

# Tobacco Use Patterns



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*Shifting to a Higher Gear*

# Background



- **Most tobacco control programs focus on prevention for children or cessation for adults (Lawrence, Nicotine Tob Res, 2007)**
- **Young adults have experienced increased targeting by the tobacco industry**
- **Smokers who quit before age 35 years have a life expectancy similar to never smokers (Doll, BMJ 2004)**
- **Little is known about cigarette smoking among young adults**



# Healthy People 2010 Tobacco Use Objectives



- 27-1 Reduce tobacco use by adults (cigarette smoking, spit tobacco, cigars)
- 27-3 Reduce the initiation of tobacco use among children, adolescents, and young adults (aged 18-25 years)
- 27-4 Increase the average age of first use of tobacco products by adolescents and young adults



# Healthy People 2010 Tobacco Use Objectives



- 27-5 Increase smoking cessation attempts by adult smokers
- 27-6 Increase smoking cessation during pregnancy
- 27-10 Reduce the proportion of nonsmokers exposed to environmental tobacco smoke
- 27-16 Reduce the proportion of adolescents and young adults who are exposed to tobacco advertising and promotions



# Methods: National Health Interview Survey



- **Nationally representative, annual, face-to-face household survey conducted by the National Center for Health Statistics**
- **Civilian, non-institutionalized US population**
- **Multi-stage area probability design**
- **Oversampling of selected groups**



# Methods: NHIS Tobacco Use Measures



- **Current Smoker** – Ever smoked 100 cigarettes and now smoke every day
- Former smoker** - Ever smoked 100 cigarettes and do not smoke now
- Never smoker** - Never smoked 100 cigarettes
- **Current smokers**
  - Number of cigarettes/day
  - Non-daily smokers
- **Other Tobacco Use**  
(cigar, chewing tobacco or snuff, any tobacco use)



# Methods: NHIS Cessation Measures



- **Quit Attempts among Current Daily Smokers**  
**Current Smoker – Ever smoked 100 cigarettes and now smoke every day**

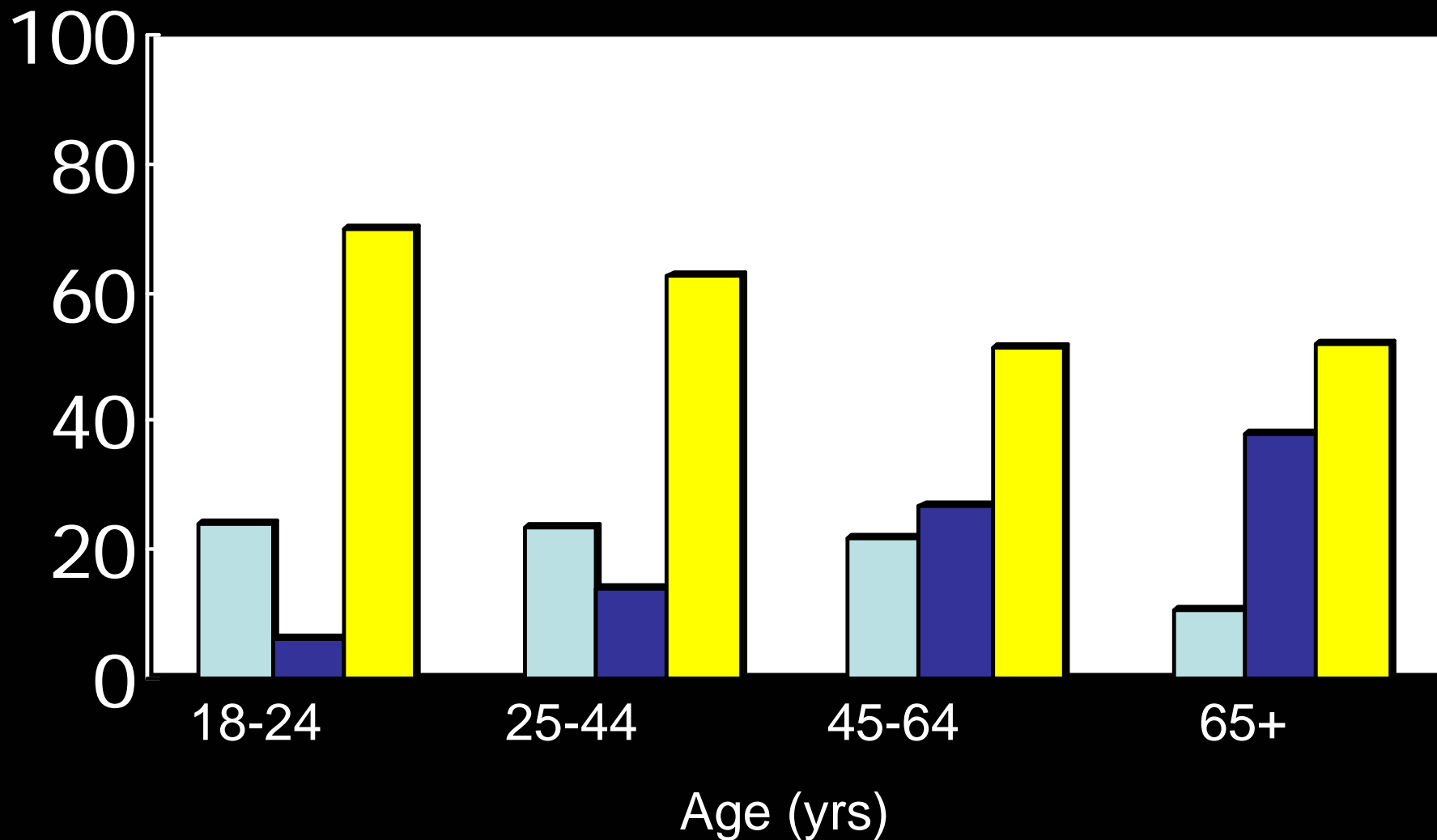
**Answered “yes” to *During the past 12 months, have you stopped smoking for one or more days because you were trying to quit smoking?***

