

Population-Based Assessment Tools

Turning Information
Into Health



Healthy Schools
**Healthy
Youth!**

Outline

- Texas Behavioral Risk Factor Surveillance System (BRFSS)
- Texas Youth Risk Behavior Survey (YRBS)

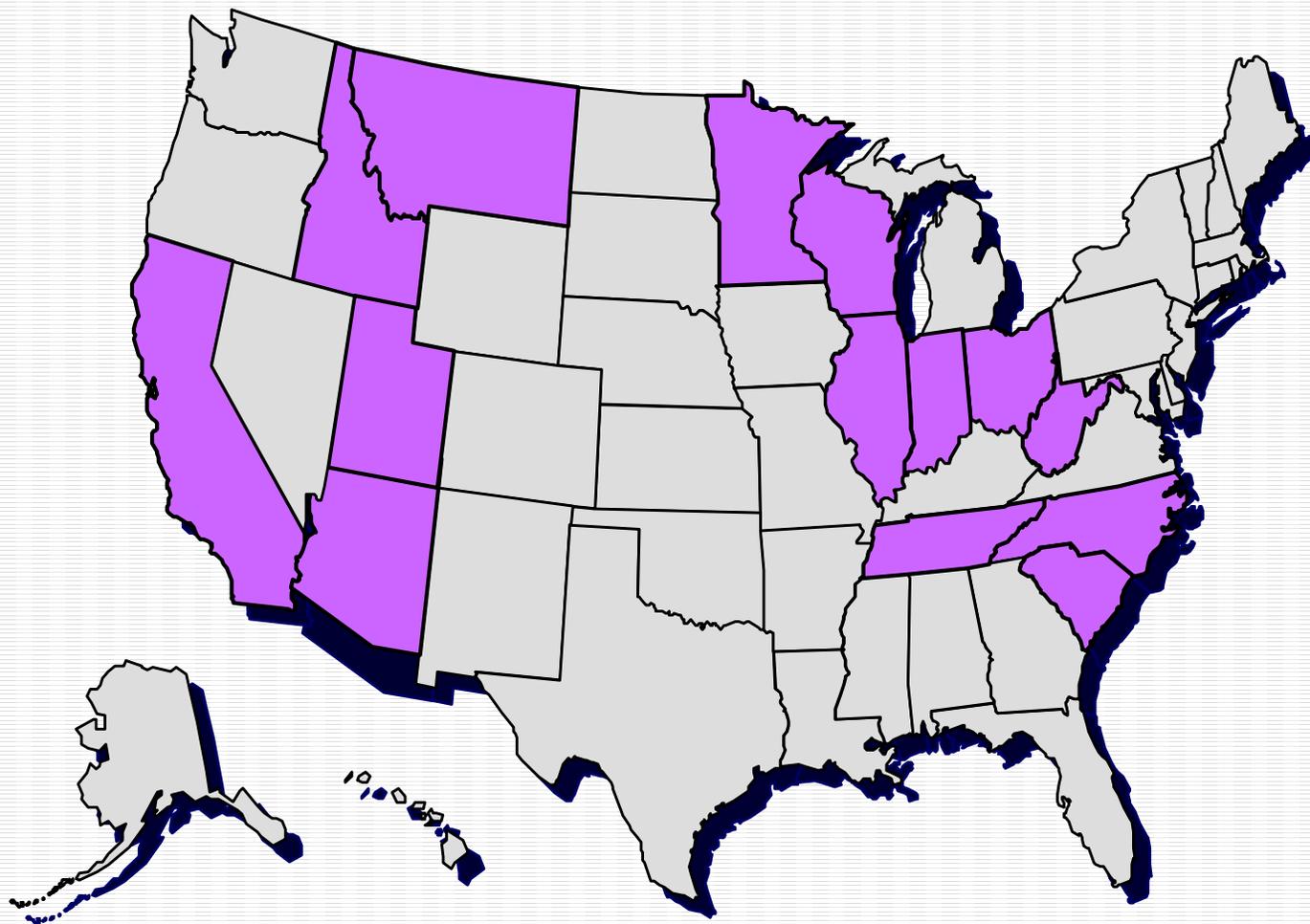
What is the BRFSS?

- BRFSS is a standardized random digit dialed (RDD) telephone survey.
- Operated and funded through a state/federal partnership
- Samples adults aged 18+ years (non-institutionalized)
- Computer assisted telephone interviewing (CATI)
- Administered in Spanish and English
- Primary state-level source of data on adult health indicators, preventive health practices, and risk behaviors
- Results reported with point estimates and confidence intervals.

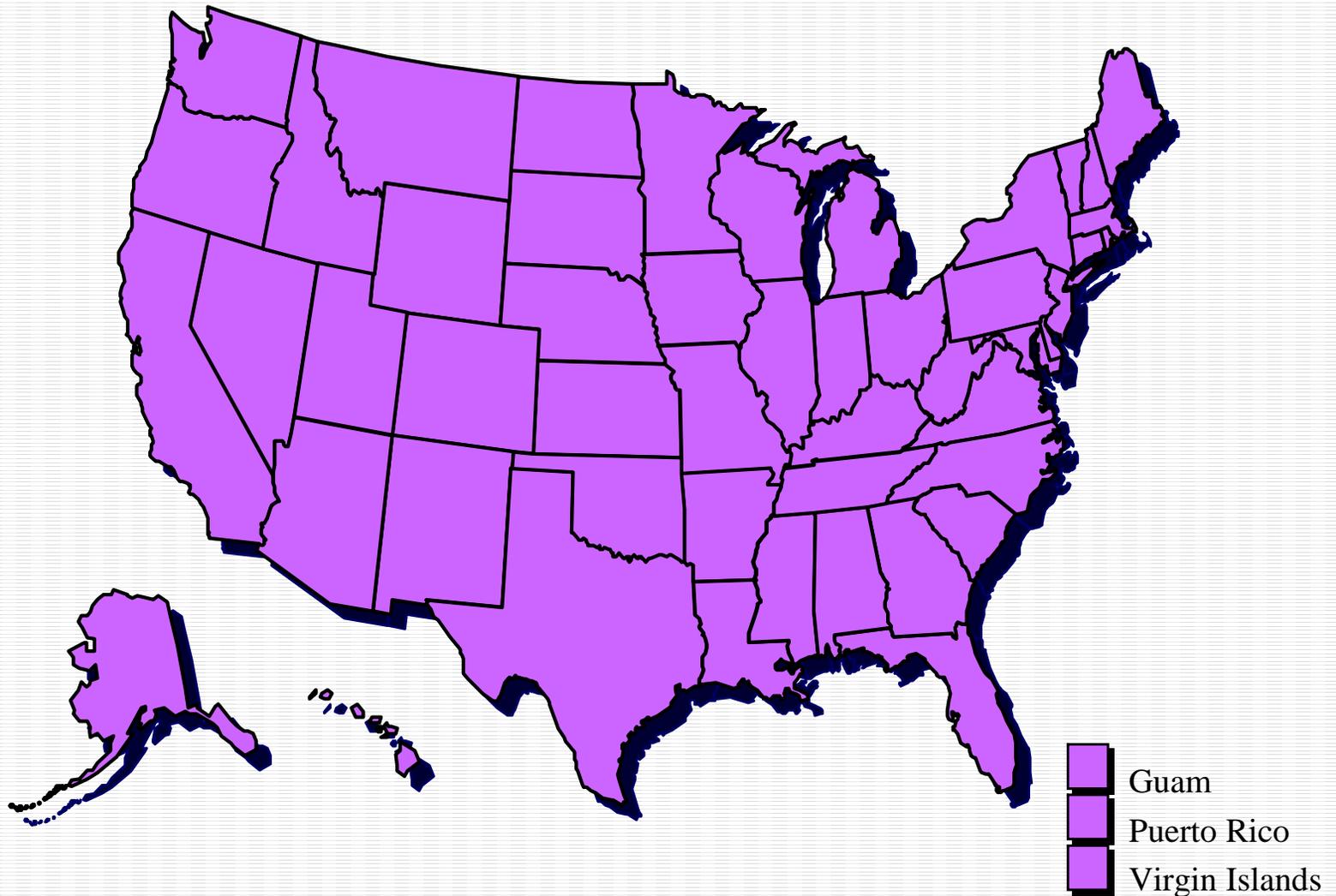
BRFSS History

- Created in the early 1980's by CDC to fill a need for state level public health data
- Focus is on modifiable risk factors for chronic diseases and other leading causes of death

