



# Overweight, Weight Loss, and Dietary Behavior 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

### *Overweight and Weight Loss Behaviors*

Between 2001 and 2005 there was a significant increase in the percentage of Rhode Island high school students who were overweight<sup>1</sup> (no data exist for 1997). In 2005, 13% of students were overweight, and 15% were at risk of being overweight.<sup>2,3</sup> At the same time, 33% described themselves as being slightly or very overweight, a significant increase over 29% in 1997. Although females were considerably more likely than males to describe themselves as overweight, the actual percentage of males who were overweight was nearly twice the percentage for females in 2005. Males were also slightly more likely to be at risk of being overweight than were females in 2005. Over 40% of students were trying to lose weight in each of the four survey periods, with rates among females consistently about twice as high as males. In 2005, the percentage of females trying to lose weight was 59% compared to 32% among males. There was little difference by grade level in the percentage of students trying to lose weight in 2005.

Diet (less food, lower calories, or less fat) and exercise were the two most common means of trying to lose weight or to keep from gaining weight. The percentage of Rhode Island high school students who dieted hovered around 40% between 2001 and 2005. Females were far more likely to diet than males, with rates of 50% and 28%, respectively, in 2005. There was a significant increase in the percentage of males who exercised to lose weight, increasing from 40% in 1997 to 52% in 2005. Exercise among females stayed relatively constant in the 64% to 70% range between 1997 and 2005, which was consistently above the rate for males. Only 5% of students were trying to lose weight by purging (vomiting or taking laxatives) in 2005. This percentage was fairly stable over time despite a significant decrease from 9% in 1997 to 6% in 2005 in the rate of females who used purging. In 2005, 12% of Rhode Island students fasted to lose weight, with females twice as likely to fast than males (16% vs. 8%).

### *Dietary Patterns – Intake of Fruits, Vegetables and Milk*

In the week prior to the 2005 survey, a lesser proportion of Rhode Island high school students consumed carrots (52%), green salad (69%), and potatoes (74%) than consumed other vegetables (82%), fruit juice (84%), and fruit (86%). Overall, only 25% of students had the recommended five or more servings of fruits and vegetables per day. There was little difference by sex or grade in the five a day measure. In 2005, 18% of Rhode Island students drank 3 or more glasses of milk per day, down significantly from the 23% reported in 2001. This trend was due primarily to a substantial decline among males. Despite this decline, males were still far more likely than females to consume milk, with rates of 24% and 13%, respectively, in 2005.

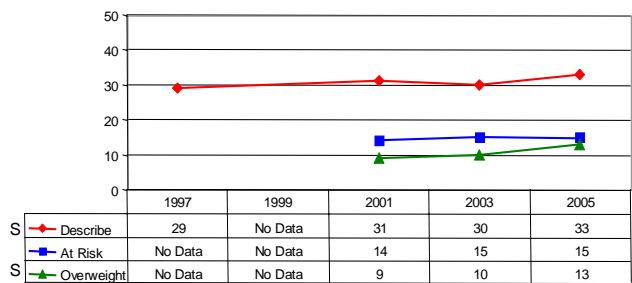
- <sup>1</sup> Students at greater than or equal to the 95<sup>th</sup> percentile for Body Mass Index (BMI), by age and sex, were considered overweight based on reference data from the National Health and Nutrition Examination Survey.
- <sup>2</sup> Students at greater than or equal to the 85<sup>th</sup> percentile for BMI but less than the 95<sup>th</sup> percentile, by age and sex, were considered at risk of being overweight based on reference data from the National Health and Nutrition Examination Survey.
- <sup>3</sup> Students self-reported the height and weight values used in the calculation of BMI. Studies have shown that self-reported height and weight may tend to underestimate the actual proportion of students who are overweight or at risk of being overweight.

# Overweight, Weight Loss, and Dietary Behavior

## Risk Behavior: Overweight and Weight Loss Behaviors

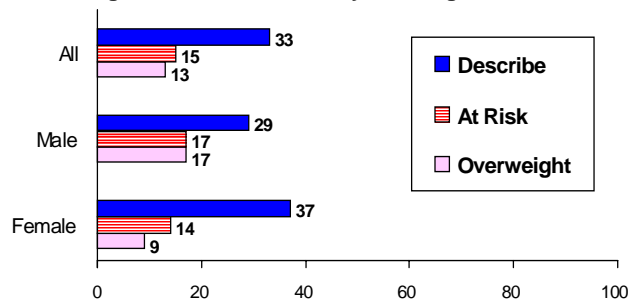
**Rationale:** Overweight and obesity are increasing in both genders and among all population groups. In 2001-2002, 66% of adults were either overweight or obese and 16% of adolescents aged 12-19 years were overweight in the United States. In 2001-2002, there were more than twice as many overweight children and more than three times as many overweight adolescents as there were in 1980. Approximately 112,000 deaths a year nationwide are currently associated with overweight and obesity. If left unabated, overweight and obesity may soon overtake tobacco as the leading cause of death. Overweight or obesity acquired during childhood or adolescence may persist into adulthood. In adolescence, obesity is associated with hyperlipidemia, hypertension, abnormal glucose tolerance, and adverse psychological and social consequences. Studies have shown high rates of body dissatisfaction and dieting among adolescent females, with many engaging in unhealthy weight control behaviors such as fasting and self-induced vomiting which can lead to abnormal physical and psychological development. It is estimated that as many as 7% to 8% of females in the United States suffer from anorexia nervosa and/or bulimia nervosa during their lifetime.

**Percentage of RI high school students who described themselves as overweight or who were at risk of being overweight or who were currently overweight\* - YRBS**



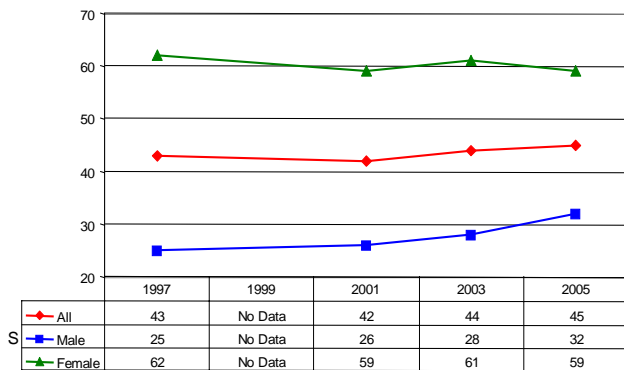
\* Students who were  $\geq 95^{\text{th}}$  percentile for body mass index, by age and sex, based on reference data were considered overweight while students who were  $\geq 85^{\text{th}}$  percentile but  $< 95^{\text{th}}$  percentile, were considered at risk of being overweight.

**Percentage of RI high school students who described themselves as overweight or who were at risk of being overweight or who were currently overweight\* - 2005 YRBS**

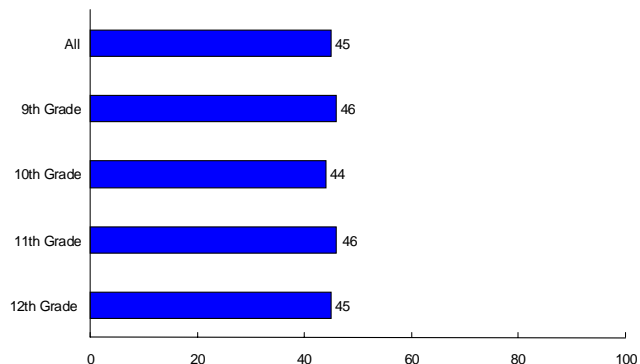


\* Students who were  $\geq 95^{\text{th}}$  percentile for body mass index, by age and sex based on reference data were considered overweight while students who were  $\geq 85^{\text{th}}$  percentile but  $< 95^{\text{th}}$  percentile, were considered at risk of being overweight.

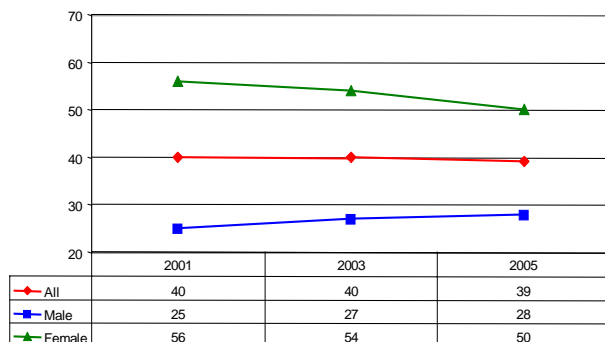
**Percentage of RI high school students who were trying to lose weight - YRBS**



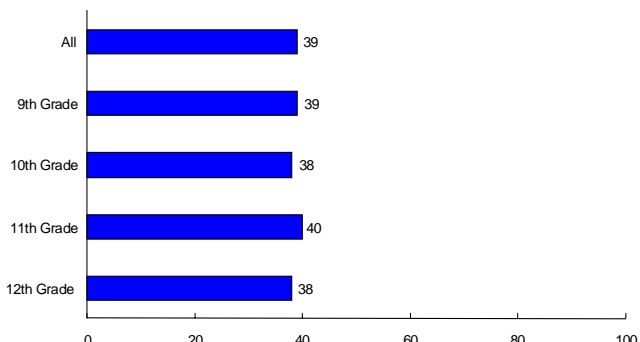
**Percentage of RI high school students who were trying to lose weight - 2005 YRBS**



**Percentage of RI high school students who ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight during the past 30 days - YRBS**



**Percentage of RI high school students who ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight during the past 30 days - 2005 YRBS**



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)

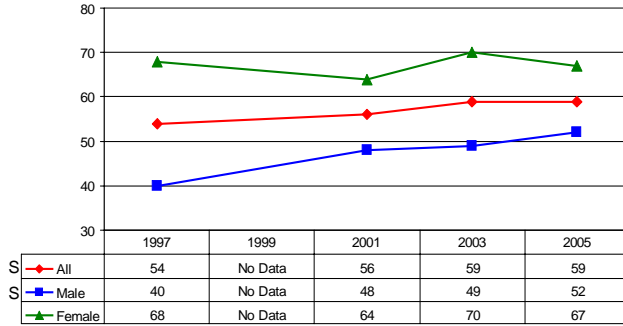
2001 Rhode Island Youth Risk Behavior Survey (n=1392)

2005 Rhode Island Youth Risk Behavior Survey (n=2362)

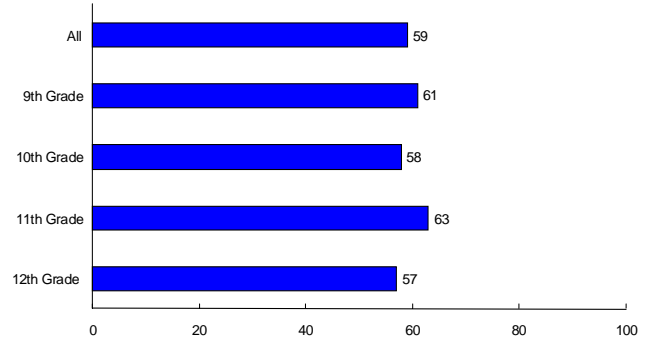
# Overweight, Weight Loss, and Dietary Behavior

## Risk Behavior: Overweight and Weight Loss Behaviors (Continued)

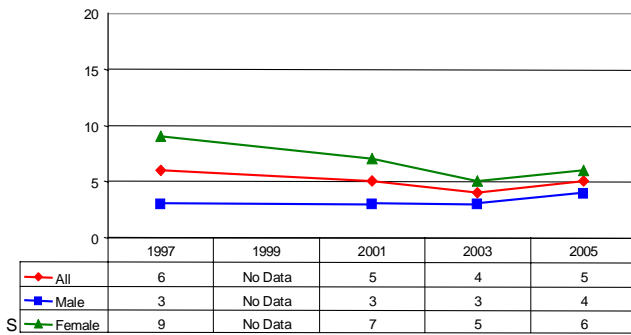
Percentage of RI high school students who exercised to lose weight or to keep from gaining weight during the past 30 days - YRBS



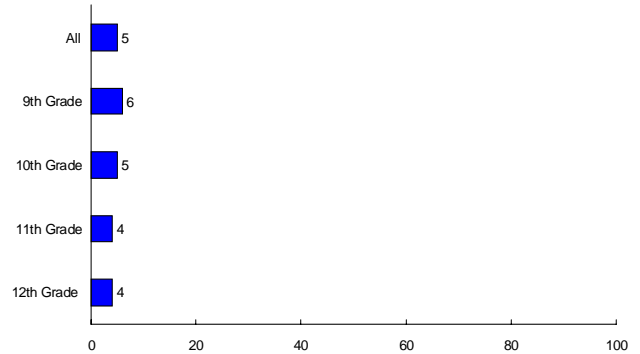
Percentage of RI high school students who exercised to lose weight or to keep from gaining weight during the past 30 days - 2005 YRBS



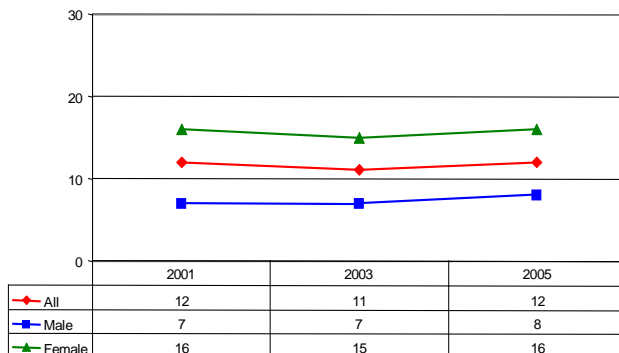
Percentage of RI high school students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days - YRBS



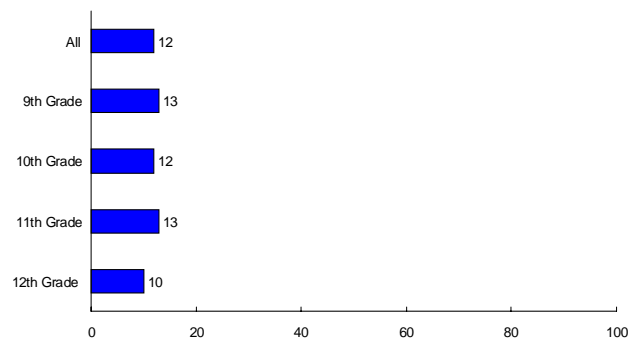
Percentage of RI high school students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days - 2005 YRBS



Percentage of RI high school students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days - YRBS



Percentage of RI high school students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days - 2005 YRBS

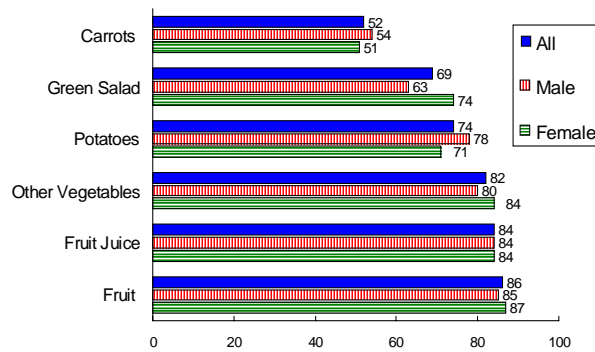


# Overweight, Weight Loss, and Dietary Behavior

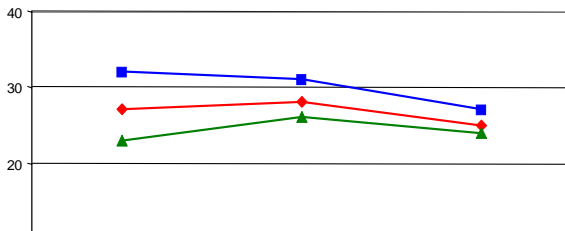
## Risk Behavior: Dietary Patterns - Intake of Fruits, Vegetables and Milk

**Rationale:** Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer. Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of overweight. Milk is by far the largest single source of calcium for high school students. In the United States, only 55% of females aged 14-18 years old consumed the recommended daily amount of calcium (1300 mg/day) with the average intake of calcium for girls in this age group being 713 mg/day. Calcium is essential for forming and maintaining healthy bones and teeth. Low calcium intake during the first two to three decades of life is an important risk factor for developing osteoporosis.

