

# Academic Performance and Health Risks Among Rhode Island Public High School Students in 2007



RI Departments of Health and Elementary & Secondary Education  
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## Introduction

This report presents data on rates for academic performance among eight demographic subgroups with D&F grades and rates for thirty health indicators among public high school students with A&B, C, and D&F grades. Data are from Rhode Island's 2007 high school Youth Risk Behavior Survey (YRBS).

**About the YRBS:** The YRBS is an anonymous and voluntary survey among random samples of high school students in over 60 states and localities. The Centers for Disease Control and Prevention developed the YRBS to monitor risk behaviors related to the major causes of mortality, disease, injury, and social problems among youth and adults in the United States.

**Rhode Island's YRBS:** In the spring of 2007, 2,210 Rhode Island adolescents participated in the YRBS with a 66% response rate. These weighted, self-reported findings are representative of 9th to 12th grade public high school students statewide and can be used to make important inferences concerning health-risk behaviors.

**Academic Performance Definition:** During the past 12 months, how would you describe your grades in school? 1) Mostly A's; 2) Mostly B's; 3) Mostly C's; 4) Mostly D's; 5) Mostly F's; 6) None of these grades; and 7) Not sure. We divided the grades into three categories: A&B grades, C grades, and D&F grades.

**Reading statistics:** This report presents bar graphs showing percentages and 95% confidence intervals (CI). As percentages from survey data are estimates, the 95% CI indicates the range of values within which the "true" value lies 95% of the time. When two groups have a 95% CI that overlap, it indicates that the "true" values are likely to be similar in both groups. If the 95% CI's do not overlap, it indicates that there is a statistically significant difference between the groups.

**Acknowledgements:** The RI Departments of Health; Elementary and Secondary Education; Mental Health, Retardation, and Hospitals; and the Office of Health and Human Services provided funding and other support for the YRBS.

**Further information:** Contact the Center for Health Data and Analysis, RI Department of Health (401-222-7628) or go to <http://www.health.ri.gov/chic/statistics/yrbs.php>.

