Healthy Places, Healthy People: A Progress Review on Nutrition and Weight Status, & Physical Activity

May 9, 2014

Healthy People 2020

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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Overview and Presenters

Chair

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

Presentations

- Irma Arispe, PhD, Associate Director, National Center for Health Statistics
- David Murray, PhD, Associate Director for Prevention
  Director, Office of Disease Prevention, National Institutes of Health
- Michael Landa, JD, Director, Center for Food Safety and Applied Nutrition
  Food and Drug Administration
- Janet Collins, PhD, Director, Division of Nutrition, Physical Activity, and Obesity
  National Center for Chronic Disease Prevention and Promotion
  Centers for Disease Control and Prevention

Community Highlight

- James Krieger, MD, MPH, Chief Chronic Disease and Injury Prevention Section
  Public Health – Seattle King County

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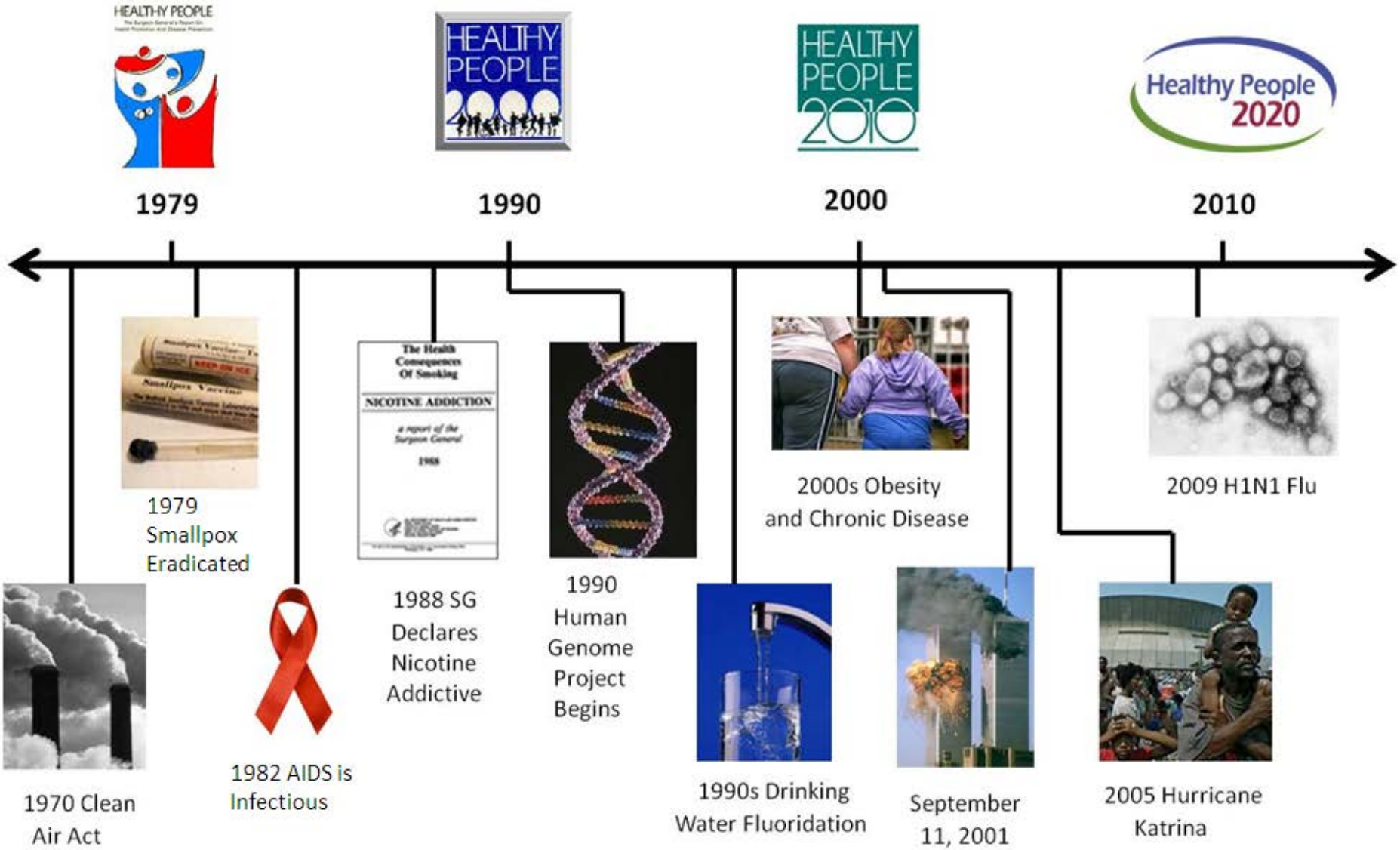
Healthy People 2020 Evolves



Public Health and Economic Impact

- Regular physical activity and healthy eating can reduce the risk of:
  - Heart disease
  - Stroke
  - Hypertension
  - Obesity
  - Type 2 Diabetes
  - Osteoporosis
  - Some cancers
- **$147 billion/year:** medical cost of obesity (2008 U.S. dollars)
  - **$1,429/year:** additional cost for obese vs. normal weight individuals

SOURCES: NIH, NHLBI Obesity Education Initiative. Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Available online: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf . Finkelstein, EA, Trogdon, JG, Cohen, JW, and Dietz, W. Annual medical spending attributable to obesity: Payer- and service-specific estimates. *Health Affairs* 2009; 28(5): w822-w831.

Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Department of Health and Human Services, 2008.

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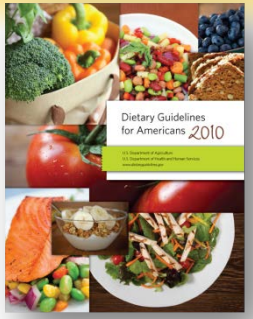
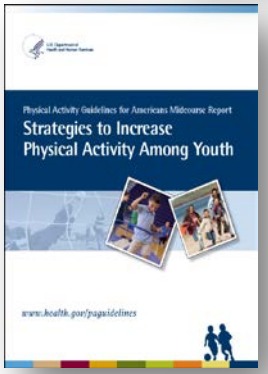
Federal Guidelines

- *Dietary Guidelines for Americans, 2010* www.dietaryguidelines.gov

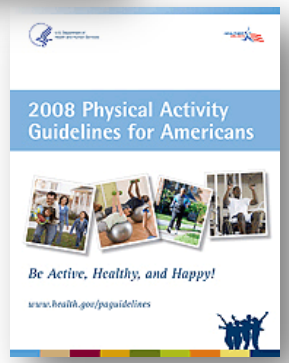


- *Physical Activity Guidelines for Americans, 2008*
  www.health.gov/paguidelines



- *Physical Activity Guidelines for Americans Midcourse Report: Strategies to Increase Physical Activity Among Youth, 2013*

  http://www.health.gov/paguidelines/midcourse/



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Irma Arispe, PhD

Associate Director, National Center for Health Statistics
Centers for Disease Control and Prevention

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Presentation Overview

- Nutrition and Weight Status
  - Weight Status
  - Food Insecurity
  - Food and Nutrient Consumption
  - Healthier Food Access
- Physical Activity
  - 2008 Physical Activity Guidelines
  - Physical Activity Education in Schools
  - Screen Time
  - Physical Activity Access and Environment

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Tracking the Nation's Progress

- 31 HP2020 Measurable Nutrition and Weight Status Objectives:
  - 1 Target met
  - 7 Improving
  - 14 Little or No detectable change
  - 0 Getting worse
  - 9 Baseline data only
- 25 HP2020 Measurable Physical Activity Objectives:
  - 5 Targets met
  - 1 Improving
  - 6 Little or No detectable change
  - 1 Getting worse
  - 12 Baseline data only

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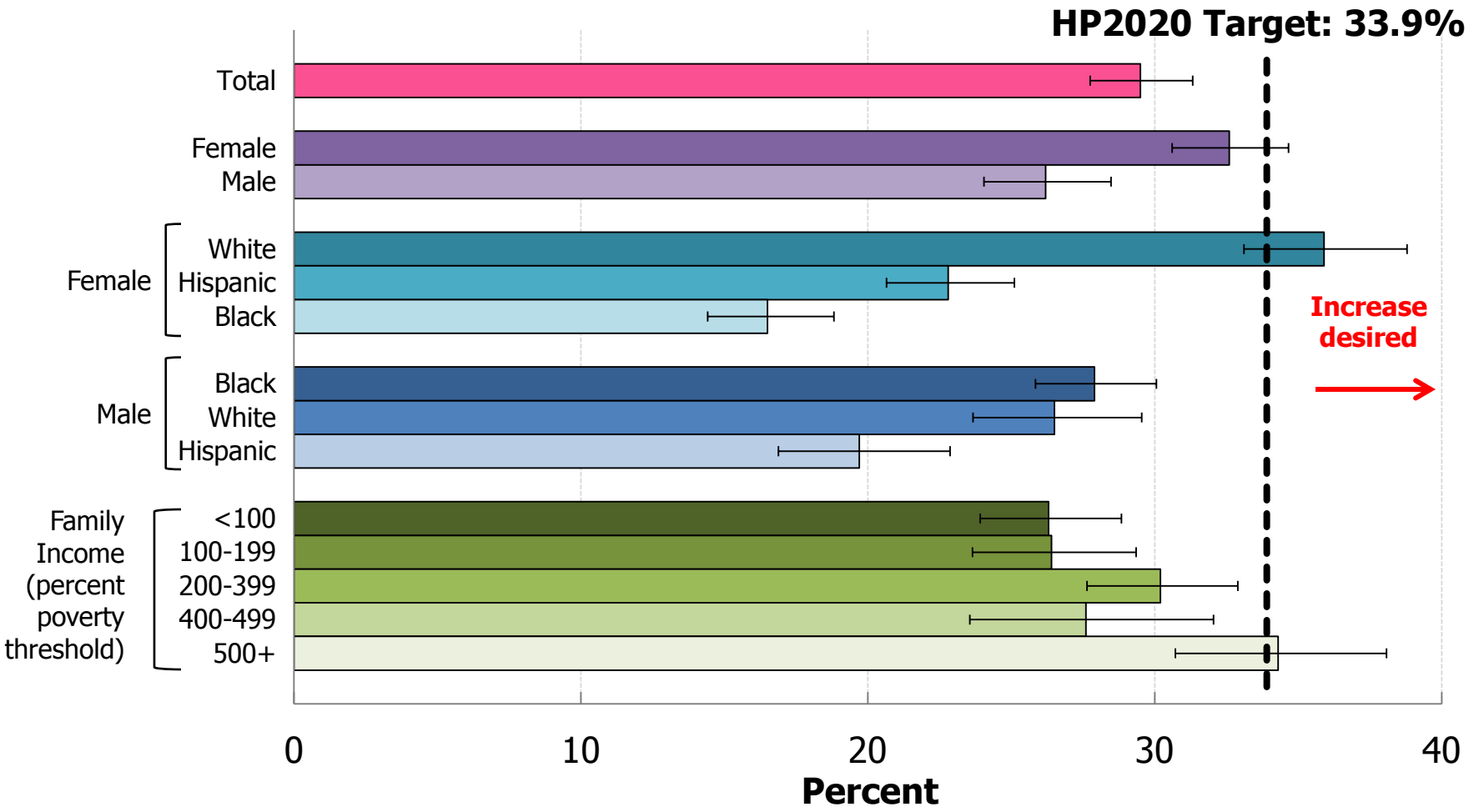
NOTES: The NWS Topic Area contains 7 Developmental objectives. The PA Topic Area contains 1 Informational objective and 10 Developmental objectives. Measurable objectives defined as having at least one data point currently available, or a baseline, and anticipate additional data points throughout the decade to track progress. Informational objectives are also measurable objectives, however, they do not have a target associated with their data. Developmental objectives lack baseline data and targets.

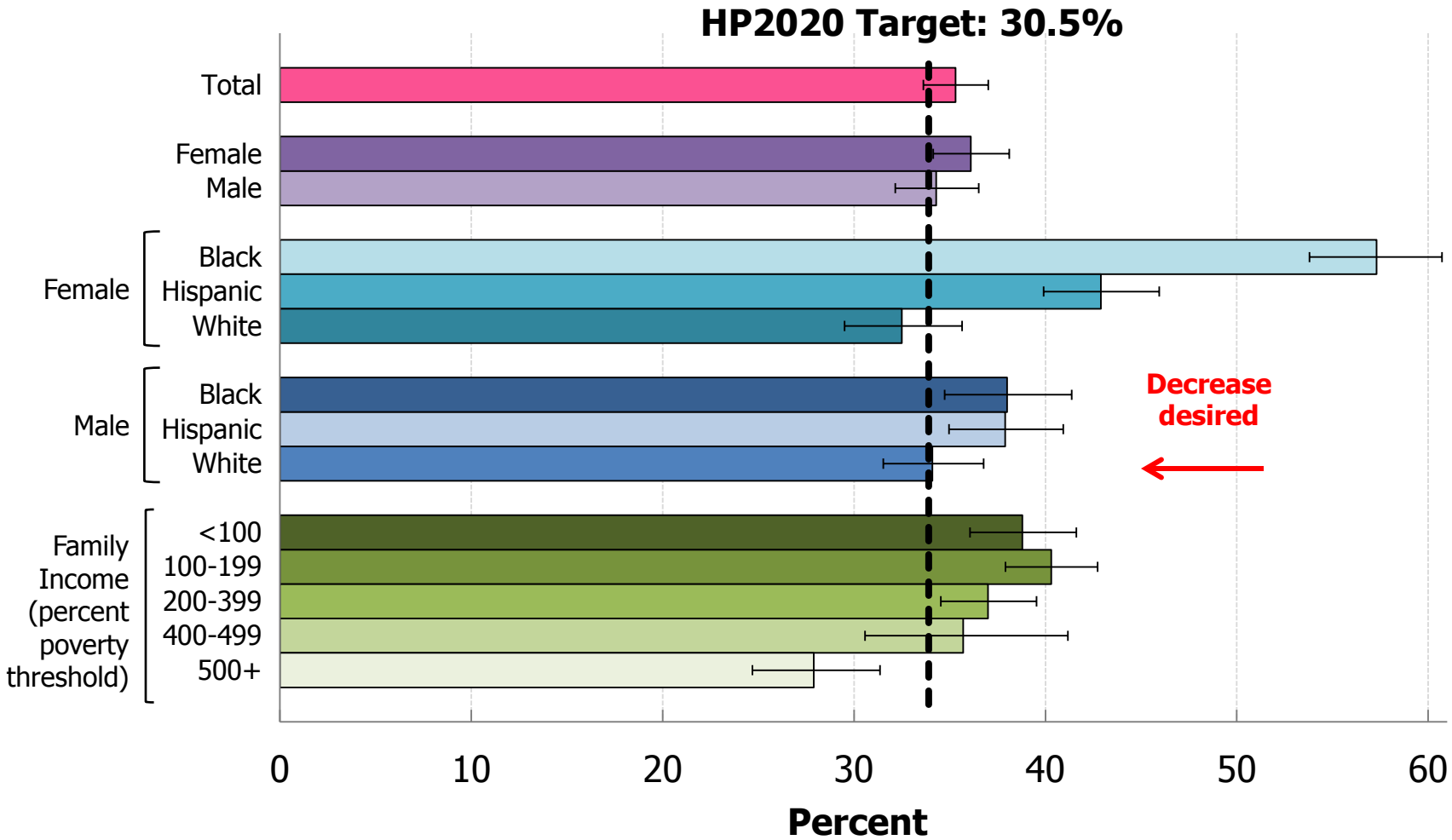
Healthy Weight, Adults, 2009–2012



NOTES: ⊢ = 95% confidence interval. Data are for the proportion of adults 20 years and over who are at a healthy weight, defined as a BMI≥ 18.5 and <25.0 kg/m^2. BMI is calculated based on measured height and weight. Data are age adjusted to the 2000 standard population. Respondents were asked to select one or more races. The categories black and white include persons who reported only one racial group and exclude persons of Hispanic origin. Persons of Hispanic origin may be of any race.
SOURCE: National Health and Nutrition Examination Survey (NHANES), CDC/NCHS.

Obj. NWS-8

Obesity, Adults, 2009–2012

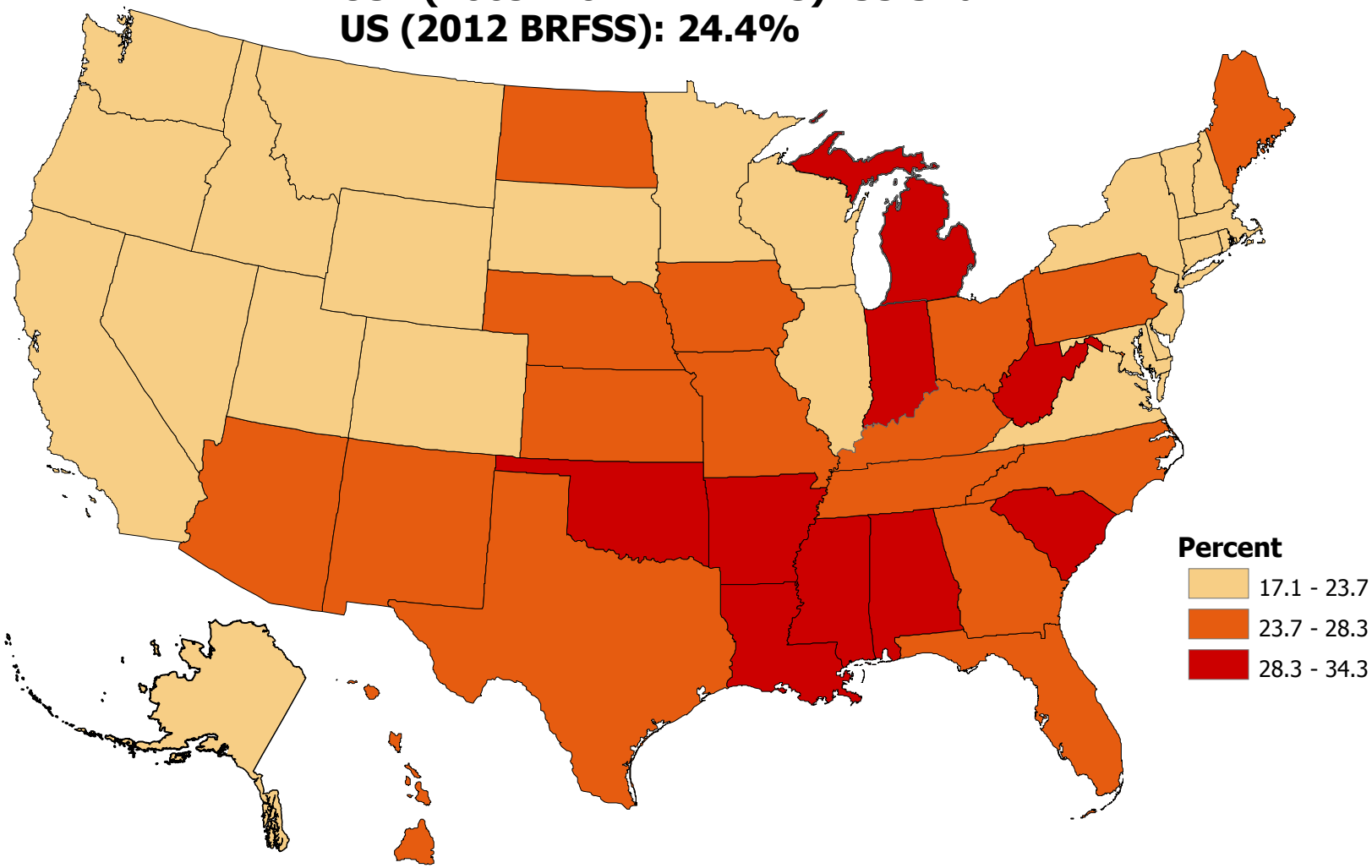


NOTES: ⊢ = 95% confidence interval. Data are for the proportion of adults 20 years and over who are obese, defined as a BMI≥30.0 kg/m^2. BMI is calculated based on measured height and weight. Data are age adjusted to the 2000 standard population. Respondents were asked to select one or more races. The categories black and white include persons who reported only one racial group and exclude persons of Hispanic origin. Persons of Hispanic origin may be of any race.
SOURCE: National Health and Nutrition Examination Survey (NHANES), CDC/NCHS.

