Prevention of Foodborne Illness and Medical Product Adverse Events: A Healthy People 2020 Progress Review

January 8, 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

Data Presentation

- Irma Arispe, PhD, Associate Director
  National Center for Health Statistics, CDC

Research and Program Presentation

- John Whyte, MD, MPH, Director
  Professional Affairs and Stakeholder Engagement
  Center for Drug Evaluation and Research, FDA
- Roberta Wagner, BS, MS, Deputy Director
  Regulatory Affairs , Center for Food Safety and Applied Nutrition, FDA
- CAPT David Goldman, MD, MPH, Assistant Administrator
  Office of Public Health Science
  Food Safety and Inspection Services, U.S. Department of Agriculture

Community Highlight

- Shelley Feist, Executive Director
  Partnership for Food Safety Education

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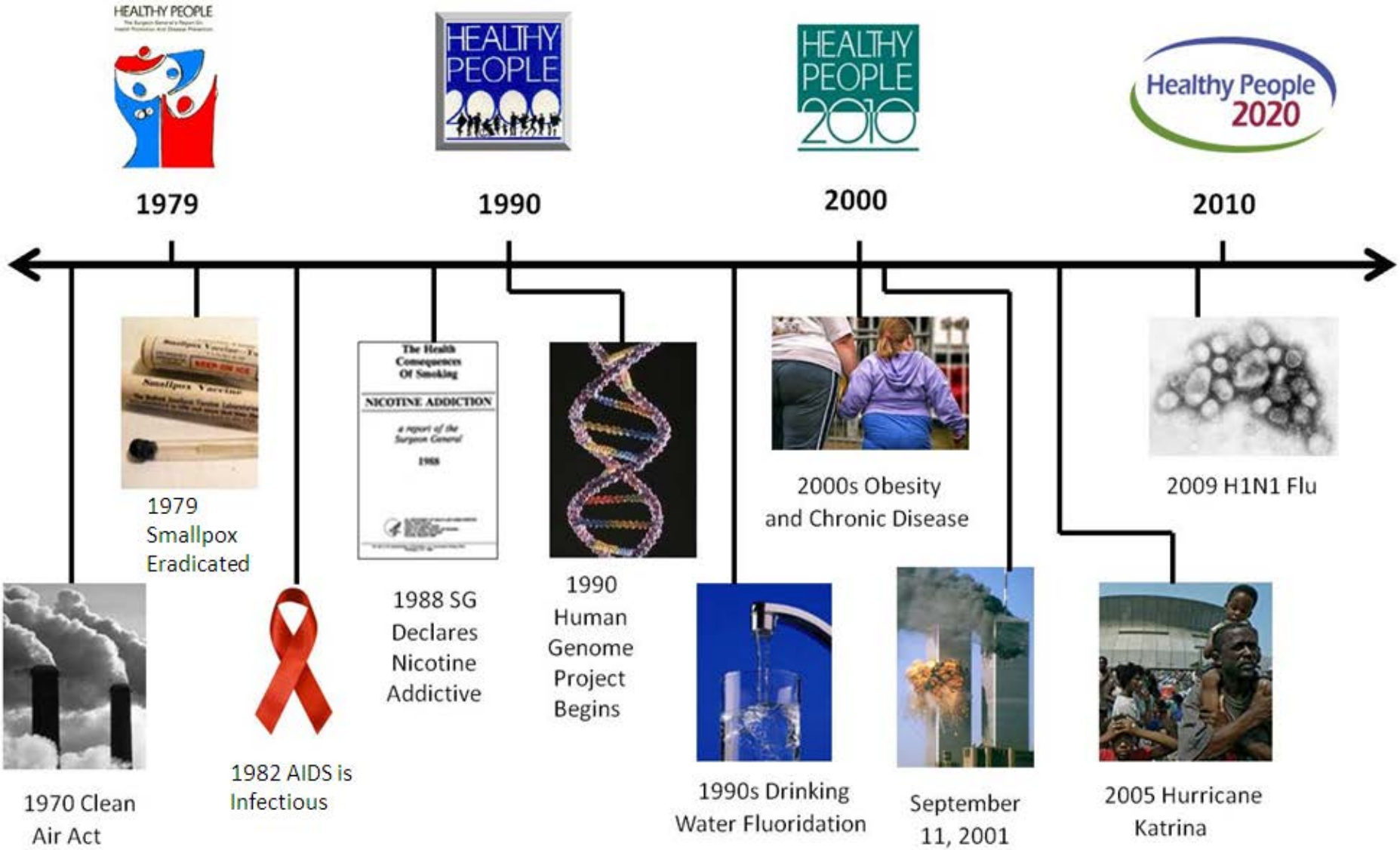
Healthy People 2020 Evolves



