

# Trends in Youth Smoking



Centers for Disease Control and Prevention

Office on Smoking and Health

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# We can end the epidemic of disease and deaths caused by tobacco addiction

- The tobacco use epidemic can be stopped
  - More than 80% of early heart attacks
  - More than 80% of chronic lung disease deaths
  - More than 80% of lung cancer deaths
- More than 12 million deaths caused by tobacco since 1964
- More than 8.6 million current and former users suffering with at least one serious illness caused by tobacco use

# When will we take the handle off the tobacco pump?

1854 - Dr. John Snow removed the pump handle from Broad Street water pump to stop Cholera Epidemic in London



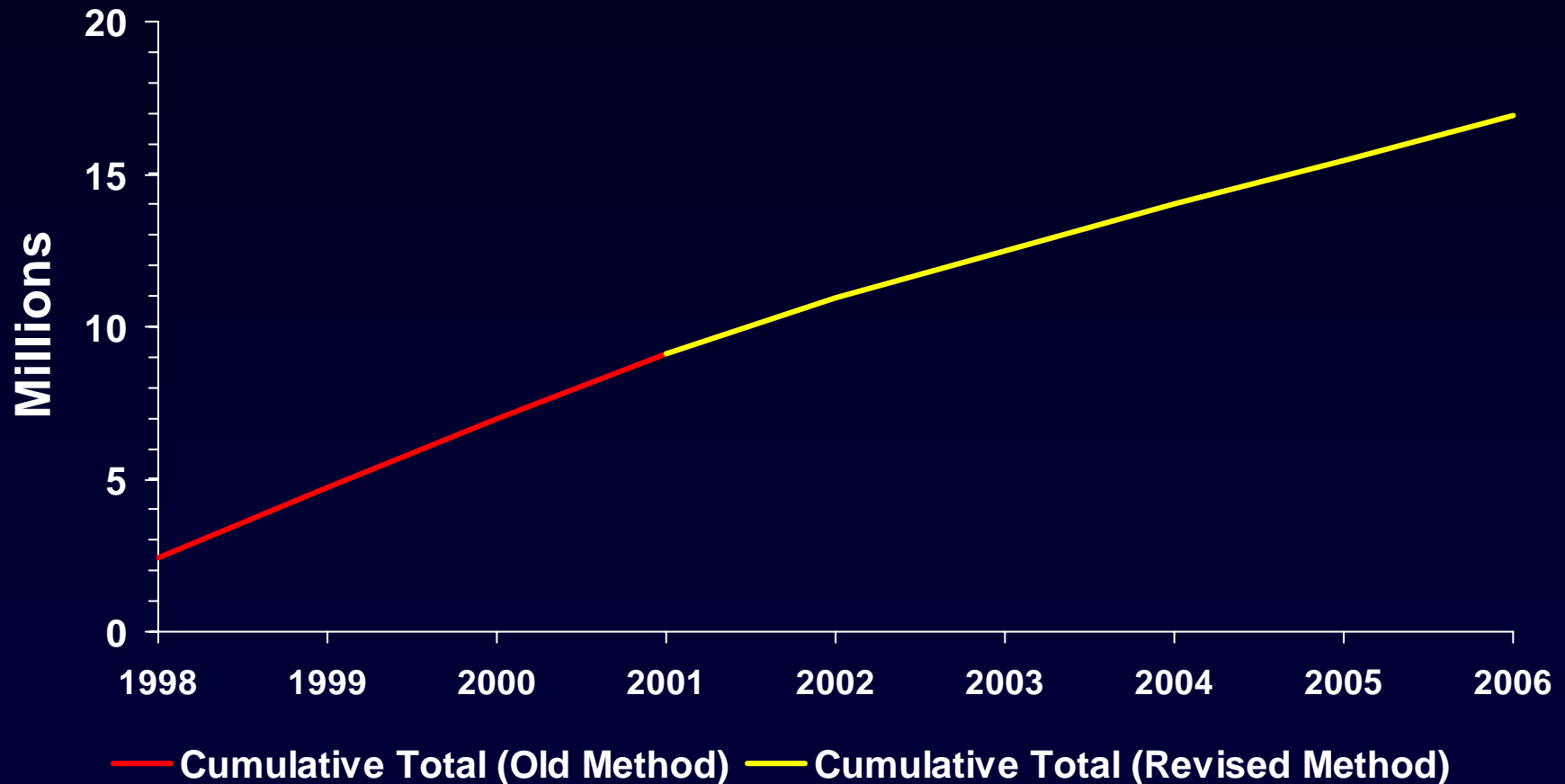
## Product, Price, Promotion, Placement\*

- **PRODUCT** - Certain features of cigarettes appeal to younger smokers
- **PRICE** - Younger smokers are more price sensitive
- **PROMOTION** - Youth are more than 3 times more sensitive to advertising and promotional campaigns
- **PLACEMENT** - Strategic location of images of smoking and youth oriented brands in media, advertising, and retail environments

\*Source: Cummings KM, Morley CP, Horan JK, Steger C, Leavell N-R. Marketing to America's Youth: evidence from corporate documents. *Tobacco Control* 2002;11(Suppl 1):i5-i17.



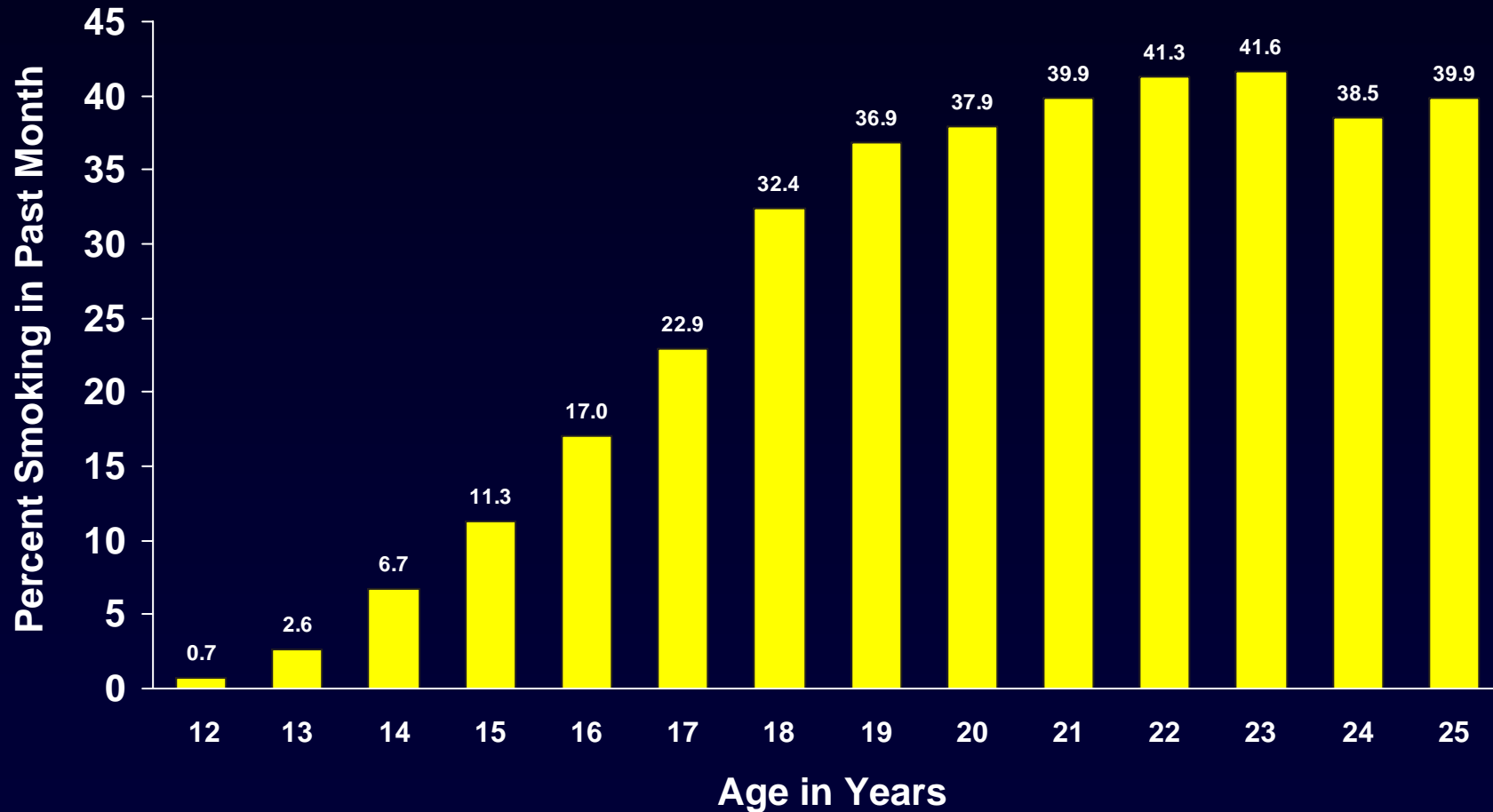
# Cumulative Total of Underage Youth Starting to Smoke Since 1997



Source: National Survey on Drug Use and Health, SAMSHA, 2002, 2003, 2004, 2005, 2006



# Past Month Cigarette Use, Ages 12 to 25



Source: National Household Survey of Drug Use and Health, 2006



## Potential Emerging Problems

- Increasing smoking initiation rates
- Increasing rates of smokeless tobacco use among high school and young adult males
- Public health progress has stalled

# Trends in Youth Tobacco Use Prevalence: Overview of Data

- Most recent data on youth smoking suggest decline is slowing
- Decreased rate of decline in youth smoking may be due to:
  - Small increase in retail price of cigarettes between 2003 to 2006
  - Decrease in televised public health smoking prevention campaign levels
  - Decrease in state funding for comprehensive tobacco prevention programs
  - Continuing high level pro-tobacco influences

SOURCE: CDC. Cigarette use among high school students—United States, 1991-2005.  
MMWR 2006;55(26):724-726.



