related deaths in Nebraska in 2006 (Table 3). Among both males (51.7%) and females (42.1%), ischemic heart disease was the leading cause of smoking-related cardiovascular disease. The second highest smoking-related cardiovascular cause of death was other heart diseases accounting for 29.0% among men and 29.2% among females (Table 5).

Table 5. Smoking-Attributable Cardiovascular Deaths in Nebraska – 2008

Disease	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Ischemic Heart	182	51.7%	88	42.1%	270	48.1%
Other Heart	102	29.0%	61	29.2%	163	29.1%
Stroke	36	10.2%	34	16.3%	70	12.5%
Atherosclerosis	7	2.0%	3	1.4%	10	1.8%
Aortic Aneurysm	23	6.5%	18	8.6%	41	7.3%
Other Arterial	2	0.6%	5	2.4%	7	1.2%
	352	100.0%	209	100.0%	561	100.0%

Source: Nebraska Department of Health and Human Services, Vital Statistics

Respiratory diseases caused approximately 36.1% of Nebraska’s smoking-related deaths in 2006 (Table 3). Chronic Airway Obstruction accounted for over three quarters (84.0%) of the smoking-related respiratory disease deaths (Table 6). Pneumonia/influenza accounted for less than only 6.7% of tobacco-related respiratory deaths while Bronchitis/Emphysema accounted for 9.3%.

Table 6. Smoking-Attributable Respiratory Deaths in Nebraska – 2008

Disease	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Pneumonia/Influenza	34	7.2%	21	6.0%	55.0	6.7%
Bronchitis/Emphysema	52	11.1%	24	6.8%	76.0	9.3%
Chronic Airway	383	81.7%	306	87.2%	689.0	84.0%
Total	469	100.0%	351	100.0%	820.0	100.0%

Source: Nebraska Department of Health and Human Services, Vital Statistics

Smoking-Attributable Lost Productivity Costs

Smoking-attributable lost productivity costs provide an estimation of the value of lost work time resulting from premature deaths from smoking. SAMMEC calculates an average annual smoking-related lost productivity cost based on adults aged 35 years and older. For 2004 (the most recent year available), Table 7 shows the total lost productivity costs by gender and for the whole state attributed to the three main tobacco related causes of death.

Table 7. Nebraska Smoking-Attributable Productivity Losses (in thousands) – 2004^{i, ii}

Disease Category	Male	Female	Total
Malignant Neoplasms	\$167,406	\$79,556	\$246,962
Cardiovascular Diseases	\$123,033	\$41,932	\$164,965
Respiratory Diseases	\$51,780	\$42,279	\$94,059
Total	\$342,219	\$163,767	\$505,986

ⁱ Among adults age 35 years and older

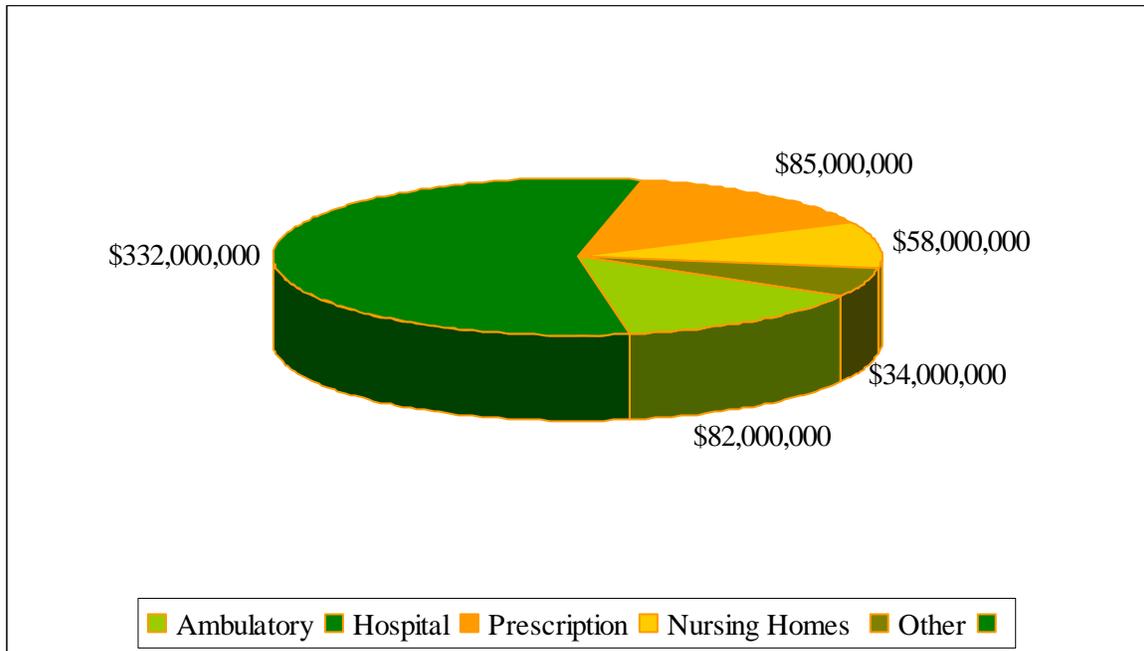
ⁱⁱ Does not include burn or secondhand smoke deaths

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

Smoking-Related Health Care Expenditures

SAMMEC data estimates smoking-related health care expenditures within five general categories: ambulatory care, hospital care, prescription drugs, nursing home care and other care (home health, non-prescription drugs, etc.). The 2004 estimates are for adults, 18 and older. According to SAMMEC calculations, Nebraska's smoking-related health care expenditures are approximately \$591 million annually. Figure 14 shows that the largest portions of smoking-related expenditures are for hospital care (\$332,000,000), ambulatory care (\$82,000,000) and prescriptions (\$85,000,000).

