Substance Use and Mental Disorders: Early Detection, Prevention and Treatment

February 26, 2014

A Healthy People 2020 Progress Review

Healthy People 2020

U.S. Department of Health & Human Services · USA

Office of Disease Prevention and Health Promotion

Howard K. Koh, MD, MPH

Assistant Secretary for Health
U.S. Department of Health and Human Services

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Office of Disease Prevention and Health Promotion

Overview and Presenters

Chair

- Howard K. Koh, MD, MPH, Assistant Secretary for Health
  U.S. Department of Health and Human Services

Presentations

- Rebecca Hines, MHS, Chief, Health Promotion Statistics Branch
  National Center for Health Statistics, Centers for Disease Control and Prevention
- Philip Wang, MD, DrPH
  Deputy Director, National Institute of Mental Health, National Institutes of Health
- Jack Stein, PhD, Director, Office of Science Policy and Communications
  National Institute on Drug Abuse, National Institutes of Health
- Frances M. Harding, Director, Center for Substance Abuse Prevention
  Substance Abuse and Mental Health Services Administration

Community Highlight

- Connie Smith, Prevention Branch Manager, Division of Behavioral Health
  Kentucky Department for Behavioral Health

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Healthy People 2020 Evolves

1979

1990

2000

2010

1970 Clean Air Act

1979 Smallpox Eradicated

1982 AIDS is Infectious

1988 SG Declares Nicotine Addictive

1990 Human Genome Project Begins

1990s Drinking Water Fluoridation

2000s Obesity and Chronic Disease

September 11, 2001

2005 Hurricane Katrina

2009 H1N1 Flu

Burden of Substance Abuse

- Estimated costs
  - Excessive drinking - $223.5 billion (2006)
  - Illicit drug use - $193+ billion (2007)
- Usage
  - Current binge alcohol users - about 59.7 million people aged 12 or older (2012)
  - Current users of illicit drugs - 23.9 million people aged 12 or older (2012)

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Impact of Mental Disorders

- A leading cause of:
  - Disability
  - Absenteeism and lost productivity in the workplace
- Mental disorders affect nearly 44 million adults (2012)
- $300 billion spent on treatment (2012)
- Depression is associated with the development of hypertension, heart disease, diabetes, and stroke.

SOURCE: Prince M, Patel V, Shekhar S, et al. *LANCET 2007*:370(9590):859-877; Sing M, Hill S, Puffer L. DHHS Publication. No. SMA 01-3542. Rockville, MD: *CMHS, Substance Abuse and Mental Health Services Administration*. 2001.; National Survey on Drug Use and Health, SAMHSA, 2012.: Insel T. Assessing the state of America's mental health system. *Testimony before the Committee on Health, Education, Labor, and Pensions for the United States Senate*. 2013.; Wassertheil-Smoller S, Shumaker S, Ockene J, et al. *Arch Intern Med* 2004:(164):289-298. Carnethon M, Biggs M, Barzilay J, et al. *Arch Intern Med*. 2007:(167):802-807. Jonas BS, Mussolino ME. *Psycho Med* 2000:(62): 463-71.

Rebecca Hines, MHS

Chief, Health Promotion Statistics Branch
National Center for Health Statistics
Centers for Disease Control and Prevention

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Presentation Overview

- Early Detection, Prevention & Treatment
  - Tracking the nation's progress
- Mental Health/Mental Disorders
  - Depression
  - Suicide
  - Serious Mental Illness (SMI)
- Substance Use
  - Excessive alcohol use
  - Illicit drug use

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Tracking the Nation's Progress

- 15 HP2020 Measurable Mental Health and Mental Disorders Objectives:
  - 2 Targets met
  - 1 Improving
  - 3 Little or No change
  - 5 Getting worse
  - 4 Baseline data only

- 34 HP2020 Measurable Substance Abuse Objectives:
  - 7 Targets met
  - 7 Improving
  - 8 Little or No change
  - 8 Getting worse
  - 4 Baseline data only

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NOTES: The Substance Abuse Topic Area also contains 8 Informational objectives and 2 Developmental objectives. Measurable objectives are defined as having at least one data point currently available, and anticipate additional data points throughout the decade to track progress. Informational objectives, are a subset of measurable objectives that do not have a target. Developmental objectives lack baseline data and targets.

Impact of Mental Disorders

- A leading cause of:
  - Disability
  - Absenteeism and lost productivity in the workplace
- Mental disorders affect nearly 44 million adults (2012)
- About $300 billion spent on treatment (2012)
- Depression is associated with the development of heart disease, diabetes, and stroke

SOURCES: Prince M, et al. *LANCET 2007*:370(9590):859-877; Sing M, et al. DHHS Publication. No. SMA 01-3542. Rockville, MD: *CMHS, Substance Abuse and Mental Health Services Administration*. 2001; National Survey on Drug Use and Health, SAMHSA, 2012: Insel T. Assessing the state of America's mental health system. *Testimony before the Committee on Health, Education, Labor, and Pensions for the United States Senate*. 2013.; Centers for Disease Control and Prevention, Heart-Healthy and Stroke-Free: A Social Environment Handbook. accessed on 2/10/14 at: http://www.cdc.gov/dhdsp/seh_handbook.htm.

Mental Illness Prevalence, 2012

- 18.6% Any Mental Illness (AMI)
- 4.1% Serious Mental Illness (SMI)
- 6.9% Major Depressive Episodes (MDE)
- National Survey on Drug Use and Health (NSDUH) is a critical mental health data source

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NOTE: Data are for adults aged 18 years and over.

SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Depression and Suicide

- Over 16 million adults reported major depressive episode (2012)
- Lifetime major depression for women is over double that of men
- Depression is a risk factor for suicide attempts
- More than 38,000 Americans died by suicide in 2010
  - 2nd for leading cause of death for ages 25-34 and 3rd for ages 10-14 and 15-24
  - 10th leading cause of death for all ages

SOURCES: National Survey on Drug Use and Health, SAMSHA; Centers for Disease Control and Prevention, accessed on 2/10/14 at: http://www.cdc.gov/mentalhealth/basics/burden.htm; Centers for Disease Control and Prevention, accessed on 2/10/14 at: http://www.cdc.gov/violenceprevention/suicide/riskprotectivefactors.html;Center for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System, http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html.

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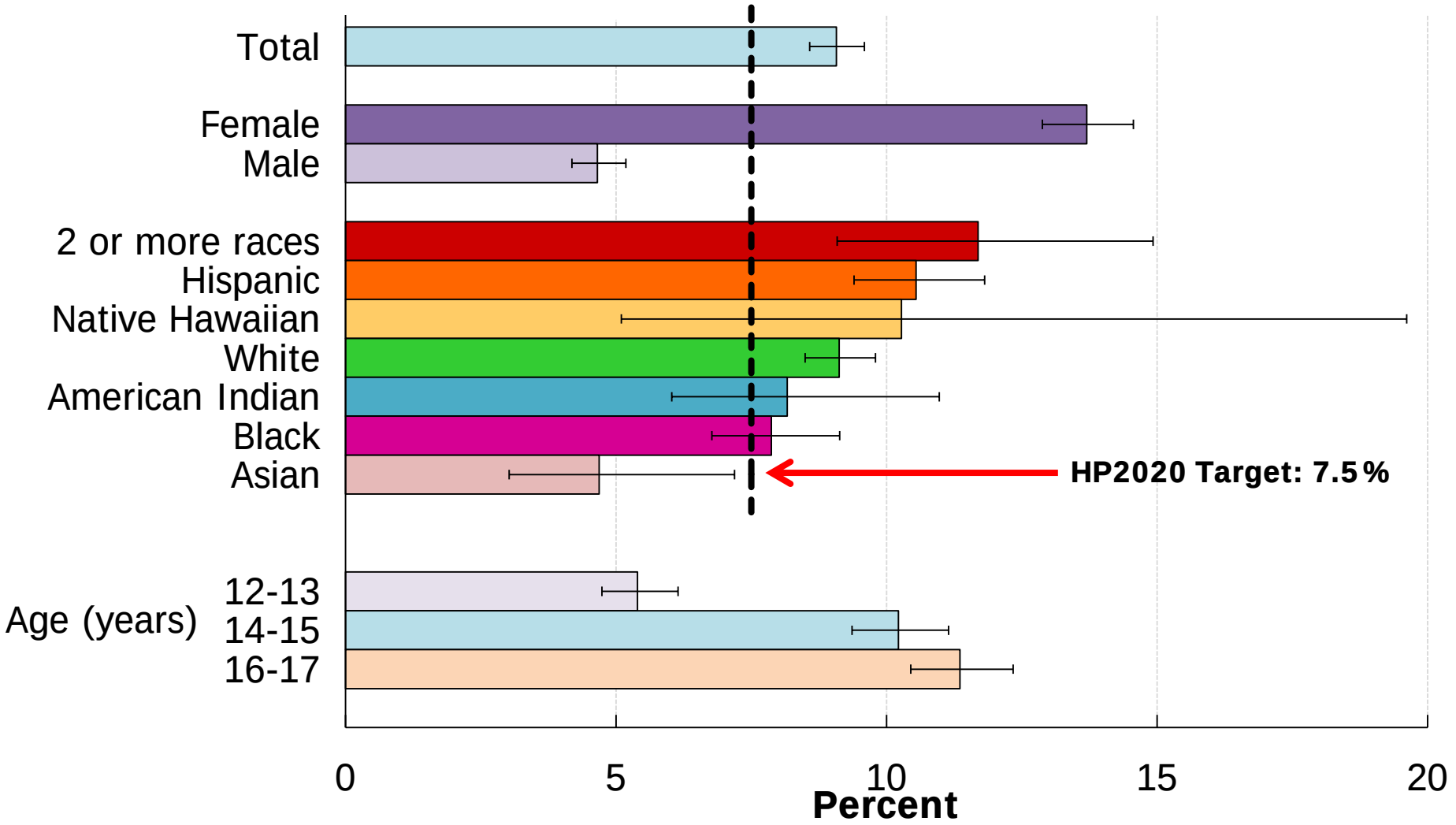
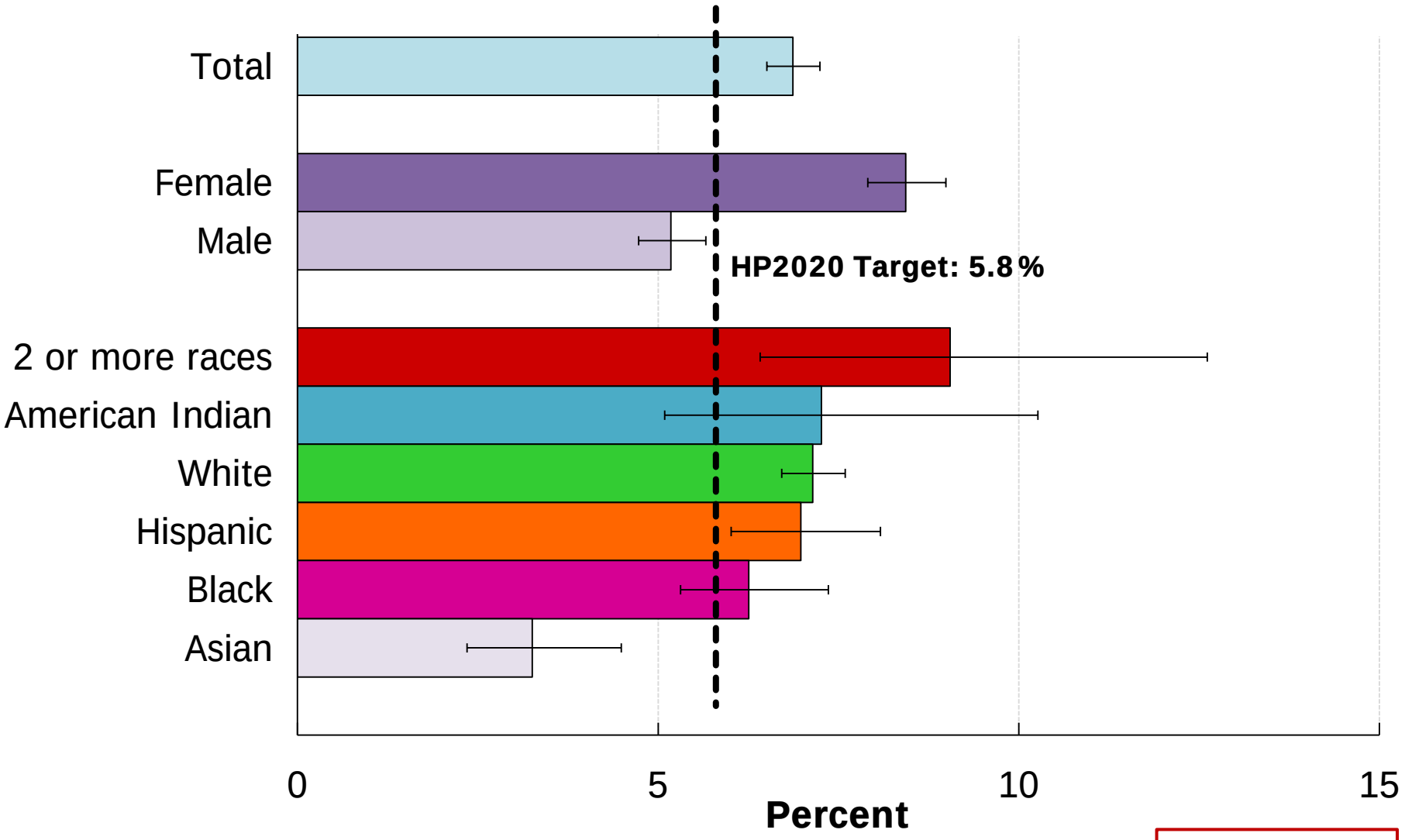
Major Depressive Episode, Adolescents, 2012



NOTES: I = 95% confidence interval. Data are for adolescents aged 12-17 years who reported having a Major Depressive Episode (MDE) in the past 12 months. American Indian includes Alaska Native. Native Hawaiian includes other Pacific Islander. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.
SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Obj. MHMD-4.1
Decrease desired

Major Depressive Episode, Adults, 2012

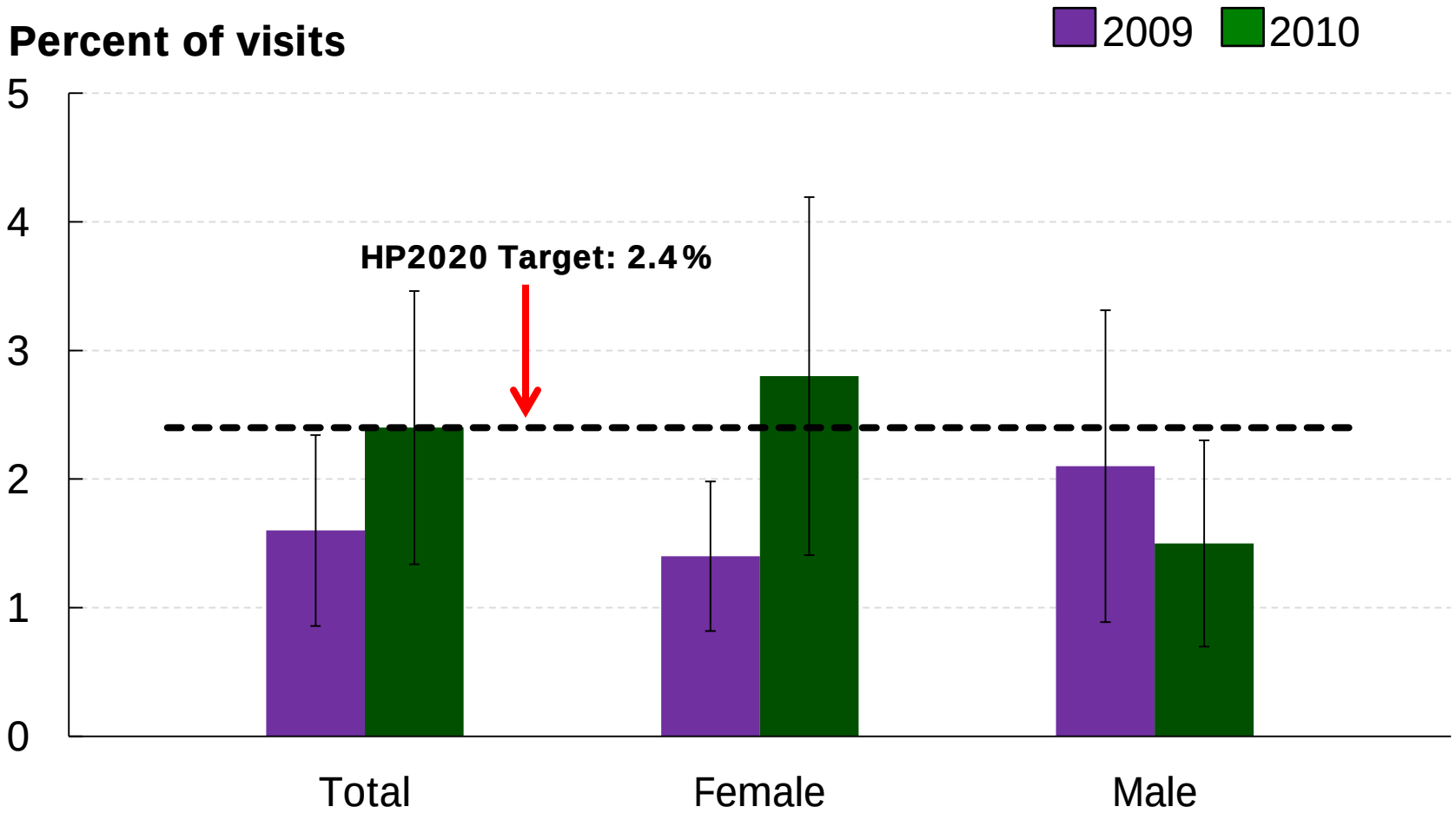


NOTES: I = 95% confidence interval. Data are for the proportion of adults aged 18 and over who experienced a Major Depressive Episode in the past 12 months. American Indian includes Alaska Native. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.

SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Obj. MHMD-4.2
Decrease desired

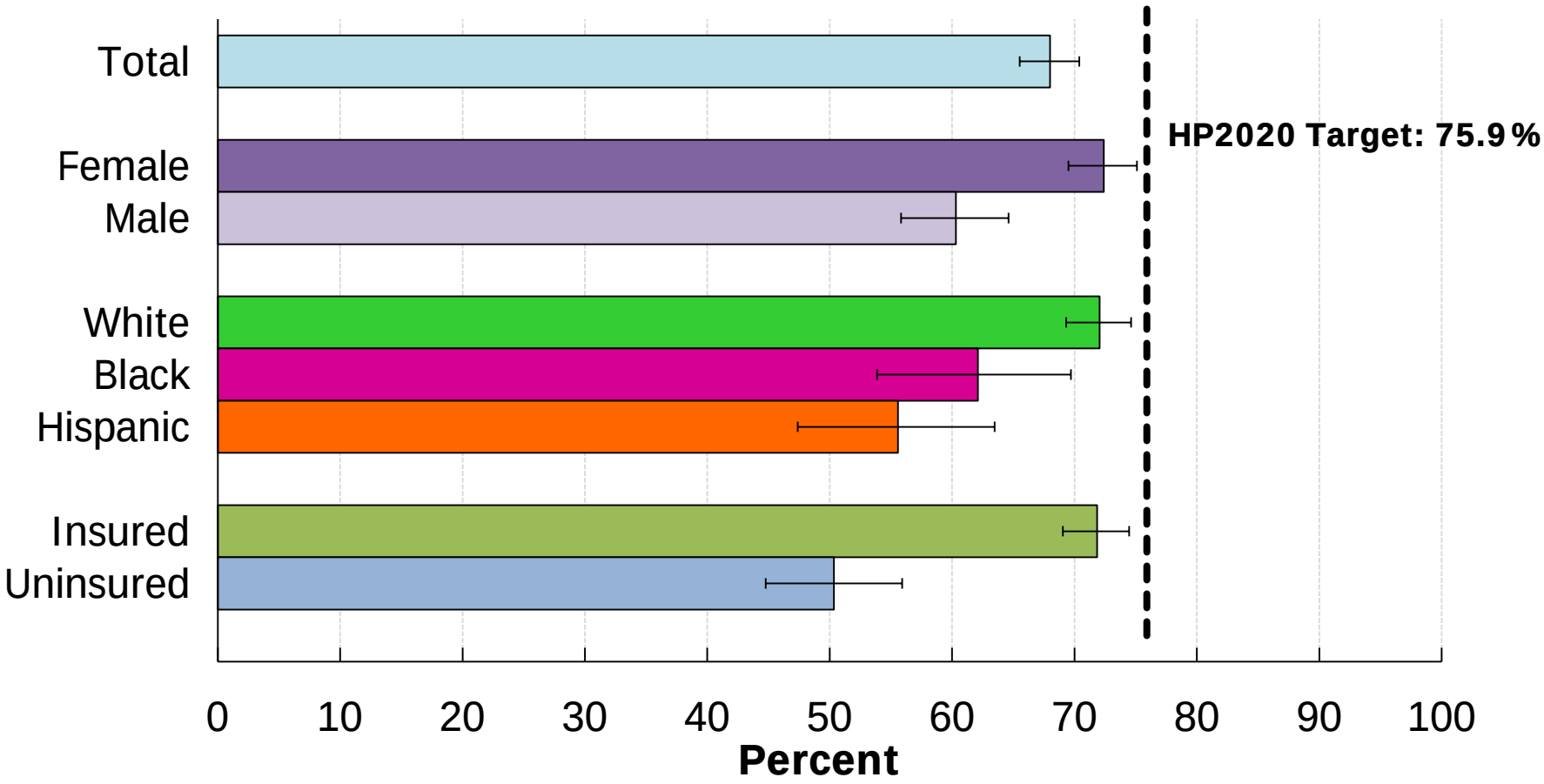
Visits to Primary Care Physicians that Included Depression Screening, Adults



NOTES: I = 95% confidence interval. Screening refers to screenings that took place during office visits. Office visits are for adults age 19+ years.
SOURCE: National Ambulatory Medical Care Survey (NAMCS), NCHS/ CDC.