Percentage of RI high school students who ate or drank the following at least once during the past seven days - 2005 YRBS

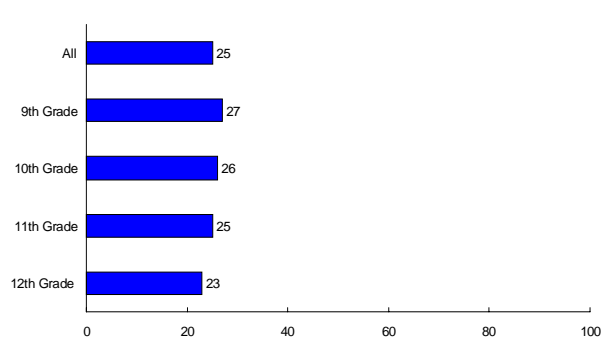


Percentage of RI high school students who ate five or more servings of fruits and vegetables per day during the past seven days - YRBS

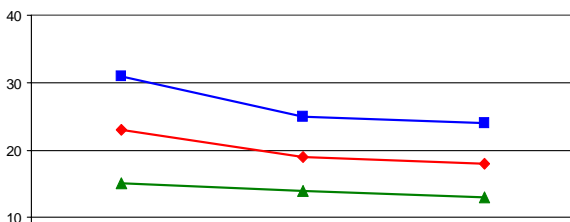


	2001	2003	2005
All	27	28	25
Male	32	31	27
Female	23	26	24

Percentage of RI high school students who ate five or more servings of fruits and vegetables per day during the past seven days - 2005 YRBS

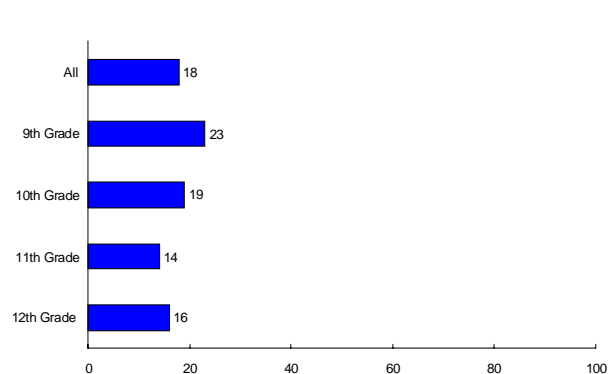


Percentage of RI high school students who drank three or more glasses of milk per day during the past seven days - YRBS



	2001	2003	2005
All	23	19	18
Male	31	25	24
Female	15	14	13

Percentage of RI high school students who drank three or more glasses of milk per day during the past seven days - 2005 YRBS





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

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## *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.

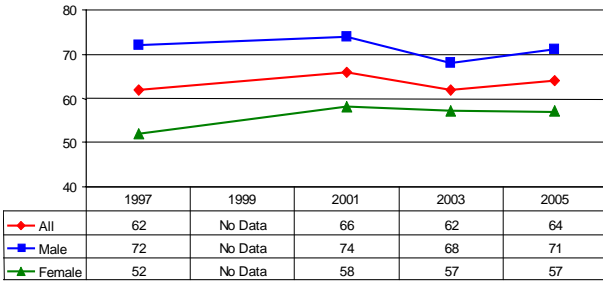
<sup>2</sup> **Sufficient moderate physical activity:** participation in physical activities that did not make students sweat or breathe hard for at least 30 minutes on five or more of the past seven days prior to the survey.

# Physical Activity

## Risk Behavior: Regular Physical Activity

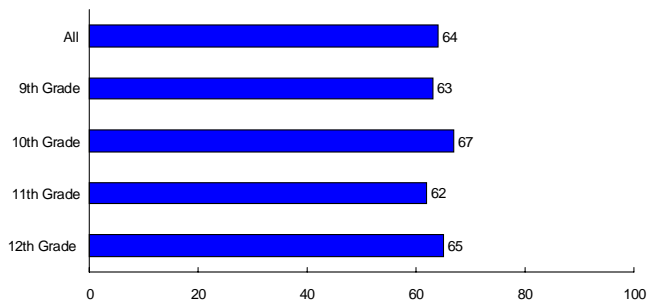
**Rationale:** Participating in regular physical activity helps to build and maintain healthy bones and muscles, control weight, build lean muscle, reduce fat, reduce feelings of depression and anxiety, and promote psychological well being. Over time, regular physical activity decreases the risk of dying 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**



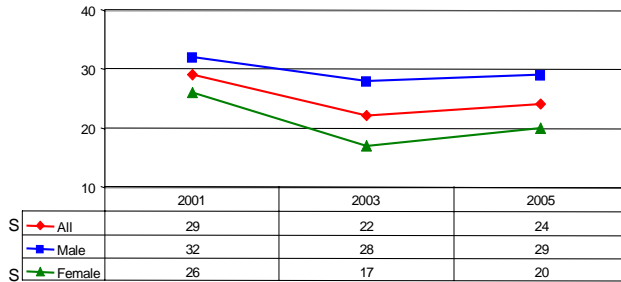
\*Students that exercised or participated in physical activities that made them sweat and breathe hard for at least 20 minutes on three or more of the past seven days

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



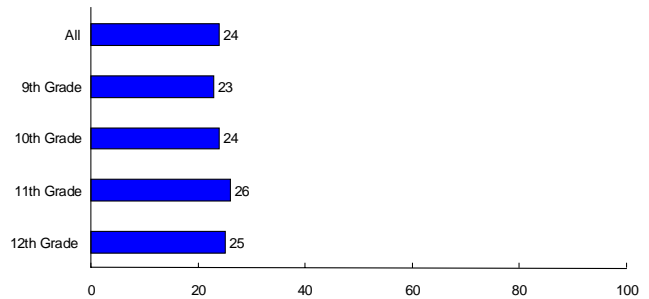
\* Students that exercised or participated in physical activities that made them sweat and breathe hard for at least 20 minutes on three or more of the past seven days

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



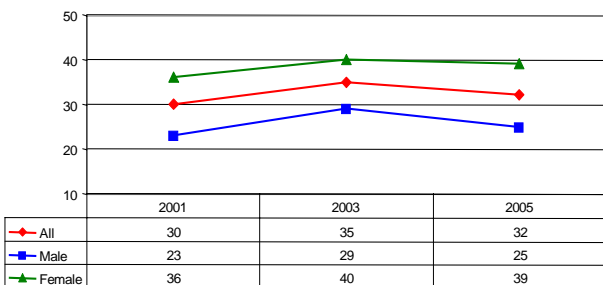
\* Students who participated in physical activities that did not make them sweat or breathe hard for at least 30 minutes on five or more of the past seven days

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



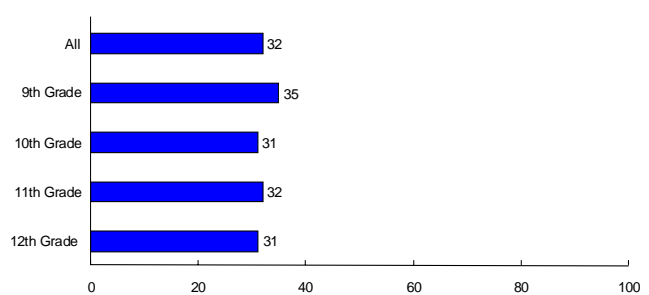
\* Students who participated in physical activities that did not make them sweat or breathe hard for at least 30 minutes on five or more of the past seven days

**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

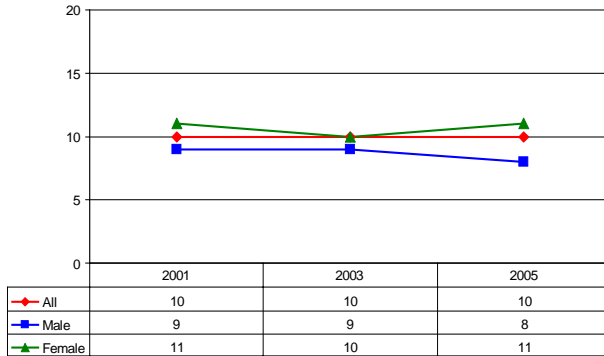
Note: An "S" next to the line graph legend box denotes a statistically significant linear change.

Source: 1997 Rhode Island Youth Risk Behavior Survey (n=1528)      2003 Rhode Island Youth Risk Behavior Survey (n=1814)  
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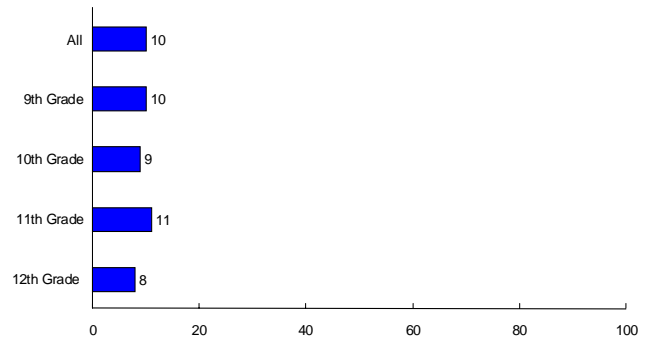
# Physical Activity

## 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



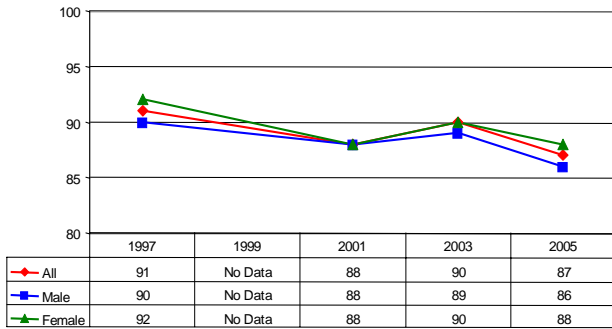
Percentage of RI high school students who participated in no vigorous or moderate physical activity during the past seven days - 2005 YRBS



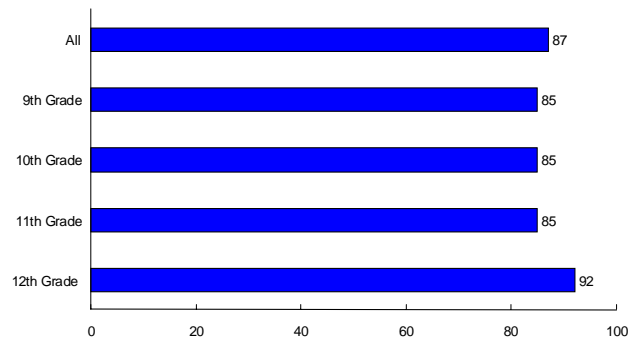
## Risk Behavior: Physical Education Classes

**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.

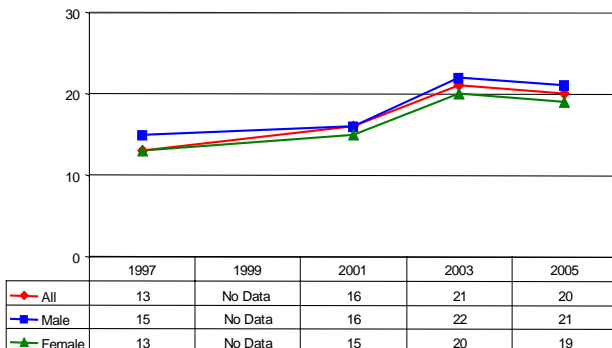
Percentage of RI high school students who attended physical education class one or more days during an average school week - YRBS



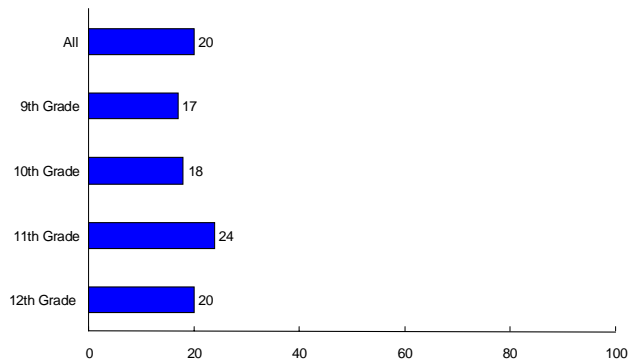
Percentage of RI high school students who attended physical education class one or more days during an average school week - 2005 YRBS



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



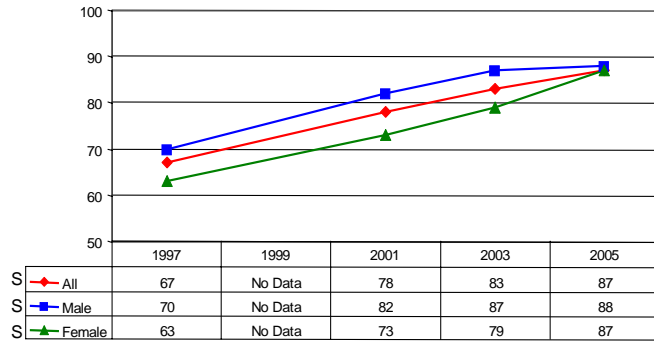
Percentage of RI high school students who attended a physical education class daily during an average school week - 2005 YRBS



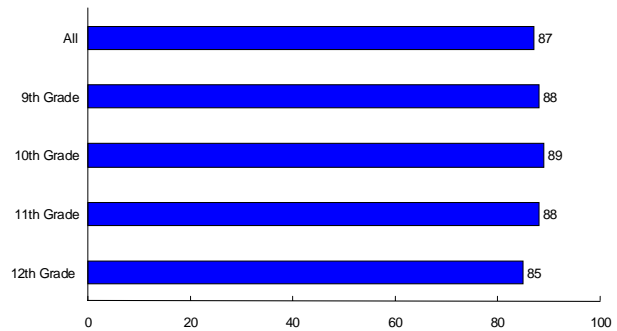
# Physical Activity

## 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



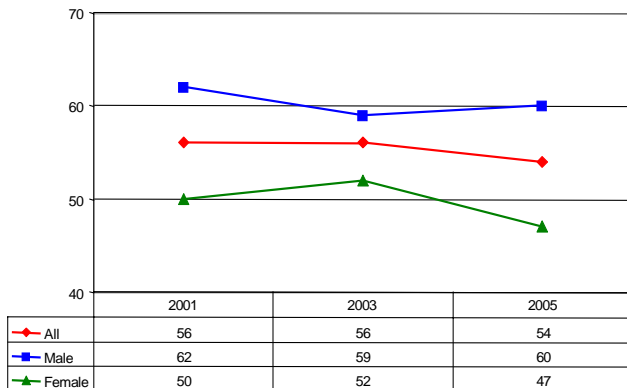
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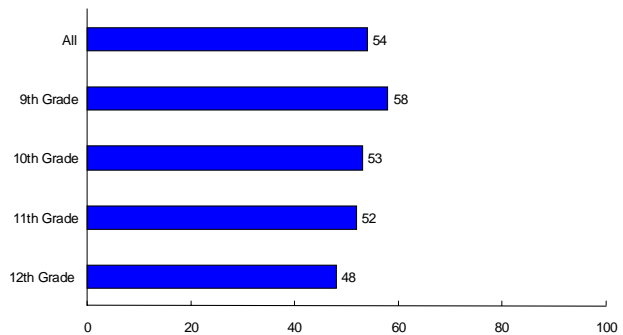
## Risk Behavior: Team Sports

**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



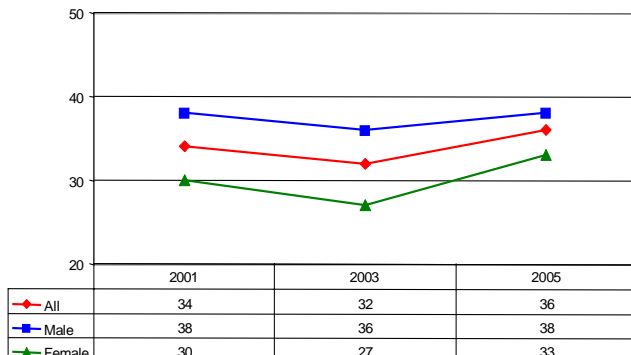
Percentage of RI high school students who played on one or more sports teams run by school or non-school groups during the past 12 months - 2005 YRBS



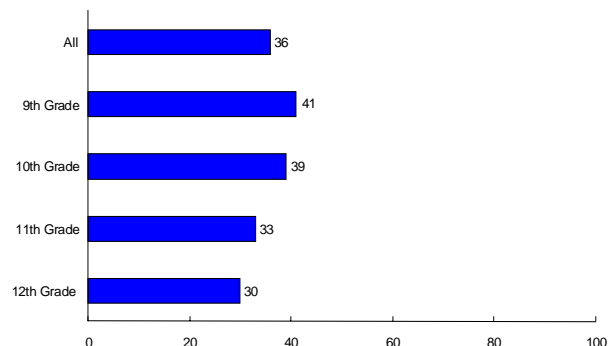
## Risk Behavior: Television Viewing

**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





# Sexual Behavior Health Risks Among Rhode Island Public High School Students *1997 through 2005*

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## ***KEY FINDINGS***

### ***Lifetime and Recent Sexual Intercourse, Multiple Partners, and Age at First Sexual Intercourse***

Nearly half of RI high school students in 2005 had ever had sexual intercourse, little changed from previous surveys. From 1997 to 2005, males consistently appeared slightly more likely than females to have ever had sex. In 2005, the lifetime rate increased steadily by grade level from 31% for 9<sup>th</sup> graders to 67% for 12<sup>th</sup> graders. The percentage of males who had recent sexual intercourse (past 3 months) increased significantly from 28% to 37% between 1997 and 2005, while the proportion for females remained stable at about one third. The percentage of students who had recent sex increased markedly across grade levels in 2005, from 23% for 9<sup>th</sup> graders to 58% for 12<sup>th</sup> graders.