- **Proportion of Ever Smokers who are no longer smoking**

**Former Smoker (smoked 100 but does not smoke now)/Ever smokers**

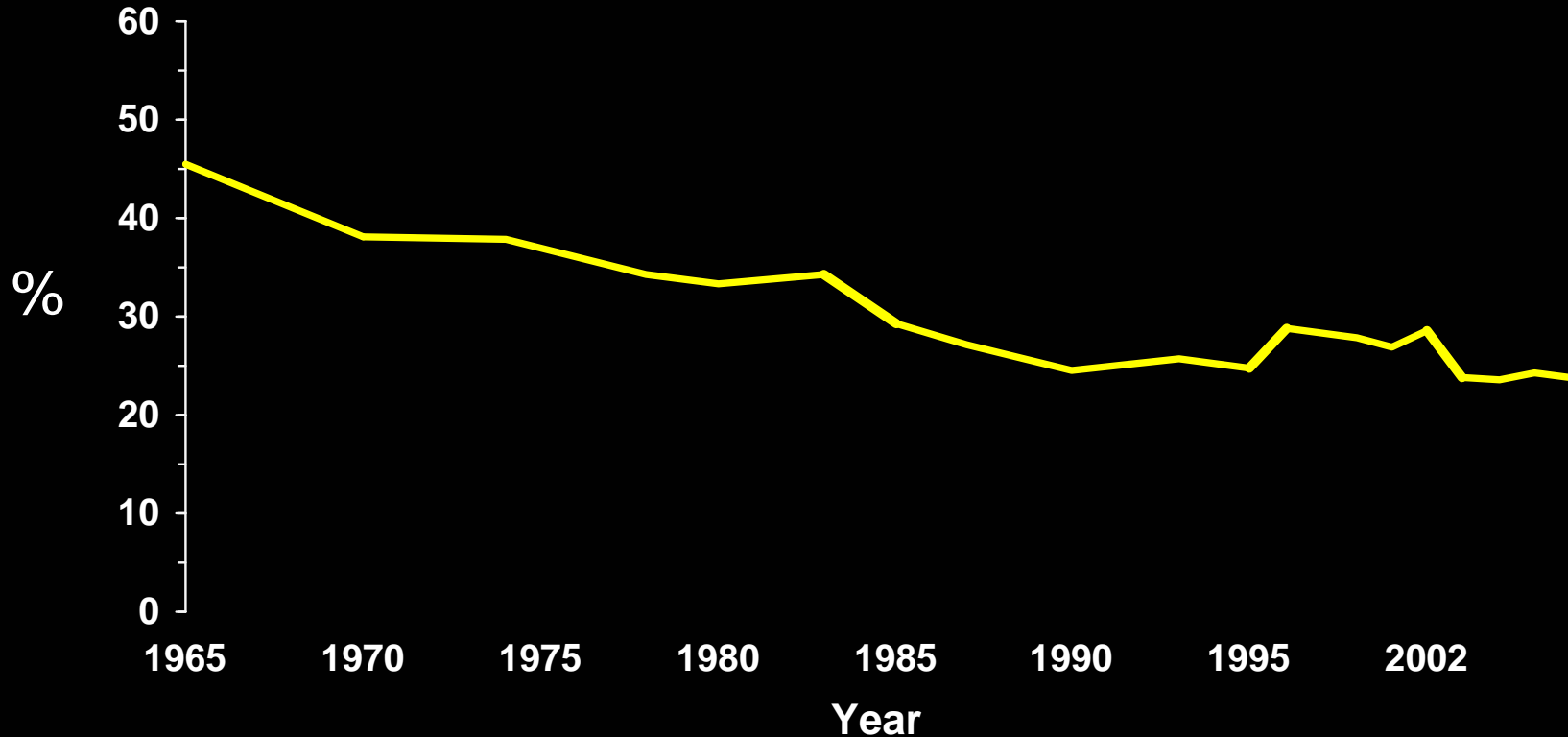


# Percentage of Current, Former, Never Smokers by Age — United States, 2006



Source: 2006 National Health Interview Survey

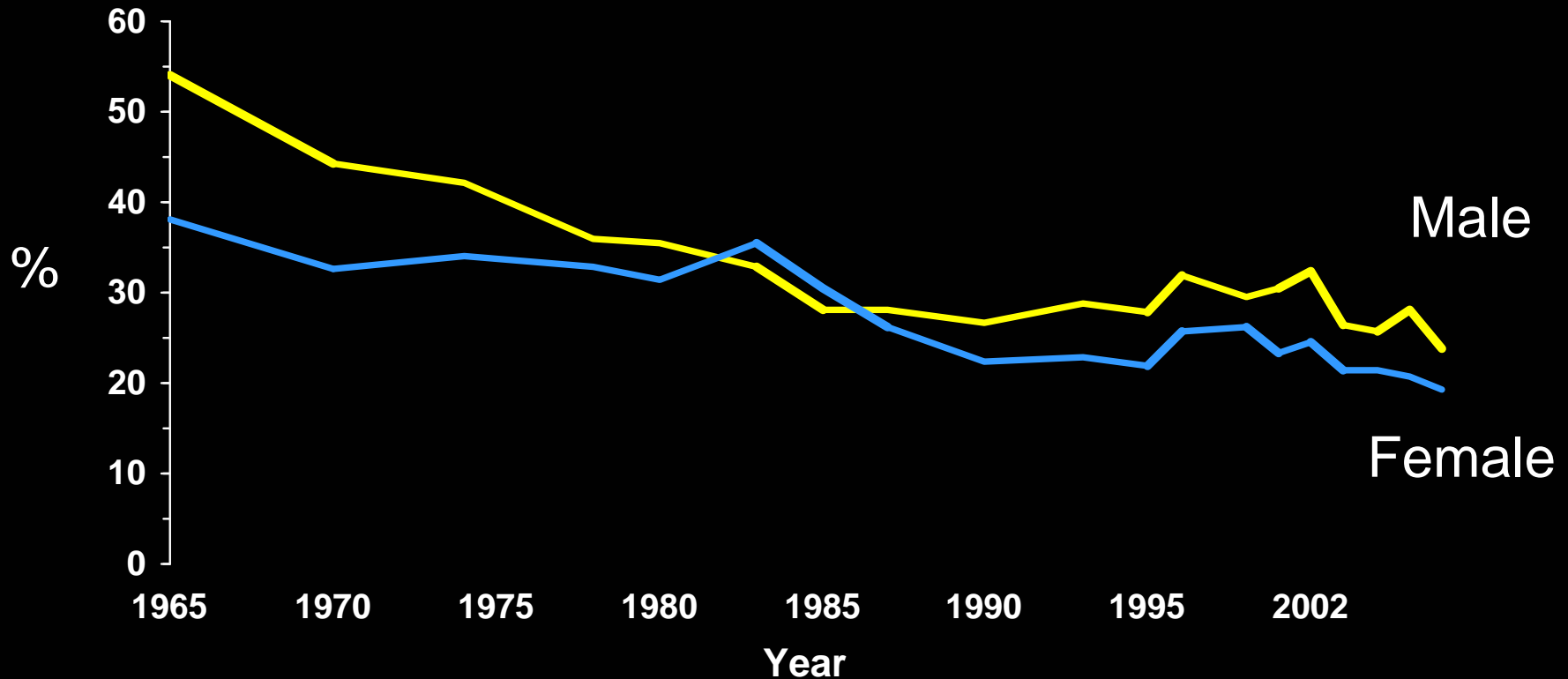
# Prevalence of Current Smoking, Ages 18-24 —United States, 1965-2006



Source: 1965-2005 National Health Interview Surveys

\*Also known as "quit ratio"; estimates since 1992 incorporate some-day smoking

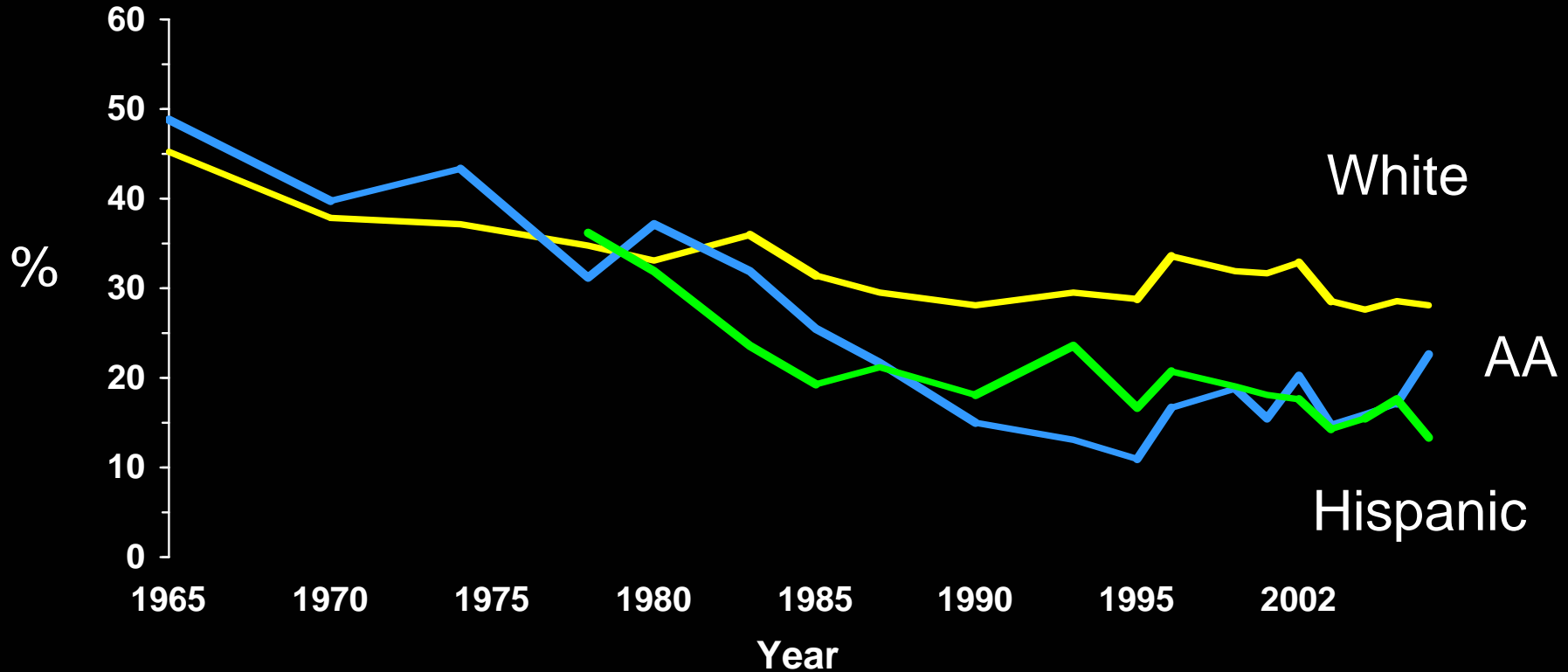
# Prevalence of Current Smoking, Ages 18-24 by Sex — United States, 1965-2006