Overview: Food Safety

- 1 in 6 Americans is affected by foodborne illness each year
- Costs are estimated between $78 and $152 billion dollars annually (2011 and 2010)
- At least 2 million people acquire serious infections with antibiotic resistant bacteria annually, not all foodborne

SOURCE: Scharff 2011 and 2010

NOTES: 1 http://www.cdc.gov/drugresistance/threat-report-2013/
2 http://www.tufts.edu/med/apua/consumers/personal_home_5_1451036133.pdf (accessed 8-5-2013); extrapolated from Roberts RR, Hota B, Ahmad I, et al. Hospital and societal costs of antimicrobial-resistant infections in a Chicago teaching hospital: implications for antibiotic stewardship. Clin Infect Dis. 2009 Oct 15;49(8):1175-84

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Federal Agencies with Major Roles in Food Safety

- Food Safety and Inspection Service (FSIS)
- U.S. Food and Drug Administration (FDA)
- Centers for Disease Control and Prevention (CDC)

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Overview: Medical Product Safety

- **The role of the Food and Drug Administration**
  - Premarket Review
  - Postmarket Surveillance
  - Inspection
  - Compliance
  - Enforcement

- **Medical Products Include:**
  - Medical devices
  - Drugs
  - Biologics
  - Radiological Products

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Prescription Painkiller Overdoses in the US

15,000 Nearly 15,000 people die every year of overdoses involving prescription painkillers.

1 in 20 In 2010, 1 in 20 people in the US (age 12 or older) reported using prescription painkillers for nonmedical reasons in the past year.

1 Month Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for a month.

SOURCE: CDC Vital Signs. Prescription Painkiller Overdoses in the US. November 2011.

Irma Arispe, PhD

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

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Presentation Outline

- Food Safety
  - Foodborne infections
  - Foodborne disease outbreaks
  - Antimicrobial resistance
  - Food safety practices and food allergies

- Medical Product Safety
  - Adverse drug events
  - Tracking of adverse drug events
  - Potential new data source

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Food Safety: Public Health Impact

- **Foodborne illnesses caused by 31 major pathogens annually account for:**
  - 9.4 million episodes of foodborne illnesses
  - 55,961 hospitalizations
  - 1,351 deaths
- **Estimates of the illnesses caused by four key pathogens tracked annually in Healthy People are:**
  - *Salmonella*
    - 1,027,561 illnesses; 19,336 hospitalizations; and 378 deaths
  - *Campylobacter*
    - 845,024 illnesses; 8,463 hospitalizations; and 76 deaths
  - Shiga toxin producing *Escherichia coli* serogroup O157
    - 63,153 illnesses; 2,138 hospitalizations; and 20 deaths
  - *Listeria monocytogenes*
    - 1,591 illnesses; 1,455 hospitalizations; and 255 deaths

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SOURCES: Scallan, E., et al.; 2011a. Foodborne illnesses acquired in the United States—major pathogens. Emerg. Infect. Dis. 17(1): 7-15. Scallan, E., et al.; 2011b Foodborne illnesses acquired in the United States—unspecified agents. Emerg. Infect. Dis. 17(1): 16-22.

Major Data Systems Used for Foodborne Illness Surveillance

CDC leads federal surveillance efforts to collect foodborne illness and outbreak data with these systems:

- **Foodborne Diseases Active Surveillance Network (FoodNet)**
  - tracks laboratory confirmed cases of infection targeting nine pathogens transmitted commonly through food with a network of 10 states, USDA-FSIS and the FDA
- **National Outbreak Reporting System (NORS)**
  - collects reports of enteric disease outbreaks caused by bacterial, viral, parasitic, chemical, toxin, and unknown agents
- **National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS)**
  - tracks antimicrobial resistance in human infections caused by *Salmonella* and other enteric bacteria