Obj. MHMD-11.1
Increase desired

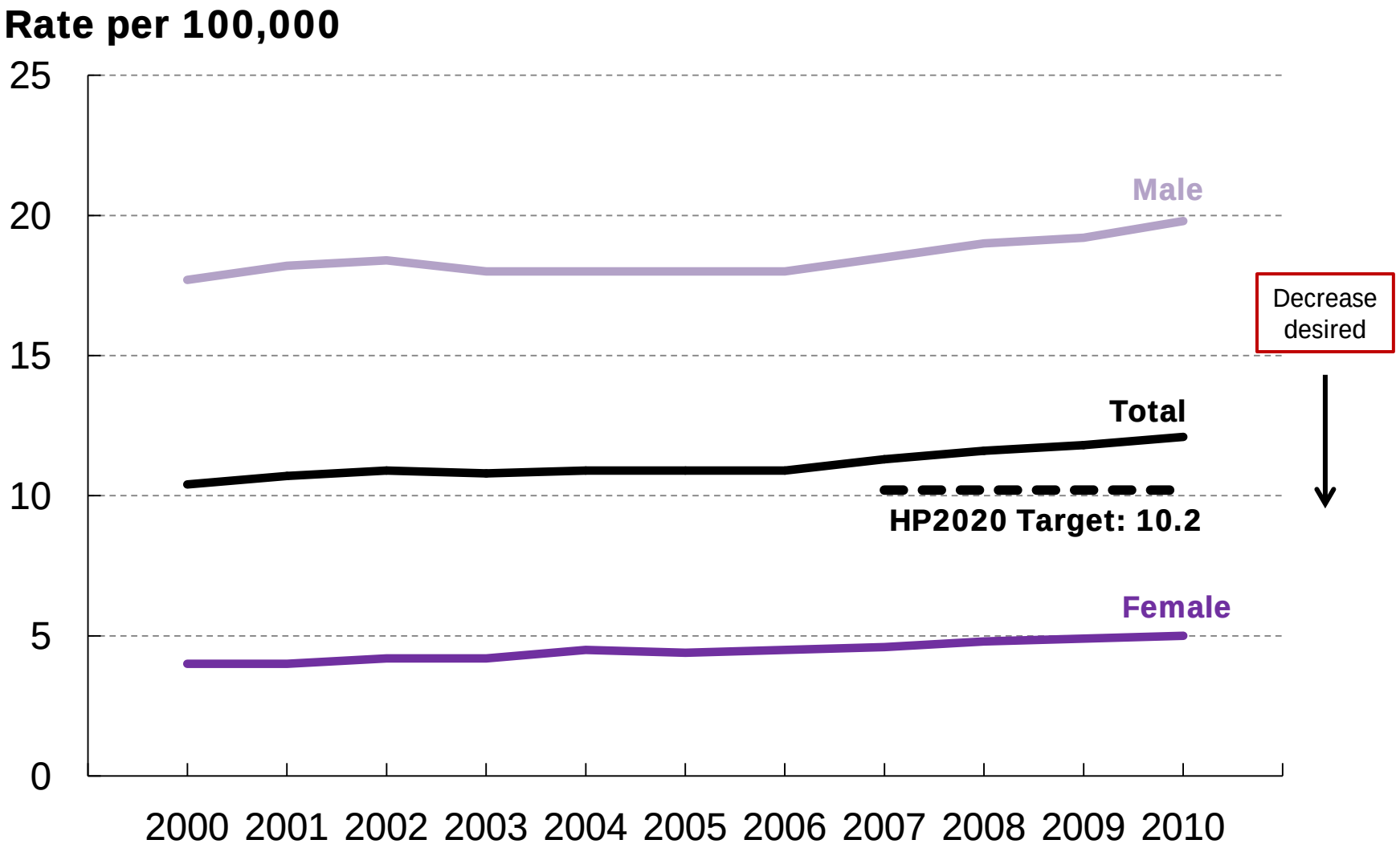
Adults With Major Depressive Episode Who Received Treatment, 2012



NOTES: I = 95% confidence interval. Data are for the proportion of adults aged 18 and over who experienced a Major Depressive Episode in the past 12 months. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.
SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Obj. MHMD-9.2
Increase desired

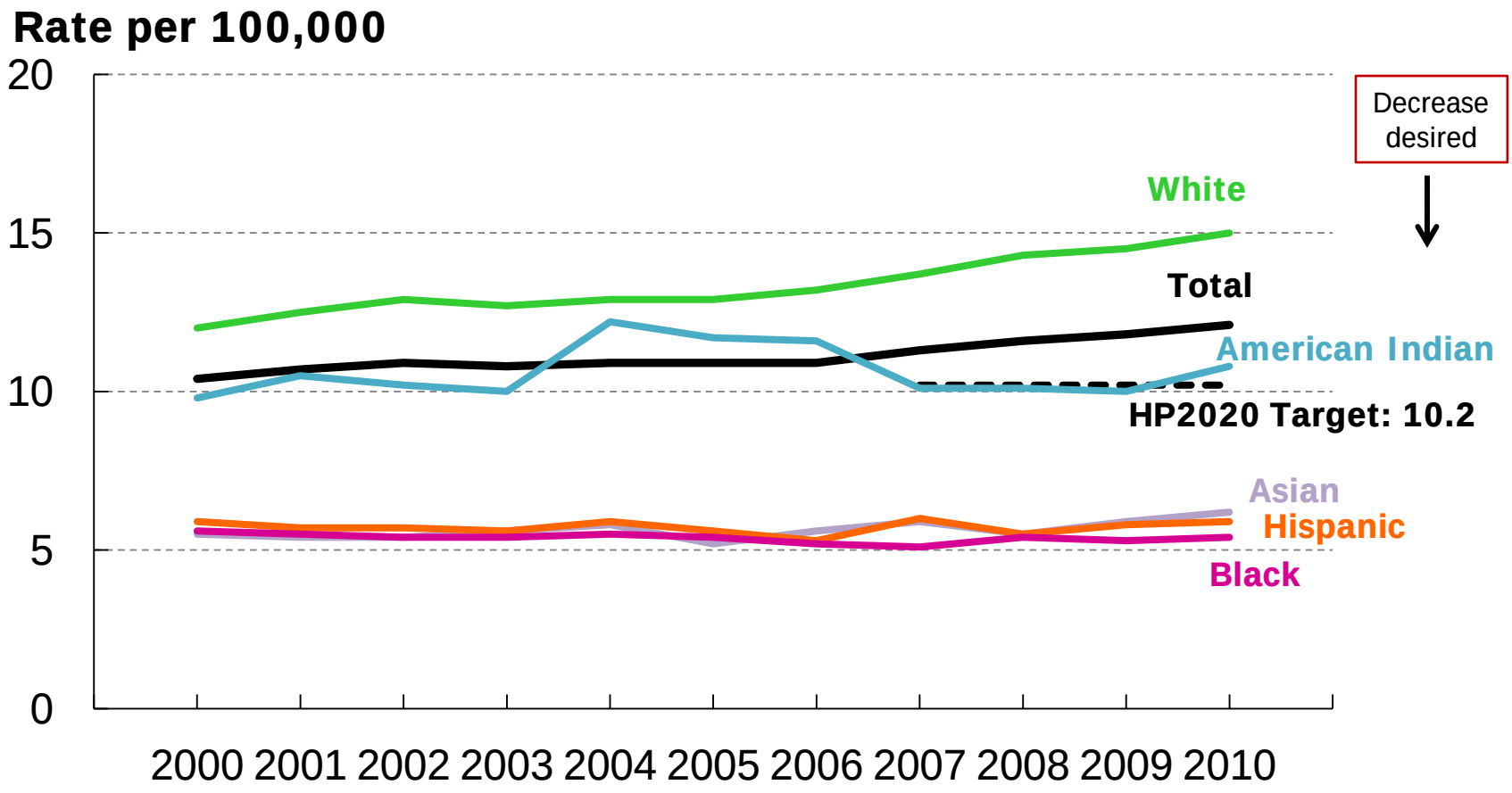
Suicide by Sex, 2000–2010



Obj. MHMD-1

NOTES: Data are for ICD-10 codes *U03, X60-X84, Y87.0 reported as underlying cause. Data are age adjusted to the 2000 standard population.
SOURCE: National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS.

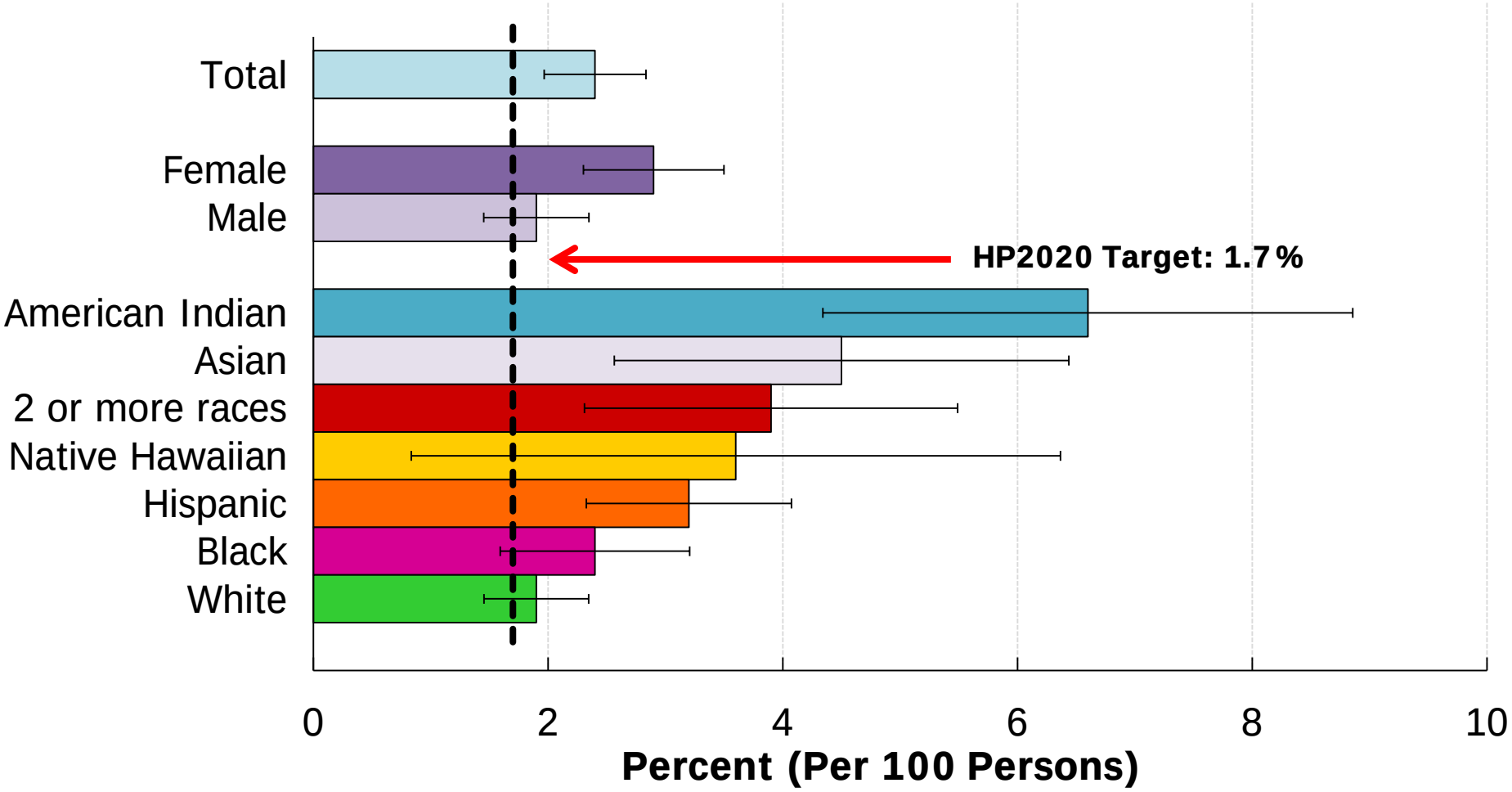
Suicide by Race/Ethnicity, 2000—2010



NOTES: Data are for ICD-10 codes *U03, X60-X84, Y87.0 reported as underlying cause. American Indian includes Alaska Native. Asian includes Pacific Islander. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race. Data are age adjusted to the 2000 standard population.
SOURCE: National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS.

Obj. MHMD-1

Serious Suicide Attempts Among High School Students, 2011

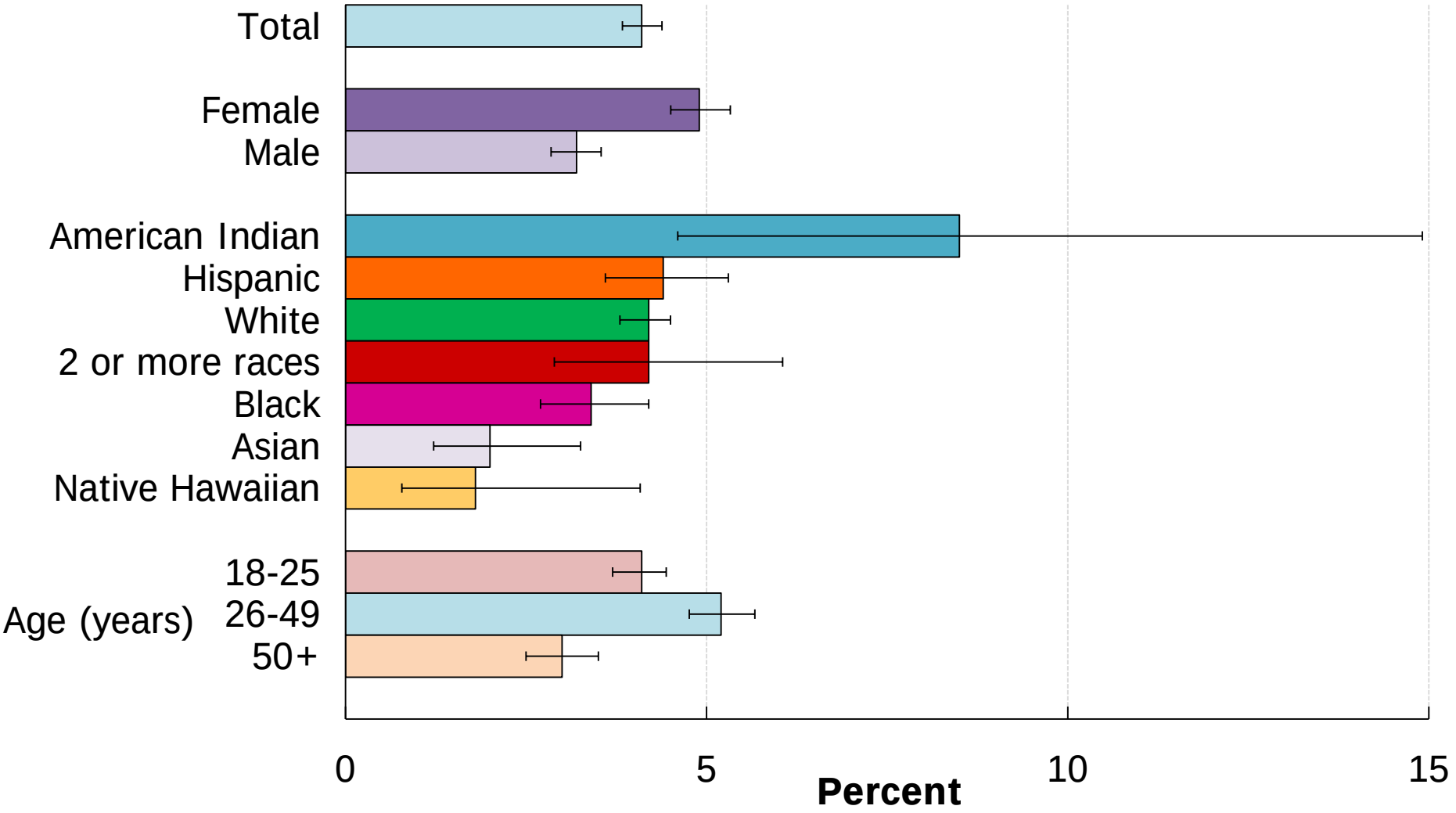


NOTES: I = 95% confidence interval. Data are for students in grades 9 through 12 who reported making suicide attempts that required medical attention in the past 12 months. American Indian includes Alaska Native. Native Hawaiian includes other Pacific Islander. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.

SOURCE: Youth Risk Behavior Surveillance System (YRBSS), CDC/NCHHSTP.

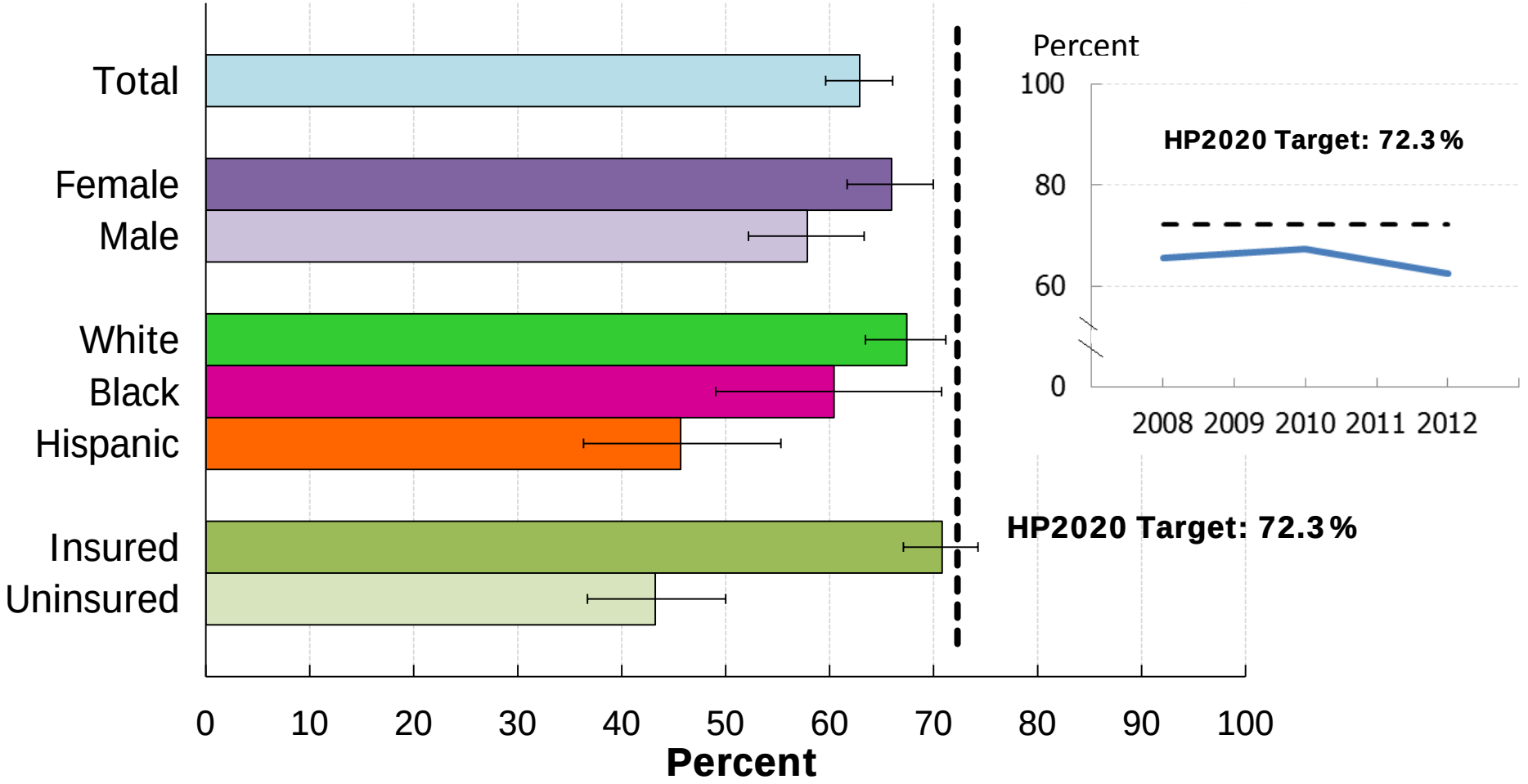
Obj. MHMD-2
Decrease desired

Serious Mental Illness, Adults, 2012



NOTES: I = 95% confidence interval. American Indian includes Alaska Native. Native Hawaiian includes other Pacific Islander. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race. SMI is defined as mental illness that resulted in serious functional impairment, which substantially interfered with or limited one or more major life activities.
SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Adults With Serious Mental Illness Who Receive Treatment, 2012

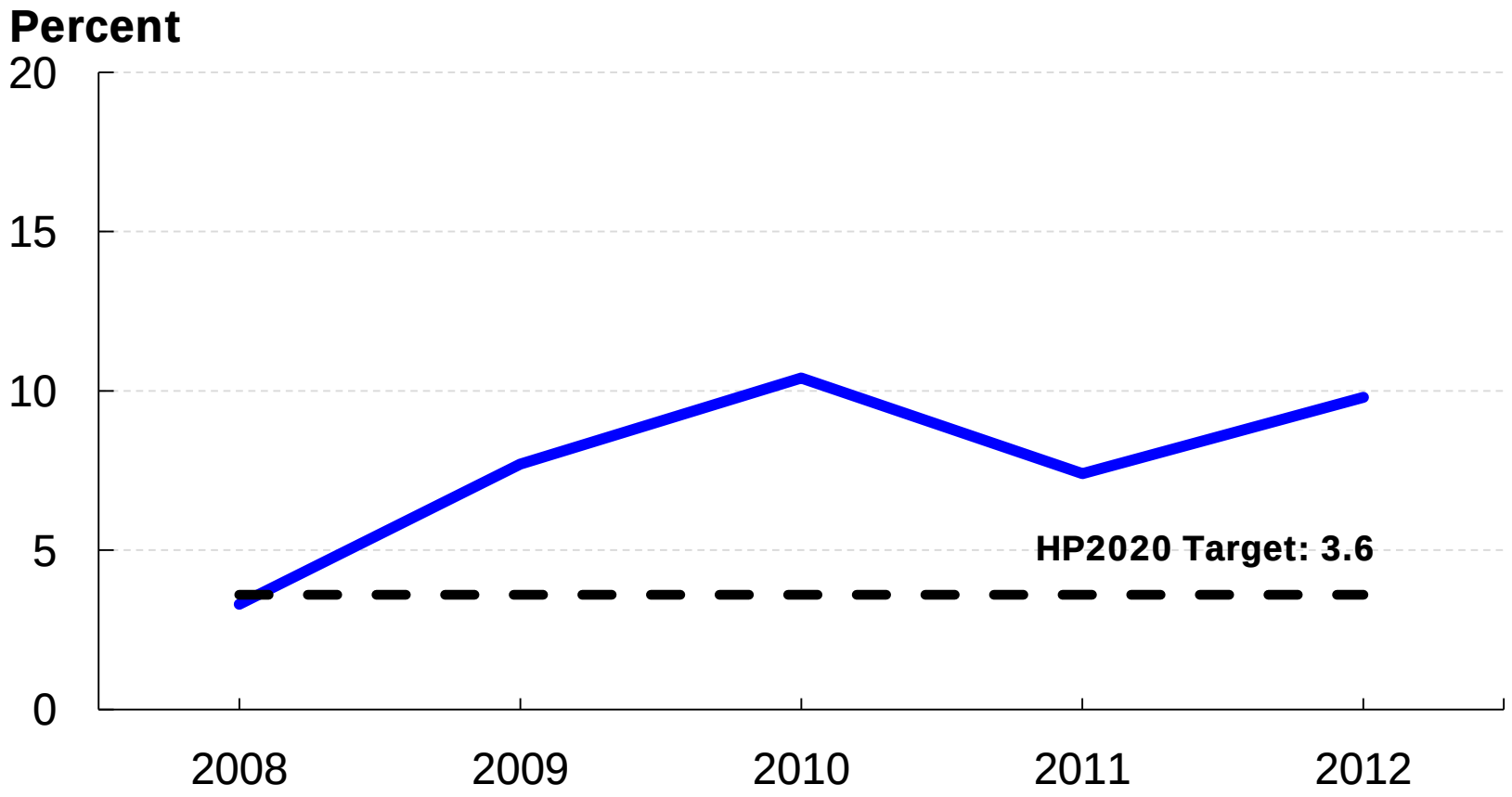


NOTES: I = 95% confidence interval. Adults are those people age 18 and over who received treatment for Serious Mental Illness. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race. SMI is defined as mental illness that resulted in serious functional impairment, which substantially interfered with or limited one or more major life activities.

SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Obj. MHMD-9.1
Increase desired

Persons with Co-occurring Substance Abuse and Mental Disorders Who Received Treatment for Both Disorders, 2008-2010



Obj. MHMD-10
Increase desired

SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Presentation Overview

- Early Detection, Prevention & Treatment
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Burden of Substance Abuse

- Estimated costs
  - Excessive drinking - $223.5 billion (2006)
  - Illicit drug use - $193+ billion (2007)
- Usage
  - Current binge alcohol users - about 59.7 million people aged 12 or older (2012)
  - Current users of illicit drugs - 23.9 million people aged 12 or older (2012)

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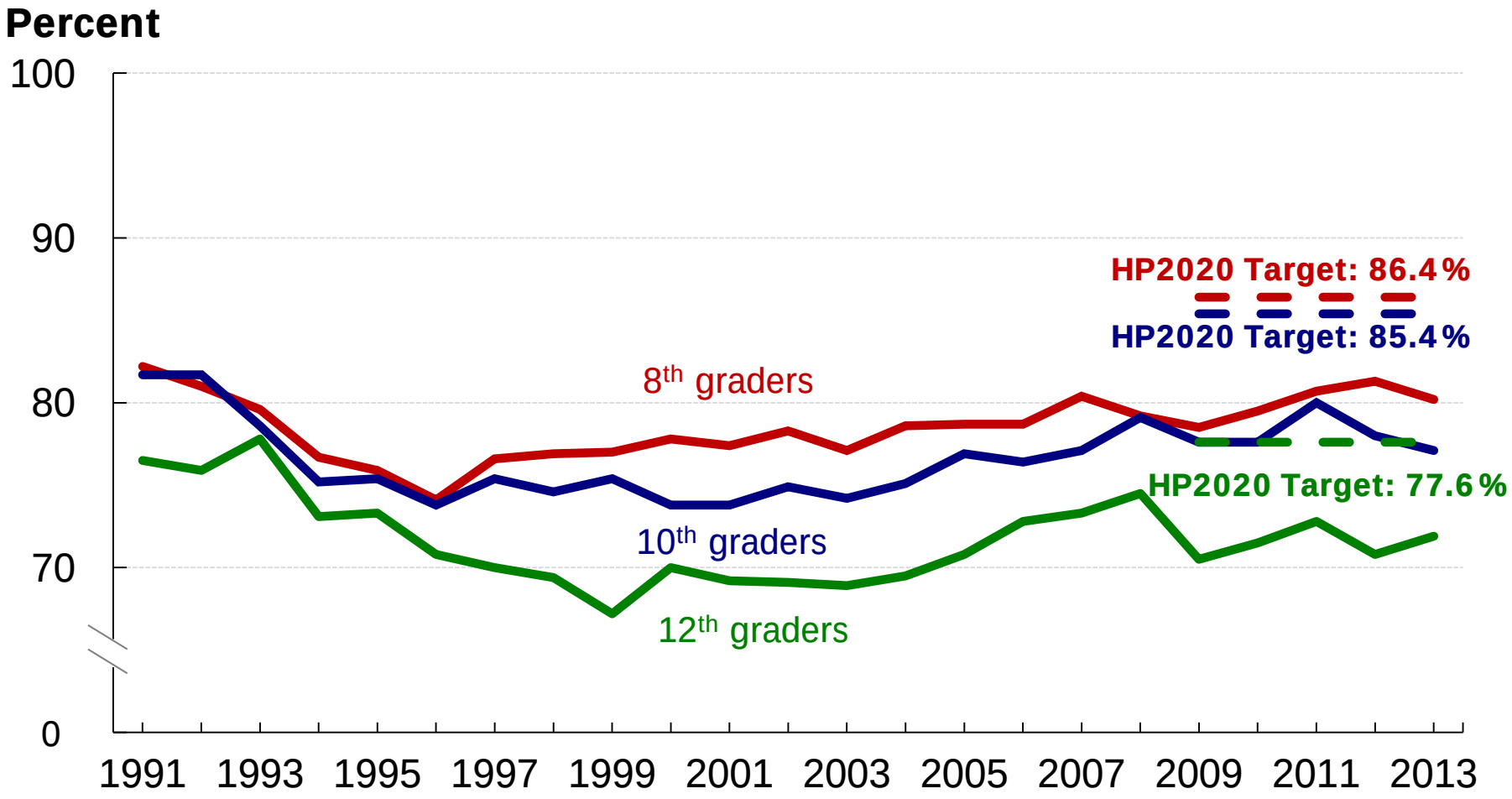
SOURCES: AJPM, 2011:41(5):516-524; The Economic Impact of Illicit Drug Use on American Society. Washington D.C. United States Department of Justice; National Survey on Drug Use and Health, SAMHSA.

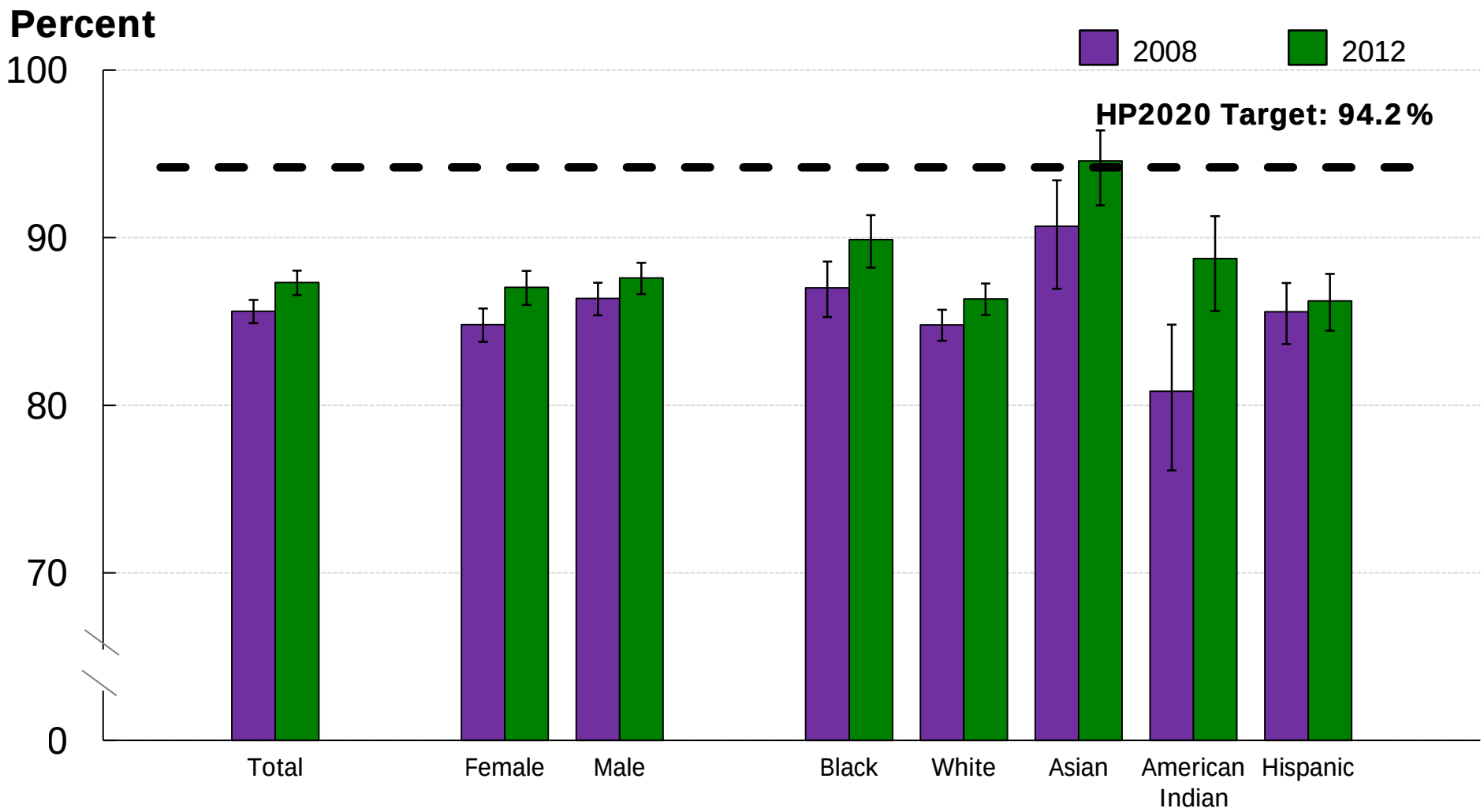
Adolescent Disapproval of Drinking Alcohol Daily, 1991–2013



Objs. SA-3.1 through 3.3
Increase desired

NOTES: Data are for students who report their disapproval of people who take 1-2 drinks nearly every day.
SOURCE: Monitoring the Future (MTF), NIH/NIDA.

Adolescents Who Did Not Initiate Alcohol Use in the Past Year

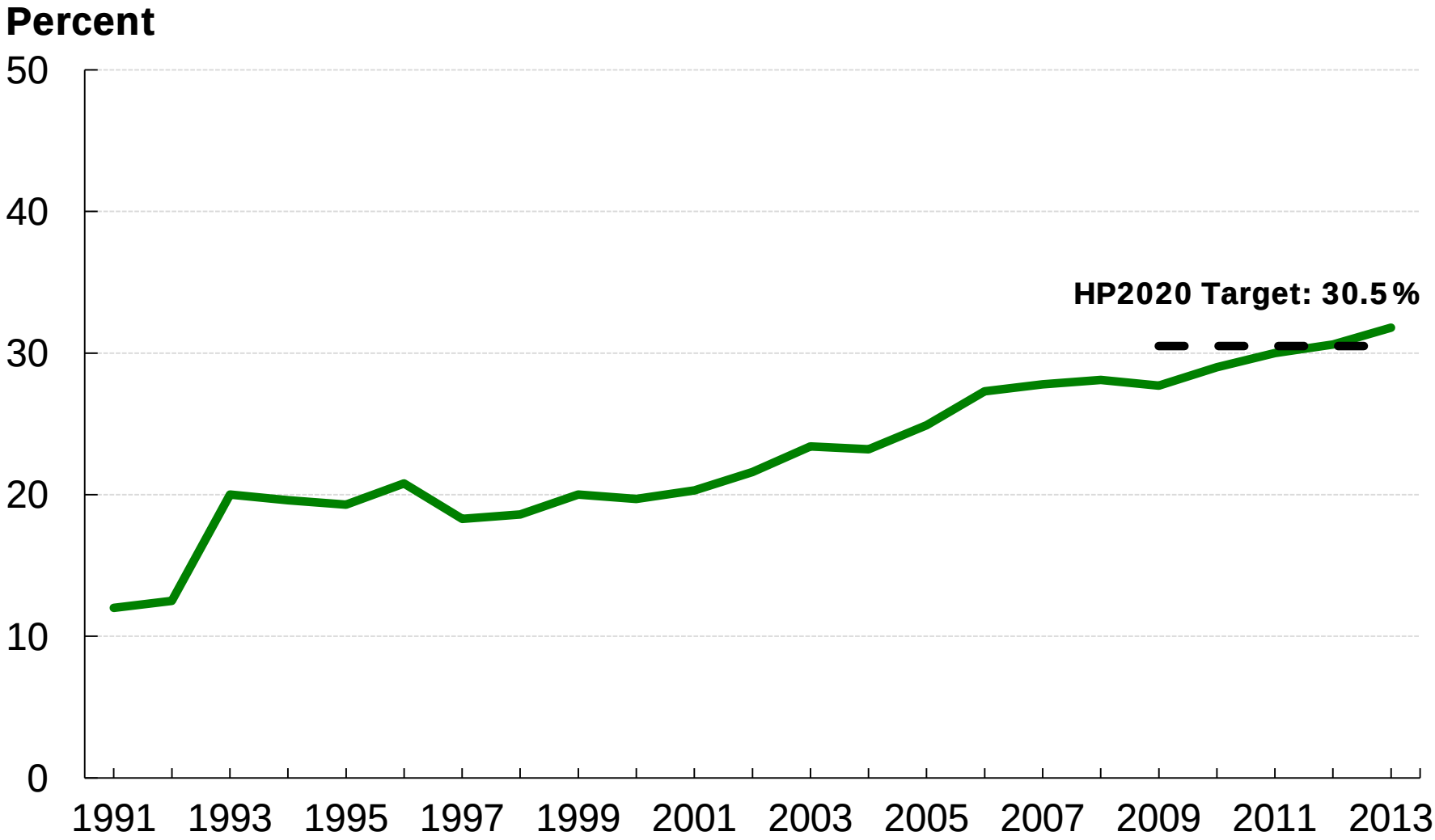


NOTES: I = 95% confidence interval. Data are for youth aged 12 – 17 year who remained alcohol free another year. American Indian includes Alaska Native. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.

SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Obj. SA-2.1
Increase desired

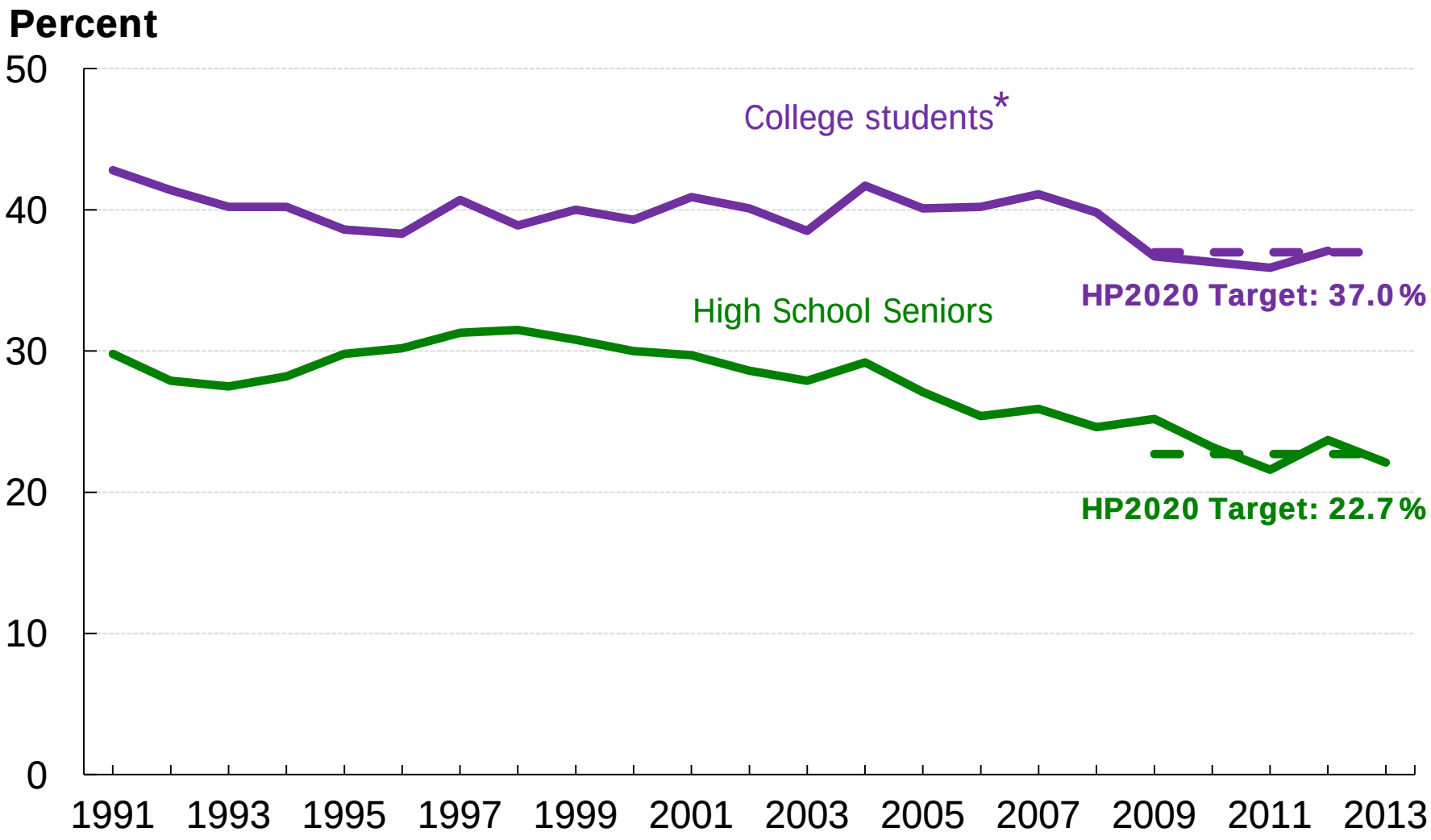
High School Seniors Who Never Used Alcohol, 1991–2013



Obj. SA-2.3
Increase desired

NOTES: Data are for High School seniors who have never had more than just a few sips of alcohol in their life.
SOURCE: Monitoring the Future (MTF), NIH/NIDA.

Binge Drinking, 1991–2013

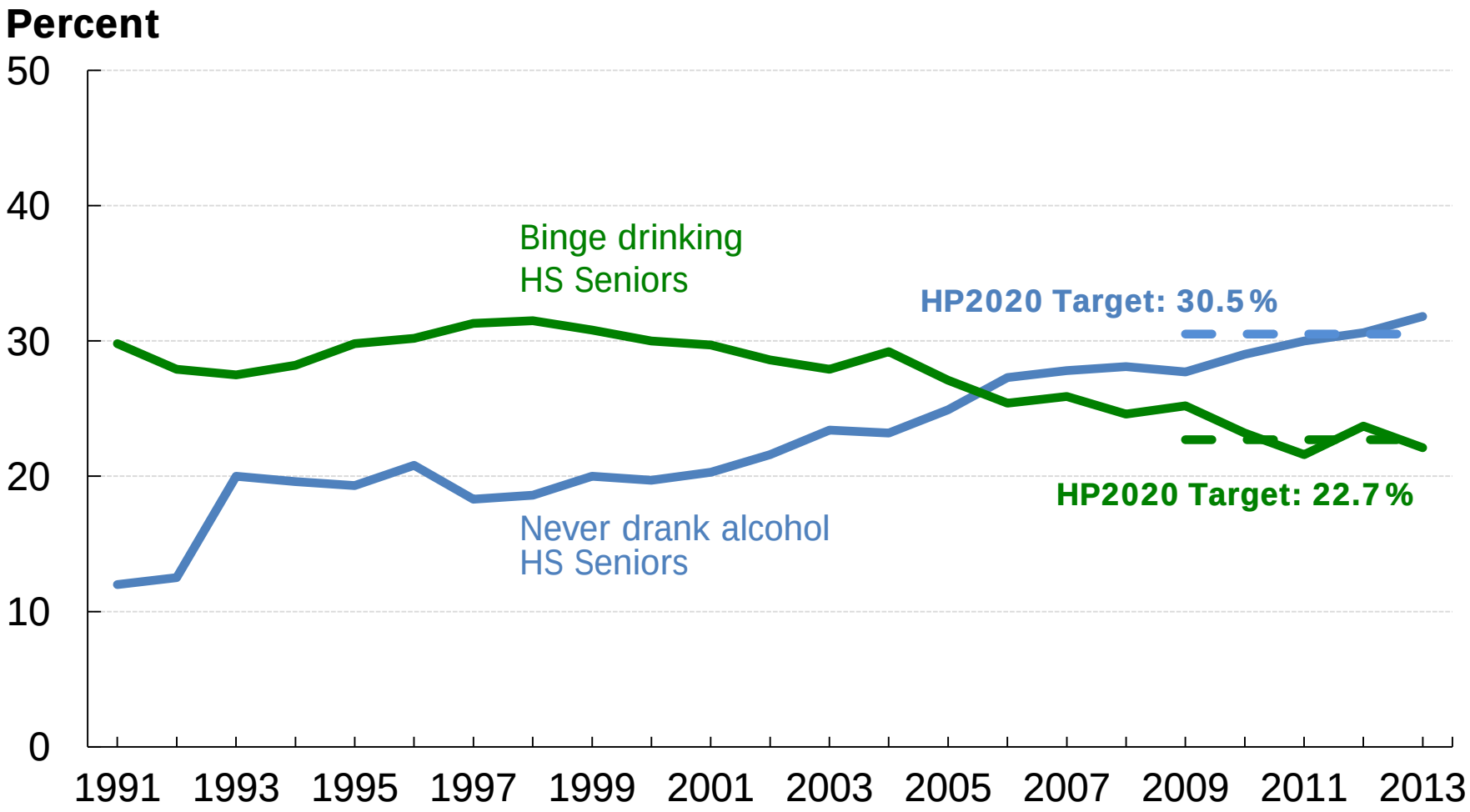


NOTES: Binge drinking is defined as drinking five or more alcoholic beverages in a row during the past 2 weeks. * The most recent year of data for college students is 2012.

SOURCE: Monitoring the Future (MTF), NIH/NIDA.

