



Second-hand Smoke among Florida Public Middle and High School Students, 2004

Introduction

The Florida Youth Tobacco Survey (FYTS) is a statewide school-based confidential survey of Florida public middle and high school students. The FYTS tracks indicators of tobacco use and exposure to second-hand smoke among these students and provides data for monitoring and evaluating tobacco use among youth in the Florida Tobacco Prevention and Control Program.

The FYTS is based on a two-stage cluster probability sample design. First, a random sample of public middle schools and high schools is selected for participation in the survey. Then, within each selected school, a random sample of classrooms is selected, and all students in that class are invited to participate in the survey. The responses of the survey participants are calculated to reflect the prevalence of tobacco usage in Florida public middle and high school students.

The first FYTS was administered in 1998. Since then, the FYTS has been conducted annually by the Florida Department of Health. The FYTS became a part of the Florida Youth Survey (FYS) in 2000, which now includes the Communities That Care and Youth Risk Behavior surveys. The FYTS has been supported by many agencies, including the Florida Department of Education, school districts throughout the state, and the Office on

Smoking and Health at the Centers for Disease Control and Prevention (CDC).

The 2004 FYTS was conducted in March and April. Participants in the 2004 FYTS included a sample of 7,364 students attending 80 middle schools (grades six to eight) and 7,023 students attending 78 high schools (grades 9-12) across the state. Overall, response rates were 80.5 percent for the middle school survey and 77.8 percent for the high school survey based on a 98.8 percent middle school response rate, 100.0 percent high school response rate, 81.5 percent middle school student response rates, and 77.8 percent high school student response rate.

Data presented in this report are statewide estimates of prevalence. These estimates are computed based on the survey results, probability of survey respondents being selected for the survey, and demographics of Florida middle school and high school students. Tests of statistical significance were conducted on differences between prevalence estimates. Tests that result in a p-value (probability value) of less than 0.05 are considered statistically significant. Because the FYTS is a random survey and all estimates of prevalence are subject to random sample errors, 95 percent confidence intervals are presented with each prevalence in the detailed tables at the end of this report.

This report focuses on second-hand smoke (SHS).

Executive Summary

Over half (57.5 percent) of middle school students and more than two-thirds (67.1 percent) of high school students were exposed to second-hand smoke (SHS) in 2004. The prevalence of exposure to SHS decreased by 7 percent for both middle and high school students from 1998 to 2004. Parents, relatives and friends were the major sources of SHS exposure to students. Private places, such as homes and cars, were major locations where students were exposed to SHS. Public areas, such as schools, work places and restaurants, accounted for 8.2 percent and 14.4 percent of locations where middle school students and high school students were exposed to SHS, respectively. Approximately one-sixth of students reported that smoking was allowed inside their homes in 2004. The prevalence of allowing smoking inside the home decreased by 36 percent from 1999 to 2004. Approximately one-third students reported someone else smoked in their homes in 2004. The prevalence of reporting someone else smoked in homes decreased by 14.7 percent and 11.9 percent among middle school students and high school students, respectively, during 1998-2004.

Exposure to Second-hand Smoke

Figure 1: Percentage of Florida public middle school students who were exposed to second-hand smoke in a room or a car during the previous seven days, by sex, race/ethnicity, and grade in 2004

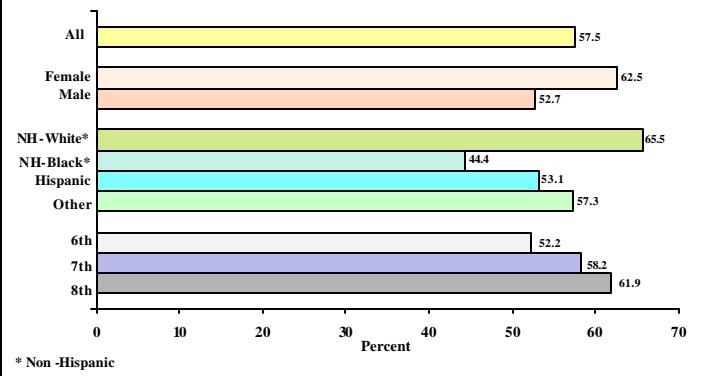


Figure 2: Percentage of Florida public high school students who were exposed to second-hand smoke in a room or a car during the previous seven days, by sex, race/ethnicity, and grade in 2004