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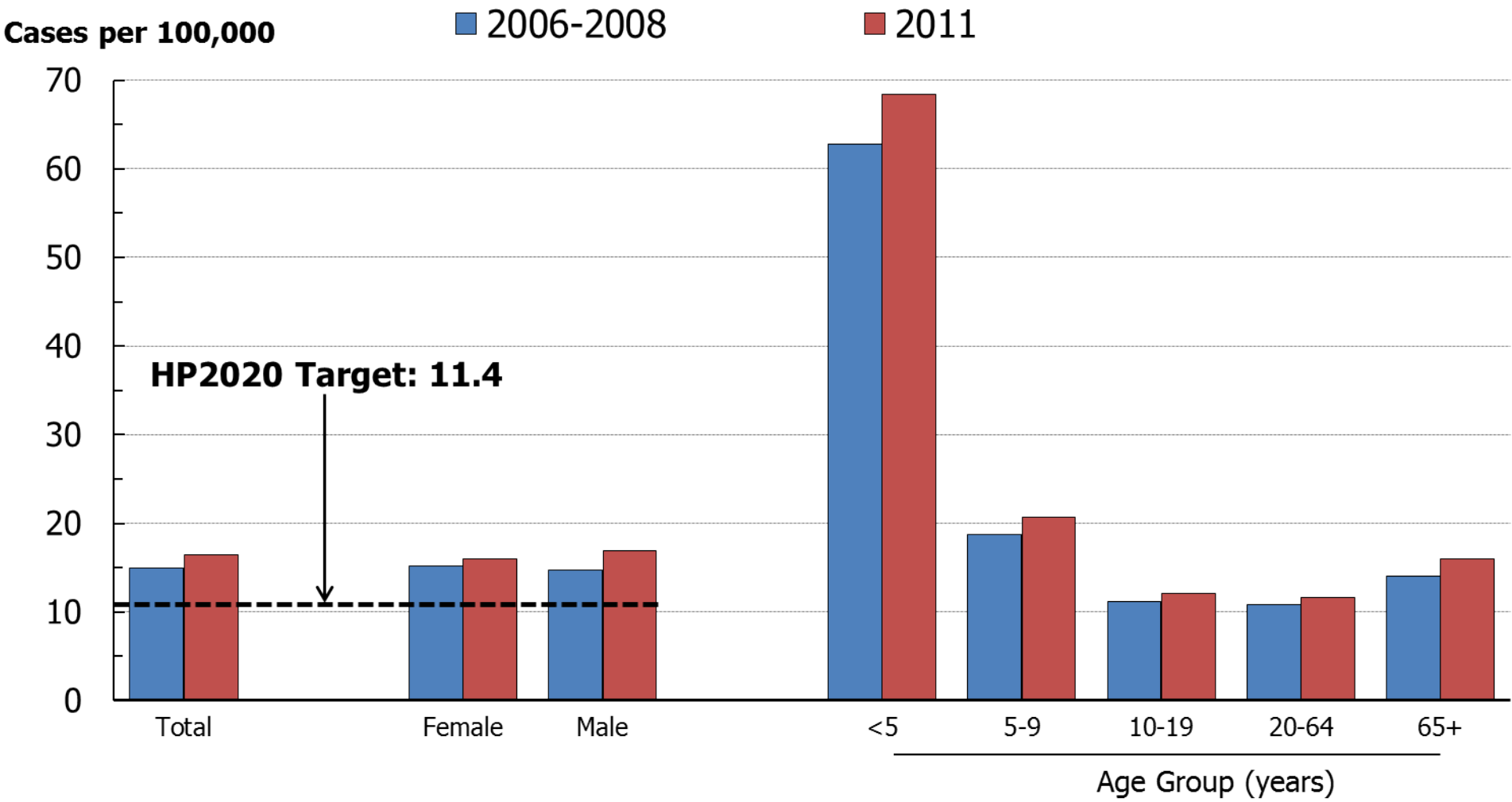