Source: 1965-2005 National Health Interview Surveys

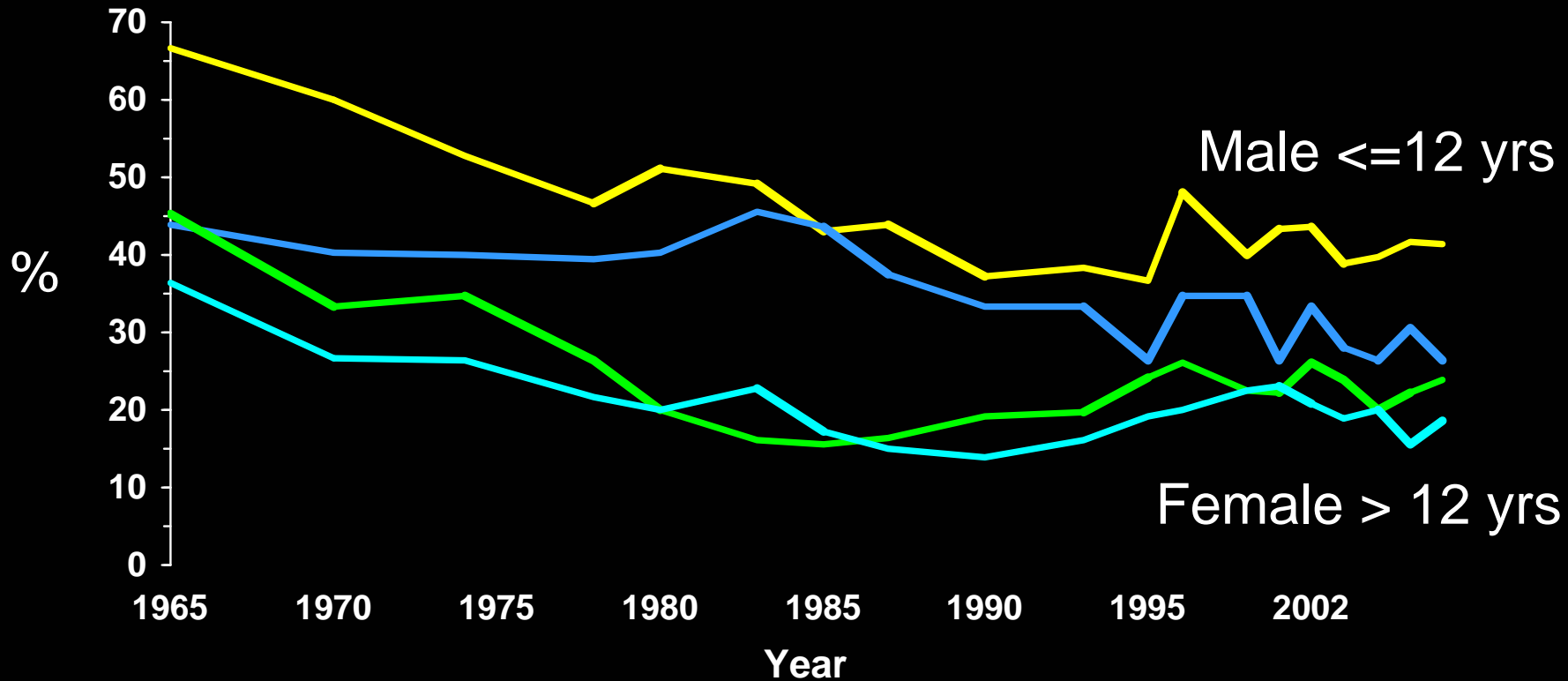
\*Also known as "quit ratio"; estimates since 1992 incorporate some-day smoking

# Prevalence of Current Smoking, Ages 18-24 by Race/Ethnicity — United States, 1965-2006



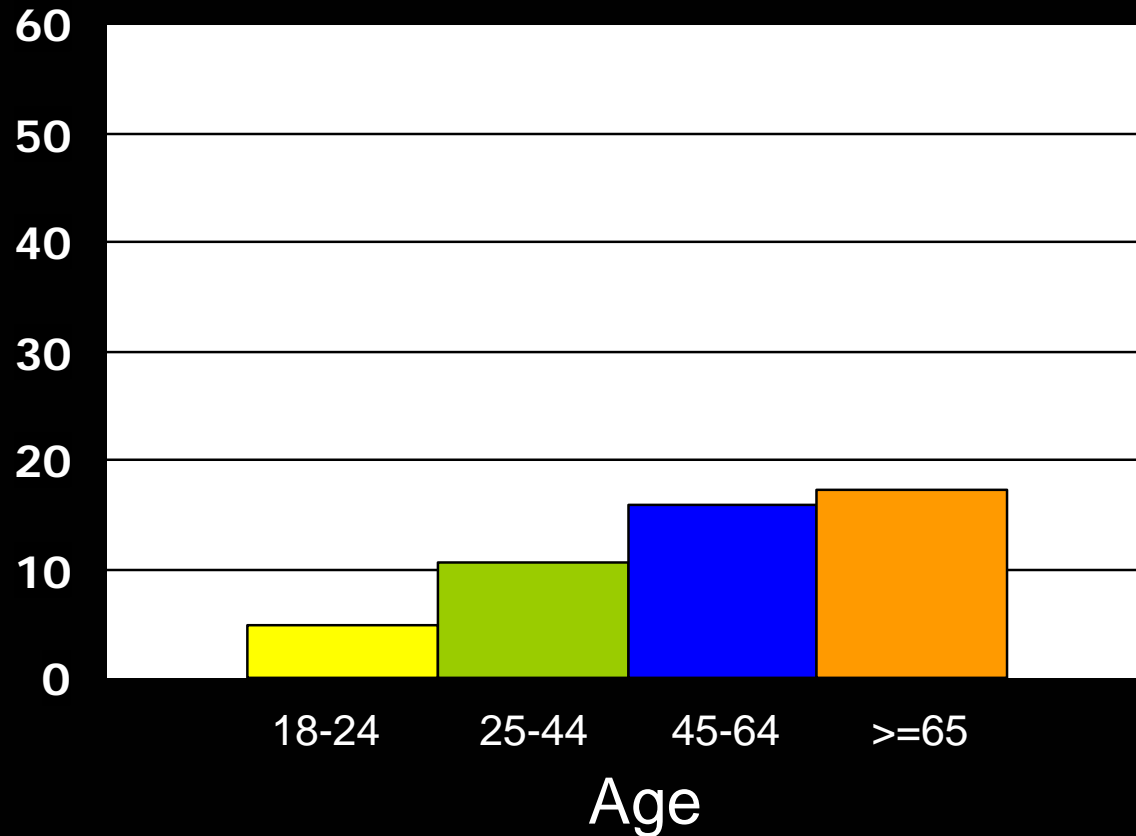
Source: 1965-2006 National Health Interview Surveys

