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MISSISSIPPI Tobacco Data

THE MISSISSIPPI YOUTH TOBACCO SURVEY

1998–2010

BACKGROUND

In 1998, the state of Mississippi approved a tobacco prevention pilot program that resulted in the formation of The Partnership for a Healthy Mississippi. The Partnership implemented most of its tobacco control programs by 1999, and at the conclusion of the pilot, approximately \$20 million annually was court ordered to go directly to The Partnership from the state's tobacco settlement. In addition to these funds, The Mississippi Department of Health received funds from Centers for Disease Control and Prevention through a cooperative agreement to implement and enhance tobacco prevention and cessation efforts.

In 2006, Governor Haley Barbour, the state Division of Medicaid, and the Health Care Trust Fund filed motions to vacate the December 2000 order and direct the \$20 million away from tobacco prevention and into the trust fund. This motion was successful.

As of June 1, 2006, counter-marketing campaigns were no longer airing, and the college program for the 18 to 24-year-old market ended. As of November 30, 2006, The Partnership ceased funding of cessation programs, including a statewide quitline and regional tobacco cessation treatment clinics, law enforcement program, and numerous statewide and after-school programs.

In 2007, the Mississippi Legislature called for the development, implementation, and funding of a comprehensive and statewide tobacco education, prevention, and cessation program that is consistent with the Best Practices for Tobacco Control Programs of the federal Centers for Disease Control and Prevention. The FY2008 allocated \$8 million for the Office of Tobacco Control, MSDH, to create a state tobacco prevention and cessation program. Funding at this level was sustained for FY2009 and FY2010.

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KEY OUTCOMES

Cigarette smoking among Mississippi youth has decreased substantially since statewide tobacco control programs were implemented in 1999.

Current smoking among public middle school students has decreased by 72% since 1998, leading to 16,699 fewer young smokers.

CURRENT SMOKING AMONG PUBLIC HIGH SCHOOL STUDENTS HAS DECREASED BY 35% SINCE 1998, LEADING TO 14,463 FEWER YOUNG SMOKERS.

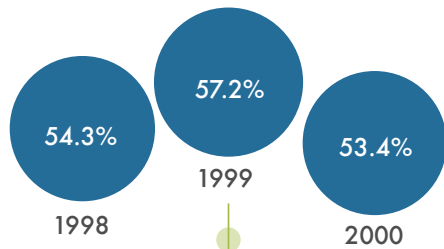
THE PREVALENCE OF HAVING EVER TRIED SMOKING HAS DECREASED BY 56% SINCE 1998, LEADING TO 34,070 FEWER MIDDLE SCHOOL STUDENTS WHO HAVE TRIED SMOKING.

The prevalence of having ever tried smoking has decreased by 32% since 1998, leading to 33,291 fewer high school students who have tried smoking.

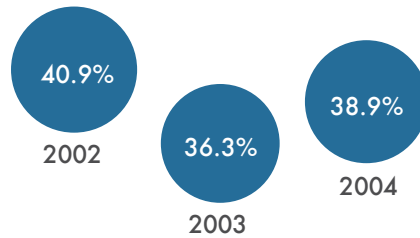
FREQUENT SMOKING HAS DECREASED BY 83% SINCE 1998, LEADING TO 4,931 FEWER MIDDLE SCHOOL STUDENTS WHO ARE FREQUENT SMOKERS.

Frequent smoking has decreased by 51% since 1998, leading to 9,824 fewer high school students who are frequent smokers.

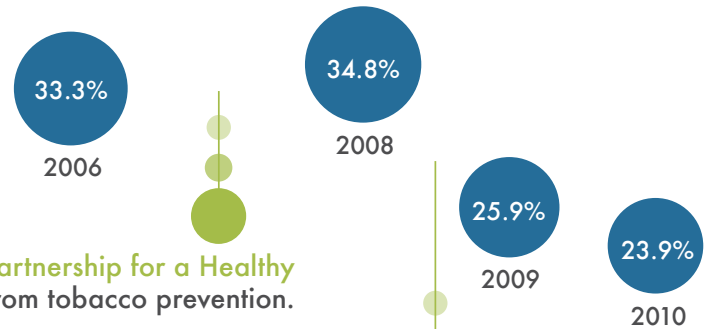
Ever Tried a Cigarette | MS Public Middle Schools



The Partnership for a Healthy Mississippi implements its tobacco control programs.



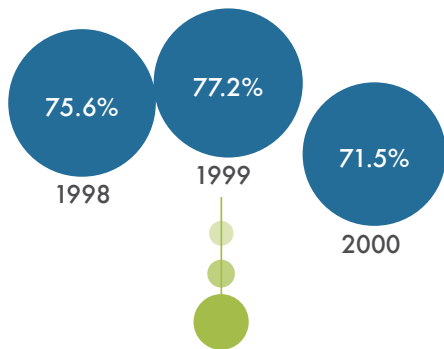
State funding for The Partnership for a Healthy Mississippi is directed away from tobacco prevention.