# Overview – Data Sources for Youth Trends

- Youth Risk Behavior Surveillance System (Biennial 1991-2005)
  - School-based survey of 9<sup>th</sup> to 12<sup>th</sup> grade students
  - Anonymous self-administered questionnaire
  - Public and private schools in sample
  - About 12,000-16,000 students in each nationally representative sample
- Monitoring the Future Study (Annually 1975-2006)
  - High School Seniors surveyed since 1975; 8<sup>th</sup> and 10<sup>th</sup> graders since 1991
  - School-based anonymous self-administered questionnaire
  - Public and private schools in sample
  - About 40,000-50,000 students in each nationally representative sample
- National Household Survey of Drug Use and Health (Annually 2002-2006; prior to 2002, National Household Survey of Drug Abuse)
  - Three age groups sampled: 12-17, 18-25, 26 and older
  - Nationally representative state-based, multistage sample of households
  - About 65,000-70,000 personal interviews completed annually

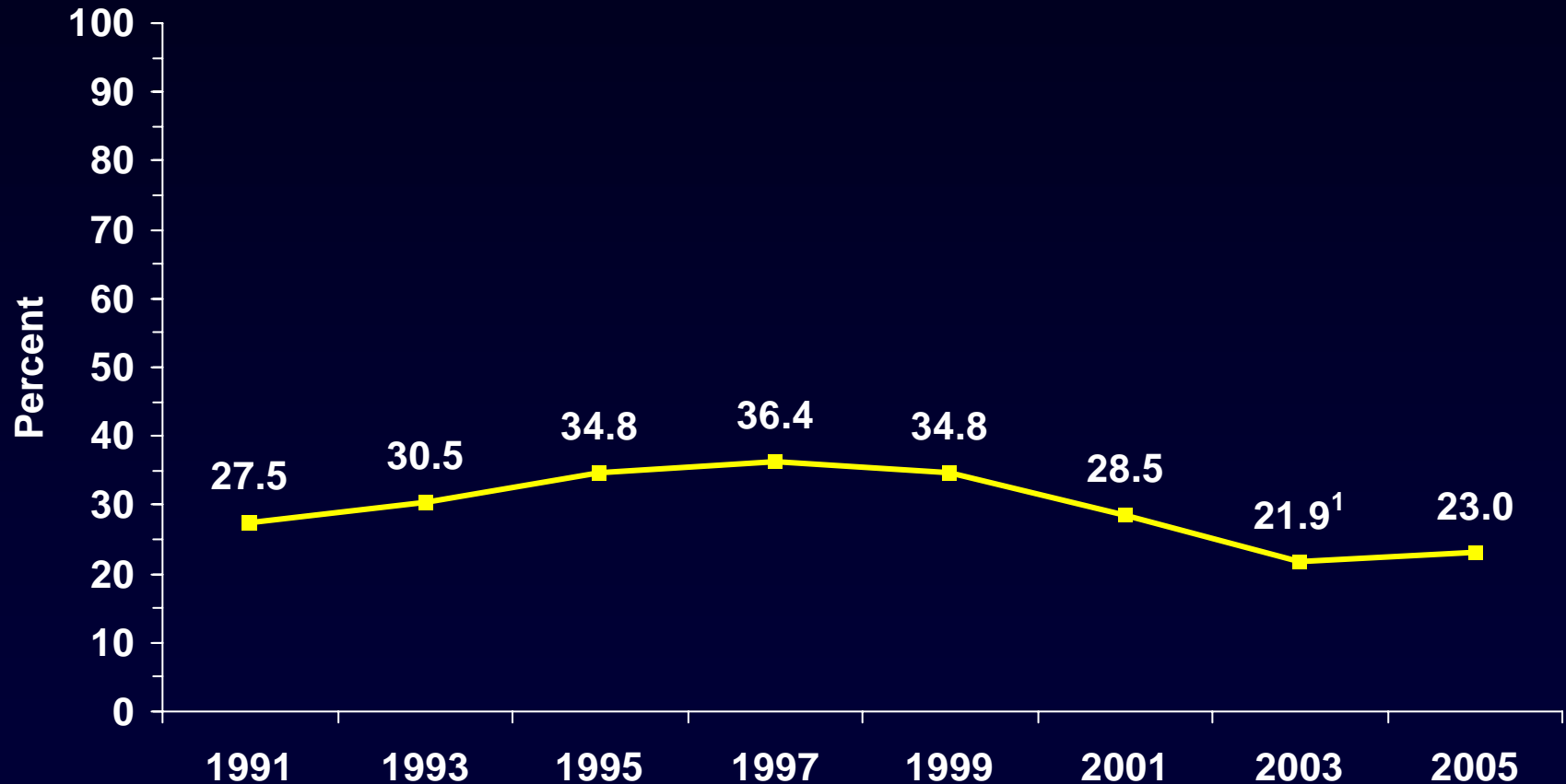


# The Youth Risk Behavior Surveillance System (YRBSS)

National Prevalence Rates for 2005  
and  
Trends from 1991-2005



# Percentage of High School Students Who Reported Current Cigarette Use,\* 1991-2005



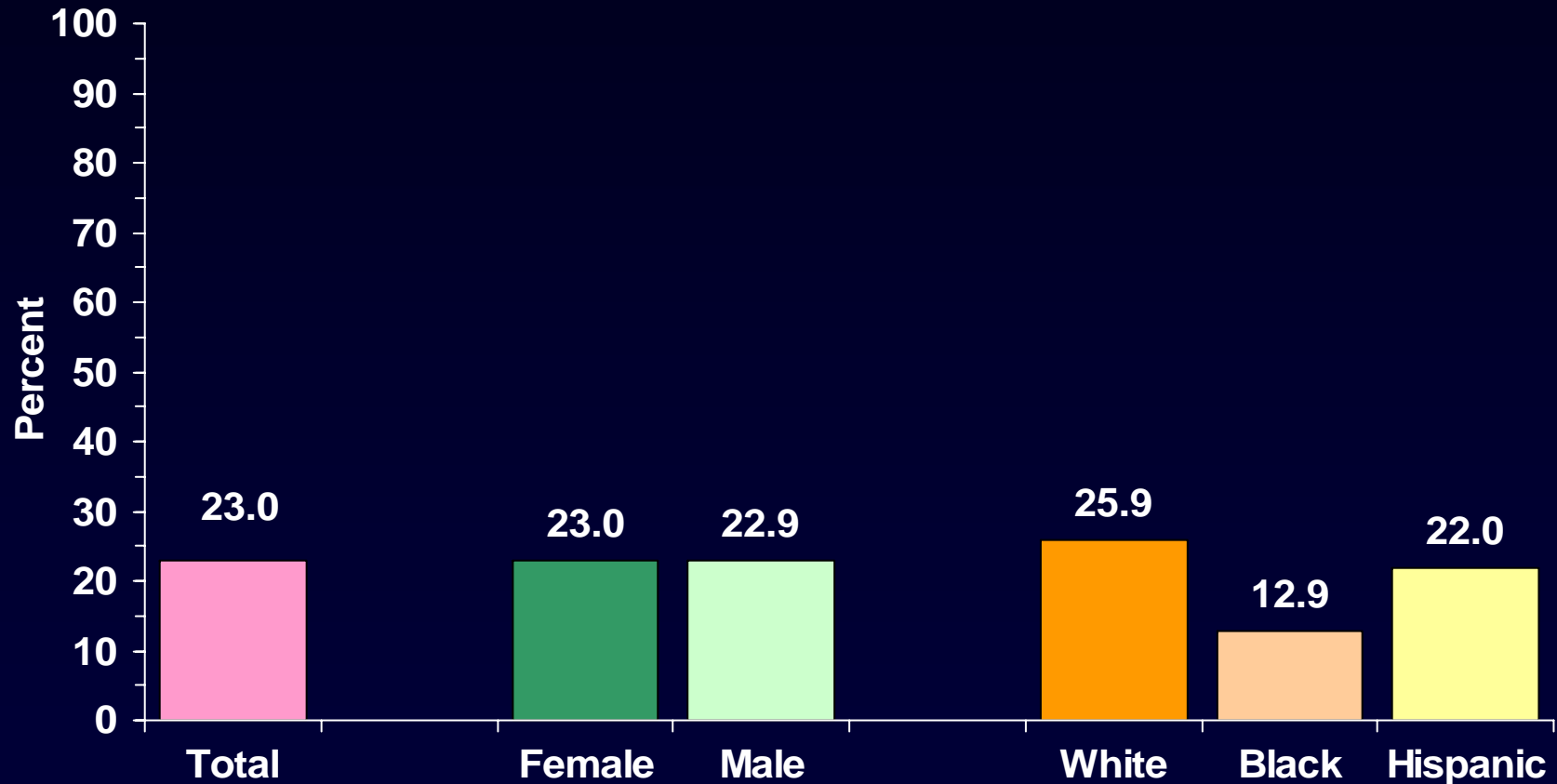
Source: National Youth Risk Behavior Surveys, 1991 – 2003