Obj. NWS-9

Self-Reported Obesity, Adults, 2012

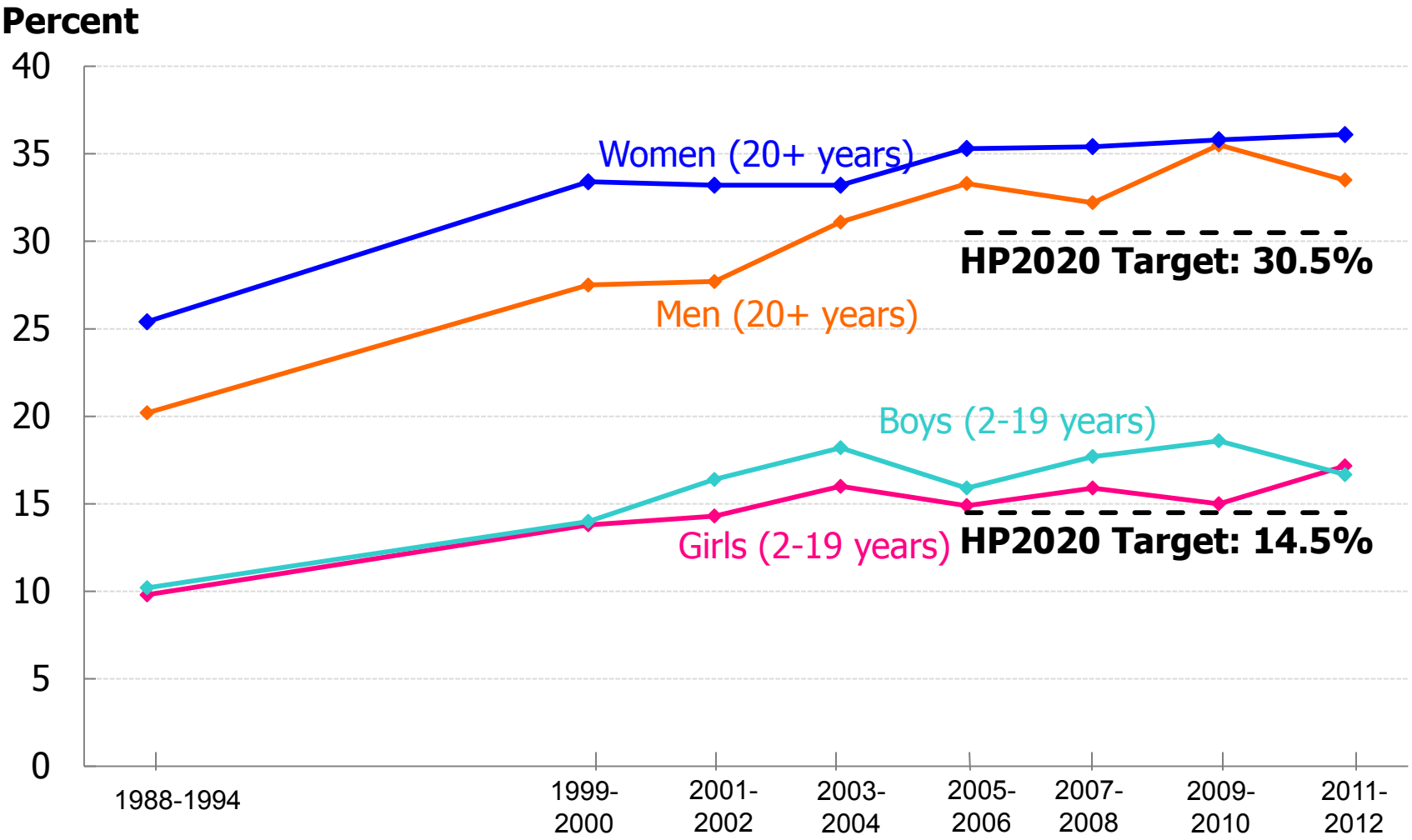
US* (2009–2012 NHANES): 35.3%
US (2012 BRFSS): 24.4%



NOTES: Data are for the proportion of adults 20 years and over who are obese, defined as a BMI≥30 kg/m^2, and are age adjusted to the 2000 standard population. Rates are displayed by Jenks classification for US states.
*National data for the objective are based on measured height and weight from the National Health and Nutrition Examination Survey (NHANES) and are the basis for setting the target. State data from the BRFSS are based on self-reported weight and height and may not be comparable to the national data from the NHANES.
SOURCE: Behavioral Risk Factor Surveillance System (BRFSS), CDC/PHSPO.

Obj. NWS-9
Decrease desired

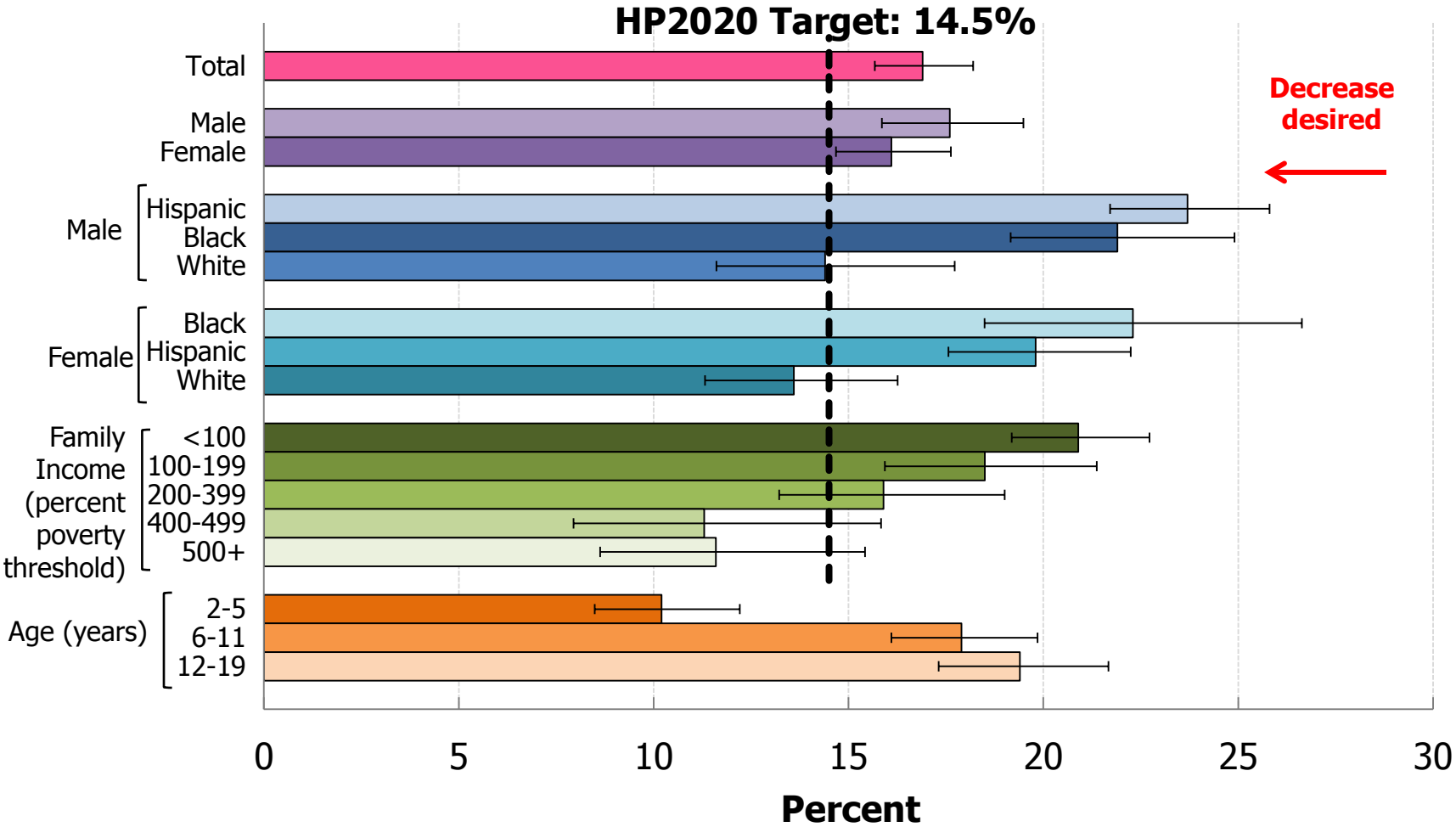
Obesity, Children/Adolescents and Adults 1988–1994 through 2011–2012



NOTES: Obesity defined as BMI≥30 kg/m^2 for adults and BMI-for-age≥95th percentile on the sex specific 2000 CDC Growth Charts for 2-19 years. Data for adults are age adjusted to the 2000 standard population.
SOURCE: National Health and Nutrition Examination Surveys (NHANES), CDC/NCHS.

Objs. NWS-9, 10.4
Decrease desired

Obesity, Children and Adolescents, 2009–2012

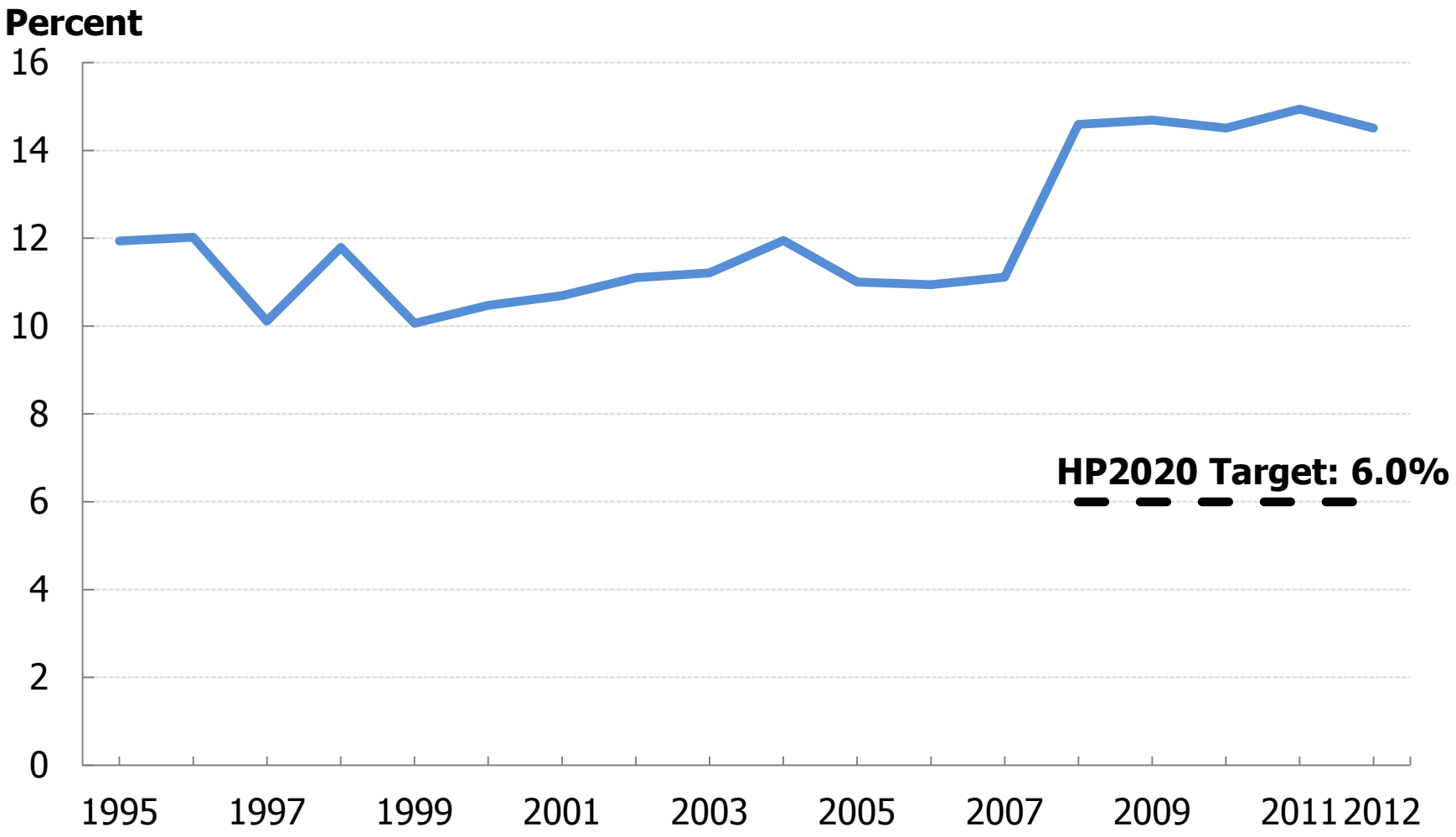


NOTES: ⊢ = 95% confidence interval. Data are for children and adolescents aged 2-19 years who are obese, defined as a BMI-for-age≥95th percentile on the sex specific 2000 CDC Growth Charts. BMI is calculated based on measured height and weight. Respondents were asked to select one or more races. The categories black and white include persons who reported only one racial group and exclude persons of Hispanic origin. Persons of Hispanic origin may be of any race. Target does not apply to age groups.

SOURCE: National Health and Nutrition Examination Survey (NHANES), CDC/NCHS.

Objs. NWS-10.1 through 10.4

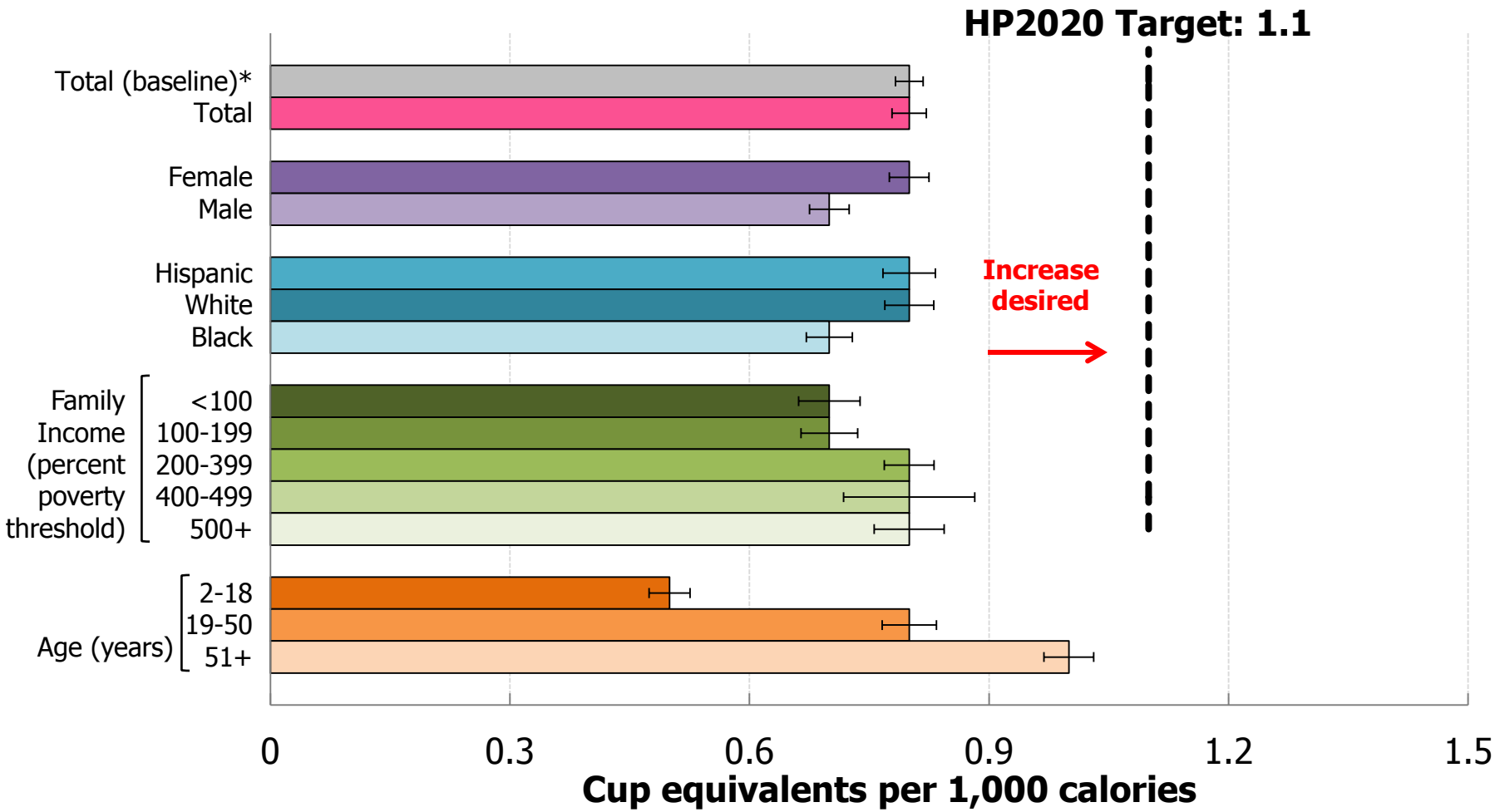
Food Insecurity, US Households, 1995–2012



NOTE: Data are for the proportion of U.S. households that reported experiencing food insecurity at least some time in the past 12 months based on providing an affirmative answer to at least 3 of 18 core questions regarding food inadequacy and insufficiency that result from inadequate household resources.
SOURCE: Food Security Supplement to the Current Population Survey (CPS), Census and DOL/BLS.