The percentage of students having sexual intercourse with four or more people during their lifetime was stable between 11% and 14% across the surveys. In 2005, nearly twice the percentage of males (17%) than females (9%) had had multiple sexual partners. Older students in 2005, especially 12<sup>th</sup> graders (21%), seemed much more likely than younger students to have had multiple sexual partners. In each survey year, 6% to 7% of students reported having sexual intercourse for the first time before age 13. The rates for early sexual experience were 2 to 4 times higher for males than females over the survey periods, with a significant downward trend noted for females. In 2005, 9<sup>th</sup> graders (9%) appeared about twice as likely than students in higher grades to have had sex before age 13.

### ***Use of Condoms and Birth Control Pills, Alcohol and Other Drug Use Related to Sexual Intercourse***

From 1997 to 2005, there was a significant increase from 52% to 66% in the rate of sexually active students who used a condom at last intercourse, especially among males (56% to 73%). However, twelfth graders (58%) appeared somewhat less likely than younger students to have used condoms in 2005. The percentage of sexually active students using birth control pills remained fairly stable over time between 17% and 22%, but the rate was consistently higher among females than males (23% versus 17% in 2005). The use of birth control pills increased steadily by grade from 8% for 9<sup>th</sup> graders to 27% for 12<sup>th</sup> graders in 2005.

The rate among all students for drinking alcohol or using drugs before last sexual intercourse declined significantly from 32% to 22% between 1997 and 2005, largely due to a significant decrease among males from 42% to 28%. In each survey year, males were substantially more likely than females to use alcohol or drugs before sex (28% versus 16% in 2005). There were no major differences observed by grade level in 2005.

### ***HIV/AIDS Education in School***

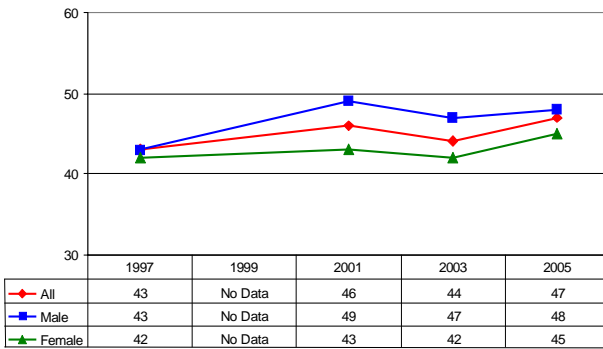
There was a significant decline from 95% in 1997 to 87% in 2005 in the proportion of students who had ever been taught about AIDS or HIV infection in school. Significant decreases occurred for both males and females, although girls seemed consistently more likely to report AIDS or HIV education than boys, especially in 2005 (91% versus 85%). As one might expect, rates appeared to increase slightly but steadily across grade levels in 2005.

# Sexual Behavior

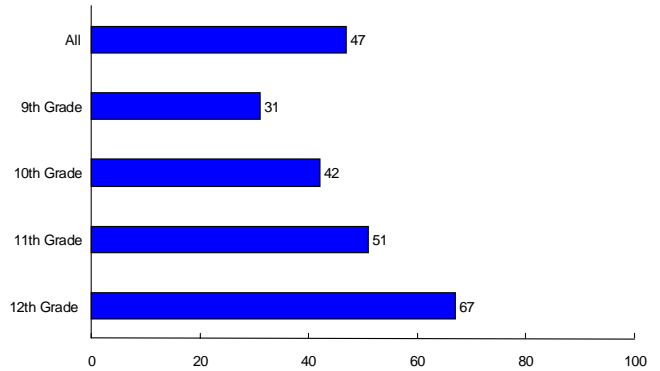
## **Risk Behavior:** Lifetime & Recent Sexual Intercourse, Multiple Partners, & Age at First Sexual Intercourse

**Rationale:** Recent sexual behavior and number of sexual partners is associated with increased risk for unwanted pregnancy and sexually transmitted diseases, including HIV infection. Early initiation of sexual intercourse is associated with having a greater number of lifetime partners. In addition, adolescents who initiate sexual intercourse early are less likely to use contraception and are at higher risk for pregnancy.

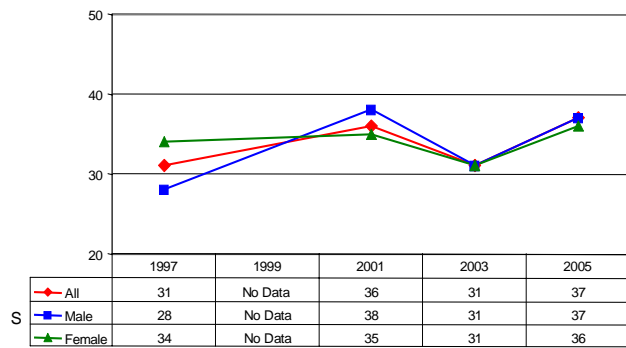
**Percentage of RI high school students who ever had sexual intercourse - YRBS**



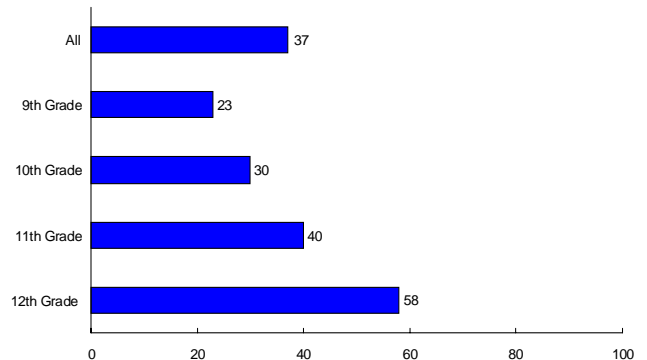
**Percentage of RI high school students who ever had sexual intercourse - 2005 YRBS**



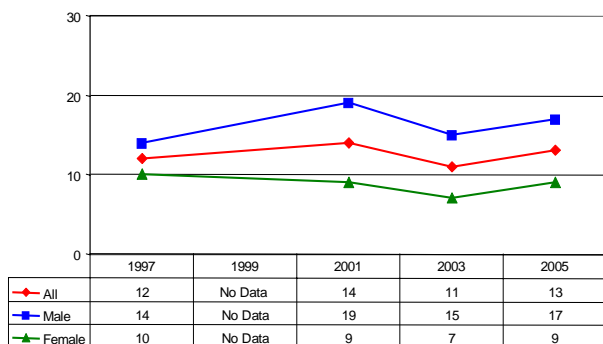
**Percentage of RI high school students who had sexual intercourse during the past 3 months - YRBS**



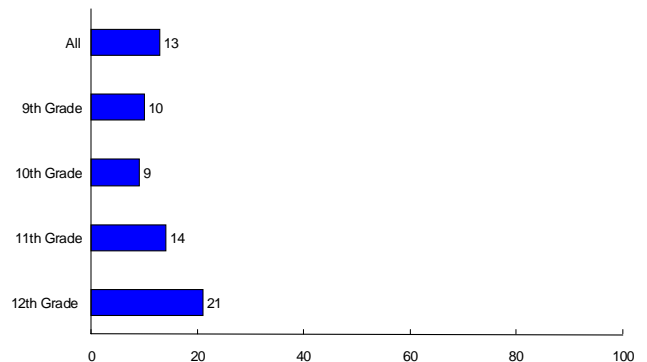
**Percentage of RI high school students who had sexual intercourse during the past 3 months - 2005 YRBS**



**Percentage of RI high school students who had sexual intercourse with 4 or more people during their lifetime - YRBS**



**Percentage of RI high school students who had sexual intercourse with 4 or more people during their lifetime - 2005 YRBS**

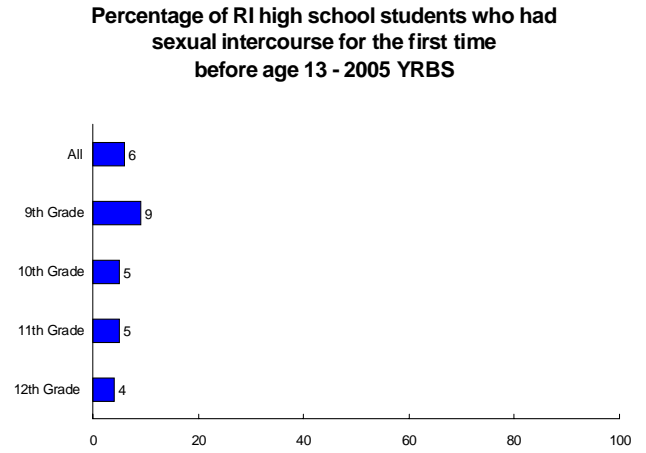
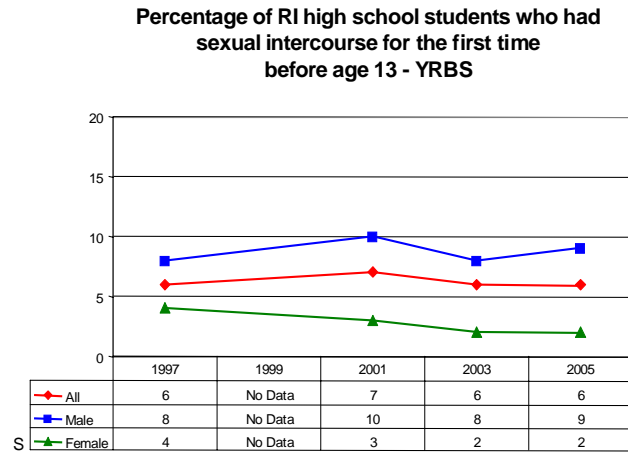


Note: An "S" next to the line graph legend box denotes a statistically significant linear change.

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)

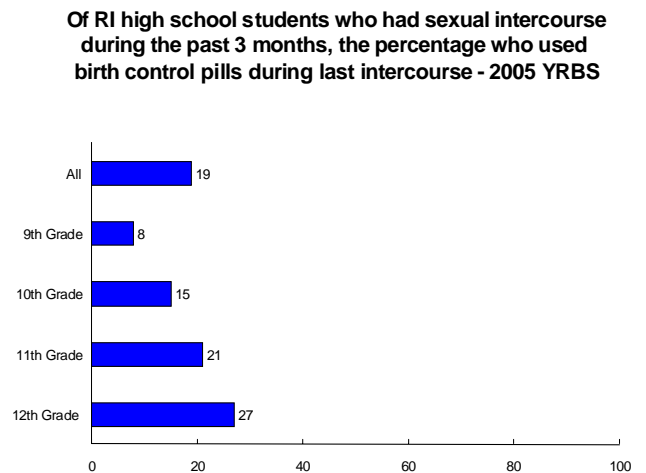
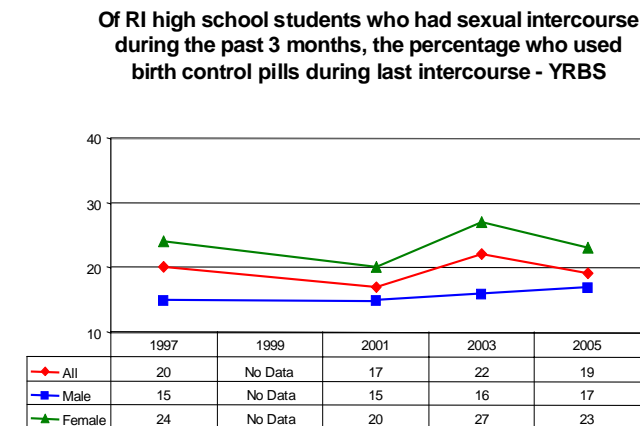
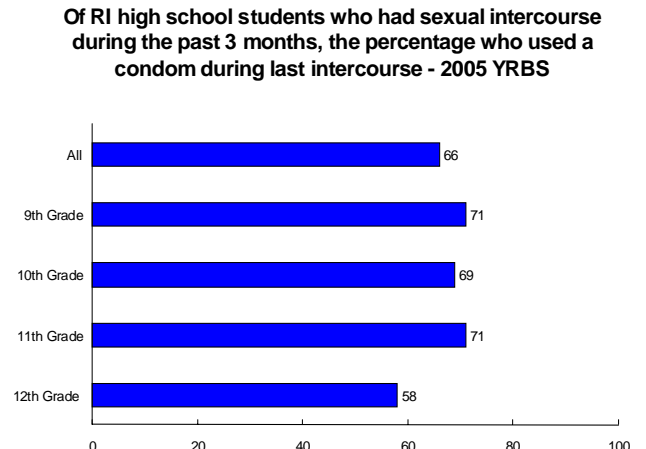
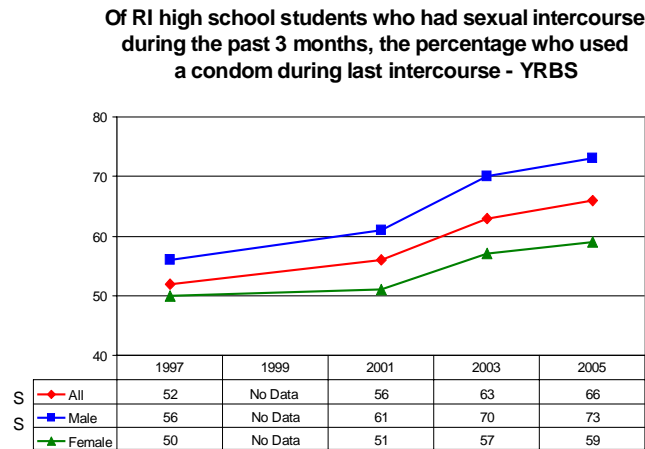
# Sexual Behavior

## Risk Behavior: Lifetime & Recent Sexual Intercourse, Multiple Partners, & Age at First Sexual Intercourse (Continued)



## Risk Behavior: Use of Condoms & Birth Control Pills, Alcohol & Other Drug Use Related to Sexual Intercourse

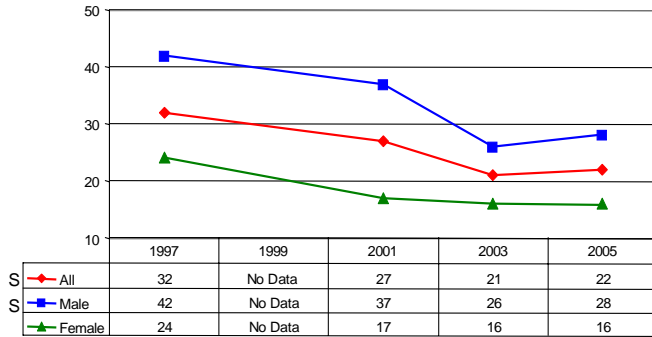
**Rationale:** Each year in the United States, there are an estimated 9.1 million cases of sexually transmitted diseases among persons aged 15-24 years. Alcohol and other drug use may serve as predisposing factors for initiation of sexual activity and unprotected sexual intercourse. Use of latex condoms by males, when used consistently and correctly, are highly effective at reducing the risk of HIV infection and other sexually transmitted diseases.