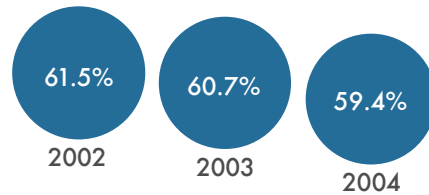
Comprehensive and statewide tobacco education, prevention, and cessation programs are implemented by the Office of Tobacco Control, Mississippi State Department of Health.

- In 2010, 26,785 Mississippi public middle school students had tried at least one cigarette.
- The prevalence of having ever tried a cigarette has decreased by 56% since 1998, leading to 34,070 fewer middle school students who have tried smoking.
- In the past year, the prevalence of having ever tried smoking has not changed significantly.

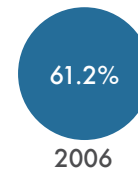
Ever Tried a Cigarette | MS Public High Schools



The Partnership for a Healthy Mississippi implements its tobacco control programs.

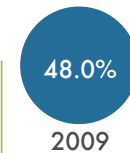


State funding for The Partnership for a Healthy Mississippi is directed away from tobacco prevention.

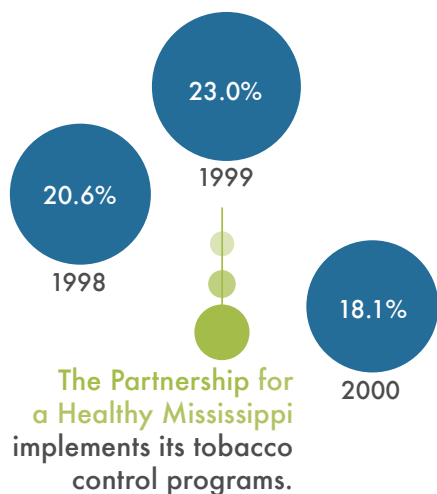


Comprehensive and statewide tobacco education, prevention, and cessation programs are implemented by the Office of Tobacco Control, Mississippi State Department of Health.

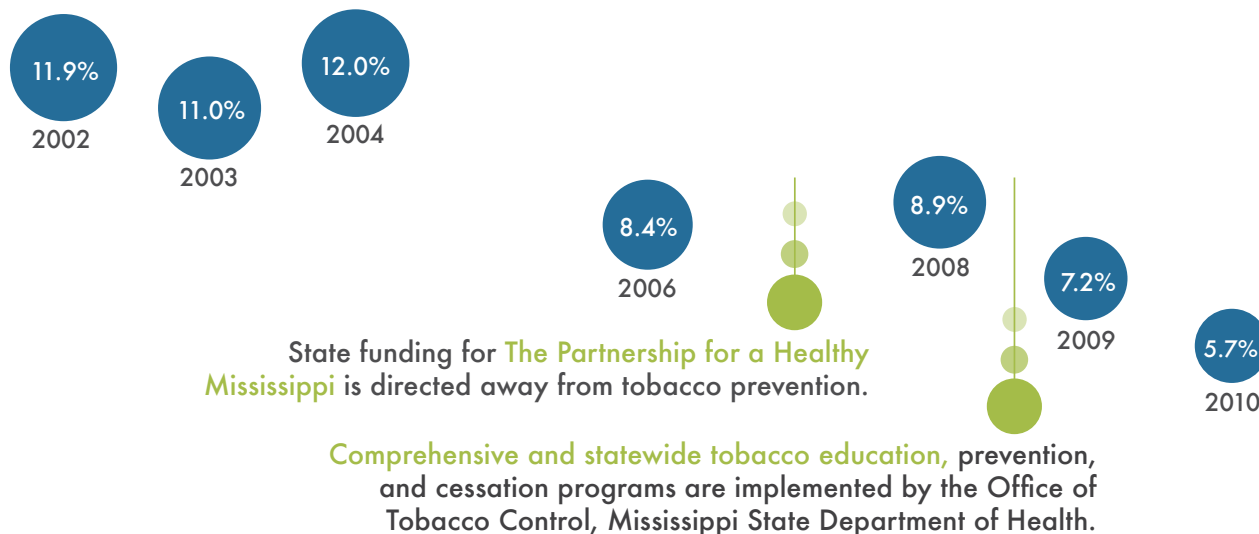
- In 2010, 69,857 Mississippi public high school students had tried at least one cigarette.
- The prevalence of having ever tried a cigarette has decreased by 32% since 1998, leading to 33,291 fewer high school students who have tried smoking.
- In the past year, the prevalence of having ever tried smoking has not changed significantly.