Obj. NWS-13
Decrease desired

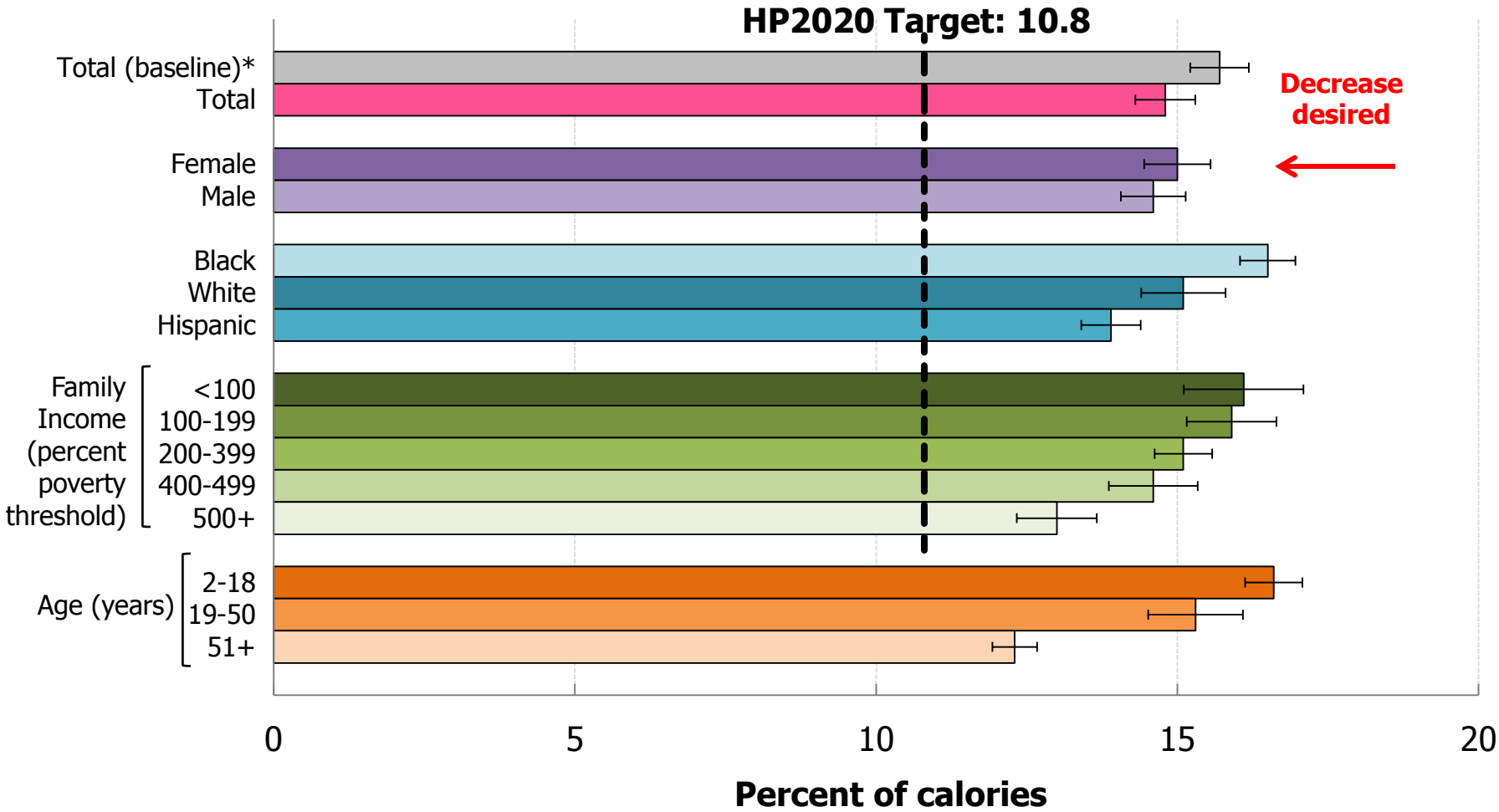
Total Vegetable Consumption, 2007–2010



NOTES: ⊢ = 95% confidence interval. *Baseline year: 2001–2004. Data are for mean daily intake of cup equivalents of total vegetables per 1,000 calories by persons aged 2 years and older based on a single 24-hour dietary recall. Cup equivalents were calculated using the Food Patterns Equivalents Database (FPED), USDA/ARS. Except for age specific groups, data are age adjusted to the 2000 standard population. The categories black and white include persons who reported only one racial group and exclude persons of Hispanic origin. Persons of Hispanic origin may be of any race.
SOURCE: National Health and Nutrition Examination Survey (NHANES), CDC/NCHS.

Obj. NWS-15.1

Added Sugars Consumption, 2007–2010

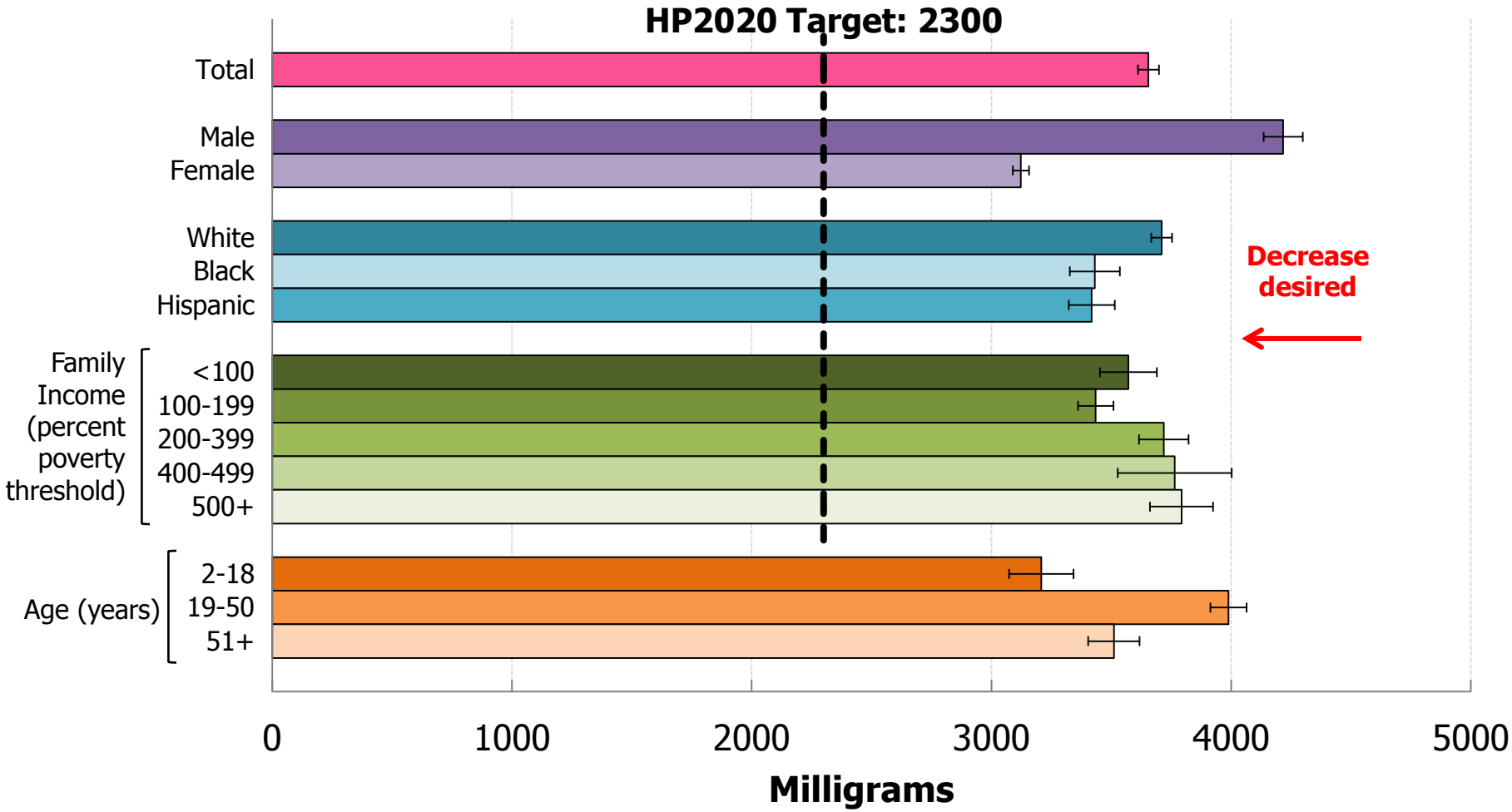


NOTES: ⊢ = 95% confidence interval. *Baseline year: 2001–2004. Data are for the proportion of total daily calorie intake from added sugars by persons aged 2 years and over based on a single 24-hour dietary recall. Estimates were calculated using the Food Patterns Equivalents Database (FPED). Except for age specific groups, data are age adjusted to the 2000 standard population. Respondents were asked to select one or more races. The categories black and white include persons who reported only one racial group and exclude persons of Hispanic origin. Persons of Hispanic origin may be of any race.

SOURCE: National Health and Nutrition Examination Survey (NHANES), CDC/NCHS.

Obj. NWS-17.2

Sodium Consumption, 2009–2010



NOTES: ⊢ = 95% confidence interval. Data are for mean total daily sodium intake (in mg) from food, detary supplements, tap water, and salt use at the table by persons aged 2 years and older based on a single 24-hour dietary recall. Except for age specific groups, data are age adjusted to the 2000 standard population. Respondents were asked to select one or more races. The categories black and white include persons who reported only one racial group and exclude persons of Hispanic origin. Persons of Hispanic origin may be of any race.

SOURCE: National Health and Nutrition Examination Survey (NHANES), CDC/NCHS.

Obj. NWS-19

Healthier Food Access for Children and Adolescents

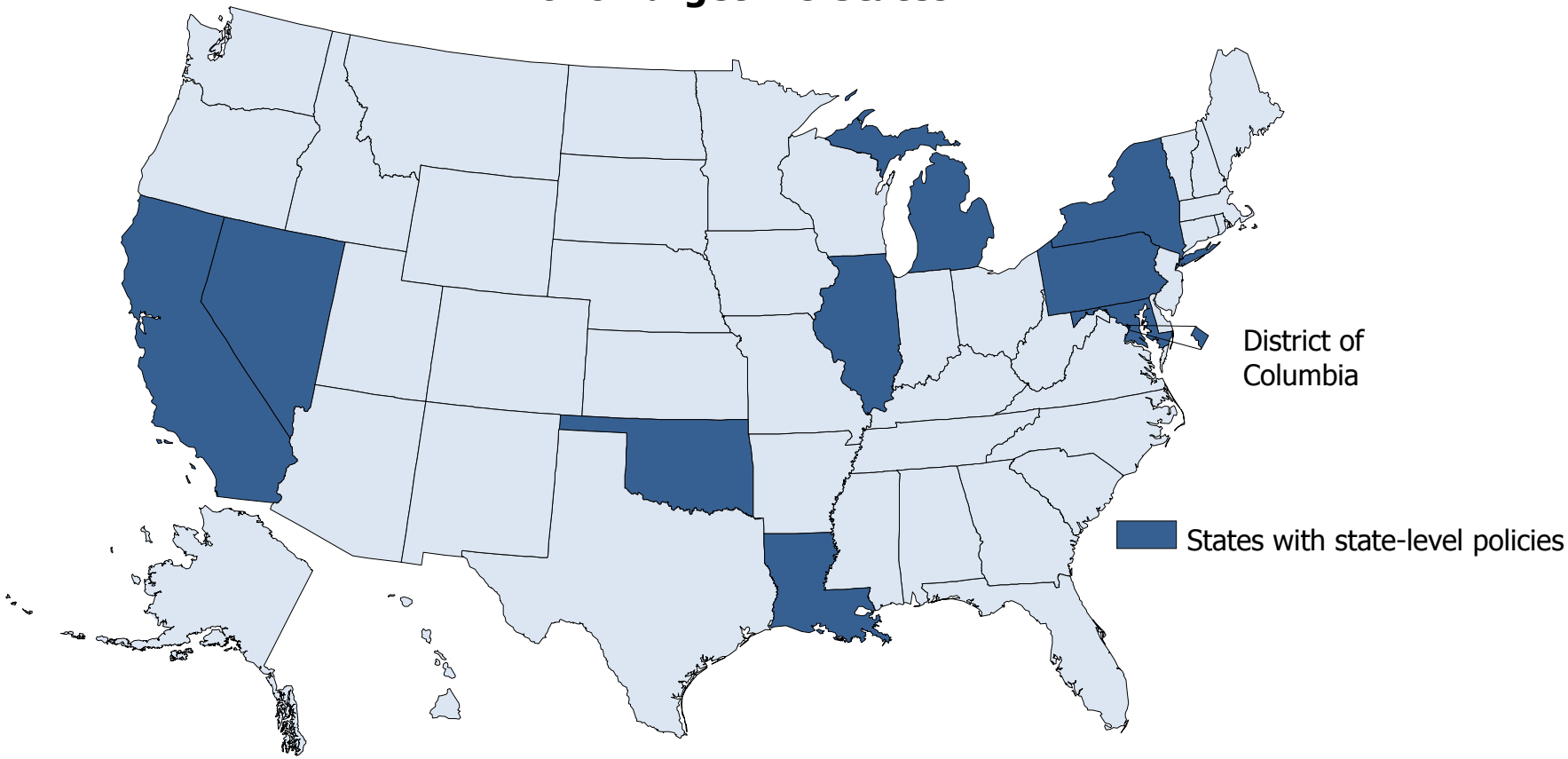
- In 2006, 24 states had nutrition standards for foods and beverages provided to preschool-aged children in child care.
- In 2006, 9.3% of schools did not sell or offer calorically sweetened beverages to students.
- In 2012, 9.6% of school districts required schools to make fruits or vegetables available whenever other food is offered or sold.

SOURCES: National Resource Center for Health and Safety in Child Care and Early Education, School Health Policies and Practices Study (SHPPS), CDC/NCHHSTP

Objs. NWS-1, 2.1, 2.2
Increase desired

Incentive Policies for Food Retail Outlets to Provide Foods Encouraged by the Dietary Guidelines, 2011

2011: 10 States
HP2020 Target: 18 States



NOTES: States with retail policies (legislation or executive action) had to support at least one of the following goals: (1) the building and/or placement of new food retail outlets; (2) renovation and equipment upgrades of existing food retail outlets; (3) increases in, and promotion of, foods encouraged by the Dietary Guidelines for Americans stocked or available at food retail outlets.
SOURCE: State Indicator Report on Fruits and Vegetables, CDC.

Obj. NWS-3
Increase desired

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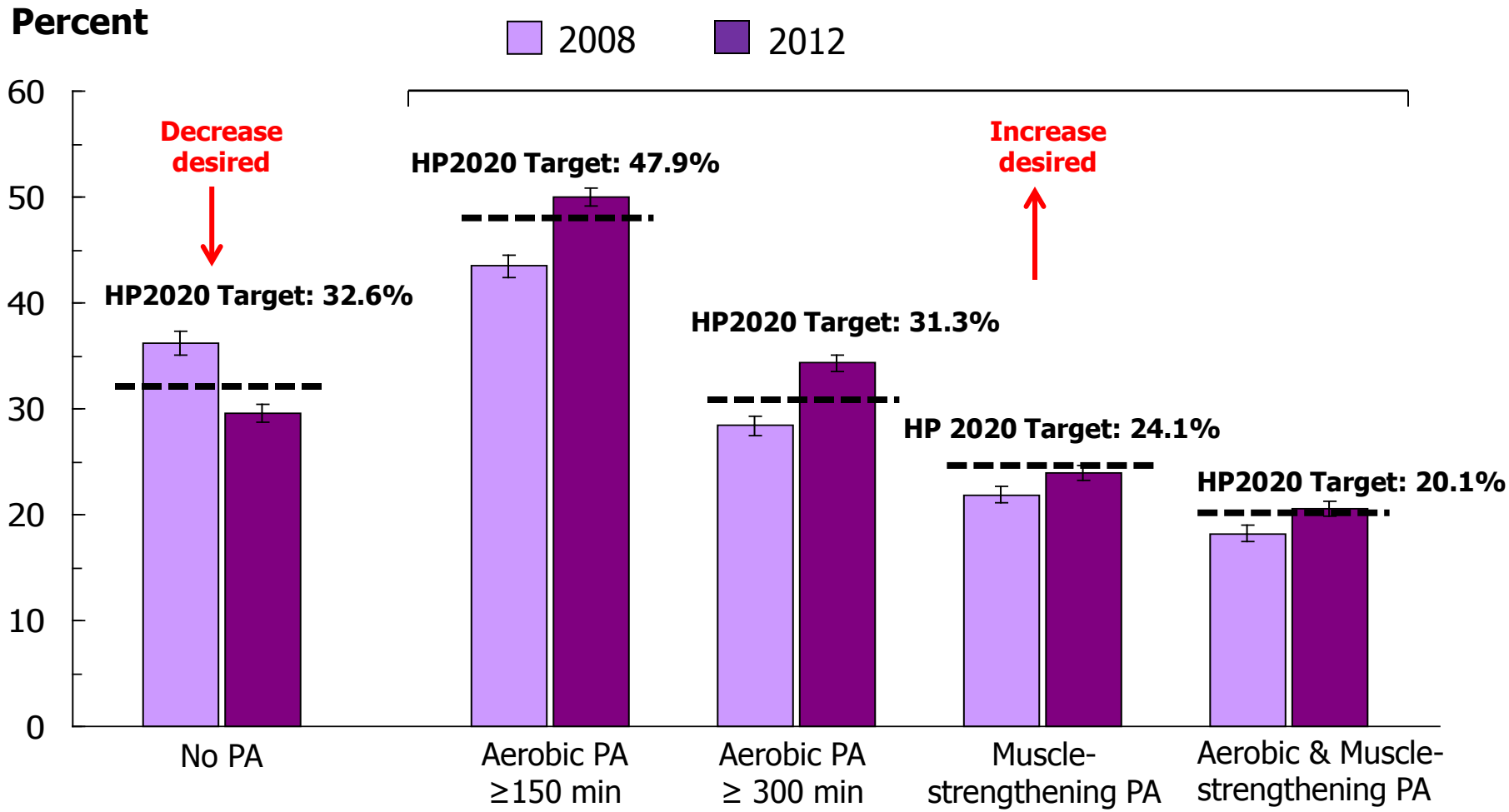
Physical Activity Benefits

- Decreases risk of early death, obesity, and chronic diseases, including osteoporosis
- Reduces risks of depression and improves mental well-being
- Improves control of body weight, blood pressure, blood glucose, and cholesterol
- Improves quality of sleep and functional health
- Enhances independent living among older adults
  - Prevents falls and reduces risk of hip fracture
  - Reduces risk of cognitive decline

SOURCES: Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Department of Health and Human Services, 2008.