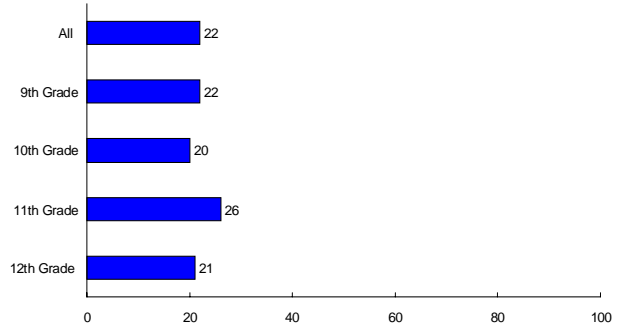
## Sexual Behavior

**Risk Behavior:** Use of Condoms & Birth Control Pills, Alcohol & Other Drug Use Related to Sexual Intercourse (Continued)

Of RI high school students who had sexual intercourse during the past 3 months, the percentage who drank alcohol or used drugs before last intercourse - YRBS



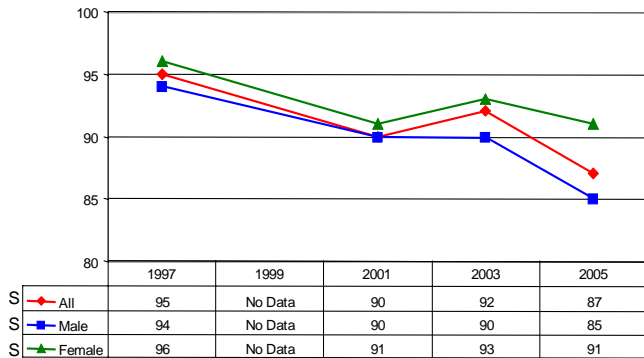
Of RI high school students who had sexual intercourse during the past 3 months, the percentage who drank alcohol or used drugs before last intercourse - 2005 YRBS



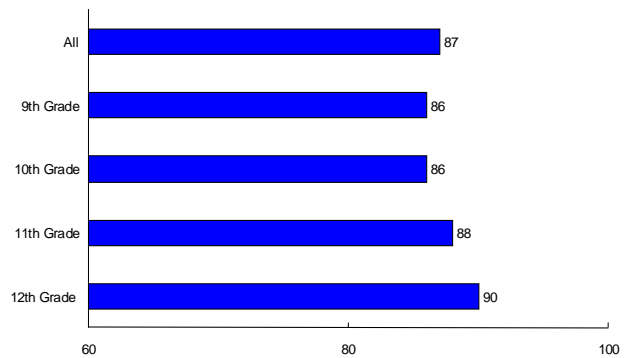
**Risk Behavior:** HIV/AIDS Education in School

**Rationale:** In 2004, there were an estimated 4,842 cases of HIV/AIDS among persons aged 15-24 years in the United States. Nearly three quarters of senior high schools nationwide taught HIV prevention in a required health education course.

Percentage of RI high school students who had ever been taught in school about AIDs or HIV infection - YRBS



Percentage of RI high school students who had ever been taught in school about AIDs or HIV infection - 2005 YRBS





# Alcohol and Other Drug Use 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**

### ***Alcohol Use***

In 2005, 43% of both male and female Rhode Island high school students had at least one drink of alcohol in the month prior to the survey, down significantly from previous surveys, beginning at 54% for males and 51% for females in 1997. Drinking increased dramatically by grade level, from 32% among 9<sup>th</sup> graders to 59% among 12<sup>th</sup> graders, in 2005. The percentage of heavy drinkers, those students having five or more drinks in a row at least once in the past month, dropped significantly from a high of 32% in 1997 to 25% in 2005. Heavy drinking increased substantially by grade level, from 16% among 9<sup>th</sup> graders to 37% among 12<sup>th</sup> graders in 2005.

### ***Other Drug Use***

A quarter of high school students used marijuana during the 30 days preceding the survey in 2005, down somewhat from previous survey periods, with only slightly lower usage among females than males. The use of marijuana increased by grade level, with markedly higher levels of usage among 12<sup>th</sup> graders (34%) than other grade levels in 2005.

The trend in cocaine was nearly unchanged from most previous survey periods, with 3% of students using cocaine in the past month in 2005. Males, however, were more than twice as likely to use cocaine than females, with rates of 5% and 2%, respectively, in 2005. Twelfth graders appeared to have the highest cocaine usage (5%) by grade in 2005.

Although the use of inhalants was stable between 2003 and 2005, the overall trend in lifetime use showed a significant decrease from a high of 21% in 1997 to 10% in 2005. The trend was similar for both male and female students. Ninth graders appeared to have the highest level of inhalant use (12%) by grade in 2005.

### ***Lifetime Use, Age of initiation, and Use on School Property***

Marijuana, cigarettes and alcohol were the three most prevalent forms of drugs used by Rhode Island high school students in 2005, with lifetime usage of 43%, 45% and 70%, respectively. Lifetime rates were lower for methamphetamines and ecstasy (both 6%), with little difference by sex or grade. Overall, 4% of students had tried heroin, with a rate more than twice as high for males (5%) than females (2%) in 2005.

There were significant decreases between 1997 and 2005 in the percentage of students using alcohol or cigarettes before age 13, but little change in those trying marijuana. In 2005, males appeared more likely than females to try marijuana or alcohol before age 13, and 9<sup>th</sup> graders appeared more likely than other students to report using alcohol before age 13.

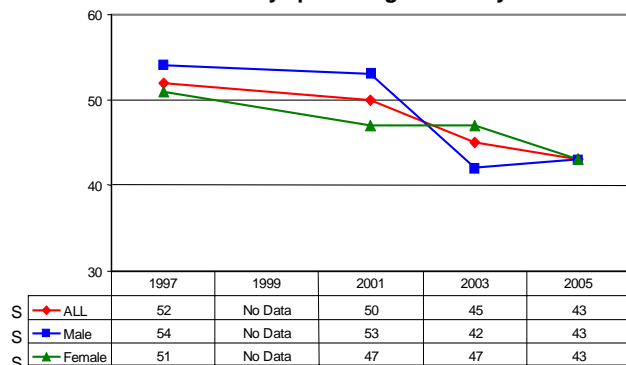
The percentage of students using cigarettes on school property decreased significantly between 1997 and 2005, from 20% to 8%. Little change was seen in the percentage of students using marijuana or alcohol on school property. Nearly a quarter of students were offered, sold or given an illegal drug on school property in 2005, which was a significant downward trend from 29% in 1997. Males also had a significant decrease from 1997 to 2005, and 11<sup>th</sup> and 12<sup>th</sup> graders in 2005 did appear to have slightly higher rates than younger students for being offered, sold, or given drugs.

# Alcohol and Other Drug Use

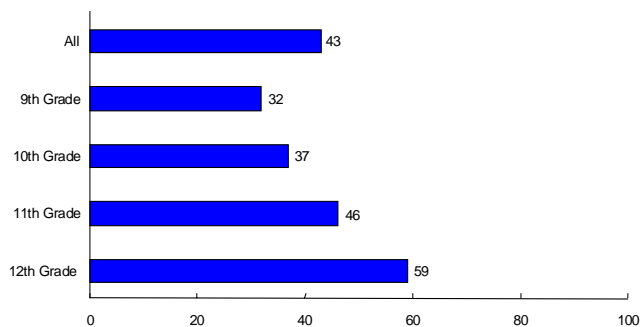
## Risk Behavior: Alcohol Use

**Rationale:** In 2000, 5% of 15-20 year old drivers nationwide who were involved in crashes that resulted in injuries had been drinking alcohol. In addition, 22% of 15-20 year old drivers involved in fatal crashes also had been drinking alcohol. Alcohol use is associated with 20% of fatalities among those less than 15 years old.

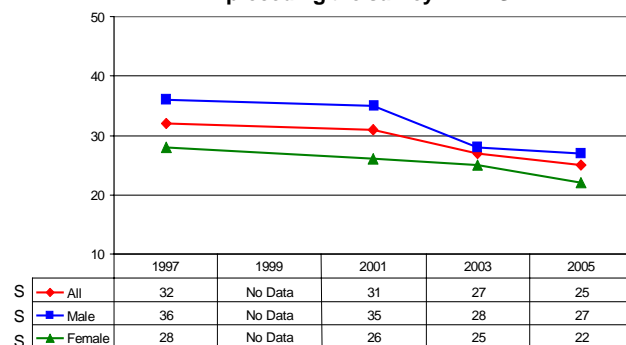
Percentage of RI high school students who had at least one drink of alcohol on one or more of the 30 days preceding the survey - YRBS



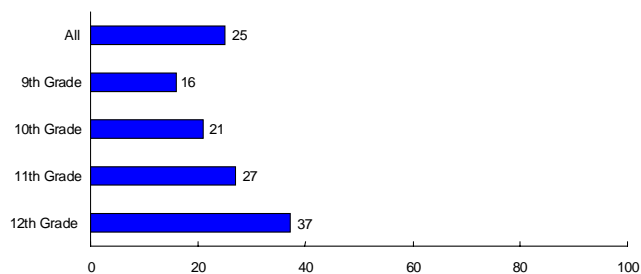
Percentage of RI high school students who had at least one drink of alcohol on one or more of the 30 days preceding the survey - 2005 YRBS



Percentage of RI high school students who had five or more drinks of alcohol in a row, within a couple of hours, on one or more of the 30 days preceding the survey - YRBS



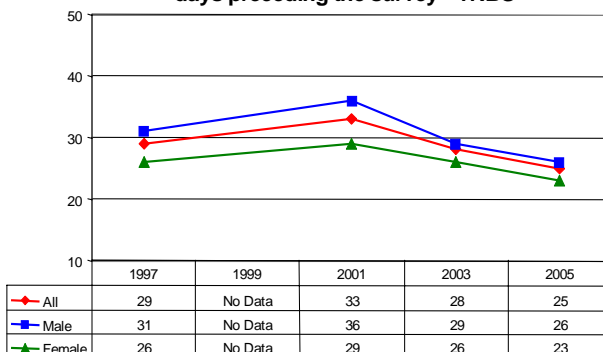
Percentage of RI high school students who had five or more drinks of alcohol in a row, within a couple of hours, on one or more of the 30 days preceding the survey - 2005 YRBS



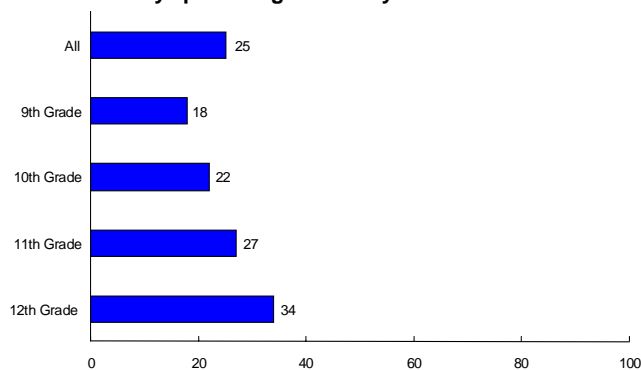
## Risk Behavior: Other Drug Use

**Rationale:** Drug use is related to suicide, early unwanted pregnancy, school failure, delinquency, and transmissions of sexually transmitted diseases (STD), including human immunodeficiency virus (HIV) infection. Drug use is greater among youth in the U.S. than has been documented in any other industrialized nation in the world.

Percentage of RI high school students who used marijuana one or more times during the 30 days preceding the survey - YRBS



Percentage of RI high school students who used marijuana one or more times during the 30 days preceding the survey - 2005 YRBS



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)

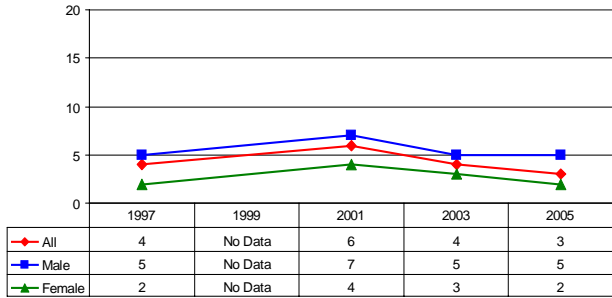
2001 Rhode Island Youth Risk Behavior Survey (n=1392)

2005 Rhode Island Youth Risk Behavior Survey (n=2362)

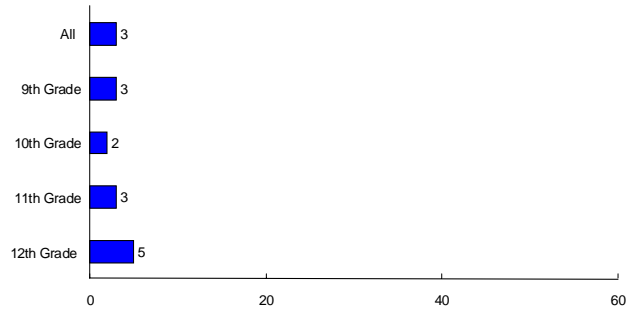
# Alcohol and Other Drug Use

## Risk Behavior: Other Drug Use (Continued)

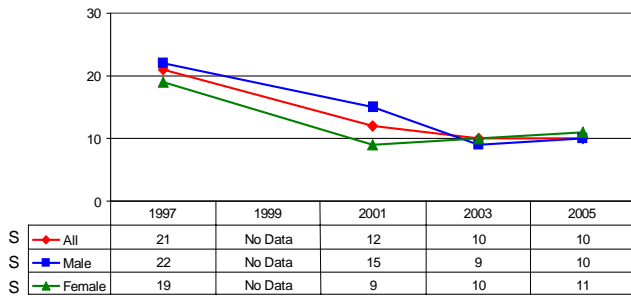
Percentage of RI high school students who used any form of cocaine including powder, crack or freebase one or more times during the 30 days preceding the survey - YRBS



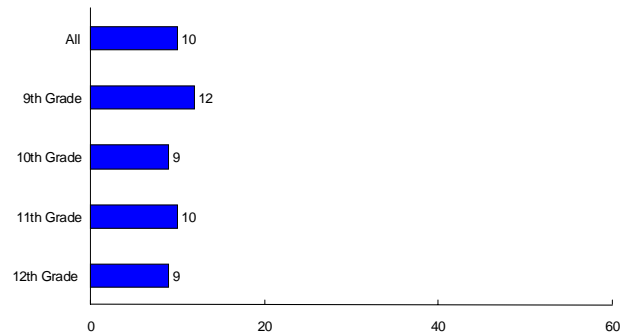
Percentage of RI high school students who used any form of cocaine including powder, crack or freebase one or more times during the 30 days preceding the survey - 2005 YRBS



Percentage of RI high school students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life - YRBS



