



# Tobacco Use and Consequences in Minnesota, 2008

MN STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP

## KEY FINDINGS

- Youth 30-day smoking rates declined by 37% from 1998 to 2007
- 92% of 9th and 12th grade females perceived great to moderate risk of harm from smoking 1-2 packs of cigarettes per day
- Average annual smoking-attributable productivity losses in Minnesota total \$1,275,071,000

## INSIDE

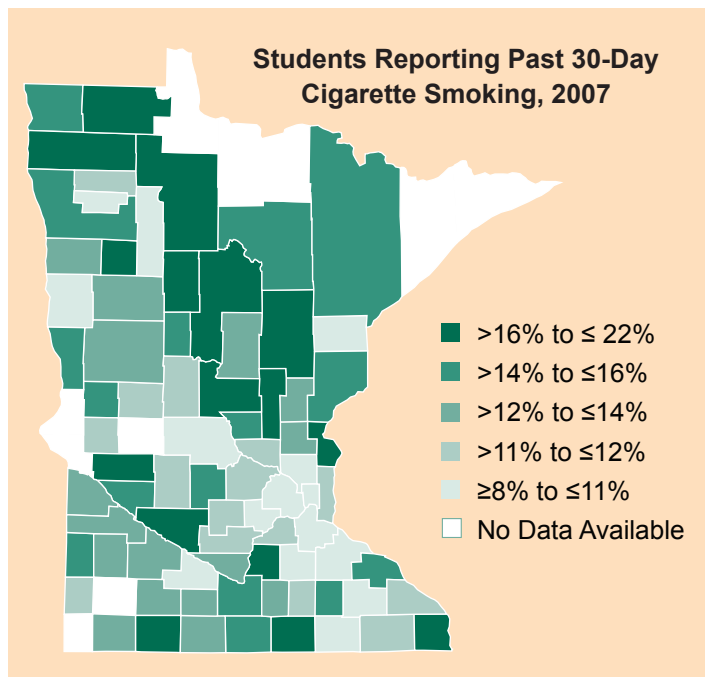
Youth Access.....	2
Perceptions of Harm, Disapproval .....	2
Age of First Use.....	2
Chewing Tobacco.....	2
Adult Smoking .....	3
Tobacco Consequences.....	3
MN SEOW .....	4
Data Sources.....	4

## Youth Smoking

The percent of Minnesota students who reported smoking on one or more days in the past 30 days has declined over the past 9 years, for both males and females across all grade levels (*see figure below*).

Rates have been highest in the Northwest, Northeast, and Southwest regions of the state, and lowest in the Southeast and Metro regions of the state.

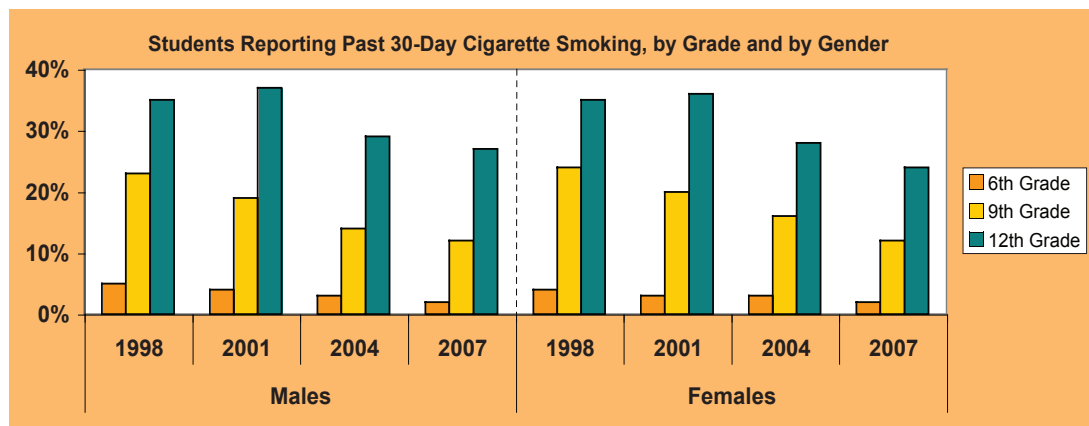
Reported past 30-day cigarette smoking has been highest among American Indian/Alaska Native youth and Hispanic/Latino youth, and lowest among Asian/Pacific Islander youth and African-American, African and Black youth. From 1998 to 2007, rates decreased the most for Hispanic/Latino youth (down 39%) and for



White youth (down 37%).

The percent of students reporting heavy smoking, defined as smoking cigarettes on 20 or more days in the past 30 days,

has also declined. Heavy smoking rates dropped from 21% in 2001 to 15% in 2007 for 12th grade males, and from 14% to 11% for 12th grade females.