BRFSS in the U.S., 1984



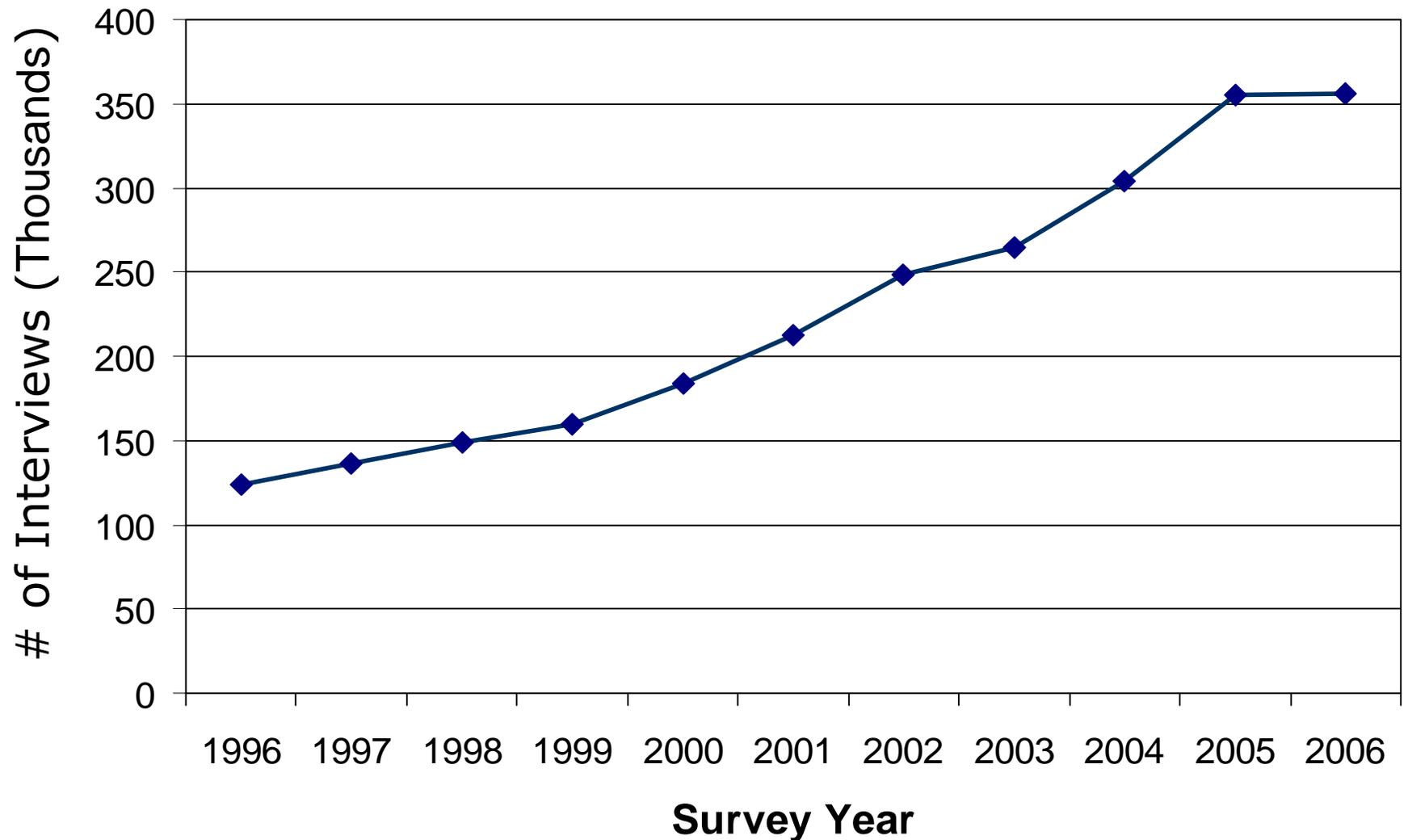
BRFSS in the U.S., today



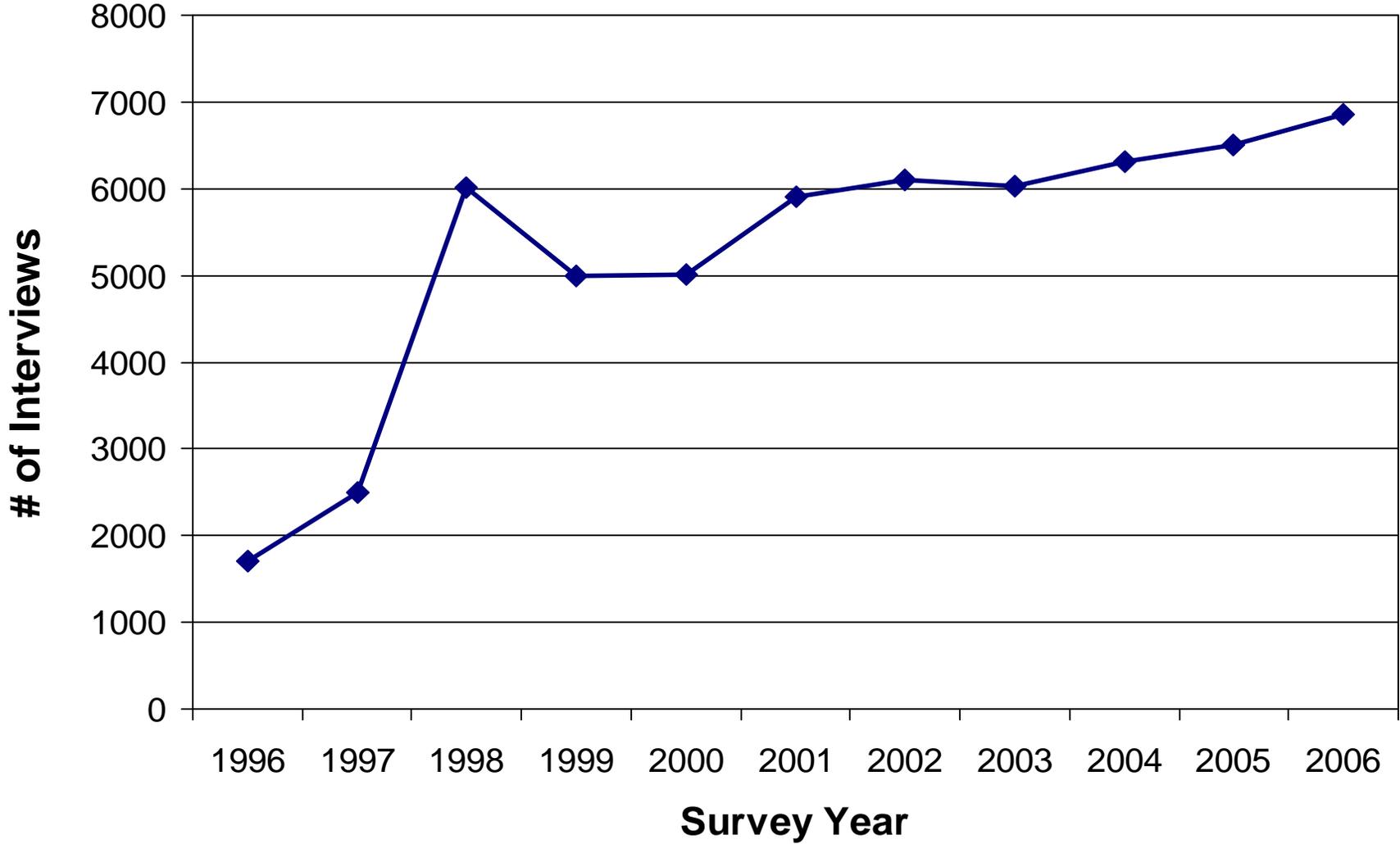
BRFSS History

- Created in the early 1980's by CDC to fill a need for state level public health data
- Focus is on modifiable risk factors for chronic diseases and other leading causes of death
- Has expanded over the years and is now the largest and most enduring health telephone survey in the world

BRFSS Sample Size U.S., 1996 - 2006



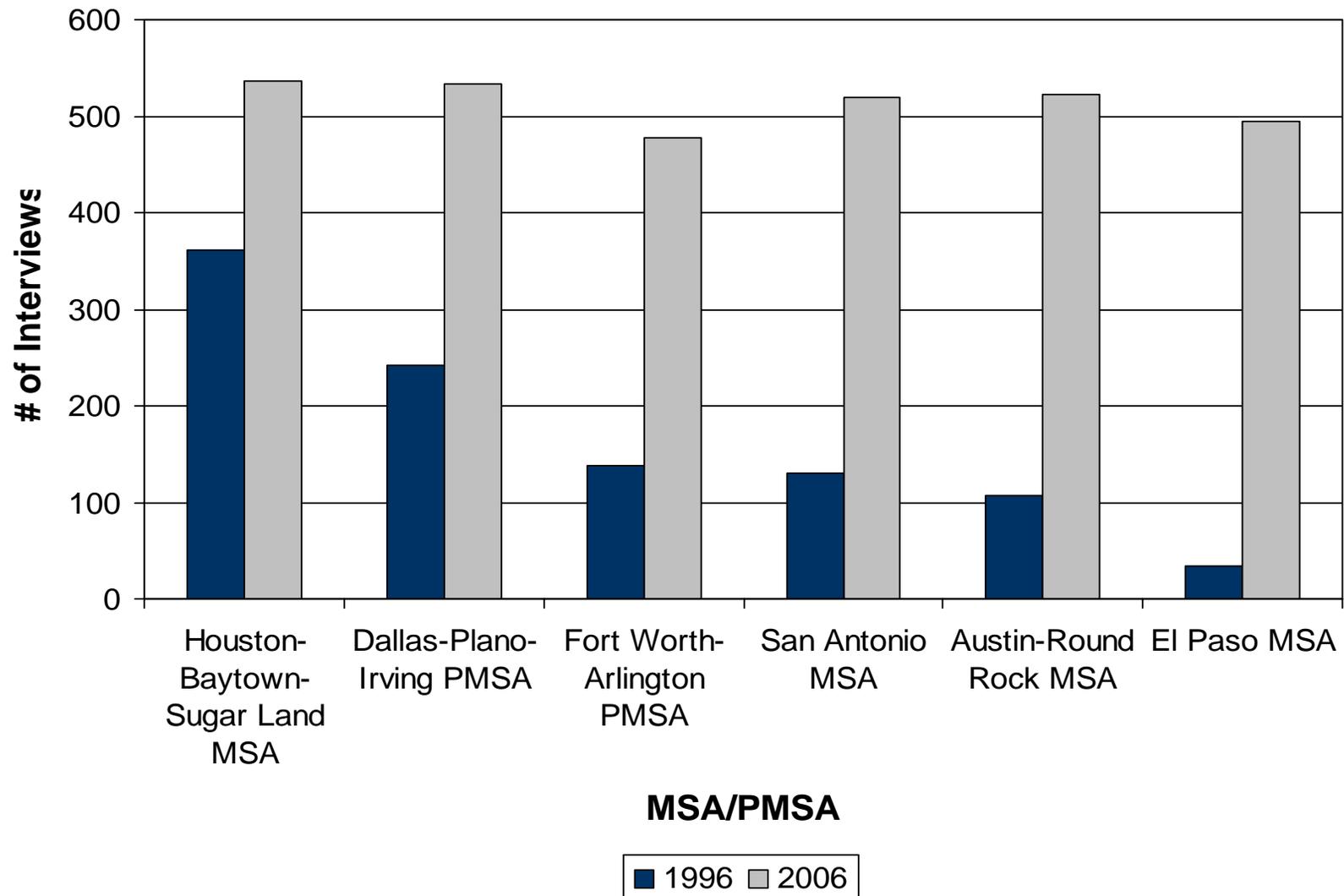
BRFSS Sample Size Texas, 1996 - 2006



Not Just a State-Level Survey in Texas

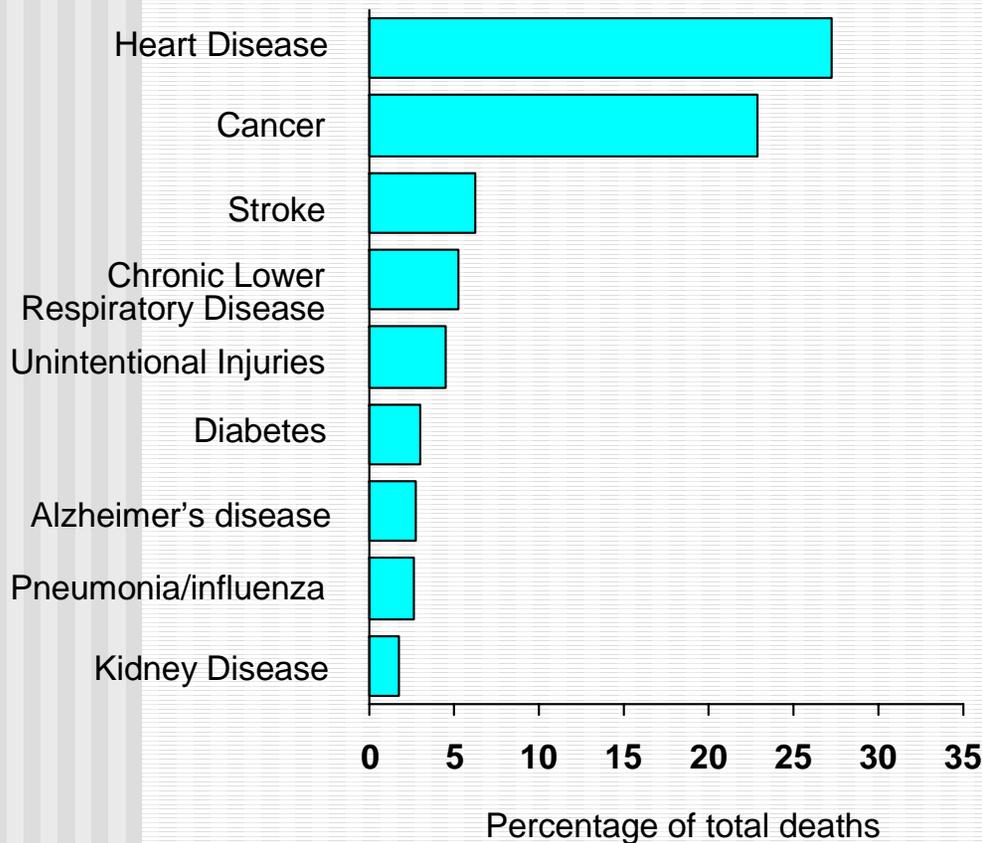
- We manipulate the Texas statewide data collection so that we can provide estimates beyond the state level.
- Started with 2004 data collection.

BRFSS Sample Size MSA/PMSEA, 1996 vs. 2006

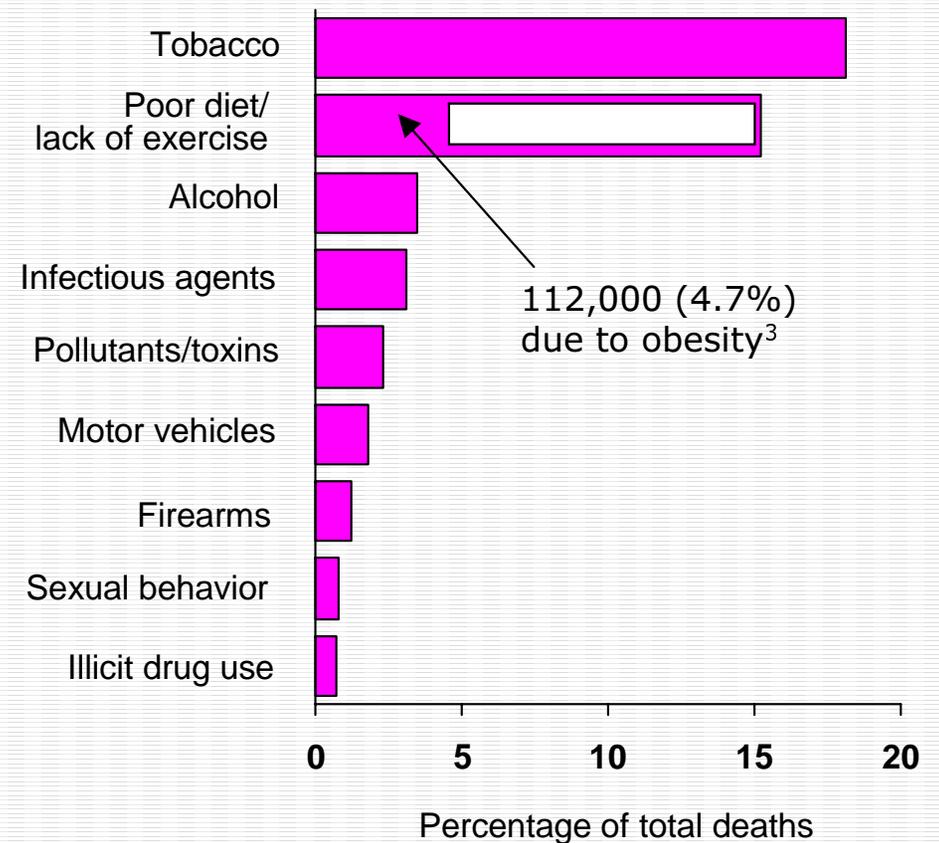


Causes of Death in the U.S.