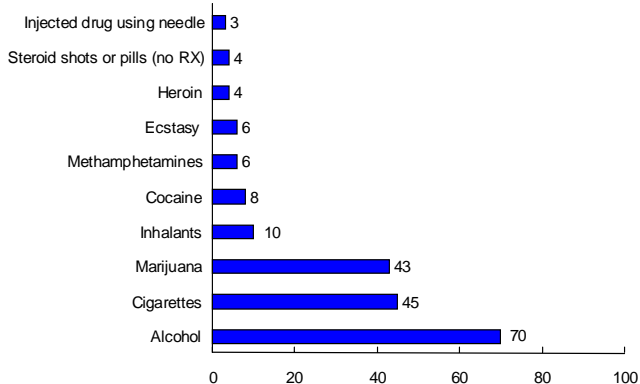
Percentage of RI high school students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life - 2005 YRBS



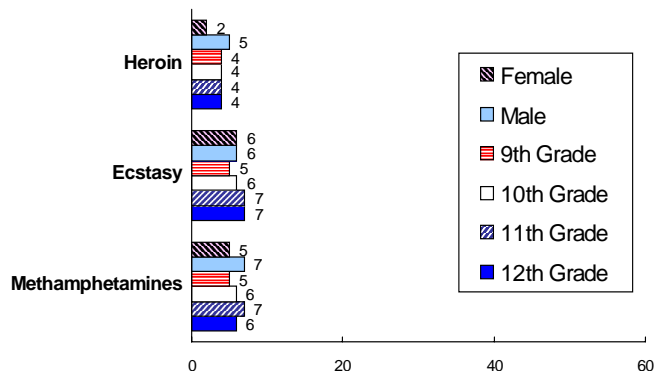
## Risk Behavior: Lifetime Use, Age of Initiation, and Use on School Property

**Rationale (Alcohol, Drug Use, and Crime):** In Rhode Island there were over 900 juvenile arrests and referrals to Family Court in 2002 for drug and alcohol related offenses. This represented 10% of all the referrals to Family Court that year. In addition, over half (55%) of the incarcerated population at the Training School were receiving substance abuse treatment in December 2002. (Source: 2003 Rhode Island Kids Count Factbook)

Percentage of RI high school students who used the following substances one or more times in their lifetime - 2005 YRBS



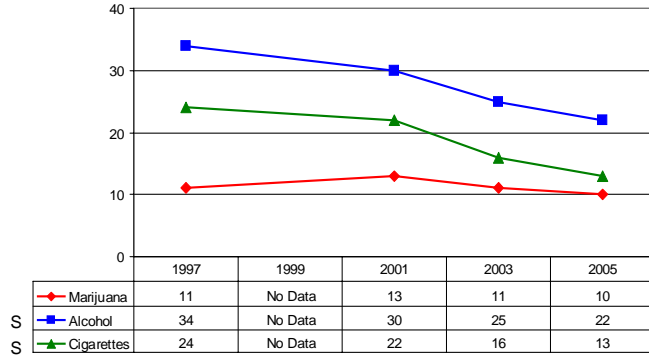
Percentage of RI high school students who used heroin, ecstasy or methamphetamines one or more times during their life - 2005 YRBS



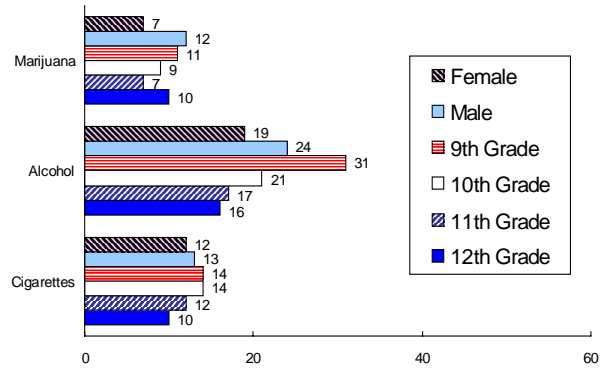
# Alcohol and Other Drug Use

*Risk Behavior:* Lifetime Use, Age of Initiation, and Use on School Property (Continued)

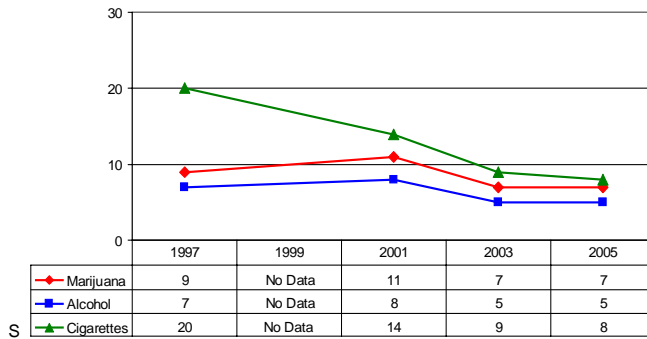
**Percentage of RI high school students who used the following substances for the first time before age 13 - YRBS**



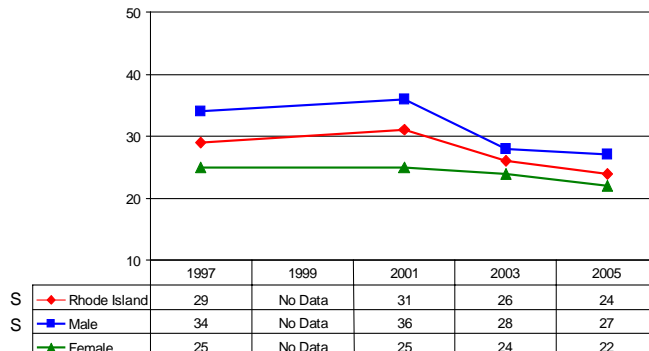
**Percentage of RI high school students who used the following substances for the first time before age 13 – 2005 YRBS**



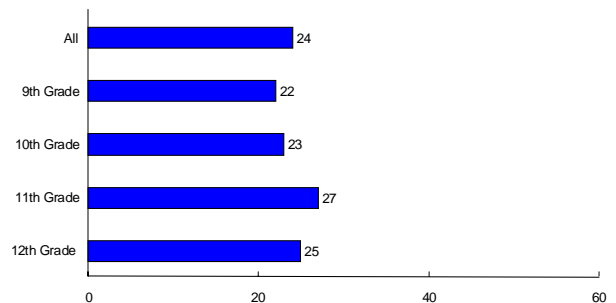
**Percentage of RI high school students who used the following substances on school property one or more times during the 30 days preceding the survey - YRBS**



**Percentage of RI high school students who were offered, sold or given an illegal drug on school property by someone during the past 12 months - YRBS**



**Percentage of RI high school students who were offered, sold or given an illegal drug on school property by someone during the past 12 months – 2005 YRBS**





# Tobacco Use

## 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

#### *Cigarette Smoking*

In the 2005 survey, 45% of Rhode Island teenagers reported that they had ever tried cigarettes. This continued a declining trend in smoking beginning in 1997 when the rate was 69%. The decline was experienced by both males and females, with the 2005 survey showing 43% of males and 46% of females ever smoking, compared to 69% for each group in 1997. In 2005, ever smoking increased by grade level, from 35% of 9<sup>th</sup> graders to 56% of 12<sup>th</sup> graders.

Nearly one sixth (16%) of Rhode Island students were current smokers in 2005 (i.e., smoked cigarettes on one or more of the past 30 days). This was a significant decrease from 1997, 2001 and 2003 when the figures were 35%, 25%, and 19% respectively. Similar declines occurred among both male and female students, with 15% of males and 17% of females being current smokers in 2005, both down from 35% in 1997. Ninth graders had the lowest percentage of current smokers in 2005 (13%), compared to 16% to 18% among 10<sup>th</sup> to 12<sup>th</sup> graders.

The percentage of students who were frequent smokers (i.e., smoked 20+ days in past 30 days) changed little between 2003 and 2005 (9% and 8%, respectively), but declined significantly from 19% in 1997. Frequent smoking rates also declined significantly among males and females, although somewhat faster for males. In general, frequent smoking rates increased across grade levels from 5% among 9<sup>th</sup> graders to 12% among 12<sup>th</sup> graders.

#### *Smokeless Tobacco and Other Tobacco Use*

Just 2% of Rhode Island female students reported using chewing tobacco or snuff on one or more of the past 30 days in 2005, which was consistent with data from earlier years. In contrast, 7% of males reported smokeless tobacco use in 2005, which was down from 10% in 1997. In 2005, males were three times as likely to smoke cigar products as females, with rates of 19% and 6%, respectively. The percentage of students using some type of tobacco product over the previous 30 days continued a significant downward trend from 29% in 2001 to 20% in 2005.

#### *Age of Initiation, Use on School Property, Access to Tobacco Products, and Quitting Smoking*

In 2005, 13% of Rhode Island students reported having their first cigarette before age 13. This was a continuation of a major downward trend starting in 1997 with a high of 24%. Rates were similar between male and female students and did not vary significantly by grade level.

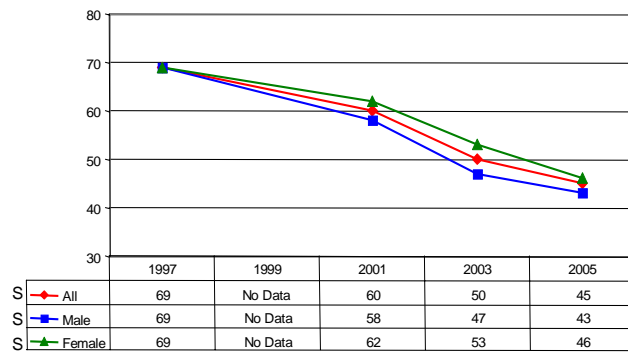
Only 8% of Rhode Island students in 2005 had smoked cigarettes on school property during the previous 30 days, down significantly from 20% in 1997, with similar rates and trends experienced by males and females. Among current smokers under age 18, 22% usually bought their cigarettes in a store or gas station in the past 30 days in 2005, down from 29% in 2001. This decrease was due entirely to a significant decline in the rate for males from 39% in 1997 to 22% in 2005. Among current smokers, 58% of female students tried to quit smoking during the past 12 months, compared to 44% of males.

# Tobacco Use

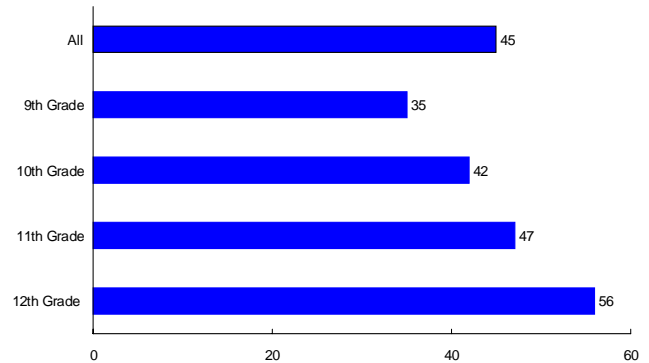
## Risk Behavior: Cigarette Smoking

**Rationale:** Tobacco use is considered the chief preventable cause of death in the United States with 18% of all deaths attributable to tobacco use. Cigarette smoking increases risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas and cervix. If current patterns of smoking behavior persist, an estimated 6.4 million U.S. persons who were under the age of 18 in 2000 could die prematurely from smoking-related illnesses.

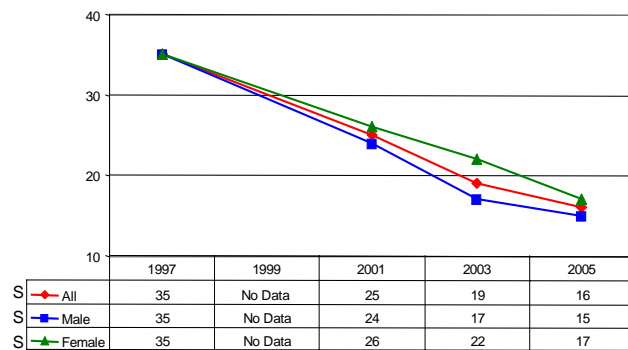
**Percentage of RI high school students who ever tried cigarette smoking, even one or two puffs - YRBS**



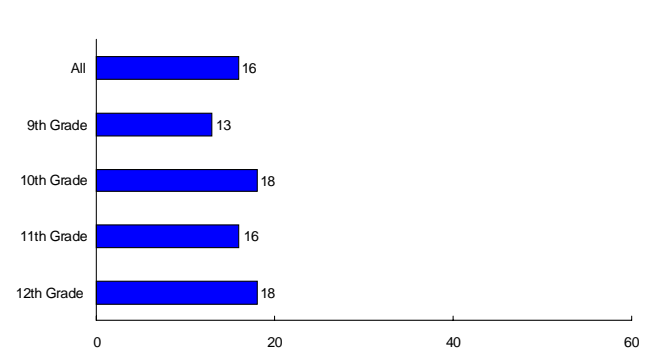
**Percentage of RI high school students who ever tried cigarette smoking, even one or two puffs - 2005 YRBS**



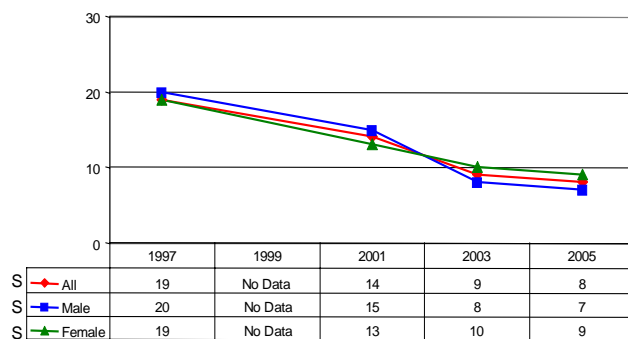
**Current Smokers**  
**Percentage of RI high school students who smoked cigarettes on one or more of the past 30 days - YRBS**



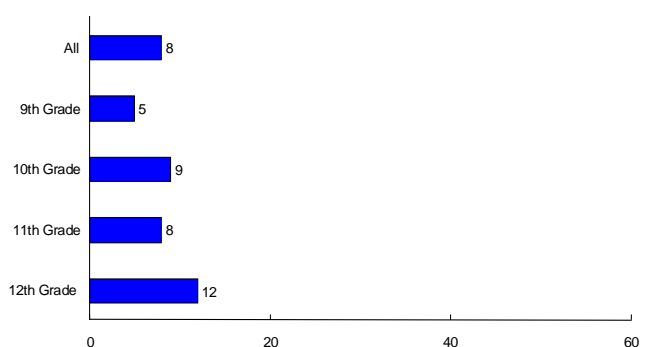
**Current Smokers**  
**Percentage of RI high school students who smoked cigarettes on one or more of the past 30 days - 2005 YRBS**



**Frequent Smokers**  
**Percentage of RI high school students who smoked cigarettes on 20 or more of the past 30 days - YRBS**



**Frequent Smokers**  
**Percentage of RI high school students who smoked cigarettes on 20 or more of the past 30 days - 2005 YRBS**



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)

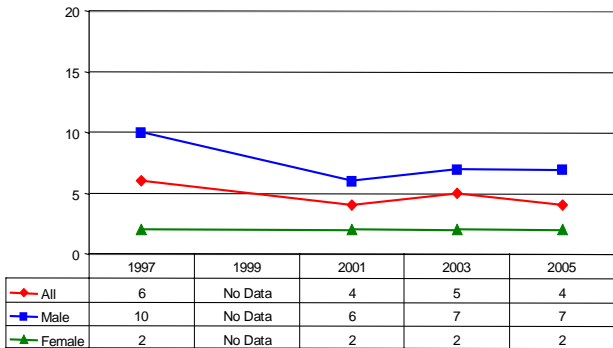
2005 Rhode Island Youth Risk Behavior Survey (n=2362)

# Tobacco Use

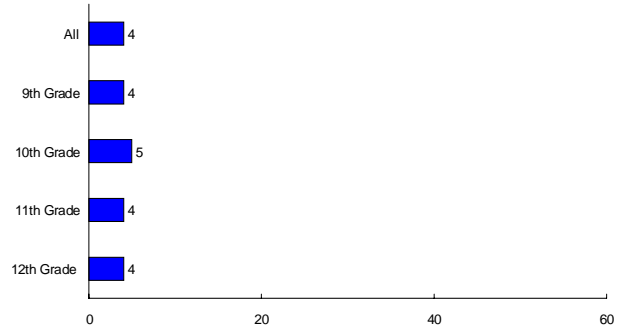
## Risk Behavior: Smokeless Tobacco and Other Tobacco Use

**Rationale:** Smokeless tobacco use primarily begins in adolescence, with an average age of initiation of 16.7 years in the United States. Approximately 75% of oral cavity and pharyngeal cancers are attributed to the use of smoked and smokeless tobacco. Use of smokeless tobacco also causes gum recession and an increased risk of heart disease and stroke. The overall risk of oral and pharyngeal cancer is 7 to 10 times higher among cigar smokers compared to those who never smoked. Additionally, cigar smoking can cause lung cancer, coronary heart disease, and chronic obstructive pulmonary disease.