Objs. SA-14.1, 14.2
Decrease desired

Alcohol Related Behavior, 1991–2013

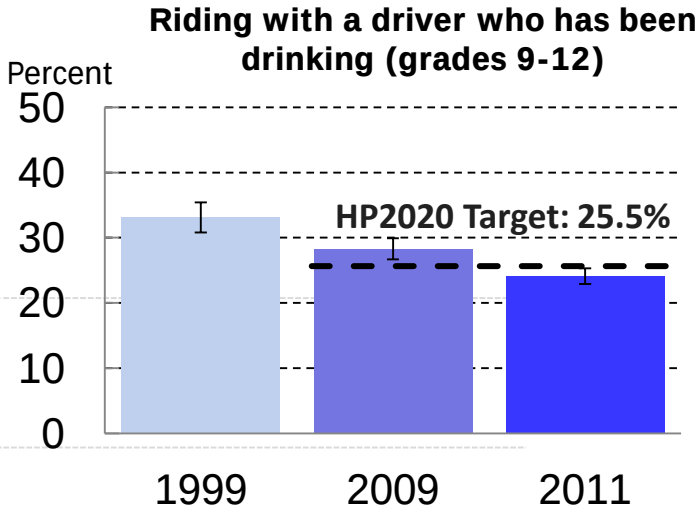


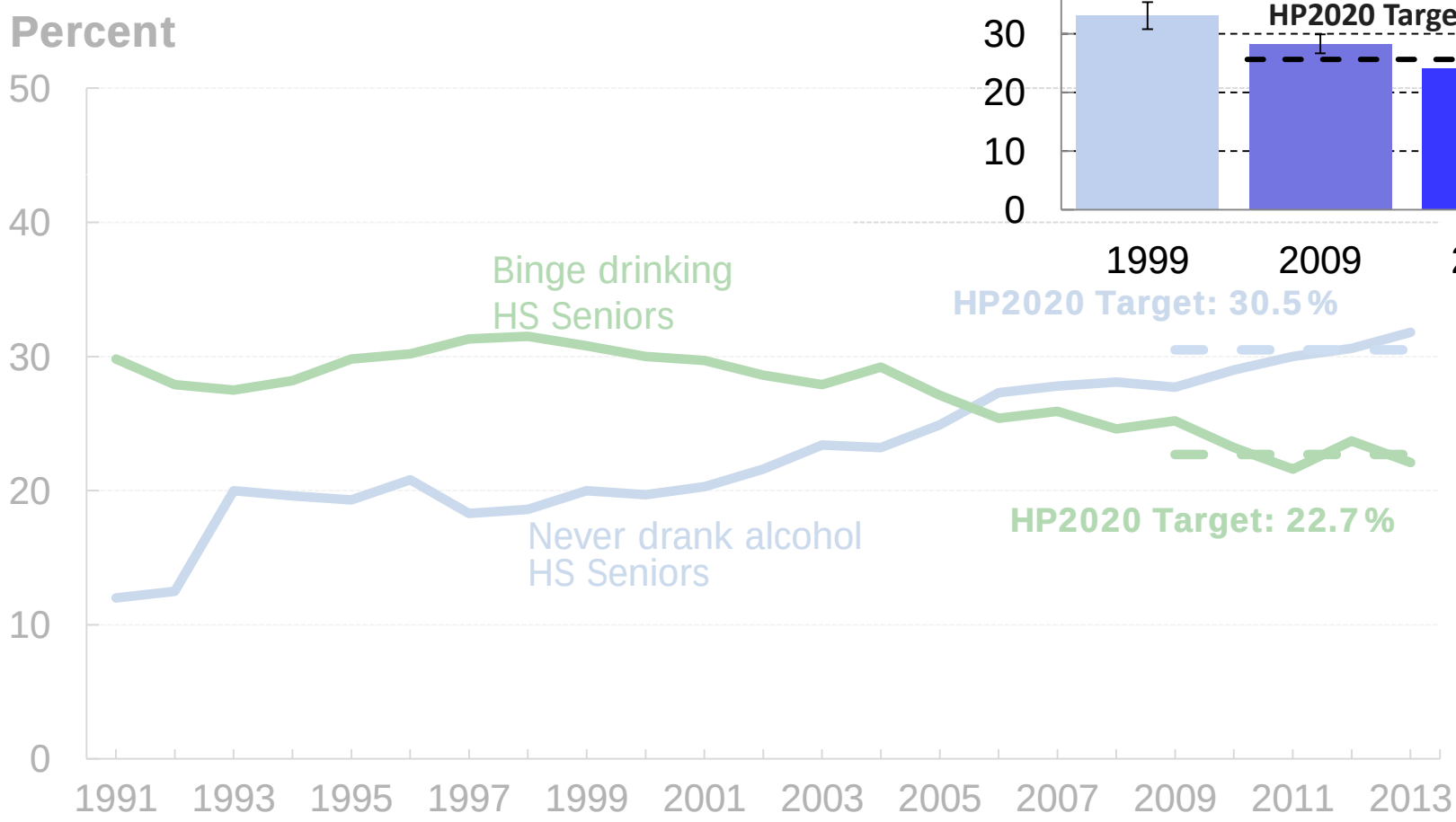
NOTES: Binge drinking is drinking 5+ alcoholic beverages in a row during the past 2 weeks. Data for never drinking are for High School seniors who have never had more than just a few sips of alcohol in their life.

SOURCE: Monitoring the Future (MTF), NIH/NIDA.

Objs. SA- 2.3, 14.1

Alcohol Related Behaviors, 1991–2013

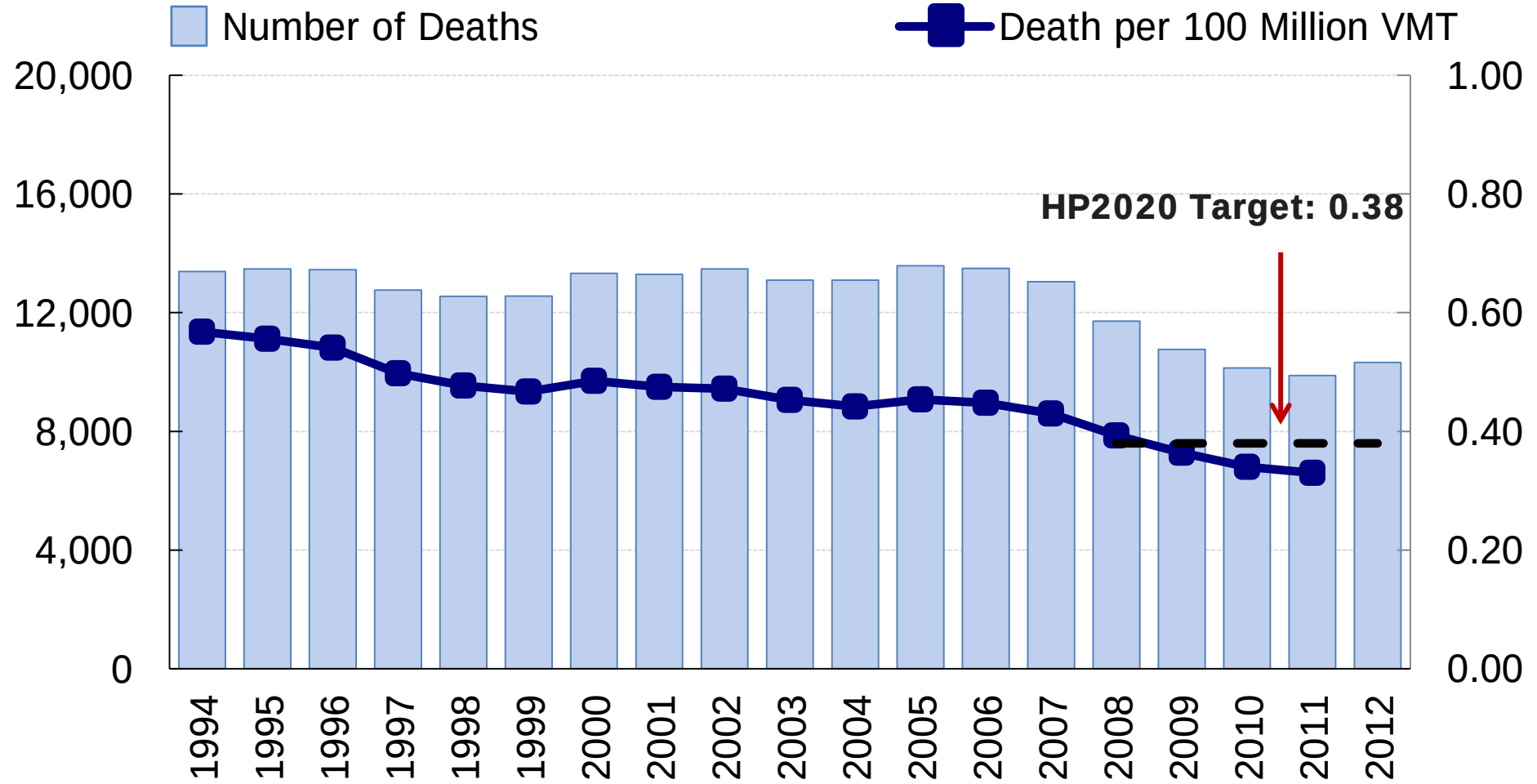




Obj. SA-1
Decrease desired

NOTE: Data for riding with a driver who has been drinking are for students in grades 9 – 12 during the past 30 days.
SOURCE: Youth Risk Behavior Surveillance System (YRBSS), CDC/NCCDPHP.

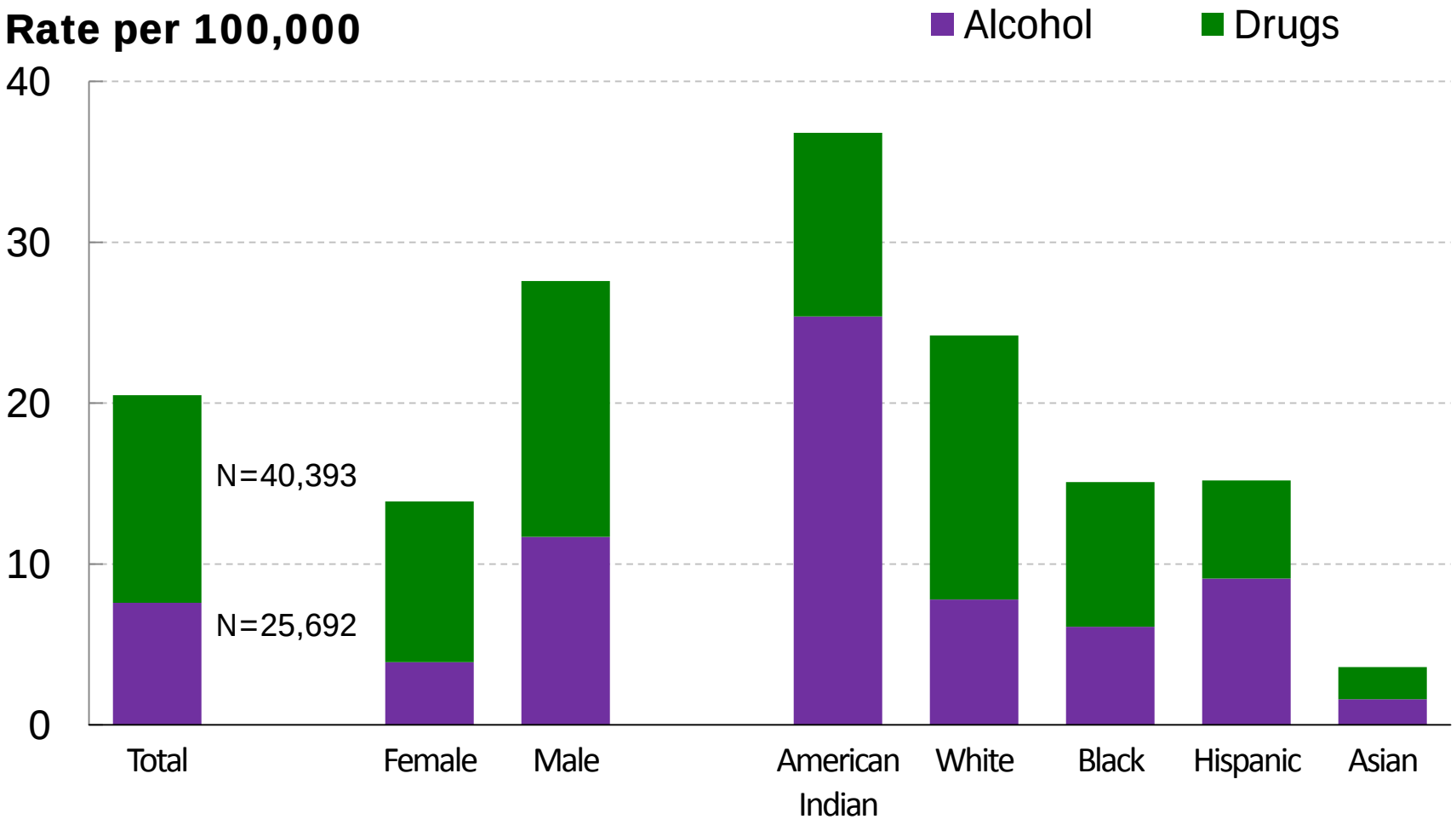
Alcohol-Related Motor Vehicle Crash Deaths, 1994—2012



NOTES: Data are for deaths in crashes involving a driver, motorcycle rider, or nonoccupant with a blood alcohol content (BAC) of .08 g/dL or greater. Vehicle miles traveled (VMT) data for 2012 are not yet available.
SOURCE: Fatality Analysis Reporting System (FARS), DOT/NHTSA.

Obj. SA-17
Decrease desired

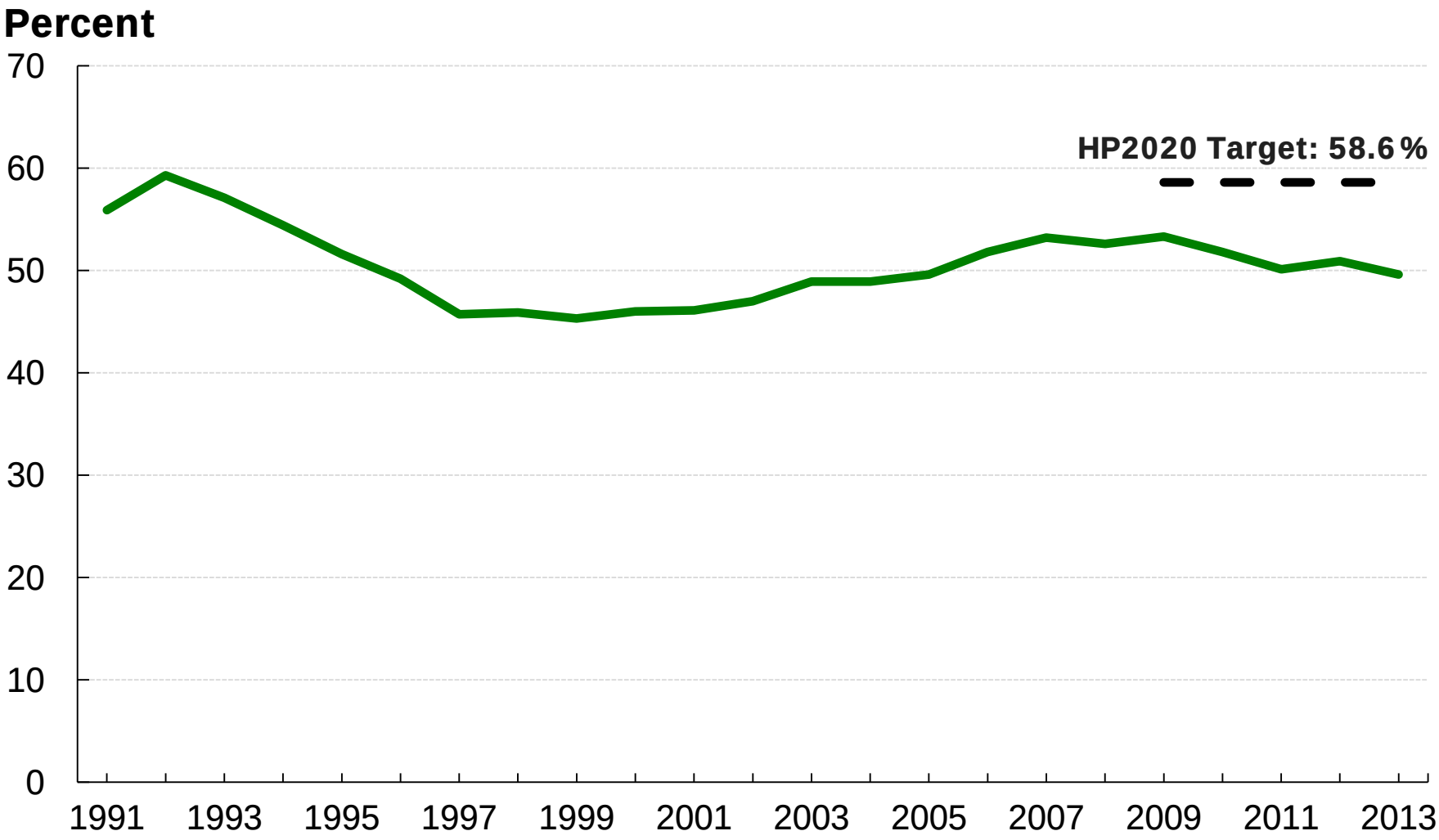
Alcohol and Drug-Induced Deaths, 2010



NOTES: ICD-10 codes for Alcohol and Drug -induced death can be found in National Vital Statistics Reports, Vol. 61, No. 4 (5/8/2013). Rates are age adjusted per 100,000 standard population. American Indian includes Alaska Native. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.

SOURCE: National Vital Statistics System—Mortality (NVSS-M), CDC/NCHS.

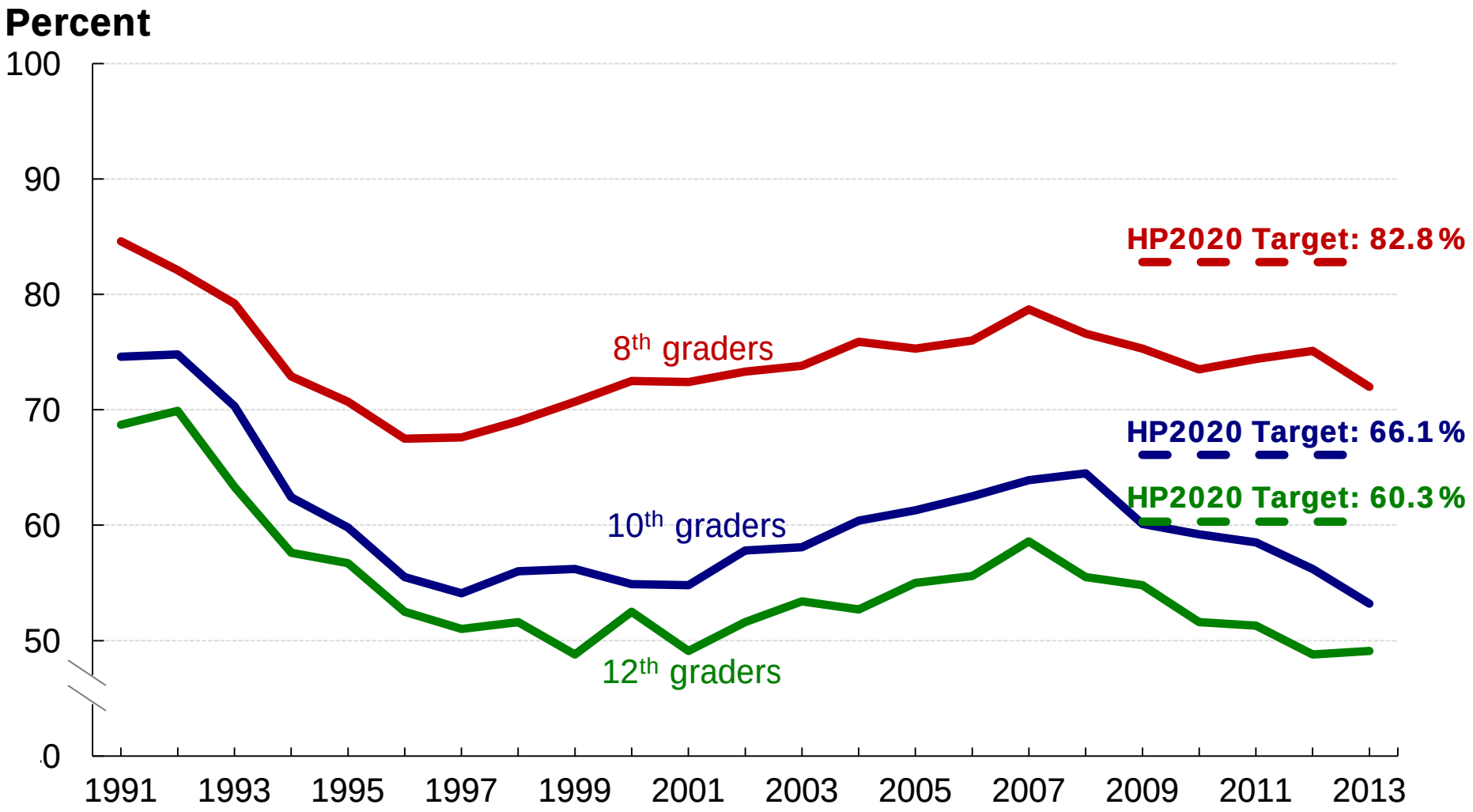
High School Seniors Who Never Used Illicit Drugs, 1991–2013



Obj. SA-2.4
Increase desired

NOTES: Data are for High School seniors who have never used illicit drugs in their life.
SOURCE: Monitoring the Future (MTF), NIH/NIDA.

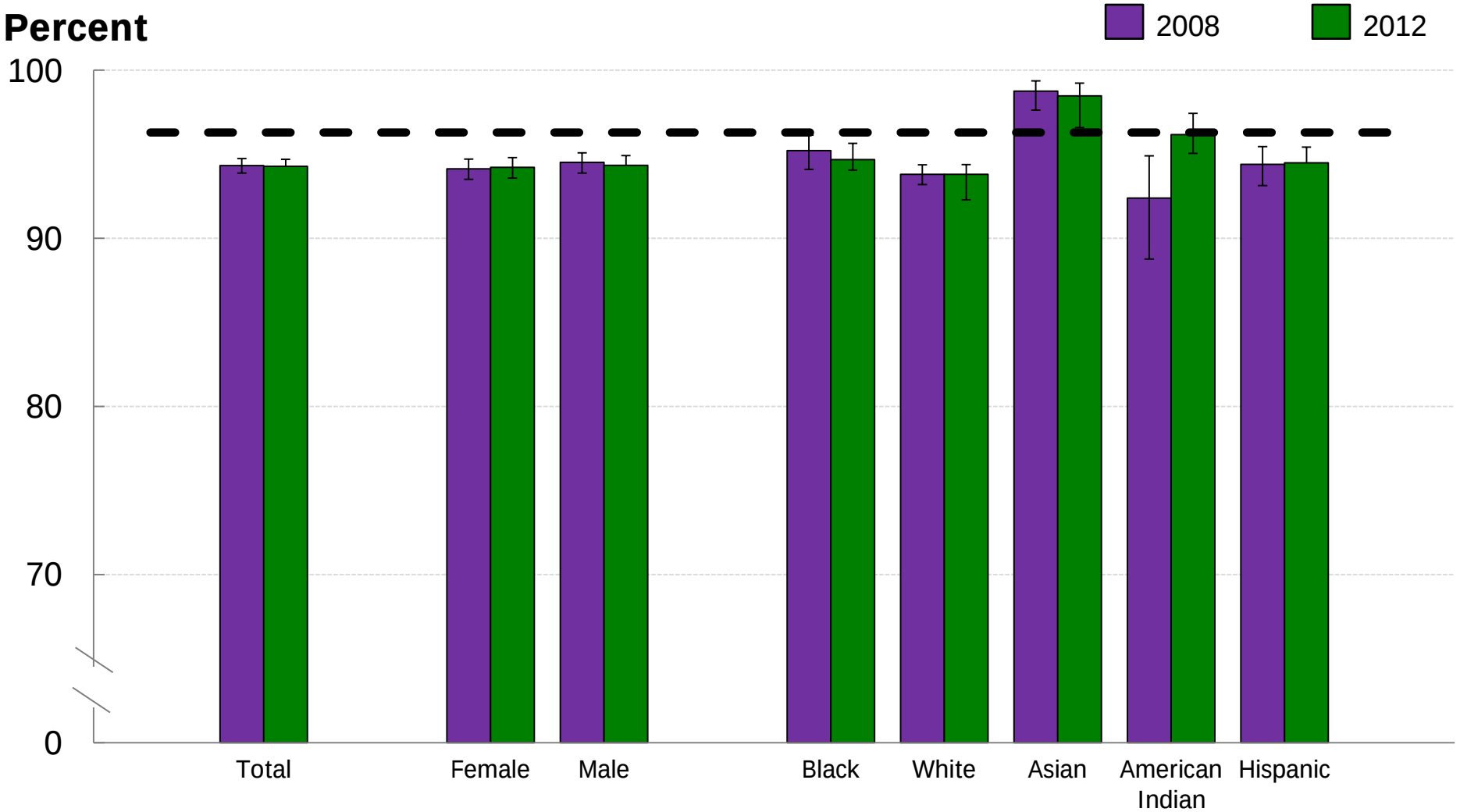
Adolescent Disapproval of Trying Marijuana, 1991–2013



Objs. SA-3.4, 3.5, 3.6
Increase desired

NOTES: Data are for students who report their disapproval of people trying marijuana once or twice.
SOURCE: Monitoring the Future (MTF), NIH/NIDA.