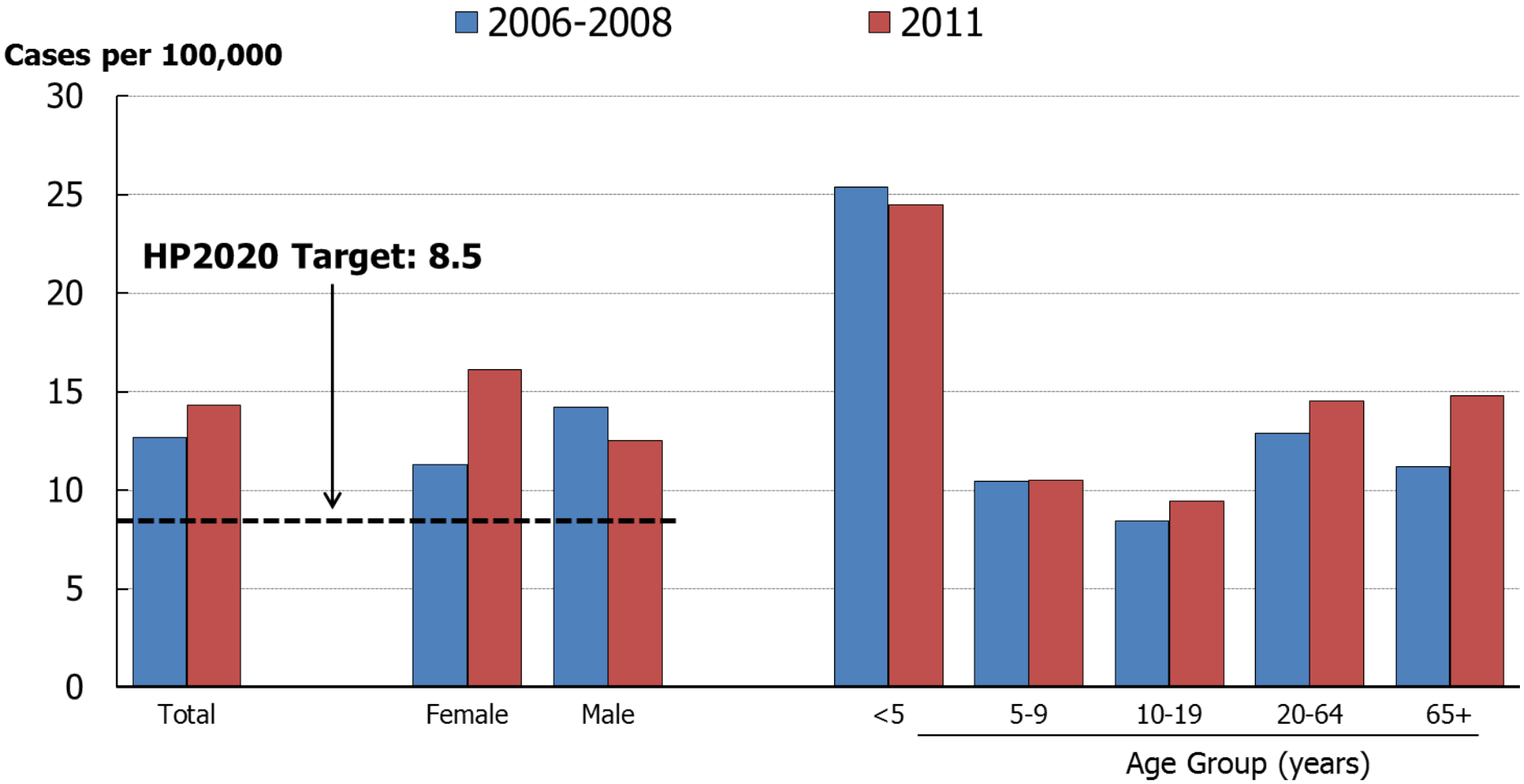
Infections Caused by *Salmonella*, 2006–2008* and 2011