\* Smoked cigarettes on  $\geq 1$  of the 30 days preceding the survey

<sup>1</sup> Significant linear decrease and quadratic effect,  $p < .05$



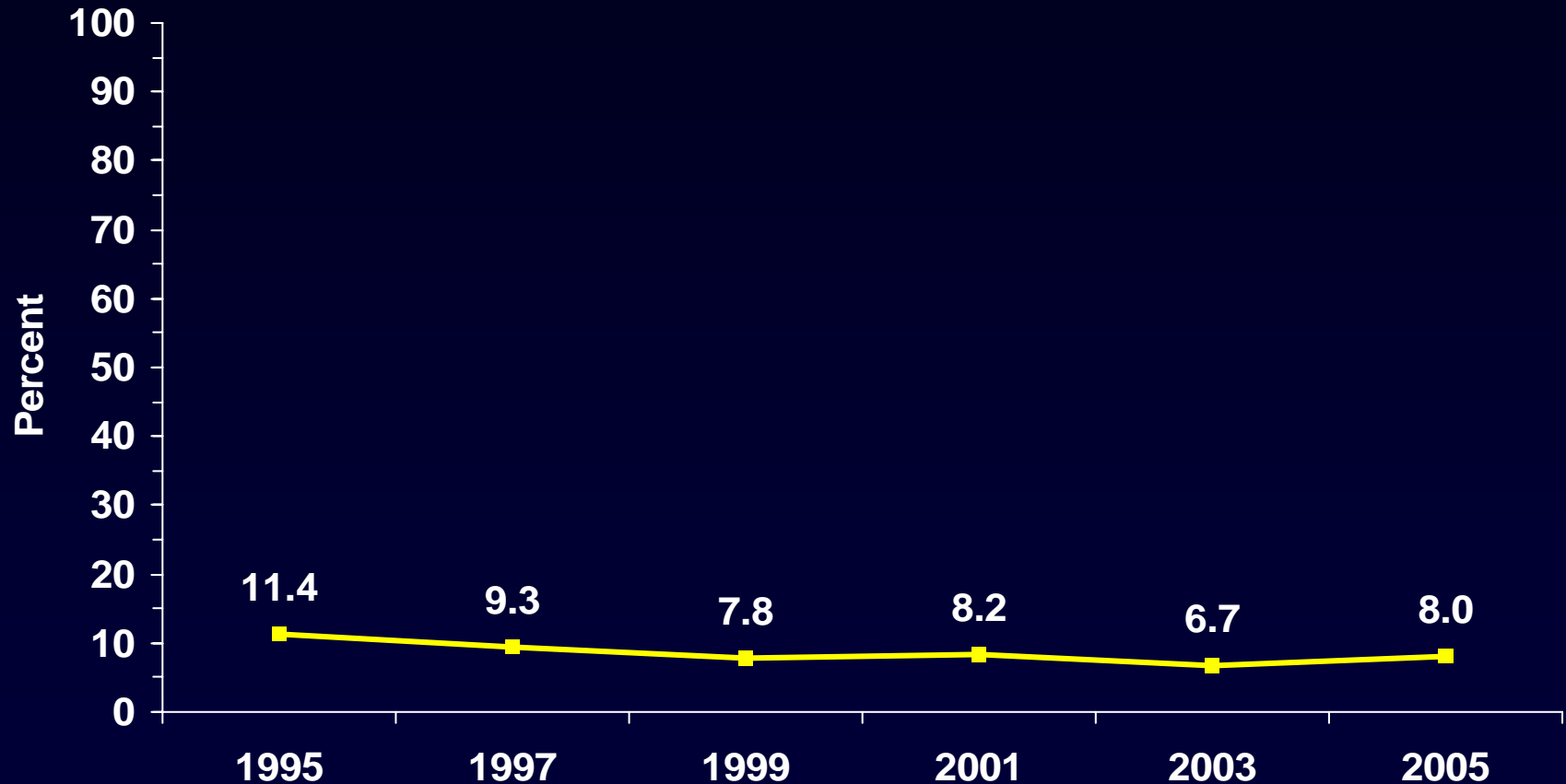
# Percentage of High School Students Who Reported Current Cigarette Use,\* by Gender and Race/Ethnicity, 2005



Source: National Youth Risk Behavior Survey, 2003  
\* Smoked cigarettes on  $\geq 1$  of the 30 days preceding the survey



# Percentage of High School Students Who Reported Current Smokeless Tobacco Use,\* 1995-2005



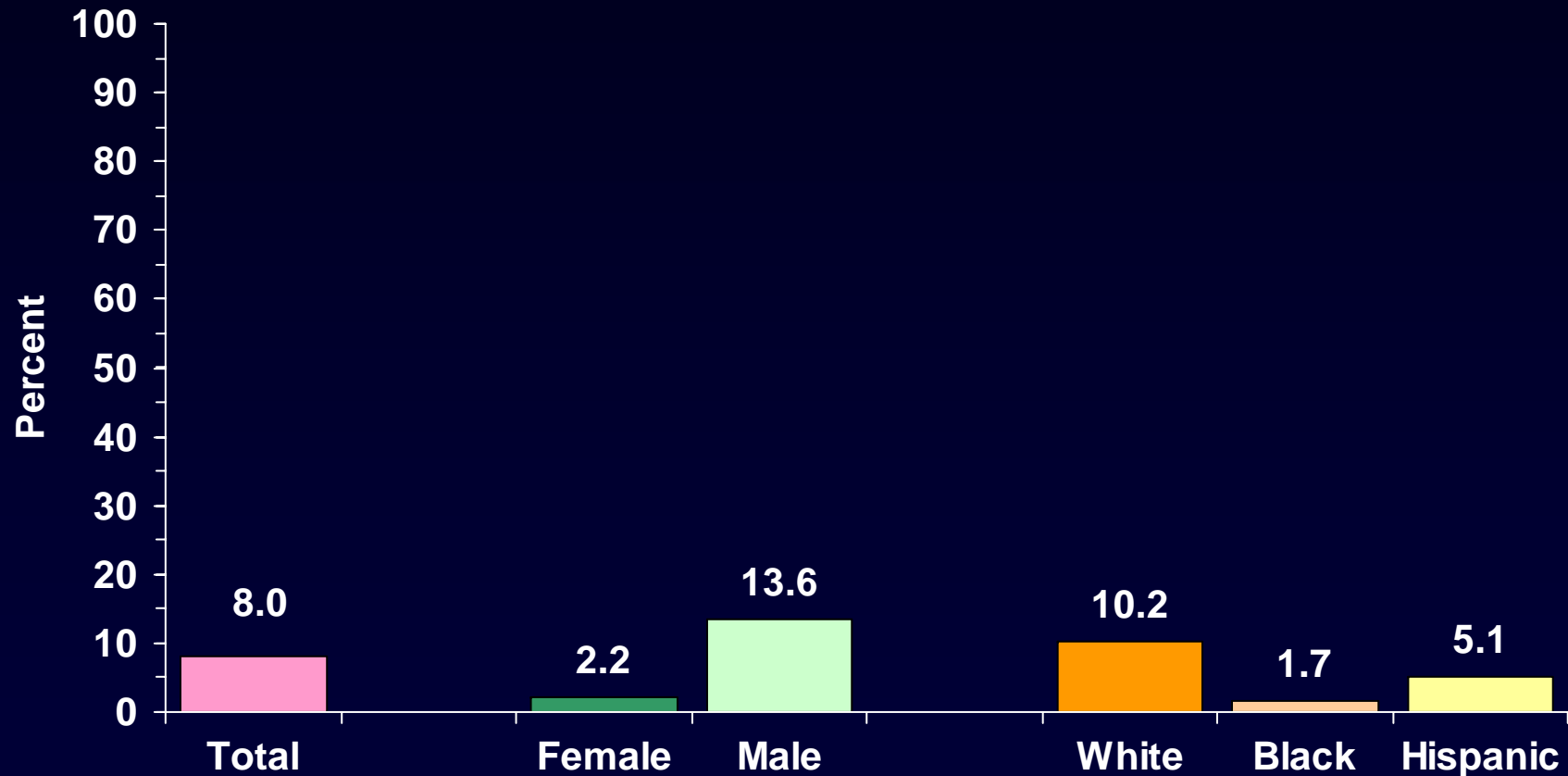
Source: National Youth Risk Behavior Surveys, 1995 – 2003

\* Used chewing tobacco, snuff, or dip on  $\geq 1$  of the 30 days preceding the survey