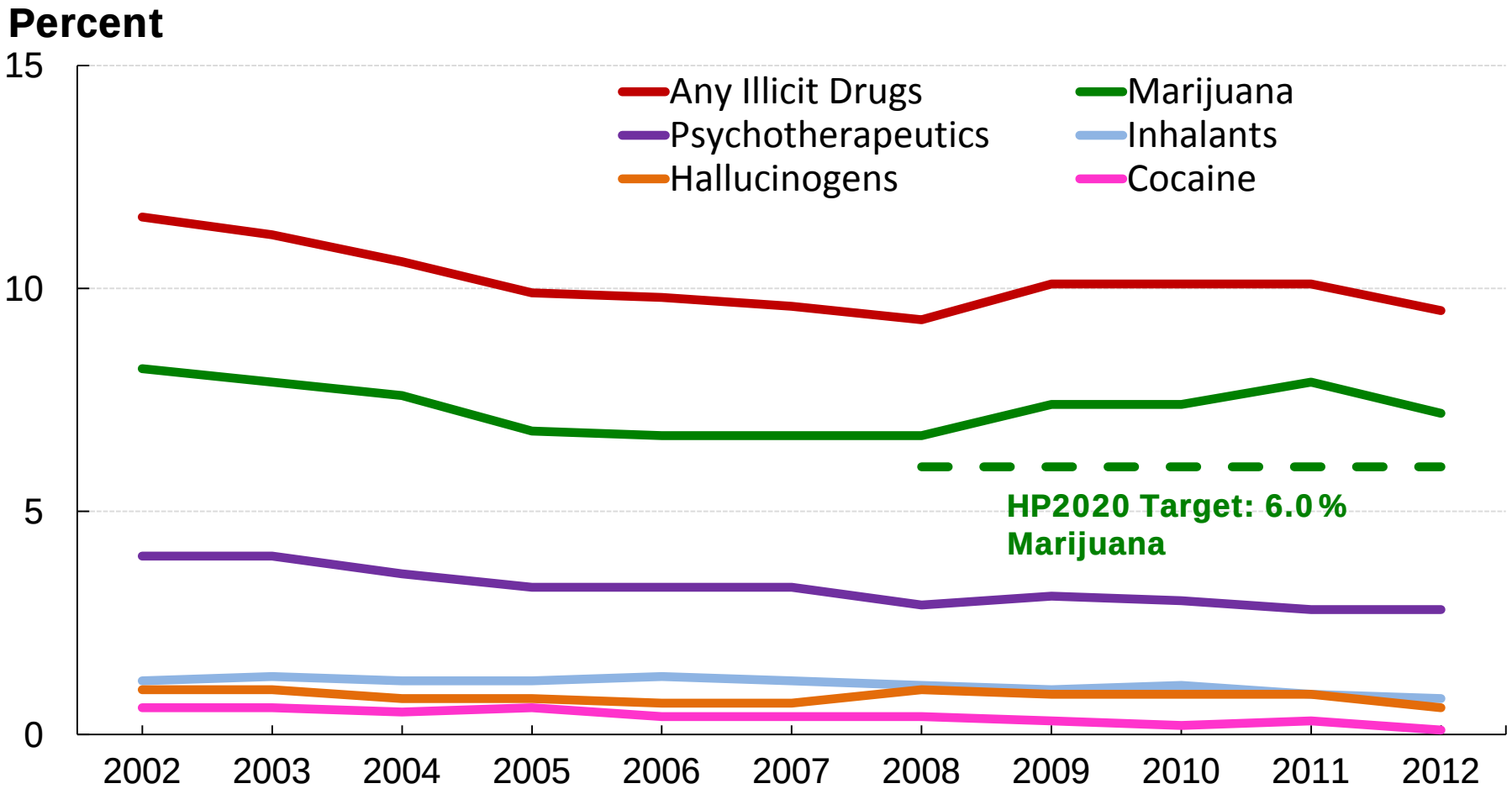
Adolescents Who Did Not Initiate Use of Marijuana in the Past Year



NOTES: I = 95% confidence interval. Data are for youth aged 12 – 17 years. American Indian includes Alaska Native. Native Hawaiian includes other Pacific Islander. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.
SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

Obj. SA-2.2
Increase desired

Illicit Drug Use in the Past Month Adolescents, 2002-2012

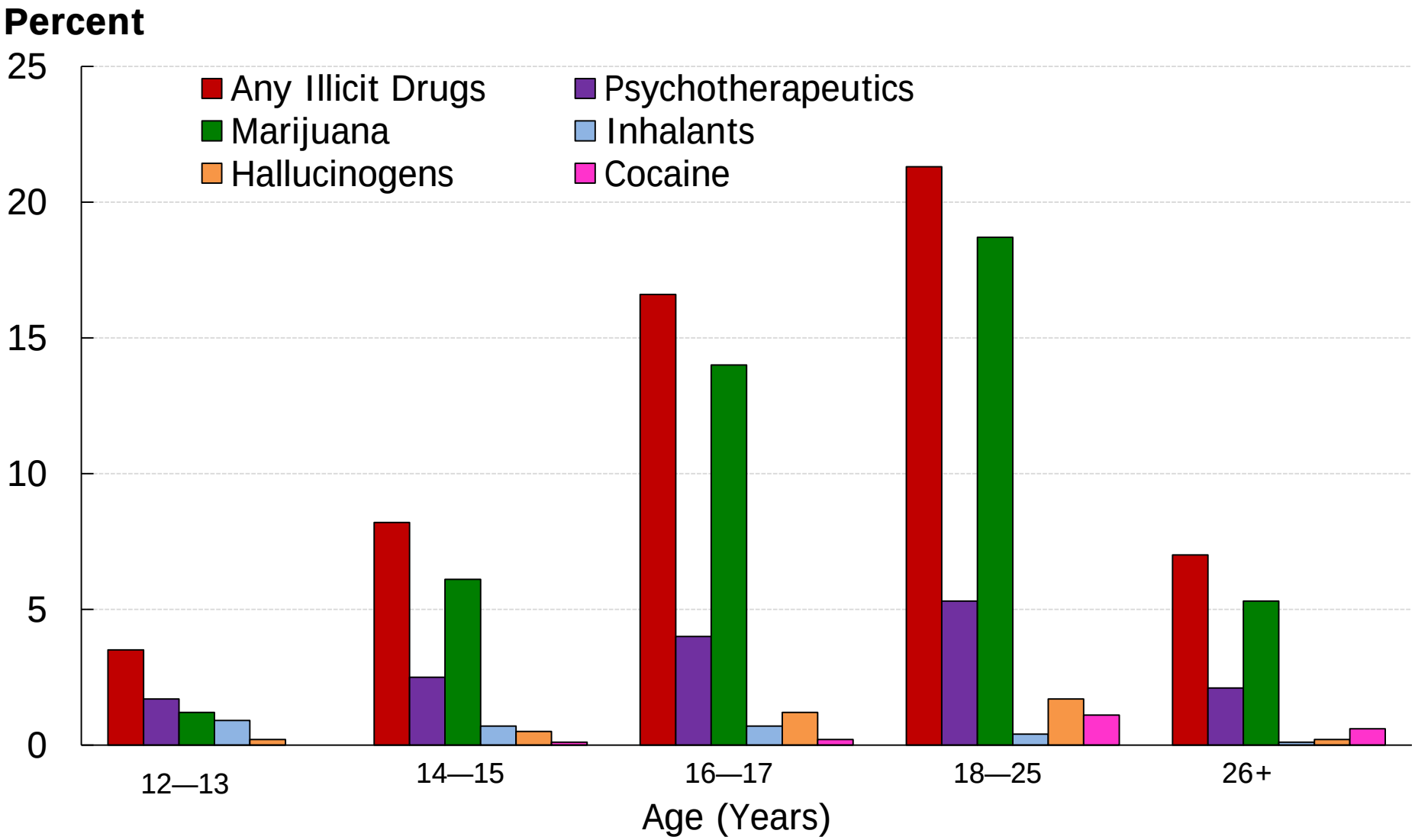


NOTES: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Adolescents are those age 12-17. Marijuana use is use within the last 30 days.

SOURCE: National Survey on Drug Use and Health (NSDUH), SAMHSA.

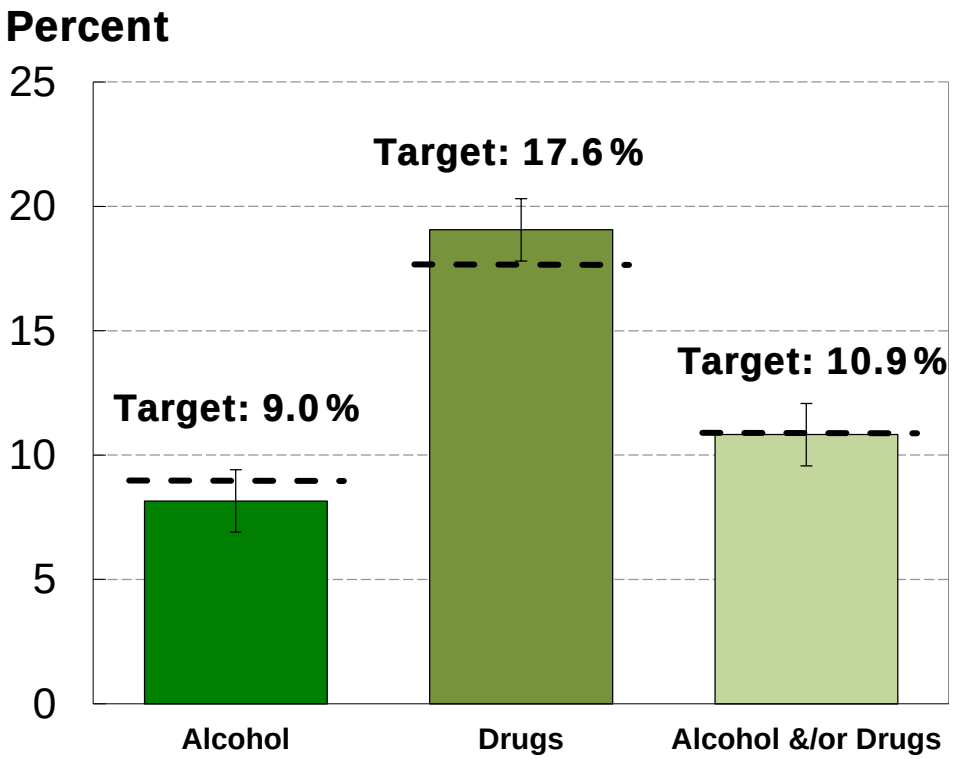
Obj. SA-13.2
Decrease desired

Illicit Drug Use in the Past Month, 2012



NOTES: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically. The prevalence of past month cocaine use among adolescents aged 12—13 years is less than 0.1 percent and is not shown.

Needing and Receiving Treatment for Alcohol and Drug Use, 2012



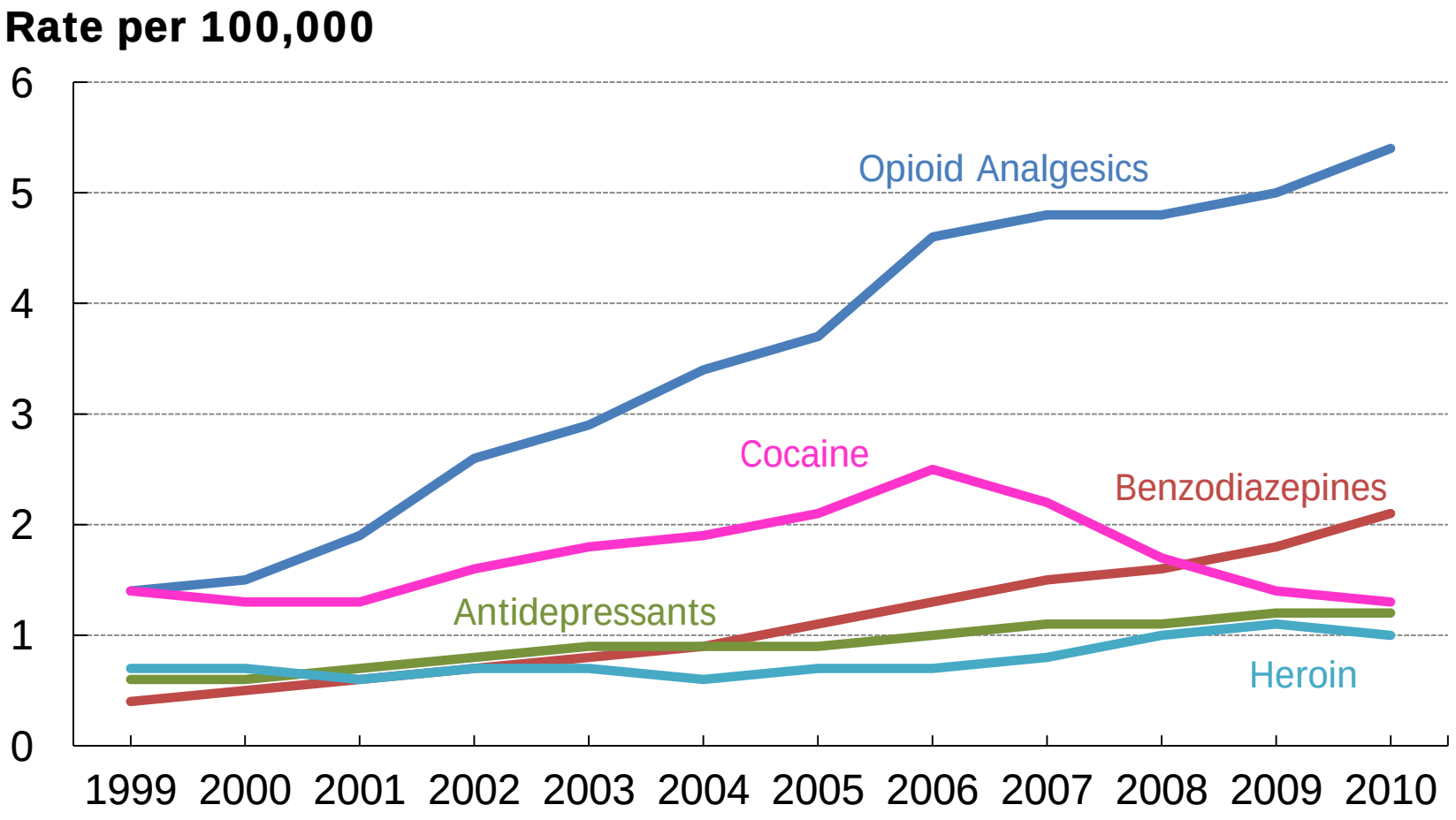
Admissions for injection drug use	2006	2011
Number	**255,278**	**300,230**
% change 2006-2011	**17.6 %**	

Target: 279,706 admissions

NOTES: Data are for people needing treatment for a drug and/ or alcohol problem if he or she was dependent on or abused alcohol and/or drugs or received specialty treatment in the past 12 months. Specialty treatment is treatment received at drug or alcohol rehabilitation facilities (inpatient or outpatient), hospitals (inpatient only), or mental health centers.
SOURCES: Treatment Episodes Data System (TEDS), SAMHSA; National Survey on Drug Use and Health (NSDUH), SAMHSA.

Obj. SA-7, 8.1, 8.2, and 8.3
Increase desired

Drug Overdose Deaths, 1999—2010



NOTE: Drug overdose deaths are identified using ICD-10 underlying cause code of X40-X44, X60-X64, X85, or Y10-14, and a multiple cause code of T40.2-T40.4 (opioid analgesics), T42.4 (benzodiazepines), T40.5 (cocaine), T43.0-T43.2 (antidepressants) or T40.1 (heroin). Drug categories are not mutually exclusive; deaths involving more than one drug category could be counted multiple times.
SOURCE: National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS.

Key Takeaways - Substance Use

- Impact of drug and alcohol use varies widely across sex, race, and ethnicity
- Although rates are increasing, most people who need substance abuse treatment do not receive it
- Among 8-12 grade students, disapproval of marijuana and alcohol use decreases as actual use increases
- Steep increase in opioid overdose deaths since 2002
- Mixed progress thus far in the decade

Healthy People 2020

Key Takeaways - Mental Health

- In 2012, 6.9% of adults reported depression in the past 12 months
  - 8.4% for women
  - 5.2% for men
- Suicide rates have been increasing since 2000
  - Serious suicide attempts are about 1000 times as likely as completed suicides for adolescents
- About one-third of adults with Serious Mental Illness do not receive treatment in 2012
- 5 objectives moving away from target, 3 with little/no change

Healthy People 2020

Substance Use and Mental Disorders: Early Detection, Prevention, and Treatment

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NIH National Institute of Mental Health

U.S. Department of Health & Human Services

Office of Disease Prevention and Health Promotion

Phil Wang, MD, DrPH

Deputy Director
National Institute of Mental Health (NIMH)

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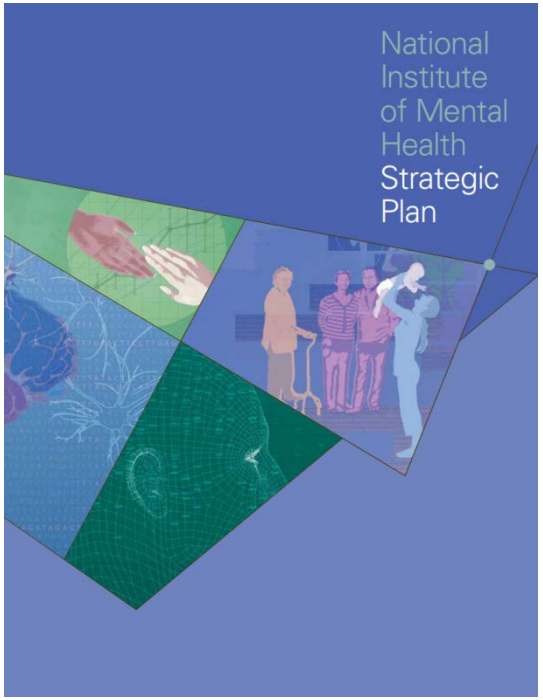
NIH National Institute of Mental Health

U.S. Department of Health & Human Services

Office of Disease Prevention and Health Promotion

NIMH Strategic Plan

- **Strategic Objective 1:**
  - Promote discovery in the brain and behavioral sciences to fuel research on the causes of mental disorders.
- **Strategic Objective 2:**
  - Chart mental illness trajectories to determine when, where, and how to intervene.
- **Strategic Objective 3:**
  - Develop new and better interventions that incorporate the diverse needs and circumstances of people with mental illnesses.
- **Strategic Objective 4:**
  - Strengthen the public health impact of NIMH-supported research.



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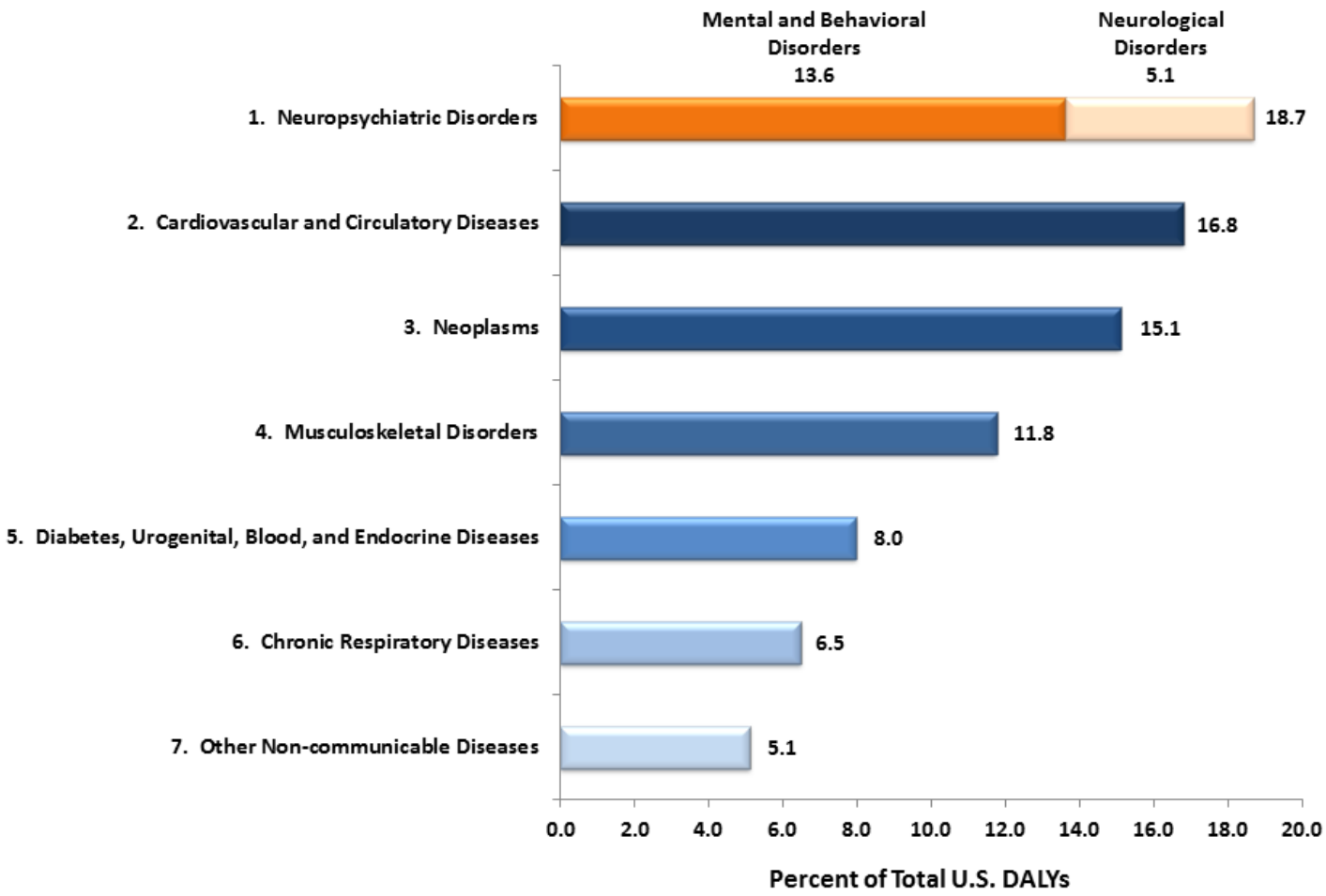
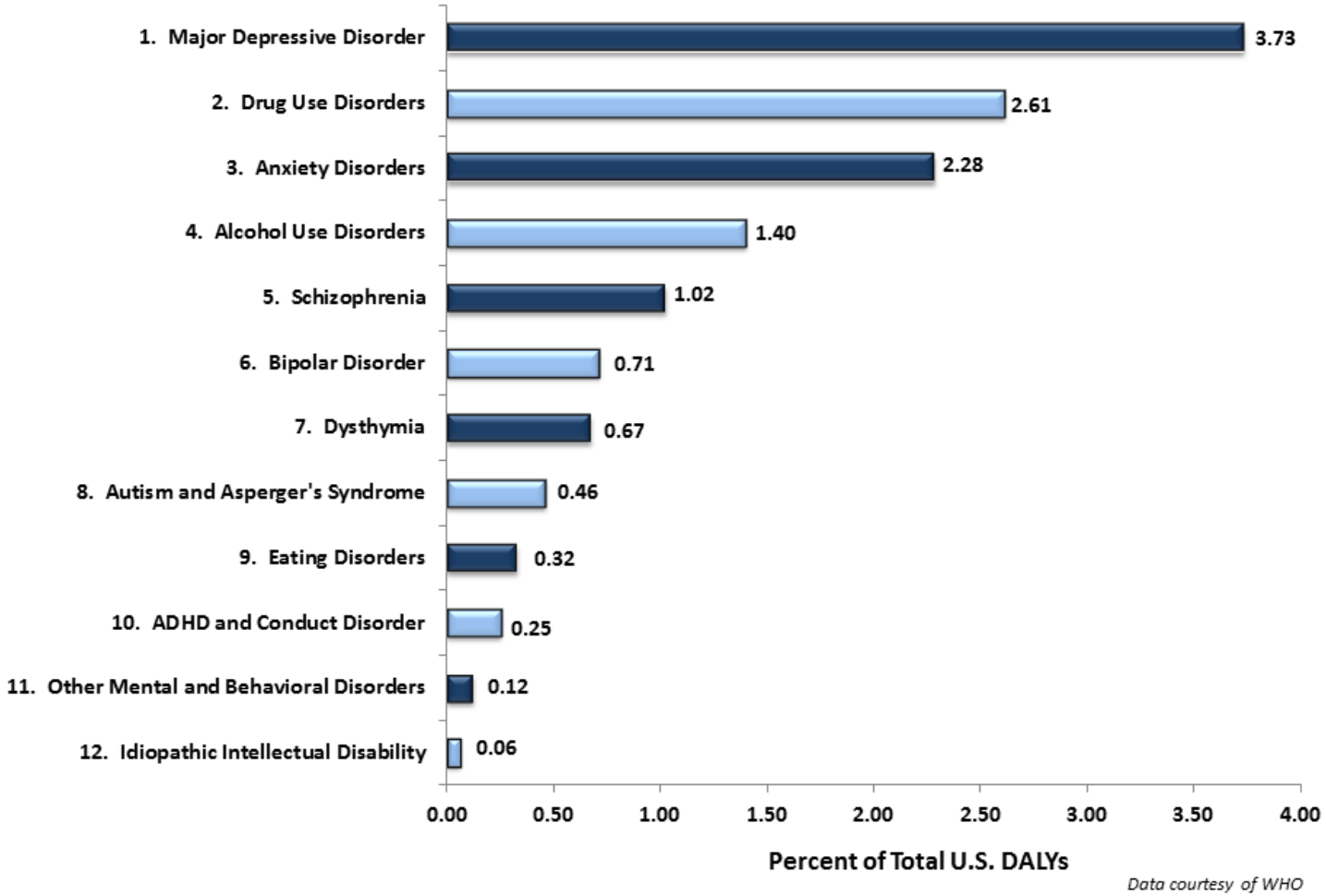
U.S. Disability-adjusted Life Years (DALYs; 2010): Leading Categories of Diseases and Disorders