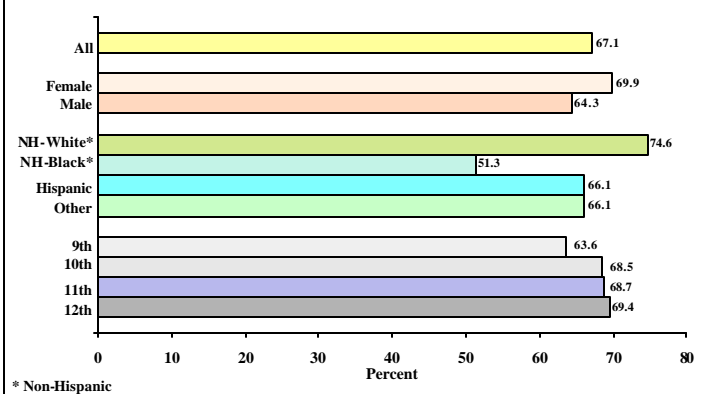
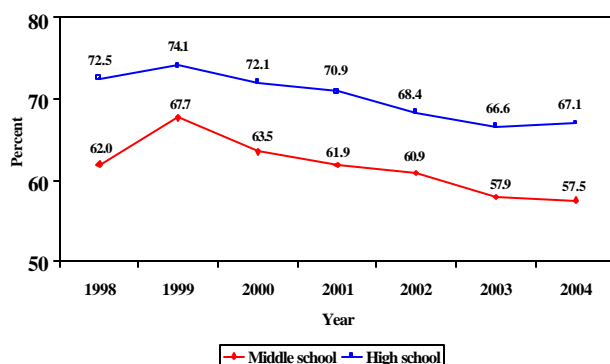


Figure 3: Percentage of Florida public middle and high school students who were exposed to second-hand smoke in a room or a car during the previous seven days, 1998-2004



Second-hand Smoke: Students who were exposed to smoke by somebody else in a room or car during the past seven days prior to the survey.

Middle School

More than half (57.5 percent) of middle school students reported being exposed to SHS. The prevalence of exposure to SHS in middle school students was:

- higher among female students (62.5 percent) than among male students (52.7 percent)
- the highest among non-Hispanic White students (65.5 percent)
- the lowest non-Hispanic Black students (44.4 percent)
- higher among students in higher grade levels than among students in lower grade levels

See Figure 1 and Table 1.

High School

More than two thirds (67.1 percent) of high school students reported being exposed to SHS. The prevalence of exposure to SHS in high school students was:

- higher among female students (69.9 percent) than among male students (64.3 percent)
- the highest among non-Hispanic White students (74.6 percent)
- the lowest among non-Hispanic Black students (51.3 percent)
- not statistically different among grade levels

See Figure 2 and Table 1.

Trends 1998-2004

The prevalence of exposure to SHS decreased by 7.3 percent among middle school students and by 7.4 percent among high school students during 1998-2004. The prevalence increased from 1998 to 1999, then decreased from 1999 to 2004 among both middle and high school students. The prevalence of being exposed to SHS was higher among high school students than among middle school students in every year during this time period. See Figure 3.

Sources of Second-hand Smoke

FYTS Survey Question: *During the past seven days, when you were around someone who was smoking indoors, who was smoking?*

In most cases, students were exposed to SHS from somebody with whom they have a close relationship. Parents, relatives and friends appeared to be the major source of SHS exposure for both middle and high school students.

Middle School

SHS from family members (either parents or relatives) accounted for more than two thirds (69.4 percent) of SHS to which middle school students were exposed.

The major sources of SHS exposure for middle school students were:

- parents (44.1 percent)
- relatives (25.3 percent)
- friends (11.2 percent)
- strangers (18.3 percent)

See Figure 4.

High School

SHS exposure from friends was almost equally important as SHS exposure from parents for high school students. SHS exposure from relatives became a less important source among high school students than among middle school students. SHS exposure from coworkers became one of the major sources of SHS.

The major sources of SHS exposure for high school students were:

- parents (30.9 percent)
- relatives (17.9 percent)
- friends (28.1 percent)
- coworkers (6.1 percent)
- strangers (16.9 percent)

See Figure 5.