Leading Causes of Death, 2004¹



Actual Causes of Death, 2000²



Sources:

¹ National Vital Statistics Reports, Vol. 54, No. 19, June 28, 2006.

² Mokdad, AH; JS Marks; DF Stroup; and JL Gerberding. 2004. Actual causes of death in the United States, 2000. JAMA 291(10): 1238-1245. Corrected: January 19, 2005.

³ Flegal, KM; BI Graubard; DF Williamson; and MH Gail. 2005. Excess deaths associated with underweight, overweight, and obesity. JAMA 293(15): 1861-7.

About half of all deaths in the U.S. are caused by risk behaviors

- Smoking
- Not getting enough exercise
- Eating a poor diet
- Drinking too much alcohol
- Having hypertension or diabetes and not taking medicine to control it
- Having sex with multiple partners and not using a condom

BRFSS Questions

- Tobacco use
- Physical activity, nutrition, and obesity
- Use of preventive health services and screenings
- Major chronic diseases (Diabetes, CVD, Asthma, Arthritis)
- HIV/AIDS
- Alcohol consumption
- Access to health care
- Health-related quality of life
- Disability
- Visual impairment
- Demographics

BRFSS Has Many Uses

- Assessing risk factors for chronic diseases
- Identifying demographic differences in health status
- Measuring trends in health-related behaviors
- Designing and monitoring health interventions
- Addressing emergent and critical health issues
- Formulating policy for health initiatives
- Measuring progress toward state and national health objectives

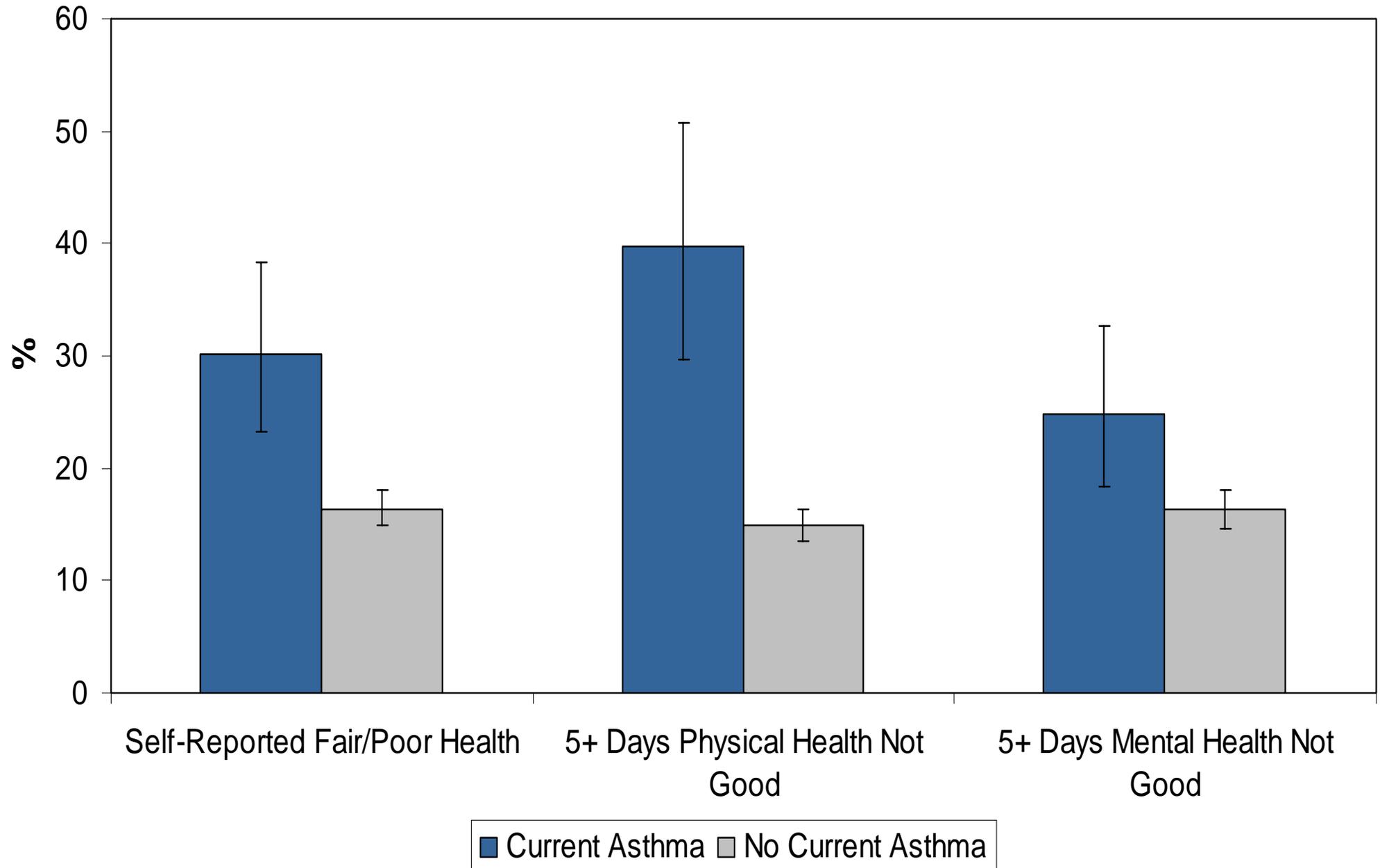
And is Used by Many People

- Policymakers
- Public health programs
- Researchers and academics
- Non-profit and advocacy groups
- Private sector groups
- CDC
- The media
- National, state, and local public health practitioners

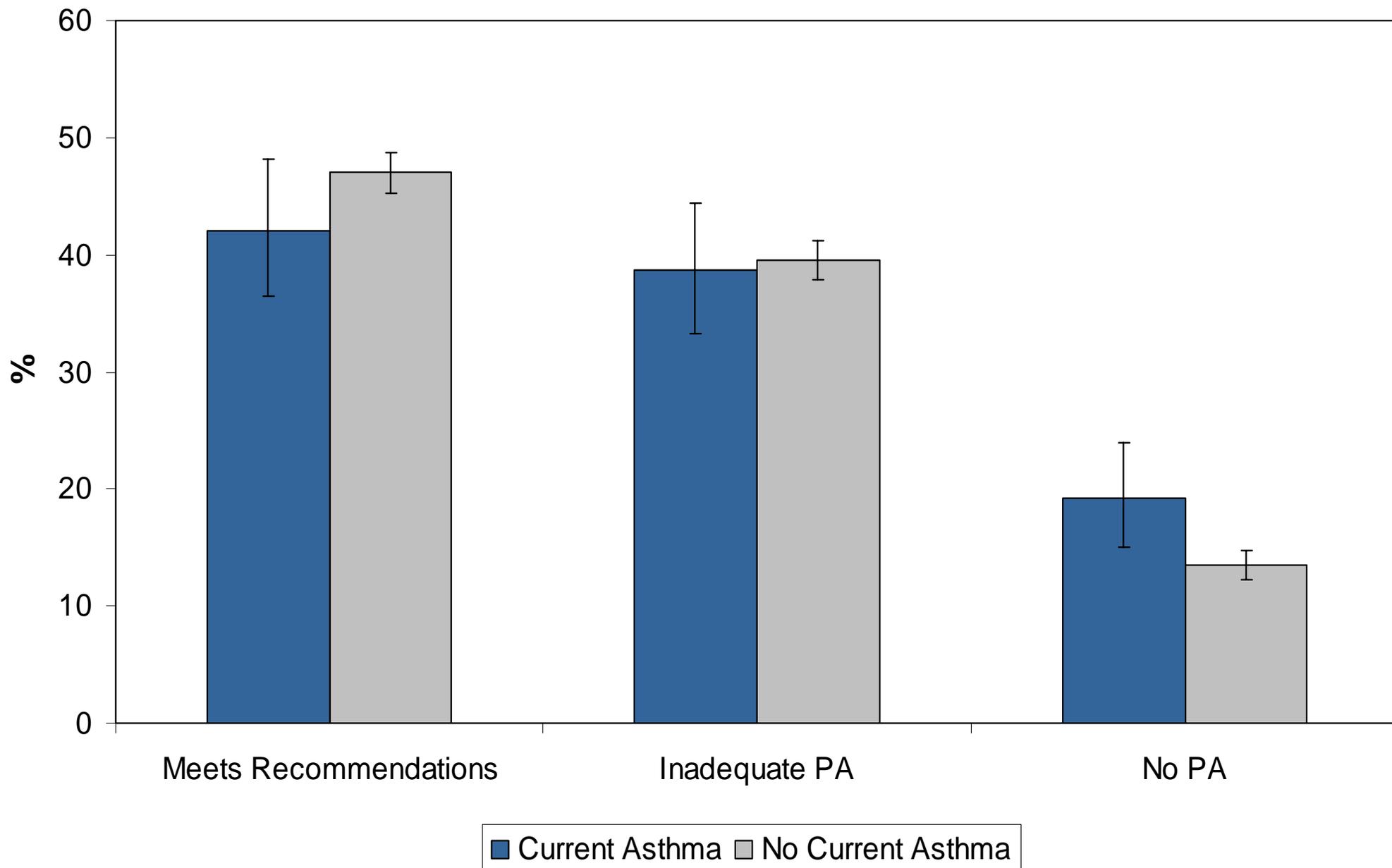
Assessing Risk Factors for Chronic Diseases

Asthma

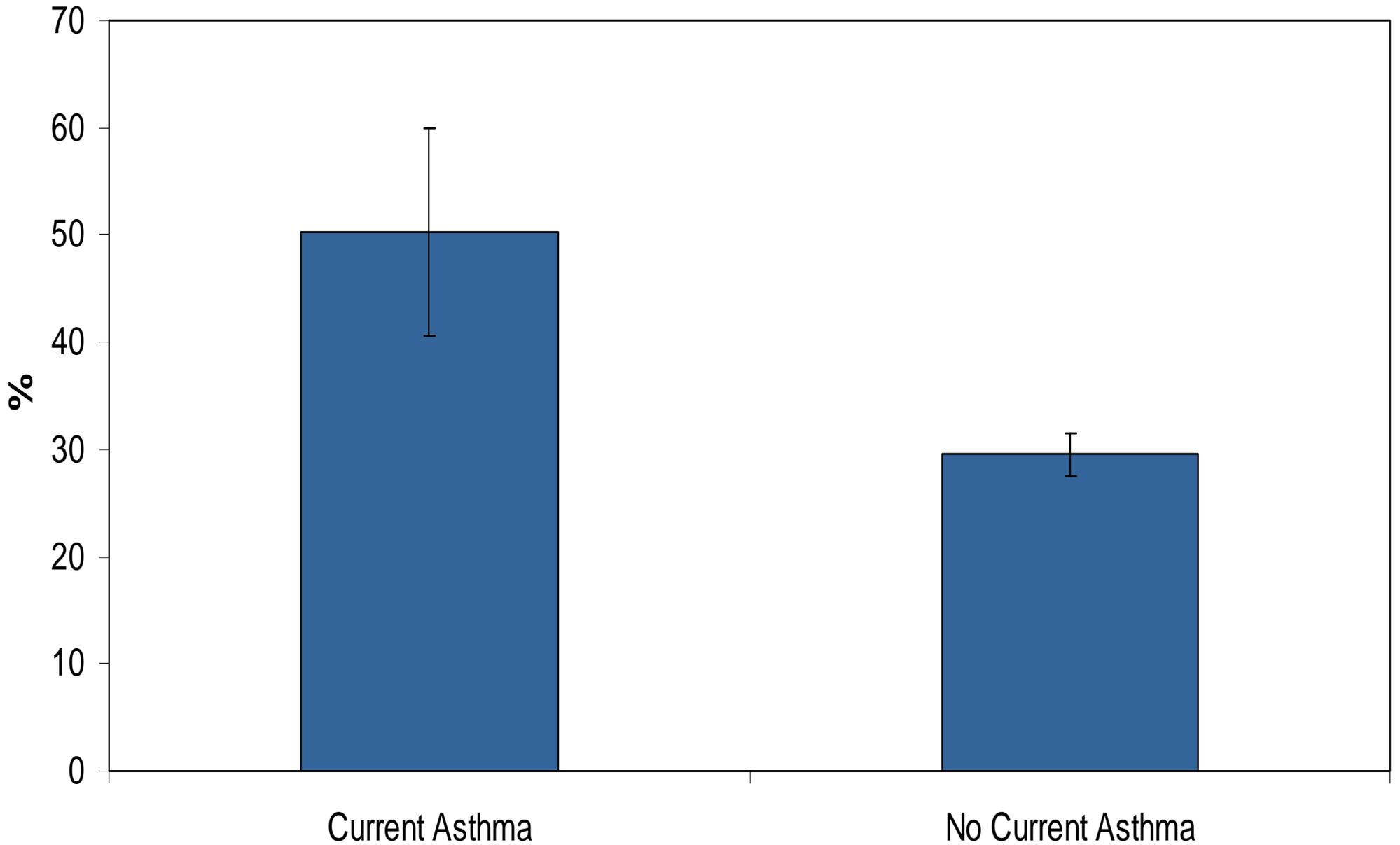
Prevalence of Quality of Life Indicators by Current Asthma 2006 Texas BRFSS