The World Health Organization (WHO), 2010
US Burden of Disease Collaborators, *JAMA*, 2013

U.S. Disability-adjusted Life Years (DALYs; 2010): Mental and Behavioral Disorders



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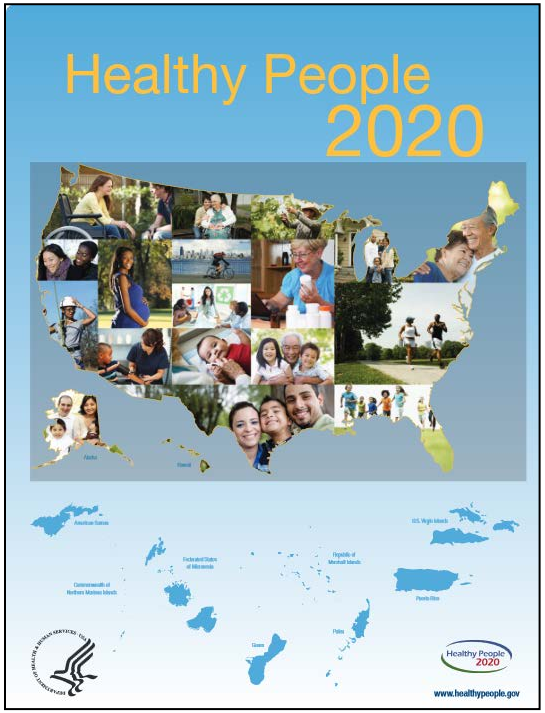
The World Health Organization (WHO), 2010
US Burden of Disease Collaborators, *JAMA*, 2013

Healthy People 2020 Objectives: Mental Health and Mental Disorders

- **Suicide Prevention:**
  - MHMD-1
    - Reduce the suicide rate.
  - MHMD-2
    - Reduce suicide attempts by adolescents.



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A Prioritized Research Agenda for Suicide Prevention: An Action Plan to Save Lives

- Developed by the Research Prioritization Task Force of the Action Alliance for Suicide Prevention
- Goal: Focus suicide research in the areas that show the most promise in reducing the rates of suicide morbidity (attempts) and mortality (deaths) in the United States, each by at least 20% in five years and by 40% or greater in ten years, *if fully implemented*.

Suicide Prevention: Army STARRS

- **Identify** risk and protective factors for suicide and psychological health
- **Inform** the development of evidence-based interventions.
- Rapidly **deliver** "actionable" findings.

ARMY STARRS

Army Study to Assess Risk and Resilience in Servicemembers

U.S. ARMY · NIMH National Institute of Mental Health · Harvard Medical School · University of Michigan · Uniformed Services University of the Health Sciences · UC San Diego School of Medicine · National Institutes of Health

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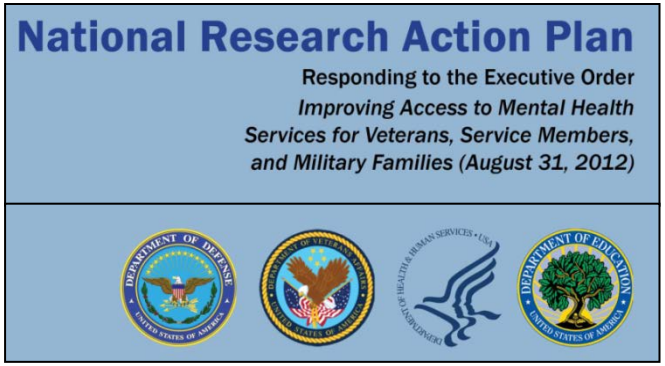
Healthy People 2020

Suicide Prevention: National Research Action Plan (NRAP)

- Improve coordination of agency research on:
  - Post-traumatic stress disorder (PTSD)
  - Traumatic brain injury (TBI)
  - Suicide
- Reduce the number of affected men and women through better prevention, diagnosis, and treatment.



The White House

Office of the Press Secretary

Immediate Release August 31, 2012

Executive Order – Improving Access to Mental Health Services for Veterans, Service Members, and Military Families

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Suicide Prevention: NIMH Initiatives

- Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE) Trial (U01-MH-088278)
- Pediatric Suicide Prevention in Emergency Departments (RFA-MH-14-070)
- NIMH Division of Intramural Research Programs: Ask Suicide-screening Questions (ASQ)
- Investigator-initiated Research Project Grants focused on suicide prevention

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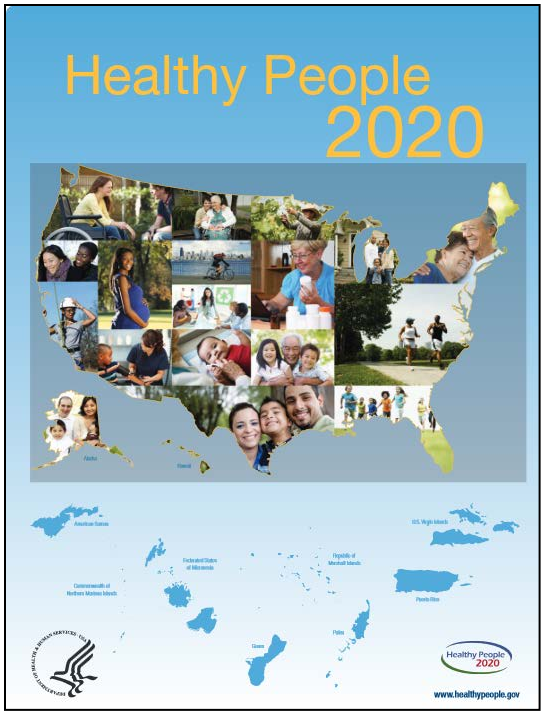
Healthy People 2020 Objectives: Mental Health and Mental Disorders (continued)

- **Serious Mental Illness (SMI)**
  - MHMD-8
    - Increase the proportion of persons with SMI who are employed.
  - MHMD-9.1
    - Increase the proportion of adults aged 18 years and older with SMI who receive treatment.
  - One example of an SMI:
    - Schizophrenia



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Serious Mental Illness (SMI): Schizophrenia

- In a given year, ~0.7% (range = 0.5-1%) of the U.S. adult population has schizophrenia.*

NIH National Institute of Mental Health

Healthy People 2020

*Regier et al., *Arch Gen Psychiatry*, 1993; Saha et al., *PLoS*, 2005

Serious Mental Illness (SMI): Schizophrenia

- In a given year, ~0.7% (range = 0.5-1%) of the U.S. adult population has schizophrenia.*
- Onset of the first psychotic episode of schizophrenia is typically preceded by a high-risk period, known as the prodrome.
  - Targeted intervention during the prodromal period may prevent worsening of symptoms/onset of disorder.

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Healthy People 2020

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  - Multicomponent intervention during the first episode to prevent long-term disability.

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Healthy People 2020

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- Each year, ~100,000 adolescents and young adults have a first psychotic episode.
  - Multicomponent intervention during the first episode to prevent long-term disability.
- The average period of untreated psychosis is estimated to be ~110 weeks.
  - Focus on community-based interventions to decrease the duration of untreated psychosis.

*Regier et al., *Arch Gen Psychiatry*, 1993; Saha et al., *PLoS*, 2005

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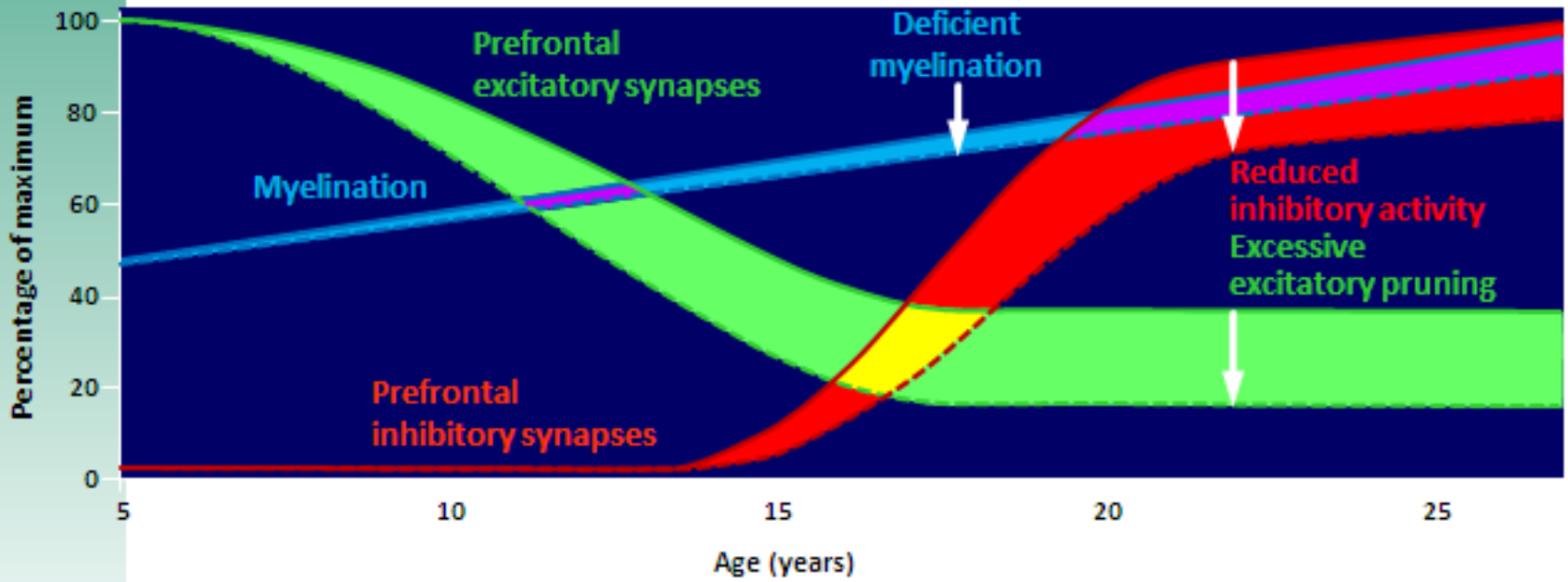
SMI:
Schizophrenia as a Neurodevelopmental Disorder

Stage I: Risk < 12 years

Stage II: Prodome 12 – 18 years

Stage III: Psychosis 18 – 24 years

Stage IV: Chronic Disability > 24 years



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Adapted from: Insel, *Nature*, 2010

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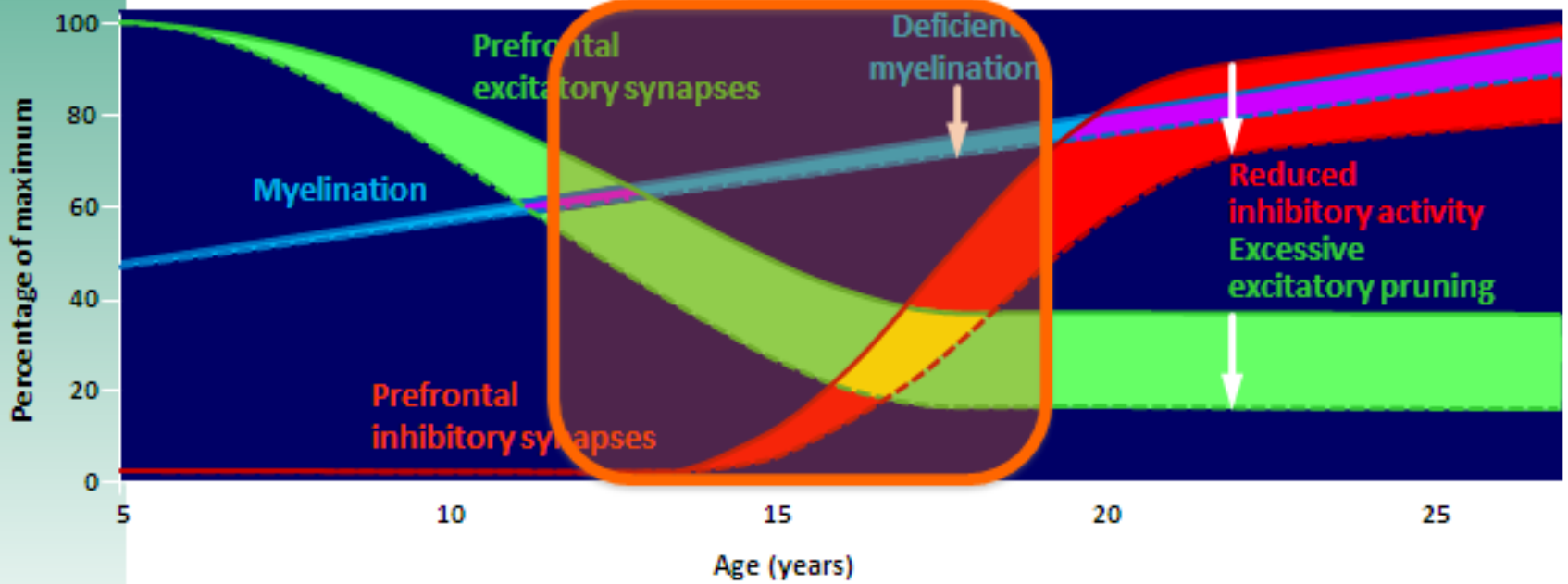
Schizophrenia as a Neurodevelopmental Disorder



NAPLS
North American Prodrome Longitudinal Study

Adapted from: Insel, *Nature*, 2010

NIH National Institute of Mental Health

Healthy People 2020

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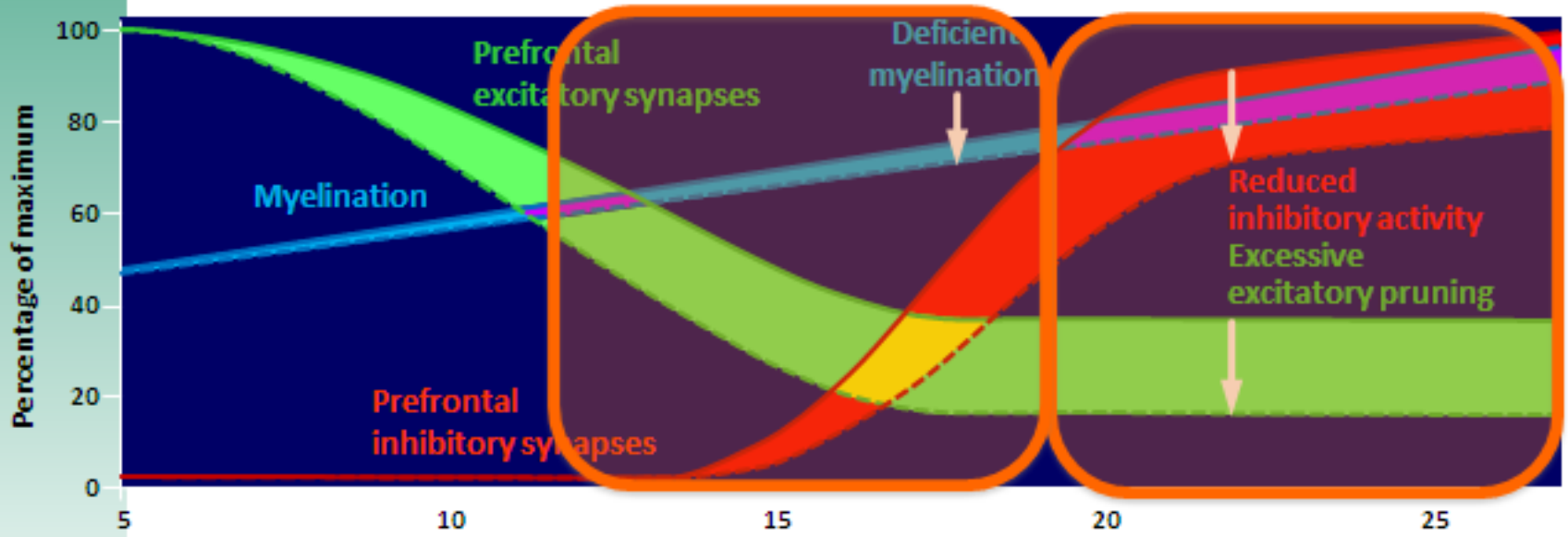

NAPLS
North American Prodrome Longitudinal Study

RAISE
Recovery After an Initial Schizophrenia Episode
A Research Project of the NIMH

Adapted from: Insel, *Nature*, 2010

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EP3:
Early Prediction and Prevention of Psychosis

- A priority initiative for NIMH for the next five years.
- Aims to support accelerated research on:
  - The detection of risk states for psychotic disorders;
  - Preventing onset of psychosis in high-risk individuals; and,
  - Reducing the duration of untreated psychosis in people who have experienced a first psychotic episode.
- Relevant funding announcements:
  - Research to Improve the Care of Persons at Clinical High Risk for Psychotic Disorders
    - RFA-MH-14-210; RFA-MH-14-211; RFA-MH-14-212
  - Reducing the Duration of Untreated Psychosis in the United States
    - PAR-13-187; PAR-13-188

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Early Detection, Prevention, and Treatment

NIMH envisions a world in which mental illnesses are prevented and cured.

NIH National Institute of Mental Health

NIH National Institute of Mental Health

Healthy People 2020

Substance Abuse

Jack B. Stein, Ph.D.

National Institute on Drug Abuse (NIDA)

Healthy People 2020

U.S. Department of Health & Human Services · USA

Office of Disease Prevention and Health Promotion

National Institute on Drug Abuse

- **Mission:** ***To lead the Nation in bringing the power of science to bear on drug abuse and addiction.***

  – support and conduct research across a broad range of disciplines.

  – Ensure rapid and effective dissemination of research to improve prevention and treatment and inform policy.