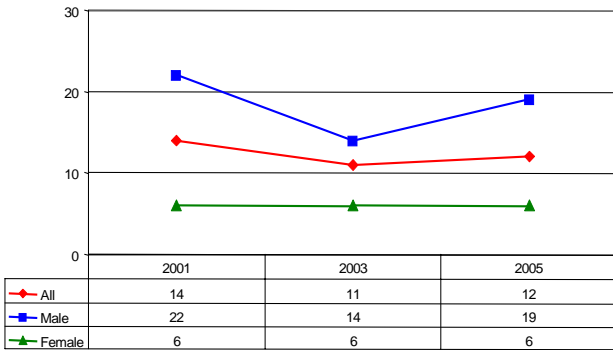
Percentage of RI high school students who used chewing tobacco, snuff or dip on one or more of the past 30 days - YRBS



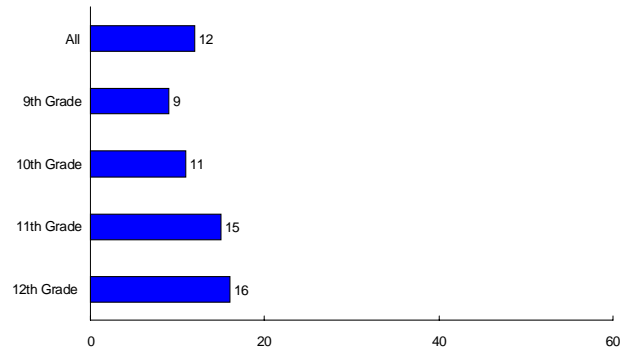
Percentage of RI high school students who used chewing tobacco, snuff or dip on one or more of the past 30 days - 2005 YRBS



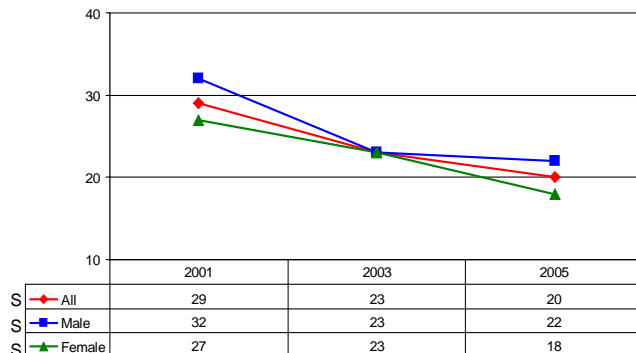
Percentage of RI high school students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days - YRBS



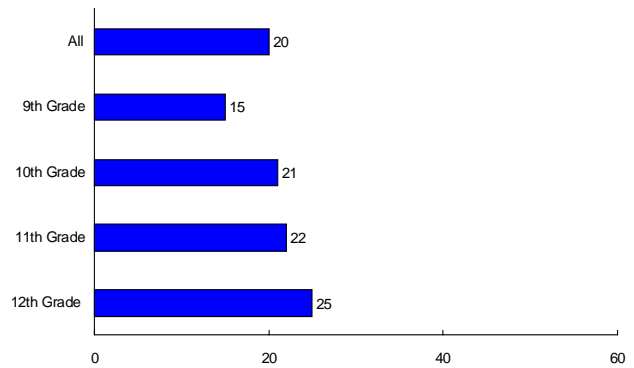
Percentage of RI high school students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days - 2005 YRBS



Percentage of RI high school students who used any tobacco on one or more of the past 30 days\* - YRBS



Percentage of RI high school students who used any tobacco on one or more of the past 30 days\* - 2005 YRBS



\* Smoked cigarettes or cigars or used chewing tobacco, snuff or dip on 1+ of the 30 days preceding the survey

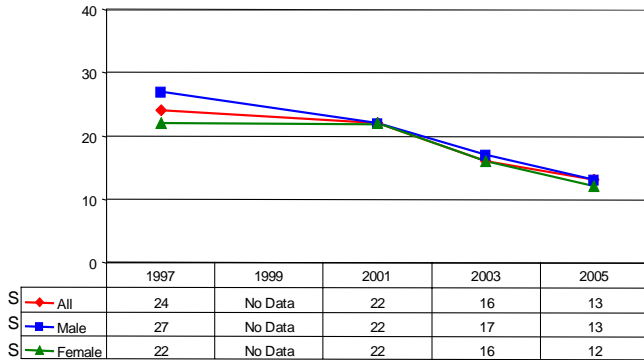
\* Smoked cigarettes or cigars or used chewing tobacco, snuff or dip on 1+ of the 30 days preceding the survey

# Tobacco Use

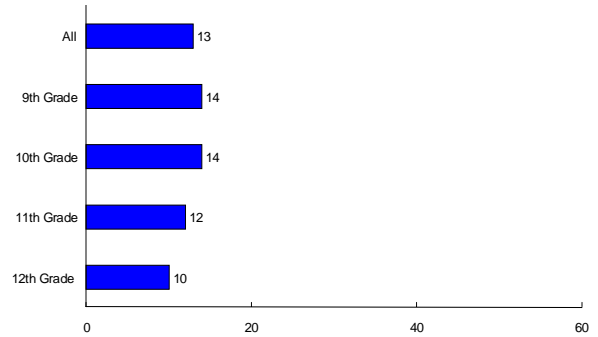
**Risk Behavior:** Age of Initiation, Use on School Property, Access to Tobacco Products, and Quitting Smoking

**Rationale:** The age when young people first start using alcohol, tobacco, and illicit drugs is a predictor of later alcohol and drug problems, especially if use begins before age 15. Approximately 46% of school districts in the United States prohibit tobacco use by students, staff, and visitors in buildings, on all school property, in school vehicles, and during school events on or off campus.

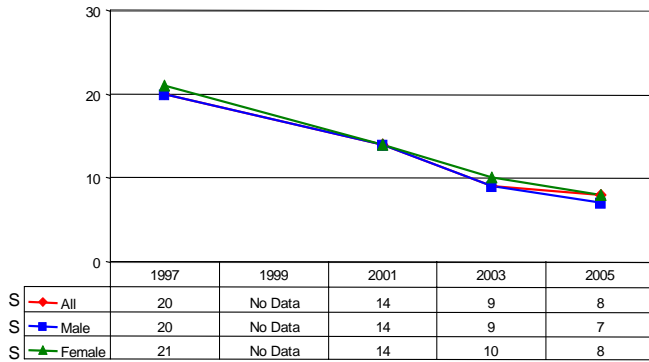
**Percentage of RI high school students who smoked a whole cigarette for the first time before age 13 - YRBS**



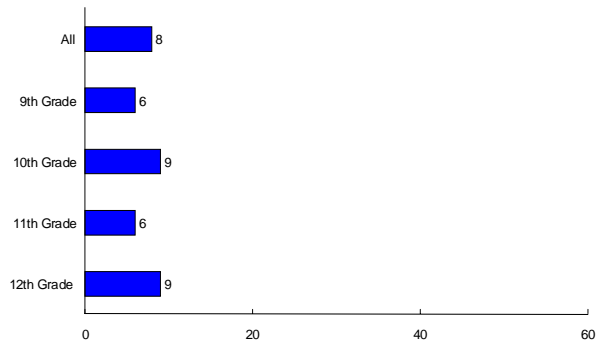
**Percentage of RI high school students who smoked a whole cigarette for the first time before age 13 - 2005 YRBS**



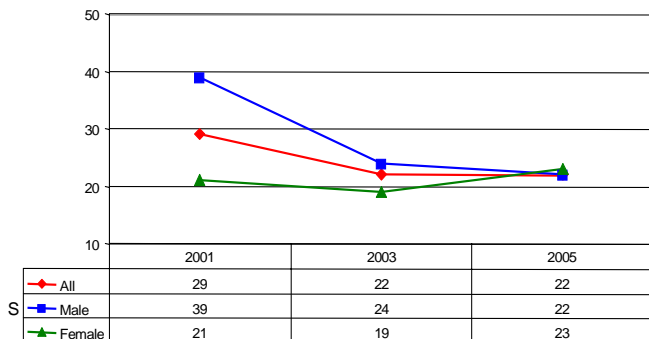
**Percentage of RI high school students who smoked cigarettes on school property on one or more of the past 30 days - YRBS**



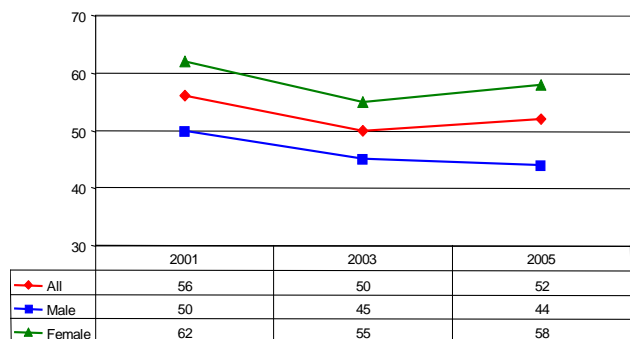
**Percentage of RI high school students who smoked cigarettes on school property on one or more of the past 30 days - 2005 YRBS**



**Percentage of RI high school students less than 18 years of age who are current smokers and usually purchased cigarettes at a store or gas station during the past 30 days - YRBS**



**Percentage of RI high school students who are current smokers and have tried to quit smoking during the past 12 months - YRBS**





# Violence Related Behaviors 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/yrebs.php>.*

## ***KEY FINDINGS***

### ***Weapon Carrying***

The percentage of all high school students who carried a weapon dropped significantly from 18% in 1997 to 12% in 2005, as did the percentage for males alone from 28% to 20%. The rate for females carrying weapons varied up and down between 8% and 3% from 1997 to 2005, but appeared to decline overall. Females were consistently much less likely than males to carry weapons. There were no major differences in weapon carrying by grade level in 2005.

### ***Physical Fights***

Between 1997 and 2005, the percentage of high school students who were in a physical fight over the past year showed a significant decline (35% to 28%), with significant decreases as well for males and, especially, females. Males (37%) were almost twice as likely as females (20%) to be in a fight in 2005. There appeared to be a greater tendency for students in 9<sup>th</sup> and 10<sup>th</sup> grades to be involved in fighting than students in 11<sup>th</sup> and 12<sup>th</sup> grades in 2005. The percentage of students injured in a fight who were treated by a doctor or nurse remained stable at 5%-6% from 1997 to 2005. Males were much more likely than females to need treatment, with rates of 7% versus 2%, respectively, in 2005. Twelfth graders appeared more likely to need treatment than did younger students in 2005.

### ***Violence on School Property***

The rate of carrying a weapon on school property varied between 8%-5% from 1997 to 2005, but appeared to be declining. Similar trends existed for male and female high school students, but boys remained consistently much more likely than girls to bring a weapon to school, with rates of 7% and 2%, respectively, in 2005. Differences by grade level were negligible in 2005. The percentage of students threatened or injured with a weapon on school property was stable at 8%-9% from 1997 to 2005. Males were consistently twice as likely than females to have been threatened or injured, with rates of 11% and 6%, respectively, in 2005. Rates declined steadily across grades with younger students more likely than older ones to have been threatened or injured on school property in 2005.

The rate for physical fights on school property appeared to decline slightly from 14% to 11% between 1997 and 2005. There was a significant decline in the same period for males (19% to 15%), who were consistently about twice as likely than females to have been in a fight (15% versus 7%, respectively, in 2005). Younger students appeared more likely than older ones to have been in a fight in 2005. The percentage of students who did not go to school at least once in the past month because they felt unsafe was stable at 6% across years, except for an apparent spike in 2001 (10%). There seemed to be only slight differences by sex for 1997 to 2005 and by grade level in 2005.

### ***Sexual Violence***

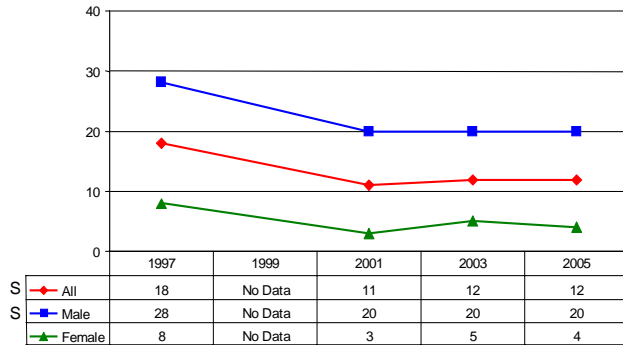
The percentage of high school students who reported being hit or hurt on purpose by their boy/girlfriend remained stable (8%-10%) from 2001 to 2005, as did the rate for students being forced to have sexual intercourse (6%-8%). Males were consistently more likely than females to have been hit or hurt, whereas rates by sex were similar for forced sexual intercourse across surveys. Ninth graders seemed less likely to be hit or hurt in 2005, whereas rates for forced sexual intercourse were relatively stable across grades at 5%-7% in 2005.

# Violence Related Behaviors

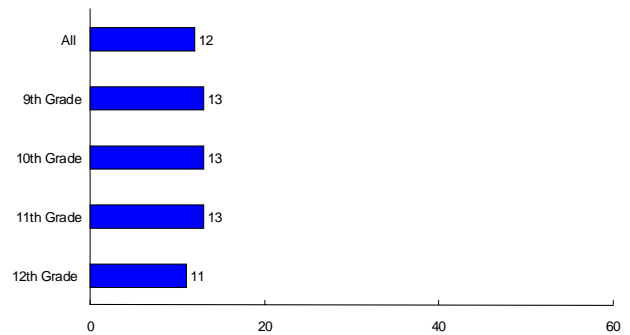
## Risk Behavior: Weapon Carrying

**Rationale:** Approximately nine out of ten homicide victims in the United States are killed with a weapon such as a gun, knife or club. Homicide is the second leading cause of death among all youth aged 15 to 19 years (9.5 per 100,000) and is the leading cause of death among black youth aged 15 to 19 years (33.2 per 100,000).

**Percentage of RI high school students who carried a weapon such as a gun, knife or club on one or more of the past 30 days - YRBS**



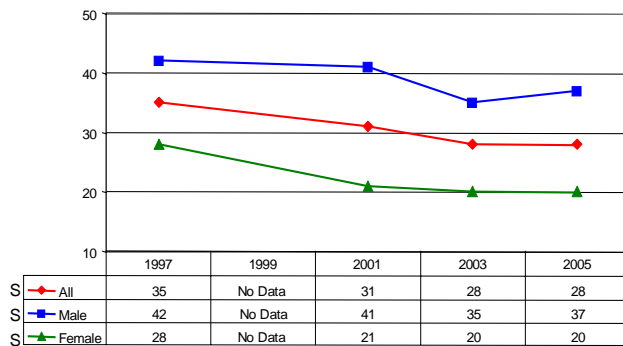
**Percentage of RI high school students who carried a weapon such as a gun, knife or club on one or more of the past 30 days - 2005 YRBS**



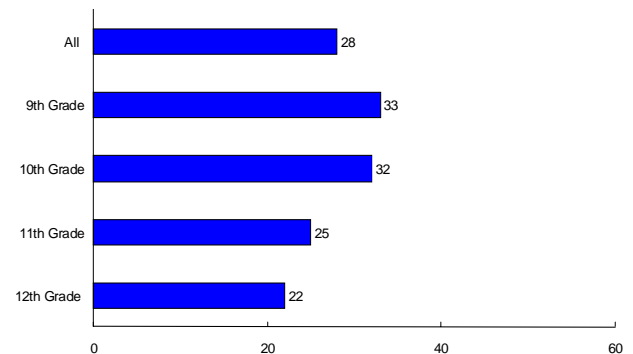
## Risk Behavior: Physical Fights

**Rationale:** Physical fighting is an antecedent for many fatal and nonfatal injuries. In 2005, 36% of high school students in the United States reported that they had been in a physical fight anywhere.

