

Tobacco Use

and Academic Achievement

What is the relationship between tobacco use and academic achievement?

Data presented below, from the 2003 National Youth Risk Behavior Survey (YRBS), show a negative association between tobacco use and academic achievement after controlling for sex, race/ethnicity, and grade level. This means that students with higher grades are less likely to engage in tobacco use behaviors than their classmates with lower grades, and students who do not engage in tobacco use behaviors get higher grades than their classmates who do engage in tobacco use behaviors. These associations do not prove causation. Further research is needed to determine whether low grades lead to tobacco use, tobacco use leads to low grades, or some other factors lead to both of these problems.

Students with higher grades are significantly less likely to have engaged in behaviors such as:

- **Lifetime cigarette use** (Ever tried cigarette smoking, even one or two puffs).
- **Current cigarette use** (Smoked cigarettes on at least 1 day during the 30 days before the survey).
- **Current frequent cigarette use** (Smoked cigarettes on 20 or more days during the 30 days before the survey).
- **Current tobacco use** (Current cigarette use, current smokeless tobacco use, or current cigar use).
- **Smoked a whole cigarette before age 13 years.**
- **Smoked cigarettes on school property** (On at least 1 day during the 30 days before the survey).

Percentage of U.S. high school students receiving mostly A's, B's, C's, or D/F's who engaged in tobacco use, by type of grades earned – National Youth Risk Behavior Survey, 2003.

| Tobacco Use | Percentage of U.S. high school students who received mostly | | | |
|--|---|-----|-----|-------|
| | A's | B's | C's | D/F's |
| Lifetime cigarette use (Ever tried cigarette smoking, even one or two puffs) ¹ | 42 | 57 | 70 | 82 |
| Lifetime daily cigarette use (Ever smoked at least one cigarette every day for 30 days) ¹ | 8 | 12 | 23 | 33 |
| Current cigarette use (Smoked cigarettes on at least 1 day during the 30 days before the survey) ¹ | 12 | 19 | 31 | 46 |
| Current frequent cigarette use (Smoked cigarettes on 20 or more days during the 30 days before the survey) ¹ | 4 | 7 | 15 | 25 |
| Smoked more than 10 cigarettes/day (On the days they smoked during the 30 days before the survey) ^{2,3} | 1 | 2 | 4 | 11 |
| Current cigar use (Smoked cigars, cigarillos, or little cigars on at least 1 day during the 30 days before the survey) ¹ | 9 | 12 | 19 | 33 |
| Current tobacco use (Current cigarette use, current smokeless tobacco use, or current cigar use) ¹ | 16 | 25 | 38 | 52 |
| Smoked a whole cigarette for the first time before age 13 years ¹ | 11 | 15 | 24 | 35 |
| Smoked cigarettes on school property (On at least 1 day during the 30 days before the survey) ¹ | 3 | 5 | 12 | 22 |

¹p<.0001 based on logistic regression analysis controlling for sex, race/ethnicity, and grade level.

²p<.001 based on logistic regression analysis controlling for sex, race/ethnicity, and grade level.

³Among students who currently smoked cigarettes.

Figure 1. Percentage of U.S. high school students receiving mostly A's, B's, C's, or D/F's who ever smoked cigarettes, currently smoked cigarettes, and smoked a whole cigarette before age 13 years—Youth Risk Behavior Survey, 2003.