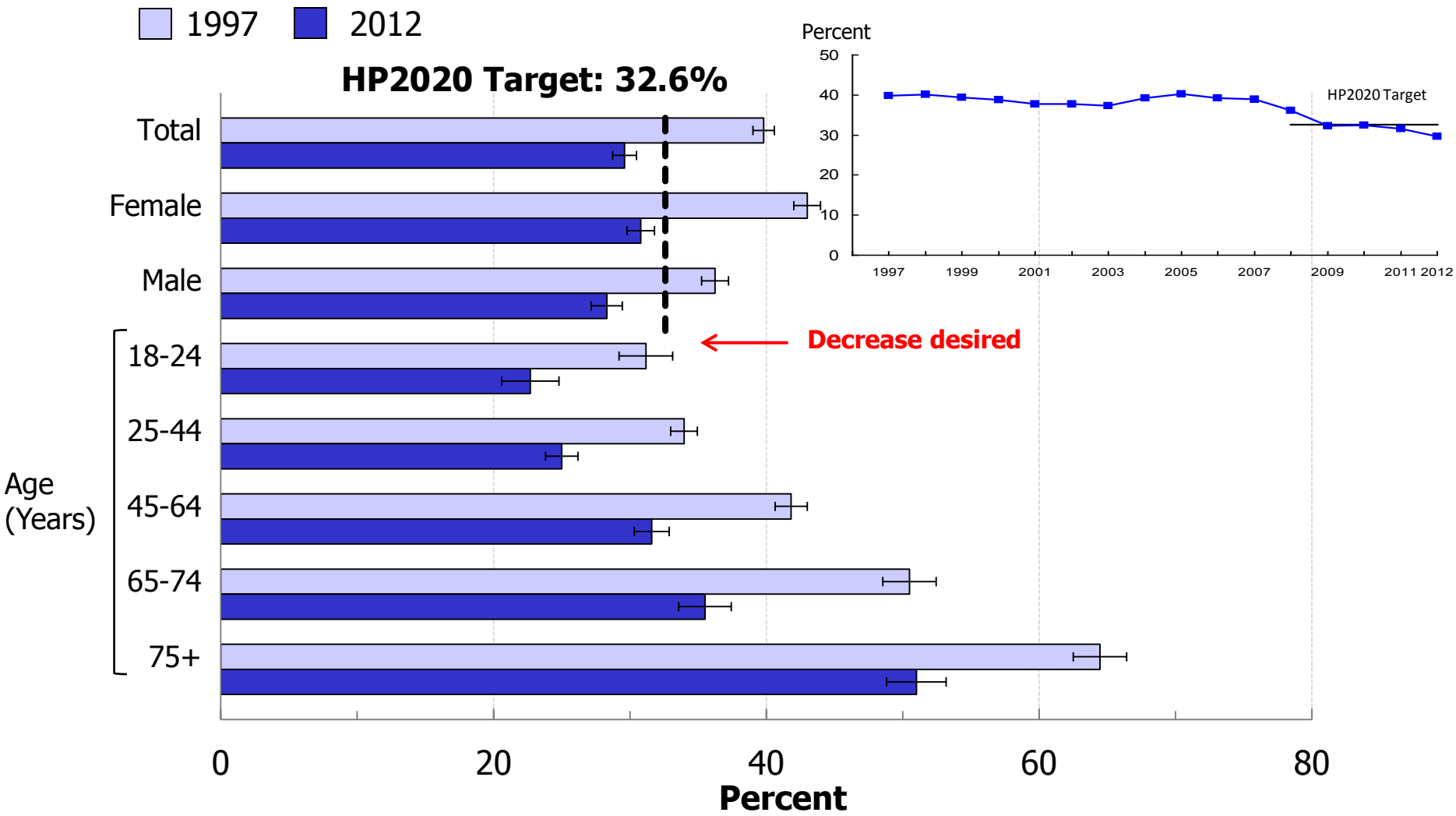
Leisure-Time Physical Activity (PA), Adults



NOTES: I = 95% confidence interval. Data are for adults 18 years and over who report no leisure-time aerobic PA; aerobic PA: ≥150 min of moderate or ≥75 min of vigorous PA per week or an equivalent combination of moderate and vigorous-intensity activity; for additional health benefits: ≥300 min of moderate or ≥150 min of vigorous PA per week or an equivalent combination of moderate and vigorous-intensity activity. Muscle-strengthening PA - exercise at least twice per week. Aerobic & muscle-strengthening PA includes ≥150 min of moderate or ≥75 min of vigorous PA per week or an equivalent combination of moderate and vigorous-intensity PA and muscle-strengthening PA at least twice a week. Data are age adjusted to the 2000 standard population.
SOURCE: National Health Interview Survey (NHIS), CDC/NCHS.

Objs. PA-1, PA-2.1 through 2.4

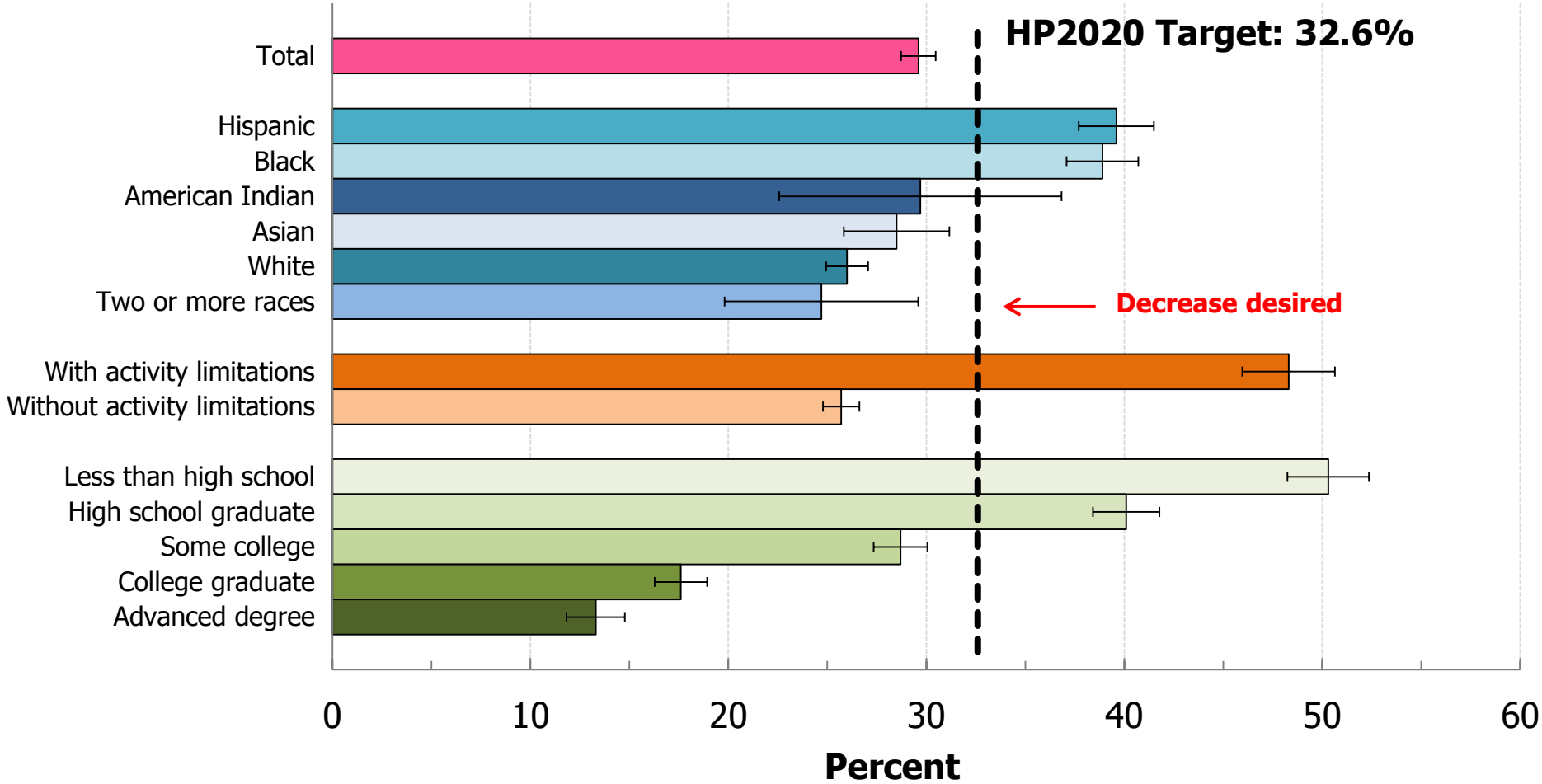
No Leisure-Time Physical Activity, Adults



NOTES: ⊢⊣ = 95% confidence interval. Data are for adults ages 18 years and over who were engaged in no leisure-time aerobic physical activity. Except for age-specific estimates data are age adjusted to the 2000 standard population.
SOURCE: National Health Interview Survey (NHIS), CDC/NCHS.

Obj. PA-1

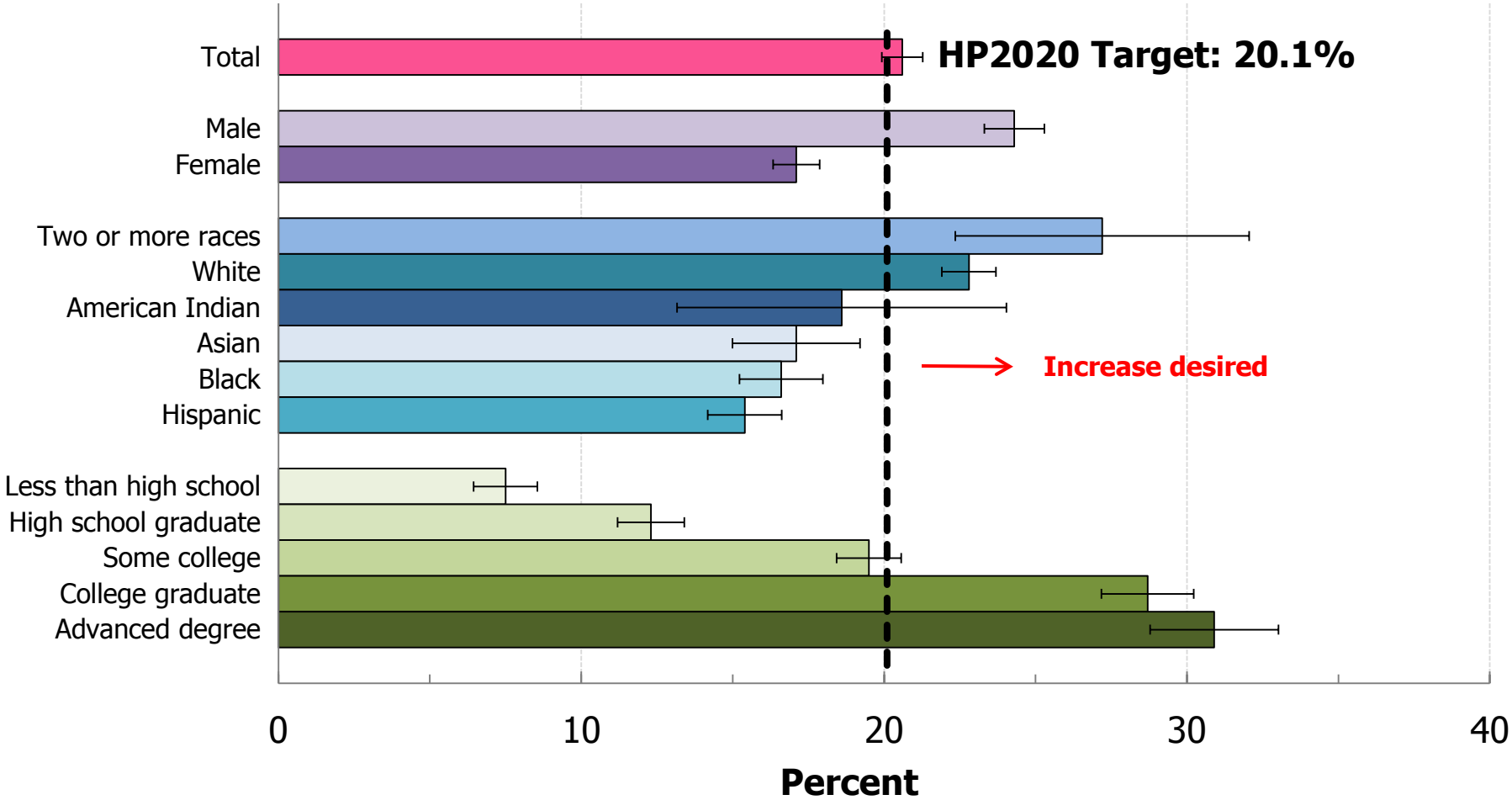
No Leisure-Time Physical Activity, Adults, 2012



NOTES: ⊢⊣ = 95% confidence interval. Data are for adults 18 years and over; except for education-level data that are for adults 25 years and over. Data are age adjusted to the 2000 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. Respondents were asked to select one or more races. Data for the single race categories are for persons who reported only one racial group.
SOURCE: National Health Interview Survey (NHIS), CDC/NCHS.

Obj. PA-1

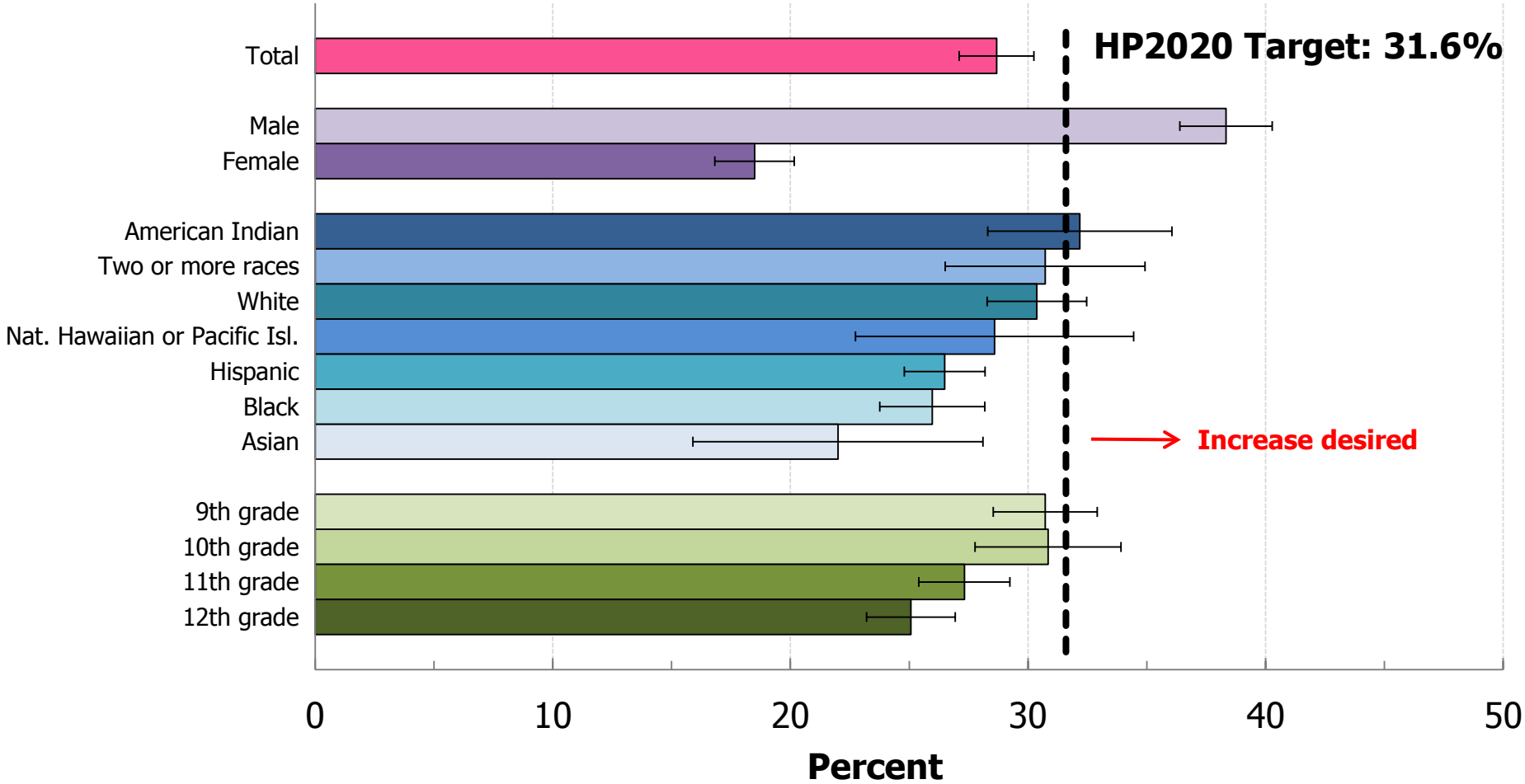
Meeting the Aerobic and Muscle-Strengthening PA Guidelines, Adults, 2012



NOTES: ⊢⊣= 95% confidence interval. Data are for adults 18 years and over, except for education-level data that are for adults 25 years and over, who report light or moderate leisure time PA for at least 150 minutes per week or vigorous PA 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing PA specifically designed to strengthen muscles at least twice per week. Data are age adjusted to the 2000 standard population. American Indian includes Alaska Native. Black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race. Data for the single race categories are for persons who reported only one racial group.
SOURCE: National Health Interview Survey (NHIS), CDC/NCHS.