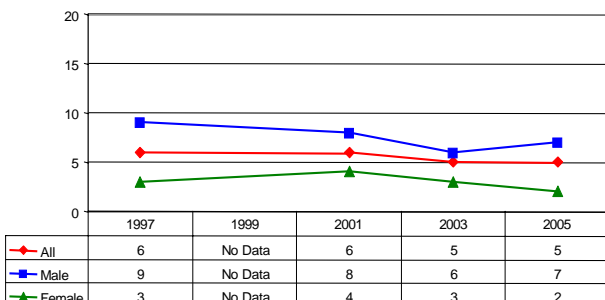
**Percentage of RI high school students who were in a physical fight one or more times during the past 12 months - YRBS**



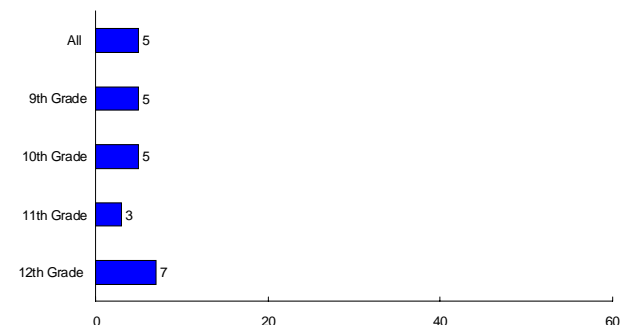
**Percentage of RI high school students who were in a physical fight one or more times during the past 12 months - 2005 YRBS**



**Percentage of RI high school students who were injured in a physical fight one or more times during the past 12 months and had to be treated by a doctor or a nurse - YRBS**



**Percentage of RI high school students who were injured in a physical fight one or more times during the past 12 months and had to be treated by a doctor or a nurse - 2005 YRBS**



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)

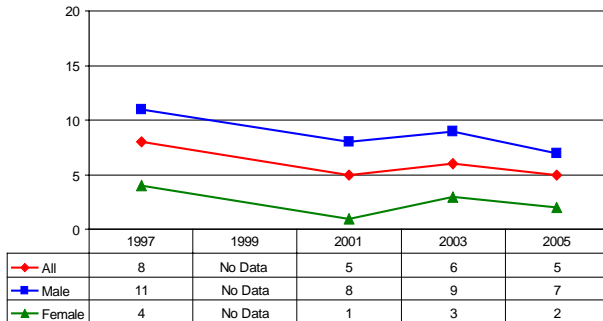
2005 Rhode Island Youth Risk Behavior Survey (n=2362)

# Violence Related Behaviors

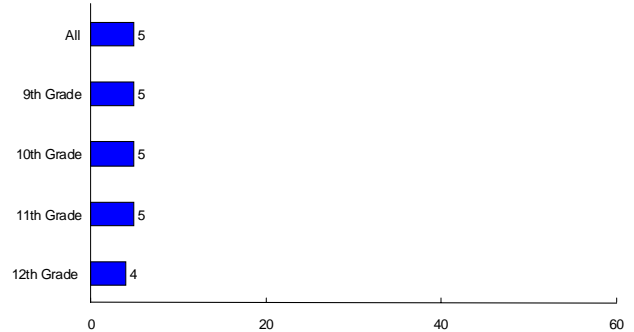
## Risk Behavior: Violence on School Property

**Rationale:** Nearly 100% of school districts in the United States have a policy prohibiting weapon possession or use by high school students on school property. Nationally, the rate for weapon carrying (e.g. a gun, knife, or club) among high school students on school property declined from 12% to 7% between 1993 and 2005. In 2005, 14% of high schools students nationwide had been in a physical fight on school property, and 6% of students did not go to school on at least one day in the past month because they felt unsafe at school or traveling to or from school.

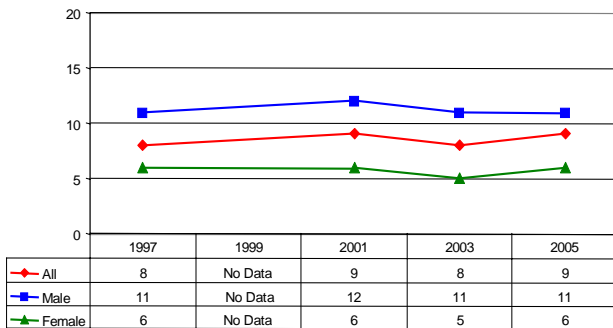
**Percentage of RI high school students who carried a weapon such as a gun, knife or club on school property on one or more of the past 30 days - YRBS**



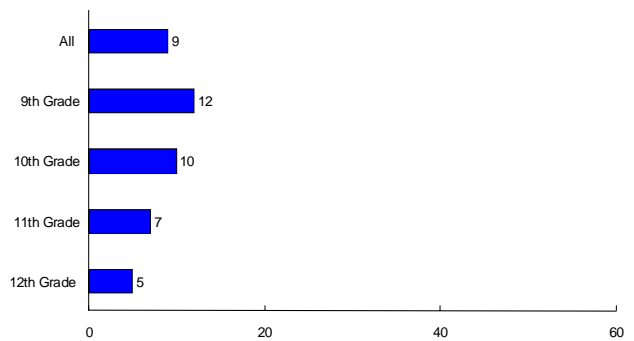
**Percentage of RI high school students who carried a weapon such as a gun, knife or club on school property on one or more of the past 30 days - 2005 YRBS**



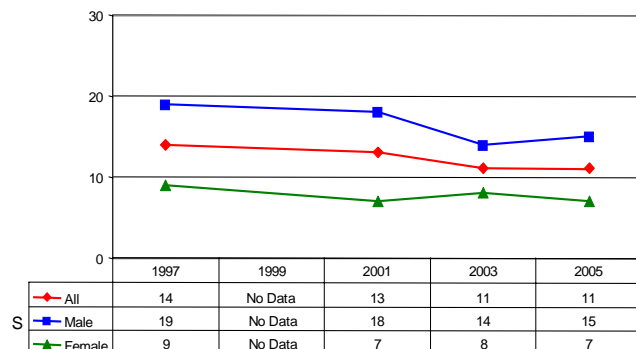
**Percentage of RI high school students who have been threatened or injured with a weapon on school property one or more times during the past 12 months - YRBS**



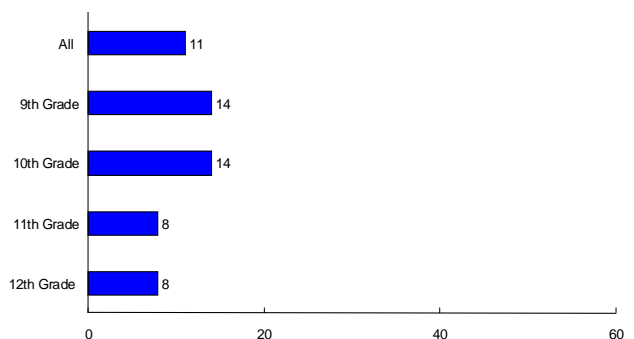
**Percentage of RI high school students who have been threatened or injured with a weapon on school property one or more times during the past 12 months - 2005 YRBS**



**Percentage of RI high school students who were in a physical fight on school property one or more times during the past 12 months - YRBS**



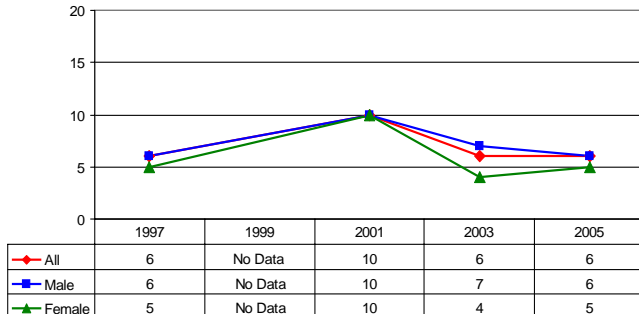
**Percentage of RI high school students who were in a physical fight on school property one or more times during the past 12 months - 2005 YRBS**



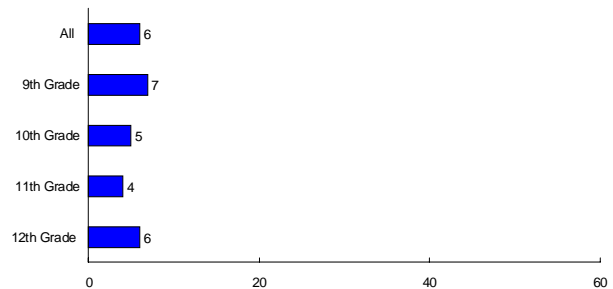
## Violence Related Behaviors

### Risk Behavior: Violence on School Property (Continued)

**Percentage of RI high school students who did not go to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school - YRBS**



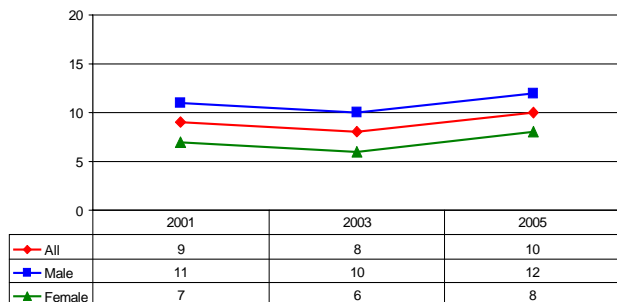
**Percentage of RI high school students who did not go to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school - 2005 YRBS**



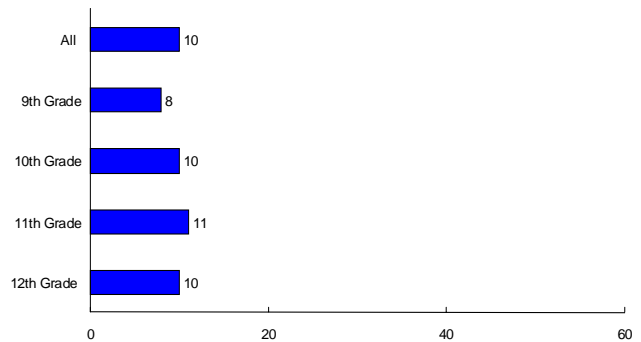
### Risk Behavior: Sexual Violence

**Rationale:** Intimate partner abuse victimization is associated with participation in other high risk behaviors. In 2005, 9% of high school students nationwide had been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend on one or more occasions in the past year. Forced sexual intercourse is associated with negative psychosocial and mental health consequences. In 2005, 8% of high school students nationwide had ever been physically forced to have sexual intercourse when they did not want to.

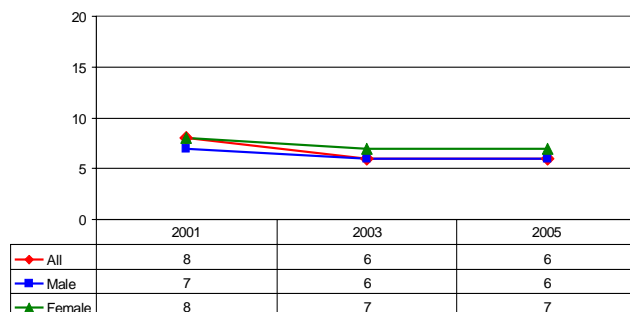
**Percentage of RI high school students who were hit, slapped or physically hurt on purpose by their boyfriend or girlfriend during the past 12 months - YRBS**



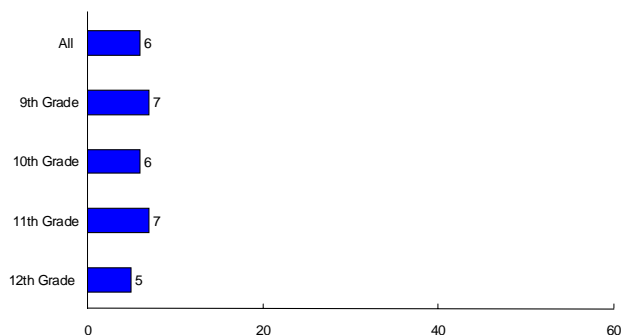
**Percentage of RI high school students who were hit, slapped or physically hurt on purpose by their boyfriend or girlfriend during the past 12 months - 2005 YRBS**



**Percentage of RI high school students who have ever been physically forced to have sexual intercourse when they did not want to - YRBS**



**Percentage of RI high school students who have ever been physically forced to have sexual intercourse when they did not want to - 2005 YRBS**





# Personal Safety, Depression, and Attempted Suicide 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**

### ***Lack of Helmet Use***

In 1997, 91% of Rhode Island high school students never or rarely wore a helmet when riding a bike. Although there was a significant decrease in percentages among males and females in subsequent years, the absolute rates remained very high at 86% of males and 78% of females never or rarely wearing a helmet in 2005. There was little difference by grade in 2005, except that 9<sup>th</sup> graders appeared more likely to use a helmet than did older students.

### ***Lack of Motor Vehicle Seat Belt Use***

The percentage of high school students never or rarely wearing a seat belt when riding in a car driven by someone else showed a significant and steady decline from 33% in 1997 to 13% in 2005. While there were significant decreases among both male and female students, males were consistently less likely than females to wear a seat belt. In 2005, the rate of never or rarely wearing a seat belt was 16% for males and 9% for females. Usage was similar across grades in 2005, although 11<sup>th</sup> graders appeared more likely to use seatbelts than other students.

### ***Alcohol Use and Driving***

Rates of riding in a vehicle driven by someone who had been drinking alcohol decreased significantly between 1997 and 2005 from 36% to 29% among high school students. The rate fell for both sexes, but males remained slightly more likely than females in most years to ride with such a driver. In 2005, older students (11<sup>th</sup>/12<sup>th</sup> grade) appeared somewhat more likely than younger students to engage in this behavior. Regarding students who drove a car after drinking, there was a significant decrease in rates over time, attributable primarily to females. The rate among females declined from 12% in 1997 to 7% in 2005, compared to a relatively stable rate among males of 17% to 15%.

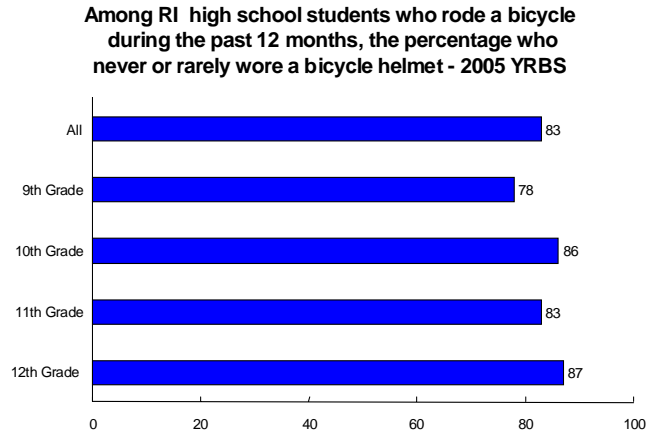
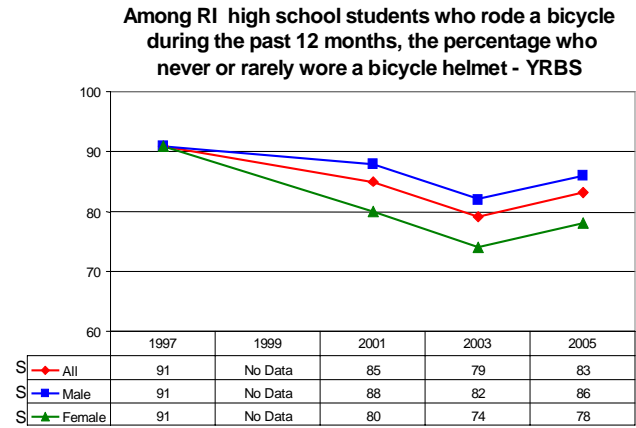
### ***Suicidal Thoughts and Attempts***

The percentage of high school students who felt sad and hopeless almost every day for two weeks or more during the past year was stable at 24% - 26% for all years. In 2005, females (34%) were twice as likely as males (17%) to report these feelings. There were only minor differences by grade level. The percentage of students who seriously considered attempting suicide during the past 12 months dropped significantly from 24% in 1997 to 14% in 2005. More females seriously considered suicide than males in all survey periods, with rates of 17% for females and 11% for males in 2005. The percentage of students who made a plan to attempt suicide also decreased significantly from 17% in 1997 to 11% in 2005. Females were more likely than males to make a plan (13% vs. 9%) in 2005. The percentage of students who actually attempted suicide was stable at 8% to 10% between 1997 and 2005, with females being 1½ to 2 times more likely than males to make an attempt. Only 3% of students had to seek medical help for injuries as a result of an attempted suicide in 2005, a rate virtually unchanged since 1997. With the exception of injuries, rates for the suicide related data appeared to decrease somewhat by grade level in 2005.