<sup>1</sup> Significant linear decrease,  $p < .05$



# Percentage of High School Students Who Reported Current Smokeless Tobacco Use,\* by Gender and Race/Ethnicity, 2005



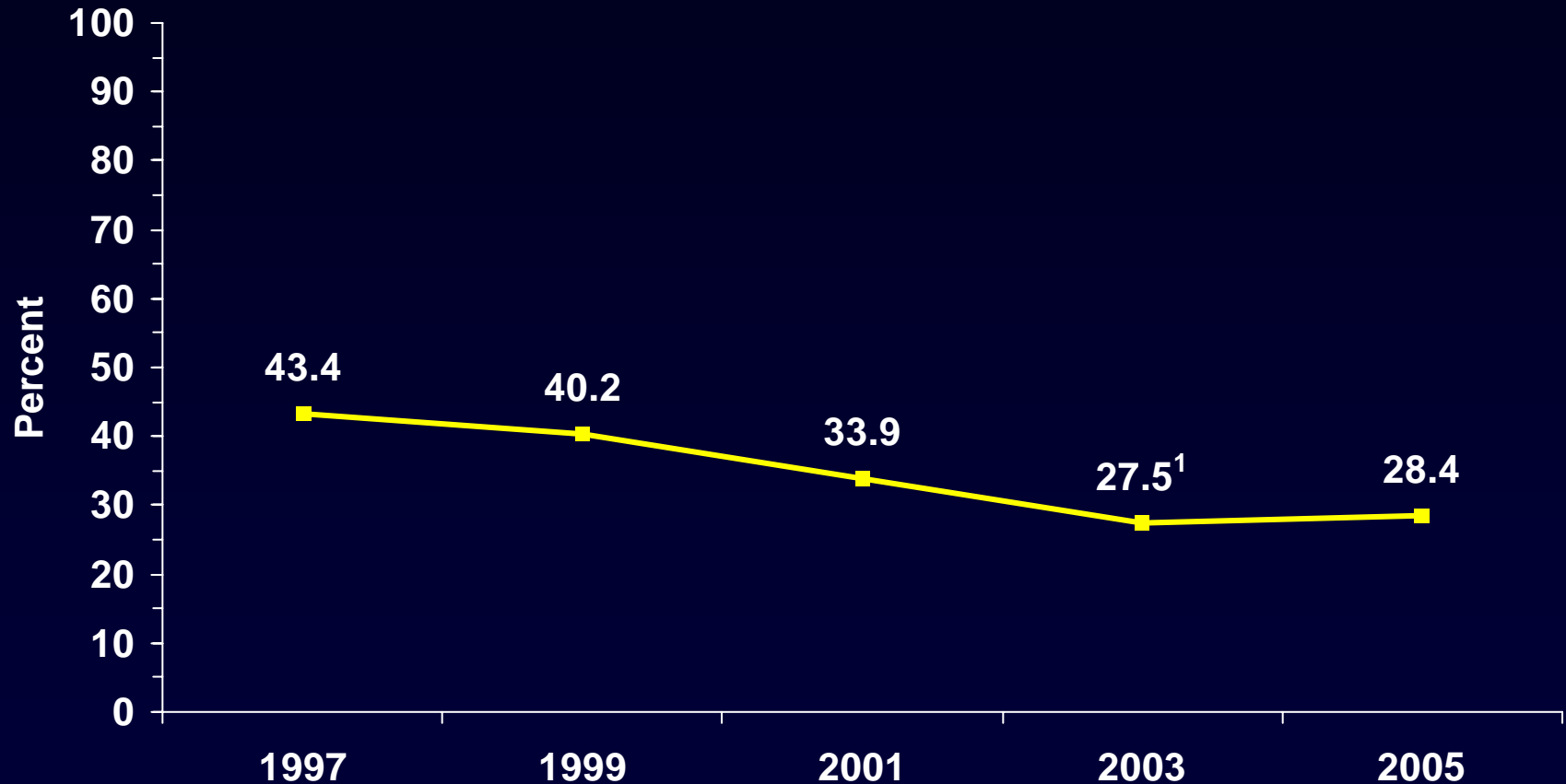
Source: National Youth Risk Behavior Survey, 2003

\* Used chewing tobacco, snuff, or dip on  $\geq 1$  of the 30 days preceding the survey

\*\* M > F; W > B



# Percentage of High School Students Who Reported Current Tobacco Use,\* 1997 - 2005



Source: National Youth Risk Behavior Surveys, 1997 - 2003

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

<sup>1</sup> Significant linear decrease and quadratic effect,  $p < .05$

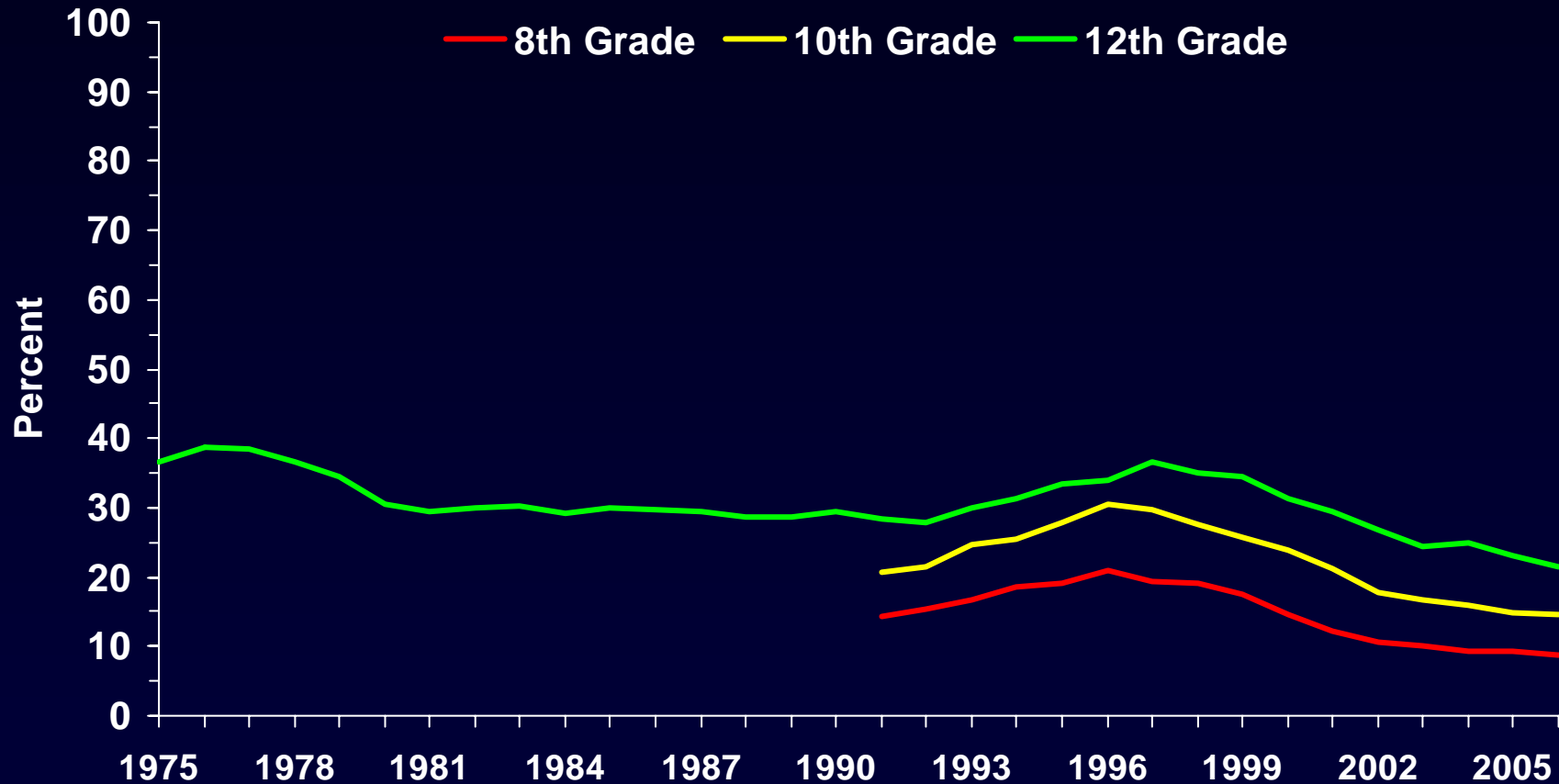


# Monitoring the Future Study

- Conducted by the University of Michigan under a research grant from:
  - National Institute on Drug Abuse
  - National Institutes of Health
  - Department of Health and Human Services