Figure 14. Smoking-Attributable Expenditures – 2004



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

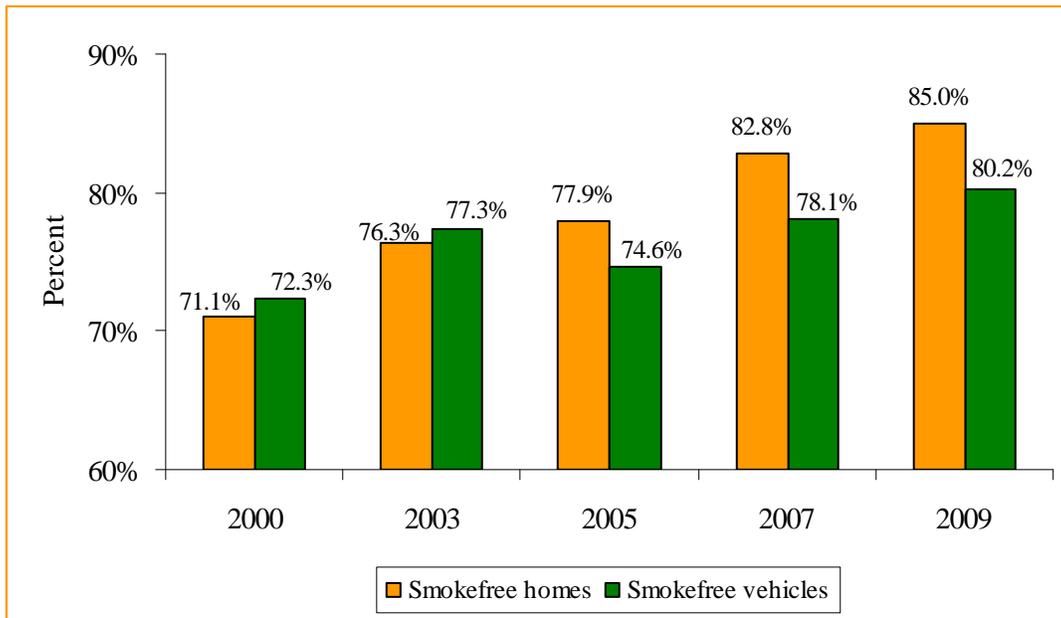
Secondhand Smoke

Protection from Secondhand Smoke in Homes and Vehicles

The Adult Tobacco Survey/Social Climate Survey asked Nebraskans about smoking in their homes and family vehicles. In 2000, 71.1% of Nebraskans reported that smoking was not allowed in any part of the home. The percentage increased to 82.8% in 2007 and 85.0% in 2009.

The percentages of Nebraskans that do not allow smoking in the family vehicle increased from 72.3% in 2000 to 78.1% in 2007 and 80.2% in 2009.

Figure 15. Nebraskans Protected by Non-Smoking Rules



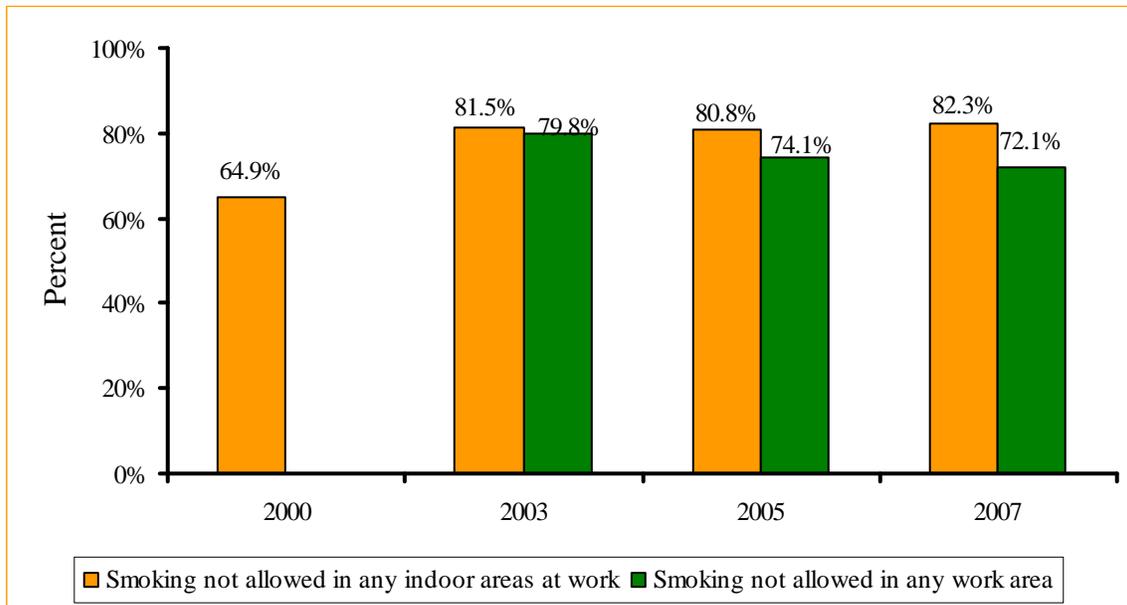
Source: 2000 Nebraska Social Climate Survey, subsequent years: Nebraska ATS/SCS

Protection from Secondhand Smoke at Work

In the past, the ATS/SCS asked employed Nebraskans about their workplace's policy regarding smoking in indoor areas. Nebraska experienced an increase in the proportion of employees reporting that smoking was not allowed in any indoor area at their place of work from 64.9% in 2000 to 81.5% in 2003. In 2005, the proportion of Nebraska employees (80.8%) protected by indoor smoke-free policies remained almost the same as in 2003, but increased to 82.3% in 2007.

In addition, 2003, 2005 and 2007 ATS/SCS surveys included questions regarding smoking in work areas (which might include work areas that are outdoors). Since 2003, the percentage of Nebraskans that reported that smoking was not allowed in any work area remained high but a slight decline took place from 2005 (74.1%) to 2007 (72.1%). With the implementation of the Nebraska Clean Indoor Air Act on June 1, 2009, the ATS/SCS survey no longer collects data on smoke-free work place policies.