# Personal Safety, Depression, and Attempted Suicide

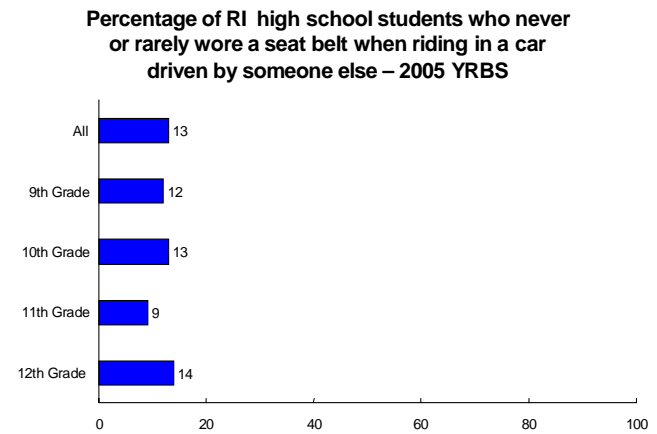
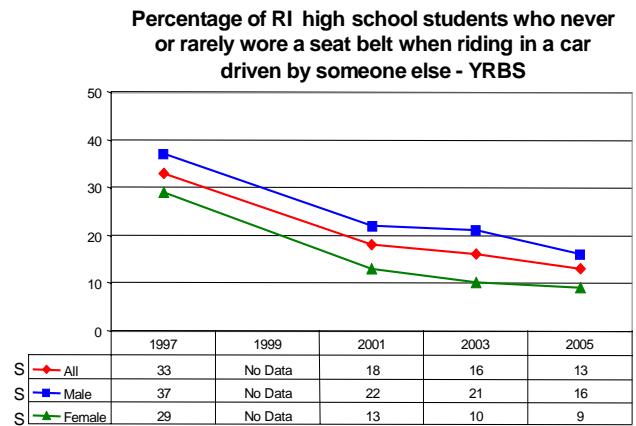
## Risk Behavior: Lack of Helmet Use

**Rationale:** In 2000 – 2001, bicycle activities were the third leading type of sports and recreation-related activities in the United States in which 15-19 year old males were injured and treated at an emergency department. Head injury is the leading cause of death in bicycle crashes, and helmet use protects against head injury. Estimates indicate bicycle helmets might prevent approximately 56% of bicycle related deaths, 65-88% of bicycle-related brain injuries, and 65% of serious injuries to the upper and middle regions of the face (i.e., facial fractures and lacerations seen in the emergency department).



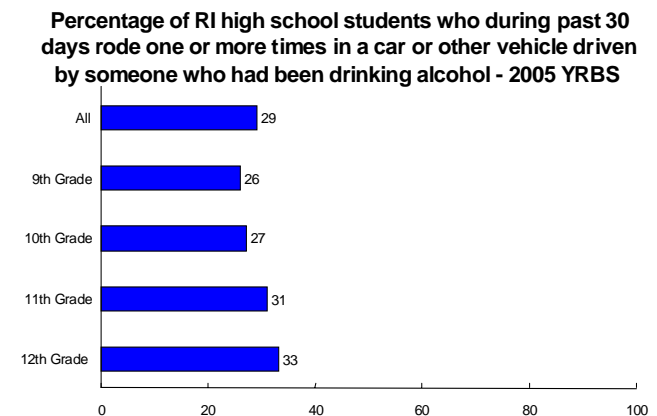
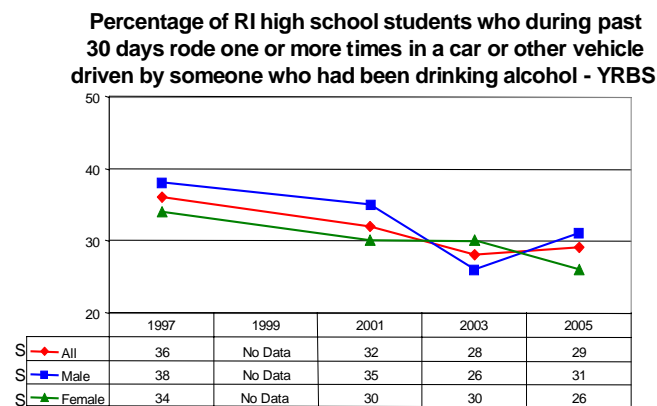
## Risk Behavior: Lack of Motor Vehicle Seatbelt Use

**Rationale:** Proper use of lap and shoulder belts reduces the risk of fatal injury to front-seat passengers by 45% and the risk of moderate-to-critical injury by 50%.



## Risk Behavior: Alcohol Use and Driving

**Rationale:** According to national figures for 2000, 5% of 15-20 year old drivers who were involved in crashes that resulted in injuries had been drinking alcohol. In addition, 22% of 15-20 year old drivers involved in fatal crashes had been drinking alcohol. Alcohol use is associated with 20% of fatalities among those less than 15 years old in the United States.



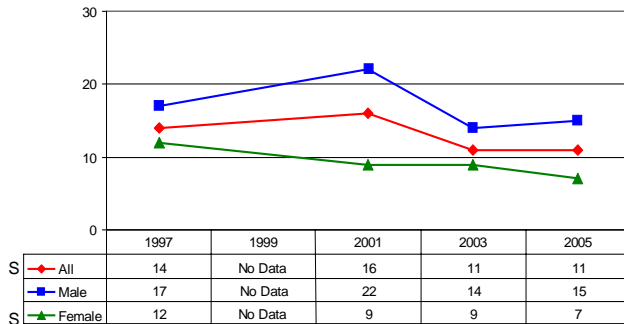
Note: An "S" next to the line graph legend box denotes a statistically significant linear change.

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)

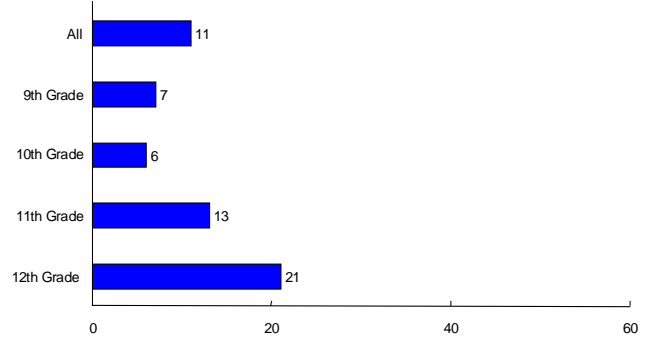
# Personal Safety, Depression, and Attempted Suicide

## Risk Behavior: Alcohol Use and Driving (Continued)

Percentage of RI high school students who during the past 30 days drove a car or other vehicle one or more times when they had been drinking alcohol - YRBS



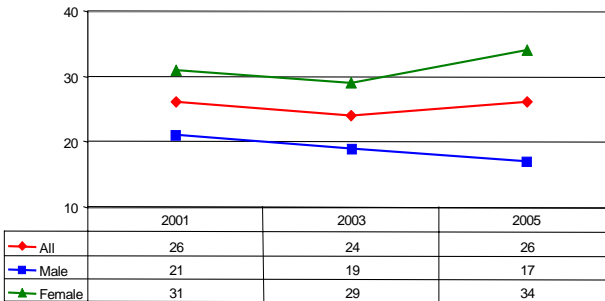
Percentage of RI high school students who during the past 30 days drove a car or other vehicle one or more times when they had been drinking alcohol - 2005 YRBS



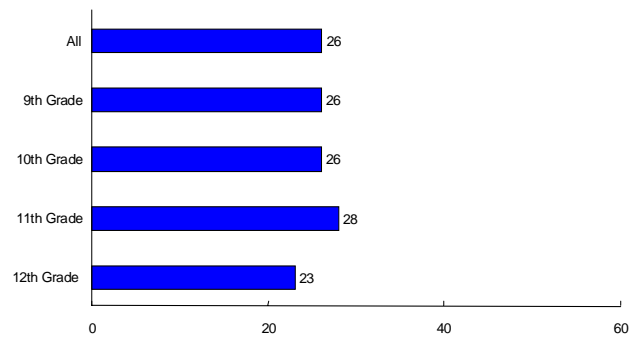
## Risk Behavior: Suicidal Thoughts and Attempts

**Rationale:** Suicide is the third leading cause of death among youth aged 15-19 nationally. The suicide rate for persons aged 15-19 was 7.9 per 100,000 in 2001 down from a high of 10.9 per 100,000 in 1994.

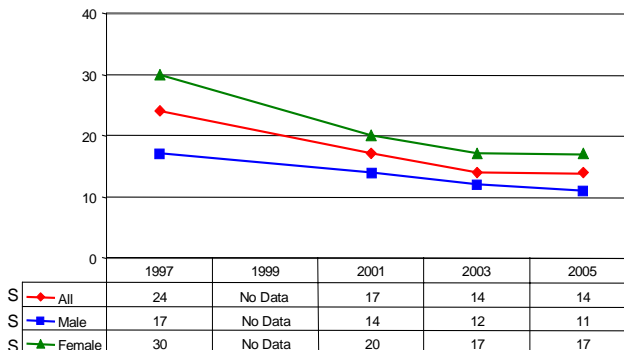
Percentage of RI high school students who during the past 12 months ever felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities - YRBS



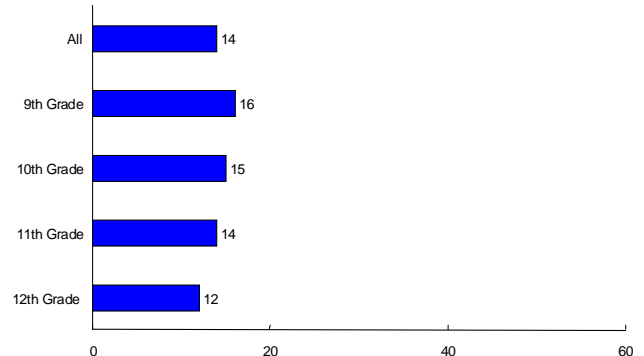
Percentage of RI high school students who during the past 12 months ever felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities - 2005 YRBS



Percentage of RI high school students who seriously considered attempting suicide during the past 12 months - YRBS



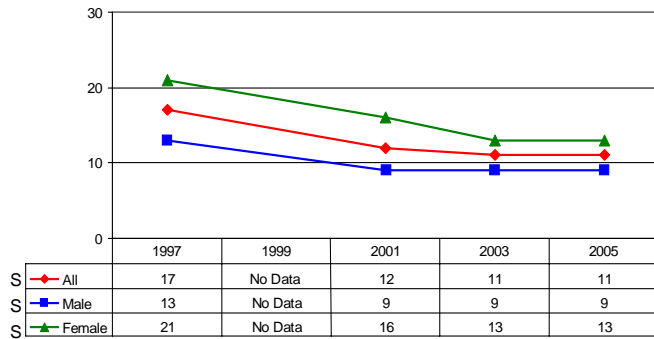
Percentage of RI high school students who seriously considered attempting suicide during the past 12 months - 2005 YRBS



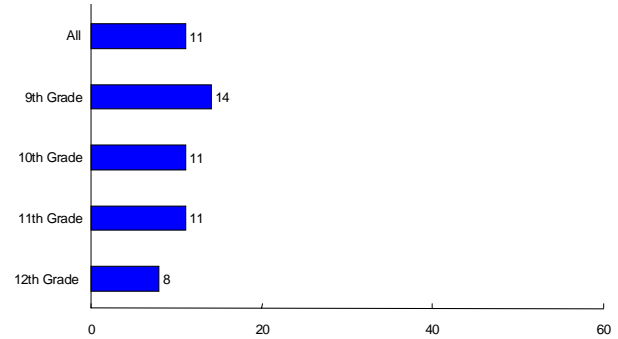
# Personal Safety, Depression, and Attempted Suicide

## Risk Behavior: Suicidal Thoughts and Attempts (Continued)

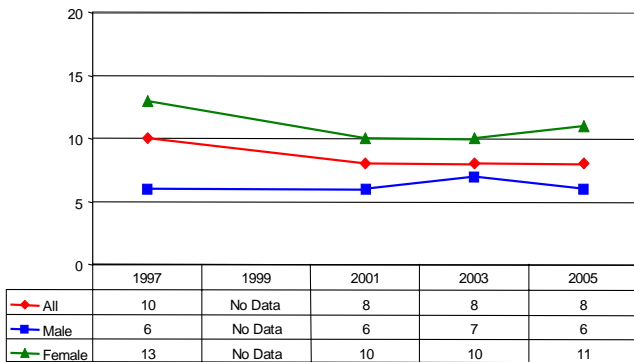
Percentage of RI high school students who made a plan about how they would attempt suicide during the past 12 months - YRBS



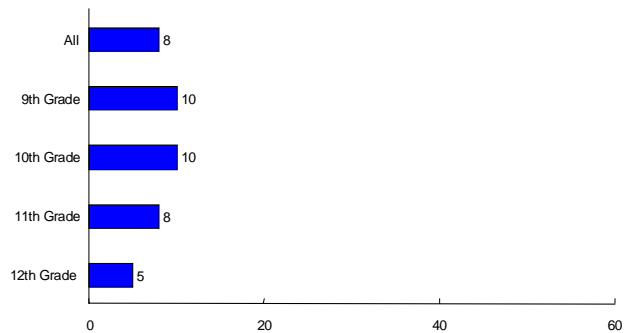
Percentage of RI high school students who made a plan about how they would attempt suicide during the past 12 months - 2005 YRBS



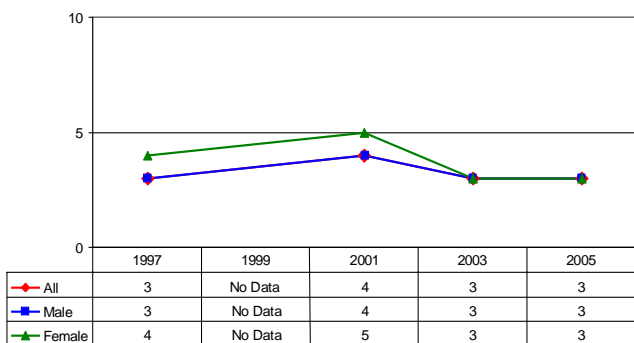
Percentage of RI high school students who actually attempted suicide one or more times during the past 12 months - YRBS



Percentage of RI high school students who actually attempted suicide one or more times during the past 12 months - 2005 YRBS



Percentage of RI high school students whose suicide attempt during the past 12 months resulted in an injury, poisoning, or overdose that had to be treated by a doctor or a nurse - YRBS



Percentage of RI high school students whose suicide attempt during the past 12 months resulted in an injury, poisoning, or overdose that had to be treated by a doctor or a nurse - 2005 YRBS