Figure 4: Percentage of Florida public middle school students who were exposed to second-hand smoke in the previous seven days, by person smoking in 2004

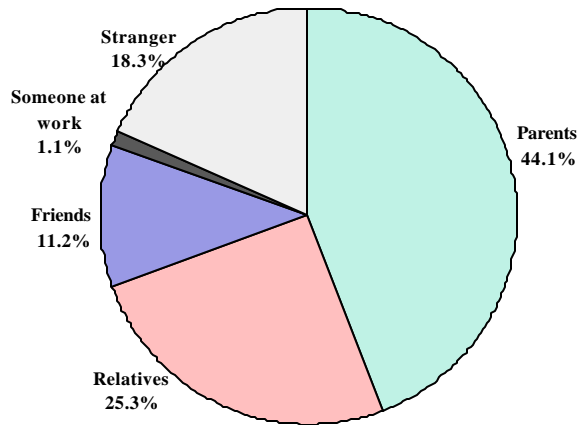
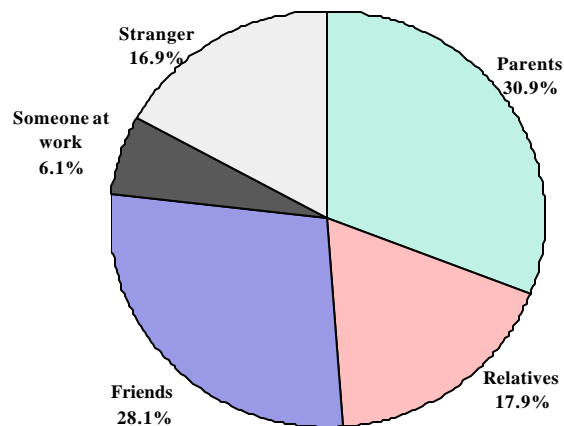
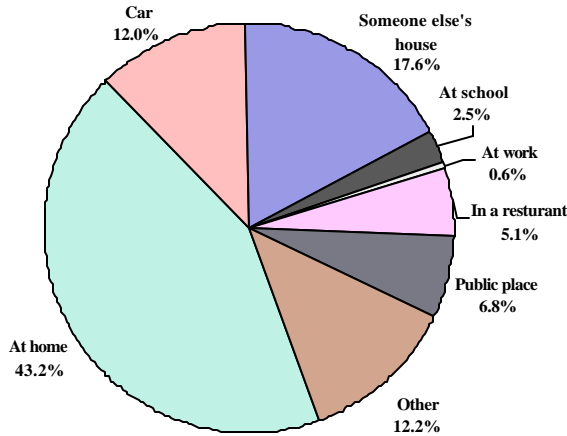


Figure 5: Percentage of Florida public high school students who were exposed to second-hand smoke in the previous seven days, by person smoking in 2004



Locations Where Students Were Exposed to Second-hand Smoke

Figure 6: Percentage of Florida public middle school students who were exposed to second-hand smoke in the previous seven days, by location in 2004



FYTS Survey Question: *During the past seven days, when you were around someone who was smoking indoors, were you usually at (in)...?*

Private places, such as homes and cars, were the major locations that students were exposed to SHS. Schools, restaurants and work places were also reported as locations where students were exposed to SHS.

Middle School

Private places accounted for 72.8 percent of locations of SHS for middle school students.

The major locations where middle school students were exposed to SHS were:

- Homes (43.2 percent)
- Someone else's houses (17.6 percent)
- Cars (12.0 percent)
- Public places, like a mall (6.8 percent)
- Restaurants (5.1 percent)
- Schools (2.5 percent)

See Figure 6.

High School

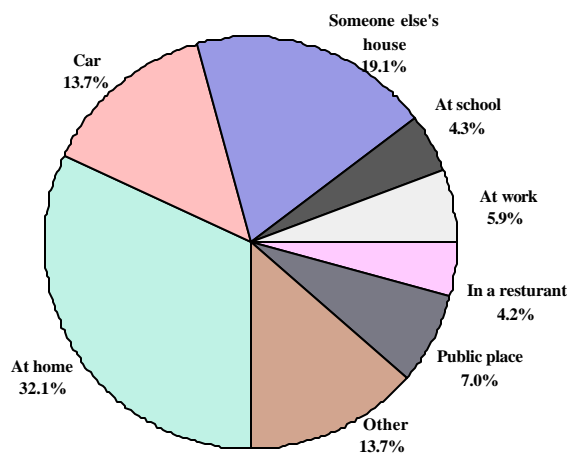
In addition to private places, the work place was a major location where high school students were exposed to SHS.