Obj. PA-2.4

Meeting the Aerobic PA Guidelines, High School Students, 2011

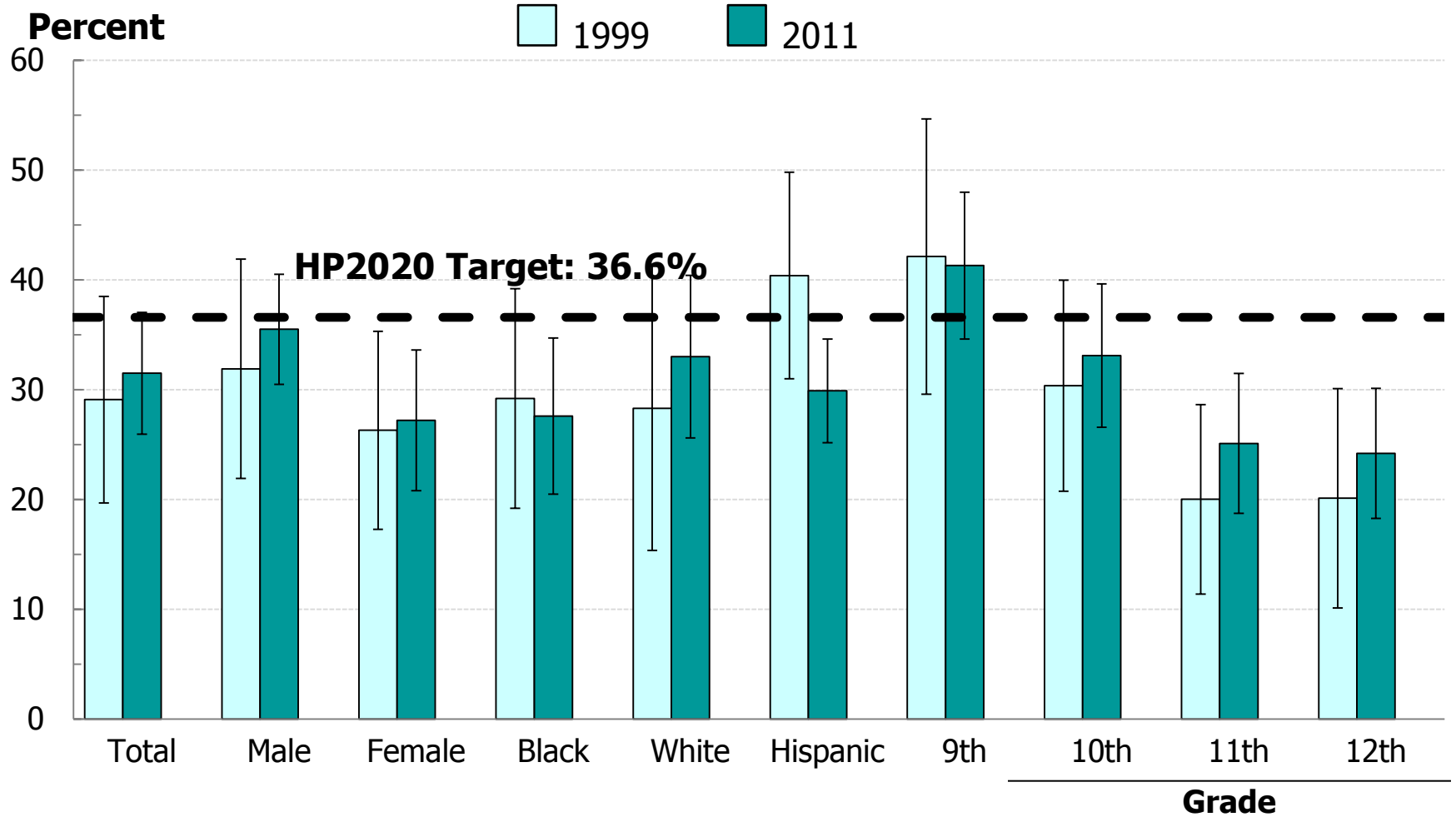


NOTES: ⊢⊣ = 95% confidence interval. Data are for students in grades 9–12 who report being involved in PA for at least 60 minutes per day in the past week. American Indian includes Alaska Native. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race. Persons were asked to select one or more races. Data for the single race categories are for persons who reported only one racial group.

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

Obj. PA-3.1

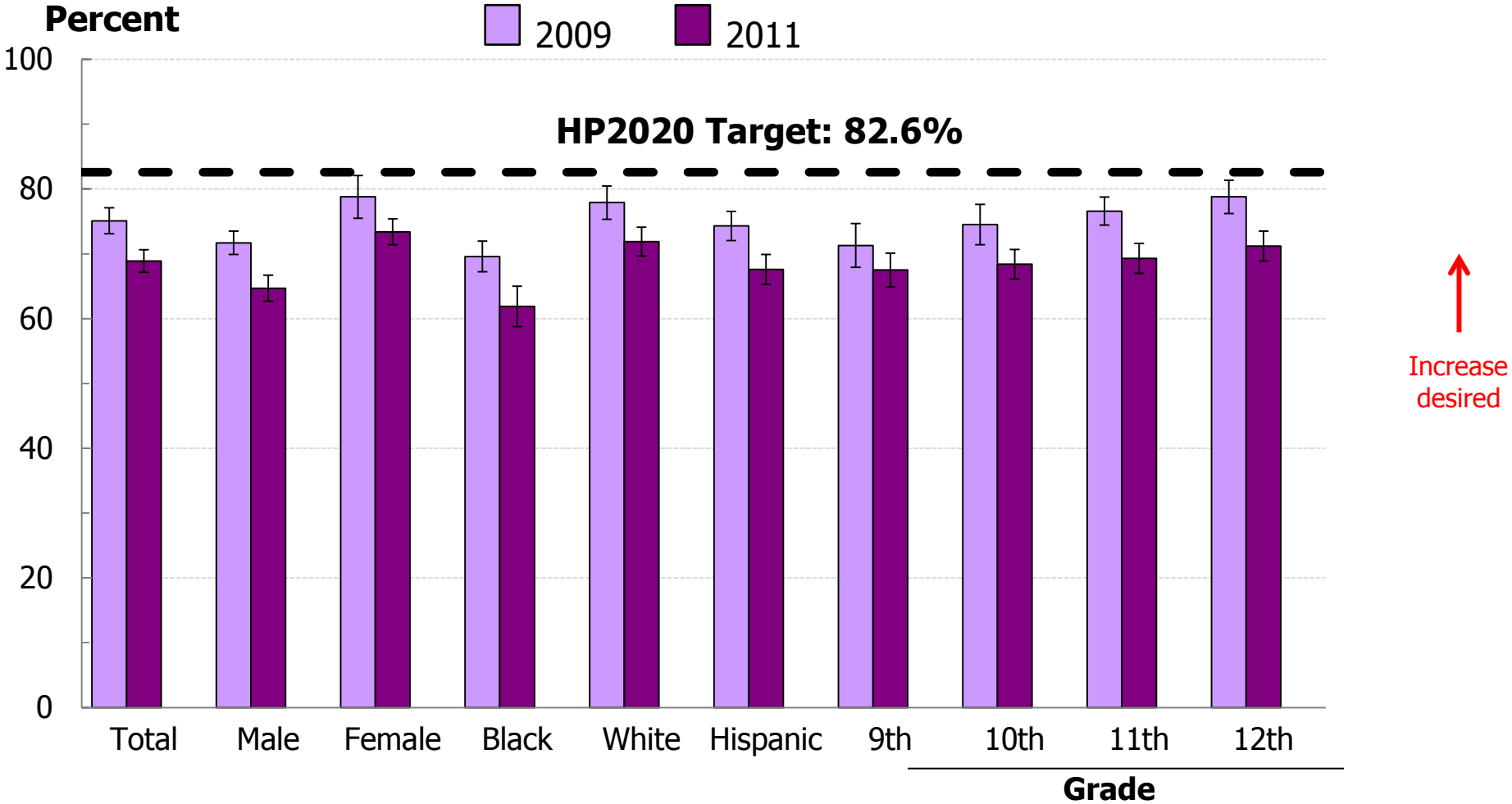
Participation in Daily School Physical Education, High School Students



NOTES: I = 95% confidence interval. Data are for students in grades 9 through 12 who participate in physical education classes on five or more days in an average week. 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. PA-5
Increase desired

Computer Use for Non-School Work for Two or Fewer Hours a School Day, High School Students



NOTES: I = 95% confidence interval. Data are for students in grades 9 through 12 who reported playing video or computer games or using computer for non-school work (including Xbox, PlayStation, an iPod, an iPad or other tablet, a smartphone, YouTube, Facebook, and the Internet) for no more than 2 hours on an average school day. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.
SOURCE: Youth Risk Behavior Surveillance System, CDC/NCHHSTP.

Obj. PA-8.3.3

PA Access and Environment

- 25 states required activity programs provided to preschool-aged children in child care (2006).
- 28.8% of schools provided access to their physical activity spaces and facilities outside of normal school hours (2006).
- Among children, 30.8% of trips to school of 1 mile or less were made by walking (2009).
- Among adults, 31.2% of trips of 1 mile or less were made by walking (2009).

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Data for objectives PA-13.1 and 13.2 are preliminary.
SOURCE: National Resource Center for Health and Safety in Child Care and Early Education; National Household Travel Survey (NHTS), DOT/FHWA

Objs. PA 9.1, 10, 13.1, 13.2
Increase desired

Key Takeaways – NWS

- Weight status data for children, adolescents and adults show **little or no change**.
- While total vegetable consumption shows **little or no change**, there is a **significant decrease** in the consumption of added sugars.
- **Disparities persist in:**
  - Weight status by age, race and income.
  - Food and nutrient consumption by age, sex, race and income.
- **Obesity prevalence is higher** among the non-Hispanic black and Hispanic populations and lower income groups.

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Key Takeaways – PA

- Between 2008 and 2012, more adults engaged in leisure time aerobic activity.
- In 2012, 20.6% of adults met the PA guidelines for aerobic and muscle-strengthening physical activity.
- In 2011, 28.7% of high school students met the guidelines for aerobic physical activity.
- Computer use for non-school work for 2 or fewer hours among high school students has declined, moving away from the target.
- Although there have been some improvements in PA, disparities still persist by age, sex, race, and education.

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David M. Murray, Ph.D.

Associate Director for Prevention
Director, Office of Disease Prevention

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NIH

Department of Health & Human Services · USA

Office of Disease Prevention and Health Promotion

National Institutes of Health

- The NIH seeks fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

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NIH Investments in Nutrition, Weight Status, and Physical Activity

- Investments
  - $2.3 billion for 5,961 projects in FY2012[1]
  - $2.2 billion for 5,810 projects in FY2013[1]
- Research Foci
  - Basic Science
  - Prevention
  - Treatment

[1]Investment figures are not based on official NIH Research, Condition, and Disease Categorization (RCDC) categories. Statistics reflect use of custom sub-setting criteria to select relevant projects from two official RCDC categories' project lists (Nutrition and Obesity) and from the unofficial Physical Activity research area where redundant projects in the combined pool of selected projects were eliminated.

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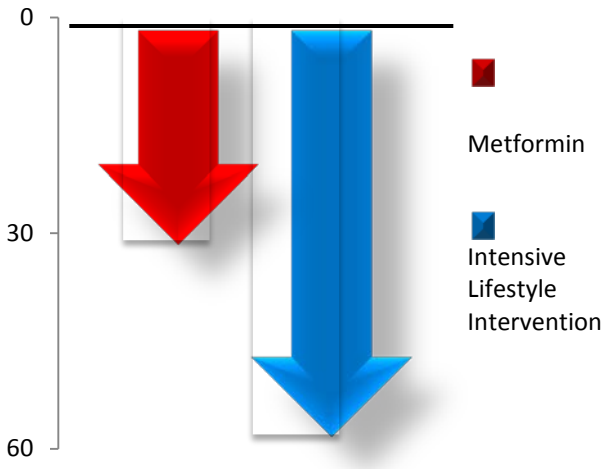
Examples of Research on Nutrition and Weight Status - Adults



Percent Reduction in Diabetes Incidence Compared to Placebo

3,234 individuals at risk for Type 2 diabetes

Objective(s): NWS-9, NWS-18, PA-2

- The Diabetes Prevention Program (DPP), NEJM, 2002
- Lifestyle modification (increased physical activity, along with reduced fat and caloric intake) lowered risk by **58%**
- Metformin medication lowered risk by **31%**
- Effects persisted over 10 years of follow-up, Lancet, 2009

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NIDDK NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES

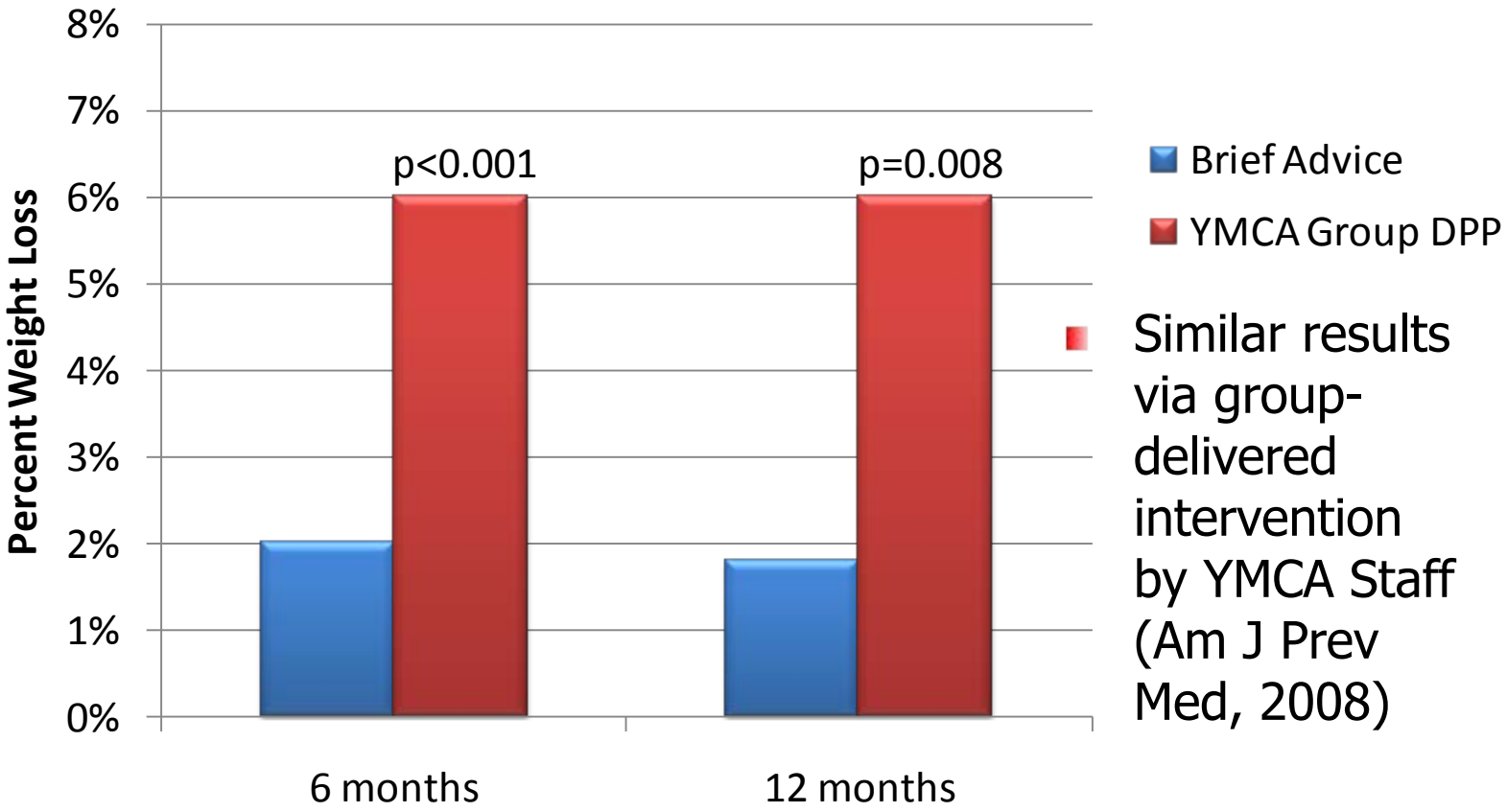
NIH

CDC

INDIAN HEALTH SERVICE · PHS · 1955

American Diabetes Association®

Examples of Research on Nutrition and Weight Status - Adults



Similar results via group-delivered intervention by YMCA Staff (Am J Prev Med, 2008)