Figure 16. Nebraskans Protected by Non-Smoking Policies at Work, 2000 - 2007

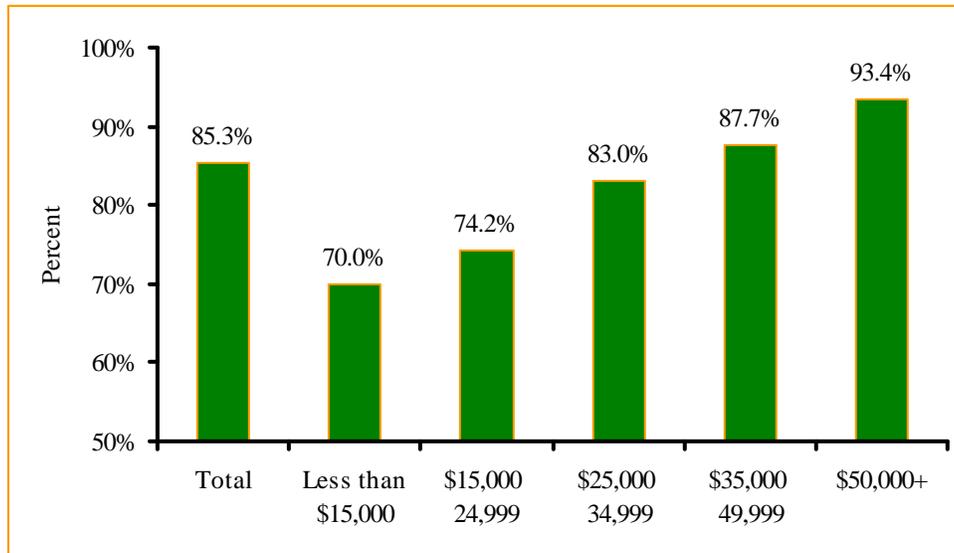


Source: Nebraska Social Climate Survey, Nebraska ATS/SCS

Disparities in Adoption of Smoke-free Rules in Homes: Income and Education

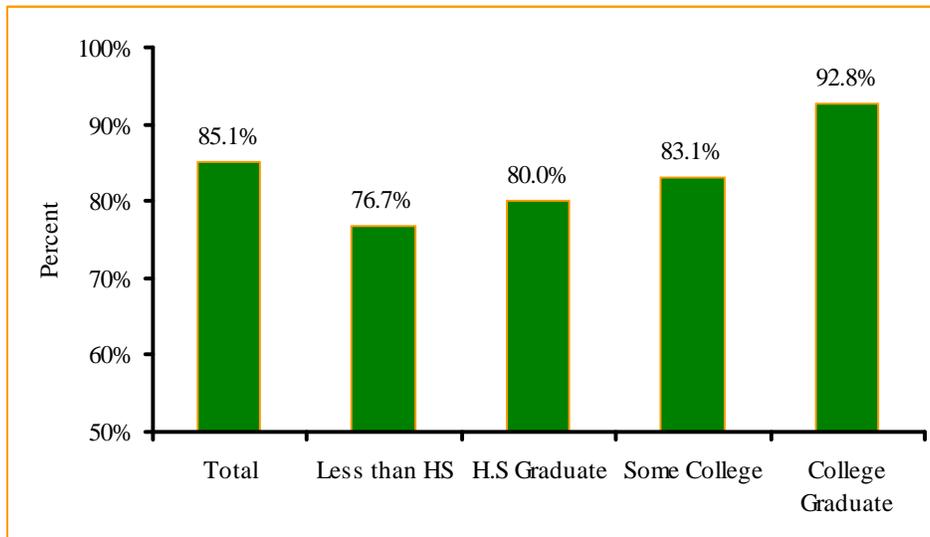
Disparities in protection against secondhand smoke are evident by income and education in Nebraska. Protection against secondhand smoke in homes increases with education and also by income.

Figure 17. Protection from Secondhand Smoke in Homes by Income



Source: ATS/SCS 2009

Figure 18. Protection from Secondhand Smoke in Homes by Education



Source: ATS/SCS 2009

Smoker and Non-Smoker Perceptions Regarding Secondhand Smoke

The 2009 Nebraska ATS/SCS included a number of questions regarding general attitudes about secondhand smoke.

Table 8. Attitudes Toward Secondhand Smoke

Health Consequences Associated with Exposure to Secondhand Smoke	Total	Smoker	Non-smoker
Bothered moderately or very much when exposed to secondhand smoke	71.1%	23.9%	80.8%
<hr/>			
Agree or strongly agree that			
• Inhaling secondhand smoke is harmful to babies and children	96.2%	93.4%	96.8%
• Inhaling secondhand smoke is harmful to adults and children	96.6%	94.5%	97.1%
<hr/>			
Breathing smoke from other people's cigarettes ...			
• Is very harmful	63.6%	40.5%	67.8%
• Causes lung cancer in adults	92.2%	79.2%	94.8%
• Causes heart disease	87.9%	75.7%	90.4%
• Causes respiratory problems in children	92.9%	91.5%	98.0%
• Causes Sudden Infant Death Syndrome	70.2%	54.5%	73.8%

Source: Nebraska ATS/SCS, 2009

Support for the Nebraska Smoke-Free Air Law

The Nebraska Clean Indoor Air Act was passed by the Nebraska Unicameral and signed by the Governor in February 2008, and went into effect on June 1, 2009. The purpose of the Act is to protect the public health and welfare by prohibiting smoking in public places and places of employment.

Public Opinion of the Law

To measure public opinion about the law, a number of questions were added to the Nebraska Adult Tobacco Survey/Social Climate Survey (ATS/SCS). The survey measured four main components related to the law:

- (1) Support for the law
- (2) Importance of the law
- (3) Health impact on employees and customers
- (4) Frequency of visits to hospitality businesses.

Support for the Law

Nebraskans were asked whether they supported the Smoke-Free Air Law. The question was asked both prior to implementation, as well as after the law went into effect. As shown in Table 9, support for the law was high prior to implementation (80.6%) and remained high after implementation (80.0%).

Table 9. Support for Smoke-Free Air Law

	June 2008 – May 2009	June 2009 – Sept 2009
Support	80.6%	80.0%
Oppose	19.4%	20.0%
Sample size (n)	2883	1168

Importance of the Law

Nebraskans were asked how important it was to have a statewide law that prohibited smoking inside most public buildings, including restaurants and bars. Results in Table 10 show that over 80.0% of adult Nebraskans thought the law was important both before and after implementation.

Table 10. Importance of Smoke-Free Law

	June 2008 – June 2009	June 2009 – Sept 2009
Important	83.7%	82.0%
Not Important	16.3%	18.0%
Sample size (n)	2899	1176

Health Impact on Employees and Customers

Evidence shows that adopting smoke-free policies improves the health of employees and the public. Nebraskans were asked if they agreed that restaurants and bars in Nebraska will be healthier for employees and customers once the Smoke-Free Air Law goes into effect and after implementation. Table 11 shows that over 85.0% of Nebraskans agreed that restaurants and bars would be, or were, healthier for employees and customers as a result of the law.