The major locations for exposure to SHS among high school students were:

- Homes (32.1 percent)
- Someone else's houses (19.1 percent)
- cars (13.7 percent)
- Public places like a mall (7.0 percent)
- Work places (5.9 percent)
- Schools (4.3 percent)
- Restaurants (4.2 percent)

See Figure 7.

Figure 7: Percentage of Florida public high school students who were exposed to second-hand smoke in the previous seven days, by location in 2004



Smoking Allowed at Home

FYTS Survey Question: *Is smoking allowed inside your home?*

Middle School

Over one in six (18.4 percent) middle school students reported that smoking was allowed inside their homes. There was no difference in reporting that smoking was allowable in the home between genders or among grade levels. More non-Hispanic White students (22.5 percent) than non-Hispanic Black students (14.8 percent) and Hispanic students (12.1 percent) reported that smoking was allowed inside their homes. See Figure 8 and Table 2.

High School

One in six (16.7 percent) high school students reported that smoking was allowed inside their homes. There was no difference in the prevalence between genders or among grade levels. More non-Hispanic White students (20.0 percent) than non-Hispanic Black students (11.3 percent) and Hispanic students (14.1 percent) reported that smoking was allowed inside their homes. See Figure 9 and Table 2.

Trends 1999-2004*

The prevalence of students reporting that smoking was allowed inside their homes has been decreasing among both middle and high school students since 1999. The prevalence decreased by 35.7 percent among middle school students and by 37.5 percent among high school students in 1999 through 2004. There was no difference in prevalence between middle school students and high school students during this time period. See Figure 10.

* This data were not available in 1998.

Figure 8: Percentage of Florida public middle school students who reported that smoking was allowed inside their homes, by sex, race/ethnicity, and grade in 2004

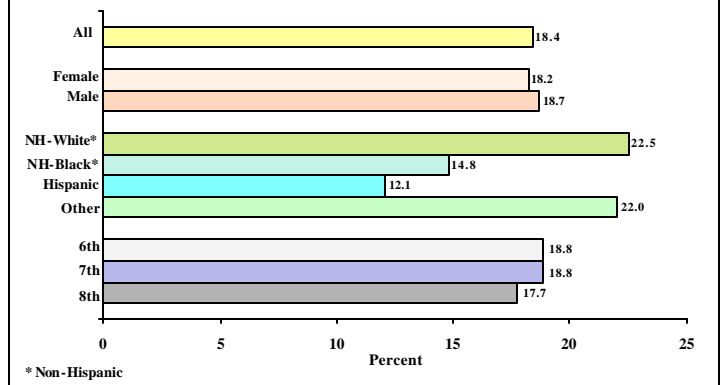


Figure 9: Percentage of Florida public high school students who reported that smoking was allowed inside their homes, by sex, race/ethnicity, and grade in 2004

