

TOBACCO  
SURVEILLANCE  
REPORT

# Youth Tobacco Use on the Decline in Montana

An estimated 1,500 Montanan adults die annually from tobacco-related illnesses.<sup>1</sup> Corporate tobacco companies spend millions of dollars each year marketing to youth in an effort to replace their adult costumers who either quit or die. Therefore, it is particularly important that attention is paid to the trends in youth tobacco use so that practitioners in public health and education can target tobacco use interventions to those youth most at risk. Such interventions currently include the Montana Tobacco Use Prevention Program's *reACT Against Corporate Tobacco*, a Montana teen led movement against the tobacco industry.



According to a 2007 national survey, the prevalence of current youth smoking in Montana did not differ from the prevalence across the United States.<sup>2</sup> However, the prevalence of smokeless tobacco use among youth was significantly higher in Montana compared to the United States as a whole.<sup>2</sup>

This report examines trends in tobacco use and tobacco initiation among Montana youth in grades 8, 10, and 12 using data from the Prevention Needs Assessment survey.

**The Prevention Needs Assessment (PNA)** survey is conducted in Montana schools every other year by the Montana Department of Public Health and Human Services, Addictive and Mental disorders Division. It is distributed to all 8th, 10th, and 12th grade classrooms in schools that choose to participate. In 2008, there was good representation across the state; approximately 51% of enrolled 8th, 10th, and 12th graders voluntarily completed the survey. This report presents information from analysis of data from 16,911 students who completed the survey. Half of the respondents were girls, 85% were White, 10% American Indian, 37% in 8th grade, 34% in 10th grade, and 29% in 12th grade. Students were considered current tobacco users (cigarette or smokeless tobacco) if they reported using tobacco on any of the 30 days before the survey. Students were considered to have experimented with tobacco if they reported having ever tried tobacco (cigarette or smokeless tobacco).

## Montana Tobacco Use Prevention Program

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*expect* a smokefree  
Montana

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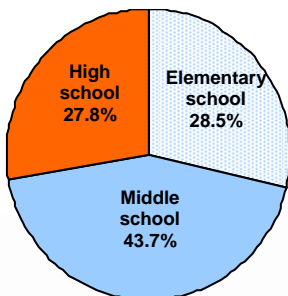
# YOUTH SMOKING IN MONTANA

**Table 1.** Prevalence of current smoking among Montana youth by gender, grade, race, and parental education, PNA 2008.

	Current Smoking % (95% CI)
<b>Total</b>	15.6 (15.1– 16.2)
<b>Gender</b>	
Boys	15.0 (14.3– 15.8)
Girls	15.9 (14.5– 16.1)
<b>Grade</b>	
8th	7.8 (7.1– 8.5)
10th	17.0 (16.0– 18.0)
12th	23.9 (22.7– 25.1)
<b>Race</b>	
American Indian	29.3 (27.0– 31.6)
Non-American Indian*	14.2 (13.6– 14.8)
<b>Highest education of either parent</b>	
High school or less	21.8 (20.6– 23.0)
More than high school	12.5 (11.9– 13.1)

\* Includes White and Other

**Figure 1.** School age at which Montana youth first smoked a cigarette, PNA 2008.



Elementary school– aged ≤10 years  
 Middle school– aged 11 to 14 years  
 High school– aged ≥15 years

## Who smokes?

**Gender.** There was no difference between boys and girls in the prevalence of smoking (Table 1).

**Grade.** Students in 12th grade were nearly two and a half times more likely to be current smokers than students in 8th and 10th grade (odds ratio [OR] = 2.4, 95% confidence interval [CI]= 2.2– 2.6) (Table 1).

**Race.** American Indian students were two and a half times more likely to be current smokers compared to non-American Indian students (OR= 2.6, 95% CI= 2.2– 2.9) (Table 1).

**Parental education.** Students whose parents have a high school education or less were nearly twice as likely to be current smokers compared to students whose parents have more than a high school education (OR= 1.8, 95% CI= 1.6– 2.0) (Table 1).

**Experimentation.** The proportion of youth who had ever tried smoking cigarettes significantly decreased from 57% in 2000 to 36% in 2008 ( $p < 0.05$ ).

- There was no difference between boys and girls in smoking experimentation.

**Age at initiation.** In 2008, the average age for youth to have tried their first cigarette was 12 years. The age at which youth first try cigarettes has not changed since 2004.

- There was no difference in age of initiation between boys and girls.
- Although the majority of youth who had experimented with cigarettes first did so in middle school (Figure 1), 45% of 8th grade smokers began in elementary school and 44% of 12th grade smokers began in high school.
- Over one in four youth tried their first cigarette in elementary school (Figure 1). In fact, 16% of youth reported that they were 8 years old or younger.