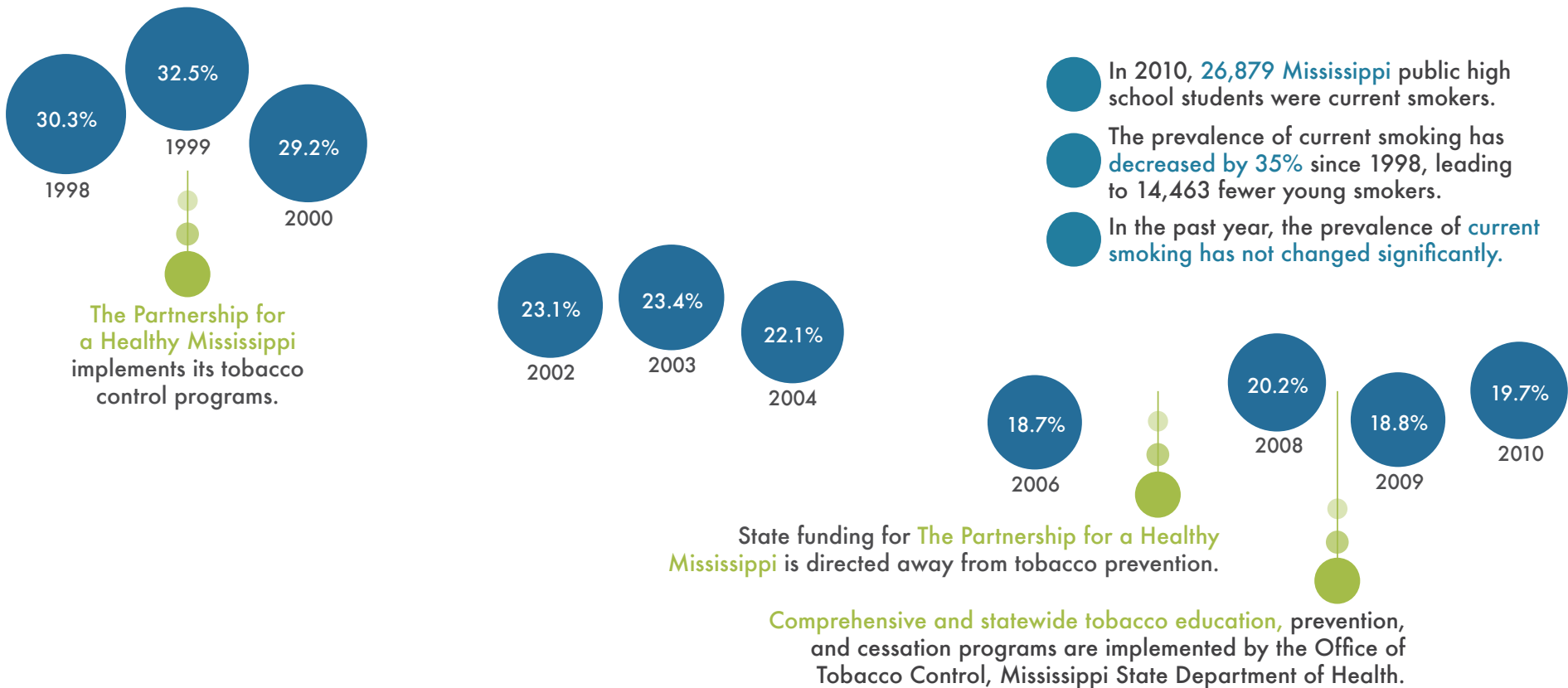
Current Smokers | MS Public Middle Schools