Table 11. Restaurants and Bars are Healthier

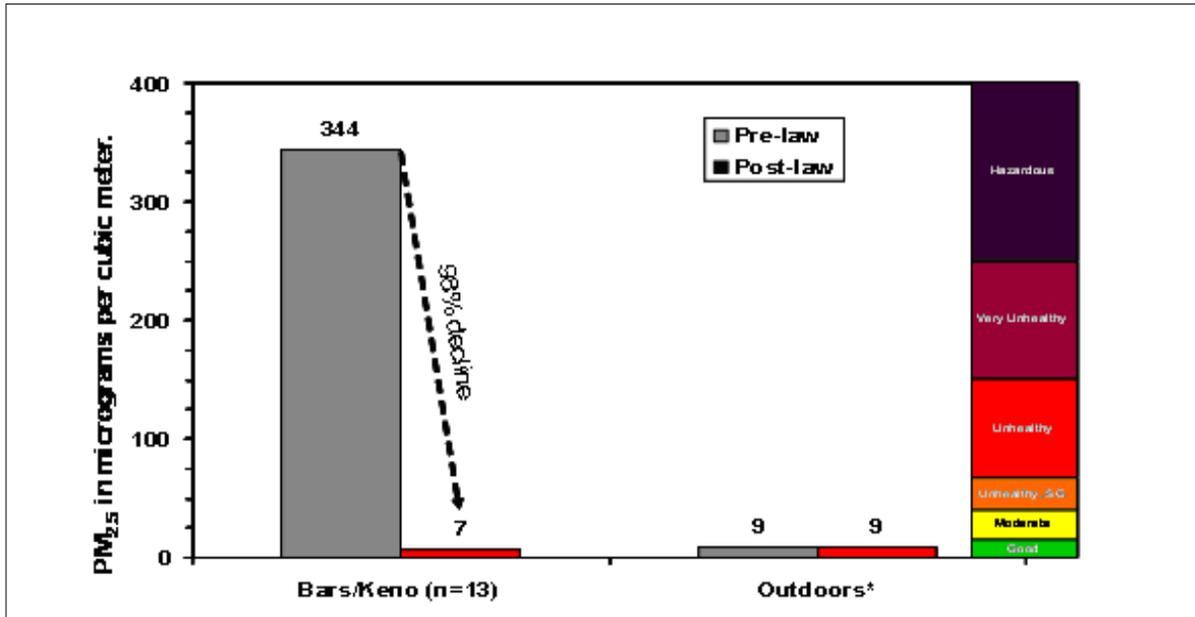
	June 2008 – June 2009	June 2009 – Sept 2009
Agree	87.4%	86.0%
Disagree	12.6%	14.0%
Sample size (n)	2885	1167

Improvement to Air Quality As Result of Smoke-free Law

In December 2006, indoor air quality was assessed in 13 bars (n=8) and keno establishments (n=5) in Omaha, Nebraska. The same sites were re-visited in November 2008 after they were required by local law to prohibit indoor smoking. Concentration of fine particle air pollution, PM_{2.5}, was measured with a TSI SidePak AM510 Personal Aerosol Monitor at both points in time. PM_{2.5} is particulate matter in the air smaller than 2.5 microns in diameter. Particles of this size are released in significant amounts from burning cigarettes, are easily inhaled deep into the lungs, and cause adverse health effects including cardiovascular and respiratory morbidity and death.

Figure 19 shows the significant decline in pollution levels in Omaha bars and keno establishments after going smoke-free. Pollution levels dropped from hazardous levels to good.

Figure 19. Average Level of Air Pollution in Omaha, Nebraska



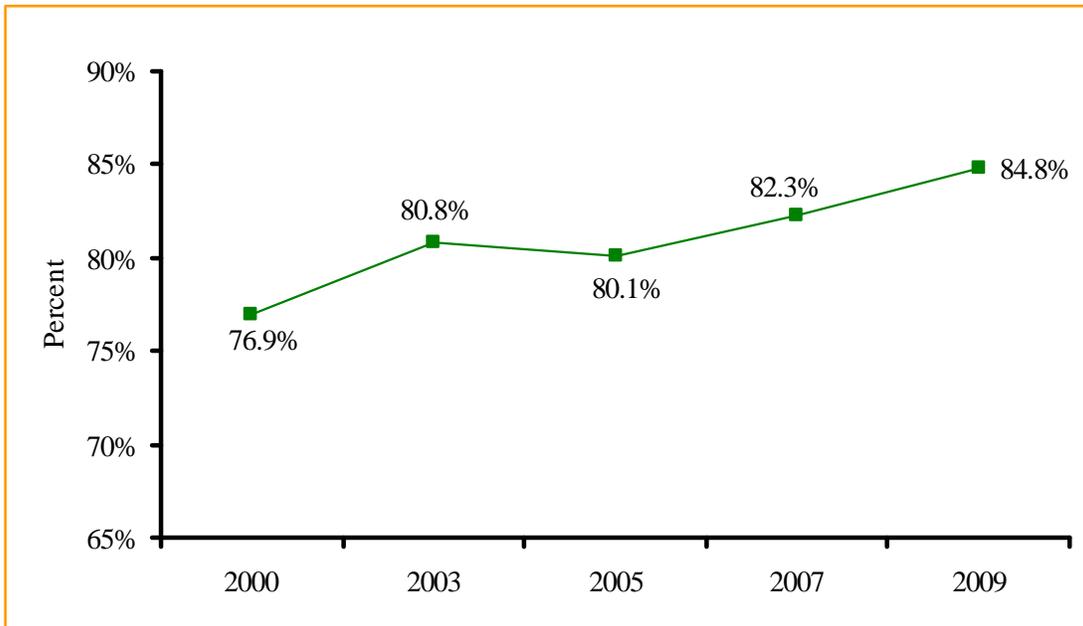
Source: Travers M.J. and Dobson K.A. *Omaha, Nebraska Air Monitoring Study*

In 2006, levels of fine particle air pollution were hazardous in Omaha bars and keno establishments (pre-law $PM_{2.5} = 344 \mu\text{g}/\text{m}^3$). Employees in Omaha bars and keno establishments were exposed to levels of air pollution 5.7 times higher than safe annual levels established by the U.S. Environmental Protection Agency. In 2008, these levels dropped 98% to safe levels. This demonstrates that strong smoke-free workplace ordinance effectively protect the health of workers and patrons from the health effects of exposure to tobacco smoke pollution.

