



# Physical Activity Health Risks Among Rhode Island Public High School Students *1997 through 2005*

The Youth Risk Behavior Survey (YRBS) is an anonymous and voluntary survey among random samples of high school students in over 50 states, territories, and municipalities nationwide. The Centers for Disease Control and Prevention developed the YRBS to monitor risk behaviors for the major causes of mortality, disease, injury, and social problems among youth and adults in the United States. In the spring of 1997, 2001, 2003 and 2005, Rhode Island (RI) administered the YRBS to 1,528, 1,392, 1,814 and 2,362 adolescents, with response rates of 60%, 63%, 66%, and 71% respectively. Weighted findings are representative of 9<sup>th</sup> to 12<sup>th</sup> grade public high school students statewide and can be used to make important inferences concerning health-risk behaviors. The RI Departments of Health, Education, and Mental Health, Retardation, and Hospitals provide funding and other support for the YRBS.

*Donald Perry, MPA and Laura Pitt, MPH prepared this report. For additional information, contact Donald Perry, RI Department of Health (401) 222-7628 or Jan Mermin, RI Department of Education (401) 222-8954 or visit the RI YRBS website at <http://www.health.ri.gov/chic/statistics/yrbs.php>.*

## *KEY FINDINGS*

### *Regular Physical Activity*

From 1997 to 2005, nearly two-thirds of Rhode Island high school students consistently participated in sufficient vigorous physical activity<sup>1</sup> in the past week. Males were more likely than females to engage in sufficient vigorous activity, with rates of 71% and 57%, respectively, in 2005. Differences were negligible by grade level. Overall, the percentage of students participating in sufficient moderate physical activity<sup>2</sup> decreased significantly between 2001 and 2005, with only a slight upturn to 24% in 2005. Males were more likely than females to engage in sufficient moderate activity in 2005 (29% vs. 20%, respectively), but no major differences were observed by grade level.

The proportion of students with neither sufficient vigorous or moderate physical activity in the past week remained at about one third for all survey periods, with a significantly higher percentage for females (39%) than for males (25%) in 2005. The percentage of students participating in no vigorous or moderate exercise remained stable at 10% across the surveys, with females slightly higher than males. There were only minor differences by grade.

### *Physical Education Classes*

About nine out of ten high school students attended physical education (PE) classes at least once a week in 2005, which is fairly consistent across survey periods. In 2005, 20% of students reported attending a PE class daily in a typical school week, up substantially from 13% in 1997. There were slightly higher percentages of daily PE for males vs. females and for older students (11<sup>th</sup>/12<sup>th</sup> grades) vs. younger students (9<sup>th</sup>/10<sup>th</sup> grades) in 2005. The percentage of students who exercised or played sports for more than 20 minutes during an average PE class increased significantly among both males and females between 1997 and 2005, with an overall rate of 67% in 1997 and 87% in 2005.

### *Team Sports*

In 2005, slightly more than half of high school students played on one or more sports teams during the past year, with little change over time. Males were more likely than females to play on teams, with rates of 60% and 47%, respectively, in 2005. Participation on teams appeared greater in the lower grade levels.

### *Television Viewing*

About one third of high school students watched 3 or more hours of TV on an average school day in 2005, which is consistent for all survey periods. There was a marked decrease by grade level in 2005, with 12<sup>th</sup> graders (30%) much less likely than 9<sup>th</sup> graders (41%) to spend so many hours watching television.

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<sup>1</sup> **Sufficient vigorous physical activity:** participation in physical activities that made students sweat and breathe hard for at least 20 minutes on three or more of the past seven days prior to the survey.

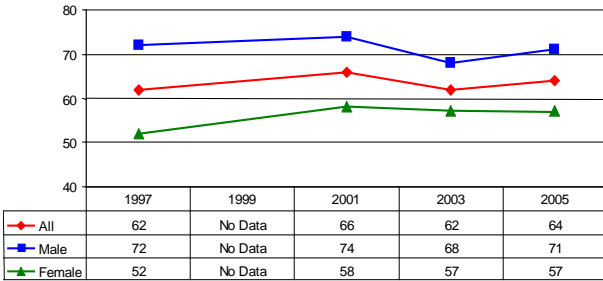
<sup>2</sup> **Sufficient moderate physical activity:** participation in physical activities that did not make students sweat or breathe hard for at least 30 minutes on five or more of the past seven days prior to the survey.