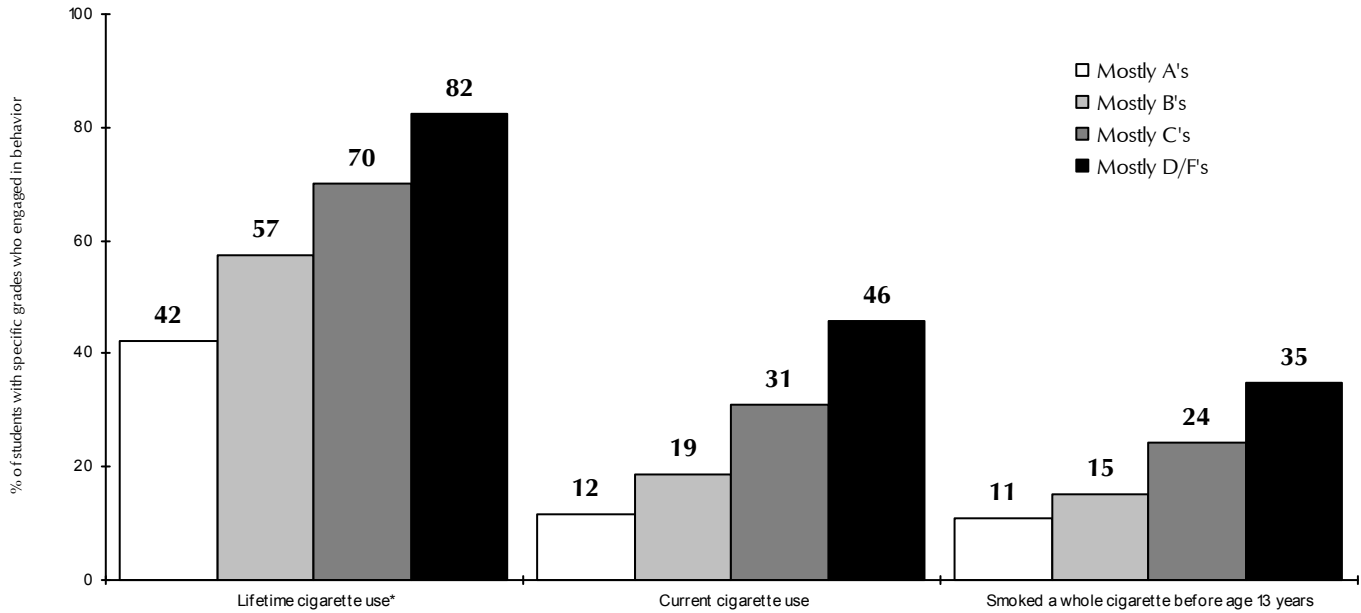
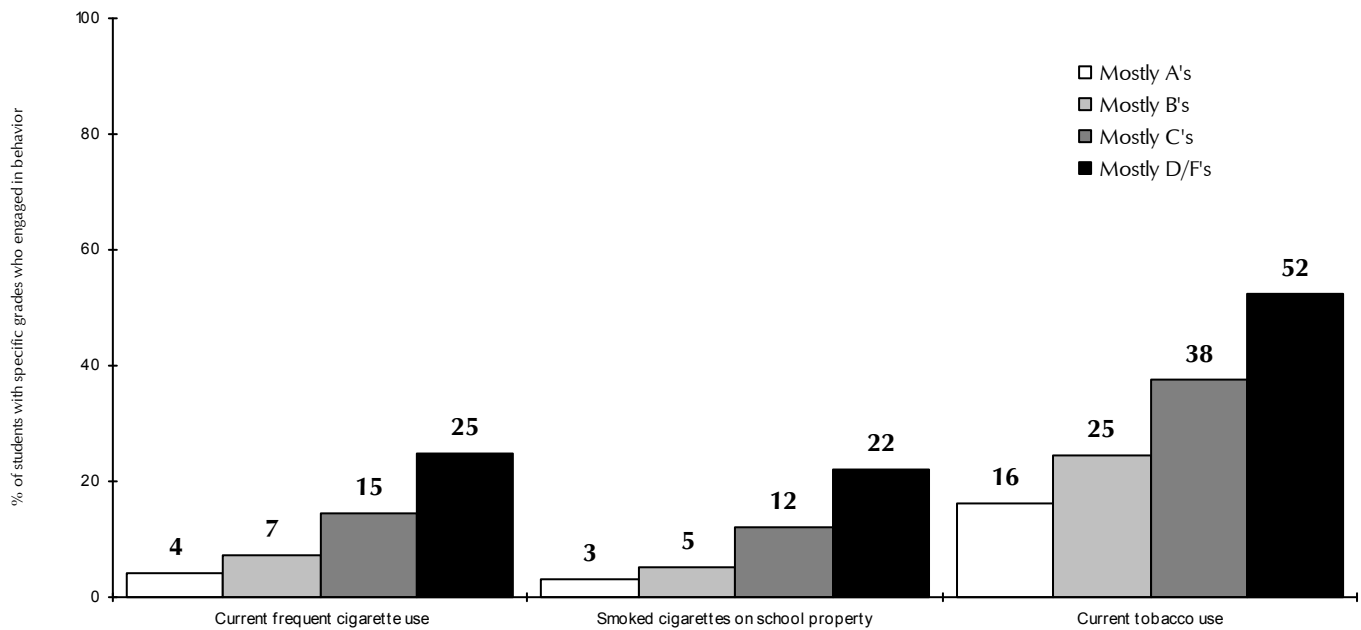


Figure 2. Percentage of U.S. high school students receiving mostly A's, B's, C's, or D/F's who smoked cigarettes frequently, smoked cigarettes on school property, and currently used tobacco—Youth Risk Behavior Survey, 2003.



*This means that 42% of students with mostly A's ever smoked cigarettes and 82% of students with mostly D's or F's ever smoked cigarettes.

The national YRBS monitors priority health-risk behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. It is conducted every two years during the spring and provides data representative of 9th through 12th grade students in public and private schools throughout the United States. In 2003, students completing the YRBS were asked, "During the past 12 months, how would you describe your grades in school?" and given 7 response options (Mostly A's, Mostly B's, Mostly C's, Mostly D's, Mostly F's, None of these grades, Not sure). In 2003, 27% of students received mostly A's, 38% received mostly B's, 23% received mostly C's, 6% received mostly D's or F's, and 5% reported receiving none of these grades or not sure.

For more information visit http://www.cdc.gov/HealthyYouth/health_and_academics/ or call 800-CDC-INFO (800-232-4636).



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