According to a recent study, adolescents who have tried cigarettes by 7th grade are more likely to become regular smokers and have behavior problems. “By the end of high school, 36% of early smokers were smoking regularly and 58% had engaged in two or more problem behaviors, include binge drinking, abusing and selling drugs and dropping out of school.”

—Ellickson PL, Tucker JS, Klein DJ. *Reducing early smokers’ risk for future smoking and other problem behavior: insights from a five-year longitudinal study. J Adolesc Health 43(2), 2008.*

## Youth Access

In 2007, students reporting past month cigarette smoking were asked how they acquired them. Youth were most likely to report social access—getting cigarettes from others (72%). Fifty-nine percent reported buying cigarettes; 22% reporting taking them.

Ninth-graders were most likely to report getting cigarettes from friends (60%) or getting someone to buy for them (34%). Twelfth graders were most likely to report getting cigarettes from friends (51%) or buying them from a gas station or convenience

store (46%).

Retailer violation rates—selling tobacco products to persons under 18—fell in Minnesota from 19.2% in 2001 to 9.5% in 2006. This compares to a national decline of 17.5% down to 10.9%.

## Perceptions of Harm, Disapproval

In 2007, students were asked if they thought their close friends would disapprove or greatly disapprove if they smoked one or more packs of cigarettes per day. Belief of friends’ disapproval decreased with grade for males (92% of 6th graders;

82% of 9th graders; 70% of 12th graders) and females (95%; 88%; 82%).

Students were also asked if they believed people put themselves at great or moderate risk of harm by smoking one or more packs of cigarettes

per day. The percent perceiving harm from tobacco (unlike alcohol or marijuana) increased by grade among females. While perception of harm from tobacco decreased by grade among males, it decreased less than for other substances.

## Age at First Use

Students were asked, in 2007, how old they were the first time they smoked all or part of a cigarette for the first time. Male students were more likely than female students to report having done so by age 13 or

younger in Minnesota (16% vs. 14%), and non-metro students were more likely than metro students (18% vs. 14%).

American Indian/Alaska Native students were most likely to report having first smoked

by age 13 or younger (30%), followed by Hispanic/Latino students (25%). White (14%) and Asian/Pacific Islander (17%) students were least likely to report having done so (MSS).

## Chewing Tobacco

Reported use of chewing tobacco by 9th and 12th grade males dropped from 1998 to 2004, then jumped back up in 2007: 11% to 6% to 8% for 9th graders; 19% to 13% to 19% for 12th graders.

In 2007, White (20%) and American Indian/Alaska Na-

tive (22%) 12th grade males were most likely to report use of chewing tobacco in the past 30 days, while Asian/Pacific Islander (7%) 12th grade males were least likely to do so.

The Northwest and Northeast regions of the state had the highest rates of reported

chewing tobacco use among male students in 2007 (15%–16% for 9th graders; 25%–26% for 12th graders). These regions, along with West Central Minnesota, also had the highest rates of use among females: 3%–4% (MSS).

## Adult Smoking

The percent of Minnesota adults who report smoking cigarettes every day has generally declined over the past four years. However, rates increased slightly from 2006 to 2007 among 25–34 year olds: 14.4% to 14.9%, and among those aged 65 and over: 4.5% to 5.4% (BRFSS).

The percent of Minnesota adult males who report daily smoking had dropped from 16.2% in 2003 to 13.8% in 2007; among adult females the

rate dropped from 15.5% to 11% (BRFSS).

In 2004/2005, Minnesota adults were asked whether they had smoked cigarettes on one or more day in the past 30 days. Reported rates were highest among metro area 21–24 year old men, 21–24 year old men and women in the Southeast region, and 18–20 year olds in the Northwest region (MNSASU).