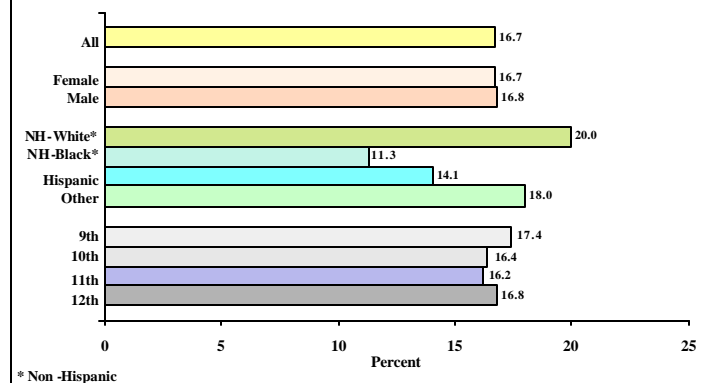
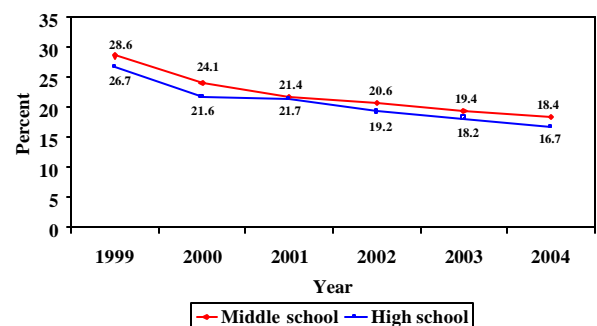
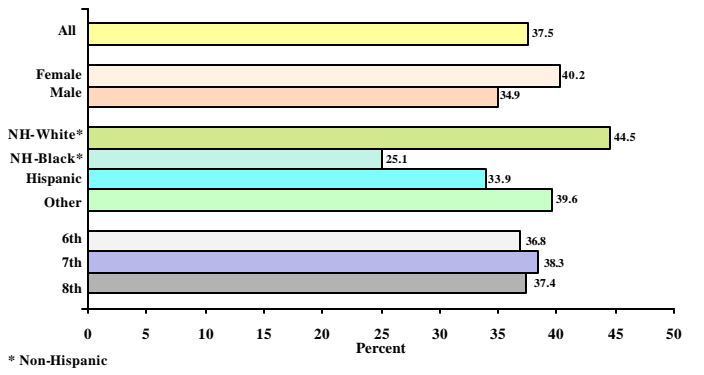


Figure 10: Percentage of Florida public middle and high school students who reported that smoking was allowed inside their homes, 1999-2004



Someone else Smoke Cigarettes in Home

Figure 11: Percentage of Florida public middle school students who reported that someone else smoked cigarettes in their homes, by sex, race/ethnicity, and grade in 2004



FYTS Survey Question: *Besides yourself, does anyone who lives in your home smoke cigarettes now?*

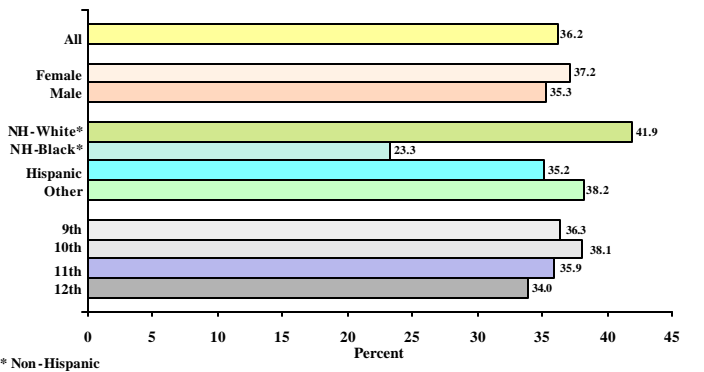
Middle School

Over one third (37.5 percent) of middle school students reported that someone living in their home smoked cigarettes. The prevalence of reporting someone else who lived in their home smoked cigarettes was:

- higher among female students (40.2 percent) than among male students (34.9 percent)
- the highest among non-Hispanic White students (44.5 percent)
- the lowest among non-Hispanic Black students (25.1 percent)

See Figure 11 and Table 3.

Figure 12: Percentage of Florida public high school students who reported that someone else smoked cigarettes in their homes, by sex, race/ethnicity, and grade in 2004



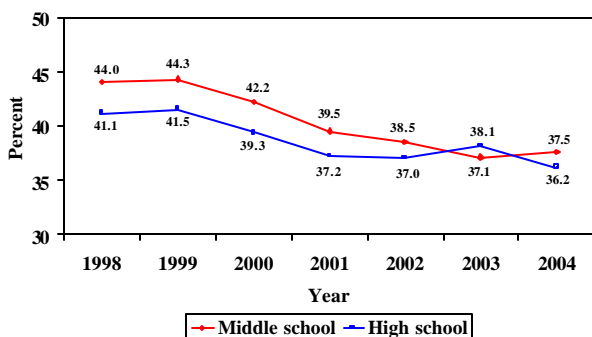
High School

Over one-third (36.2 percent) of high school students reported that someone living in their home smoked cigarettes. The prevalence of reporting someone else who lived in their home that smoked cigarettes was:

- the highest among non-Hispanic White students (41.9 percent)
- the lowest among non-Hispanic Black (23.3 percent)
- not statistically different between genders or among grade levels

See Figure 12 and Table 3.

