



Tobacco Use Among South Dakotans

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Abstract:

Tobacco use is the leading cause of preventable deaths in the United States and in South Dakota. Reducing tobacco use among South Dakotans is critical to alleviate the heavy burden of preventable deaths, illnesses and excessive health care costs that result from using tobacco products. The South Dakota Department of Health's Tobacco Control Program has collaborated with various agencies and coalitions to discourage people from starting to smoke, to help current smokers quit and to protect all people from exposure to secondhand smoke. The South Dakota Behavioral Risk Factor Surveillance System (BRFSS), the South Dakota Youth Tobacco Survey (YTS), the South Dakota Youth Risk Behavior Survey (YRBS), South Dakota Vital Statistics and the South Dakota Perinatal Health Risk Assessment Survey are the primary instruments used to measure progress toward achieving the goals and objectives of South Dakota's tobacco control effort.

Since 2001, the South Dakota Department of Health's Tobacco Control Program has been implementing comprehensive statewide programs to reduce tobacco use and exposure to secondhand smoke. Concurrent with the comprehensive tobacco control program implementation, the prevalence of cigarette smoking declined significantly from its peak of 27.2 percent in 1998 to its current low of 19.8 percent in 2007,¹ which is equal to the national average of 19.8 percent. Use of spit tobacco among adult South Dakotans also has declined from 6.8 percent in 2003 to 5.8 percent in 2007. There also has been a reduction in the number of high school students that are current smokers, i.e., having smoked cigarettes on one or more of the past 30 days, from 33 percent in 2001 to 25 percent in 2007.² The prevalence of current smokers among middle school-aged South Dakotans has decreased from 8 percent in 2005 to 6 percent in 2007.³

Important shifts have occurred in the struggle to quit smoking: In South Dakota, 57.2 percent of current smokers are trying to quit.¹ In addition, 80.8 percent of respondents report that smoking is not allowed in any work area. Positive changes have taken place in South Dakotans' attitudes toward exposure to secondhand smoke. There is widespread awareness of the harm of secondhand smoke, with 83 percent of respondents indicating that they believed secondhand smoke causes lung cancer.

These positive trends across a multitude of indicators suggest that the comprehensive tobacco control effort in South Dakota is having an effect in reducing the harms of tobacco. The decreases in smoking prevalence among South Dakota adults and youth are some of the most encouraging findings. However, challenges remain. The tobacco industry is well aware of efforts to reduce tobacco use and continues to develop and promote new products. Despite decreasing cigarette use among all adults in South Dakota, 18- to 24-year-olds still have the highest smoking rate, at 29.3 percent.¹

Surveillance will continue to monitor tobacco use trends in South Dakota and assess the impact of tobacco control efforts. Some of the most important findings are summarized in the following report.

Introduction

Tobacco use is the leading cause of preventable deaths in the United States and in South Dakota. In 2000, nearly one in every five deaths in the United States was tobacco-related.⁴ Current research suggests the greatest predictor of smoking in adulthood is smoking during adolescence.⁵ Eighty percent of adult tobacco users smoked their first cigarette before the age of 18, with 71 percent of those respondents becoming daily users before the age of 18, according to the United States Department of Health and Human Services.

Since 2001, the South Dakota Department of Health's Tobacco Control Program has been implementing comprehensive statewide programs to reduce tobacco use and exposure to secondhand smoke. Reducing tobacco use among South Dakotans is critical to alleviating the heavy burden of preventable deaths, illnesses and excessive health care costs that result from using tobacco products. The South Dakota Department of Health Tobacco Control Program have collaborated with various agencies and coalitions to discourage people from starting to smoke, to help current smokers quit and to protect all people from exposure to secondhand smoke.