Meets Moderate of Vigorous Physical Activity Recommendations by Current Asthma 2005 Texas BRFSS



Received Flu Vaccine in Past Year by Current Asthma 2006 Texas BRFSS

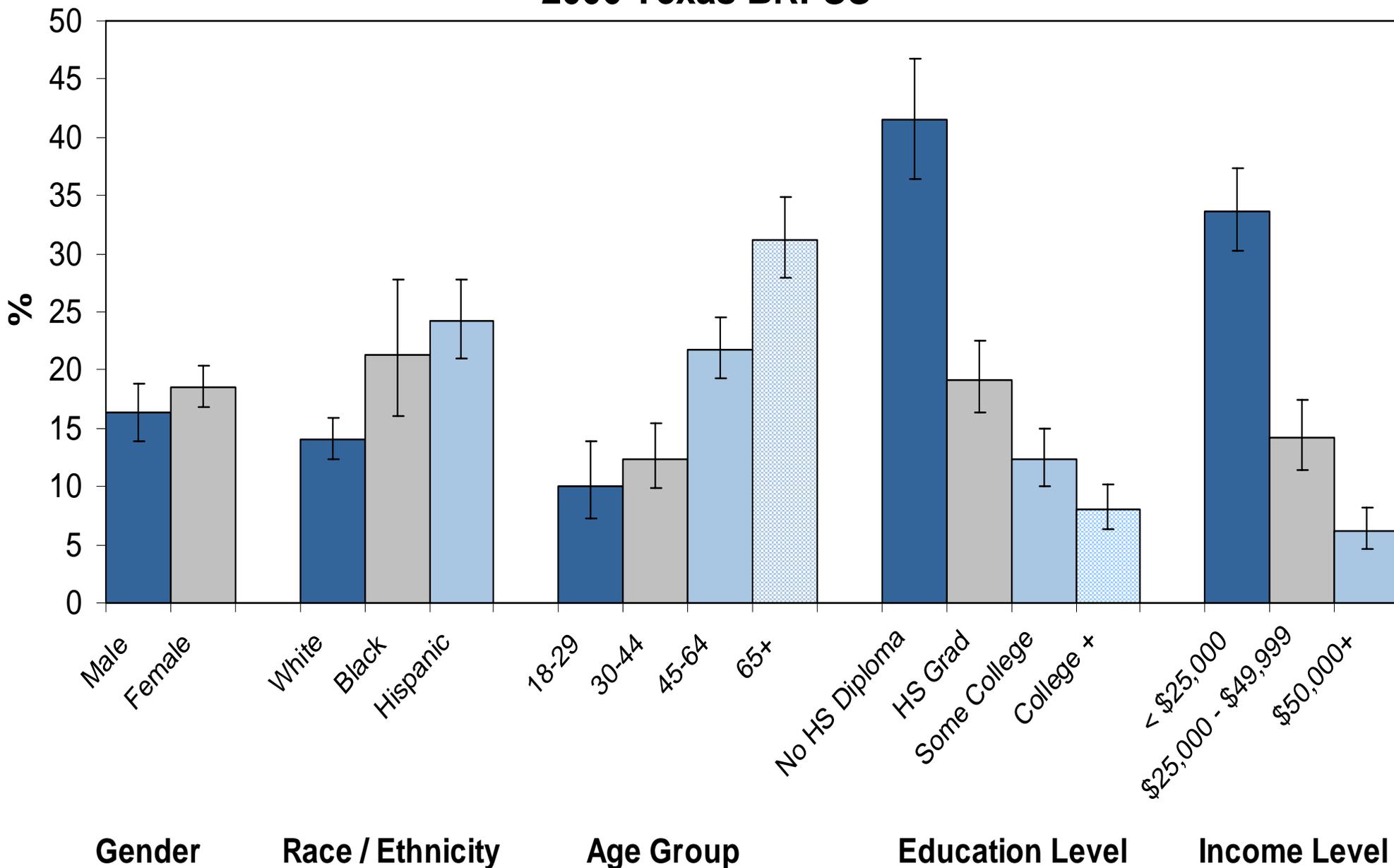


Identifying Demographic Differences in Health Status

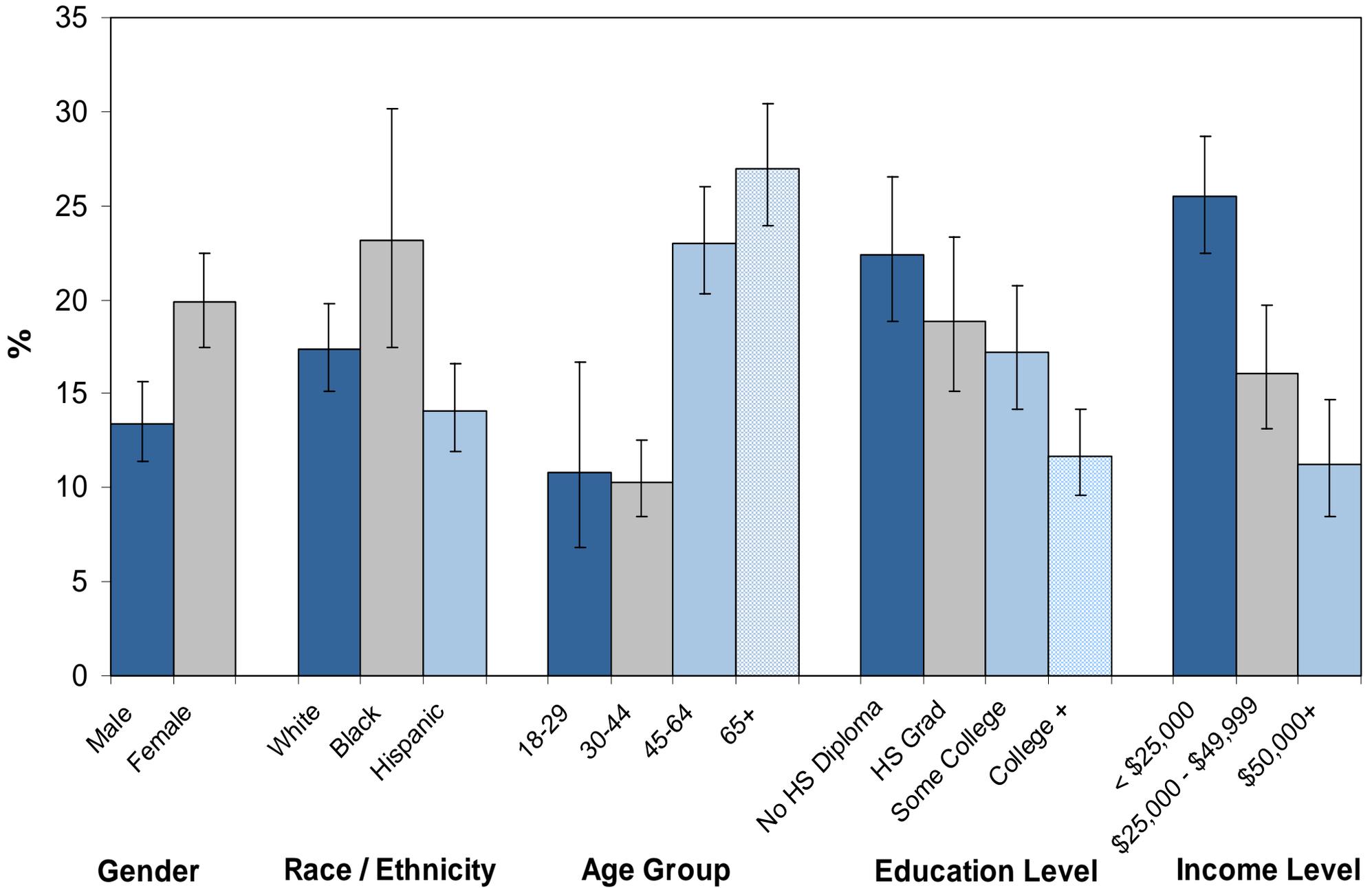
Health-Related
Quality of Life

Prevalence of Self-Reported Fair/Poor Health by Demographic Characteristics

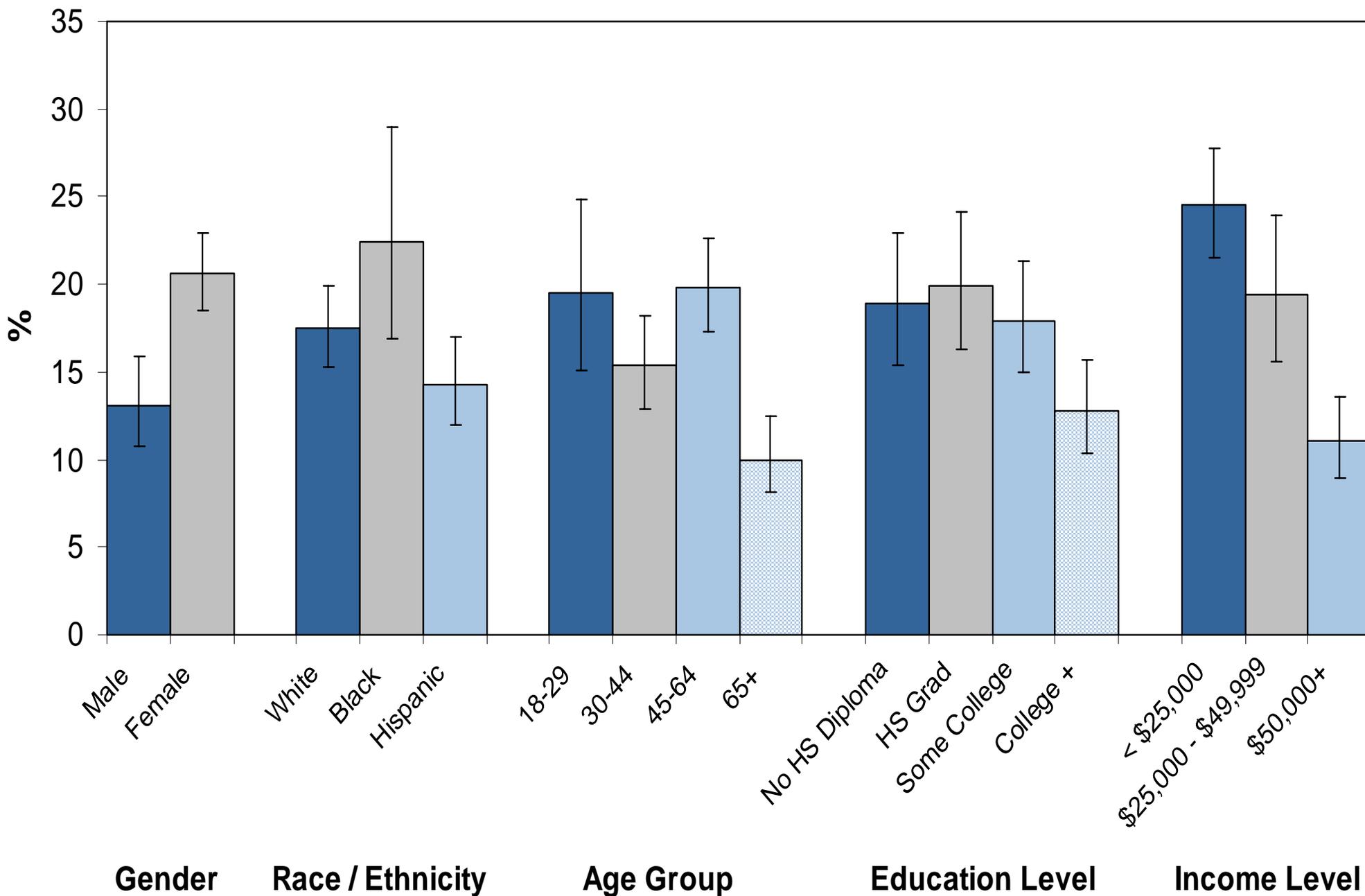
2006 Texas BRFSS



5+ Days of Poor Physical Health by Demographic Characteristics 2006 Texas BRFSS



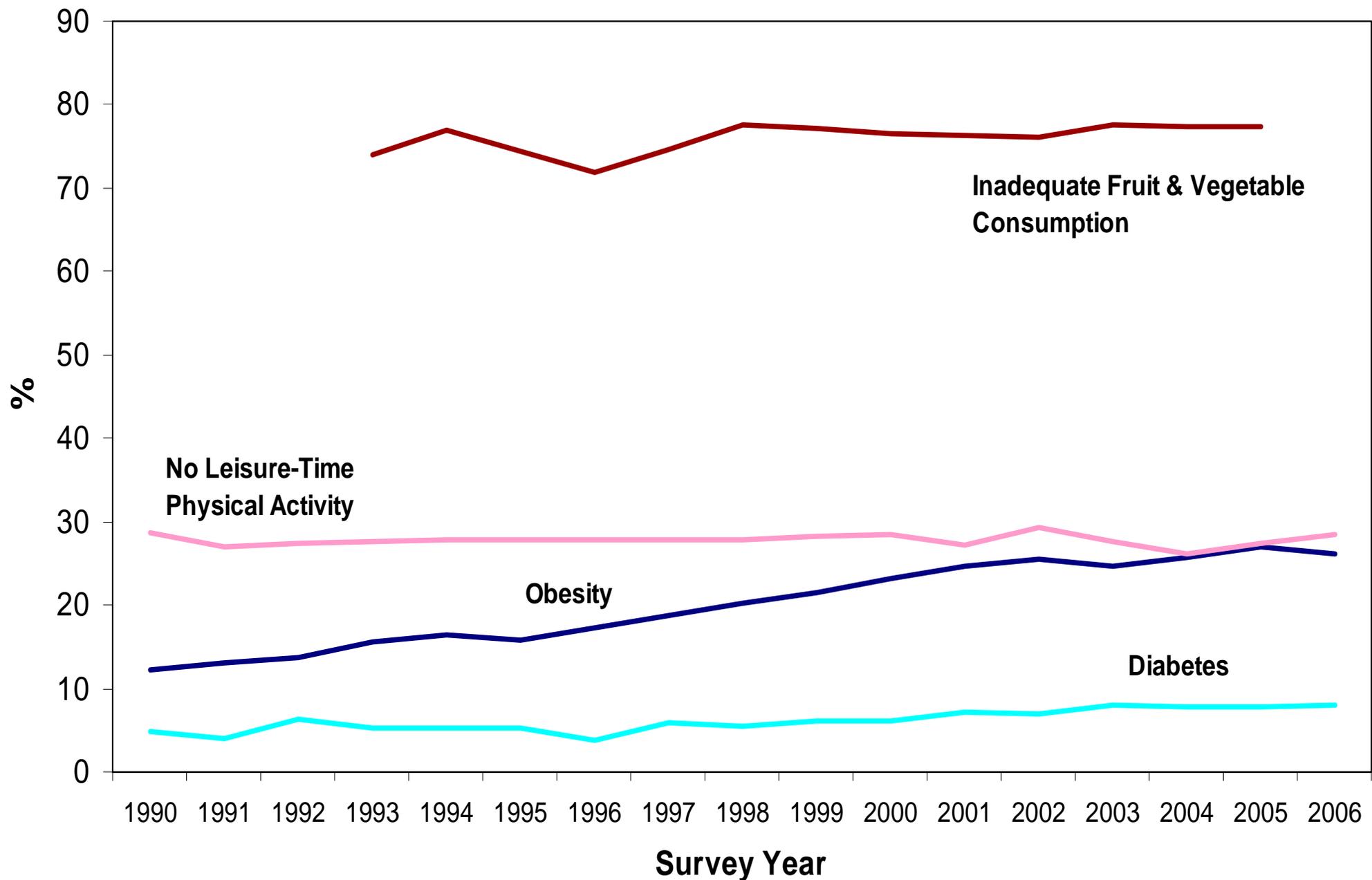
5+ Days of Poor Mental Health by Demographic Characteristics 2006 Texas BRFSS