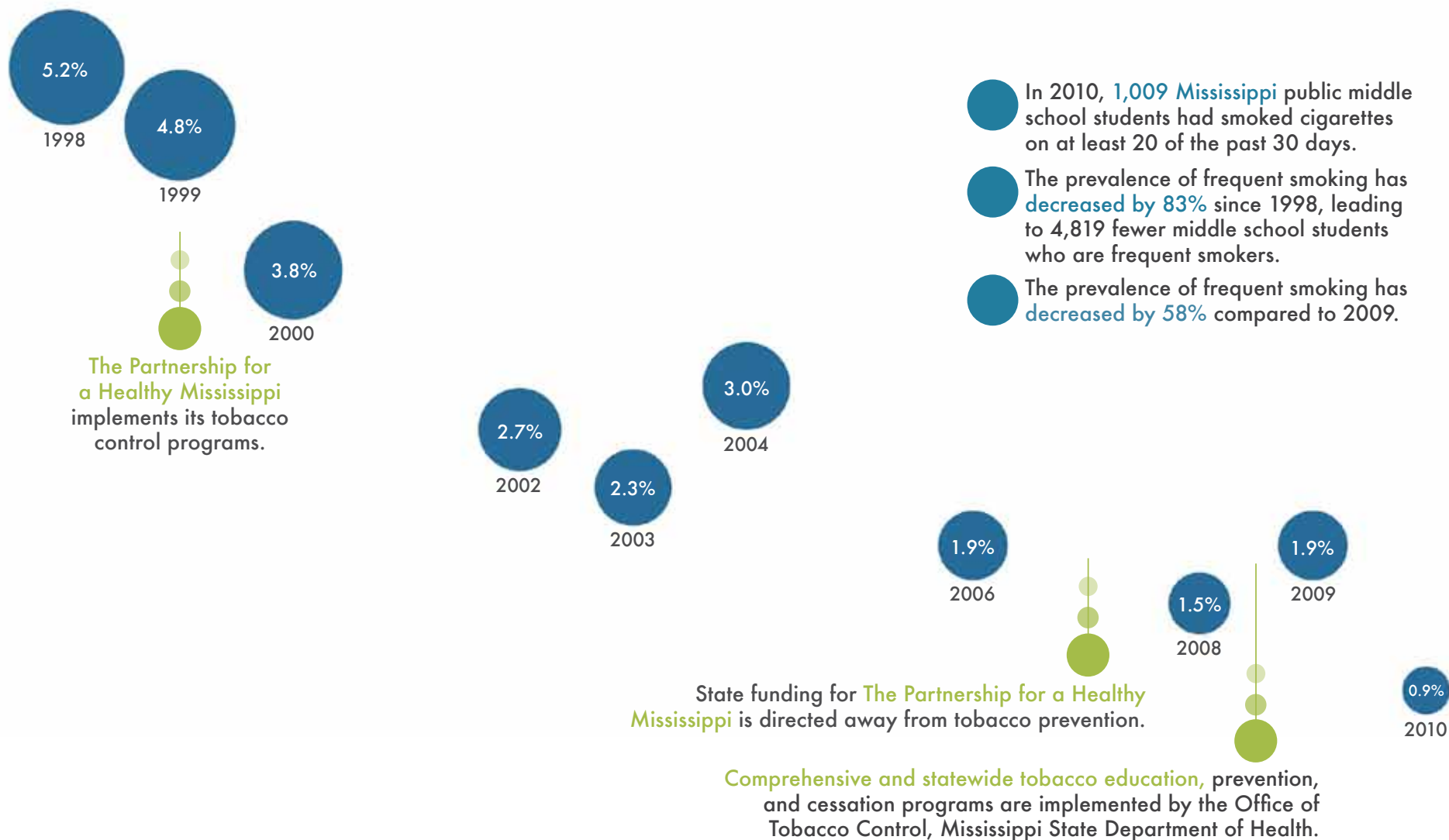
- In 2010, 6,388 Mississippi public middle school students were current smokers.
- The prevalence of current smoking has decreased by 72% since 1998, leading to 16,699 fewer young smokers.
- In the past year, the prevalence of current smoking has not changed significantly.



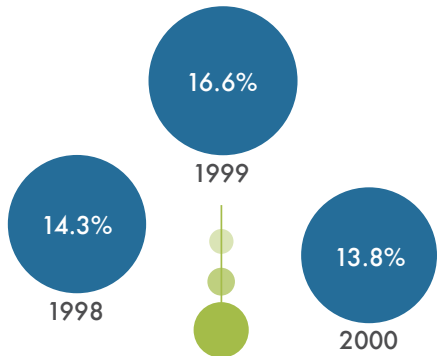
Current Smokers | MS Public High Schools



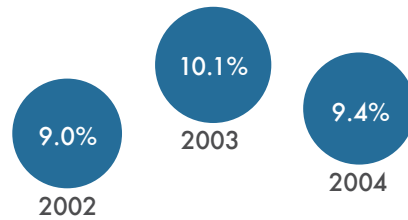
Frequent Cigarette Smoking | MS Public Middle Schools



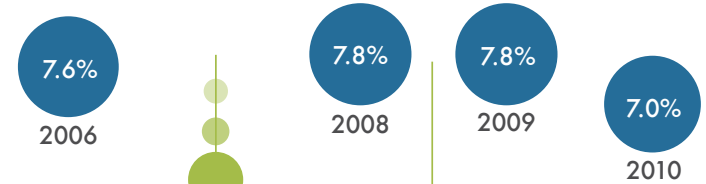
Frequent Cigarette Smoking | MS Public High Schools



The Partnership for a Healthy Mississippi implements its tobacco control programs.