Healthy People 2020

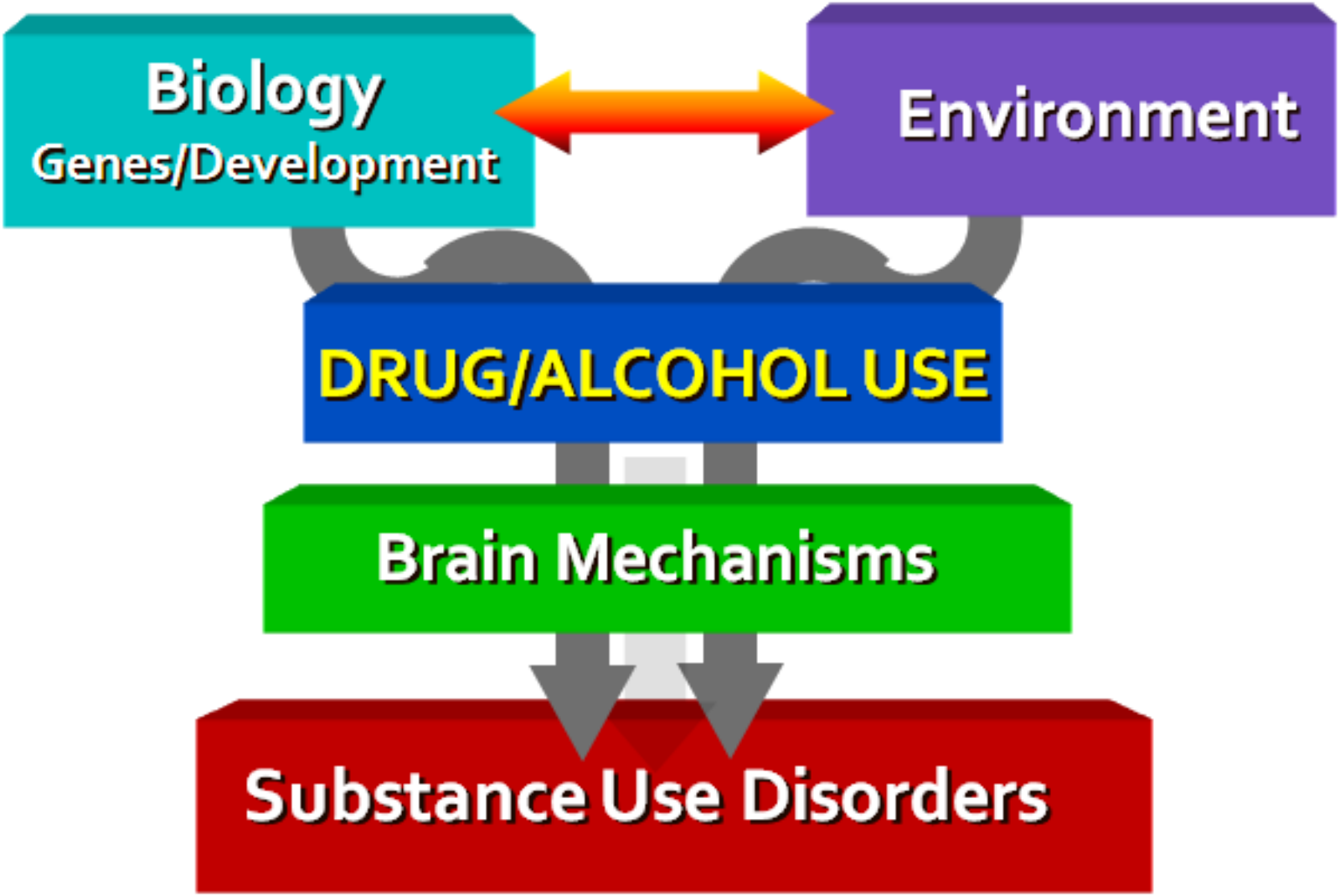
Presentation Overview

1. Understanding Substance Use Disorders: What Research Has Taught Us

2. Healthy People 2020: Substance Abuse Goals/Objectives
    - *Significant Findings*
    - *Key Initiatives*

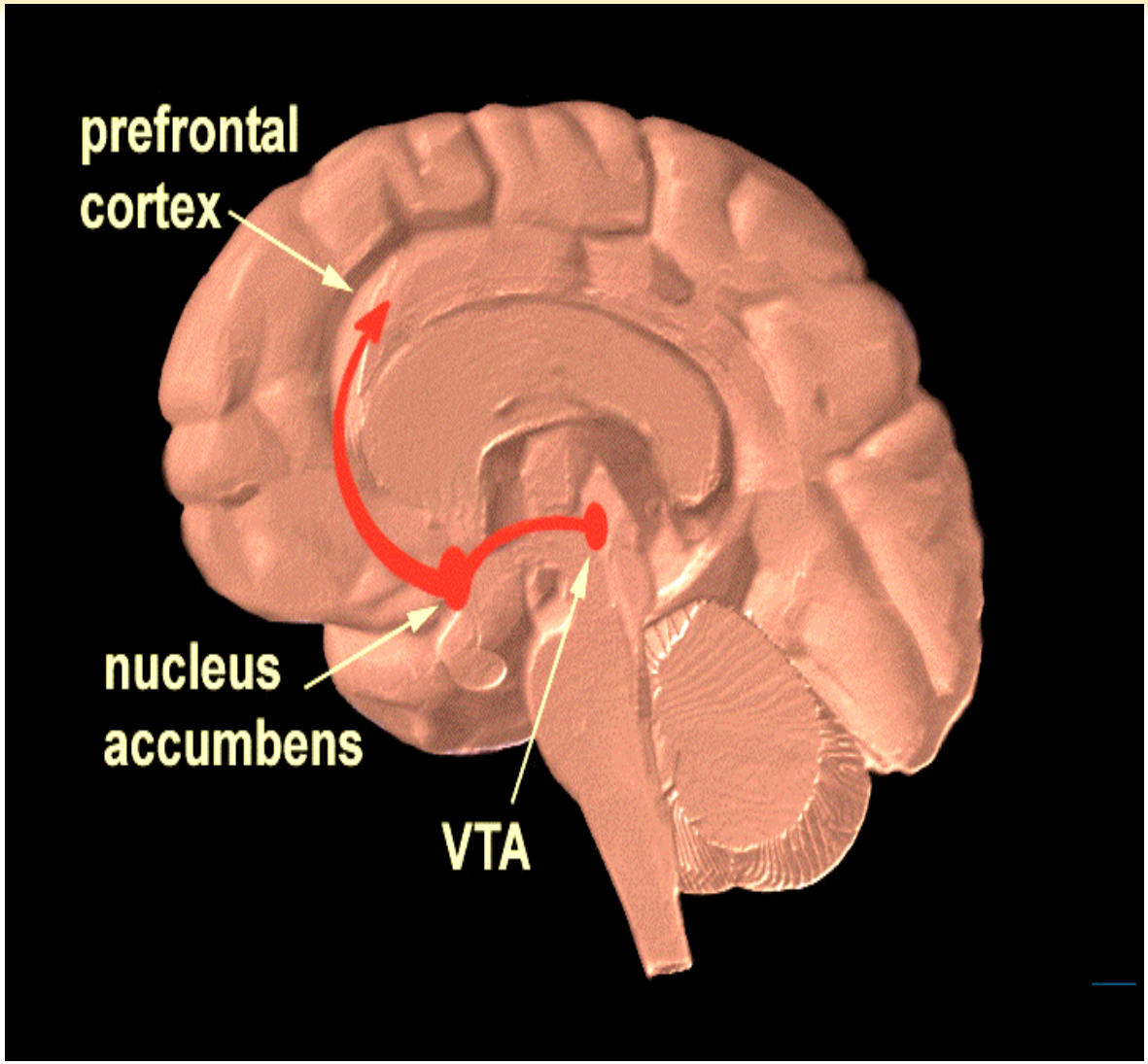
Healthy People 2020

Development of Substance Use Disorders

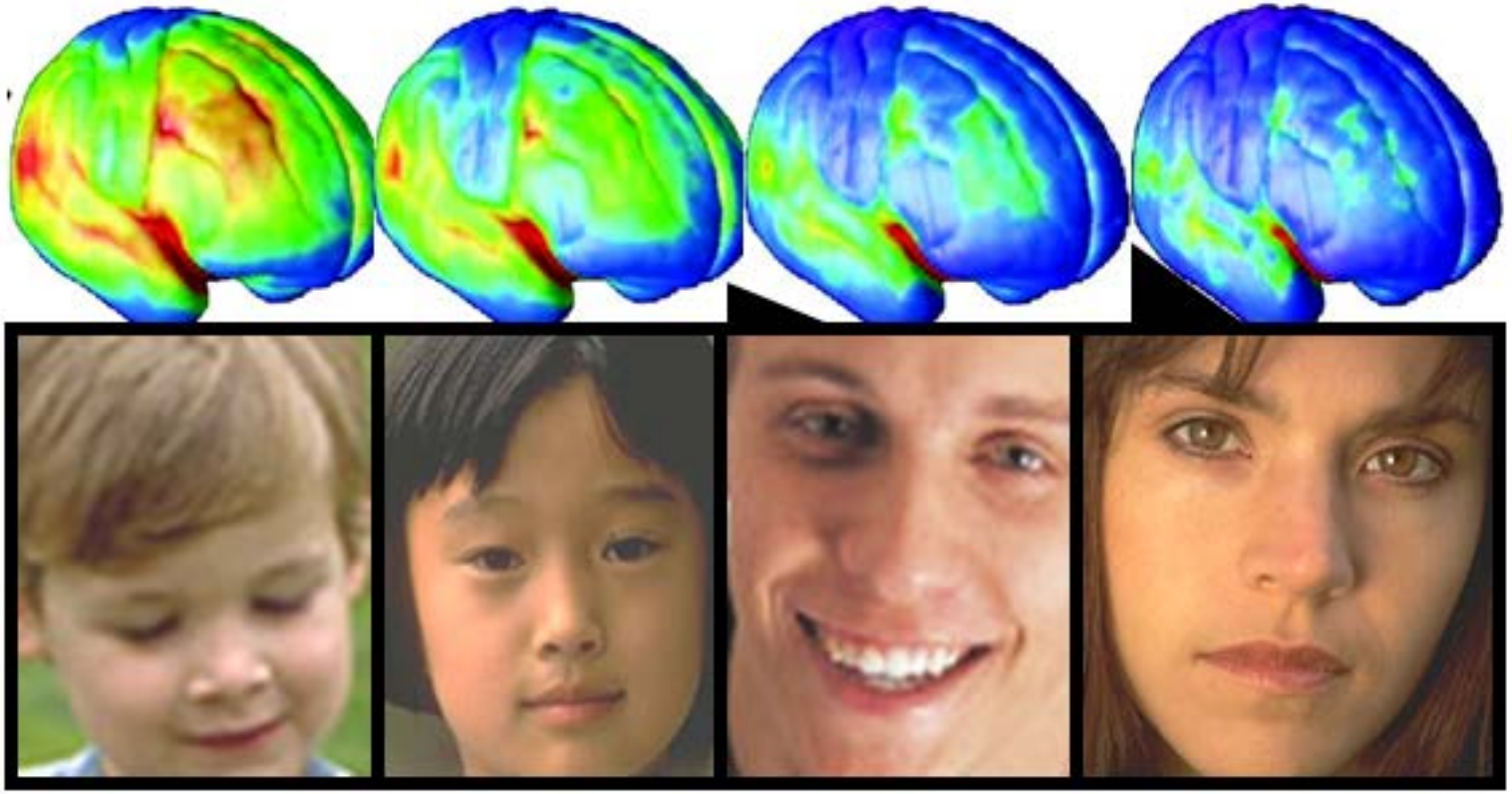


Healthy People 2020

Drugs Affect Key Brain Circuits



Adolescents' Brains are Still Developing…



Healthy People 2020: Substance Abuse Goals/Objectives

I. Policy and Prevention
   - Initiation of use
   - Disapproval/perception of risk

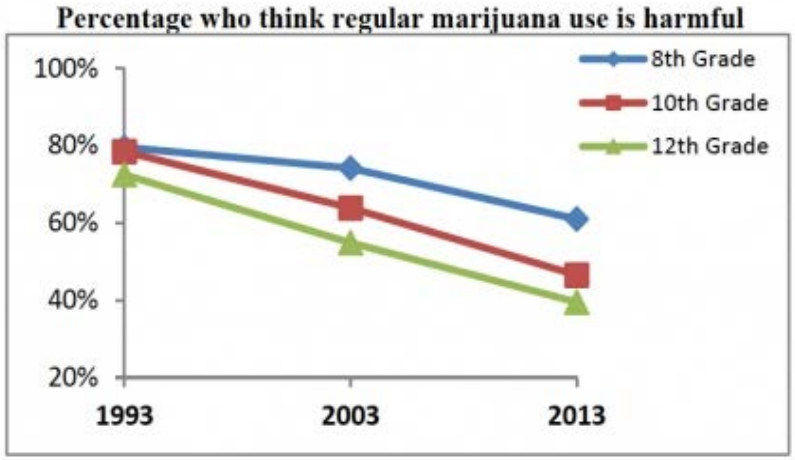
II. Screening and Treatment
   - Specialty care treatment
   - Referral/follow-up by medical community

III. Epidemiology and Surveillance
   - Use patterns
   - Health consequences

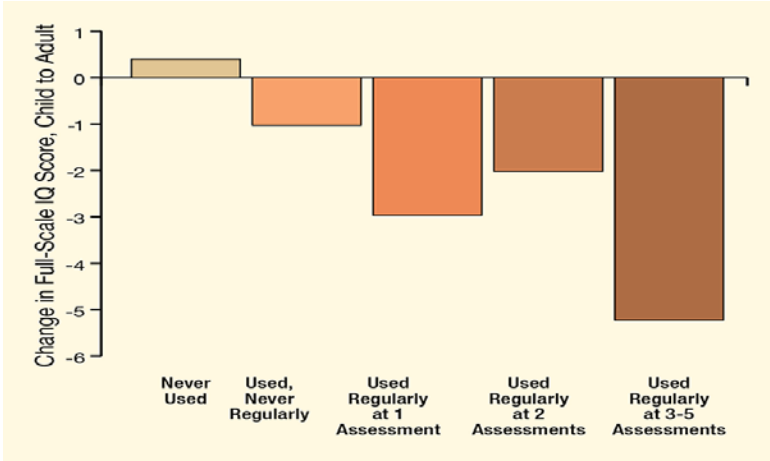
Healthy People 2020

I. Policy and Prevention: *Significant Findings*

- % of high-school students who see "great risk" from being regular marijuana users has dropped dramatically in the past 10 years (Johnston, 2013)



- Early-onset, regular marijuana use is linked to IQ decline (Meier, 2013)



Healthy People 2020

I. Policy and Prevention: *Key Initiatives*

- ***"Public Health Impact of the Changing Policy/Legal Environment for Marijuana"***
  - Youth exposure to marijuana and other drugs
  - education and professional achievement
  - risky behaviors (drugged driving; HIV)
  - mental health

- ***"Using Social Media to Understand and Address Substance Use and Addiction"***
  - role of social media in reducing risk behaviors associated with the alcohol, tobacco, and other drug use

Healthy People 2020

II. Screening and Treatment: *Significant Findings*

- Screening and brief intervention promoted marijuana abstinence and reduced consumption among emergency department patients (Bernstein, et al., 2009)

- Medications for opioid addiction have been adopted in fewer than half of private sector treatment programs; in programs that have, only about 35% of patients receive them (Knudsen, et al., 2011)

Healthy People 2020

II. Screening and Treatment: *Key Initiatives*

- **"Screening, Brief Intervention, and Referral to Treatment (SBIRT) in Primary Care"**
  - feasibility of implementing SBIRT in primary care settings
  - Effects on health care outcomes

- ***"Health Services and Economic Research on the Prevention and Treatment of Drug, Alcohol, and Tobacco Abuse"*** (NIDA/NIAAA)
  - Clinical improvement
  - Organization/delivery of services
  - Implementation
  - Cost

Healthy People 2020

III. Epidemiology and Surveillance: *Significant Findings*

- Home visits by nurses to low-income first-time mothers results in children less likely to use alcohol, cigarettes, or marijuana at age 12 (Olds, et al., 2012)
- Community-based universal interventions reduce youth substance use, including prescription drugs (Spoth, et al., 2013)
- Prescription drug monitoring programs show promise at curbing abuse (Deyo, et al., 2013)

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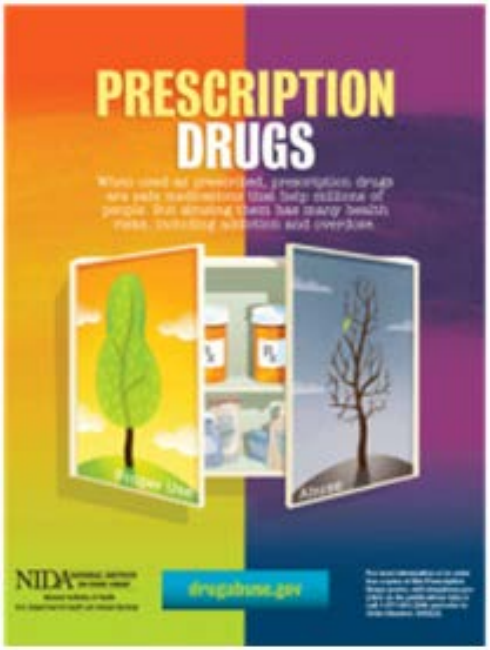
III. Epidemiology and Surveillance: *Key Initiative*

- ***"Prescription Drug Abuse Research"***
  - factors contributing to prescription drug abuse
  - adverse medical, mental health, and social consequences
  - effective prevention and treatment service delivery approaches
  - behavioral and pharmacological treatments, including overdose prevention (e.g., intranasal naloxone formulations)



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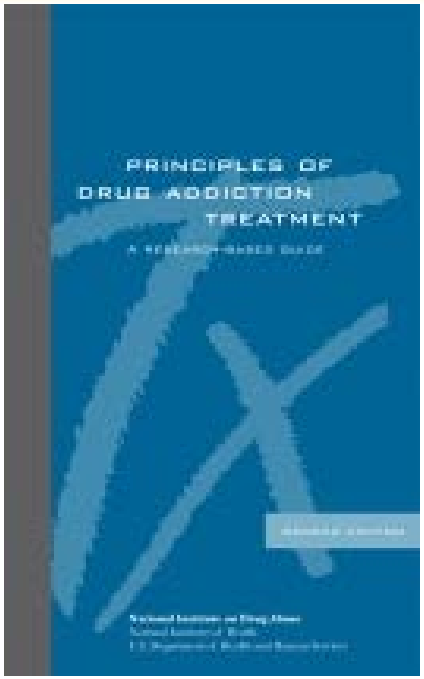
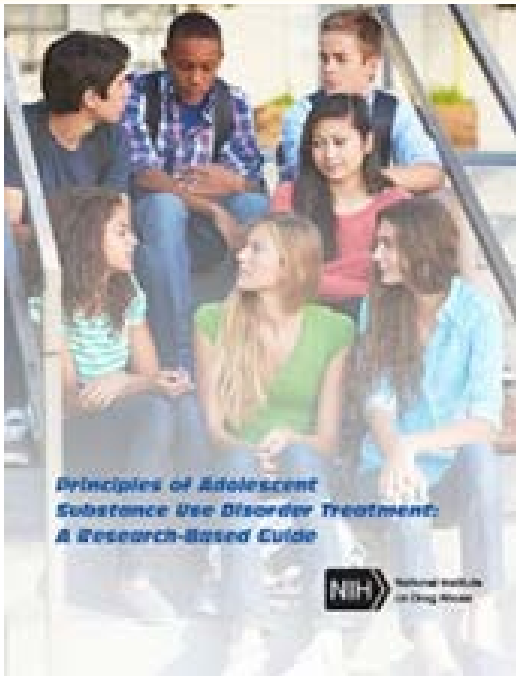
Collaborative Research on Addictions at NIH (CRAN)

integrate resources and expertise to advance alcohol, tobacco, and drug use and addiction research and public health outcomes

National Institute on Drug Abuse

The Science of Drug Abuse & Addiction





NIDAMED

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www.drugabuse.gov

SAMHSA's Prevention Efforts

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U.S. Department of Health & Human Services · USA

Office of Disease Prevention and Health Promotion

Frances M. Harding, Director

Center for Substance Abuse Prevention
Substance Abuse and Mental Health Services Administration

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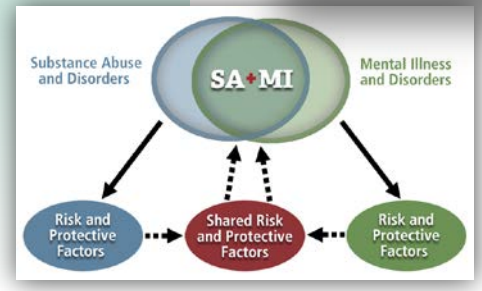
U.S. Department of Health & Human Services · USA

Office of Disease Prevention and Health Promotion

Substance Abuse and Mental Illness Are Linked



Substance abuse and mental illness share risk and protective factors.

- Up to half of people with a serious mental illness will develop a substance use disorder at some time in their lives.
- People with a substance use disorder are almost three times as likely to have a serious mental illness as those who do not have a substance use disorder.
- Three in four mental illnesses emerge early in life and 1 in 5 children have had a serious mental disorder.

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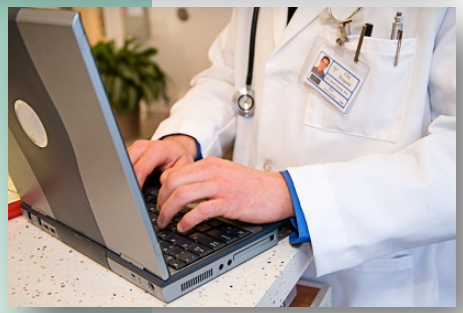
SAMHSA's Strategic Initiative #1: Prevention of Substance Abuse and Mental Illness



Top Priorities

- Prevent substance abuse and **improve well-being** in states, territories, and tribes.
- Establish **prevention of underage drinking** as a priority issue for states, territories, tribal entities, colleges and universities, and communities.
- Increase public knowledge of the **warning signs for suicide** and actions to take in response.
  - Surgeon General's National Strategy on Suicide Prevention
- Reduce **prescription drug misuse** and abuse.

Partnerships for Success Grant Program

Addresses two of the nation's top substance abuse prevention priorities:

- Underage drinking among persons aged 12-20
- Prescription drug misuse and abuse among persons aged 12-25

Healthy People 2020

Partnerships for Success Grant Program Outcomes in Kentucky

Statewide needs assessment identified seven communities:

- Capacity built among state, Regional Prevention Centers, and coalitions
- In just one year, since 2012:
  - 19 permanent prescription drug dropboxes installed
  - Statewide conference for law enforcement personnel
  - Implementation of evidence-based school curriculum

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National Underage Drinking Prevention Media Campaign -*Talk. They Hear You.*

- Launched in May 2013. Provides parents and other caregivers of children aged 9-15 with advice on how to talk to their kids about the dangers of underage drinking.

- As of January 2014, the campaign has achieved an 11 to 1 return on the national media campaign contract in advertising equivalency totaling more than $11.3M.

- The Campaign has achieved over 1.16 billion impressions , including:
  - 206 million from news stories: Today Show, NPR, Fox Boston
  - 544 million from the TV PSA
  - 59 million from placement of PSAs in Times Square, shopping malls, airports, and the DC area transit system

- Interactive Web-based simulation to help parents practice tough conversations with their child on alcohol use

- www.samhsa.gov/underagedrinking

Healthy People 2020

Technology-based Products to Prevent High-Risk Drinking Among College Students Challenge

Why: Excessive and underage drinking among college students are significant public health problems

What:Tech-based products to decrease the acceptability of and engagement in high-risk drinking among college students

Dates:Submission period was May 24 - July 8, 2013; winners were announced on September 13, 2013

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Technology-based Products to Prevent High-Risk Drinking Among College Students Challenge

continued

Winners

- First place ($60,000) – Syracuse University
  - BeWise – interactive website re: alcohol poisoning
- Second place ($30,000) – University of Central Florida
  - Expectancy Challenge Alcohol Literacy Curriculum – mobile app
- Third place ($10,000) – University of Tennessee
  - Alcohol and You – Online module for all first-year students

Healthy People 2020

Suicide Prevention

- Suicide is the third leading cause of death among 15 to 24 year olds.
- For every youth who dies by suicide, 100 to 200 attempts are made.
- LGBT (lesbian, gay, bisexual, transgender) youth are 2 to 3 times more likely to die by suicide than other youth.