# Physical Activity

## Risk Behavior: Regular Physical Activity

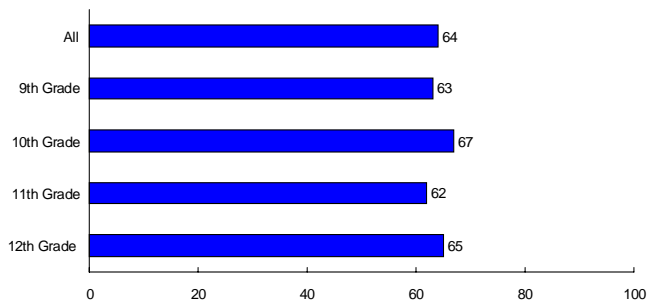
**Rationale:** Participating in regular physical activity helps to build and maintain healthy bones and muscles, control weight, build lean muscle, reduce fat, reduce feelings of depression and anxiety, and promote psychological well being. Over time, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.

**Percentage of RI high school students who exercised or participated in sufficient vigorous physical activity\* during the past seven days - YRBS**



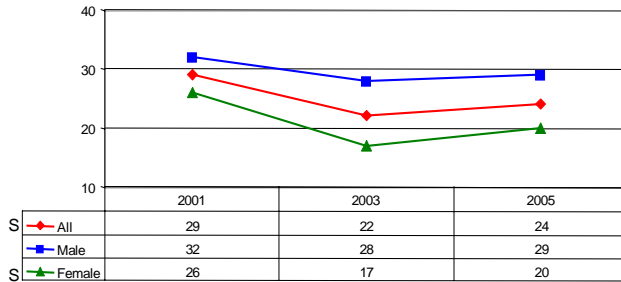
\*Students that exercised or participated in physical activities that made them sweat and breathe hard for at least 20 minutes on three or more of the past seven days

**Percentage of RI high school students who exercised or participated in sufficient vigorous physical activity\* during the past seven days - 2005 YRBS**



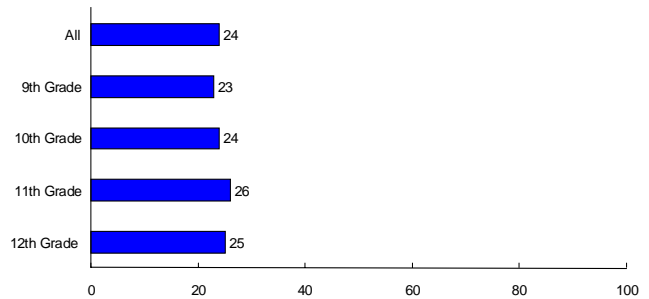
\* Students that exercised or participated in physical activities that made them sweat and breathe hard for at least 20 minutes on three or more of the past seven days

**Percentage of RI high school students who participated in sufficient moderate physical activity\* during the past seven days - YRBS**



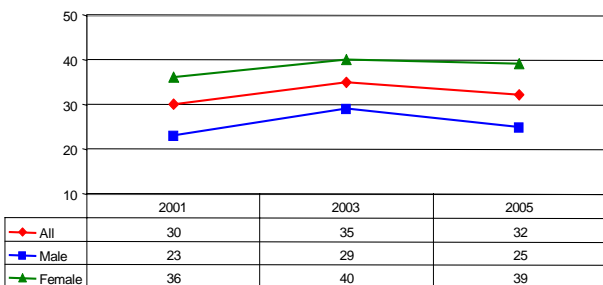
\* Students who participated in physical activities that did not make them sweat or breathe hard for at least 30 minutes on five or more of the past seven days