M  
F  
S

# Percent of Students Reporting Smoking Cigarettes in Past Month, by Grade

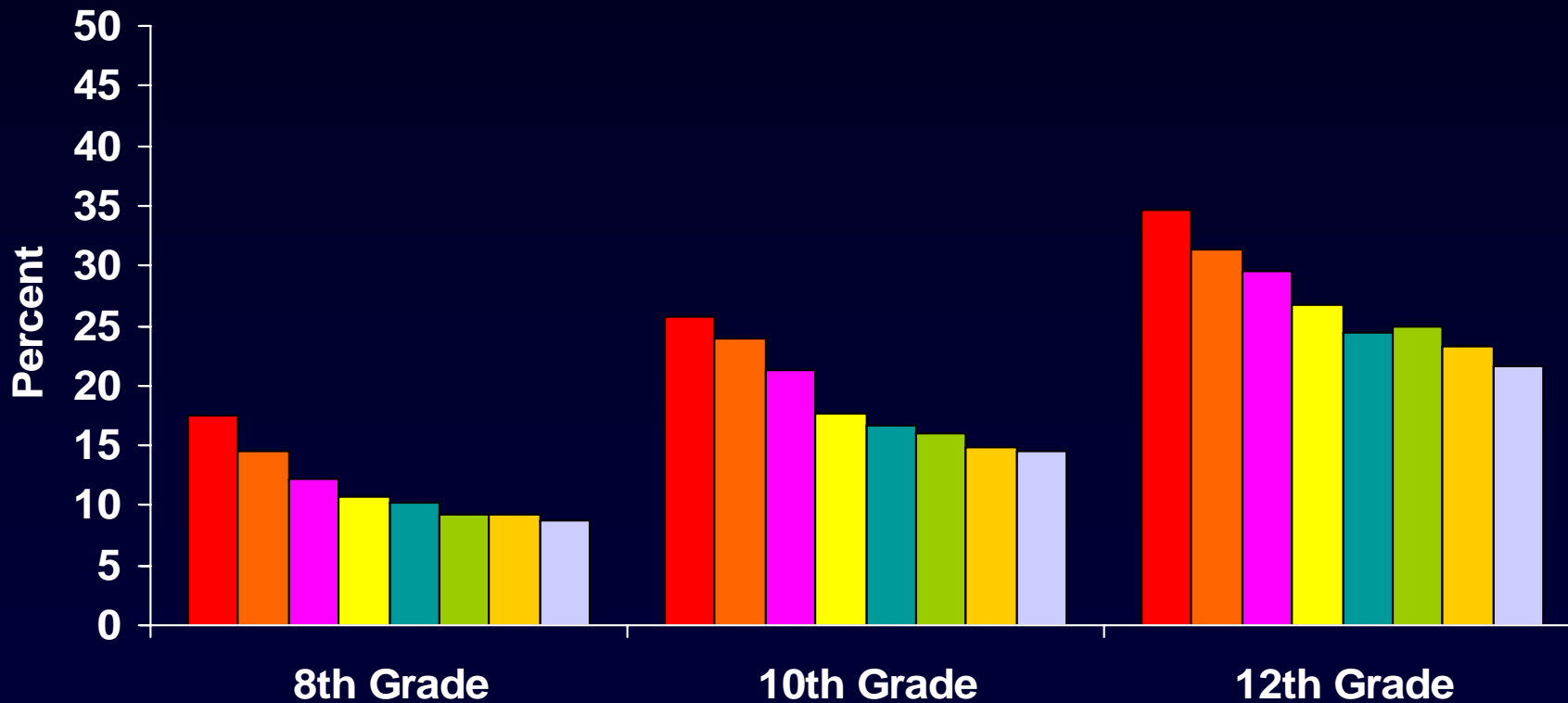


Source: Monitoring the Future Survey



# Percent of Students Reporting Smoking Cigarettes in Past Month, by Grade

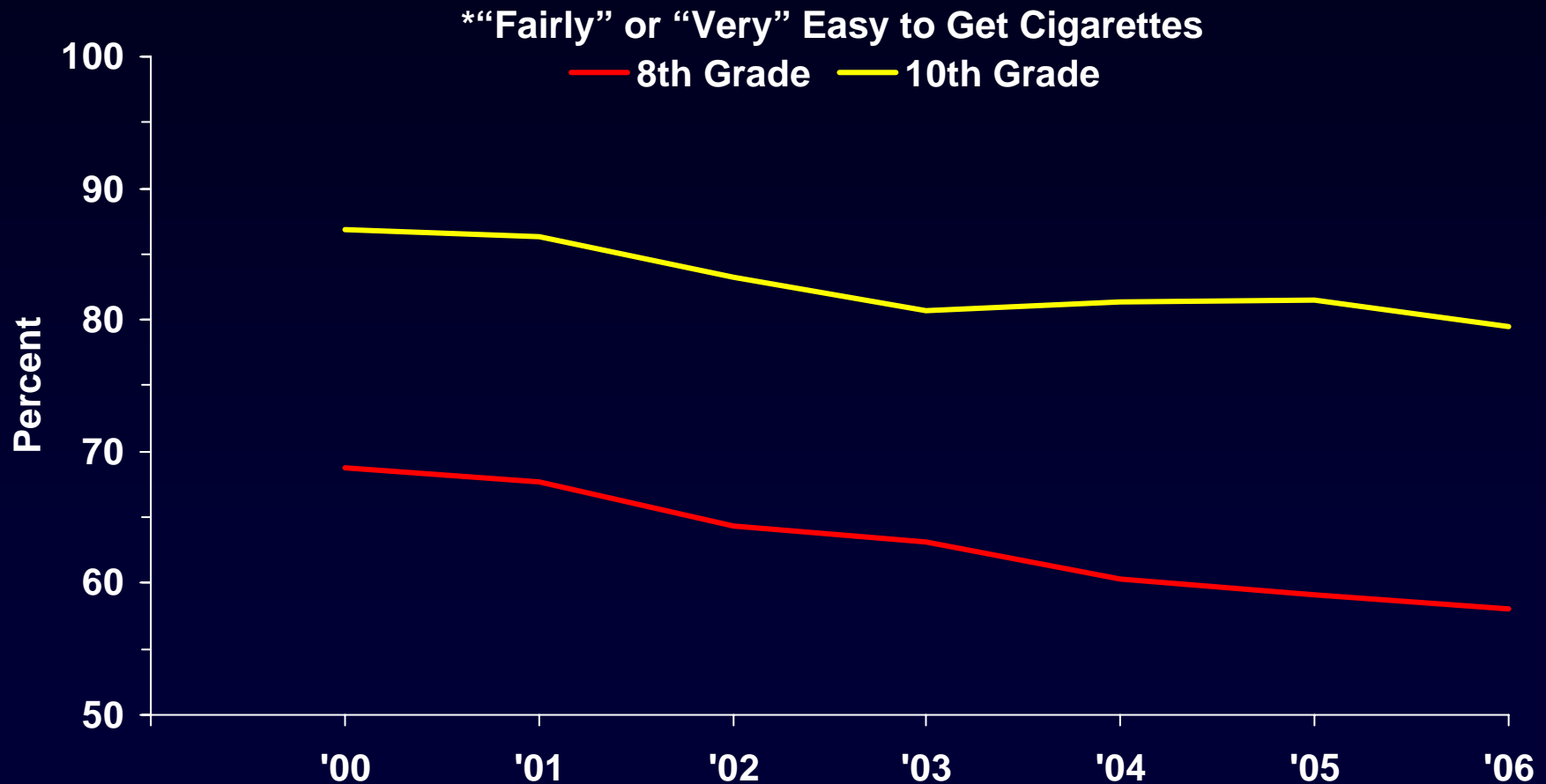
■ 1999 ■ 2000 ■ 2001 ■ 2002 ■ 2003 ■ 2004 ■ 2005 ■ 2006



Source: Monitoring the Future Survey



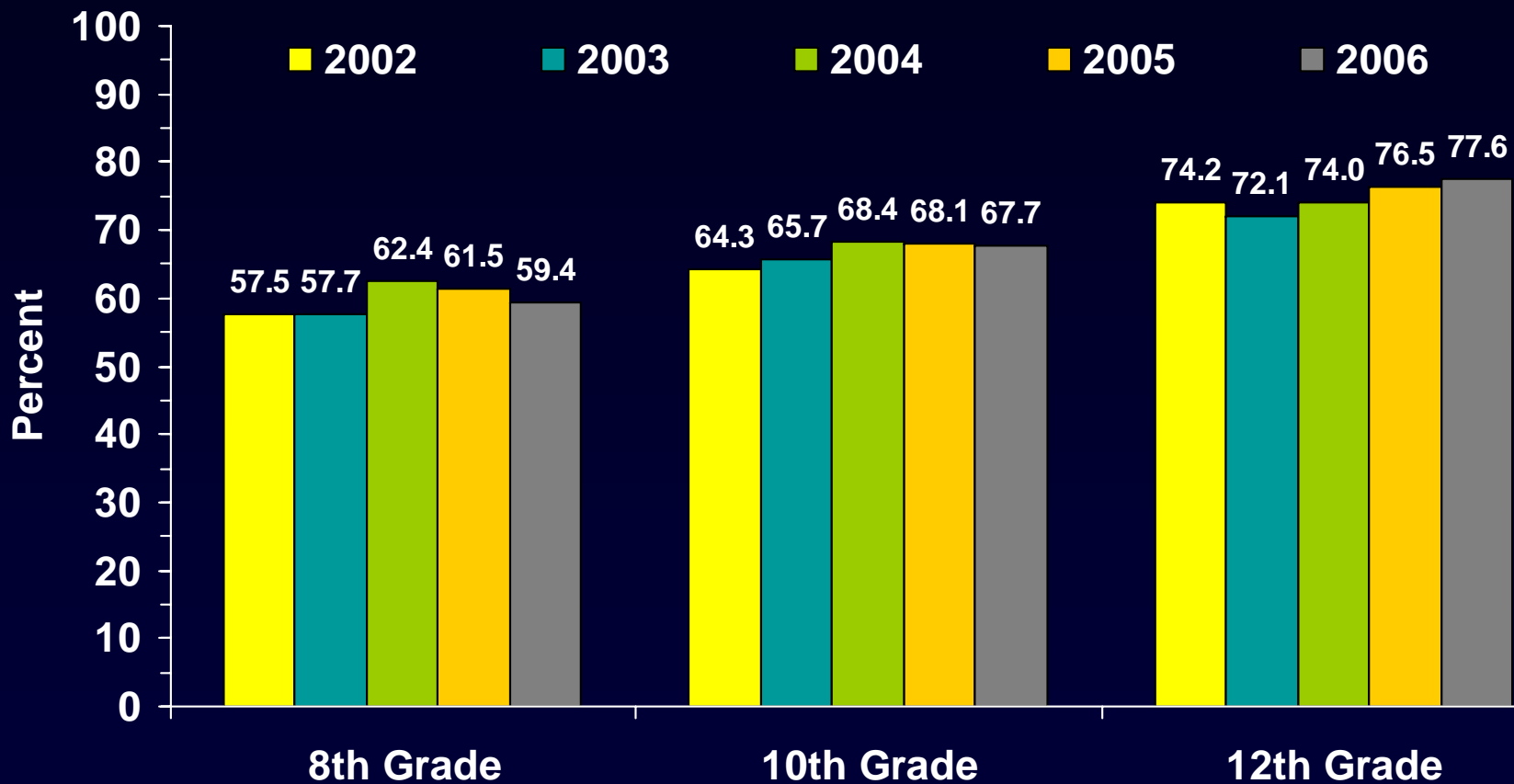
# Recent Trends in Availability of Cigarettes,\* Among 8<sup>th</sup> and 10<sup>th</sup> Grader Students