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## Highlights

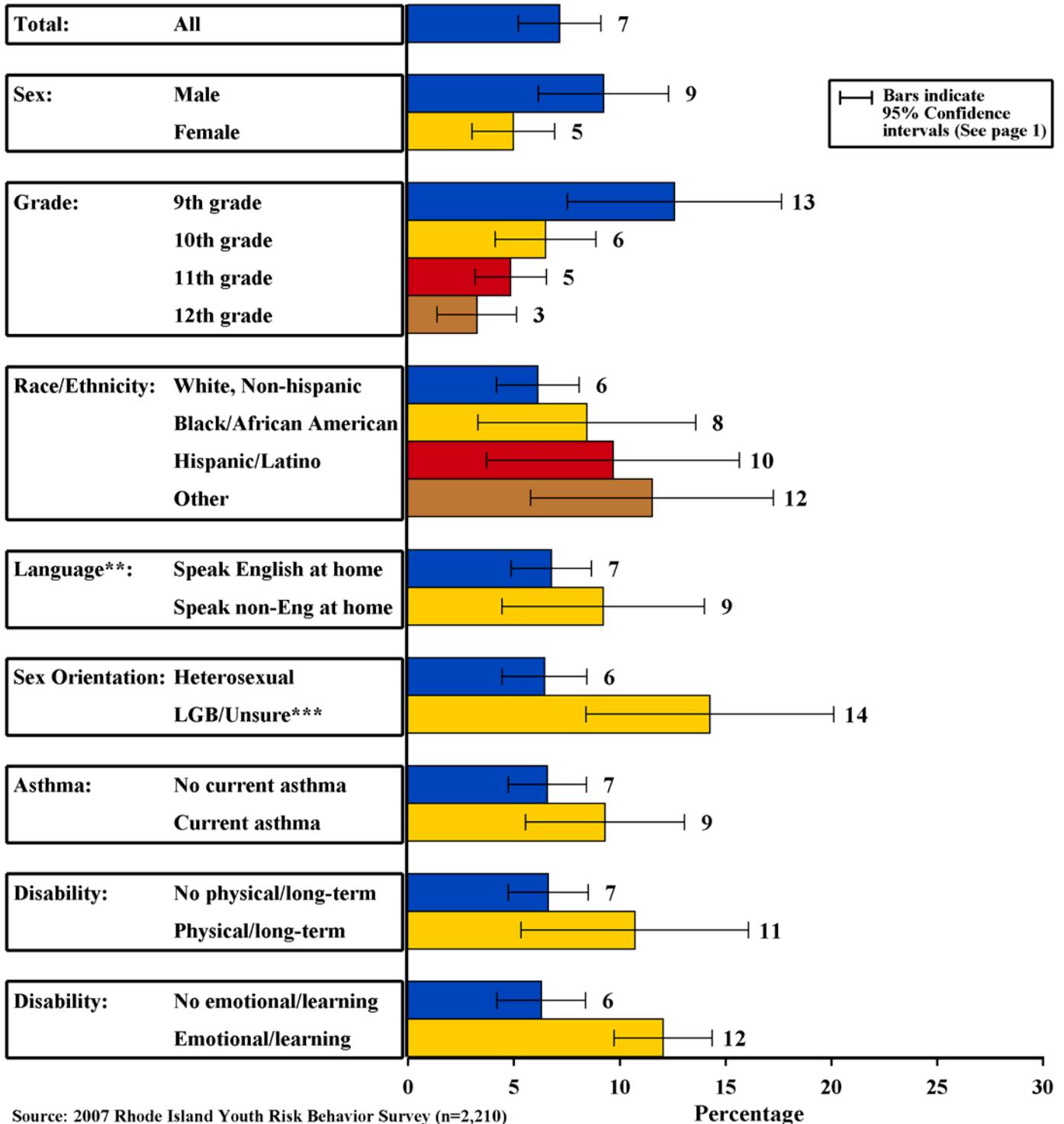
- ❖ Survey data show that 7% of RI public high school students received mostly D & F grades. This represents nearly 3,500 students statewide. Another 25% received mostly Cs. 9<sup>th</sup> graders, non-heterosexuals, and students with emotional/learning disabilities were more likely to report Ds & Fs. (Fig 1) Compared to students receiving high grades (mostly As & Bs), students receiving low grades (mostly Ds & Fs) were at greater risk for 27 of the 30 behaviors listed in this report. Prevalence rates among "C" students were consistently between those with higher and lower academic achievement.
- ❖ Students with low grades were 5 times more likely than students with high grades not to wear a seatbelt and 4 times more likely to drive after drinking alcohol or to carry a weapon. They were also at increased risk for other violence related behaviors (e.g., not going to school due to unsafe feelings, threatened/injured at school, physical fighting, dating violence, forced sexual intercourse, sad/hopeless feelings, considering suicide). Students with Ds & Fs had a higher prevalence for ever trying cigarettes and currently smoking and, especially, for trying cigarettes at any early age. (Fig 2)
- ❖ Students with low grades were more likely to have tried alcohol or to be current alcohol drinkers. The same was true for marijuana use and having ever taken painkillers. They were also 4-5 times more likely to have used cocaine or inhalants. More students with low grades had ever had sex or were currently sexually active, and 6 times as many initiated sex very young. Obesity and nutritional risks were similar for the 2 groups, but students with low grades were more likely to have insufficient physical activity. (Fig 3)

## Implications

Academic success depends on healthy students learning in safe and caring schools. The YRBS data show that students who struggle academically are much more likely to engage in risky behaviors. Research demonstrates that schools that focus on health and safety can profoundly impact academic achievement. School and community efforts should concentrate on the following in order to support positive health and academic outcomes:

- ❖ Empower local District Health and Wellness subcommittees to adopt policies, strategies and plans to strengthen the connection between health and wellness and academic achievement in the school community.
- ❖ Integrate the relationship between healthful behavior and academic achievement within school improvement and district strategic plans.
- ❖ Encourage school nurse teachers, health and physical education teachers, social workers, guidance counselors, school psychologists, and all teachers and administrators to identify and act on opportunities to promote health.
- ❖ Create interventions to address youth behavioral & mental health care needs.
- ❖ Form partnerships with health and local organizations, after school providers, and others that can provide resources and support to schools.
- ❖ Provide professional development that meets all student needs.
- ❖ Promote the link between health and academic achievement among educational leaders.