- In 2010, 9,551 Mississippi public high school students had smoked cigarettes on at least 20 of the past 30 days.
- The prevalence of frequent smoking has decreased by 51% since 1998, leading to 9,960 fewer high school students who are frequent smokers.
- In the past year, the prevalence of frequent smoking has not changed significantly.



State funding for The Partnership for a Healthy Mississippi is directed away from tobacco prevention.

Comprehensive and statewide tobacco education, prevention, and cessation programs are implemented by the Office of Tobacco Control, Mississippi State Department of Health.

KEY DEMOGRAPHIC DIFFERENCES | 2010

Among middle school students, there are no differences in the percent of males and females or whites and African-Americans who smoke cigarettes.

However, 8th graders are more likely to have tried cigarette smoking or to be current smokers than 6th graders.

MALES ARE MORE LIKELY TO HAVE EVER TRIED CIGARETTE SMOKING OR TO BE CURRENT SMOKERS THAN FEMALES.

High school whites are more likely to have ever tried cigarette smoking, to be current smokers, or to be frequent smokers than African-Americans.

12TH GRADERS ARE MORE LIKELY TO HAVE EVER TRIED CIGARETTE SMOKING THAN YOUNGER STUDENTS.

Mississippi Youth Tobacco Use 1998-2010 Ever Smokers - Public Middle School

	1998	1999	2000	2002	2003	2004	2006	2008	2009	2010
TOTAL	54.3 (±4.1)	57.2 (±4.2)	53.4 (±3.3)	40.9 (±3.5)	36.3 (±2.5)	38.9 (±3.9)	33.3 (±5.1)	34.8 (±4.8)	25.9 (±3.5)	23.9 (±3.3)
SEX										
FEMALE	51.2 (±5.3)	53.7 (±5.1)	48.6 (±3.4)	38.5 (±4.6)	33.6 (±2.7)	36.4 (±3.9)	32.3 (±6.2)	29.9 (±5.6)	23.8 (±4.5)	21.7 (±4.3)
MALE	57.3 (±4.3)	60.3 (±4.9)	58.1 (±4.8)	43.5 (±3.2)	39.0 (±2.9)	41.5 (±5.0)	34.4 (±6.1)	39.4 (±4.8)	27.9 (±3.8)	26.1 (±3.5)
RACE										
WHITE	52.0 (±6.6)	55.7 (±3.2)	50.1 (±4.6)	39.4 (±3.6)	33.3 (±3.0)	36.2 (±5.8)	30.4 (±6.5)	31.9 (±6.0)	24.4 (±5.3)	25.4 (±4.6)
BLACK	56.3 (±7.1)	58.3 (±7.6)	56.7 (±7.9)	41.8 (±5.8)	39.3 (±2.7)	41.5 (±2.9)	36.2 (±6.2)	37.0 (±5.0)	26.7 (±4.4)	22.3 (±4.5)
GRADE										
6	41.8 (±4.9)	45.1 (±5.2)	40.5 (±7.3)	32.8 (±4.9)	25.5 (±3.1)	29.1 (±5.5)	19.3 (±4.7)	22.5 (±6.7)	18.2 (±4.0)	14.9 (±5.2)
7	55.0 (±7.1)	59.4 (±5.7)	57.9 (±5.8)	46.9 (±5.1)	37.0 (±3.5)	41.5 (±5.3)	36.3 (±6.9)	36.6 (±5.6)	24.9 (±6.1)	23.8 (±5.1)
8	64.0 (±5.6)	66.3 (±6.2)	61.4 (±5.4)	50.7 (±4.5)	46.8 (±2.6)	45.9 (±5.1)	43.2 (±7.3)	45.5 (±6.8)	34.3 (±5.4)	33.1 (±6.4)