South Dakota Youth Risk Behavior Survey

Overview

The South Dakota Youth Risk Behavior Survey (SDYRBS) is used by the South Dakota Department of Health, the Department of Education and the Department of Human Services to assess six priority health risk behaviors that result in the greatest morbidity, mortality and social problems among youth. The six behaviors the SDYRBS evaluates are: behaviors that result in intentional and unintentional injuries and violence, physical activity, tobacco use, alcohol and other drug use, sexual behaviors

and dietary behaviors. The questionnaires are administered to students in grades 9, 10, 11 and 12 in 25 randomly selected public, private and Bureau of Indian Affairs (BIA) schools throughout South Dakota. In 2007, there were a total of 1,611 students included in the sample.

Results

Results from the 2007 SDYRBS indicate that while most South Dakota high school students do not smoke (75 percent), tobacco use among youth continues to be a public health concern. Twenty-five percent of students self-reported as current smokers, defined as having smoked on one or more of the past 30 days. This is a decrease from 28 percent in 2005 (Figure 1).

The percentage of high school youth having ever tried cigarette smoking has decreased. Fifty-five percent of YRBS respondents indicated they had tried cigarette smoking. The number of those who said they had had even one or two puffs² was down from 67 percent in 2001 (Figure 2). Students who smoke frequently are more likely to be addicted to nicotine and to become adult smokers.⁶ In 2007, 17 percent of YRBS respondents reported smoking two or

Figure 1. Percentage of respondents who smoked cigarettes on one or more of the past 30 days.

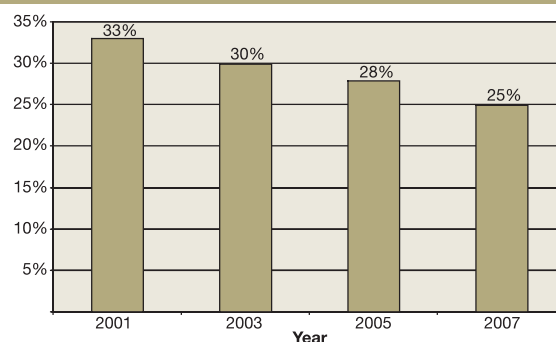
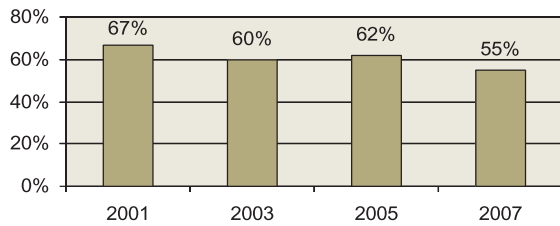


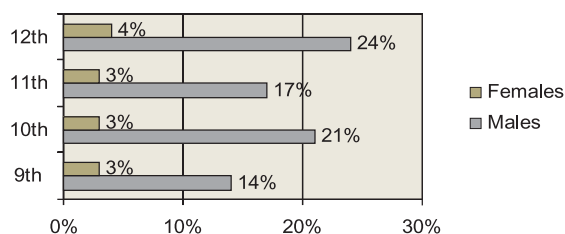
Figure 2. Percentage of respondents who ever tried cigarette smoking, even one or two puffs, 2001-2007.



more cigarettes per day on the day they smoked. This is a significant decrease from 25 percent in 2001. Of those respondents who reported smoking in the past thirty days, 13 percent wanted to stop smoking cigarettes, with 62 percent having made the attempt in the past 12 months to quit smoking cigarettes.

Though the data suggest 75 percent of South Dakota high school students do not smoke, South Dakota youth are at a greater risk of being current smokeless tobacco users compared to students nationally. Unfortunately, 14 percent of high school youth believed that spit tobacco is safer than cigarettes. Twenty-four percent of students had used chewing tobacco or snuff during their lives, and 11 percent reported having used chewing tobacco or snuff on one or more of the past 30 days. These statistics show a slight decrease from the 2005 data, when 26 percent reported having ever tried smokeless tobacco and 13 percent stated they were current users. Nineteen percent of high school males and 3 percent of females reported current use of spit tobacco. Data also indicated that use of chewing tobacco increases with grade level (Figure 3).