NOTES: Data for age groups between 20 and 64 are similar and were aggregated to highlight the other, most at-risk groups; Rates include both foodborne and non-foodborne illnesses.
SOURCE: Foodborne Diseases Active Surveillance Network (FoodNet), CDC/NCEZID.
* The baseline figure was calculated using a 3-year average (2006-08).

Obj. FS-1.4
Decrease desired

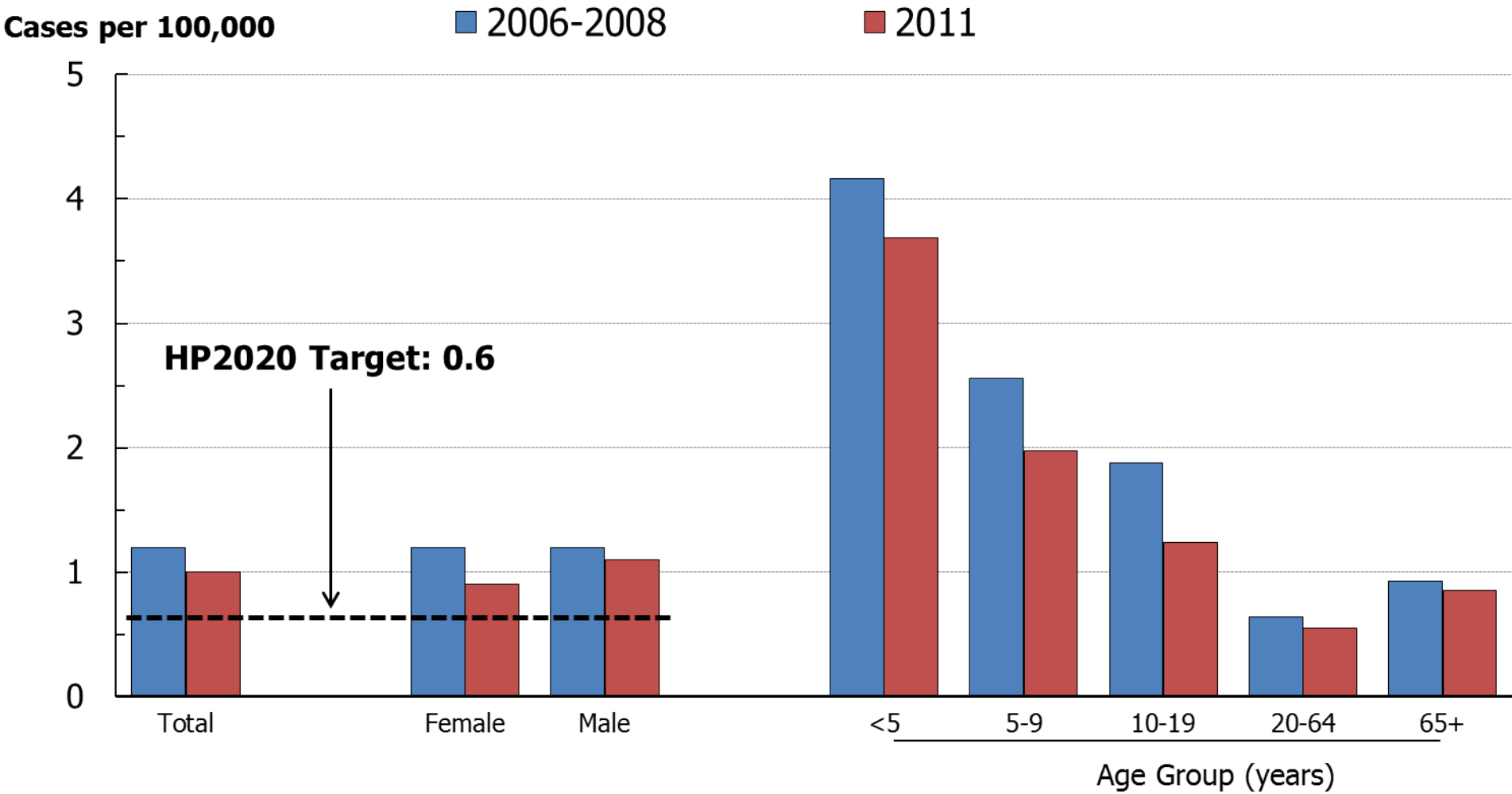
Infections Caused by *Campylobacter*, 2006–2008* and 2011



NOTES: Data for age groups between 20 and 64 are similar and were aggregated to highlight the other, most at-risk groups; Rates include both foodborne and non-foodborne illnesses.
SOURCE: Foodborne Diseases Active Surveillance Network (FoodNet), CDC/NCEZID.
* The baseline figure was calculated using a 3-year average (2006-08).