**Figure 1**  
**D & F Grades\* Among RI Public High Schools**  
**(Grades 9-12 students) within demographic subgroups -- 2007**



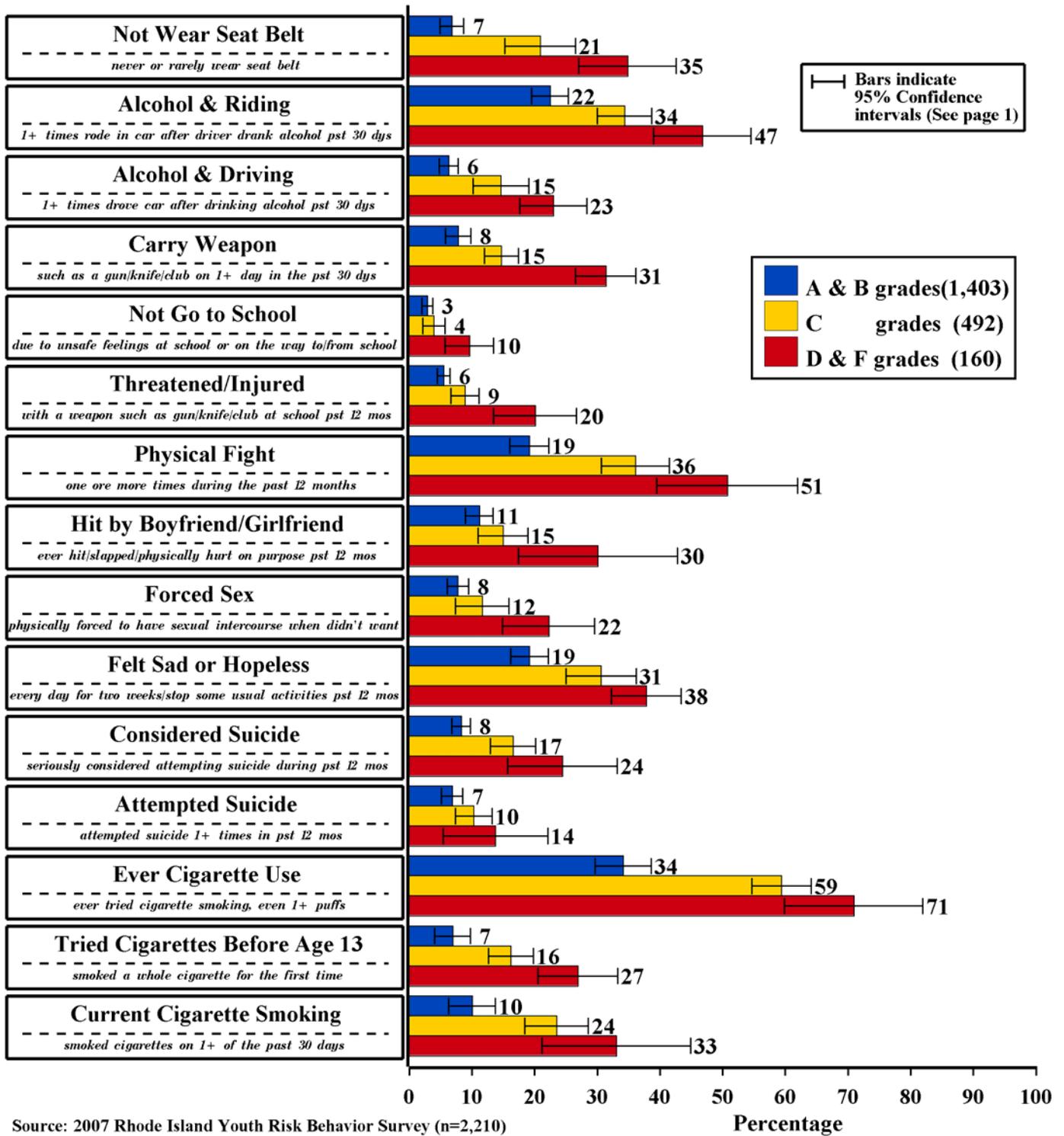
Source: 2007 Rhode Island Youth Risk Behavior Survey (n=2,210)

\* D & F Grades: Students who describe their grades in school as mostly Ds and Fs in the past 12 months

\*\* Primary Language: Students usually speak at home (English/Spanish/Portuguese/Cape Verdean Creole/Other)

\*\*\* LGB/Unsure: Students who describe their sexual orientation as Gay/Lesbian/Bisexual/Unsure

**Figure 2**  
**Risk Behaviors Among RI Public High Schools**  
**(Grades 9-12 students) by academic performance -- 2007**