Source: Monitoring the Future Survey



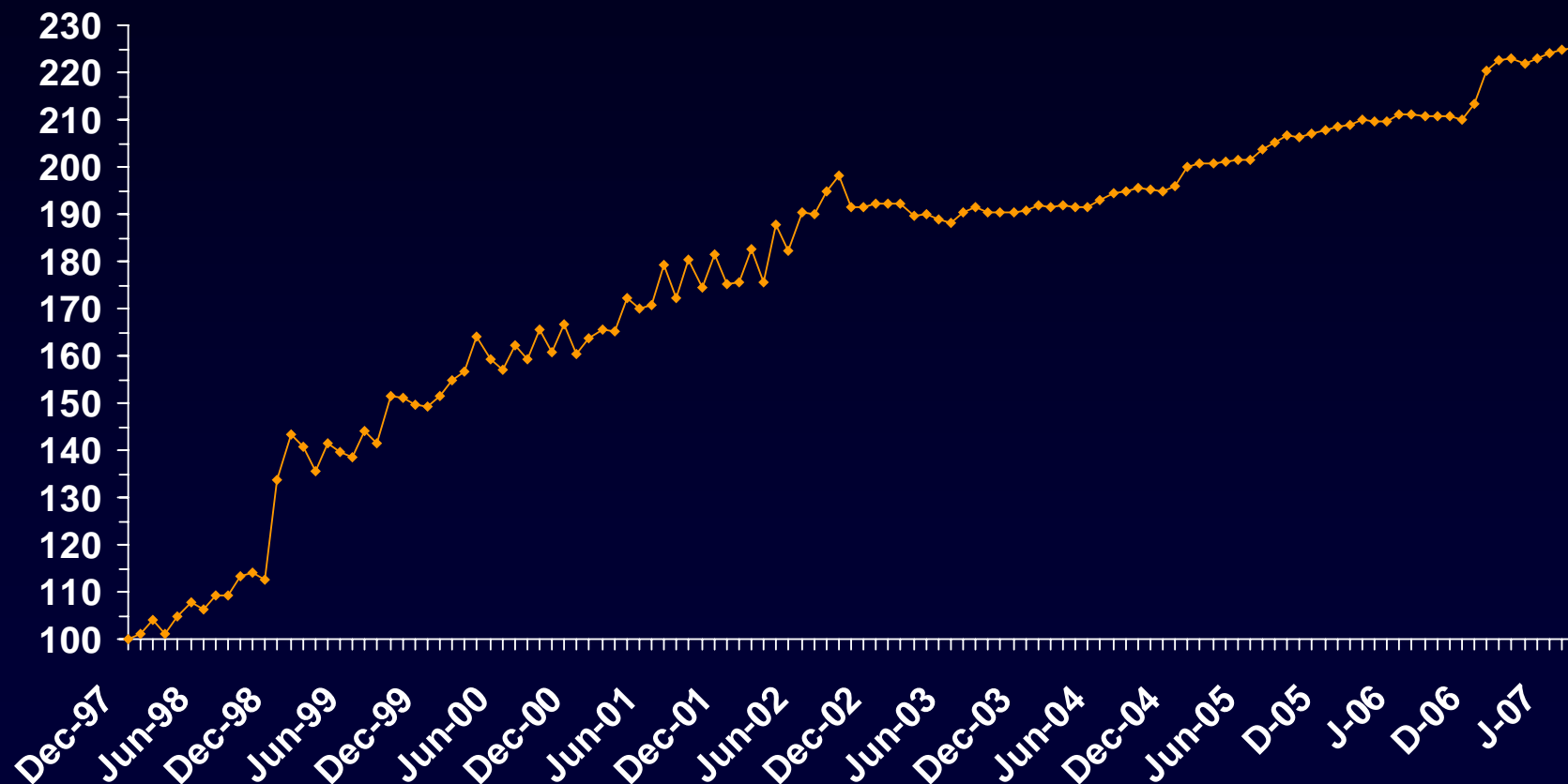
# Percent Perceiving Great Risk of Smoking One or More Packs of Cigarettes per Day