Objective(s): NWS-9, NWS-18, PA-2

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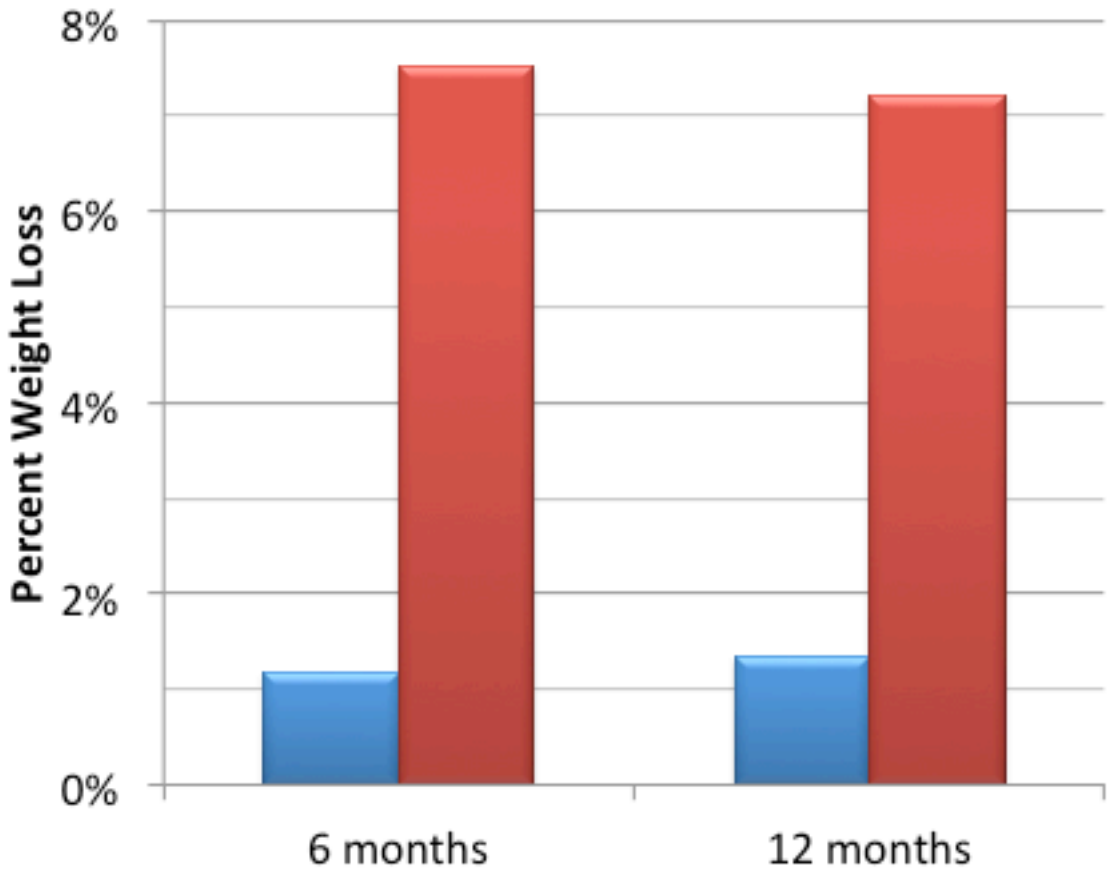
Examples of Research on Nutrition and Weight Status - Adults



- Similar results via group-delivered intervention through American Diabetes Association (Diab Care, 2011)

Objective(s): NWS-9, NWS-18, PA-2

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Examples of Research on Nutrition and Weight Status - Youth

- The HEALTHY Study
  - A school-based study to reduce risk factors for type 2 diabetes targeting food service, physical education, and behavior change
  - Followed 4600 students from 6th – 8th grade, in 42 middle schools, >50% minority, >50% overweight or obese, low SES
  - 21% lower prevalence of obesity and lower BMI z-score, waist circumference, and fasting insulin levels in intervention schools
  - No effect on the combined rate of overweight and obesity, which fell by 4% in both arms (NEJM, 2010)

Objective(s): NWS-10, NWS-14, NWS-15

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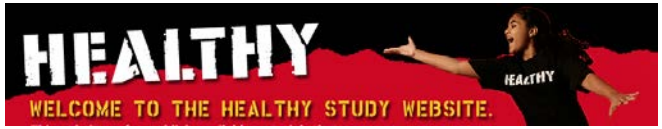
www.healthystudy.org



Examples of Research on Nutrition and Weight Status

- Obesity Related Behavioral Intervention Trials (ORBIT)
  - Translate findings from basic behavioral research into more effective interventions
- Early Adult Reduction of weight through LifestYle intervention (EARLY) Trials
  - Test innovative behavioral approaches for weight control in young adults
- Childhood Obesity Prevention and Treatment Research (COPTR)
  - Test innovative behavioral approaches for weight gain prevention in children and youth
- Status: ongoing

Objective(s): NWS-8, NWS-9, NWS-10, NWS-11, NWS-14, NWS-15, NWS-16, NWS-17, NWS-18

http://www.nhlbi.nih.gov/resources/obesity/clinicaltrials.htm

Examples of Research on Nutrition and Weight Status - Youth

- The Healthy Communities Study: How Communities Shape Children's Health
  - A five-year, nationwide study to identify characteristics of *existing* community programs and policies that may help reduce childhood obesity and improve dietary and physical activity behaviors.
  - Collect retrospective and prospective data
    - Document programs/policies in 120 US communities
    - Measure BMI, diet, and physical activity in ~5,000 elementary and middle school children
  - Partners: NHLBI, NCI, NIDDK, NICHD, OBSSR, CDC, RWJ
  - Status: ongoing

http://www.nhlbi.nih.gov/resources/obesity/pop-studies/hcs.htm

Examples of Research on Nutrition and Weight Status - Adults

- R01-HL060712; Dietary Patterns and Risk of Cardiovascular Disease; Frank Hu, Harvard University
  - Test the hypothesis that higher diet quality is inversely associated with long-term weight gain
  - Diet quality measured by Healthy Eating Index, Mediterranean Diet, Dietary Approaches to Stop Hypertension [DASH], Food Quality Score (FQS).
  - Explore biological pathways that mediate the effects of diet quality on weight change and the long-term relationships between change in diet quality and changes in biomarkers.
  - Status: ongoing

http://projectreporter.nih.gov/reporter.cfm

Examples of Physical Activity Research

- Population-Focused Research
  - R01-HL114283; Promoting Physical Activity in High Poverty Neighborhoods; Deborah Cohen, PhD, RAND Corporation
  - Aim: To determine whether the provision of opportunities for physical activity in parks in low income neighborhoods can increase park use and park-based physical activity
  - Status: Ongoing

Objective(s):
PA-1, PA-2

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http://projectreporter.nih.gov/reporter.cfm

Examples of Physical Activity Research

- Methods- and Measurement-Focused Research
  - R01-HL111195; Physical Activity Patterns via New Dimension-Informative Cluster Models; Ken Cheung, PhD, Columbia University
  - Aim: To develop new methods and identify patterns of physical activity that can be used as predictors of health outcomes.
  - Status: Ongoing

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http://projectreporter.nih.gov/reporter.cfm

Examples of Physical Activity Research - Adults

- Individual-Focused Research
  - R01-HL109429; Prosocial Behavior and Volunteerism to Promote Physical Activity in Older Adults; Capri Foy, PhD, Wake Forest University
  - Aim: To determine whether *prosocial behavior*, defined as voluntary behavior that benefits others, can be used to help older adults begin and continue a regular physical activity program.
  - Results: Ongoing

Objective(s):
PA-2

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http://projectreporter.nih.gov/reporter.cfm

Examples of Data Resources and Surveys for NWS and PA

- Support for NHANES physical activity, sleep and strength components http://appliedresearch.cancer.gov/nhanes
- NHIS Cancer Control Supplement http://appliedresearch.cancer.gov/nhis
- HINTS Health Promotion Module: Monitors public understanding of recommendations for physical activity, nutrition, and weight http://hints.cancer.gov
- Family Life, Activity, Sun, Health and Eating (FLASHE) Study http://nccor.org/projects/flashe.php
- Classification of Laws Associated with School Students (CLASS) http://class.cancer.gov

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Examples of Tools for Investigators in NWS and PA

- Automated Self-Administered 24-Hour Dietary Recall (ASA24) http://appliedresearch.cancer.gov/asa24/
  - Web-based tool that enables automated and self-administered 24-hour dietary recalls
- Measures of the Food Environment (MFE) Website https://riskfactor.cancer.gov/mfe
  - Compilation of articles about and measures of the food environment
- Portable eTechnology Diet and Physical Activity Tools for Consumers (SBIR Contract) [in development]
  - Web-based system to perform real-time energy balance assessment and intervention

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NCCOR

National Collaborative on Childhood Obesity Research

Examples of resources found at http://nccor.org:

- Measures Registry
  - Searchable online registry of over 1,000 diet and physical activity measures used in childhood obesity research
- Catalogue of Surveillance Systems
  - Review, sort and compare more than 105 publicly available datasets relevant to childhood obesity research

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NIH

CDC

USDA

Robert Wood Johnson Foundation

NCCOR

National Collaborative on Childhood Obesity Research

New Activities

- Pursuing work to address economics research in childhood obesity.
- 2014 Summer Workshop with USDA and RWJ on incentivizing healthful purchases for Supplemental Nutrition Assistance Program (SNAP) Participants
- An NCCOR workgroup is examining food data systems, monitoring, and related areas.

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NIH

CDC

USDA

Robert Wood Johnson Foundation

Summary of NIH Research that Supports Healthy People 2020

- Addresses virtually all of the Nutrition & Weight Status (NWS) and Physical Activity (PA) objectives
- Identifies factors influencing health and health disparities in the US population
- Evaluates promising strategies for prevention and treatment diverse communities
- Harnesses technology and tools to advance prevention and treatment
- Seeks expert input on research gaps
- Trains the next generation of scientists
- Fosters collaborations to maximize translation and dissemination

Healthy People 2020

Michael M. Landa

Director

FDA/Center for Food Safety and Applied Nutrition

Protecting and Promoting Your Health

Healthy People 2020

FDA

Office of Disease Prevention and Health Promotion

FDA is a Regulatory and Public Health Agency

FDA CFSAN

Center for Food Safety and Applied Nutrition

- **80% of U.S. food supply is regulated by FDA**
- **Nutrition-related activities focus on**
  - **Food Labeling**
  - **Food ingredients**

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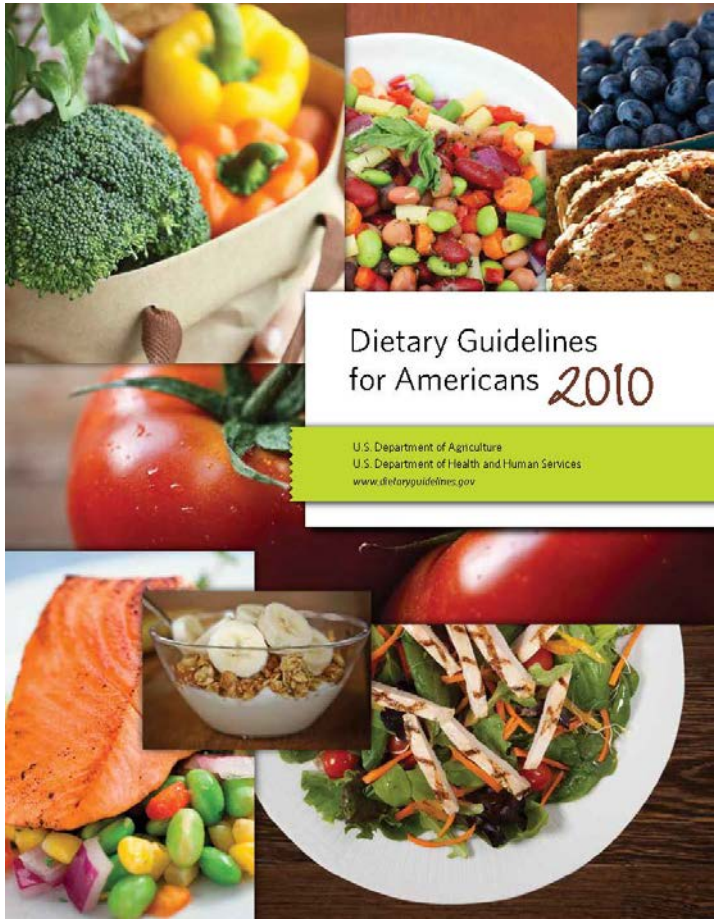
FDA's Contribution to Nutrition & Weight Status Objectives

Nutrition and Weight Status (NWS) objectives are consistent with ***2010 Dietary Guidelines for Americans***

- **Increase fruits, vegetables, and whole grains** (NWS-14, 15.1, 15.2, 16)
- **Reduce solid fats, added sugars, saturated fat, and sodium** (NWS-17.1, 17.2, 18, 19)
- **Increase calcium** (NWS-20)



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FDA Nutrition Activities Related to Healthy People 2020

- Proposed regulations
  - Updating Nutrition Facts labels
  - Changes in regulations affecting serving sizes
  - Menu labeling and vending machine labeling
- GRAS ("generally recognized as safe") status of partially hydrogenated oils
- Draft voluntary sodium reduction targets
- Health claims

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Proposed Regulation: Nutrition Facts Label

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per 2/3 cup

Calories 230

% DV*	
12%	**Total Fat** 8g
5%	Saturated Fat 1g
	Trans Fat 0g
0%	**Cholesterol** 0mg
7%	**Sodium** 160mg
12%	**Total Carbs** 37g
14%	Dietary Fiber 4g
	Sugars 1g
	Added Sugars 0g
	Protein 3g
10%	**Vitamin D** 2mcg
20%	**Calcium** 260mg
45%	**Iron** 8mg
6%	**Potassium** 235mg

* Footnote on Daily Values (DV) and calories reference to be inserted here.

Proposed label will help consumers achieve HP2020 objectives to:

- Reduce consumption of **saturated fat** (NWS-18)
- Reduce consumption of **sodium** (NWS-19)
- Reduce consumption of calories from
  - **Solid fats** (NWS-17.1)
  - **Added sugars** (NWS-17.2)
  - **Solid fats and added sugars** (NWS-17.3)
- Increase consumption of **calcium** (NWS-20)

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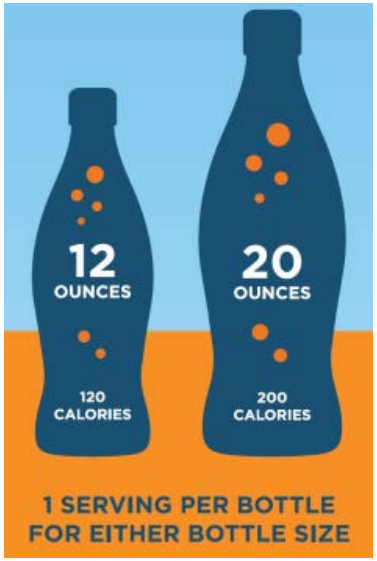
Proposed Regulation: Updating Serving Sizes and RACCs

- Reference amounts customarily consumed (RACCs)
  - Based on recent national food intake data
  - Used to establish product serving sizes
  - **NOT** a recommended amount to eat
- Serving sizes will be more realistic to reflect how much people typically eat at one time

  Example: Ice cream
  - Current RACC: ½ cup
  - Proposed RACC: 1 cup

  Example: Soda
  - Both 12- and 20-ounce bottles of soda would equal 1 serving, since people typically drink either of these sizes in one sitting
- Regulation would improve Nutrition Facts label by
  - Helping consumers see how many calories they are actually eating
  - Assisting consumers in managing their overall caloric intake and eating healthier diets



Proposed Regulations: Menu and Vending Machines Labeling

Nutrition Labeling of Standard Menu Items in Restaurants and Similar Retail Food Establishments

Published April 6, 2011 (76 FR 19192)

Calorie Labeling of Articles of Food in Vending Machines

Published April 6, 2011 (76 FR 19238)

- Patient Protection and Affordable Care Act (ACA) of 2010
  - Requires restaurants and similar establishments, with 20 or more locations, to list calorie content for standard menu items
  - Other nutrient information would be available upon request
- ACA also requires vending machine operators who own or operate 20 or more vending machines to disclose calorie content for certain items

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Partially Hydrogenated Oils and GRAS Status

INGREDIENTS: WHOLE GRAIN POPCORN, PARTIALLY HYDROGENATED SOYBEAN OIL, SALT, NATURAL AND ARTIFICIAL FLAVOR [MILK], COLOR ADDED,

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per 2/3 cup

Calories 230

% DV*	
12%	**Total Fat** 8g
5%	**Saturated Fat** 1g
	***Trans* Fat** 0g

- GRAS: **G**enerally **R**ecognized **A**s **S**afe
- FDA requested comments on tentative conclusion that partially hydrogenated oils, the primary dietary source of industrially produced trans fat in processed foods, are not GRAS
- If GRAS status revoked, PHOs would be considered food additives and require premarket review/approval by FDA, absent a subsequent determination of GRAS status for a particular use
- Addresses objective to reduce consumption of calories from solid fats (NWS-17.1)
- Trans Fat required on label since 2006
  - 2003 intake: 4.6 grams/person/day
  - 2012 intake: 1.0 gram/person/day

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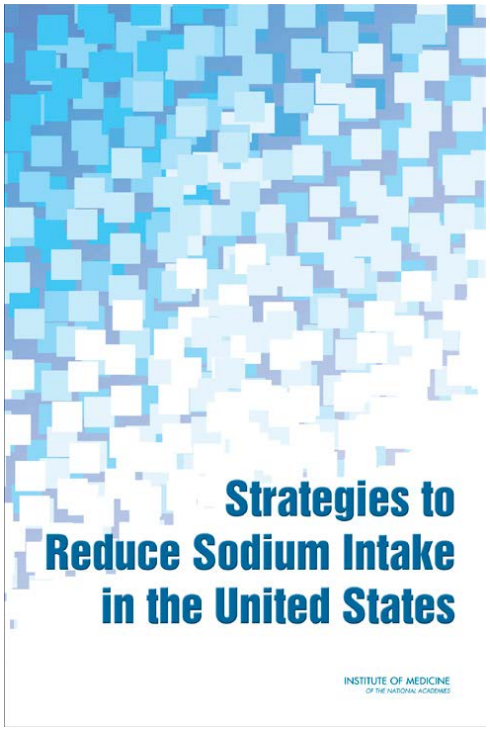
Sodium Reduction: FDA Considers Voluntary Targets

- **Sodium consumption in U.S. remains much higher than recommended levels**
  - NWS-19: Reduce sodium intake in the population
  - Decreasing sodium intake expected to lower morbidity & mortality and have large cost savings
- **Most sodium comes from salt added to processed foods during manufacturing**
  - Public health approach: Reduce sodium in overall food supply
- FDA and USDA requested comments, data, and evidence on sodium intake (76 FR 57050) including:
  - How industry promotes sodium reduction
  - Consumer understanding of sodium's role in chronic disease risk
  - Motivation and barriers in reducing sodium intake
- ***Joint Public Meeting on Approaches to Reduce Sodium Consumption*** (held on Nov. 10, 2011) http://www.fda.gov/Food/NewsEvents/WorkshopsMeetingsConferences/ucm279012.htm



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FDA Authorized Health Claims Addressing HP2020 Objectives

Model Health Claim Examples	Objectives & Issues Addressed
Diets low in saturated fat and cholesterol and rich in fruits, vegetables, and grain products that contain some types of dietary fiber, particularly soluble fiber, may reduce the risk of heart disease, a disease associated with many factors. (21 CFR 101.77)	NWS-14. **Increase fruits** NWS-15. **Increase variety and amount of vegetables** NWS-18. **Reduce saturated fat**
Diets low in sodium may reduce the risk of high blood pressure, a disease associated with many factors. (21 CFR 101.74)	NWS-19. **Reduce sodium**
Adequate calcium throughout life , as part of a well-balanced diet, may reduce the risk of osteoporosis. (21 CFR 101.72)	NWS-20. **Increase calcium**

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Summary

- FDA is helping to achieve HP2020 targets through
  - Proposed regulations to improve nutrition labeling
  - Initiatives aimed at reducing trans fat and sodium in the food supply
  - Health claims that may encourage consumers to choose healthier products
- For most NWS objectives that FDA is involved in, data show improvements towards meeting the HP 2020 targets

	NWS Objective
Improving: 6 objectives	
Little or no change: 3 objectives	
Baseline data only: 1 objective	

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Thank You!