**Percentage of RI high school students who participated in sufficient moderate physical activity\* during the past seven days - 2005 YRBS**



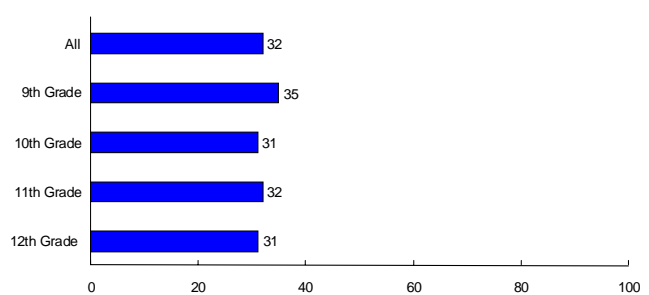
\* Students who participated in physical activities that did not make them sweat or breathe hard for at least 30 minutes on five or more of the past seven days

**Percentage of RI high school students with insufficient physical activity\* during the past seven days - YRBS**



\* Students who did not participate in at least 20 minutes of vigorous physical activity on three or more of the past seven days and did not do at least 30 minutes of moderate physical activity on five or more of the past seven days

**Percentage of RI high school students with insufficient physical activity\* during the past seven days - 2005 YRBS**



\* Students who did not participate in at least 20 minutes of vigorous physical activity on three or more of the past seven days and did not do at least 30 minutes of moderate physical activity on five or more of the past seven days

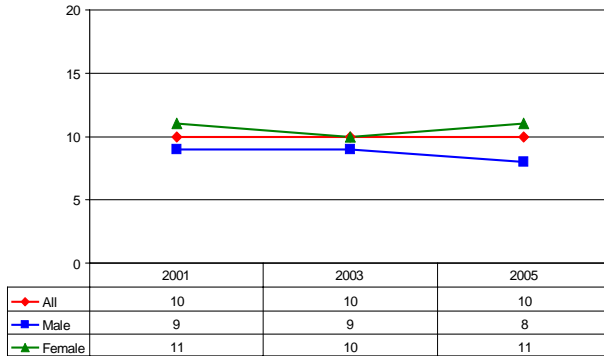
Note: An "S" next to the line graph legend box denotes a statistically significant linear change.

Source: 1997 Rhode Island Youth Risk Behavior Survey (n=1528)      2003 Rhode Island Youth Risk Behavior Survey (n=1814)  
2001 Rhode Island Youth Risk Behavior Survey (n=1392)      2005 Rhode Island Youth Risk Behavior Survey (n=2362)

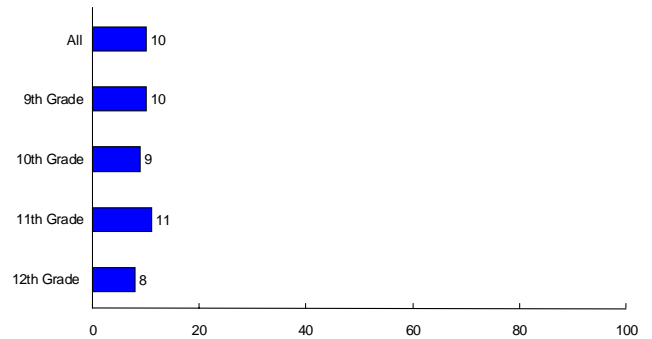
# Physical Activity

## Risk Behavior: Regular Physical Activity (Continued)

Percentage of RI high school students who participated in no vigorous or moderate physical activity during the past seven days - YRBS



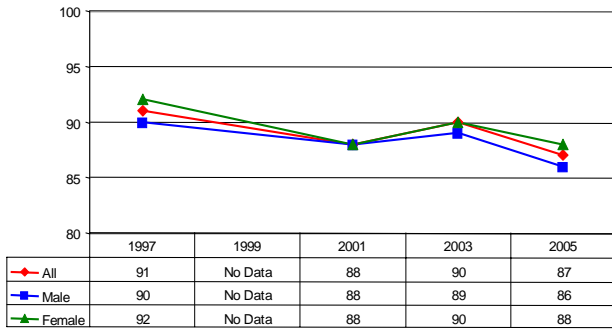
Percentage of RI high school students who participated in no vigorous or moderate physical activity during the past seven days - 2005 YRBS