# Prevalence of Current Smoking, Ages 18-24 by Sex and Education — United States, 1965-2006



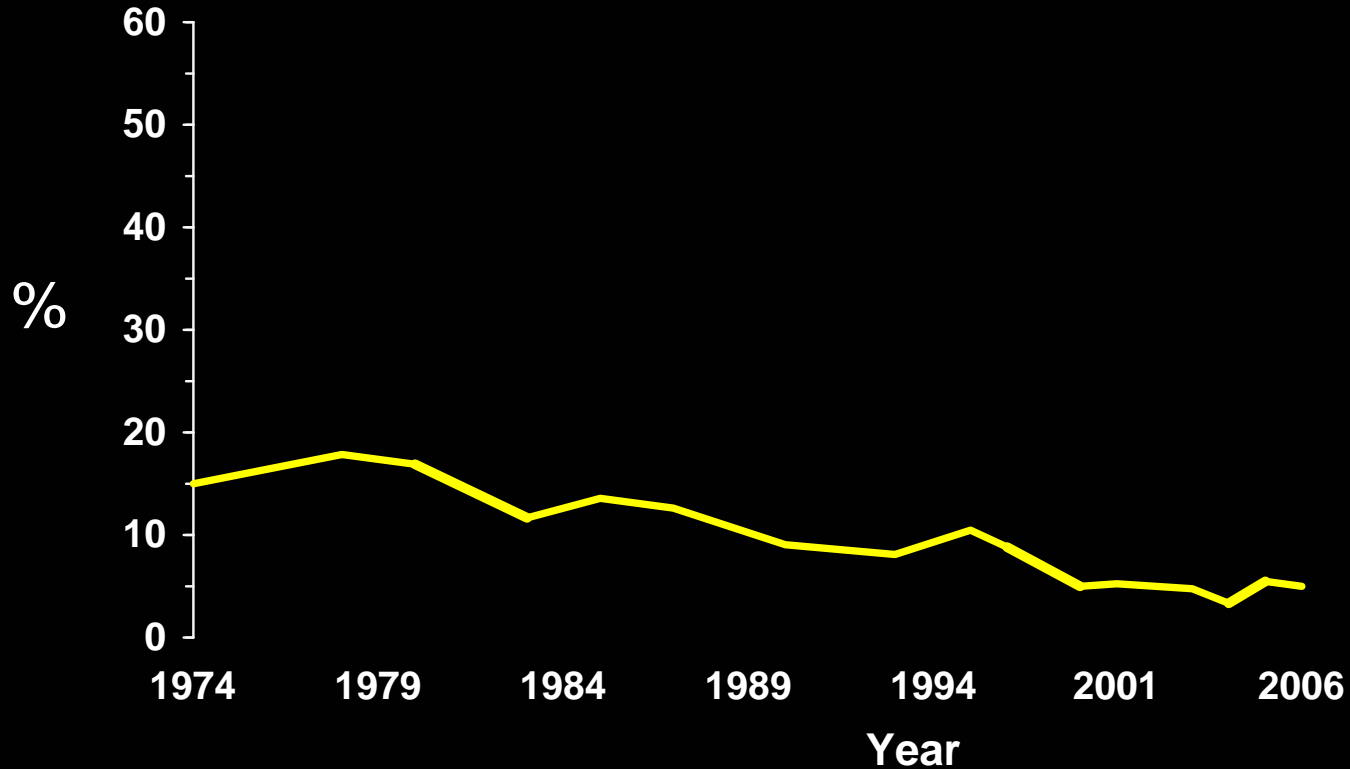
Source: 1965-2006 National Health Interview Surveys

# Percentage of Current Smokers who smoked $\geq 25$ cigarettes/day — United States, 2006



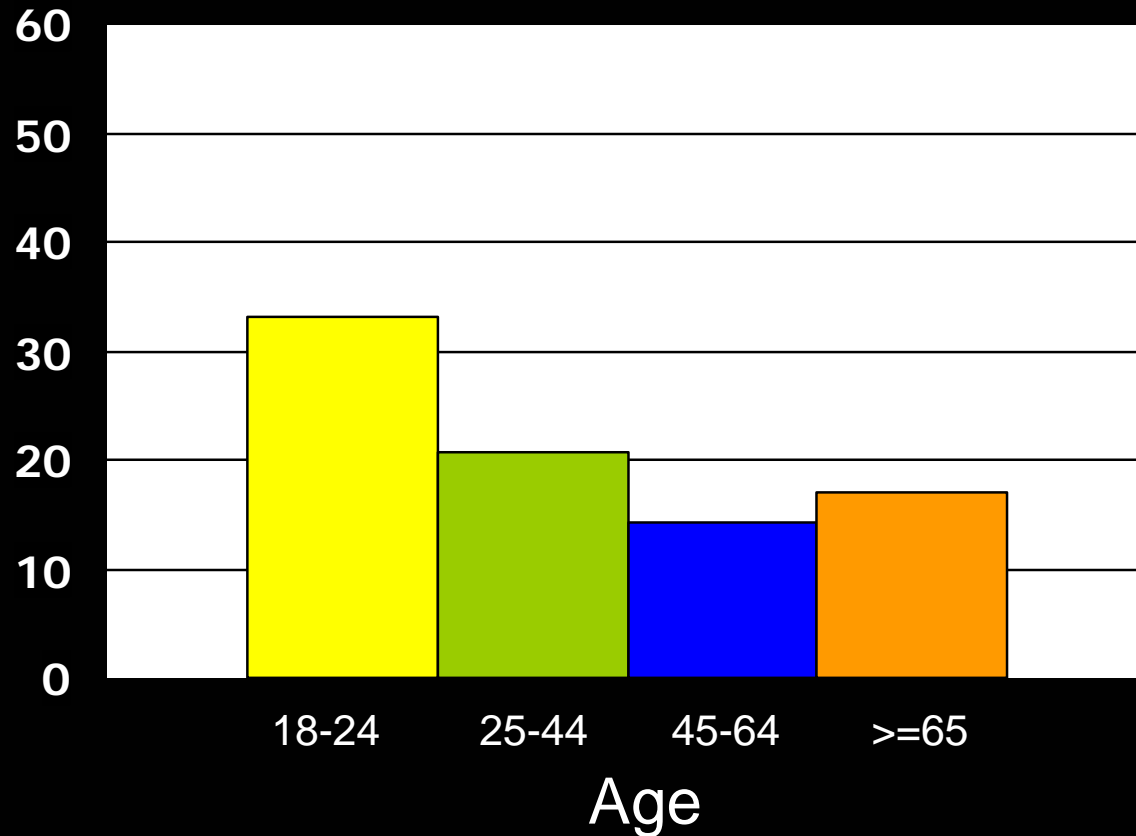
Source: 1993-2006 National Health Interview Surveys

# Percentage of Current smokers who smoke $\geq 25$ cigarettes/day, Ages 18-24 —United States, 1965-2006



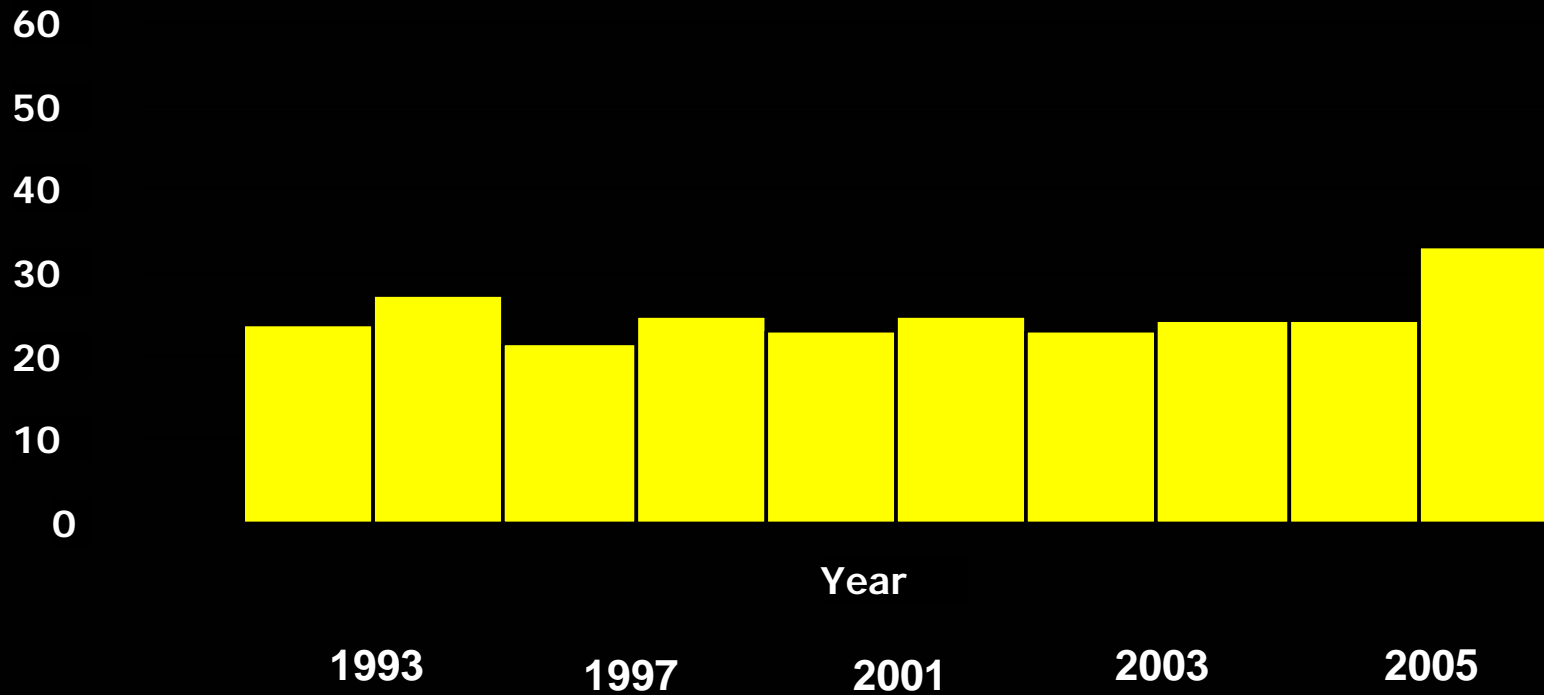
Source: 1965-2006 National Health Interview Surveys