**Y**outh smoking significantly decreased from 27% in 2000 to 16% in 2008.

# YOUTH SMOKELESS TOBACCO USE IN MONTANA

## Who uses smokeless tobacco (SLT)?

**Gender.** Significantly more boys currently used SLT than girls (15% and 4%, respectively) (Table 2).

**Grade.** Boys in the 12th grade were nearly three times more likely to be current SLT users compared to boys in 8th and 10th grade (OR= 2.9, 95% CI= 2.5– 3.3) (Table 2).

**Race.** American Indian boys were 30% more likely to be current SLT users compared to non-American Indian boys (OR= 1.3, 95% CI= 1.1– 1.7) (Table 2).

**Parental Education.** Boys whose parents have a high school education or less were 50% more likely to be current SLT users compared to boys whose parents have more than a high school education (OR= 1.5, 95% CI= 1.3– 1.7) (Table 2).

**Experimentation.** In 2008, more boys than girls reported having ever tried SLT (30% and 12%, respectively).

- The proportion of boys who had ever experimented with SLT significantly decreased from 41% in 2000 to 30% in 2008 ( $p < 0.05$ ).

**Age at initiation.** Youth who try SLT first do so at an older age than do those who experimented with cigarettes. In 2008, the average age for trying SLT was 14 years among all students; this has not changed since 2004.

- There was no difference between boys and girls.
- The majority of boys who try SLT first do so in high school (46%) (Figure 2).

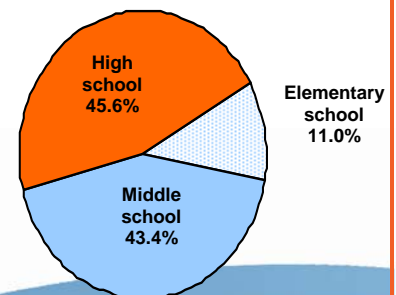
**Table 2.** Prevalence of current smokeless tobacco use among Montana youth by gender, grade, race, and parental education, PNA 2008.

	Current Smokeless Tobacco Use % (95%)
<b>Total</b>	9.3 (8.9– 9.8)
<b>Gender</b>	
Boys	15.2 (14.4– 16.0)
Girls	3.6 (3.2– 4.0)
<b>Grade</b>	
<i>Boys only</i>	
8th	5.2 (4.4– 6.0)
10th	17.3 (15.9– 18.7)
12th	25.7 (23.9– 27.5)
<b>Race</b>	
<i>Boys only</i>	
American Indian	19.0 (16.1– 22.0)
Non-American Indian*	15.0 (14.2– 15.8)
<b>Highest education of either parent</b>	
<i>Boys only</i>	
High school or less	20.2 (18.4– 22.0)
More than high school	13.8 (12.8– 14.8)

\* Includes White and Other

Smokeless tobacco use among boys significantly declined from 18% in 2000 to 15% in 2008.

**Figure 2.** School age at which Montana boys first used smokeless tobacco, PNA 2008.



Elementary school– aged ≤10 years  
Middle school– aged 11 to 14 years  
High school– aged ≥15 years

# Report Highlights

- The prevalence of smoking and smokeless tobacco (SLT) use among youth has decreased since 2000.
- 16% of youth were current smokers; 15% of boys used SLT.
- The age at which youth first try cigarettes and SLT has not changed since 2004.

## Recommendations

Tremendous strides have been made in Montana to reduce tobacco use among youth; however, there is more to be done. Results from this report indicate that youth interventions should focus on:

- A. SMOKELESS TOBACCO (SLT) USE** has decreased, however it is still significantly higher in Montana than elsewhere in the United States.
- B. AMERICAN INDIAN STUDENTS** had a higher prevalence of smoking and SLT use compared to non-American Indian students.
- C. YOUNGER YOUTH** begin to experiment with tobacco as early as elementary school. Interventions should target elementary school youth in order to decrease the number of youth who try these dangerous substances.

## References

1. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC). *Adult SAMMEC and Maternal and Child Health (MCH) SAMMEC Software, 2007*. <http://apps.nccd.cdc.gov/sammecl>.
2. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Comparison Between Montana Students and U.S. Students 2007 YRBS. [http://www.cdc.gov/HealthyYouth/yrbss/pdf/states/yrbss07\\_montana\\_us\\_comparison.pdf](http://www.cdc.gov/HealthyYouth/yrbss/pdf/states/yrbss07_montana_us_comparison.pdf)



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