Measuring Trends in Health-Related Behaviors

- Fruit and Vegetable Consumption
- Physical Activity
- Obesity
- Diabetes

Health Risk Behavior and Chronic Condition Trends 1990-2006 Texas BRFSS



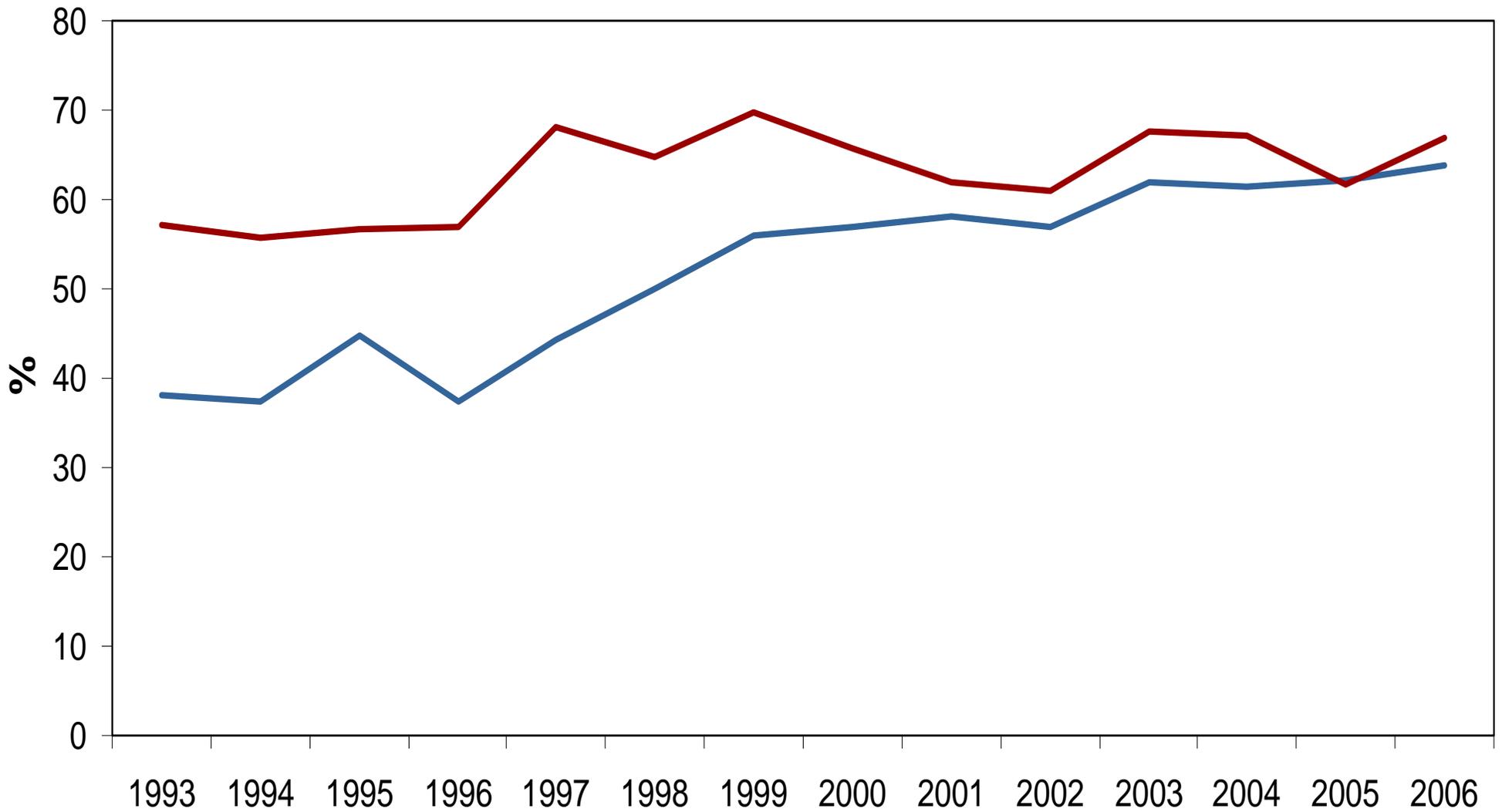
Designing and Monitoring Health Interventions

Adult Immunizations

Adult Immunizations

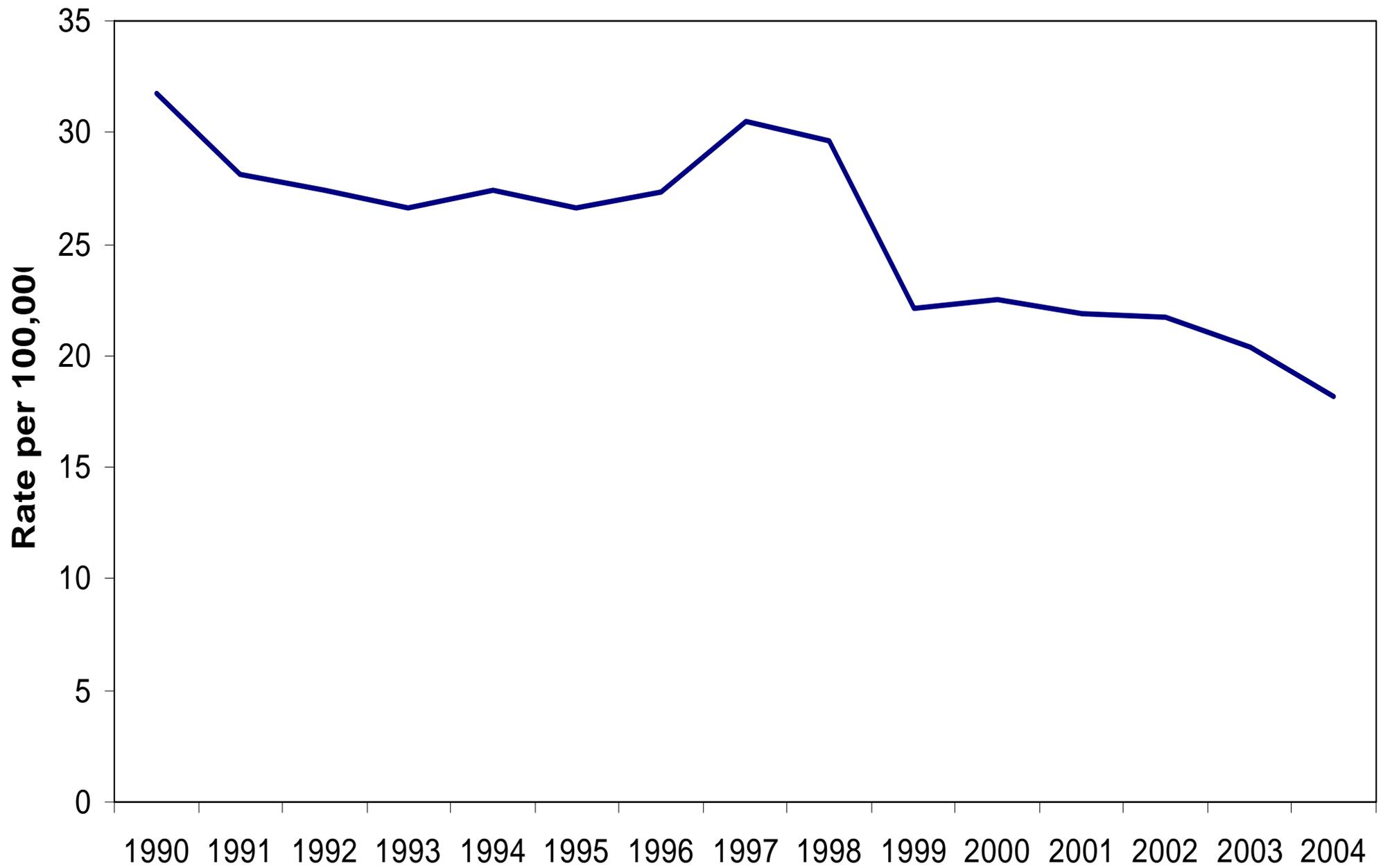
- Pneumonia Vaccine (usually only one time)
 - Aged 65+ Years
 - Have specific chronic conditions (e.g., diabetes, HIV/AIDS, etc.)
- Flu Vaccine (every year)
 - Aged 65+ Years
 - Have specific chronic conditions (e.g., diabetes, HIV/AIDS, etc.)