# Percentage of Current Smokers, who are non-daily smokers —United States, 2006



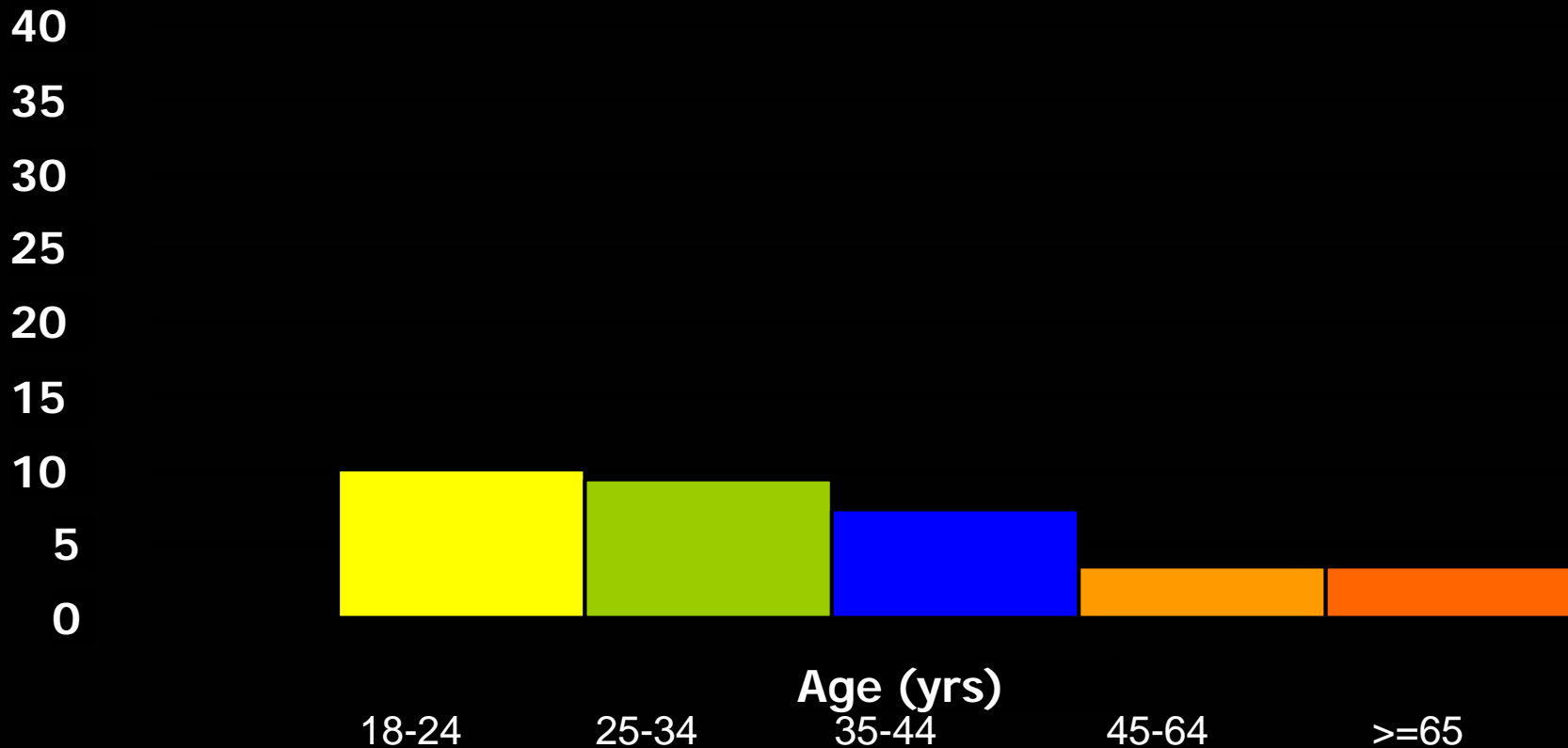
Source: 1993-2006 National Health Interview Surveys

# Percentage of Current Smokers who are Non-Daily Smokers, Ages 18-24 — United States, 1993-2006



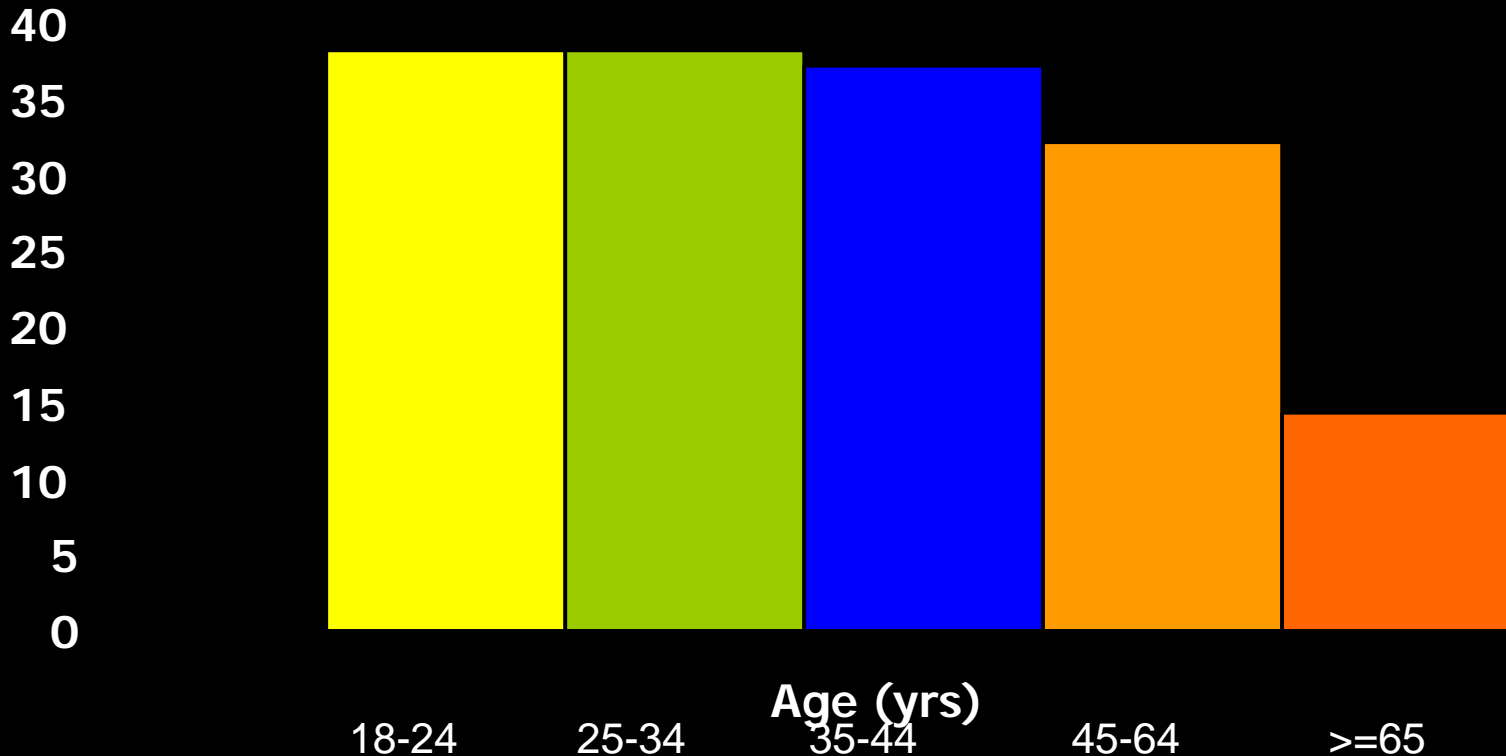
Source: 1993-2006 National Health Interview Surveys