Healthy People 2020

State and Tribal Youth Suicide Prevention Grant Program Outcomes in Tennessee

- Supports states and tribes in developing and implementing youth suicide prevention and early intervention strategies, grounded in public/private collaboration.
- In two years, since 2011:
  - Provided gatekeeper training to 650 staff
  - Gains in knowledge of suicide and self-efficacy to prevent it
  - Developed curriculum for juvenile justice settings

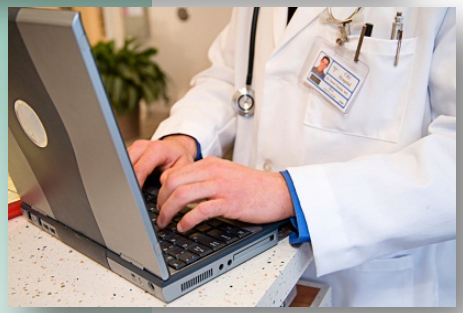
Healthy People 2020

Project LAUNCH Outcomes in Maine

- Project LAUNCH (Linking Actions for Unmet Needs in Children's Health) promotes children's wellness, birth to age 8.
- Maine's project was funded in FY 2008:
  - Targets one of its rural and highly impoverished counties
  - Supports families with high-risk pregnancies
  - Data show promising results:
    - **Rates of adequate prenatal care for teen mothers (ages 12-19) rose from 62 percent to 85 percent 4 years into the grant.**

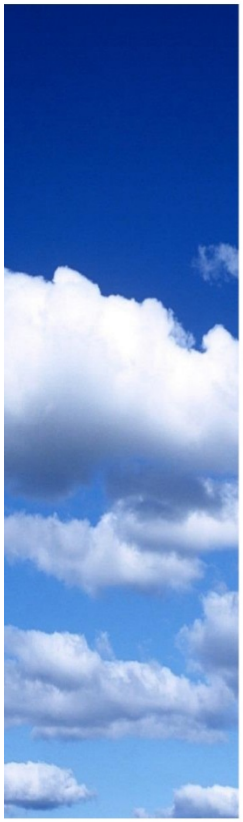
Healthy People 2020

SAMHSA's Strategic Initiative #1: Prevention of Substance Abuse and Mental Illness



Looking Toward the Future

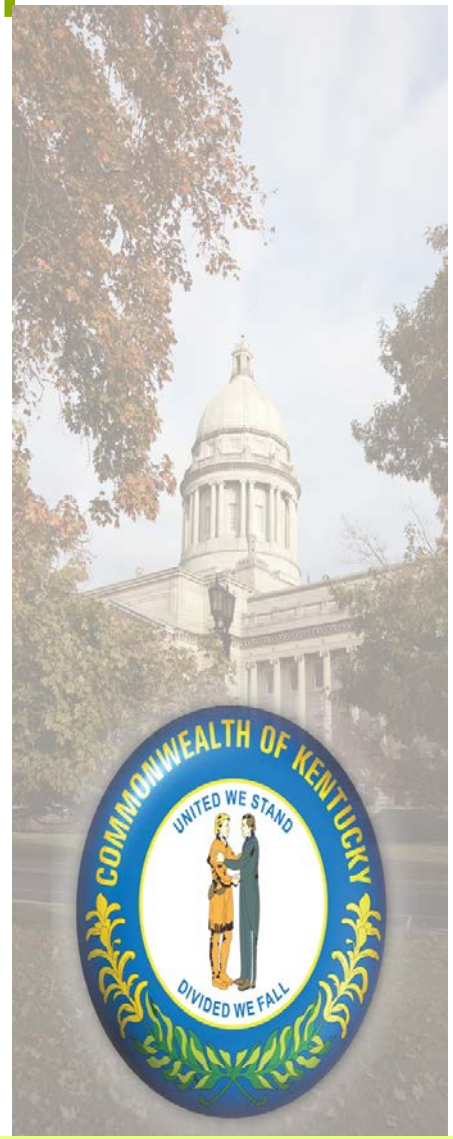
- Marijuana use
- Psychosis
- Expanding mental health promotion to coalitions and communities
- Underage drinking prevention, especially among college students
- Suicide prevention, including a focus on people in mid-life



Kentucky
UNBRIDLED SPIRIT™

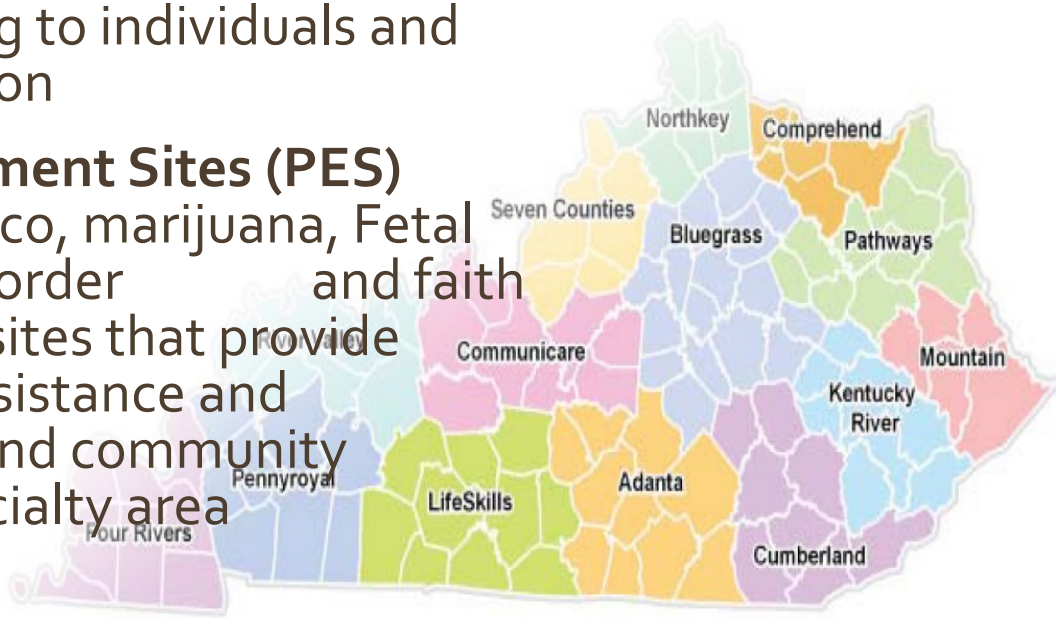
Kentucky as Commonwealth

- Approximately **4.4 million people** living in **120 counties**
- ***Kentucky is one of the poorest states in the nation***, with an average 2006-2010 rate of **17.7%** living below the poverty level (*compared to **13.8%** for the US*)
- Predominantly Caucasian: **88.9%** Caucasian, **8.0%** African-American, **1.3%** Asian/Pacific Islander and **0.3%** Native American
- Hispanic or Latino individuals of any race comprise **3.2%** of the population



Kentucky's Substance Abuse Prevention System

- Kentucky has a well-developed system of prevention at the state, regional and county levels
- **Regional Prevention Centers (RPCs)** have been in place for 20 years. RPCs are housed in the 14 Community Mental Health Centers across the state and provide technical assistance and training to individuals and coalitions in their region
- **Prevention Enhancement Sites (PES)** include alcohol, tobacco, marijuana, Fetal Alcohol Spectrum Disorder and faith based, are statewide sites that provide research, technical assistance and training to the RPCs and community coalitions in their specialty area



State, Regional and County Prevention Infrastructure

STATE

- Prevention Branch within the Department of Behavioral Health
- State Epidemiologic Outcomes Workgroup (SEC
- Data Warehouse
- Prevention Training Academy
- Requirement for national certification of prevent

REGIONAL (14 Regions)

- Master Trainers
- Prevention Enhancement Sites
- Staff support and technical support to regional a county coalitions

LOCAL

- County level coalitions (local ASAP boards: community members and agency representatives)

Partnerships for Success Priorities

Underage drinking among persons aged 12-20

- SA-14: Reduce the proportion of persons engaging in binge drinking of alcoholic beverages

Prescription drug misuse and abuse among persons aged 12 to 25

- SA-19: Reduce the past-year nonmedical use of prescription drugs

Seven regional sub-recipients cho core indicators

- Rates of alcohol and prescription d
- Regional staffing
- Regional funding
- Overall capacity

Partnerships for Success Strategies

Tier 1

Evidence-based practices and environmental strategies

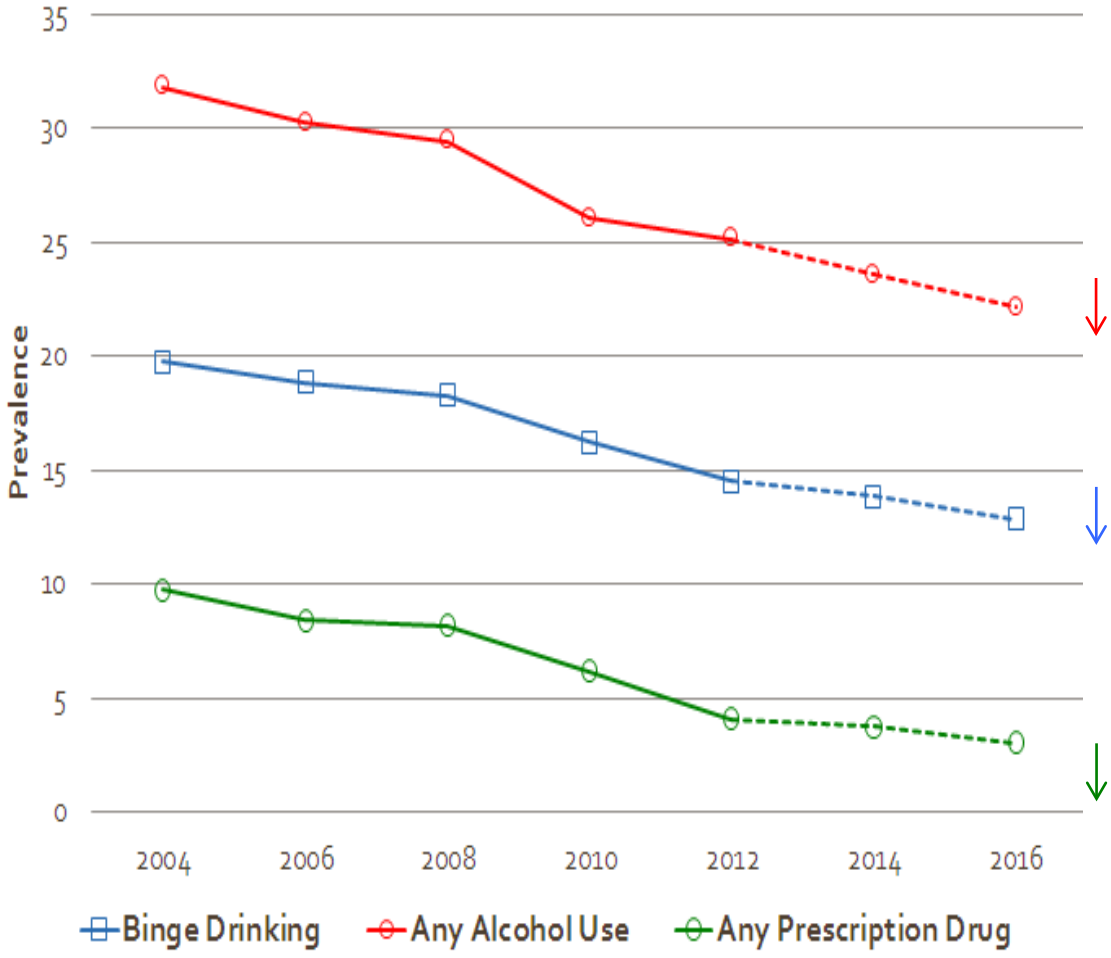
- Enforcement of existing laws regarding adults providing alcohol to minors
- Social host and unruly gathering ordinances
- Implementation of the Kentucky All Schedule Prescription Electronic Reporting (KASPER) system

Tier 2

Community-specific interventions and strategies

- Strategies benefit from the guidance of core prevention entities
  - Office of Drug Control Policy
  - KY-ASAP
  - Evidence-Based Practice Committee
  - Master Trainers
- Strategies must be approved by the state

Monitoring State and Community Outcomes



3.7% biennially (p=0.007)

3.1% biennially (p=0.004)

9.8% biennially (p=0.01

KENTUCKY INCENTIVES for PREVENTION

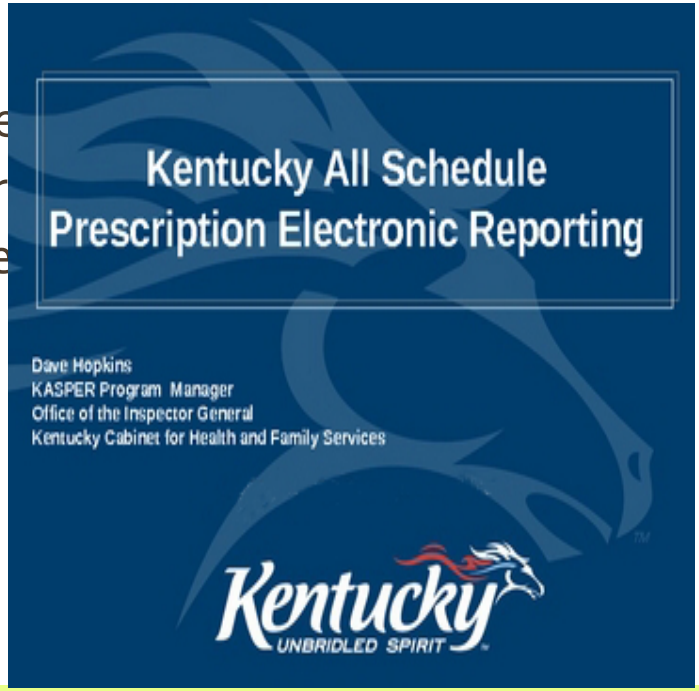
Kentucky All Schedule Prescription Electronic Reporting

Fully supported implementation of the KASPER system

- Gold standard prescription drug monitoring program
- Resource allocation for prevention and treatment
- Reduction in nonmedical prescription drug abuse

Impact of House Bill 1 (HB1)

- Fewer "pill mills"
- Fewer controlled substances dispense
- Increase in registered users and repor
- More investigations and license suspe



Accomplishments

Social marketing campaigns

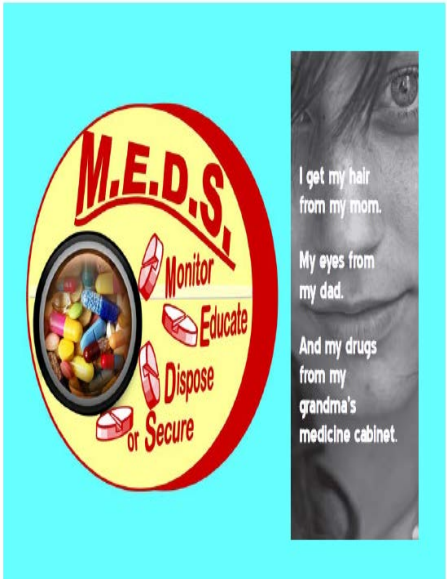
- Monitor, Educate, Dispose or Secure (MEDS) Ca
- "I Won't Be the One" Campaign

Statewide efforts

- Prescription drug disposal sites
- Social host ordinances

Regional and community efforts

- Owensboro coroner's policy
- LifeSkills drop box evaluation



Accomplishments: The Kentucky Partnership for Success Prescription Drug Law Enforcement Conference

State Epidemiological Outcomes Workgroup

Overlap of substance abuse and mental/behavioral health

- MHMD-1: Reduce the suicide rate
- MHMD-2: Reduce suicide attempt by adolescents
- MHMD-4: Reduce the proportion of persons who experience major depressive episode

Progress to date

- Over 20 regional and community
- Priority populations
- Mental health surveillance core co

Kentucky Data Warehouse – http://sig.reachoflouisville.com

Developed during State Incentive Grant

Nearly 300 relevant indicators

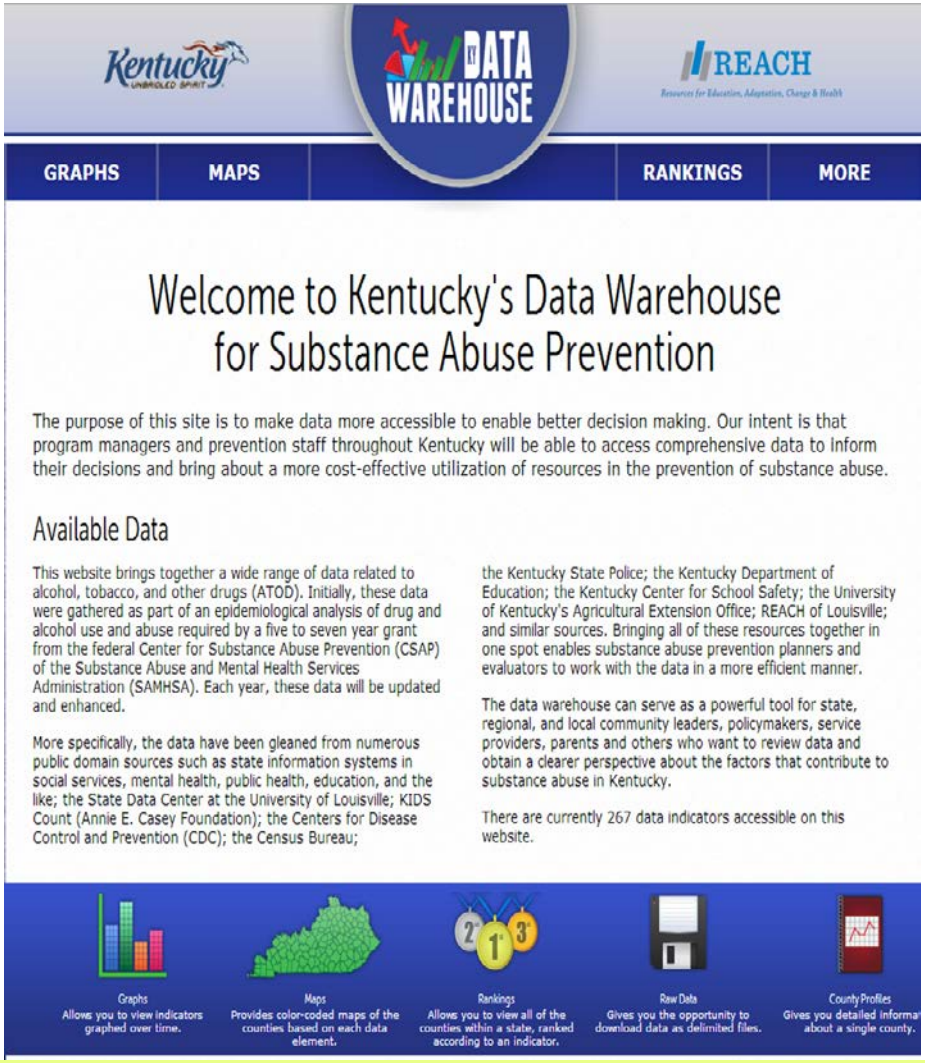
Regularly maintained and updated

Trainings and technical assistance

- Regional Prevention Centers
- Local coalition members
- Epidemiology Workgroup

Continued expansion

- Data repository
- State and regional dashboards



Roundtable Discussion

Please take a moment to fill out our brief survey

Healthy People 2020

U.S. Department of Health & Human Services · USA

Office of Disease Prevention and Health Promotion

In This Section:
- Development and Framework
- Who's Leading the Leading Health Indicators?
- Share Your LHI Story
- LHI Infographic Gallery
- 2020 LHI Topics
  - Access to Health Services
  - Clinical Preventive Services
  - Environmental Quality
  - Injury and Violence
  - Maternal, Infant, and Child Health
  - Mental Health
  - Nutrition, Physical Activity, and Obesity

LHI Infographic Gallery

Print E-mail Share

The Leading Health Indicators are high-priority health issues in the United States that serve as measures of the Nation's health. Each month healthypeople.gov displays one or more infographics to visually communicate the existing health disparities for the featured Leading Health Indicator Topic.

If you would like the monthly infographic and bulletin sent straight to your inbox, sign up for Healthy People email updates.

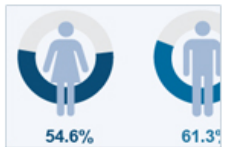
Maternal, Infant, and Child Health
July 2013

Reproductive and Sexual Health
June 2013

Mental Health
May 2013

Substance Abuse
April 2013

Physical Activity, Nutrition, and Obesity
March 2013



Oral Health
February 2013

Access to Health Services
January 2013

Environmental Quality
December 2012

LHI Infographic Gallery

http://www.healthypeople.gov/2020/LHI/infographicGallery.aspx

Healthy People 2020 Progress Review Webinar

Please join us as we review select Healthy People 2020 objectives in the Physical Activity and Nutrition and Weight Status topic areas.

May 2014

Hear from a community-based organization that is working to improve outcomes in the community.

To register, visit:
www.healthypeople.gov

Reproductive and Sexual Health LHI Webinar

Join us on March 20th for a *Who's Leading the Leading Health Indicators?* Webinar

Learn how one group is working to address the importance of reproductive and sexual health.

Register soon!

www.healthypeople.gov

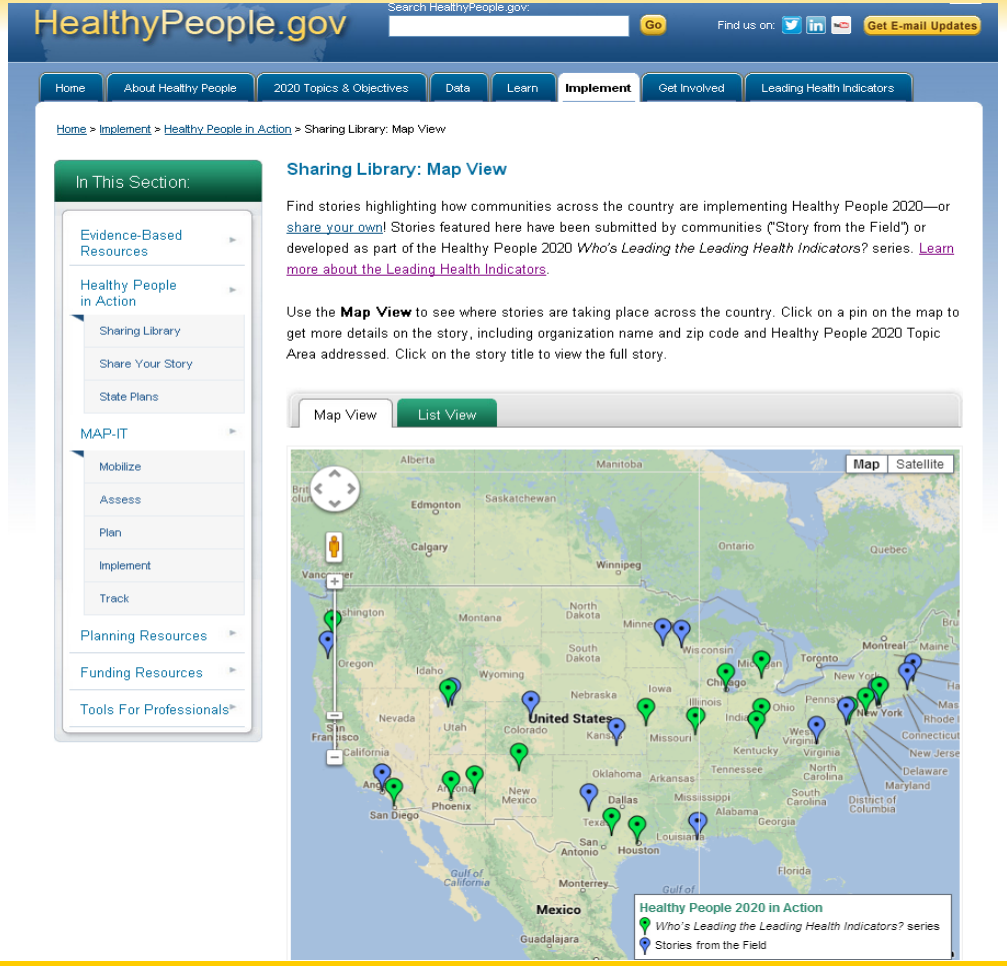
Stay Connected

Join the Healthy People Listserv & Consortium

Web	healthypeople.gov
Email	hp2020@hhs.gov
Twitter	@gohealthypeople
LinkedIn	Healthy People 2020
YouTube	ODPHP (search “healthy people”)

Healthy People 2020 Sharing Library

A library of stories highlighting ways organizations across the country are implementing Healthy People 2020



Healthy People in Action - Sharing Library

http://healthypeople.gov/2020/implement/MapSharingLibrary.aspx

Healthy People 2020 Progress Review Planning Group

- Andy Tesfazion (SAMHSA)
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- Meredith Fox (NIH/NIMH)
- Geoffrey Laredo (NIH/NIDA)
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Healthy People 2020