Immunizations Among Those Aged 65+ Years 1993-2006 Texas BRFSS



— Ever Had Pneumonia Shot — Had Flu Vaccine in Past Year

Pneumonia Death Rates Per 100,000 (Age-Adjusted) Texas, 1990-2004



Addressing Emergent and Critical Health Issues

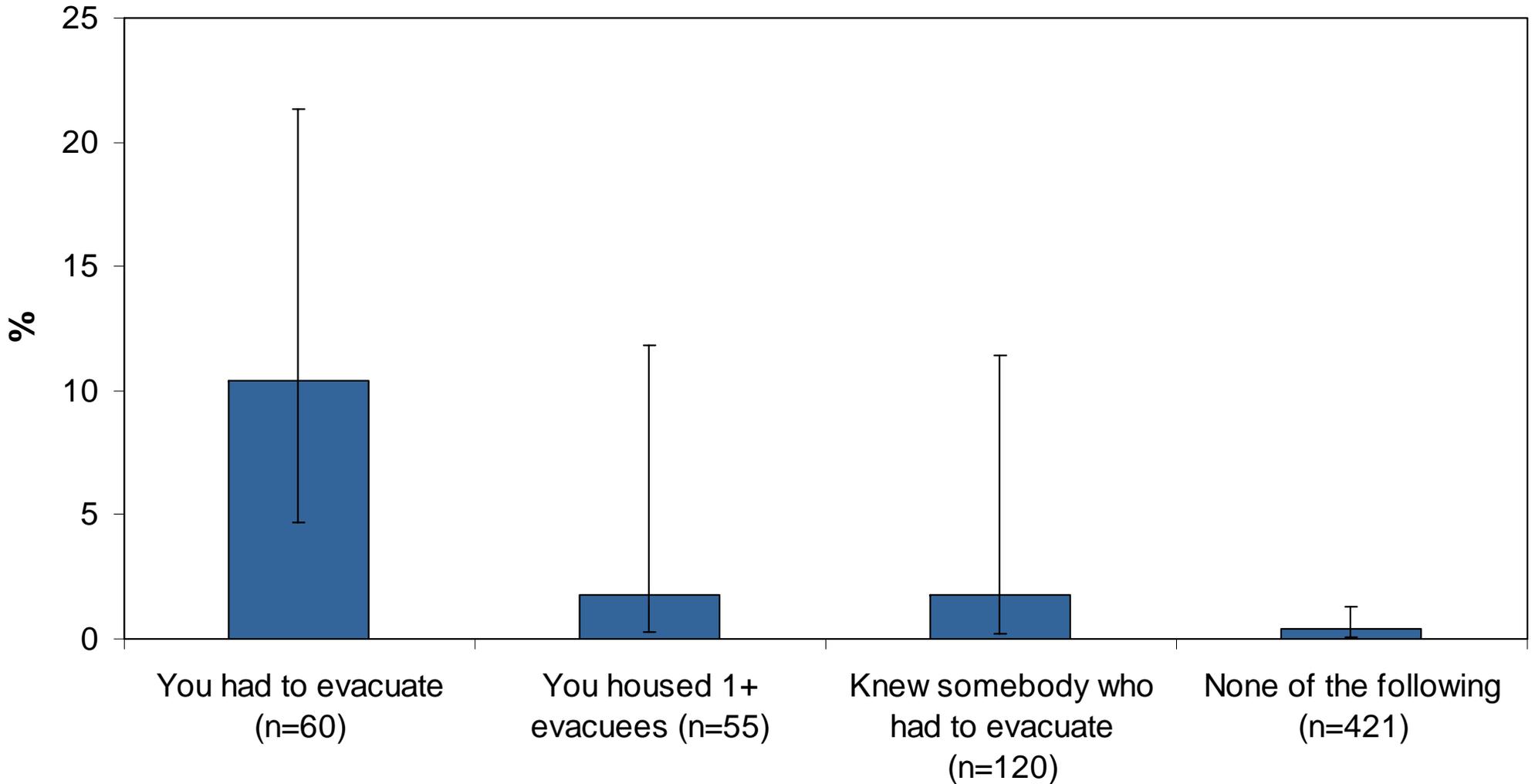
Hurricane Impact
Assessment

HPV Vaccine

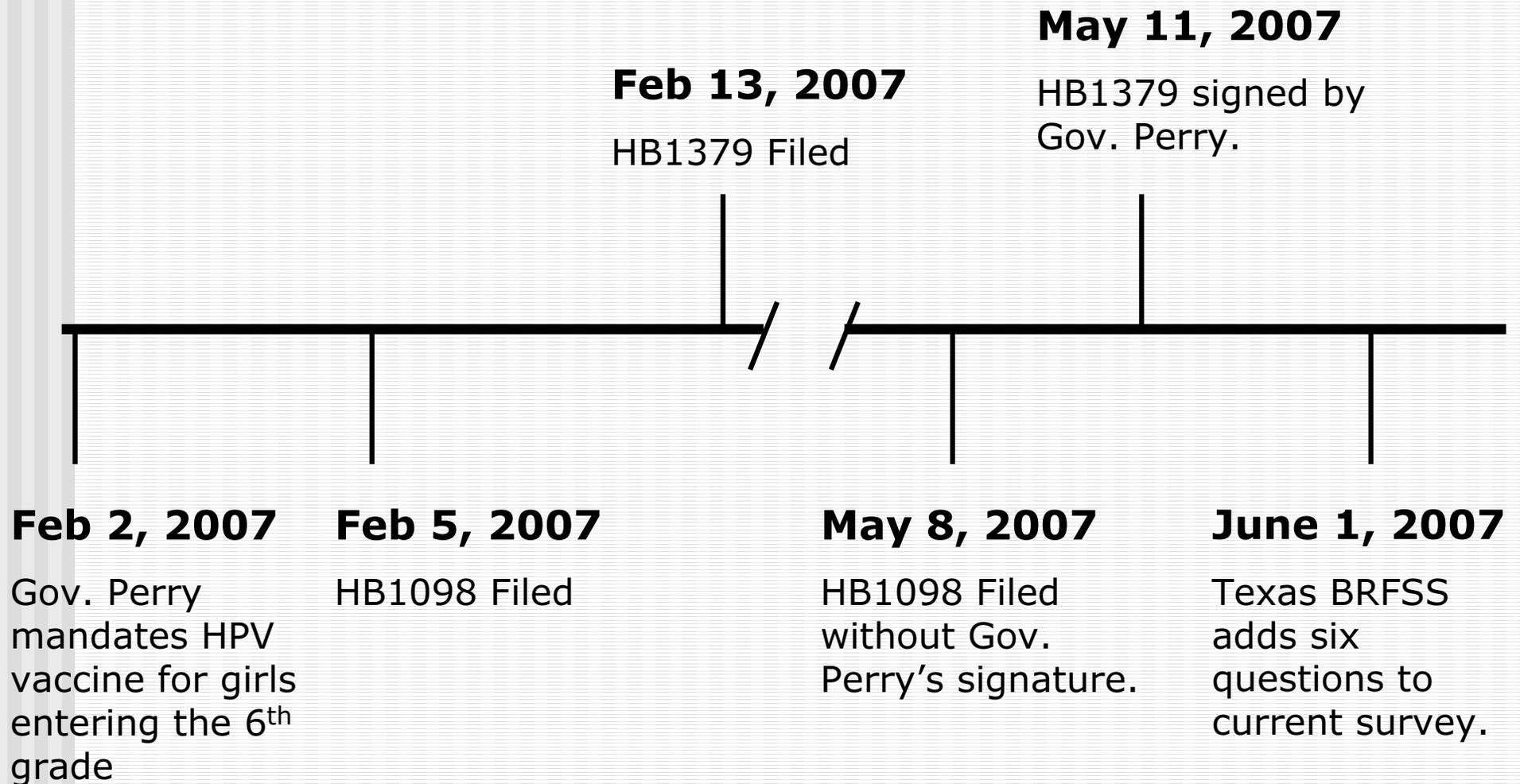
Hurricane Impact Assessment

- November / December 2005 (CDC)
 - Focused on evacuation
 - Depression / grief
- 2006 Questions (State)
 - Hurricane relocation
 - Will allow us to see the impact on our health care system

Prevalence of Depression, Stress, or Grief Interfered With Ability to Function by Evacuation Status Texas BRFSS, November/December 2005



HPV Vaccine 2007 Timeline



2007 HPV Vaccine

Questions 1 & 2

- The human papillomavirus, also called HPV, is a common virus known to cause genital warts and some cancers, such as cervical cancer in women. A vaccine to prevent HPV infection is available and is called the HPV vaccine, cervical cancer vaccine, or GARDASIL®. The vaccine was licensed and approved in June 2006. Before today, have you ever heard of the HPV vaccine?
- Have you ever had a discussion with a doctor or health care professional about being vaccinated for HPV? (Women Aged 18-44 Years)

2007 HPV Vaccine Questions 3 & 4

- Previously you said you were the **{Fill-in "parent" if Mod1_6=1 or "foster parent or guardian" if Mod1_6=3}** of a **{Fill-in "boy" if Mod1_2=1 or "girl" if Mod1_2=2}** born in **{Fill-in month and year of birth from Mod1_1, have interviewer state the Month and Year as in "January 1992"}**. Have you ever had a discussion with **{Fill-in "his" if Mod1_2=1 or "her" if Mod1_2=2}** doctor or health care professional about the HPV vaccine?
- The next question is about people's attitudes toward the HPV vaccine. Do you agree slightly or strongly, or disagree slightly or strongly with the following statement. Girls should receive the HPV vaccine before they enter sixth grade.

2007 HPV Vaccine Questions 5 & 6

- What are your top two reasons for being in favor of this recommendation?
- What are your top two reasons for not being in favor of this recommendation?

Formulating Policy for Health Initiatives

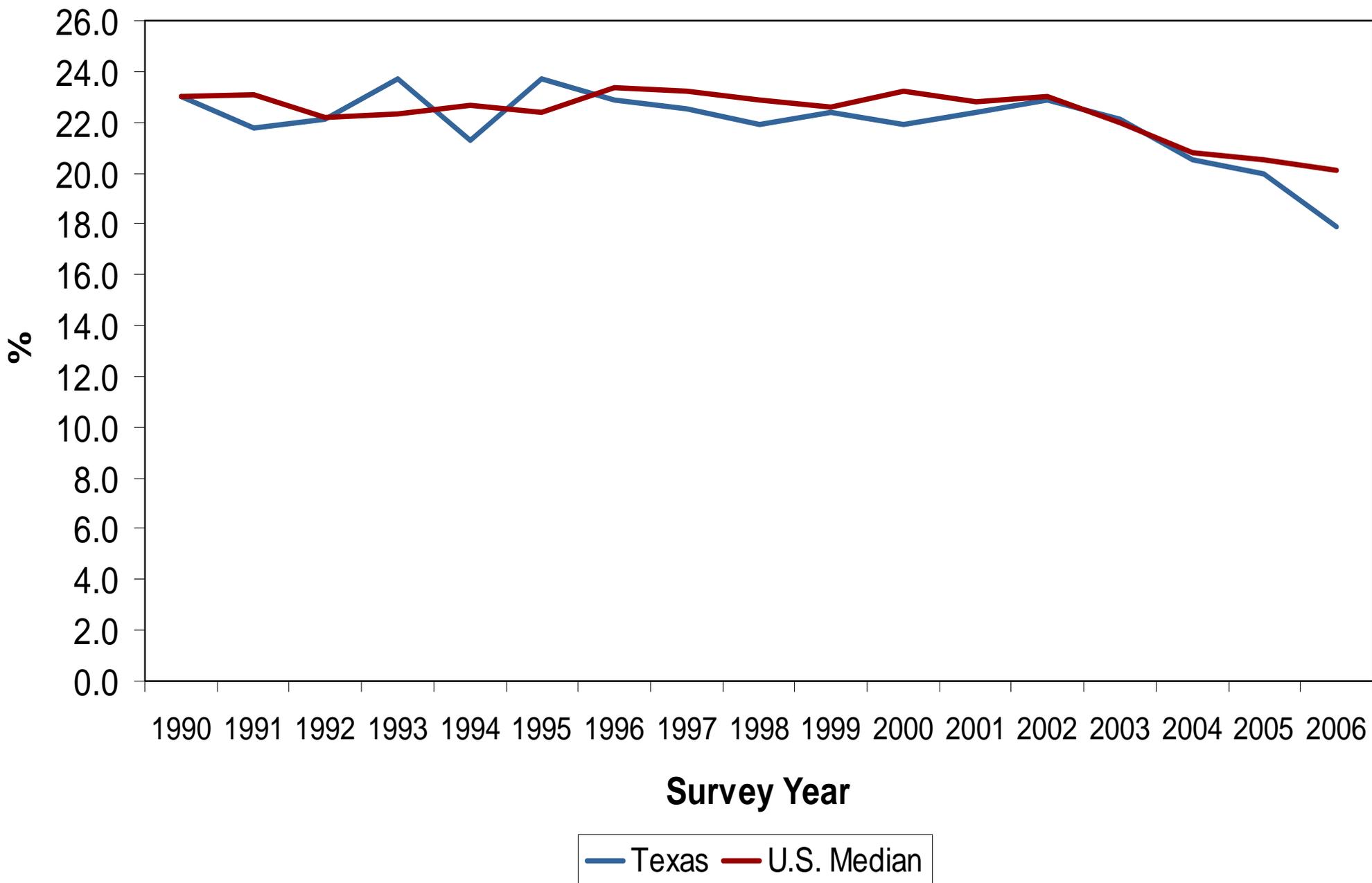
Cigarette
Consumption

Sexual Violence

Cigarette Consumption

- Smoking ban ordinances
- Cigarette tax increase
 - \$0.41 to \$1.41 per pack
 - Effective January 1, 2007

Prevalence of Current Cigarette Consumption Texas vs. U.S., 1990-2006



Sexual Violence

- HB1751: Relating to the imposition and use of a fee on certain sexually orientated businesses and certain program for the prevention of sexual assault.