Source: Monitoring the Future Survey



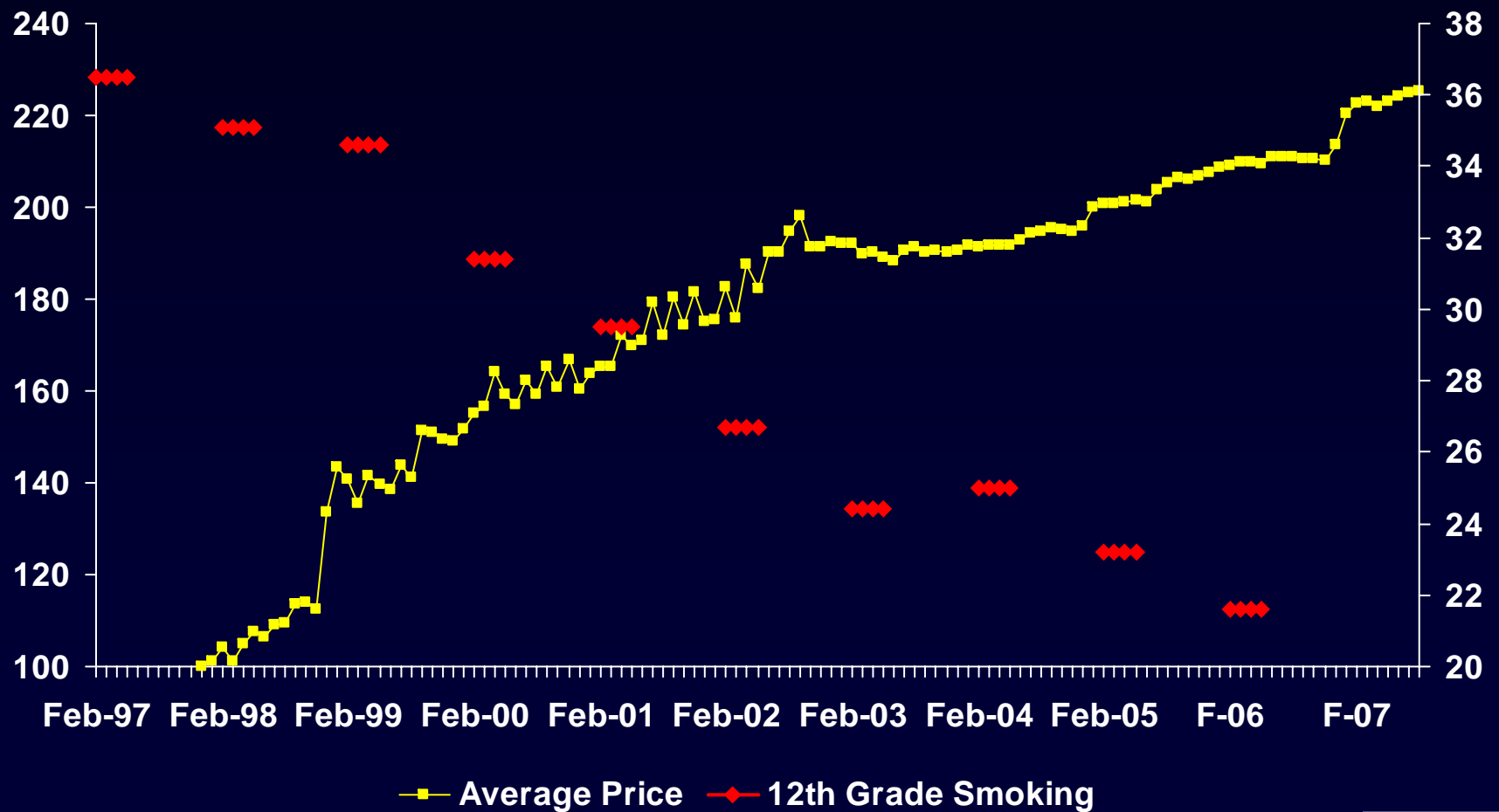
# Cigarette Retail Price Index



Source: Bureau of Labor Statistics, All Urban Consumers 12/97 to 8/07



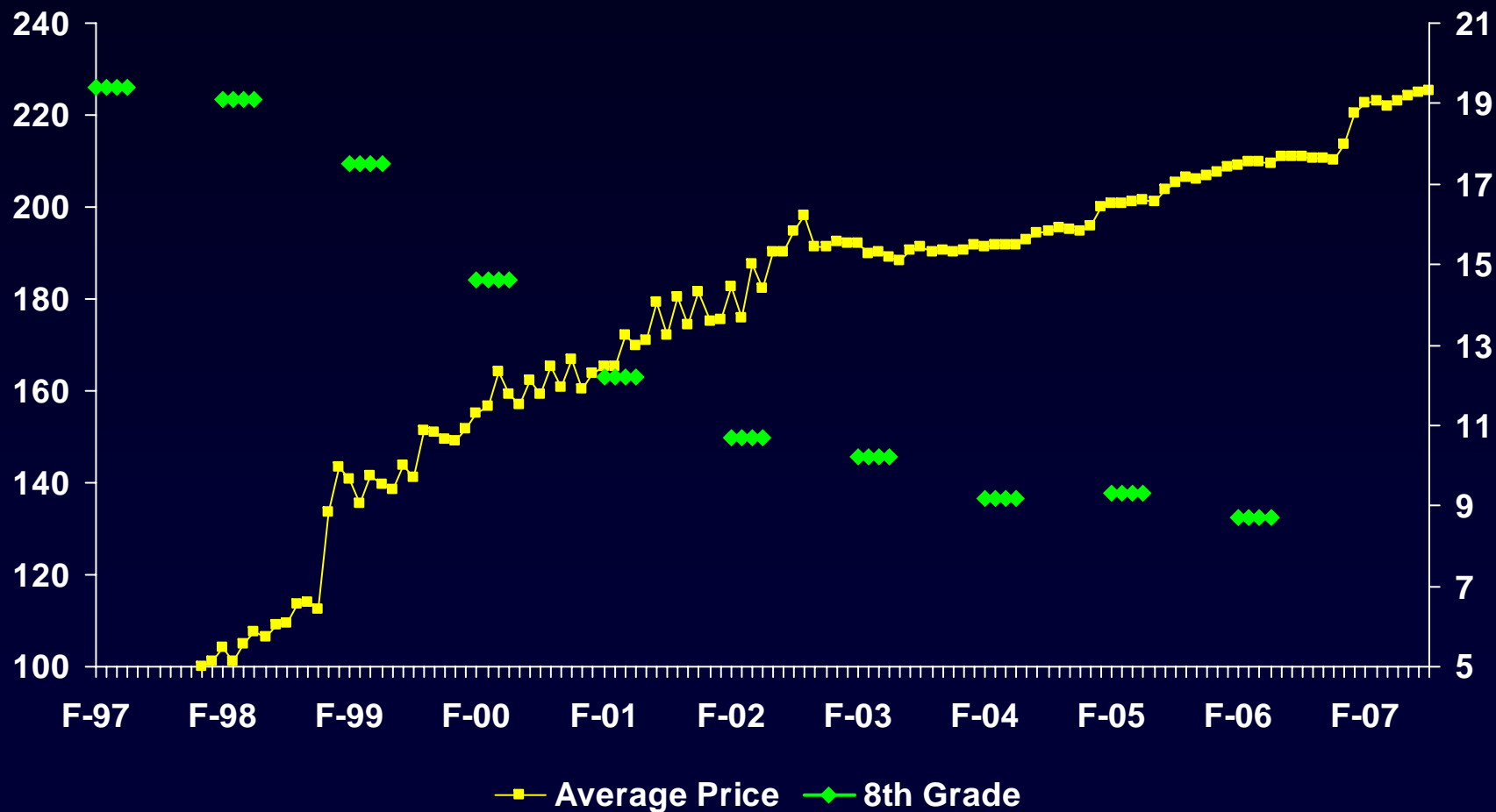
# Current Smoking among 12<sup>th</sup> Graders versus Cigarette Retail Price Index



Sources: Monitoring the Future Survey, Smoking on 1 or more of past 30 days  
 Bureau of Labor Statistics, All Urban Consumers 12/97 to 8/07



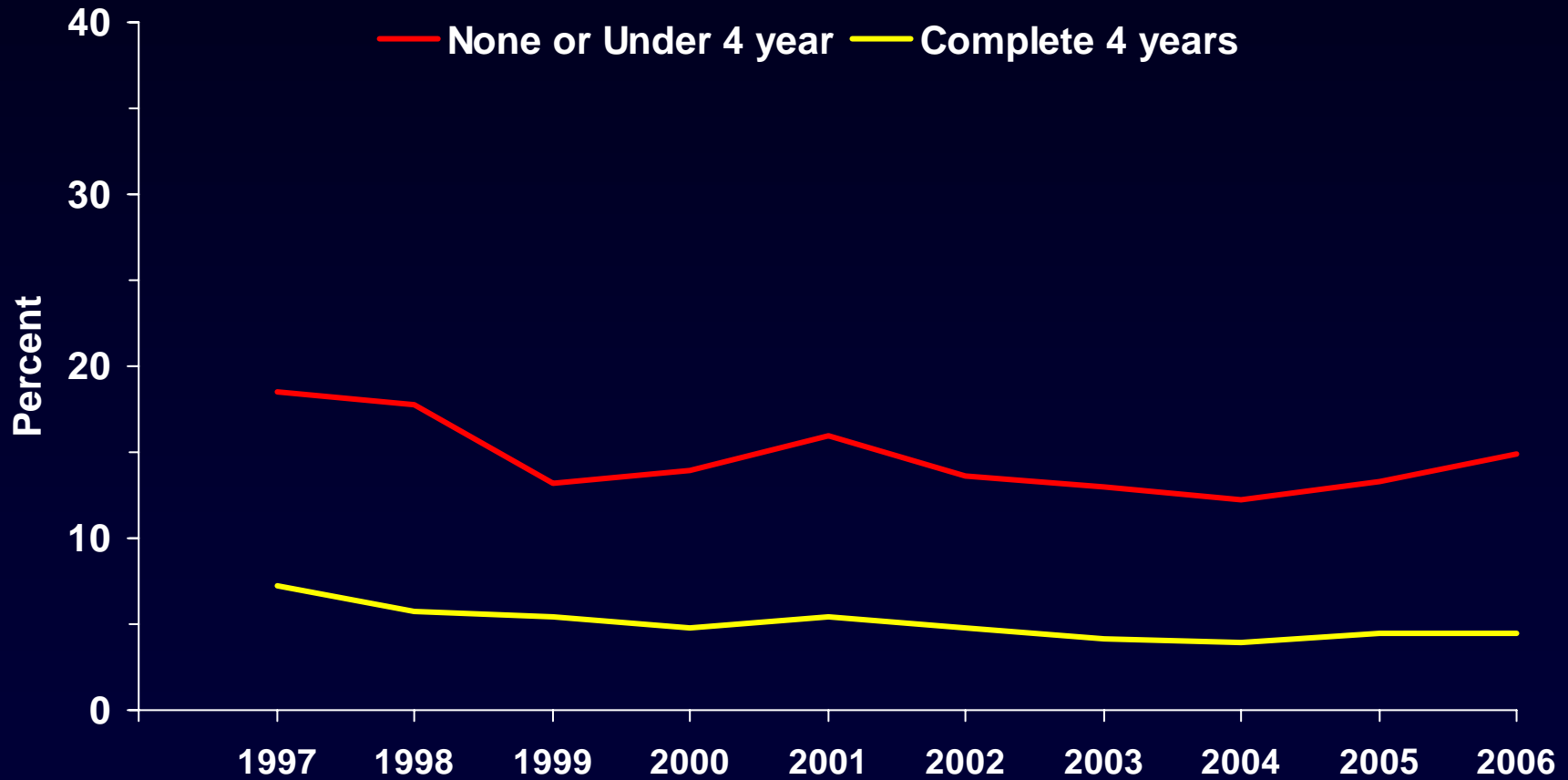
# Current Smoking among 8<sup>th</sup> Graders versus Cigarette Retail Price Index



Sources: Monitoring the Future Survey, Smoking on 1 or more of past 30 days  
 Bureau of Labor Statistics, All Urban Consumers 12/97 to 8/07