Mississippi Youth Tobacco Use 1998-2010 Ever Smokers - Public High School

	1998	1999	2000	2002	2003	2004	2006	2008	2009	2010
TOTAL	75.6 (±3.0)	77.2 (±2.4)	71.5 (±2.2)	61.5 (±2.5)	60.7 (±1.7)	59.4 (±2.5)	61.2 (±3.9)	54.0 (±4.5)	48.0 (±3.1)	51.2 (±3.2)
SEX										
FEMALE	72.6 (±3.7)	73.6 (±3.9)	70.0 (±4.0)	59.3 (±2.9)	57.4 (±2.6)	54.8 (±3.5)	61.0 (±6.9)	59.7 (±5.3)	43.5 (±4.1)	48.7 (±4.0)
MALE	78.7 (±3.3)	80.9 (±3.1)	73.1 (±2.9)	64.0 (±3.7)	64.2 (±1.8)	63.9 (±3.3)	61.2 (±4.2)	48.2 (±4.2)	53.1 (±3.6)	53.5 (±4.7)
RACE										
WHITE	79.4 (±3.3)	81.0 (±3.2)	75.5 (±4.9)	61.4 (±3.5)	63.1 (±2.1)	64.3 (±3.6)	67.1 (±8.6)	56.2 (±6.3)	53.2 (±5.0)	59.0 (±5.0)
BLACK	70.6 (±4.5)	72.3 (±4.4)	65.9 (±3.8)	61.1 (±3.8)	57.5 (±2.7)	54.2 (±4.2)	56.0 (±3.4)	50.9 (±7.4)	42.6 (±4.1)	44.0 (±4.0)
GRADE										
9	73.1 (±4.3)	75.2 (±3.1)	69.3 (±3.5)	54.5 (±4.9)	57.9 (±3.1)	56.3 (±4.8)	59.8 (±6.9)	51.0 (±9.3)	42.3 (±4.8)	42.9 (±5.4)
10	75.0 (±7.7)	77.7 (±6.8)	69.3 (±4.5)	62.4 (±3.7)	59.6 (±2.6)	58.7 (±5.4)	57.2 (±5.6)	52.1 (±6.8)	50.4 (±4.3)	49.9 (±5.3)
11	76.9 (±5.3)	75.8 (±6.9)	72.7 (±8.3)	65.0 (±5.2)	62.3 (±2.9)	58.4 (±6.8)	65.8 (±10.5)	48.9 (±8.3)	48.0 (±7.1)	56.6 (±6.8)
12	78.2 (±5.6)	80.8 (±4.6)	75.9 (±6.8)	66.5 (±4.1)	64.5 (±2.6)	67.1 (±4.9)	63.9 (±7.2)	66.7 (±7.1)	53.3 (±6.5)	58.7 (±5.9)

Mississippi Youth Tobacco Use

1998-2010

Current Smokers - Public Middle School

	1998	1999	2000	2002	2003	2004	2006	2008	2009	2010
TOTAL	20.6 (±3.1)	23.0 (±3.2)	18.1 (±2.3)	11.9 (±1.6)	11.0 (±1.2)	12.0 (±2.0)	8.4 (±1.6)	8.9 (±2.0)	7.2 (±1.7)	5.7 (±1.5)
SEX										
FEMALE	18.2 (±4.8)	19.4 (±2.6)	16.9 (±2.6)	11.5 (±2.0)	9.8 (±1.3)	11.0 (±2.5)	7.8 (±2.4)	6.9 (±2.8)	6.2 (±1.8)	4.4 (±1.8)
MALE	23.0 (±3.4)	26.1 (±4.8)	19.2 (±3.5)	12.1 (±1.8)	12.0 (±1.4)	12.8 (±2.8)	9.0 (±2.6)	11.0 (±2.3)	8.0 (±2.5)	6.8 (±1.9)
RACE										
WHITE	22.8 (±4.4)	23.4 (±3.7)	20.9 (±3.6)	13.3 (±2.0)	10.7 (±1.5)	13.5 (±3.4)	9.9 (±2.6)	11.2 (±3.0)	8.8 (±3.1)	6.2 (±2.0)
BLACK	17.6 (±4.0)	21.8 (±5.0)	15.0 (±3.5)	8.8 (±2.9)	10.8 (±1.4)	10.2 (±2.1)	7.0 (±2.3)	6.9 (±1.9)	5.6 (±2.0)	5.2 (±2.4)
GRADE										
6	11.9 (±4.7)	17.7 (±4.5)	13.6 (±4.2)	8.8 (±2.1)	7.1 (±1.3)	6.8 (±1.9)	4.0 (±2.1)	4.4 (±2.8)	3.6 (±2.0)	2.8 (±1.8)
7	21.8 (±7.7)	21.8 (±4.1)	22.0 (±2.7)	14.9 (±2.7)	10.8 (±1.8)	13.6 (±3.5)	7.2 (±2.2)	10.1 (±3.1)	6.7 (±2.7)	6.5 (±1.7)
8	25.8 (±5.3)	29.0 (±5.2)	18.5 (±4.1)	14.7 (±3.7)	14.9 (±1.8)	15.1 (±4.5)	13.5 (±2.6)	12.5 (±3.8)	11.1 (±3.6)	7.8 (±3.2)