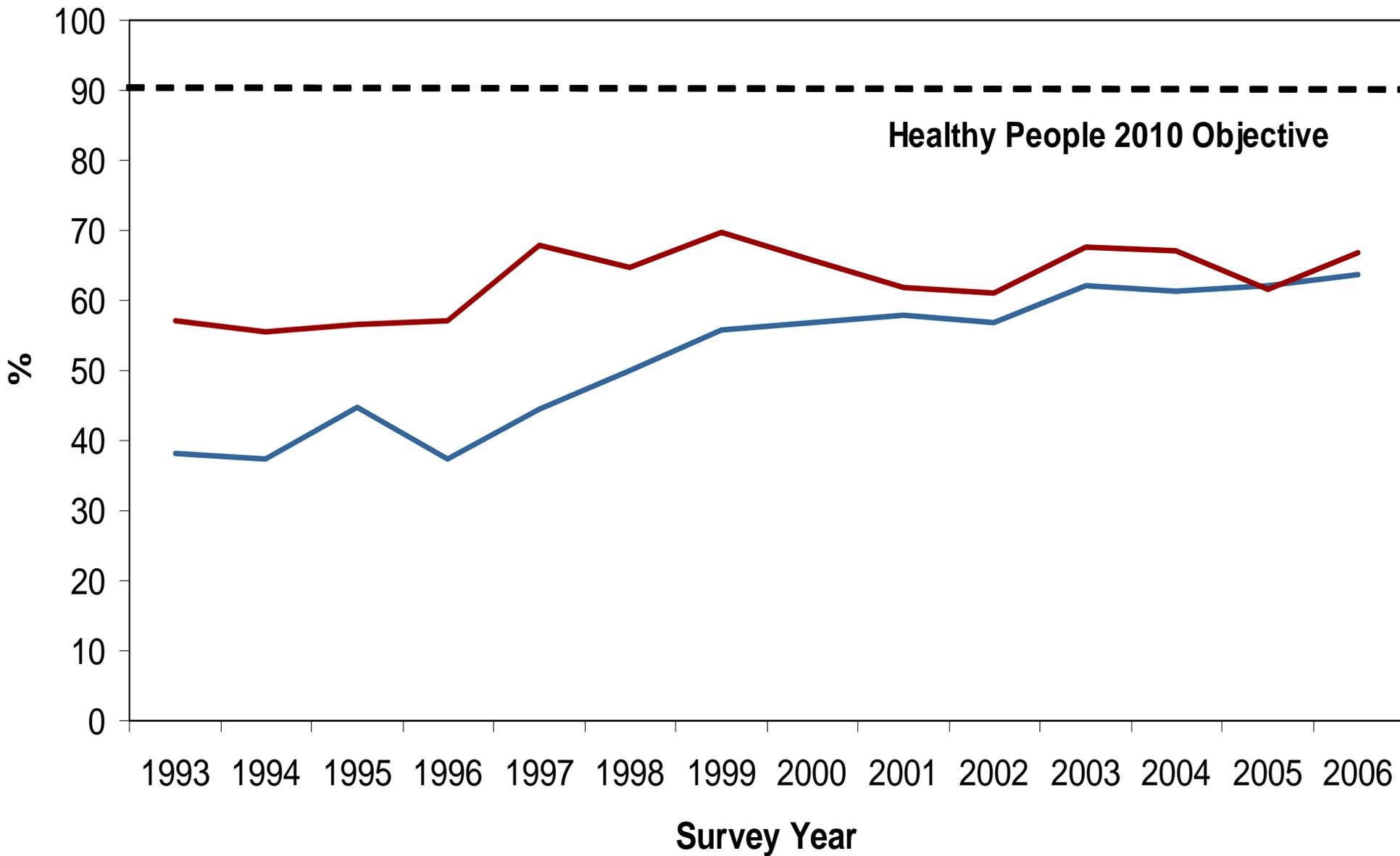
Sexual Violence

- Funds will be used for:
 - Sexual violence awareness and prevention campaigns
 - Programs for prevention of sexual assault and programs for victims of human trafficking
 - Equipment for sexual assault nurse examiner programs, to support the preceptorship of future sexual assault nurse examiners, and for the continuing education of sexual assault nurse examiners
 - Grants to increase the level of sexual assault services in Texas
 - Grants to support victim assistance coordinators
 - Grants to support technology in rape crisis centers
 - Grants to regional nonprofit providers of civil legal services to provide legal assistance for sexual assault victims
 - Data collection
 - Etc.....

Measuring Progress Toward State and National Objectives

Healthy People 2010

Immunizations Among Those Aged 65+ Years 1993-2006 Texas BRFSS



— Ever Had Pneumonia Shot — Had Flu Vaccine in Past Year

BRFSS Limitations

- Telephone coverage
 - Only landlines can be used
 - Technology barriers
- Non-response
- Self-reporting
- Recall bias
- Language barriers

BRFSS Products

- Data requests
- Texas Risk Factor Reports
- Annual BRFSS survey data
- Special point-in-time surveys
- Interactive Data Queries
 - [Texas BRFSS](#)
 - [CDC BRFSS](#)

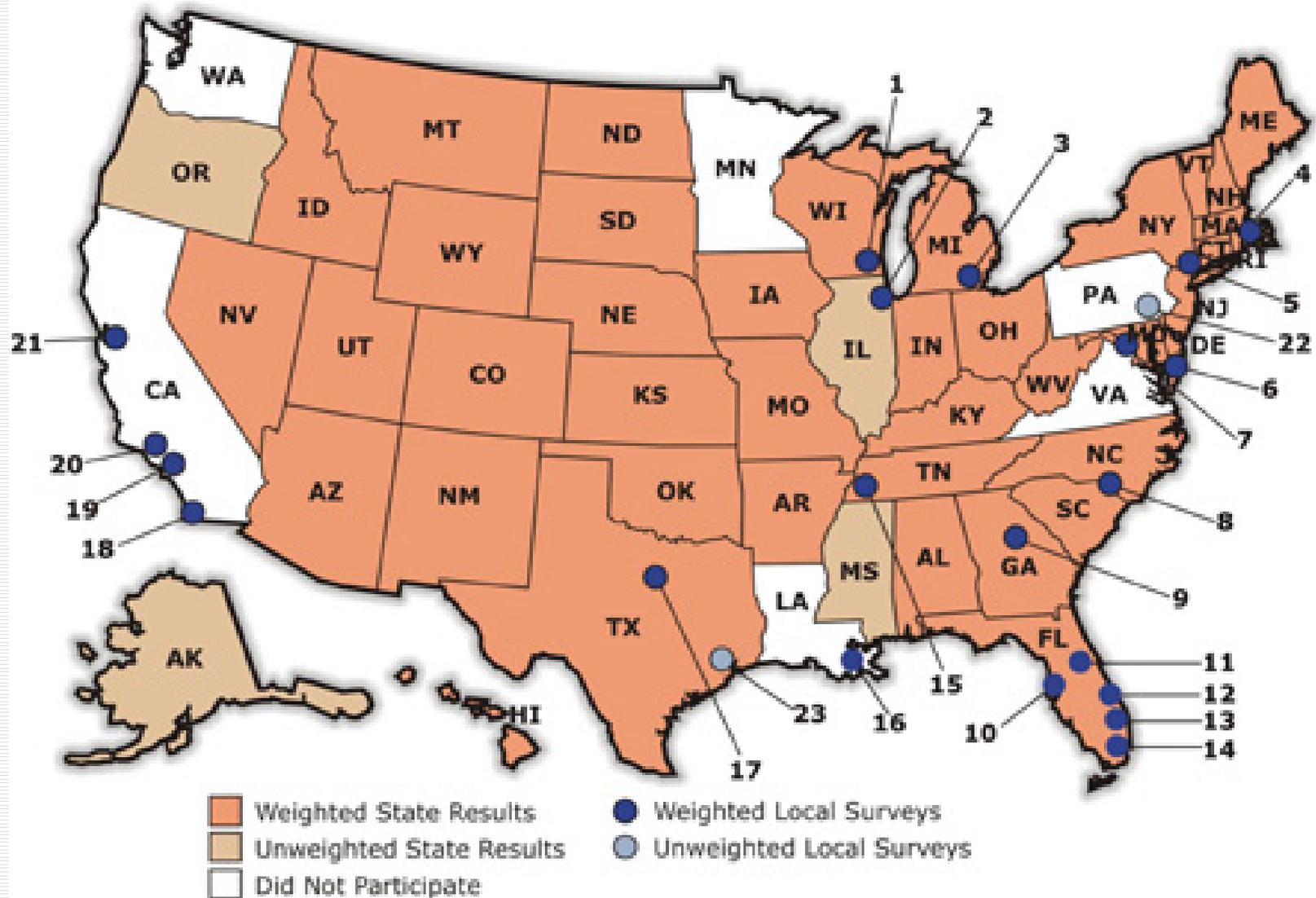
What is the YRBS?

- YRBS is a standardized biennial paper survey.
- Operated and funded through a state/federal partnership
- Samples high school students and sometimes middle school students
- Administered in English
- Primary state-level source of data on adolescent health indicators and risk behaviors
- Results reported with point estimates and confidence intervals.

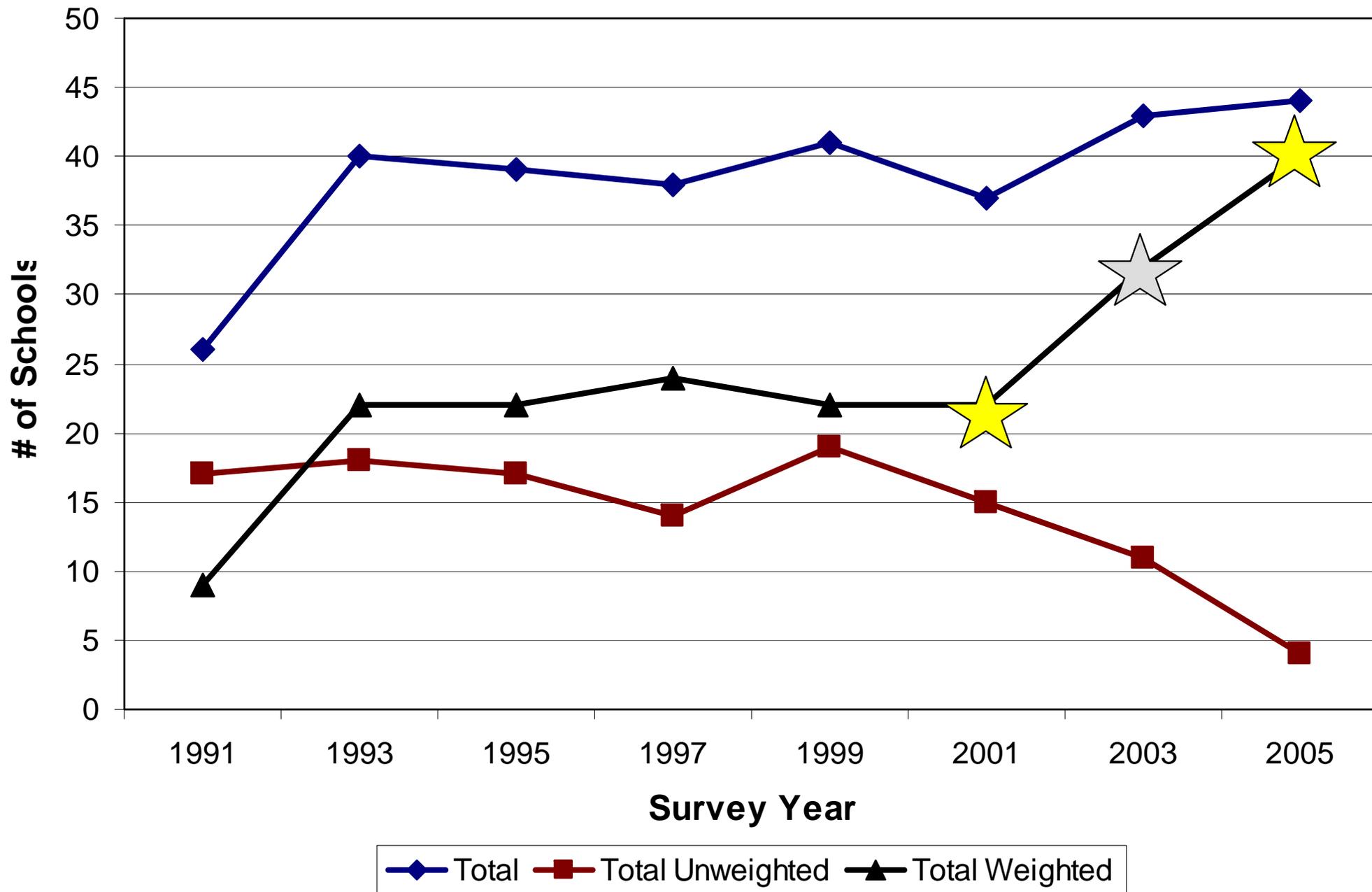
YRBS History

- Created in the late 1980's by CDC to fill a need for state level public health data
- Focus is on modifiable risk factors and other leading causes of death
 - Behaviors that contribute to unintentional injuries and violence;
 - Tobacco use;
 - Alcohol and other drug use;
 - Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection;
 - Unhealthy dietary behaviors;
 - Physical inactivity