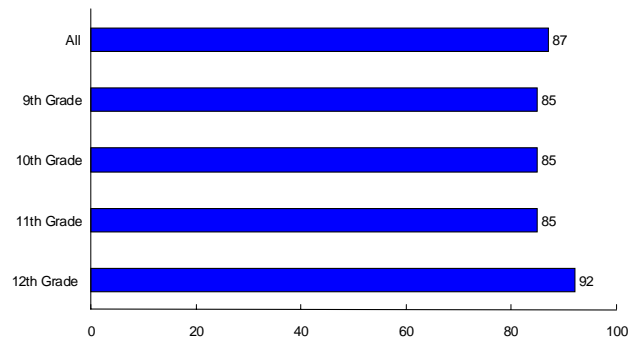
## Risk Behavior: Physical Education Classes

**Rationale:** School physical education classes can increase adolescent participation in moderate to vigorous physical activity and help high school students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.

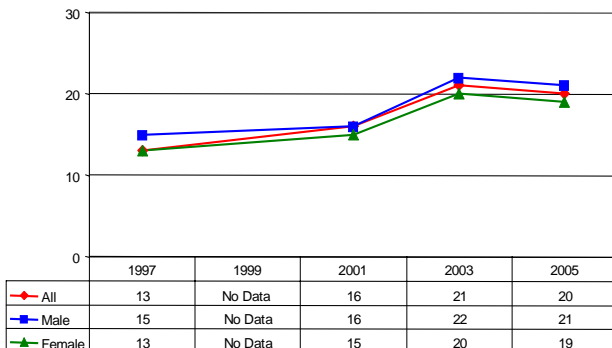
Percentage of RI high school students who attended physical education class one or more days during an average school week - YRBS



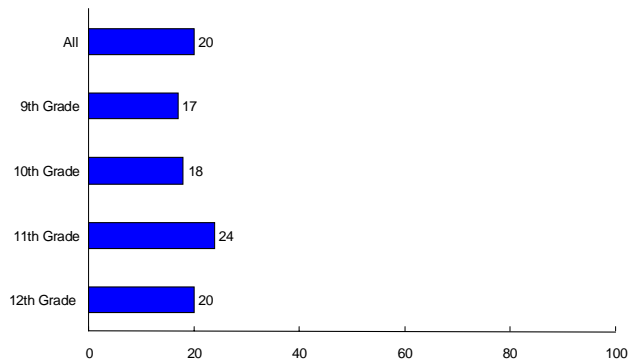
Percentage of RI high school students who attended physical education class one or more days during an average school week - 2005 YRBS



Percentage of RI high school students who attended a physical education class daily during an average school week - YRBS



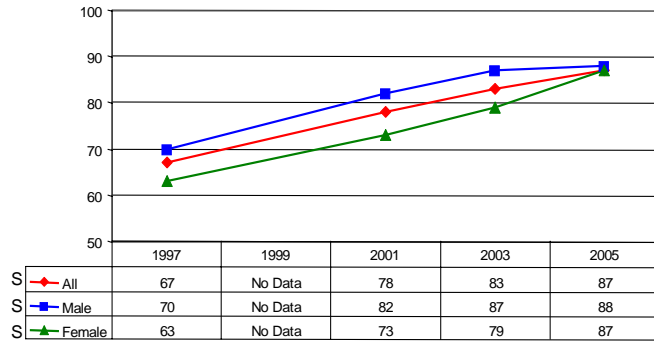
Percentage of RI high school students who attended a physical education class daily during an average school week - 2005 YRBS