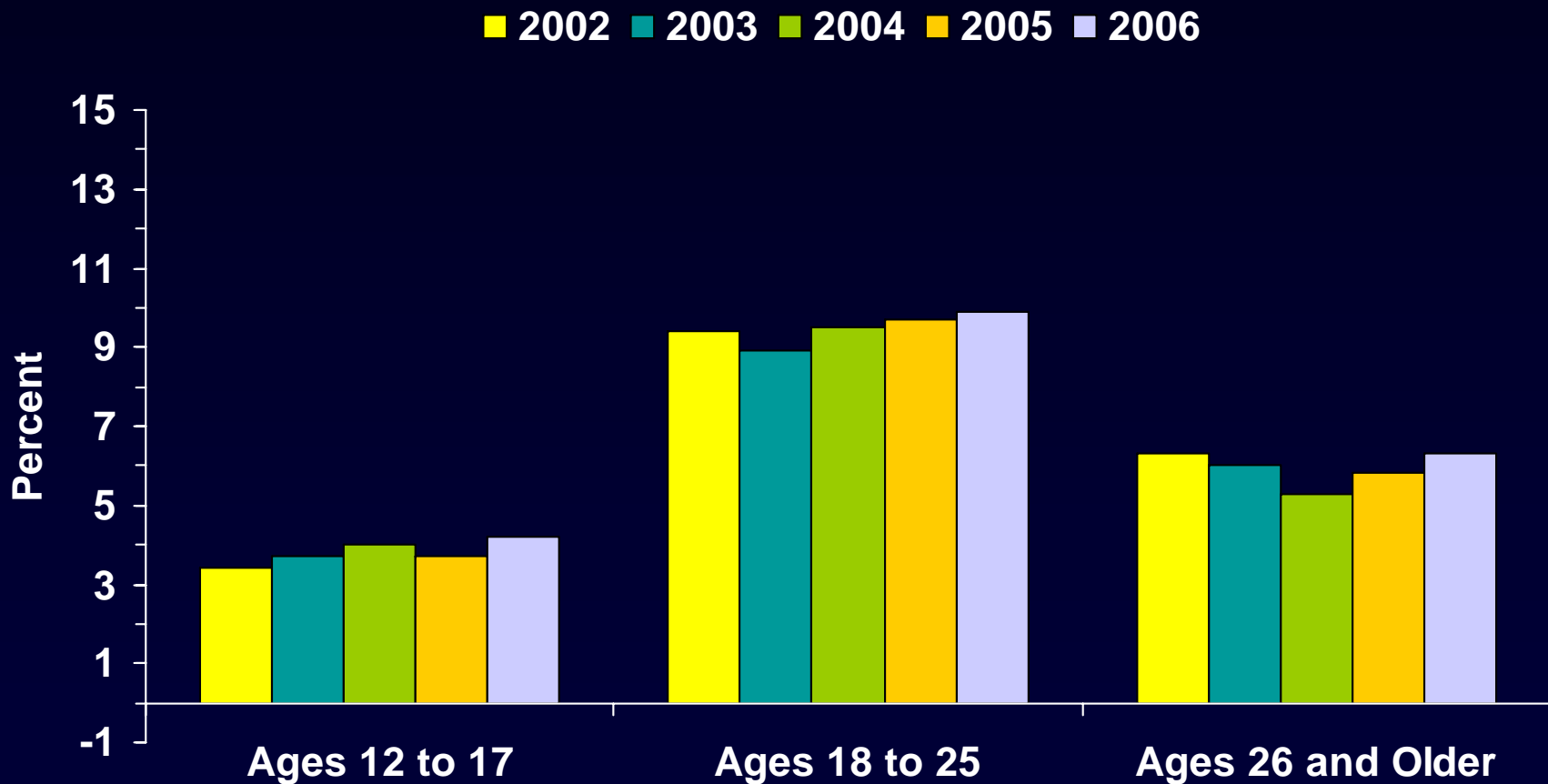
# Percent of 10<sup>th</sup> Grade Students Reporting Use of Smokeless Tobacco in Past 30 Days, by College Plans



Source: Monitoring the Future Survey



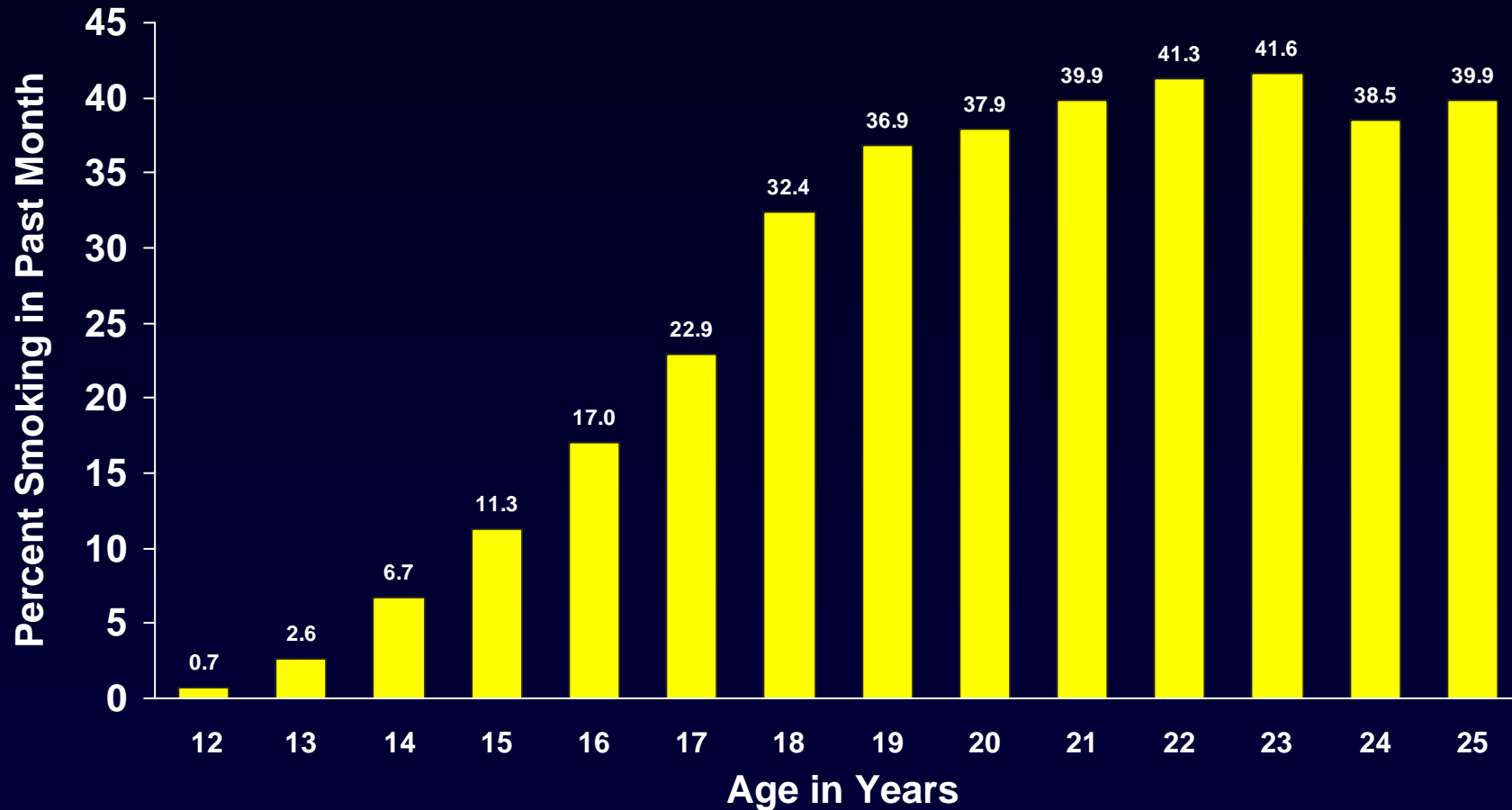
# Past Month Smokeless Tobacco Use Among Males, Ages 12-17, 18-25, and 26+



Source: National Survey on Drug Use and Health, SAMSHA, 2006



# Past Month Cigarette Use, Ages 12 to 25



Source: National Survey on Drug Use and Health, SAMSHA, 2006

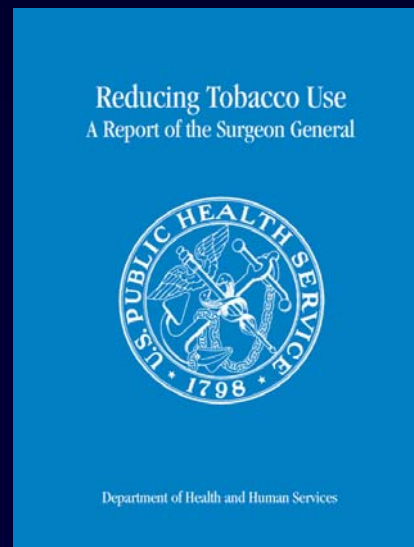


## Overview and Conclusions

- Almost 1.5 million youth under age 18 start smoking each year
- Perceived risk among younger students decreasing
- Initiation rates in later adolescence are increasing
- Prevalence of smokeless tobacco use appears to be increasing

# Reducing Tobacco Use – A Report of the Surgeon General, 2000

- “Our lack of greater progress in tobacco control is more the results of failure to implement proven strategies than the lack of knowledge about what to do”
- Educational, clinical, regulatory, economic and comprehensive approaches recommended



For More Information...



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*The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.*

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