U.S. Food and Drug Administration

Protecting and Promoting Public Health

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Janet Collins, PhD

Director, Division of Nutrition, Physical Activity, and Obesity
Centers for Disease Control and Prevention

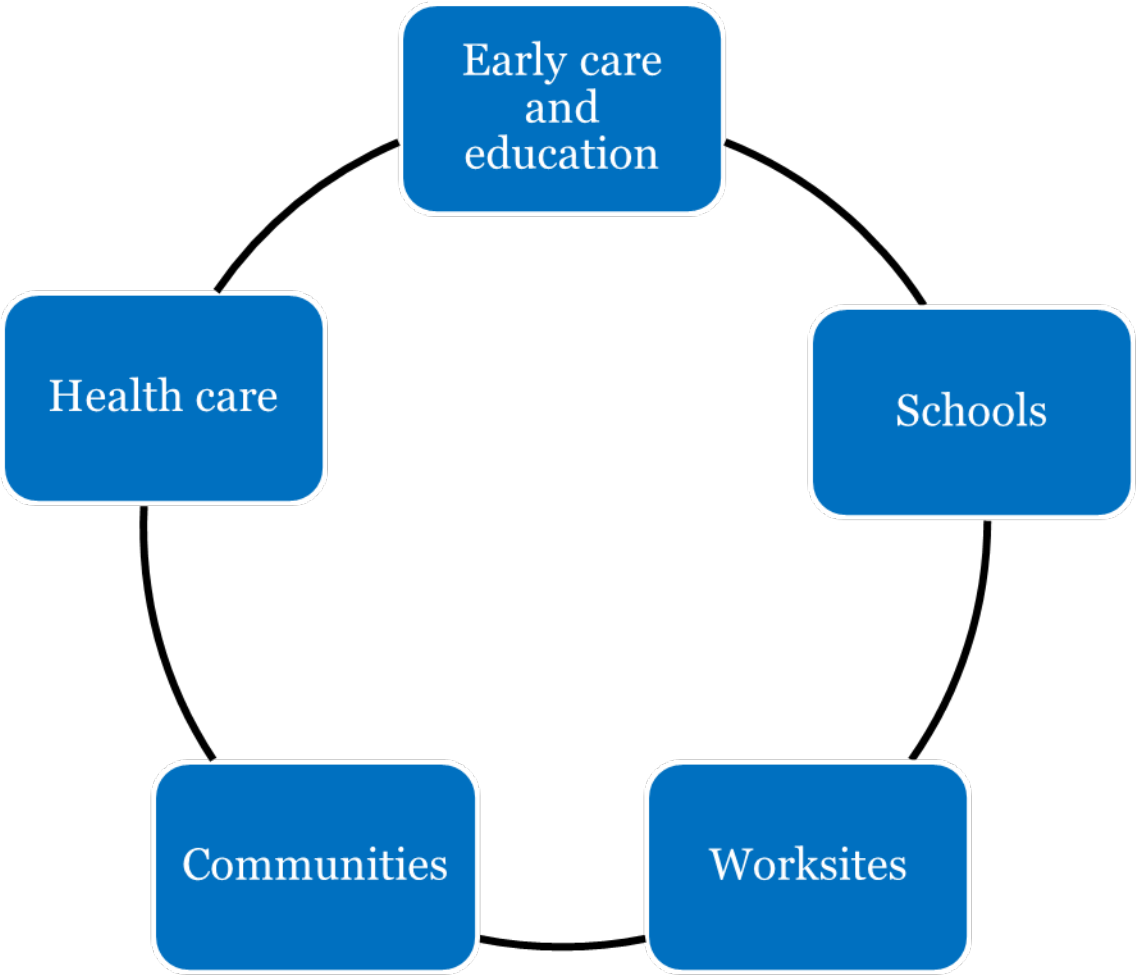
Supporting Healthy People Through Healthy Places, 2014

Healthy People 2020

Office of Disease Prevention and Health Promotion

PLASTIC

Supporting Healthy People Through Healthy Places



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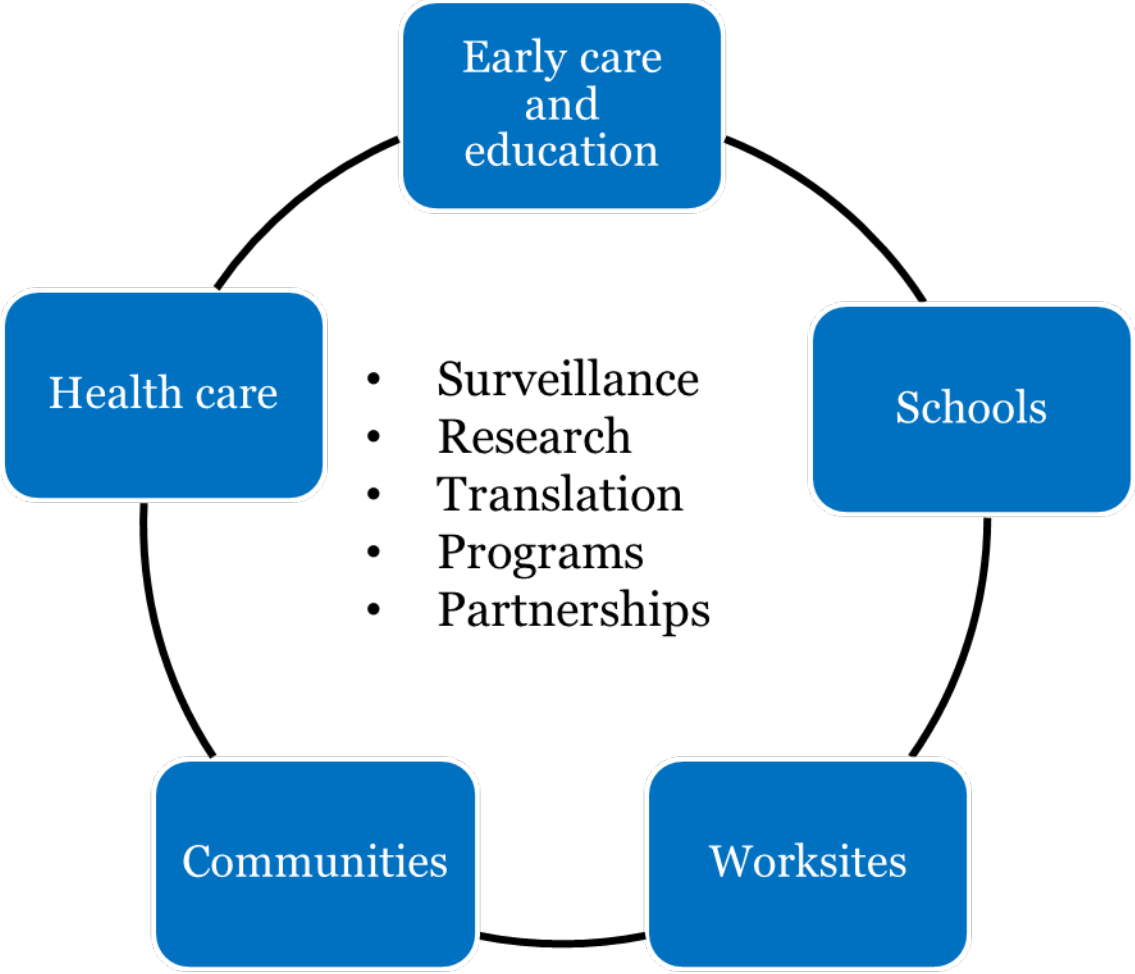
The Role of CDC in Healthy Places



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HP2020 Selected Healthy Places Objectives

Child Care

- Nutrition standards for preschool-aged children in child care. (NWS-1)
- Licensing regulations for physical activity provided in child care (PA-9)

K-12 School Settings

- Nutritious foods and beverages outside of school meals (NWS-2)
- Daily physical education for all students (PA-4)

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HP2020 Selected Healthy Places Objectives

Worksites

- Worksites that offer nutrition or weight management classes or counseling (NSW-7 D)
- Access to employer-based exercise programs (PA-12D)

Communities

- Access to healthy food retail outlets (NWS-3 and 4D)
- Built environment supports for physical activity (PA-15 D)

Health Care

- Physicians routinely measure BMI (NWS-5) and provide counseling for nutrition, weight (NWS-6) and physical activity (PA-11)

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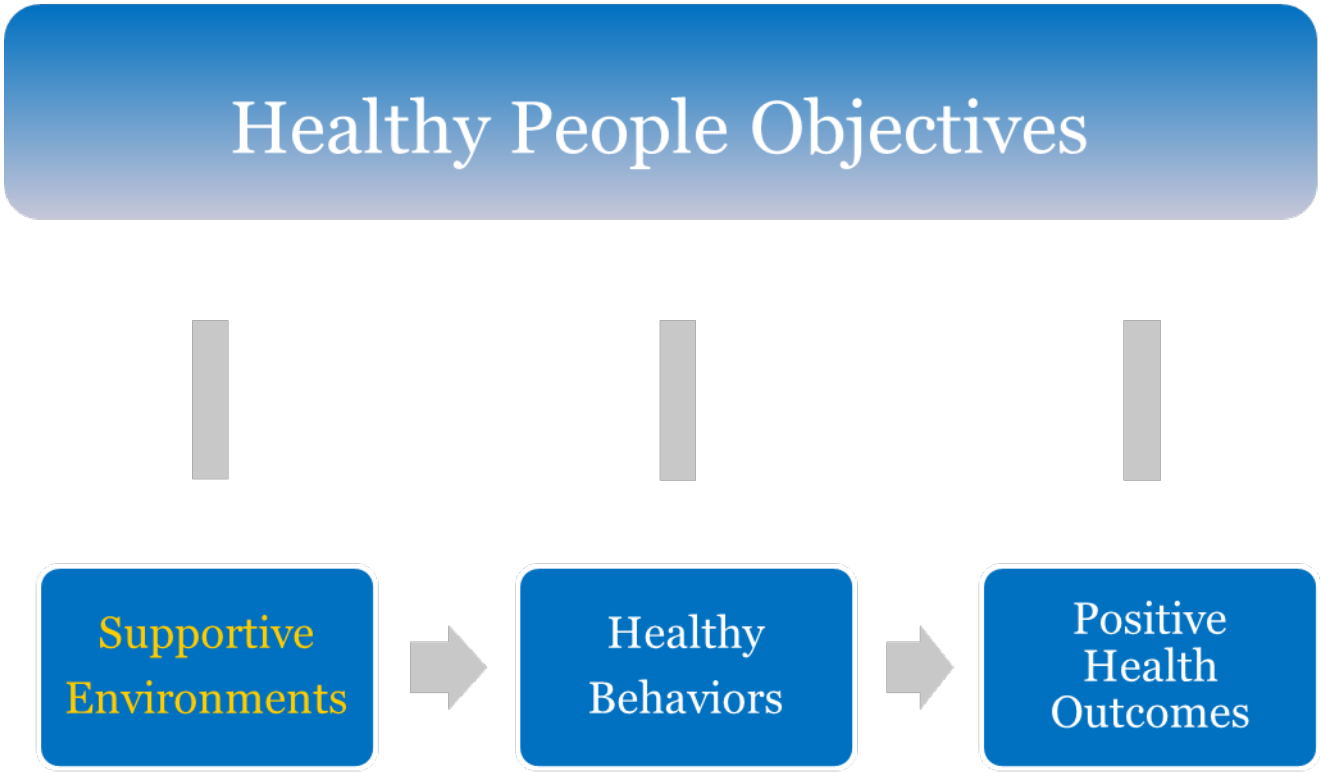
Supporting Health People Through Healthy Places



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Early Care and Education (ECE)

Why?

- 6.7 million children, aged 0-4 years, are in regular child care arrangements with non-relatives
- Early introduction to healthful behaviors

Examples

- *Let's Move! Child Care*
- ECE Learning Collaboratives

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Schools

Why?

- More than 50 million children are in K-12 school settings
- Healthy, active children learn better
- Critical time to establish lifelong healthy habits

Examples

- Comprehensive school physical activity programs
- Local education wellness polices

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Worksites

Why?

- 43 million adults work 30 hours or more per week
- Healthy workers have:
  -Lower health care costs
  -Lower absenteeism
  -Higher productivity

Examples

- Health and Sustainability Guidelines for Federal Concessions and Vending Operations (HHS and GSA)
- Worksite incentives for physical activity

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Communities

Why?

- Physical environments influence healthy behaviors
- Social support/social norms influence healthy behaviors

Examples

- Racial and Ethnic Approaches to Community Healthy Programs (REACH)
- Sodium Reduction in Communities Program

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Health Care

Why?

- Approximately 80% percent of adults and 90% of children see a health care professional each year
- Physicians and other health professionals are important influencers of healthy behaviors

Examples

- Electronic Health Records
- Community-clinical linkages

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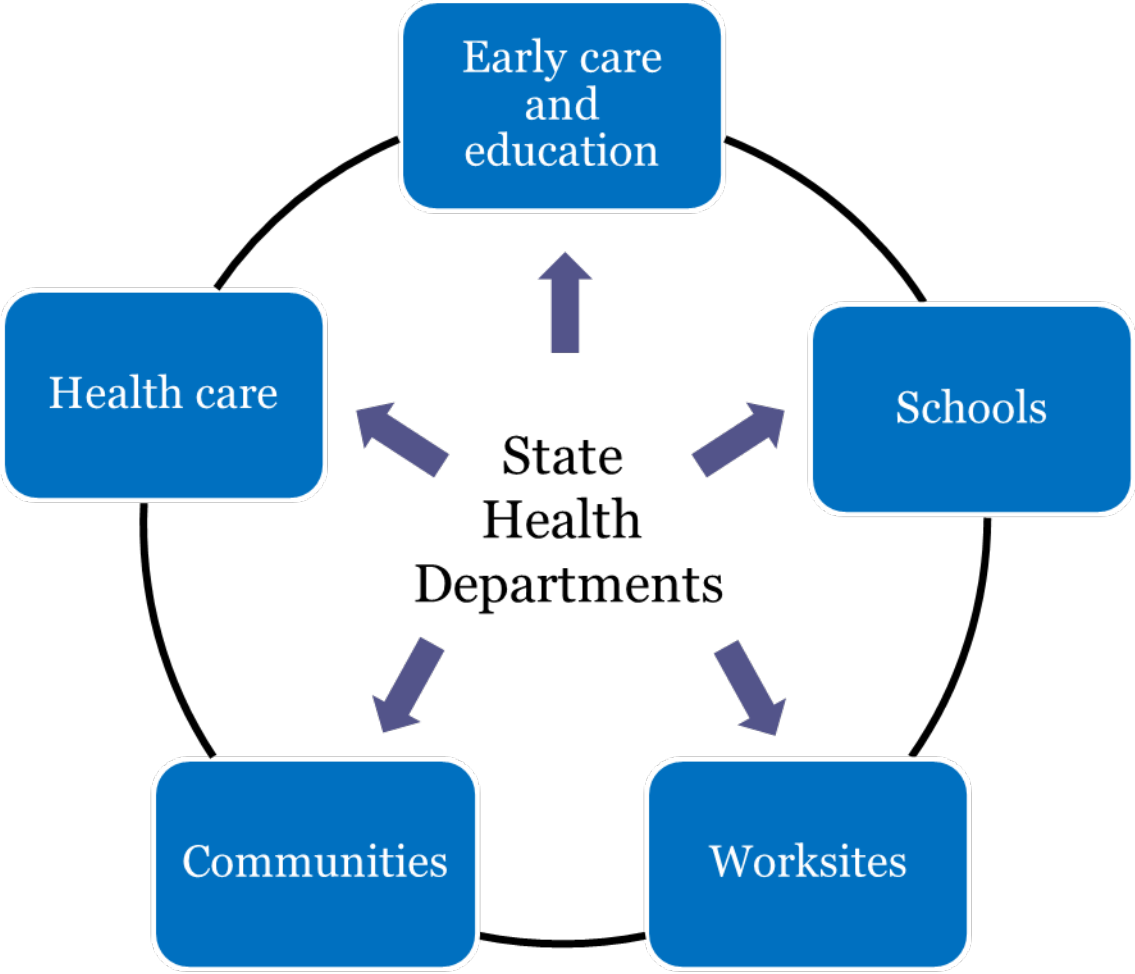
State Health Actions: A Comprehensive Approach



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Summary

Together we are working:

- at the tribal, local, state, and Federal Levels…..
- across sectors…..

To create environments that support healthy dietary and physical activity choices, particularly for high risk groups, and to address Healthy People 2020 objectives.