Preference for Smoke-Free Hotel/Motel Rooms

The Nebraska Clean Indoor Air Act allows hotels and motels to designate up to 20% of their guestrooms or suites as smoking rooms. The Nebraska Adult Tobacco Survey/Social Climate Survey tracks the preference for smoke-free hotel/motel rooms among Nebraskans. The result from the surveys shows an increasing trend among Nebraskans for preference to request for smoke-free rooms. In 2000, about three quarters of Nebraskans (76.9%) requested a non-smoking room and in 2009 slightly less than 85% requested a non-smoking room.

Figure 20. Percent of Nebraskans Who Prefer Staying in Smoke-free Hotel/Motel Rooms

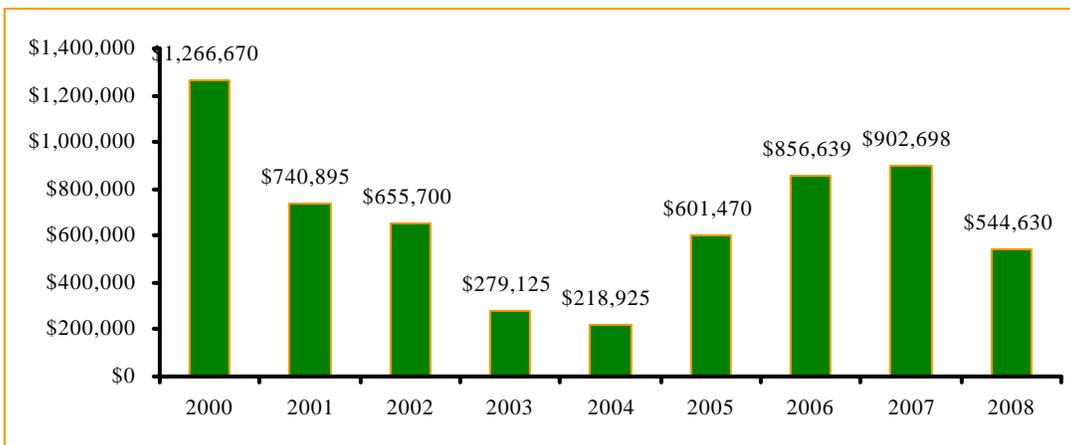


Source: Nebraska Social Climate Survey, Nebraska ATS/SCS

Fires Caused by Cigarette Smoking in Nebraska

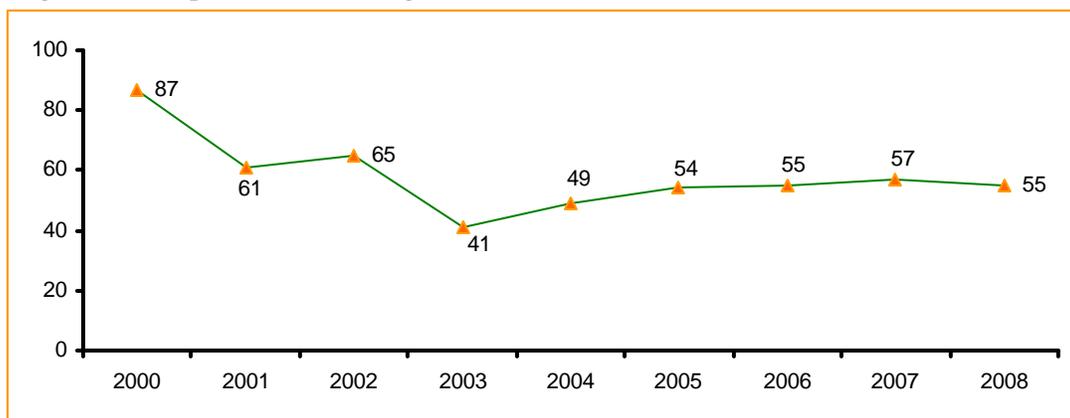
Figure 21 indicates the total number of fires in Nebraska that were caused by cigarette smoking from 2000 to 2008. The number of fires declined from a high of 87 per year in 2000 to 55 in 2008 after reaching a low of 41 fires per year in 2003. Annually, cigarette-related fires are responsible for substantial economic losses in Nebraska. Figure 21 also shows the cost of damage caused by smoking-related fires. In 2008, 55 cigarettes-related fires caused \$544,630 damages. The cost tends to decline with the reduction in number of tobacco-related fires.

Figure 21. Costs of Smoking Related Fires, 2000 – 2008



Source: Nebraska State Fire Marshal's Office

Figure 22. Frequencies of Smoking-Related Fires, 2000 – 2008



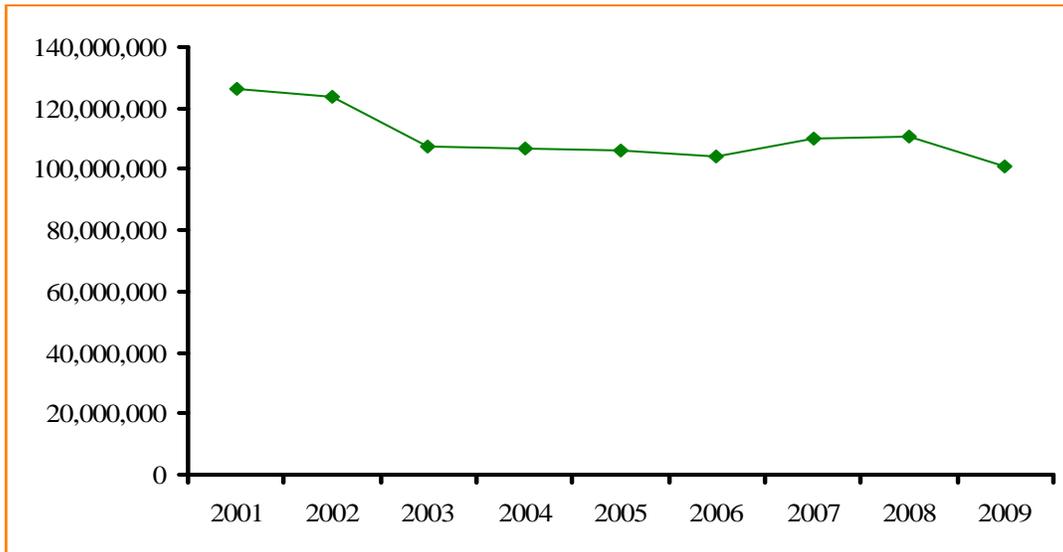
Source: Nebraska State Fire Marshal's Office

