

Health-Risk Behaviors and Academic Achievement

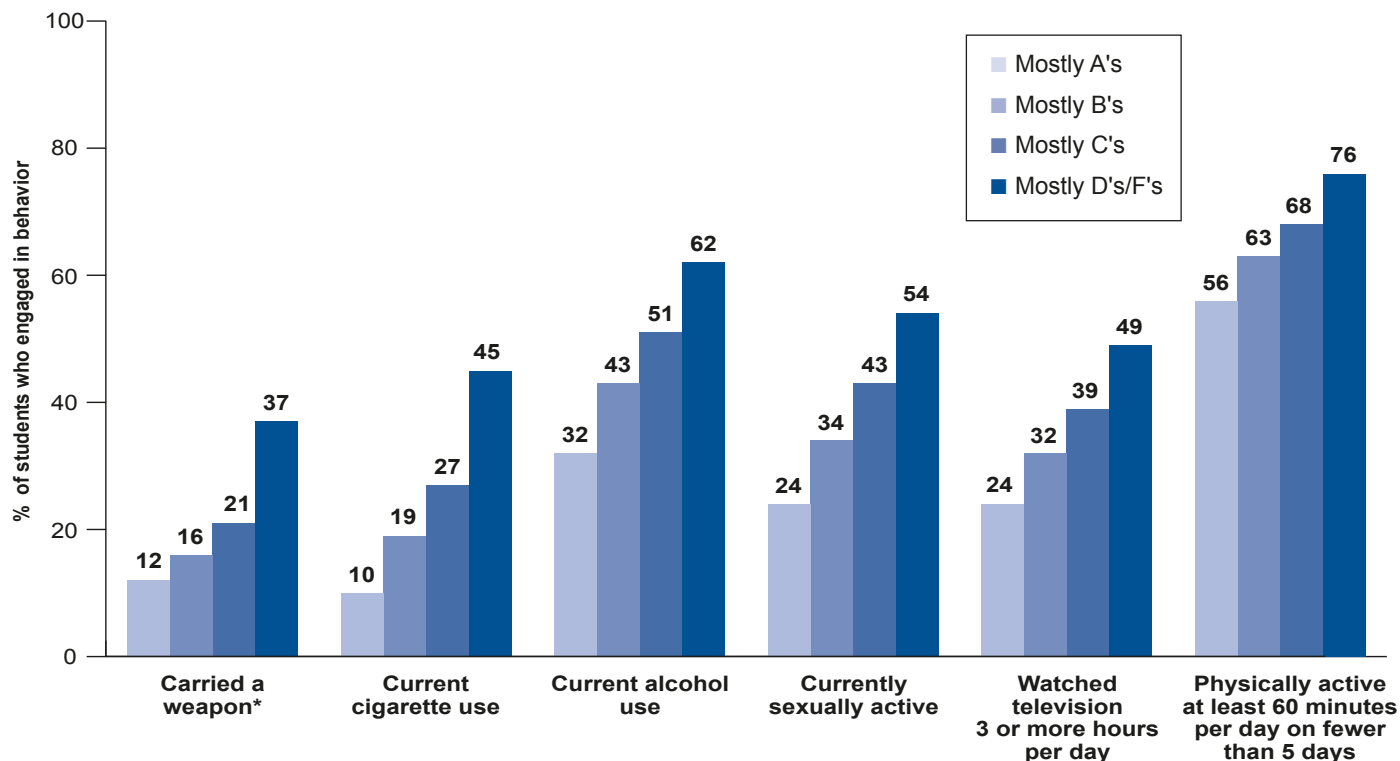
What is the relationship between health-risk behaviors and academic achievement?

Data presented below from the 2009 National Youth Risk Behavior Survey (YRBS) show a negative association between health-risk behaviors and academic achievement among high school students after controlling for sex, race/ethnicity, and grade level. This means that students with higher grades are less likely to engage in health-risk behaviors than their classmates with lower grades, and students who do not engage in health-risk behaviors receive higher grades than their classmates who do engage in health-risk behaviors. These associations do not prove causation. Further research is needed to determine whether low grades lead to health-risk behaviors, health-risk behaviors lead 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

- **Carrying a weapon** (for example, a gun, knife, or club on at least 1 day during the 30 days before the survey).
- **Current cigarette use** (smoking cigarettes on at least 1 day during the 30 days before the survey).
- **Current alcohol use** (having at least one drink of alcohol on at least 1 day during the 30 days before the survey).
- **Being currently sexually active** (having sexual intercourse with at least one person during the 3 months before the survey).
- **Watching television 3 or more hours per day** (on an average school day).
- **Being physically active at least 60 minutes per day on fewer than 5 days** (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time on fewer than 5 days during the 7 days before the survey).

Figure 1. Percentage of high school students who carried a weapon, smoked cigarettes, drank alcohol, were sexually active, watched television 3 or more hours per day, and were physically active at least 60 minutes per day on fewer than 5 days, by type of grades earned (mostly A's, B's, C's, or D's/F's)—United States, Youth Risk Behavior Survey, 2009



* This means that 12% of students with mostly A's carried a weapon and 37% of students with mostly D's or F's carried a weapon.