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Communities Putting Prevention to Work: Seattle & King County

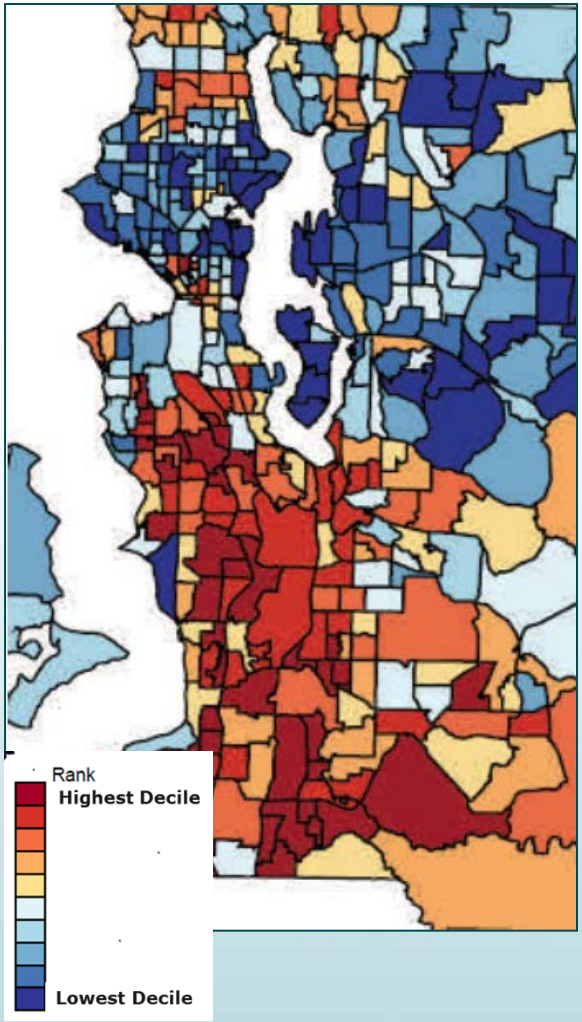
Jim Krieger, MD, MPH

May 9, 2014

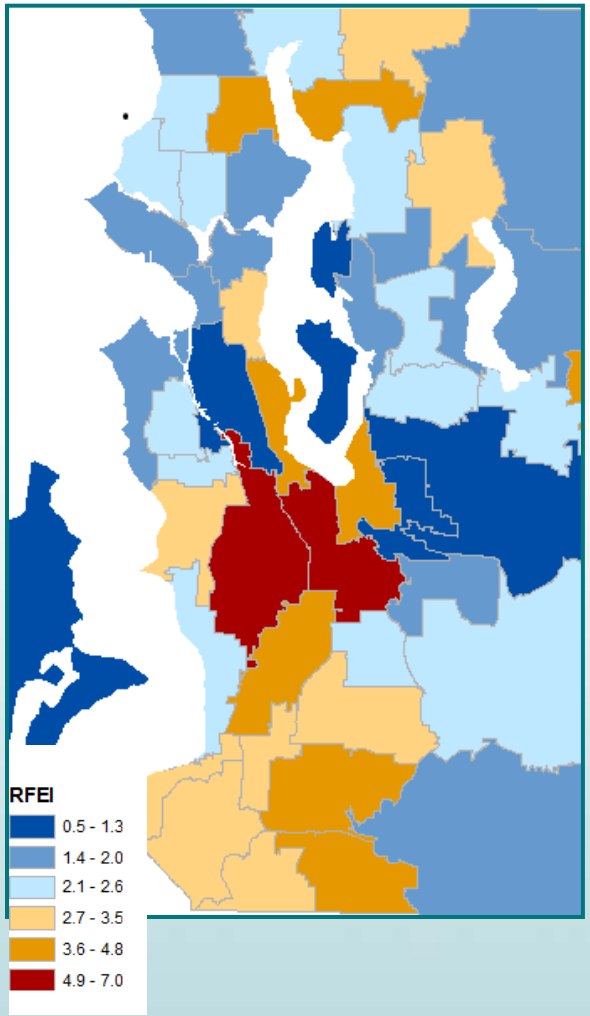
Public Health
Seattle & King County

An Opportunity to Address Health Inequity

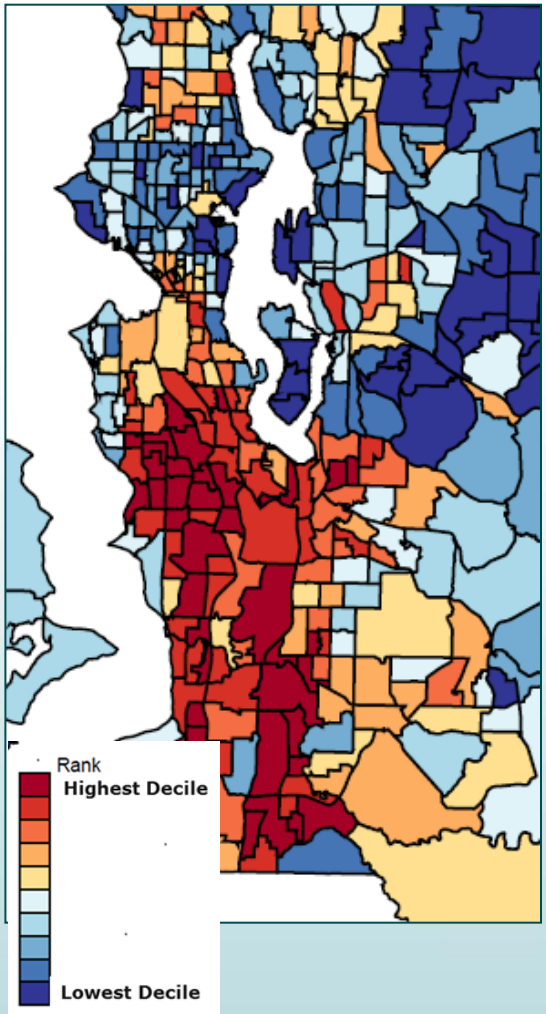
Obesity



Food Environment



No Physical Activity



It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change.

- Institute of Medicine

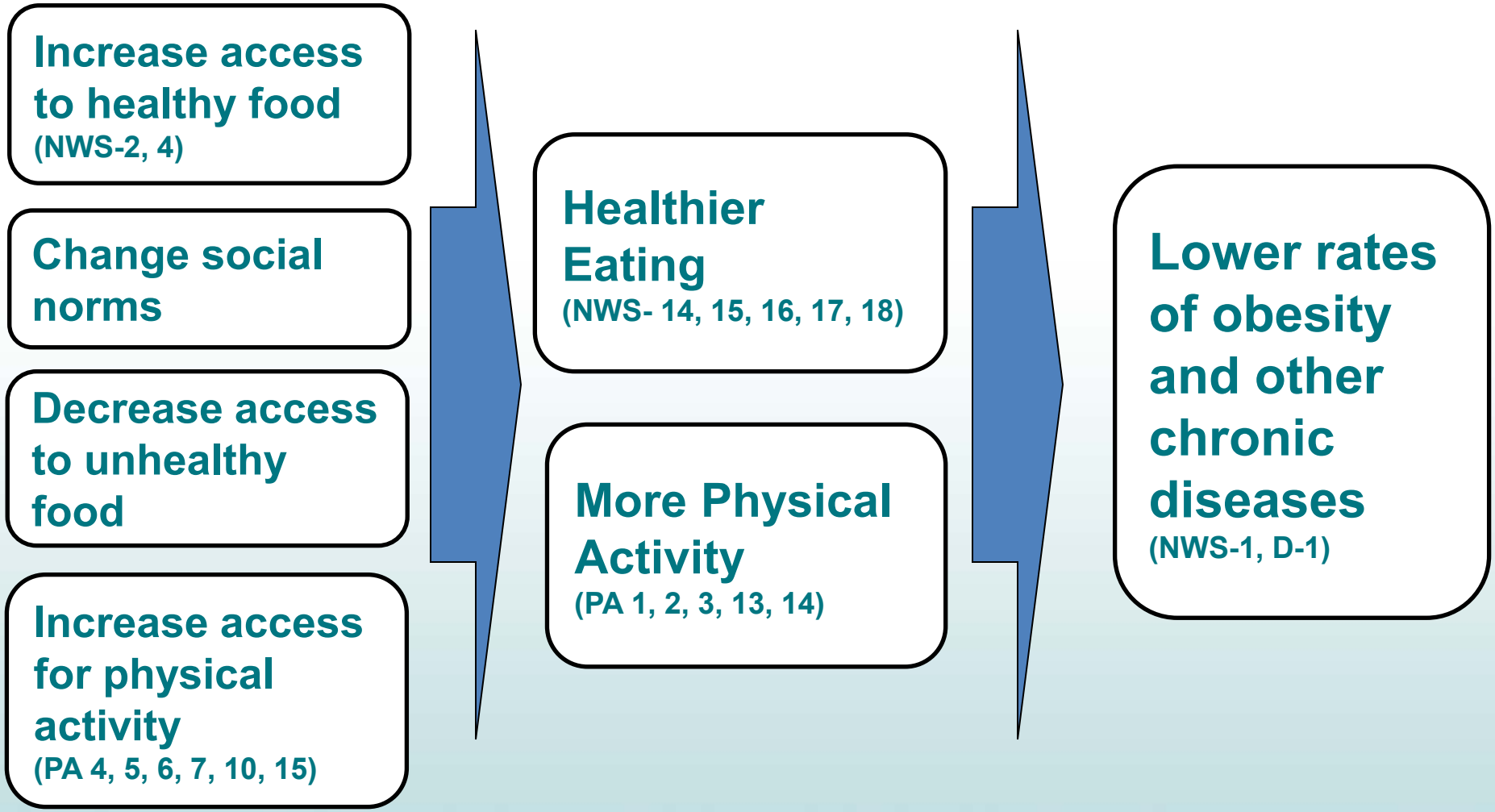
CPPW Overview - 1

- Goals:
  - Decrease obesity through healthy eating and active living (HP 2020 goal)
  - Decrease health inequities (HP 2020 goal)
- Federal stimulus funds to reduce chronic diseases related to obesity and tobacco in 55 sites across US
- $15.5M (April 2010 – March 2013) in King County for obesity

CPPW Overview - 2

- Work with community partners
  - $10 million in grants to 55 partners
  - Leadership team
  - Coalition of >200 members
- Reach people where they live, work, learn, play

Promoting Healthy Eating and Active Living



Increase access to physical activity

- Implement high quality PE (63,000 students)
- Open school facilities after hours (25 schools)
- Make it easier for kids to walk and bike to school (124,000 students)
- Improve nutrition and physical activity standards at childcare settings (8500 children)
- Support cities' efforts to adopt bicycle and pedestrian plans
  (5 cities, 189,000 residents)
- Healthy Comprehensive Plans (1.9 million residents)

Increase access to healthy food

Decrease access to unhealthy food

- Improve nutrition in schools (6 districts, 125,000 students)
- Farmers markets expand access (201,000 WIC & SNAP recipients)
- 47 corner stores join Healthy Foods Here
- Farm to Table programs (20 senior sites with 2000+ seniors, 30 childcare sites with nearly 1000 children)
- Remove sugary drink vending machines and serve water at events (5 churches, 3500 members)
- Healthy food polices in cafeterias, vending machines and public facilities (5 government agencies with 28,000 employees)
- Promote work-site wellness policy changes (4900 employees)

Change social norms

Let's Do This!

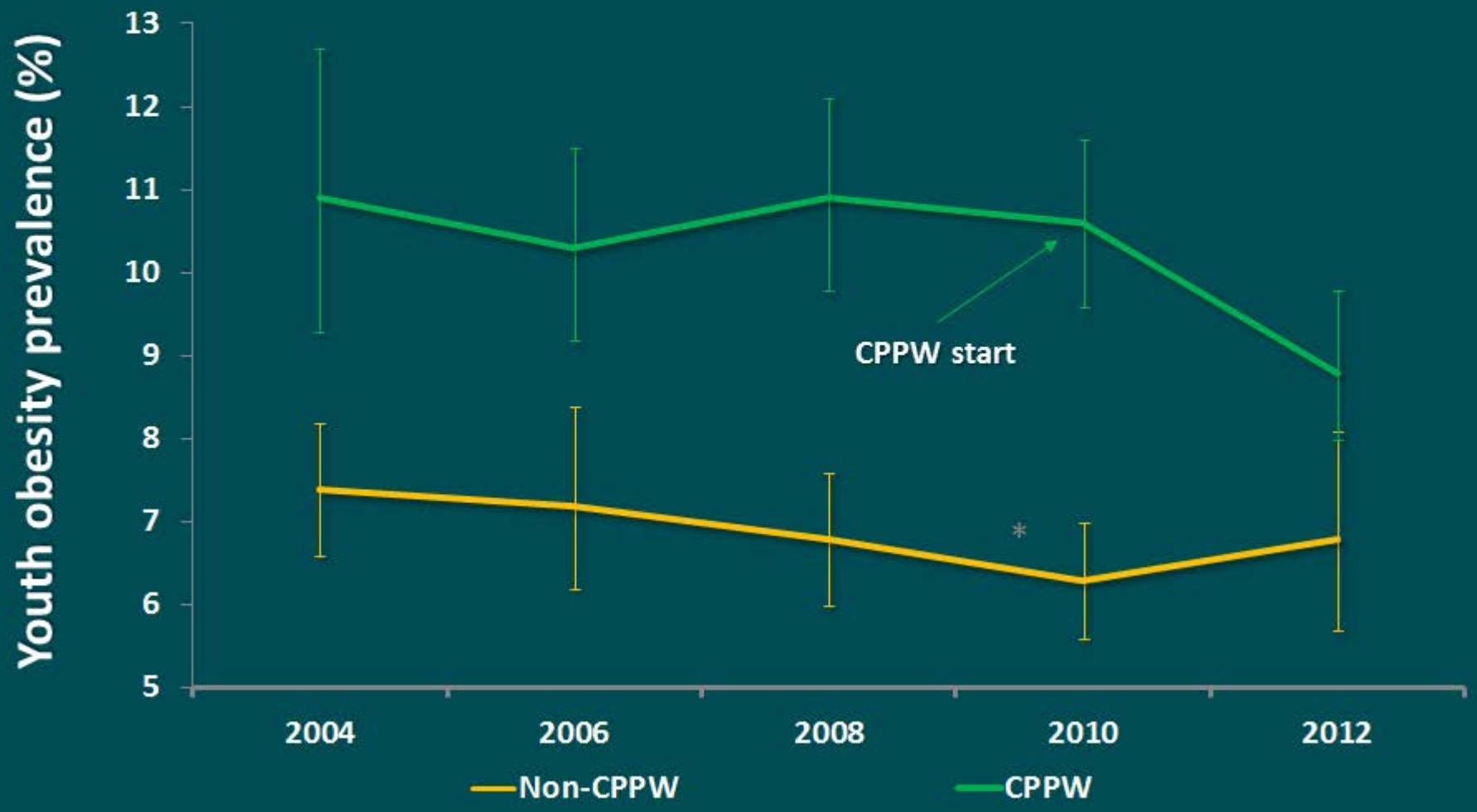
Schools

- Healthier school food
  - Trained 500+ food service staff
  - New recipes by celebrity chefs
  - Salad bars
  - Restricting unhealthy foods
  - Event guidelines
- Farm-to-School
- School gardens
- Student-led healthy eating marketing campaigns
- High quality PE
  - New curricula
  - PE staff training
  - Tools and equipment
- Joint Use Agreements
- Safe Routes to Schools

Farmers Market Access Project

- Increased access for SNAP and WIC at 9 markets
- Technology and training:
  - EBT machines
  - Mobile benefits processing
- Train WIC staff
- Community outreach

Youth obesity declines in school districts where we invested in CPPW



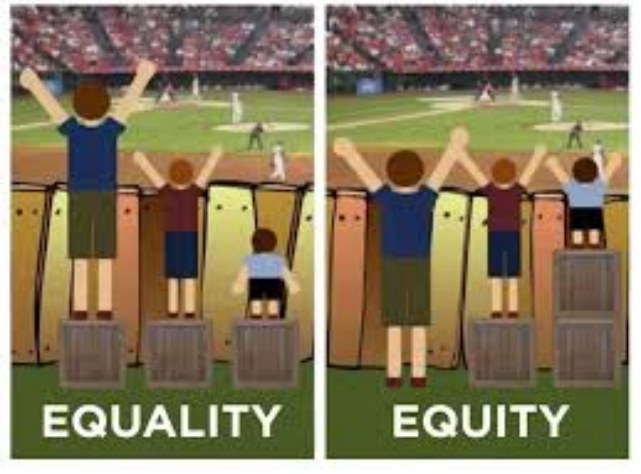
Youth include students in grades 8, 10 and 12. Data source: Healthy Youth Survey

Success Factors -1

- Policy, systems and organizational change to promote healthy environments and determinants of health
- Lasting relationships with partners from multiple sectors to support PSE change
  - Schools, childcare, hospitals, local government, farmers, churches, and more
  - Technical Assistance
  - Funding (re-granting)

Success Factors - 2

- Community engagement
- Funding directly at local level
- Strong backbone organization to convene and manage
- Health equity lens
- Sufficient per capita funding to accelerate change



Community Engagement

Challenges

- Time frame: it takes 5-10 years (for community transformation)
- Need to show early wins
- Capacity for facilitating PSE change
- Lack of data to identify gaps in PSE and monitor progress
- Insufficient intensity of evaluation
- Siloed funding streams hamper integration of local work
- Differences in funder and local priorities
- Staying focused – so much to do

Sustaining the Work

Policy, systems and environment changes endure

Community engagement

Health Care Reform

- WA "Communities of Health" pilots
- Oregon global budget supports proven community prevention efforts
- Hospital community benefits
- Accountable Care Organizations and Communities for Health

Investing in prevention

- Federal Prevention and Public Health Fund & appropriations
- MA Prevention and Wellness Fund
- King County Catalyst Fund/Communities of Opportunity
- Re-invest savings from upstream prevention activities?

Finding the win/wins across sectors

The End…Thanks

kingcounty.gov/health/cppw

Roundtable Discussion

Please take a moment to fill out our brief survey

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Home | About Healthy People | 2020 Topics & Objectives | Data | Learn | Implement | Get Involved | Leading Health Indicators

Home > Leading Health Indicators > LHI Infographic Gallery

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: Clinical Preventive Services LHI Webinar

Join us on May 22nd for a
Who's Leading the Leading Health Indicators? **Webinar**

Learn how one group is working to address the importance of immunizations for children.

Register soon!
www.healthypeople.gov

Healthy People 2020

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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

- Denise Stredrick (NIH/OD)
- Kara Morgan (FDA/OC)
- Camelia Thompson (FDA/OC)
- Stan Lehman (CDC/OD)
- Van Hubbard (NIH/NIDDK)
- Crystal McDade-Ngutter (NIH/NIDDK)
- Sheila Fleishhacker (NIH/NIDDK)
- Mark Kantor (FDA/CFSAN)
- Wenyen Juan (FDA/CFSAN)
- Janet Fulton (CDC/ONDIEH)
- Deb Galuska (CDC/ONDIEH)
- Kathleen Watson (CDC/ONDIEH)
- Rebecca Hines (CDC/NCHS)
- Leda Gurley (CDC/NCHS)
- Asel Ryskulova (CDC/NCHS)
- Kimberly Hurvitz (CDC/NCHS)
- Carter Blakey (HHS/ODPHP)
- Katrina Piercy (HHS/ODPHP)
- Stephanie Goodwin (HHS/ODPHP)
- Yen Luong (HHS/ODPHP)

Healthy People 2020