# Percentage of men currently using snuff or chewing tobacco by age - United States, 2006



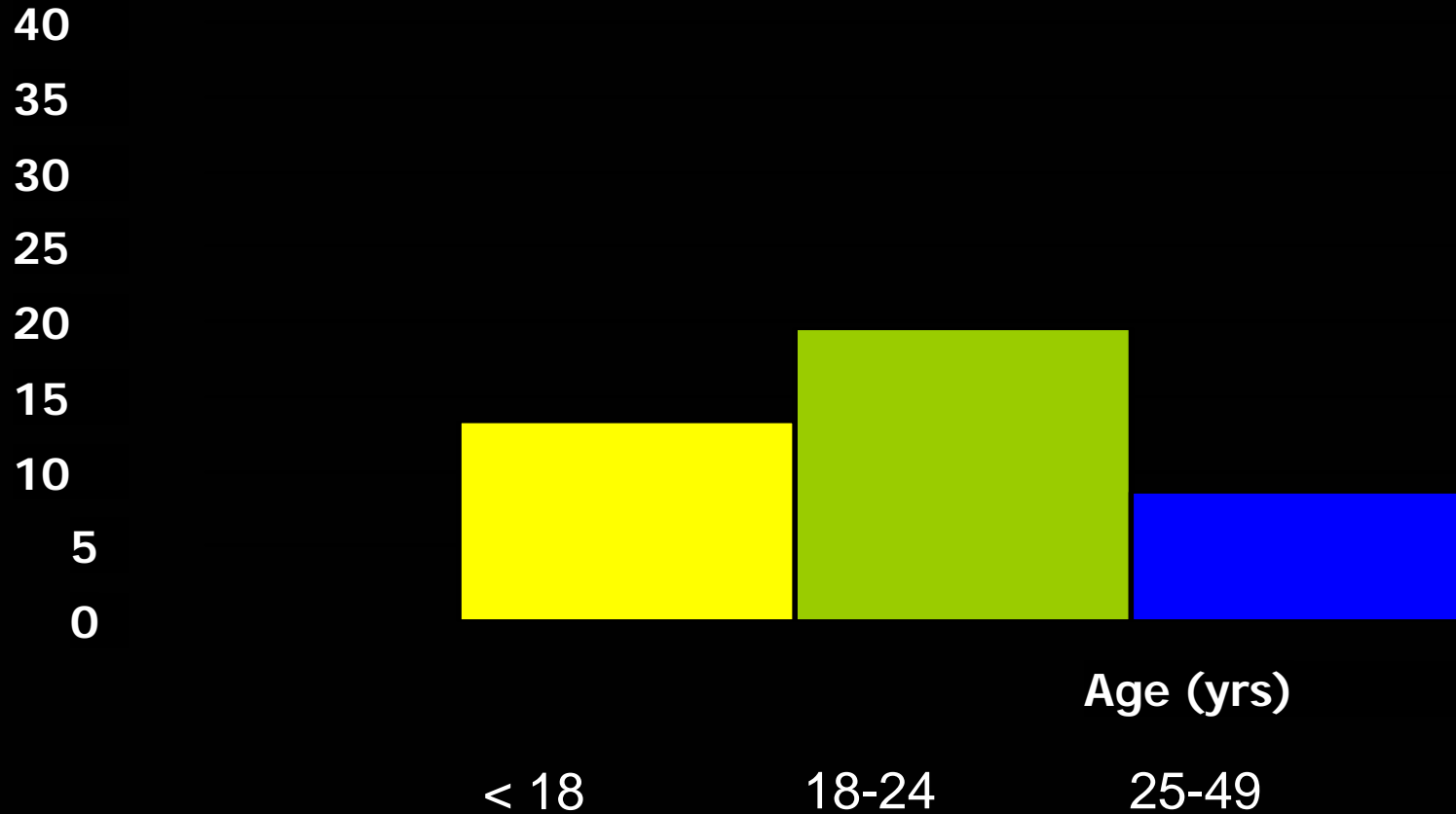
Source: 2006 National Health Interview Surveys

# Percentage of men currently using any tobacco product by age - United States, 2006



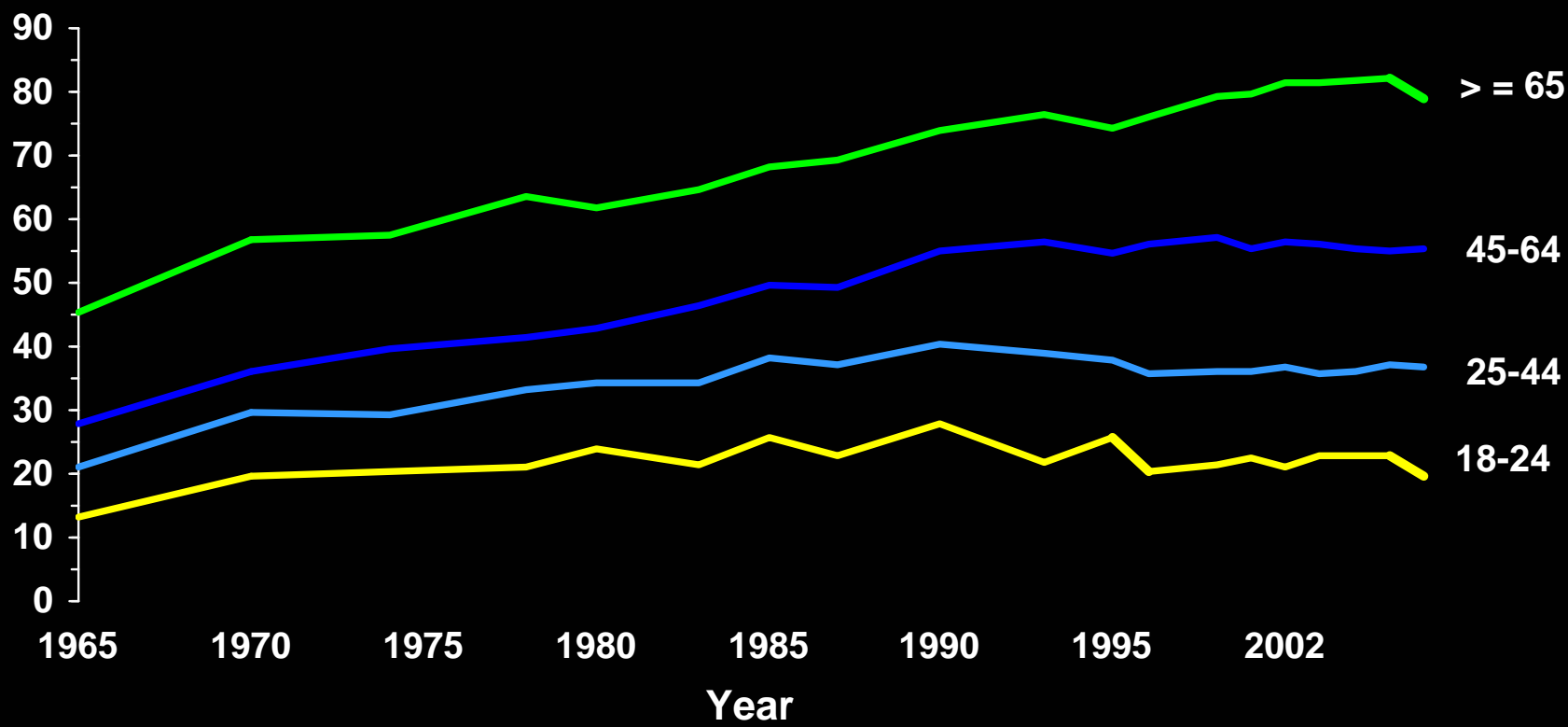
Source: 2006 National Health Interview Surveys