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 2 years during the spring and provides data representative of 9th- through 12th-grade students in public and private schools throughout the nation. In 2009, students completing the YRBS were asked, "During the past 12 months, how would you describe your grades in school?" and given seven response options (Mostly A's, Mostly B's, Mostly C's, Mostly D's, Mostly F's, None of these grades, Not sure). In 2009, 31% of students received mostly A's, 40% received mostly B's, 19% received mostly C's, 6% received mostly D's or F's, and 4% reported receiving none of these grades or not sure.

Percentage of high school students who engaged in health-risk behaviors, by type of grades earned (mostly A's, B's, C's, or D's/F's)—United States, Youth Risk Behavior Survey, 2009†

| Health-Risk Behaviors | Percentage of U.S. high school students who engaged in each risk behavior, by type of grades mostly earned | | | |
|---|--|-----|-----|---------|
| | A's | B's | C's | D's/F's |
| Unintentional Injury and Violence-Related Behaviors | | | | |
| Rarely or never wore a seat belt (when riding in a car driven by someone else) | 6 | 8 | 14 | 24 |
| Rode with a driver who had been drinking alcohol (in a car or other vehicle one or more times during the 30 days before the survey) | 21 | 27 | 35 | 47 |
| Carried a weapon (for example, a gun, knife, or club on at least 1 day during the 30 days before the survey) | 12 | 16 | 21 | 37 |
| In a physical fight (one or more times during the 12 months before the survey) | 19 | 30 | 41 | 58 |
| Ever physically forced to have sexual intercourse (when they did not want to) | 5 | 7 | 8 | 18 |
| Did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey) | 3 | 4 | 6 | 13 |
| Attempted suicide (one or more times during the 12 months before the survey) | 4 | 5 | 8 | 18 |
| Tobacco Use | | | | |
| Current cigarette use (smoked cigarettes on at least 1 day during the 30 days before the survey) | 10 | 19 | 27 | 45 |
| Ever smoked cigarettes daily (ever smoked at least one cigarette every day for 30 days) | 5 | 10 | 17 | 30 |
| Current tobacco use (current cigarette use, current smokeless tobacco use, or current cigar use) | 16 | 27 | 34 | 52 |
| Smoked cigarettes on school property (on at least 1 day during the 30 days before the survey) | 2 | 4 | 7 | 21 |
| Alcohol and Other Drug Use | | | | |
| Current alcohol use (had at least one drink of alcohol on at least 1 day during the 30 days before the survey) | 32 | 43 | 51 | 62 |
| Binge drinking (had five or more drinks of alcohol in a row within a couple of hours on at least 1 day during the 30 days before the survey) | 17 | 25 | 30 | 46 |
| Ever used marijuana (used marijuana one or more times during their life) | 21 | 37 | 50 | 66 |
| Ever took prescription drugs without a doctor's prescription (took prescription drugs [e.g., OxyContin, Percocet, Vicodin, Adderall, Ritalin, or Xanax] without a doctor's prescription one or more times during their life) | 13 | 19 | 26 | 41 |
| Ever took steroids without a doctor's prescription (took steroid pills or shots without a doctor's prescription one or more times during their life) | 2 | 2 | 4 | 12 |
| Ever used ecstasy (used ecstasy [also called MDMA] one or more times during their life) | 3 | 5 | 9 | 21 |
| Offered, sold, or given an illegal drug by someone on school property (during the 12 months before the survey) | 15 | 22 | 27 | 44 |
| Sexual Risk Behaviors | | | | |
| Ever had sexual intercourse | 32 | 46 | 59 | 69 |
| Currently sexually active (had sexual intercourse with at least one person during the 3 months before the survey) | 24 | 34 | 43 | 54 |
| Had sexual intercourse for the first time before age 13 years‡ | 3 | 4 | 9 | 18 |
| Had sexual intercourse with four or more persons during their life | 7 | 13 | 19 | 31 |
| Drank alcohol or used drugs before last sexual intercourse‡ | 16 | 18 | 25 | 40 |
| Physical Inactivity and Unhealthy Dietary Behaviors | | | | |
| Physically active at least 60 minutes per day on fewer than 5 days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time on fewer than 5 days during the 7 days before the survey) | 56 | 63 | 68 | 76 |
| Watched television 3 or more hours per day (on an average school day) | 24 | 32 | 39 | 49 |
| Drank a can, bottle, or glass of soda or pop (not including diet soda or diet pop at least one time per day during the 7 days before the survey) | 22 | 29 | 36 | 47 |
| Did not eat for 24 or more hours (to lose weight or to keep from gaining weight during the 30 days before the survey) | 7 | 10 | 13 | 19 |
| Sleep Behavior | | | | |
| Had less than 8 hours of sleep (on an average school night) | 66 | 69 | 73 | 77 |

† All associations are significant at $p < 0.0001$, using logistic regression and controlling for sex, race/ethnicity, and grade level.

‡ Among students who were currently sexually active.

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



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