Figure 3. Percentage of respondents who used chewing tobacco during the past 30 days, 2007.



Over half (56 percent) of the respondents indicated they had been in a car or room with someone who was smoking cigarettes during the seven days preceding the survey. This is a significant decline from 2001, when 63 percent of students indicated they had been in a car or room with someone who was smoking cigarettes during the preceding seven day period.

Approximately half (49 percent) of student respondents reported they were taught the dangers of tobacco use in

class. In 2005, 46 percent of respondents reported being taught in class about the dangers of tobacco use.

South Dakota Youth Tobacco Survey

Overview

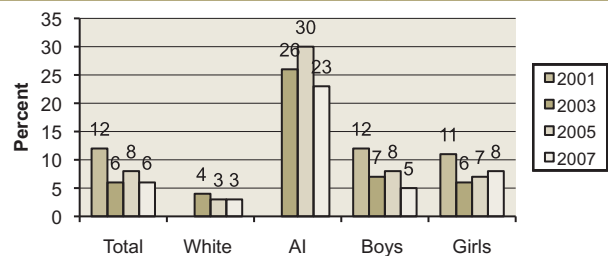
The South Dakota Youth Tobacco Survey (SDYTS) is a comprehensive survey of tobacco use, access to tobacco, cessation, knowledge and attitudes about tobacco and exposure to secondhand tobacco smoke among South Dakota middle school youth. The survey consists of 58 questions developed by the Centers for Disease Control and Prevention (CDC), which allows findings from the SDYTS to be compared with findings from other states. The SDYTS was administered to students in grades 6, 7 and 8 in public, private and Bureau of Indian Affairs (BIA) schools throughout South Dakota. In 2007, a total of 42 middle schools were sampled and data were collected from 2,727 students.

Results

Results from the 2007 SDYTS indicate that most South Dakota middle school youth do not use tobacco. Only 6 percent of students were defined as current smokers – those who reported smoking on one or more days in the past 30 days. That was a significant decline from 12 percent in 2001 (Figure 4).

The percentage of American Indian middle school students who were current smokers decreased significantly from 30 percent in 2005 to 23 percent in 2007 (Figure 4).

Figure 4. Percentage of Middle School students defined as current smokers, 2003-2007.



Ninety percent of the students defined as current smokers said they got cigarettes some way other than buying them on their own, or they indicated they had someone else buy for them. For the subgroup who tried to buy cigarettes in a store during the 30 days before taking the survey, 72 percent were not asked to show proof of age.³

More than 90 percent of middle school students believed that other people’s cigarette smoke is harmful to them, though among current smokers, the percentage dropped to 78 percent. Students who have never smoked were less likely to be exposed to someone else’s tobacco smoke.⁸ Thirty

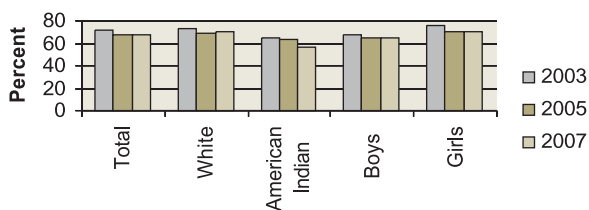
percent of non-smokers lived with a person who smoked.² Students who were current smokers were more likely to live in a home with someone who smoked (80 percent).⁸

The majority of current smokers at the middle school level (61 percent) said they would like to stop smoking. Sixty-six percent of current smokers had also tried to quit smoking at least once during the past 12 months.³

A student's future intent to smoke is one indicator of risk for current non-smokers to begin smoking or for experimental smokers to become regular tobacco users.⁸ It is encouraging to learn that 98 percent of middle school students who have never smoked indicated they will not try a cigarette soon.³

The percentage of students who are being taught about the dangers of tobacco in any class has increased 10 percent - from 47 percent in 2005 to 57 percent in 2007. Thirty-seven percent of middle school respondents reported practicing tobacco refusal skills in class this past year. The majority (66 percent) of middle school students reported that a parent or guardian had discussed the dangers of tobacco use with them during the past 12 months. Sixty-eight percent of respondents reported seeing an anti-tobacco commercial in the past 30 days (Figure 5).