Figure 13: Percentage of Florida public middle and high school students who reported that someone else smoked cigarettes in their homes, 1998-2004



Trends 1998-2004

The percentage of students who reported that someone else smoked cigarettes in their homes decreased by 14.7 percent and 11.9 percent from 1998 through 2004 among middle and high school students, respectively. The prevalence was higher among middle school students than among high school students in 1998-2000. See Figure 13.

Detailed Tables

Table 1. Percentage of Florida public middle and high school students who were exposed to second-hand smoke in a room or a car during the previous seven days, by gender, race/ethnicity, and grade, FYTS 2004

		Middle School Exposed to SHS			High School Exposed to SHS		
		%	95% CI*		%	95% CI*	
Gender	Female	62.5	60.1	64.9	69.9	67.5	72.2
	Male	52.7	50.4	55.1	64.3	61.9	66.7
Race/Ethnicity	non-Hispanic White	65.5	63.1	67.9	74.6	72.8	76.4
	non-Hispanic Black	44.4	41.2	47.6	51.3	48.2	54.3
	Hispanic	53.1	50.4	55.9	66.1	62.8	69.3
	Other	57.3	52.9	61.7	66.1	62.3	70.0
Grade (Middle/High)	6th/9th	52.2	49.0	55.5	63.6	60.8	66.3
	7th/10th	58.2	55.5	60.9	68.5	65.9	71.1
	8th/11th	61.9	59.4	64.4	68.7	65.4	72.1
	--/12th	.	.	.	69.4	65.3	73.4
Total		57.5	55.4	59.5	67.1	65.1	69.0

* 95 percent (%) confidence interval

Table 2. Percentage of Florida public middle and high school students who reported that smoking was allowed inside their homes, by gender, race/ethnicity, and grade, FYTS 2004

		Middle School Smoking Allowed in Home			High School Smoking Allowed in Home		
		%	95% CI*		%	95% CI*	
Gender	Female	18.2	16.6	19.8	16.7	15.1	18.3
	Male	18.7	17.0	20.4	16.8	15.3	18.3
Race/Ethnicity	non-Hispanic White	22.5	20.3	24.7	20.0	18.0	22.0
	non-Hispanic Black	14.8	12.0	17.5	11.3	9.4	13.1
	Hispanic	12.1	10.5	13.8	14.1	12.2	16.1
	Other	22.0	18.7	25.3	18.0	14.6	21.4
Grade (Middle/High)	6th/9th	18.8	16.6	21.0	17.4	15.2	19.5
	7th/10th	18.8	16.9	20.8	16.4	14.5	18.4
	8th/11th	17.7	16.0	19.4	16.2	14.1	18.2
	--/12th	.	.	.	16.8	14.3	19.2
Total		18.4	17.1	19.8	16.7	15.5	18.0

* 95 percent (%) confidence interval

Table 3. Percentage of Florida public middle and high school students who reported that someone else smoked cigarettes in their homes, by gender, race/ethnicity, and grade, FYTS 2004

		Middle School			High School		
		Someone else Smoked in Home			Someone else Smoked in Home		
		%	95% CI*		%	95% CI*	
Gender	Female	40.2	38.0	42.4	37.2	35.2	39.1
	Male	34.9	32.8	37.0	35.3	33.3	37.4
Race/Ethnicity	non-Hispanic White	44.5	41.8	47.3	41.9	39.9	43.9
	non-Hispanic Black	25.1	22.9	27.3	23.3	20.9	25.8
	Hispanic	33.9	31.5	36.2	35.2	32.6	37.8
	Other	39.6	35.9	43.3	38.2	34.0	42.4
Grade (Middle/High)	6th/9th	36.8	34.2	39.4	36.3	33.8	38.9
	7th/10th	38.3	36.0	40.6	38.1	35.3	40.9
	8th/11th	37.4	35.2	39.6	35.9	33.1	38.7
	--/12th	.	.	.	34.0	31.4	36.6
Total		37.5	35.8	39.2	36.2	34.5	37.9

* 95 percent (%) confidence interval

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