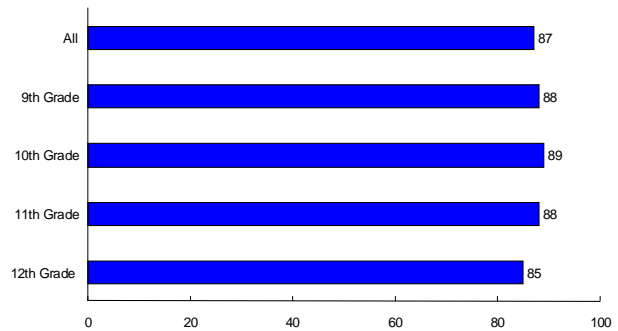
# Physical Activity

## Risk Behavior: Physical Education Classes (Continued)

Among RI high school students enrolled in physical education classes, the percentage who exercised or played sports for more than 20 minutes during an average class - YRBS



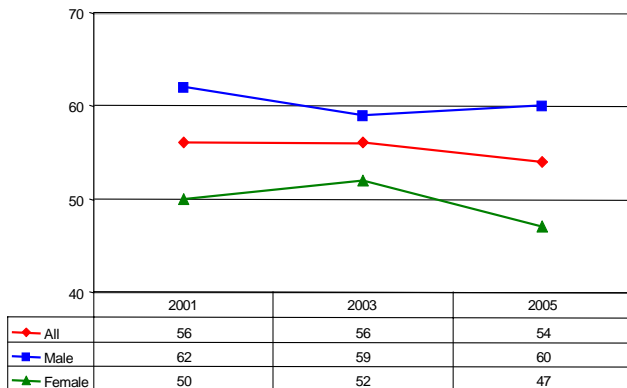
Among RI high school students enrolled in physical education classes, the percentage who exercised or played sports for more than 20 minutes during an average class - 2005 YRBS



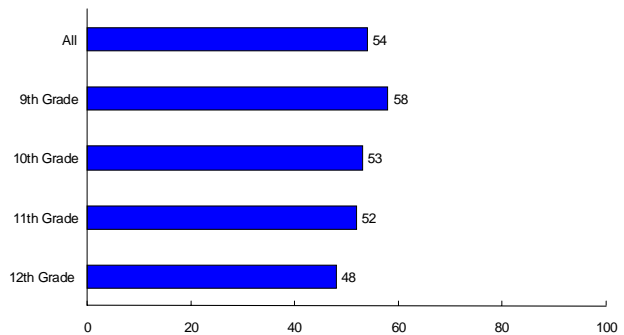
## Risk Behavior: Team Sports

**Rationale:** Participation on a sports team typically reflects participation in moderate to vigorous physical activity. Participation on sports teams does not appear, however, to contribute substantially to the development of lifelong physical activity patterns.

Percentage of RI high school students who played on one or more sports teams run by school or non-school groups during the past 12 months - YRBS



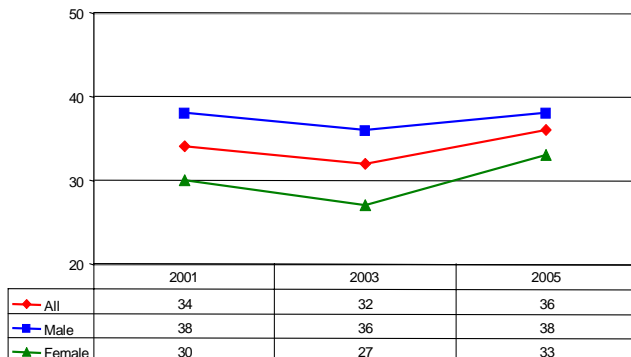
Percentage of RI high school students who played on one or more sports teams run by school or non-school groups during the past 12 months - 2005 YRBS



## Risk Behavior: Television Viewing

**Rationale:** Television viewing is the principle sedentary leisure time behavior in the United States and is correlated with decreased overall physical activity, poor nutrition, and obesity. The American Academy of Pediatrics recommends that children over two years of age watch no more than 2 hours per day of television.

Percentage of RI high school students who watched 3 or more hours of TV per day on an average school day - YRBS



Percentage of RI high school students who watched 3 or more hours of TV per day on an average school day - 2005 YRBS