Nebraska Cigarette Excise Tax

Number of Packs Taxed

The number of cigarette packs sold and taxed in Nebraska has steadily declined from 127 million packs in 2001 to 107 million packs in 2003, and has remained relatively stable since. The decrease in packs sold and taxed occurred after the cigarette tax increased in Nebraska in 2002. At that time, the Nebraska State Legislature increased the tax from 34 cents to 64 cents on packs containing 20 or fewer cigarettes and from 42.5 cents to 80 cents on packs containing 25 cigarettes.

Figure 23. Nebraska Number of Packs Taxed 2001 – 2009

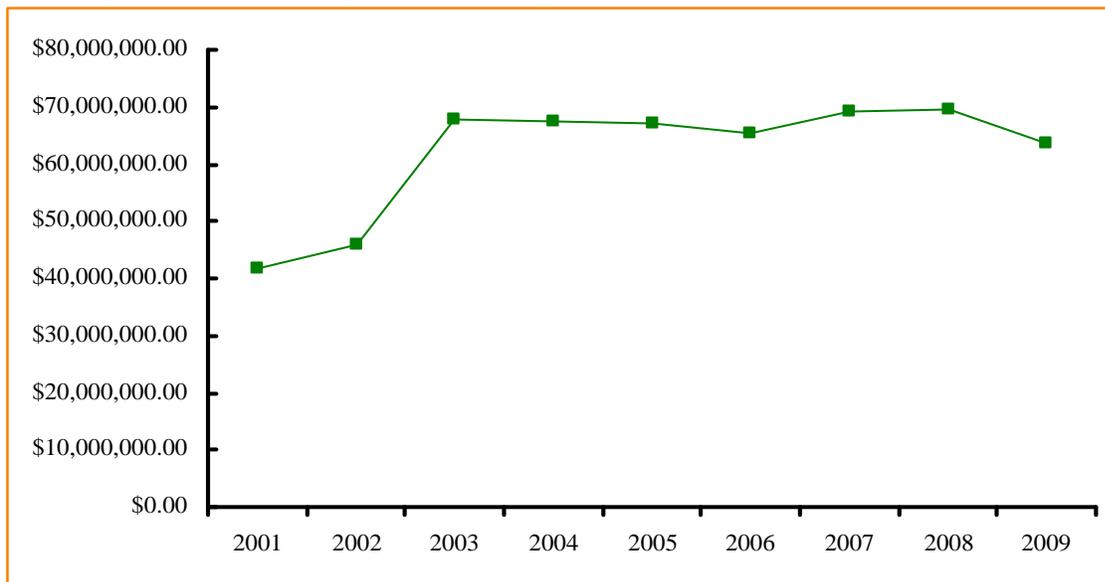


Source: Nebraska Department of Revenue

Number of Packs Taxed

During the same period, tax receipts increased from \$41 million in 2001, to \$68 million in 2003. The increase in tax receipts occurred after the cigarette tax increased in Nebraska in 2002. In 2002, the Nebraska State Legislature increased the cigarette tax from 34 cents to 64 cents on packs containing 20 or fewer cigarettes and from 42.5 cents to 80 cents on packs containing 25 cigarettes. In 2009, the Campaign for Tobacco Free Kids ranked Nebraska 38th among other states in cigarette taxes.

Figure 24. Nebraska Cigarette Tax Receipts 2001 – 2009



Source: Nebraska Department of Revenue

Distribution of Cigarette Tax Revenue

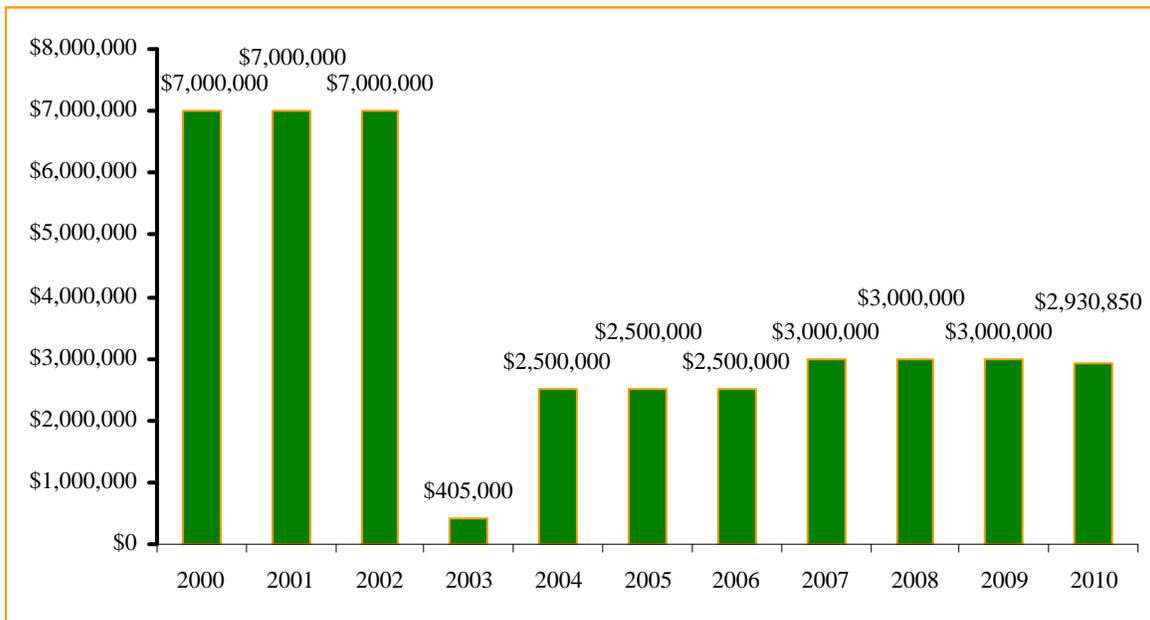
- 49¢** Deposited in the General Fund
 - 1¢** Deposited in the Nebraska Outdoor Recreation Cash Fund
 - 3¢** Deposited in the Department of Health and Human Services Finance & Support Cash Fund
 - 7¢** Deposited to the Building Renewal Allocation Fund
 - 2¢** A fiscal year payment of \$1,000,000 to the City of Primary Class Development Fund (Lincoln) and \$1,500,000 to the City of Metropolitan Class Development Fund (Omaha). Effective until June 30, 2016.
 - 2¢** Deposited into the Information Technology Infrastructure Fund
- Source: Nebraska Department of Revenue Annual Report*