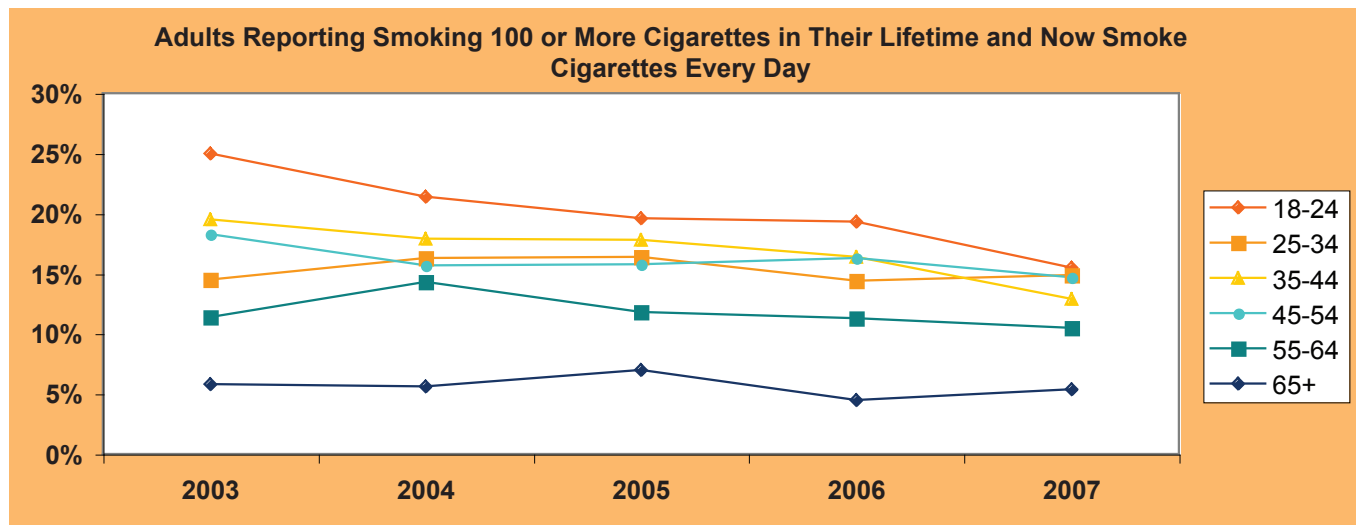
Adult 2004/2005 past 30-day rates were highest among

American Indians/Alaska Natives: 54%, Hispanic/Latino men: 32%, and African-American or Black women: 29%. Rates were lowest for Asians/Pacific Islanders: 18%, and Hispanic/Latino women: 16% (MNSASU).

The 2004 maternal smoking prevalence, from birth certificate data, was 9.8% in Minnesota versus 10.2% in the U.S. (SAMMEC).

“A September 2008 survey found 77 percent of Minnesotans are happy with the Freedom to Breathe Act, the state’s smoke-free law, nearly one year after it took effect in 2007.”

—ClearWay Minnesota, [www.clearwaymn.org/](http://www.clearwaymn.org/)



## Tobacco Consequences

The average annual (2000 to 2004) age-adjusted smoking-attributable mortality (SAM) rate per 100,000 population in Minnesota is 140.3 for females and 323.0 for males. This compares to national rates of 181.5 for females and 346.2 for males. These rates represent deaths from malignant neo-

plasms, cardiovascular diseases and respiratory diseases (SAMMEC).

The average annual (2000 to 2004) smoking attributable productivity losses in Minnesota were \$1,275,071,000 (SAMMEC).

It is estimated that 90% of lung cancer deaths among

males and 79% of lung cancer deaths among females in the United States are smoking-related. The lung, bronchus and trachea cancer death rate in Minnesota held steady around 44 to 47 per 100,000 population from 1997 to 2006 (MCHS).

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## What's Happening in Your County?



**Substance Use in Minnesota, located at [www.sumn.org](http://www.sumn.org), puts data on alcohol, tobacco and other drug use and consequences at your fingertips. The Web site was designed to help communities make decisions about substance abuse prevention efforts based on 55 indicators.**

**This site was developed by the Minnesota State Epidemiological Outcomes Workgroup (SEOW) with funding from the Substance Abuse and Mental Health Services Administration (SAMHSA). SEOW membership includes: Minnesota's departments of Human Services, Health, Education, Public Safety and Corrections and the Minnesota Institute of Public Health, which maintains the Web site.**

## Data Sources

Data on youth consumption and perceptions, presented on pages 1 and 2 of this fact sheet, are from the Minnesota Student Survey (MSS). The MSS is a confidential and anonymous self-administered survey given to 6th, 9th and 12th grade students attending Minnesota public, charter and tribal schools. The survey is administered every three years.

The Minnesota Student Survey Interagency Team is made up of four state agencies: the Minnesota Department of Education, the Minnesota Department of Health, the Minnesota Department of Human Services, and the Minnesota Department of Public Safety.

Adult consumption data included in this fact sheet are from three sources: the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), the Minnesota Survey of Adult Substance Use (MNSASU) from the Minnesota Department of Human Services, Performance Measurement and Quality Improvement, and from the CDC's Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC).

BRFSS is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984.

The MNSASU was conducted in 2004/2005, and will be conducted again in 2010/2011.

SAMMEC consists of two modules: average annual age-adjusted smoking attributable mortality and average annual smoking-attributable productivity losses were taken from the 'Adult SAMMEC.' Maternal smoking prevalence was taken from the 'MCH SAMMEC.'

Minnesota lung, bronchus and trachea cancer death rates are from the Minnesota Department of Health (MDH) Minnesota Center for Health Statistics (MCHS).

More details can be found at [www.sumn.org](http://www.sumn.org).