Mississippi Youth Tobacco Use

1998-2010

Current Smokers - Public High School

	1998	1999	2000	2002	2003	2004	2006	2008	2009	2010
TOTAL	30.3 (±3.0)	32.5 (±3.3)	29.2 (±3.6)	23.1 (±2.6)	23.4 (±1.5)	22.1 (±2.6)	18.7 (±5.1)	20.2 (±4.4)	18.8 (±2.2)	19.7 (±2.5)
SEX										
FEMALE	27.1 (±4.6)	30.7 (±5.2)	26.2 (±5.9)	21.1 (±3.6)	20.6 (±2.0)	19.7 (±2.9)	16.9 (±5.5)	15.7 (±3.8)	15.6 (±3.0)	17.8 (±3.6)
MALE	33.9 (±4.0)	34.4 (±4.2)	32.3 (±4.6)	25.1 (±3.1)	26.0 (±1.9)	24.3 (±3.1)	20.1 (±5.5)	24.8 (±5.8)	22.2 (±3.1)	21.5 (±3.0)
RACE										
WHITE	43.8 (±4.2)	42.7 (±4.8)	41.7 (±5.9)	29.3 (±2.7)	31.0 (±2.3)	29.9 (±3.8)	25.9 (±4.7)	28.9 (±5.4)	27.6 (±3.7)	29.0 (±3.3)
BLACK	14.2 (±2.7)	16.6 (±3.2)	13.3 (±3.0)	16.7 (±4.0)	14.1 (±1.4)	14.1 (±2.8)	11.6 (±3.5)	10.1 (±6.0)	9.8 (±2.5)	11.1 (±2.1)
GRADE										
9	27.6 (±5.0)	28.2 (±4.1)	25.3 (±5.3)	20.0 (±4.4)	22.4 (±2.6)	19.8 (±4.3)	17.0 (±4.3)	17.7 (±7.4)	14.4 (±3.5)	14.7 (±4.2)
10	31.4 (±6.6)	30.3 (±5.6)	27.6 (±5.5)	19.7 (±2.7)	21.8 (±2.4)	22.9 (±4.3)	12.9 (±7.4)	19.0 (±6.1)	20.0 (±3.3)	20.0 (±4.7)
11	33.5 (±6.5)	38.3 (±8.3)	32.9 (±8.5)	27.1 (±5.9)	24.2 (±2.8)	22.7 (±4.6)	20.1 (±5.9)	15.5 (±7.5)	19.8 (±3.1)	22.0 (±4.1)
12	29.4 (±6.8)	35.1 (±6.7)	32.6 (±8.9)	26.6 (±5.8)	25.5 (±2.4)	24.6 (±6.4)	27.5 (±6.1)	29.9 (±8.2)	22.8 (±6.3)	23.9 (±6.3)

Mississippi Youth Tobacco Use 1998-2010 Frequent Smokers - Public Middle School

	1998	1999	2000	2002	2003	2004	2006	2008	2009	2010
TOTAL	5.2 (±2.2)	4.8 (±1.2)	3.8 (±1.1)	2.7 (±0.9)	2.3 (±0.4)	3.0 (±0.7)	1.9 (±0.9)	1.5 (±0.7)	1.9 (±0.8)	0.9 (±0.4)
SEX										
FEMALE	3.6 (±2.7)	3.6 (±1.0)	3.6 (±1.2)	2.2 (±0.8)	1.6 (±0.5)	2.6 (±1.2)	1.9 (±1.0)	0.6 (±0.5)	1.8 (±0.8)	0.4 (±0.3)
MALE	6.8 (±3.1)	5.9 (±1.9)	4.1 (±1.3)	3.2 (±1.2)	2.9 (±0.6)	3.2 (±0.8)	1.9 (±1.2)	2.4 (±1.1)	2.0 (±1.2)	1.4 (±0.8)
RACE										
WHITE	6.4 (±3.5)	6.9 (±1.6)	5.9 (±1.9)	3.8 (±1.6)	2.8 (±0.7)	4.1 (±1.6)	3.5 (±1.4)	2.1 (±1.2)	3.2 (±1.7)	1.3 (±0.8)
BLACK	2.6 (±1.8)	1.7 (±1.2)	1.7 (±0.9)	1.4 (±0.8)	1.6 (±0.5)	1.8 (±0.5)	0.3 (±0.4)	0.8 (±0.6)	0.7 (±0.8)	0.3 (±0.4)
GRADE										
6	1.2 (±0.6)	2.7 (±1.5)	2.8 (±2.1)	1.3 (±0.8)	1.3 (±0.4)	1.1 (±0.9)	0.7 (±0.7)	0.6 (±0.6)	0.7 (±0.6)	0.6 (±0.6)
7	5.1 (±3.2)	4.1 (±1.9)	4.0 (±1.8)	3.4 (±1.0)	1.8 (±0.4)	3.0 (±1.2)	1.2 (±0.8)	1.2 (±0.8)	2.1 (±1.1)	0.7 (±0.6)
8	7.1 (±3.1)	7.5 (±2.1)	4.8 (±1.5)	5.2 (±2.2)	3.8 (±0.7)	4.7 (±2.0)	3.5 (±1.9)	2.7 (±1.6)	3.0 (±1.6)	1.4 (±1.0)