State Funding for Comprehensive Tobacco Prevention and Control

In 2000, the Nebraska Unicameral passed Legislative Bill (LB) 1436, marking a milestone in Nebraska's tobacco prevention and control efforts. The bill allocated \$21 million over three years to the Tobacco Free Nebraska program from the multi-state Tobacco Master Settlement Agreement (MSA). This marked the first time the Unicameral allocated state funds for comprehensive tobacco control efforts. In 2004, the Nebraska Legislature passed LB 1089 which allocated \$2.5 million a year of MSA payments to the program.

The 2007 CDC *Best Practices for Comprehensive Tobacco Control Programs*⁸ recommended that Nebraska's annual investment for comprehensive tobacco prevention and control be \$21.5 million. In 2007 and 2008, state funding was \$3 million per year and in 2010 the allocation was cut by 5.0% to \$2,930,000.

Figure 25. State Funding for the Tobacco Free Nebraska Program



*For FY2010, federal spending refers to a nine-month grant provided to the states by the U.S. Centers for Disease Control and Prevention for the period beginning July 2009.

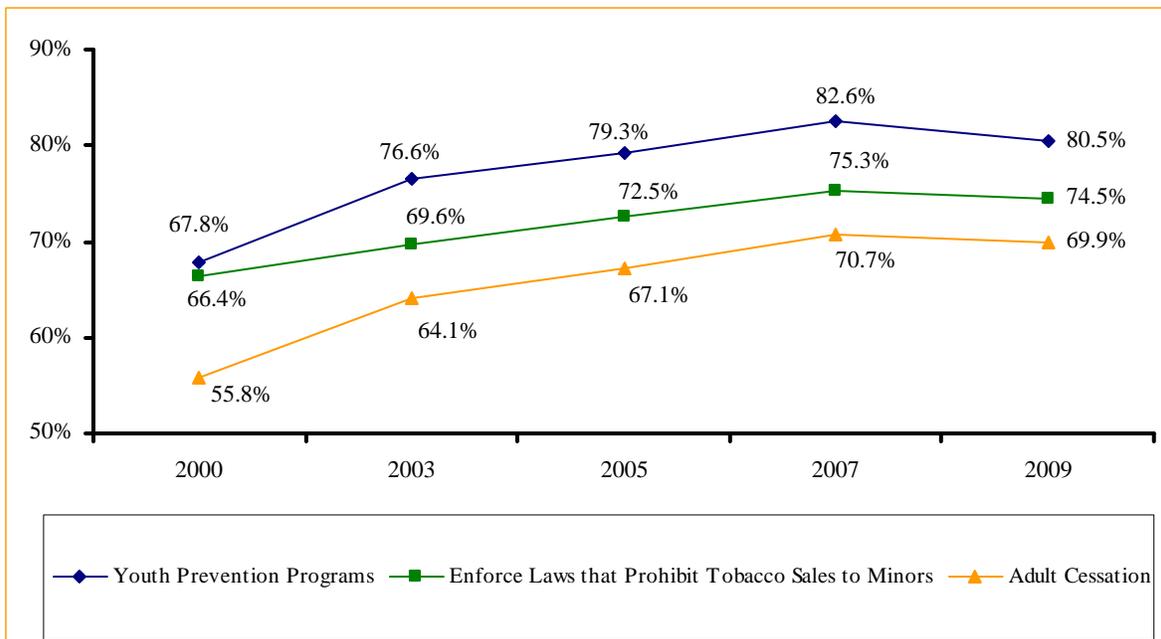
⁸ CDC, 2007

Support for Increasing Tobacco Taxes to Fund Tobacco Control Programs

ATS/SCS asks Nebraskans if state tobacco taxes should increase to fund tobacco control and prevention programs, including education programs to prevent young people from starting to use tobacco, enforcing laws that prevent the sale of tobacco products to minors and helping adults quit tobacco.

There is an increasing trend among Nebraskans to support raising tobacco taxes to fund youth prevention programs from 67.8% in 2000 to 80.5% in 2009. Nebraskans also support raising tobacco taxes to fund enforcement to restrict sales to minors (66.4% in 2000 to 74.5% in 2009) and funding adult cessation programs (55.8% in 2000 to 69.9% in 2009).

Figure 26. Support for Increased State Tobacco Taxes to Fund Tobacco Control Programs, 2000 – 2009