Figure 5. Percentage of middle school students who have seen or heard anti-smoking commercials during the past 30 days, 2003-2007



Behavioral Risk Factor Surveillance System (BRFSS)

Overview

The Behavioral Risk Factor Surveillance System (BRFSS) is a random digit-dialed telephone survey of a sample of non-institutionalized adults (age 18 years and older) conducted annually in all 50 states, the District of Columbia, Puerto Rico, Guam and the U.S. Virgin Islands, in collaboration with the Centers for Disease Control and Prevention (CDC). The BRFSS survey includes questions on a wide variety of health-related topics, including diabetes, tobacco and alcohol use, physical activity, diet, weight control, health insurance and the use of preventive and other health care services.

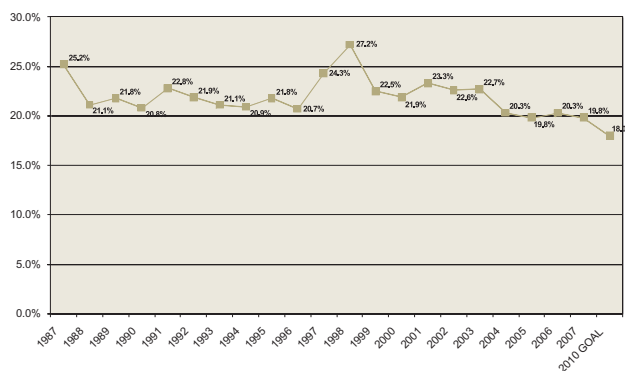
The South Dakota Department of Health is the lead agency for the statewide BRFSS survey. This summary presents behavior, attitudes and intent of South Dakota adults

toward tobacco use. Questions covered included current tobacco use behavior, cessation attempts, exposure to smoke at the workplace and whether residents are aware of the link between tobacco use and illness.

Results

The 2007 BRFSS data indicate that 19.8 percent of South Dakotans were current smokers, i.e. defined as having smoked at least 100 cigarettes in their lifetime and now smoking every day or having smoked some days (Figure 6). South Dakota mirrored the current national average of 19.8 percent.

Figure 6. Prevalence of current cigarette smoking, 1987-2007.



Males were more likely to report being current smokers than females (20.1 percent vs. 19.6 percent). Among American Indians, 48.8 percent were current smokers, which is almost three times greater than smoking among whites (17.7 percent). Data related to smoking behavior indicate that 17.8 percent of white males smoked, compared with 48.6 percent of American Indian males. Forty-eight percent of American Indian females were defined as current smokers, compared to 17.5 percent of white females (Figure 7).

For all races, smoking was most prevalent among the 18-24 year-old age group (29.3 percent) (Figure 8).

Of the current smokers, 57.2 percent had tried to quit smoking in the past year, and 68 percent reported that in

Figure 7. 2007 respondents who currently smoke, by gender.

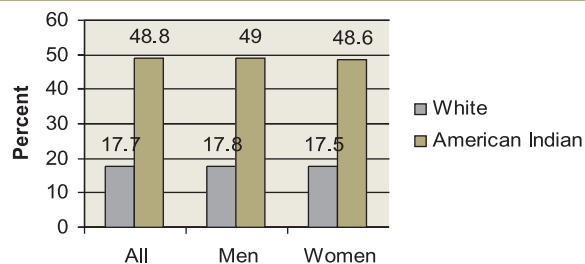


Figure 8. Current smokers, by age groups.