YRBS in the U.S., 2005

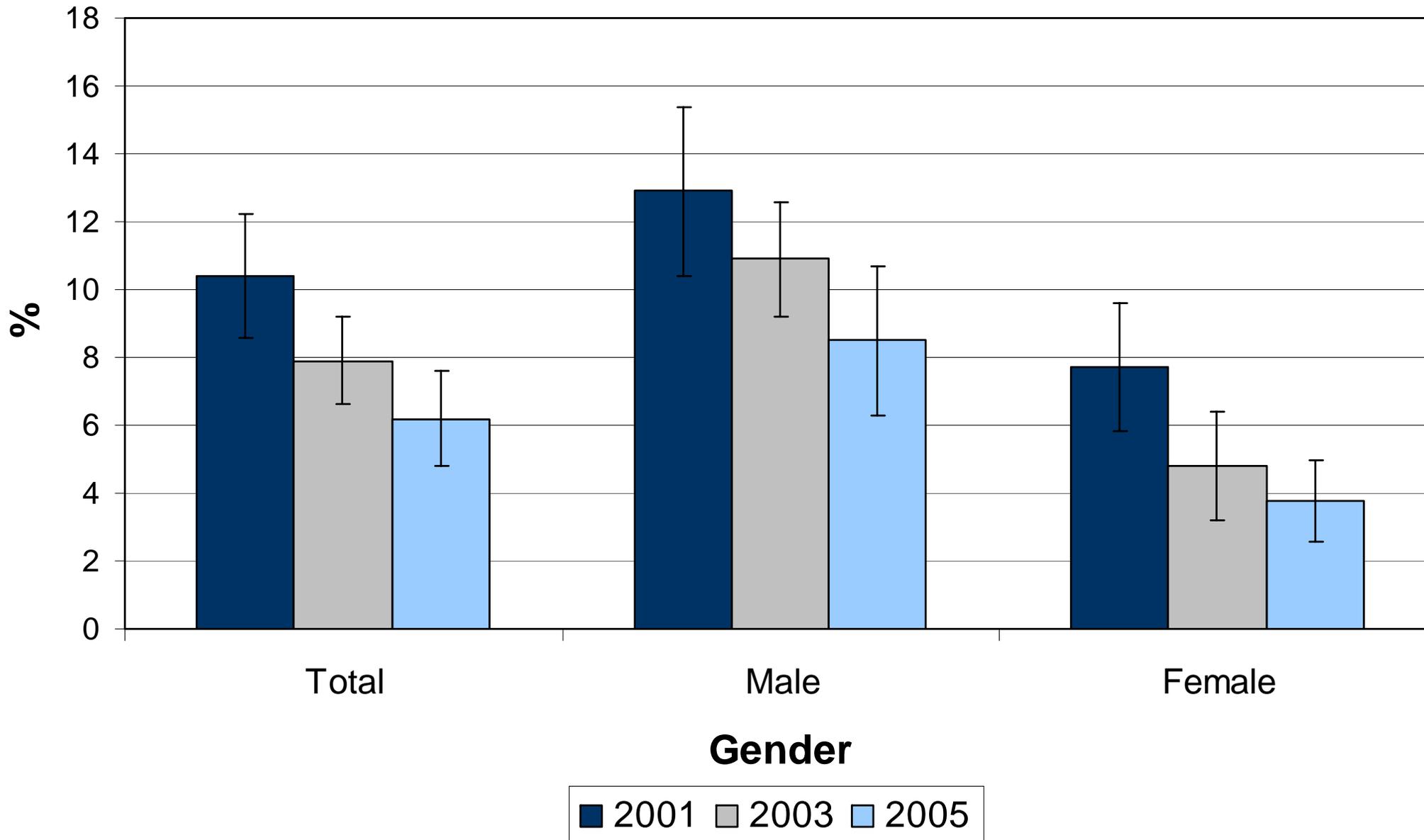


Number of States Participating in the YRBS 1991 - 2005

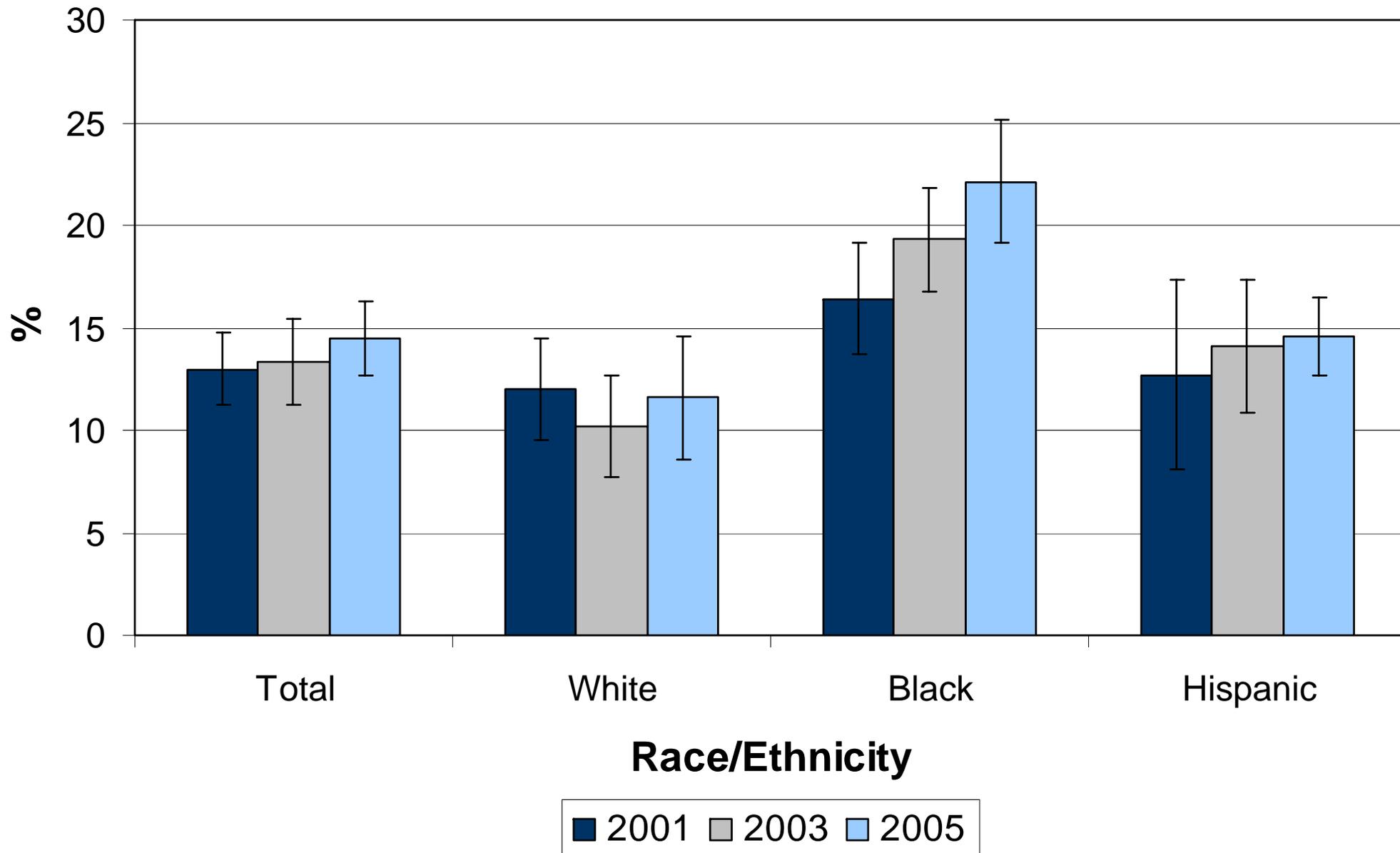


Rarely or Never Wore a Seat Belt When Riding in a Car Driven by Someone Else

Texas YRBS, 2001 - 2005

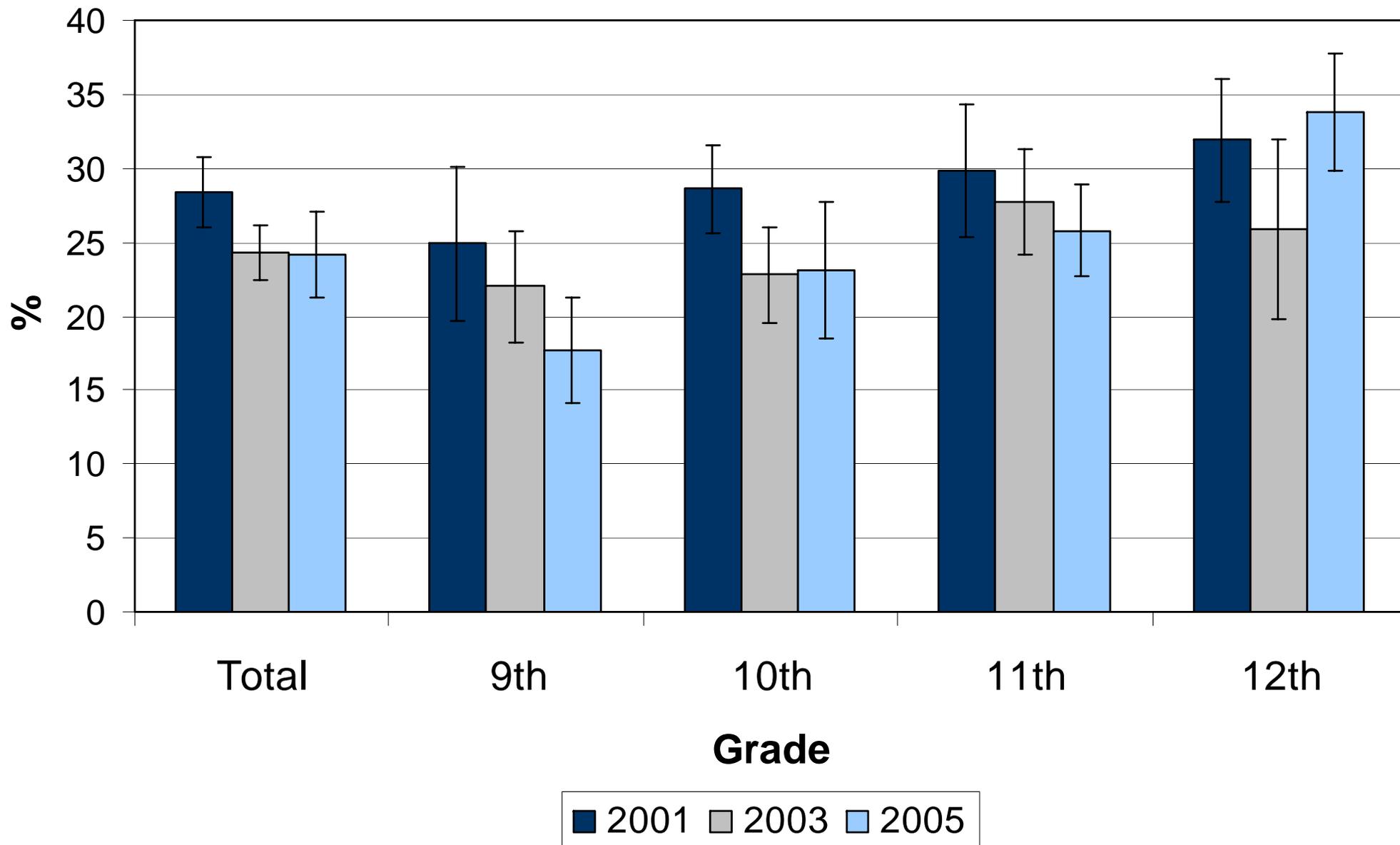


Physical Fights on School Property 1+ Times During the Past 12 Months Texas YRBS, 2001 - 2005



Students Who Smoked Cigarettes on One or More of the Past 30 Days

Texas YRBS, 2001 - 2005



YRBS Limitations

- Standard English questionnaire
- Paper survey
- Enrolled high school students
- No local breakdowns
- National survey

YRBS Topics

- Behaviors that contribute to unintentional injuries and violence;
- Tobacco use;
- Alcohol and other drug use;
- Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection;
- Unhealthy dietary behaviors;
- Physical inactivity

YRBS Products

- Data requests
- Interactive Data Queries
 - [CDC YRBS](#)

Contact Information

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- Texas BRFSS website
 - www.dshs.state.tx.us/chs/brfss
- CDC BRFSS website
 - www.cdc.gov/brfss
- CDC YRBS website
 - www.cdc.gov/yrbs