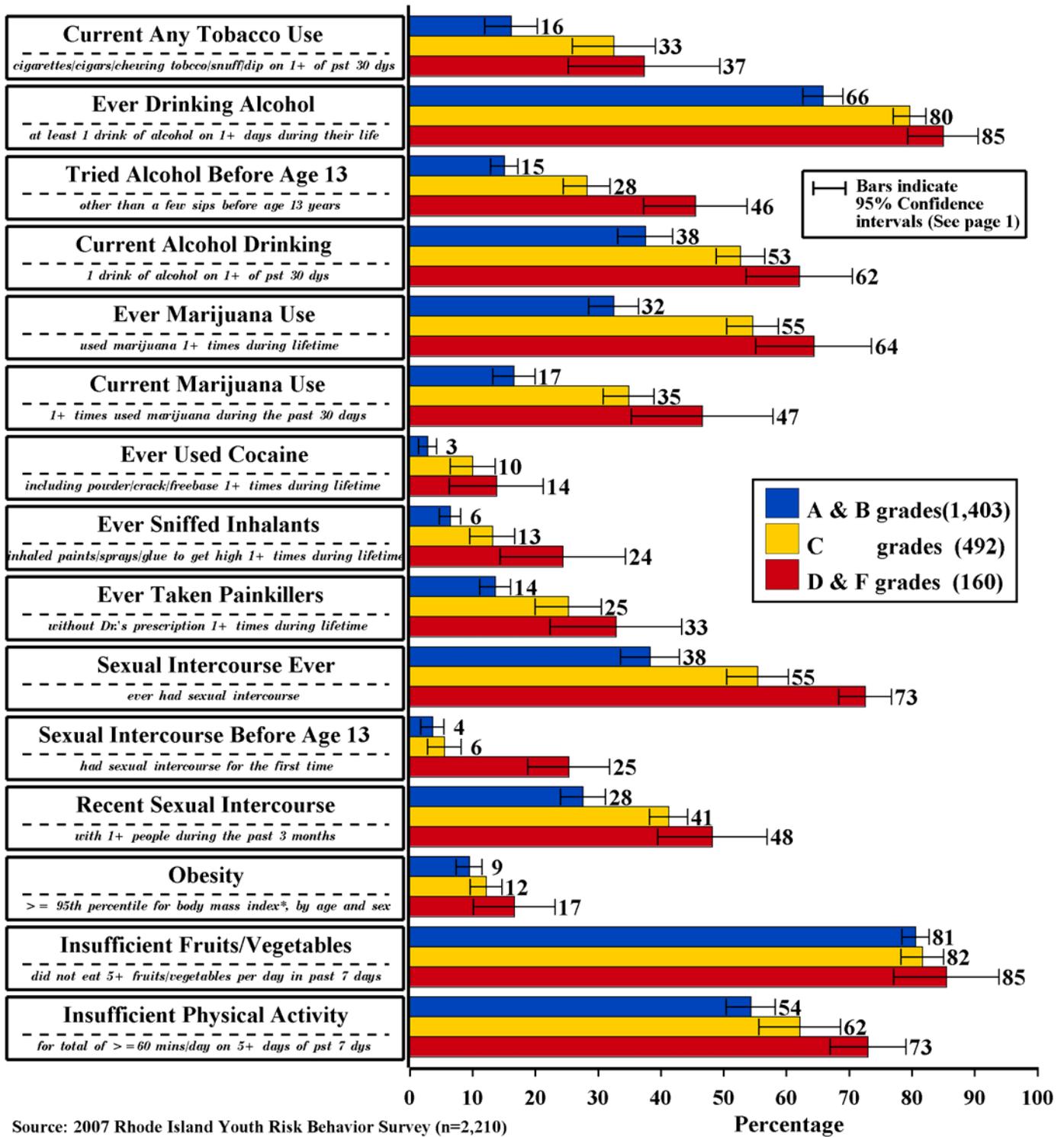


Source: 2007 Rhode Island Youth Risk Behavior Survey (n=2,210)

Percentage

# Figure 3

## Risk Behaviors Among RI Public High Schools (Grades 9-12 students) by academic performance -- 2007



Source: 2007 Rhode Island Youth Risk Behavior Survey (n=2,210)  
 \* Body Mass Index = weight in kilograms / (height in meters) <sup>2</sup>