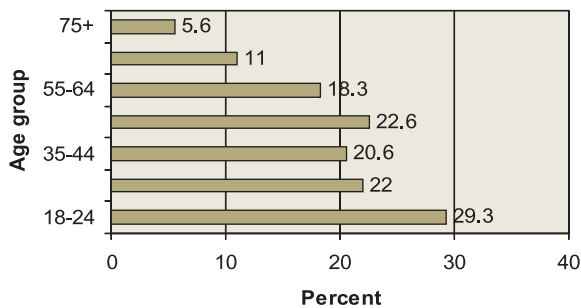
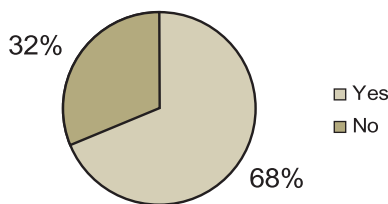


Figure 9. In the past 12 months, has a doctor, nurse, or other health professional advised you to quit smoking? 2007



the past 12 months, a doctor, a nurse or another health professional had advised them to quit smoking (Figure 9).

Spit tobacco use remained level at 5.8 percent (See Figure 10). In 2005, there was a significant decrease from 6.4 percent in 2005 to 5.8 percent in 2006. Males were more likely (11 percent) than females (0.9 percent) to use spit tobacco. American Indians had twice the prevalence of spit tobacco users compared to whites (10.8 percent vs. 5.4 percent). American Indian females reported significantly more frequent spit tobacco use than white females (6.4 percent vs. 0.6 percent).

Of those who currently use spit tobacco, 42 percent reported that in the past 12 months, a doctor, a nurse or another health professional had advised them to quit (Figure 11).

Figure 10. Percent of respondents who use spit tobacco, 1987-2007.

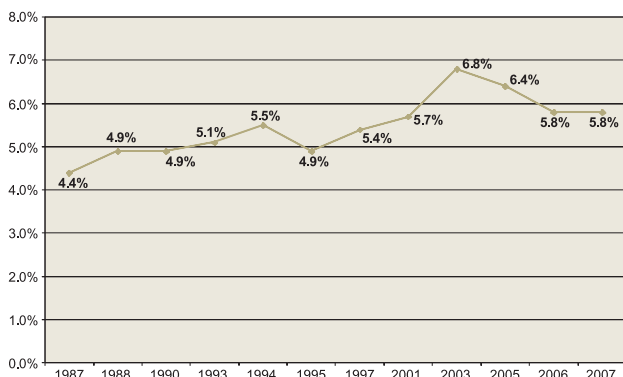
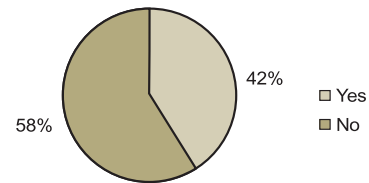
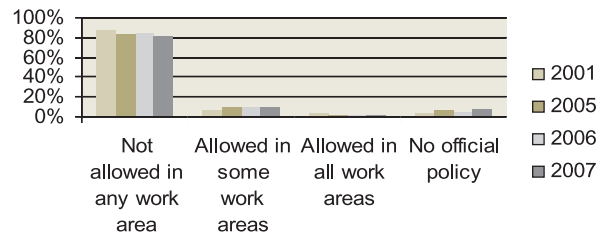


Figure 11. In the past 12 months, has a doctor, nurse, or other health professional advised you to quit spit tobacco? 2007



Among all South Dakota respondents, 80 percent agreed that breathing smoke from other people's cigarettes caused lung cancer, while 90 percent of respondents thought that breathing smoke from other people's cigarettes caused health problems in children. Specific to work sites, 80.8 percent of respondents stated that smoking was not allowed in any work area, while 8 percent stated that there was no official policy at their work site. The percentage of work sites that do not allow smoking in any work area has decreased since 2001, when 87.1 percent of BRFSS respondents indicated that smoking was not allowed in any work area (Figure 12).

Figure 12. Which of the following describes your place of work's official smoking policy for work areas?