Obj. FS-1.1
Decrease desired

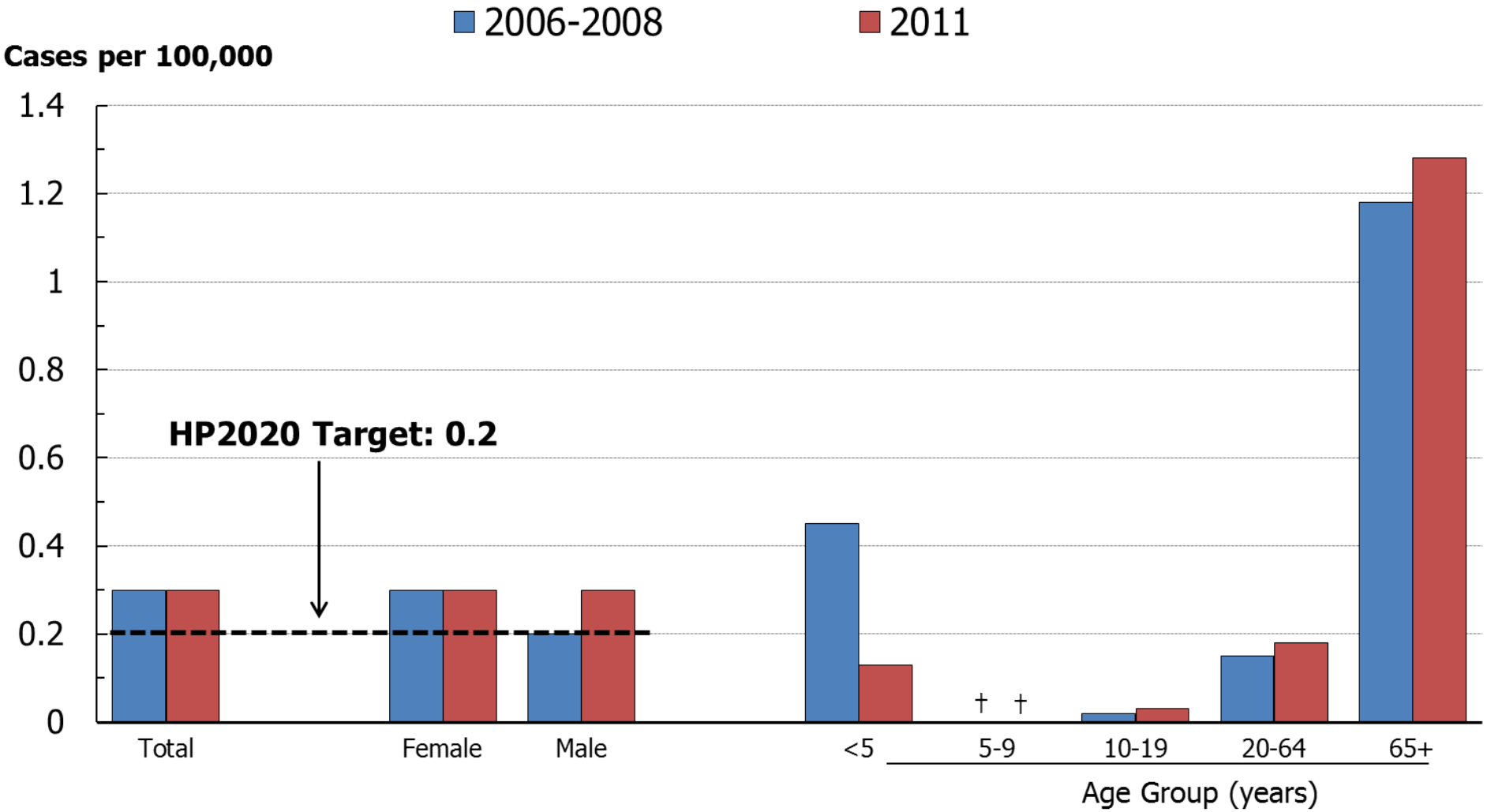
Infections Caused by *E. coli* * O157, 2006–2008** and 2011



NOTES: Data for age groups between 20 and 64 are similar and were aggregated to highlight the other, most at-risk groups; Rates include both foodborne and non-foodborne illnesses.
SOURCE: Foodborne Diseases Active Surveillance Network (FoodNet), CDC/NCEZID.
* STEC O157 is a Shiga toxin-producing *Escherichia coli*, serogroup O157.
** The baseline figure was calculated using a 3-year average (2006-08).