# Percentage of live births in which mothers reported smoking during pregnancy by age - United States, 2003



Source: 2003 Birth Certificates excludes CA, PA, WA

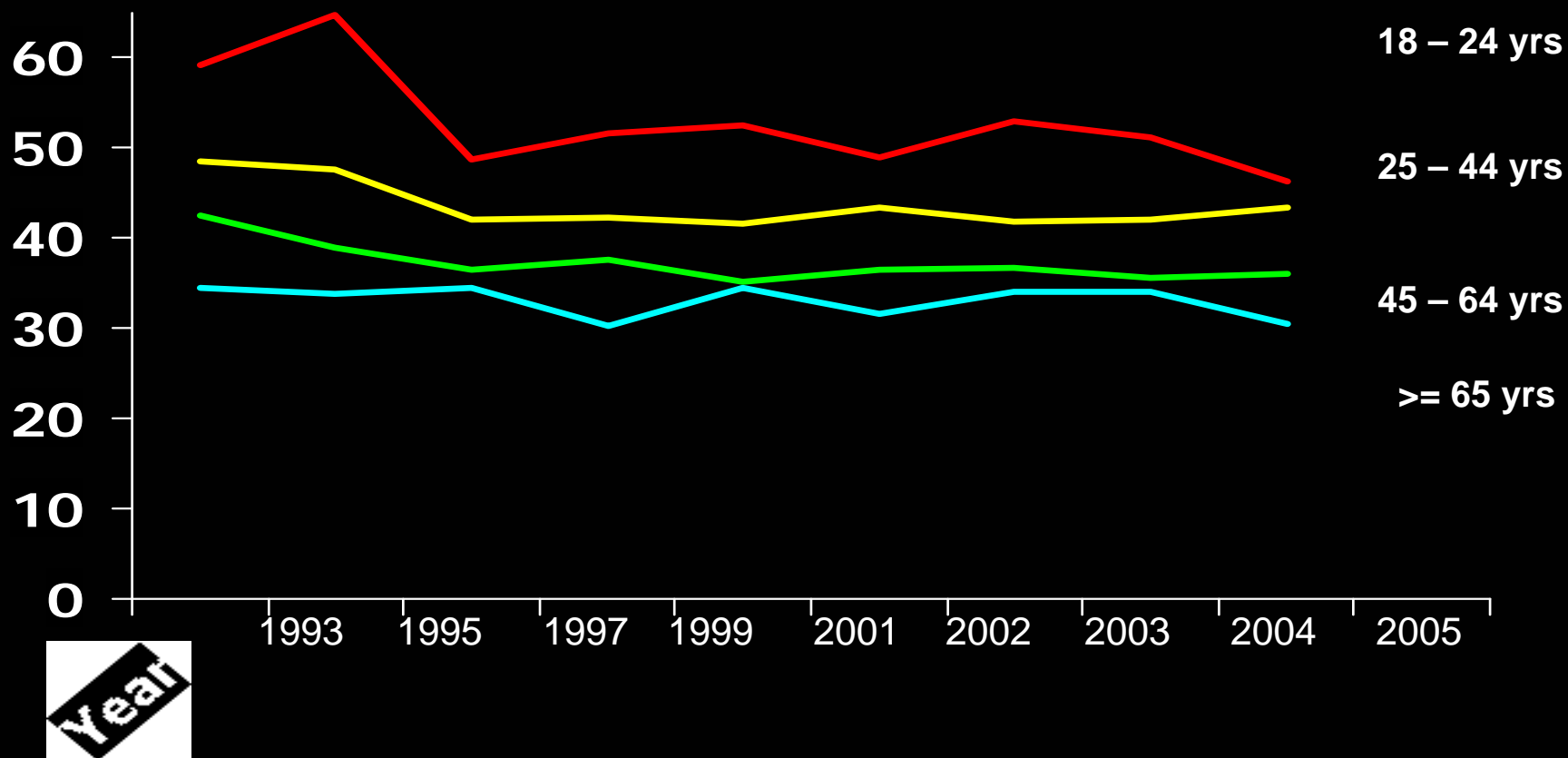
# Percentage of Ever Smokers Who have Quit\* by Age, Ages 18+ —United States, 1965-2005



Source: 1965-2005 National Health Interview Surveys

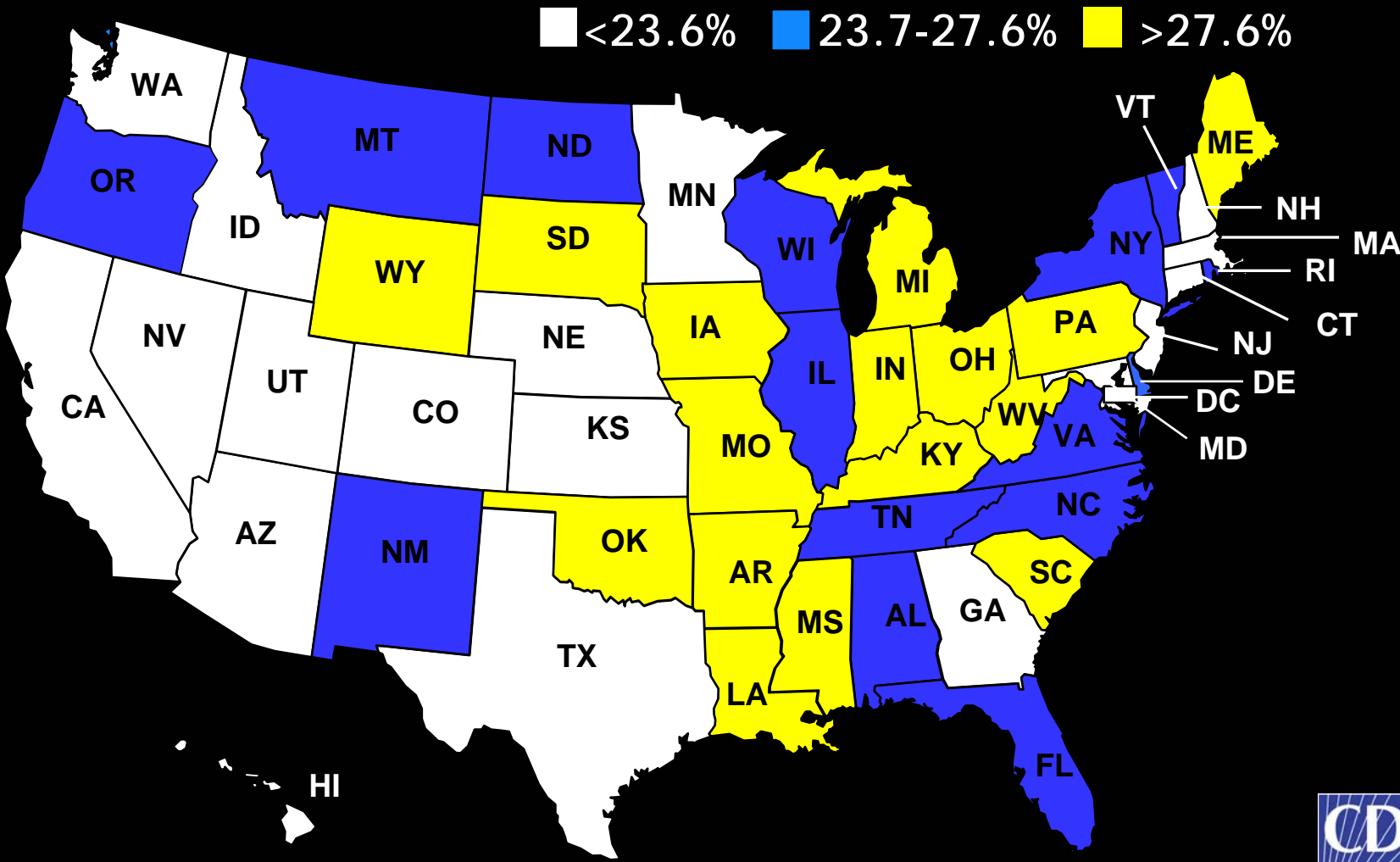
\*Also known as "quit ratio"; estimates since 1992 incorporate some-day smoking

# Percentage of Current Smokers who Tried to Quit for $\geq 1$ day in the Past Year by Age, Ages 18+ — United States, 1993-2005