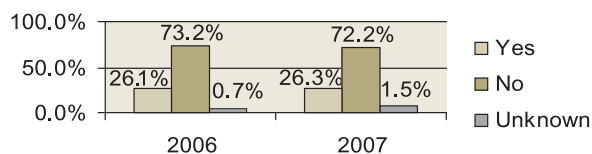


South Dakota Vital Statistics

Overview

The data pertaining to tobacco use during pregnancy were obtained from birth certificates on file with the South Dakota Department of Health. Data are available for every South Dakota newborn, whether the birth occurs in South Dakota or outside the state. Other information on the birth certificate includes personal and parental identifiers, date and place of birth, maternal medical risk factors (including diabetes), obstetric procedures, events and method of delivery, condition of the newborn and congenital anomalies of the child. Data collection regarding smoking prior to and/or during the pregnancy on the birth certificate began in 2006. In 2007, 26.3 percent of mothers giving birth reported that they smoked three months prior to and/or during the pregnancy (Figure 13).

Figure 13. SD resident live births with smoking 3 months prior to pregnancy and/or during the pregnancy as indicated on the birth certificate, 2006-2007



South Dakota Perinatal Health Risk Assessment Report

Overview

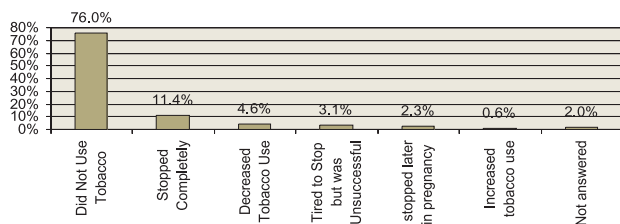
The Perinatal Health Risk Assessment has been conducted every other year for the past six years. This survey asks new mothers questions about behaviors prior to conception, such as tobacco and alcohol use and about health care and education received during the pregnancy, infant health care and behaviors such as car seat use and infant sleep position. Questions on mother’s drug use or possible physical abuse were added in 2007. A 66-question survey was mailed in March 2007 to 2,898 mothers who had given birth between August 2006 and January 2007; 896 surveys were returned.

The returned surveys represent 15.5 percent of resident births during this time period.

Results

In 2007, 79 percent of women stated they did not smoke at all in the three months prior to their pregnancy, while 17.8 percent of the women smoked fewer than 20 cigarettes per day. During the pregnancy, 76 percent of respondents did not use tobacco (Figure 14).

Figure 14. SD resident live births with smoking 3 months prior to pregnancy and/or during the pregnancy as indicated on the birth certificate, 2006-2007



Seventy-two percent of the respondents said that a doctor, a nurse or another health care professional had talked to them about how smoking around the baby could affect his or her health, compared to almost 80 percent in 2003. Of the respondents who either smoked or quit smoking during pregnancy, 57.1 percent were advised to quit.

Survey respondents were asked if secondhand smoke increases a baby’s risk of dying from Sudden Infant Death

Syndrome (SIDS). Of the respondents, 95.8 percent knew the statement to be true. Ninety percent of women stated that smoking was not allowed at any time in the house or car, compared with 85.4 percent in 2005 and 1.6 percent said smoking was allowed anytime in the house or car.

Summary and Conclusions

Tobacco use is the leading preventable cause of death in the United States, as well as in South Dakota. Cigarette smoking increases risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas and cervix.⁹

The results of the SD YRBS, SD YTS, SD BRFSS, SD Vital Statistics and SD Perinatal Risk Assessment Survey offer data that are used to evaluate programmatic progress toward outcome goals and objectives and to assist communities working to reduce the harm caused by tobacco use. The surveillance tools also aid the South Dakota Department of Health in prioritizing services to best meet the needs of the public. The paramount objectives of the South Dakota Tobacco Control Program are to reduce the number of people that start using tobacco, reduce the number of people exposed to secondhand smoke and increase the number of people who quit using tobacco.

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