Mississippi Youth Tobacco Use 1998-2010 Frequent Smokers - Public High School

	1998	1999	2000	2002	2003	2004	2006	2008	2009	2010
TOTAL	14.3 (±3.0)	16.6 (±3.0)	13.8 (±3.0)	9.0 (±1.6)	10.1 (±1.0)	9.4 (±1.7)	7.6 (±1.9)	7.8 (±1.8)	7.8 (±1.9)	7.0 (±1.6)
SEX										
FEMALE	11.6 (±2.3)	16.9 (±4.2)	12.5 (±3.6)	7.8 (±1.9)	9.1 (±1.2)	7.7 (±2.1)	5.5 (±2.9)	9.4 (±2.2)	7.4 (±2.5)	6.6 (±1.9)
MALE	17.3 (±3.3)	16.1 (±3.6)	15.1 (±3.3)	10.4 (±2.5)	11.0 (±1.4)	11.1 (±2.5)	9.8 (±2.2)	6.7 (±1.8)	8.2 (±2.5)	7.6 (±1.8)
RACE										
WHITE	23.2 (±4.5)	24.8 (±4.3)	21.6 (±4.4)	13.9 (±2.2)	14.9 (±1.7)	13.9 (±2.8)	10.9 (±3.7)	11.8 (±2.9)	12.9 (±2.8)	11.8 (±2.8)
BLACK	3.4 (±2.2)	4.1 (±1.2)	4.3 (±2.1)	4.4 (±1.7)	4.1 (±0.8)	4.7 (±1.5)	4.3 (±2.2)	3.9 (±2.5)	2.5 (±1.5)	2.5 (±1.2)
GRADE										
9	8.3 (±2.7)	12.0 (±3.8)	11.1 (±5.1)	7.7 (±2.7)	7.5 (±1.5)	7.8 (±2.1)	7.1 (±2.1)	6.0 (±3.1)	5.4 (±2.1)	4.7 (±2.6)
10	16.7 (±5.0)	14.8 (±4.0)	14.3 (±4.8)	7.8 (±1.9)	8.6 (±1.3)	9.5 (±2.8)	5.5 (±4.5)	7.9 (±2.7)	7.6 (±3.1)	6.2 (±2.5)
11	17.9 (±5.6)	20.2 (±9.0)	17.0 (±6.3)	7.9 (±3.3)	11.2 (±1.9)	9.5 (±2.9)	7.0 (±2.7)	6.5 (±3.2)	8.2 (±3.6)	7.5 (±3.1)
12	16.1 (±5.4)	21.8 (±7.0)	13.9 (±5.9)	12.8 (±3.8)	14.5 (±2.1)	12.2 (±4.3)	12.2 (±3.4)	12.7 (±3.4)	11.3 (±3.5)	10.9 (±5.0)

METHODS

BACKGROUND

The Centers for Disease Control and Prevention's (CDC) Office on Smoking and Health (OSH) provides technical assistance to the states to administer this survey. Mississippi has administered the Youth Tobacco Survey (YTS) in 1998, 1999, 2000, 2002, 2003, 2004, 2006, 2008, 2009, and 2010.

THE PURPOSE OF THE YTS is to provide states with the data needed to design, implement, and evaluate comprehensive tobacco control programs that work to prevent young people from beginning tobacco use and help those who have already started using tobacco to quit.

THE YTS COLLECTS DATA from young people in grades 6 through 12.

YTS DATA provide information on many key intermediate and long-term tobacco-related indicators, allowing states to measure progress toward state goals and objectives.

SAMPLE DESIGN

A multi-stage sample design was applied with public middle and high schools selected proportional to enrollment size. Classrooms

were chosen randomly within selected schools and all students in selected classes were eligible for participation. Data were collected by means of an anonymous and confidential self-administered questionnaire. The questionnaires were group administered in classrooms during a normal class period by teachers following standardized procedures.

EDITING, WEIGHTING, AND INITIAL ANALYSIS OF DATA

The Research Triangle Institute and the CDC's Office of Smoking and Health provided technical assistance with the processing and weighting of the data. A weighting factor was applied to each student record to adjust for non-response at the school, class, and student levels. SUDAAN statistical software was used to calculate standard errors for estimates and 95 percent confidence intervals. Weight adjustments were made for the following:

$$\text{WEIGHT} = W_1 * W_2 * f_1 * f_2 * f_3 * f_4$$

W1 = inverse of the probability of selecting the school

W2 = inverse of the probability of selecting the classroom within the school

F1 = a school-level non-response adjustment factor calculated by school size (small, medium, large)

F2 = a class adjustment factor calculated by school

F3 = a student-level non-response adjustment factor calculated by class

F4 = a post stratification adjustment factor calculated by gender and grade

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