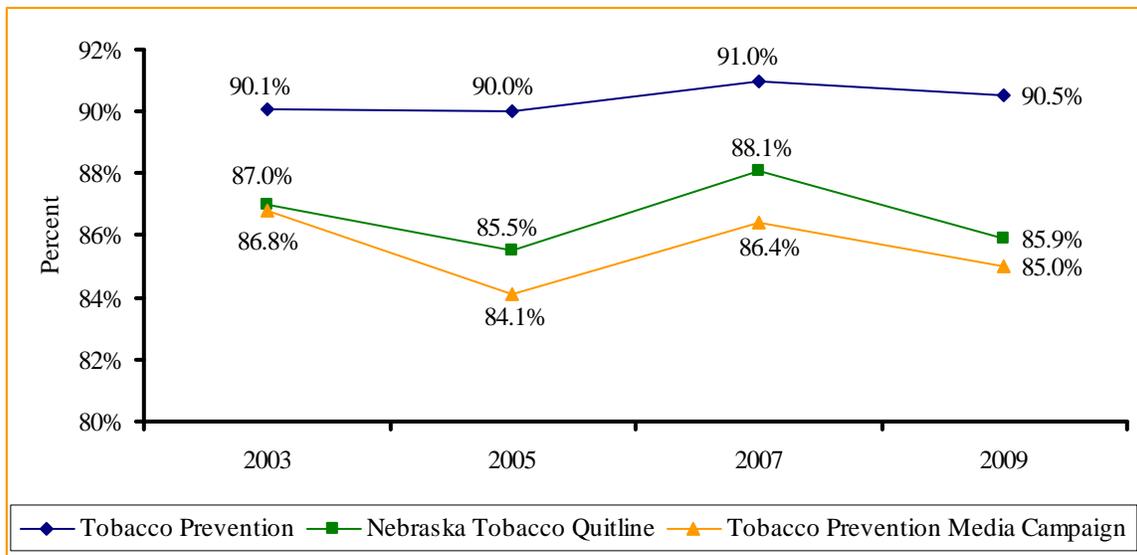


Source: Nebraska Social Climate Survey, Nebraska ATS/SCS

Support for Nebraska's Tobacco Settlement Funds for Tobacco Control

ATS/SCS also asks Nebraskans if a portion of Nebraska's share of the Tobacco Master Settlement Agreement (MSA) funds should be used for tobacco prevention and cessation programs. A majority of Nebraskans favored using settlement funds for tobacco prevention programs, the Nebraska Tobacco Quitline and a tobacco prevention media campaign. Support for all three programs remained above 80% from 2003 to 2009.

Figure 27. Support for Using a Portion of Nebraska's Tobacco Settlement Funds



Source: Nebraska ATS/SCS

References

Campaign for Tobacco-Free Kids .*Nebraska*. Accessed on January 28, 2010 from <http://www.tobaccofreekids.org/reports/settlements/state.php?StateID=NE>

U.S. Dept of Health and Human Services. *Healthy People 2020: the Road Ahead*. <http://www.healthypeople.gov/HP2020/>

Centers for Disease Control and Prevention. *Profiles 2008: School Health Profiles: Characteristics of Health Programs Among Secondary Schools*. Accessed on February 2, 2010 from http://www.cdc.gov/healthyyouth/profiles/2008/profiles_report.pdf

Centers for Disease Control and Prevention. *Sustaining States Programs for Tobacco Control: Data Highlights 2006*. Atlanta, Department of Health and Human Services Centers for Disease Control and Prevention. Accessed on March 9, 2010 from http://www.cdc.gov/tobacco/data_statistics/state_data/data_highlights/2006/pdfs/dataHighlights06rev.pdf

Centers for Disease Control and Prevention. *Tobacco Use: Targeting the Nation's Leading Killer: At A Glance 2009*. Accessed on February 2, 2010 from <http://www.cdc.gov/chronicdisease/resources/publications/AAG/osh.htm>

National Cancer Institute. *Smokeless Tobacco*. Accessed on November 19, 2010 from http://dcccps.nci.nih.gov/TCRB/less_default.html

Nebraska Department of Revenue. *Cigarette Tax Summary 2001 – 2009 Nebraska*. Raw data from Department of Revenue.

Nebraska Department of Revenue. *Tobacco Tax*. Raw data from Department of Revenue, Lincoln, Nebraska, 2010.

Nebraska Department of Health & Human Services, Office of Family Health. *Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS) Report, 2006*.

Nebraska Department of Health & Human Services *Nebraska Health 2010 Goals and Objectives*. Lincoln, 2000.

Nebraska State Fire Marshal's Office. *Fire Reporting System*, Accessed on February 22, 2010 from <http://www.sfm.state.ne.us/statistics/fire/fire-links1.html>.

Travers M.J. and Dobson K.A. *Omaha, Nebraska Air Monitoring Study: Effect of the Omaha Smoke-Free Air Ordinance*. Buffalo, Roswell Park Cancer Institute, 2009

Orzechowski & Walker, *Tax Burden on Tobacco, 2008; Historical Compilation*. Accessed on March 30, 2010 from http://www.tobaccoissues.com/getobject.aspx?folder=root/tobaccoissues/excisetaxes&name=Tax_burden_2008_vol_43.pdf

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, United States, Public Health Service, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Centers for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Rockville, Maryland, 2006.

Data Sources Used to Compile this Report

Behavioral Risk Factor Surveillance System (BRFSS) – The Behavioral Risk Factor Surveillance System is a telephone survey that uses CDC-developed questions to monitor health behaviors across the nation. The core BRFSS survey is conducted in every state and each state can choose to conduct additional, supplemental BRFSS questionnaires that measure specific health behaviors.

Nebraska Adult Tobacco Survey / Social Climate Survey – The 2000 Nebraska Social Climate Survey (SCS) and 2003, 2005, 2007 and 2009 Adult Tobacco Survey/Social Climate Survey (ATS/SCS) are representative telephone surveys of Nebraskans' attitudes and behaviors regarding tobacco.

Nebraska's Annual SYNAR Report – The Nebraska State Patrol conducts random, unannounced compliance checks of businesses to monitor sales of tobacco products to minors. The State Patrol recruits underage persons to attempt to purchase tobacco products in stores throughout the state. Results of the purchase attempts are used to calculate Nebraska's compliance rate for the Substance Abuse Prevention and Treatment Block Grant.

Pregnancy Risk Assessment Monitoring System (PRAMS) – The Pregnancy Risk Assessment Monitoring System is a joint project between the Nebraska Department of Health & Human Services, Office of Family Health and the CDC. PRAMS is an ongoing study that provides data from a representative sample of Nebraska women before, during and shortly after pregnancy.

Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) – The SAMMEC application is used to estimate the health and financial impact of cigarette smoking for the nation and states. SAMMEC uses existing smoking prevalence, health, and economic data to calculate smoking-attributable mortality, years of potential life lost, direct medical expenditures and lost productivity costs associated with smoking.

Youth Risk Behavior Survey (YRBS) – The YRBS is used to monitor health behaviors that contribute to the leading causes of death, disability and social problems among youth in the United States. The YRBS includes national, state, and local school-based surveys of representative samples of 9th through 12th grade students. A degree of caution must be used when interpreting Nebraska YRBS data for years when the data was not weighted. Due to the low student response rate to YRBS in these years, the results are representative of only those students who completed the questionnaires and not of students statewide.



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