Source: 1993-2005 National Health Interview Surveys

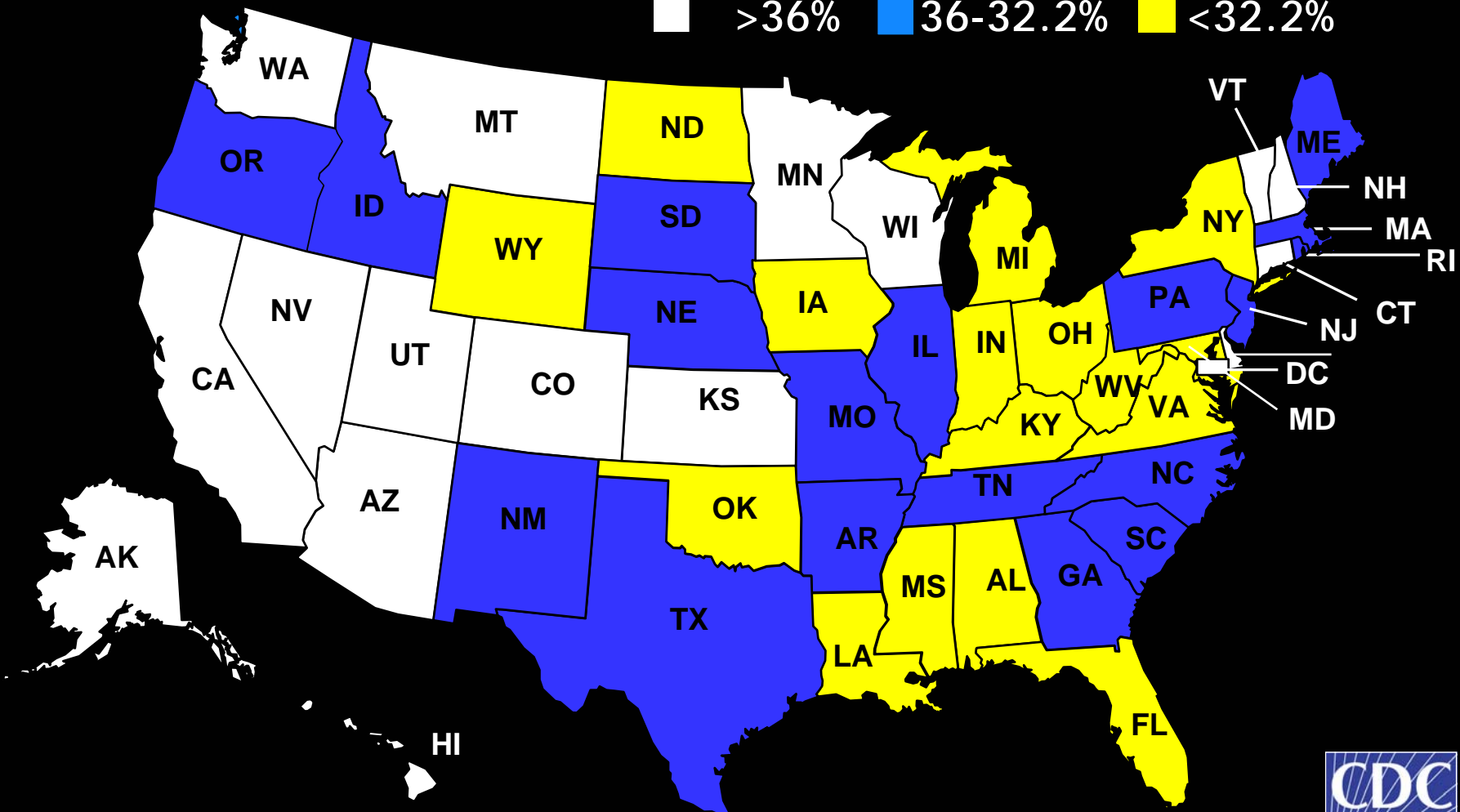
# State Prevalence of Current Smoking among 18-35 year olds, 2006



# State Prevalence of Ever Smokers who have quit smoking ages 18-35, 2006



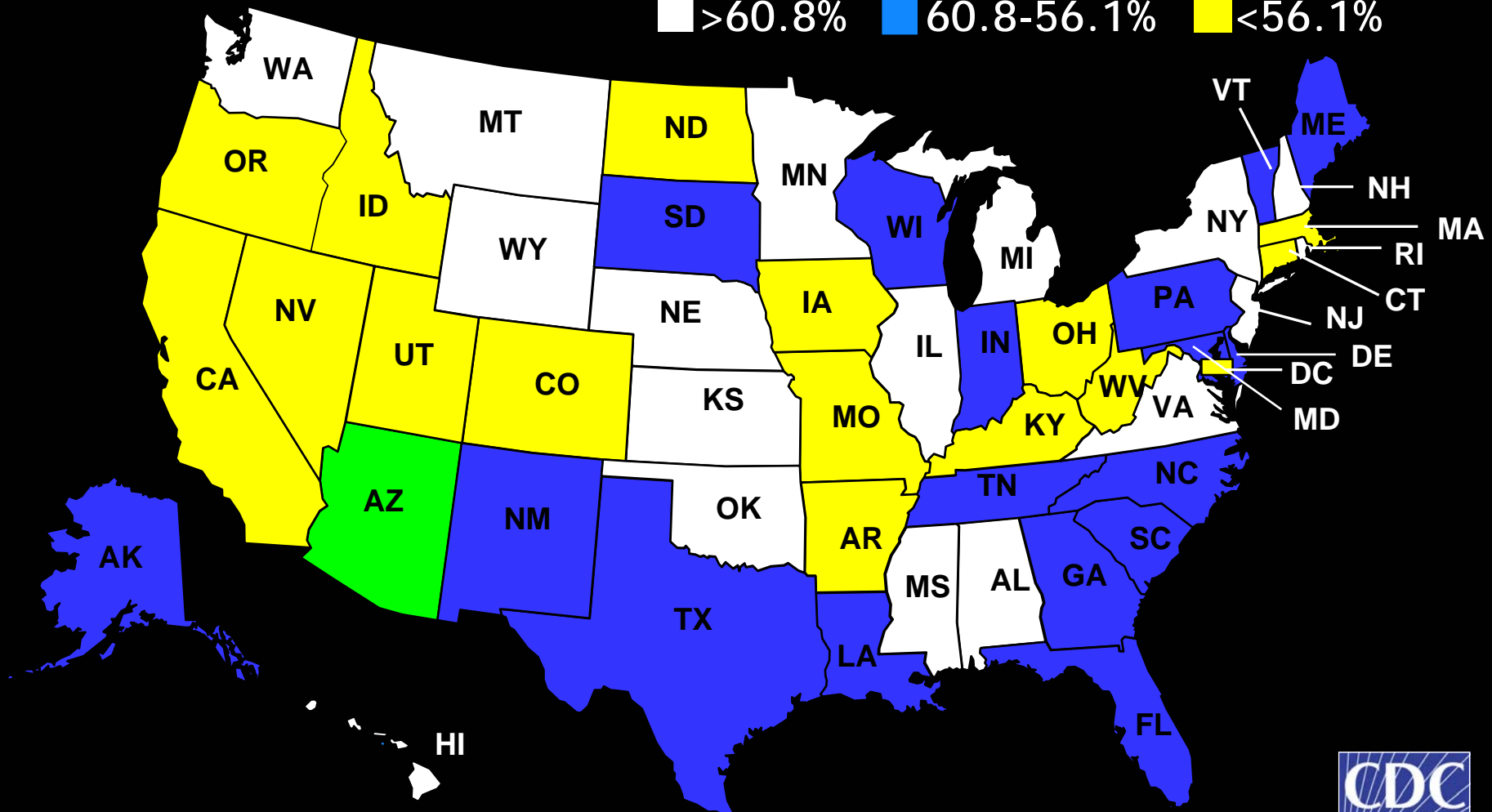
■ >36% ■ 36-32.2% ■ <32.2%



# State Prevalence of Current Smokers age 18-35 who tried to quit for $\geq 1$ day in past year, 2005



■  $>60.8\%$  ■  $60.8-56.1\%$  ■  $<56.1\%$



# Summary

- In 2006, prevalence of current smoking among 18-24 year olds was 23.9%
- Prevalence decreased almost 50% since 1965 (45.5%) but has not changed since 2003
- Prevalence is higher among men, Whites, and persons with high school or less education
- Amount smoked has decreased over time
- In 2006, only 4.9% were heavy smokers and 33% were non-daily smokers



# Summary

- **Males 18-24 years of age have the highest prevalence of smokeless tobacco use (9.9%) and of using any tobacco product (38.1%)**
- **Women 18-24 years of age have the highest prevalence of smoking during pregnancy (19.5%)**
- **Lowest prevalence of ever smokers who have quit smoking (19.8%). This has decreased since 1990s**
- **The majority of current smokers have attempted to quit in the past year (51.2%)**



# What Do We Need to Measure?

## *The Quitter's Journey*



**Long Term Success**

**Short Term Success**

**Relapse and  
Recycling**

**Quit Attempt**

**Choose a Method**

**Decide to Make Quit Attempt**



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# Surveillance: Challenges

- **General health surveys - conducted more frequently but limited space for tobacco questions**
- **Tobacco-specific surveys - infrequent, limited numbers of states, competition with other tobacco questions**
- **Timeliness of data**
- **Dissemination - reporting, data sets**
- **Limited numbers - low frequency behaviors (specific therapies, populations subgroups)**
- **Measurement gaps/definitions**
- **Lack of resources**



# NIH State-of-the-Science Conference Statement on Tobacco Use: Prevention, Cessation, and Control

- **Infrastructure: Promote surveillance programs that track tobacco use (e.g., initiation, quitting, intensity of smoking, use of smokeless tobacco), use of treatments, motivation to quit, new products, and marketing policy and systems change.**



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# Consumer Demand Strategy 5

- **Systematically measuring, tracking, reporting and studying quitting and treatment use - and their drivers and benefits - to identify opportunities and successes.**



# Surveillance: Opportunities



- **Impetus to examine trends among young adults**
- **Movement toward conducting tobacco-specific surveys more frequently**
- **Publicly available data**
- **Intervention studies**





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Department of Health and Human Services  
Centers for Disease Control and Prevention