Obj. FS-1.2
Decrease desired

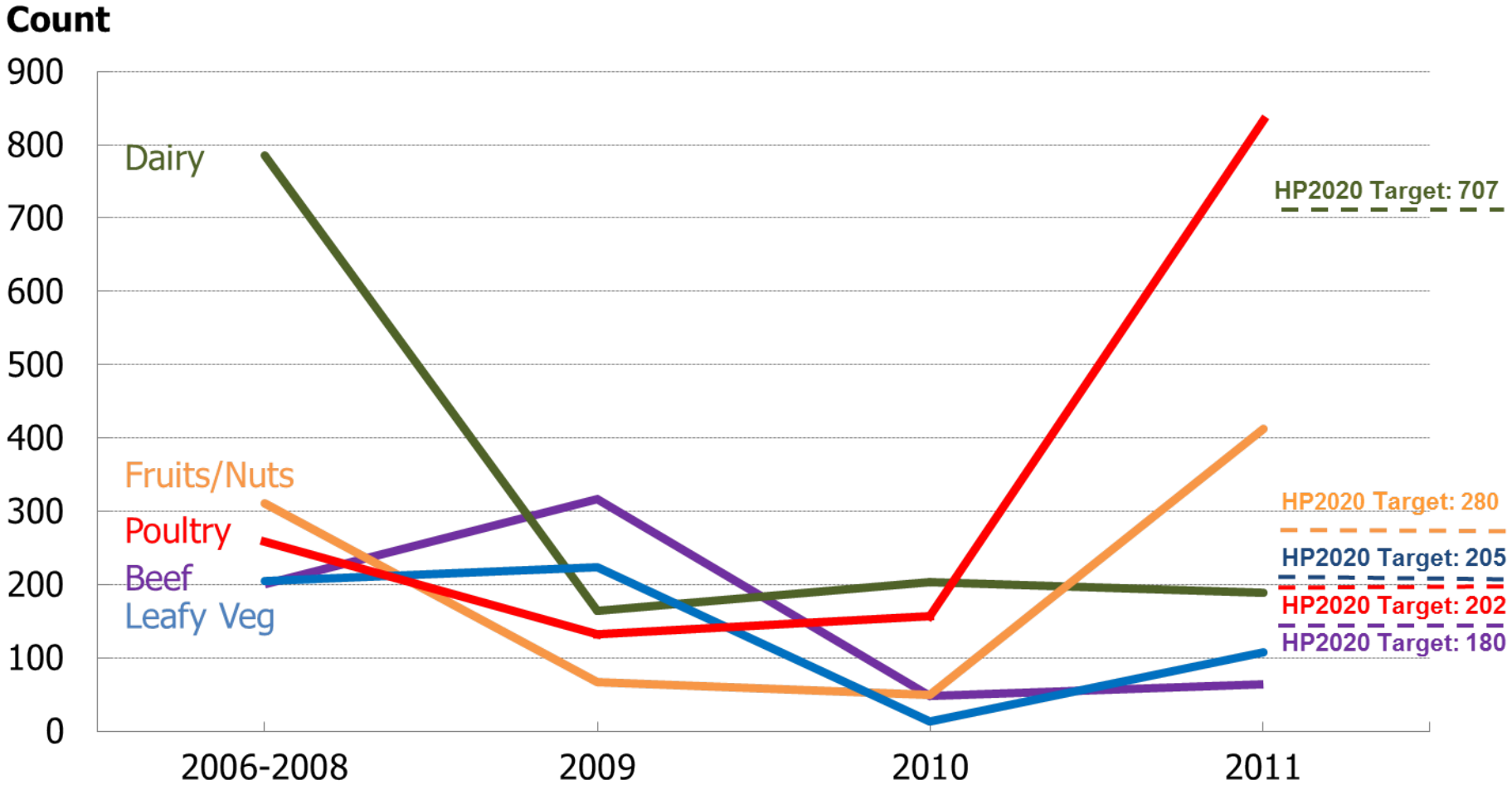
Infections Caused by *Listeria monocytogenes*, 2006–2008* and 2011



NOTES: Data for age groups between 20 and 64 are similar and were aggregated to highlight the other,most at-risk groups; Rates include both foodborne and non-foodborne illnesses.
SOURCE: Foodborne Diseases Active Surveillance Network (FoodNet), CDC/NCEZID.
*The baseline figure was calculated using a 3-year average (2006-08).
†Zero cases in 2006 through 2008, and 2011.

Obj. FS-1.3
Decrease desired

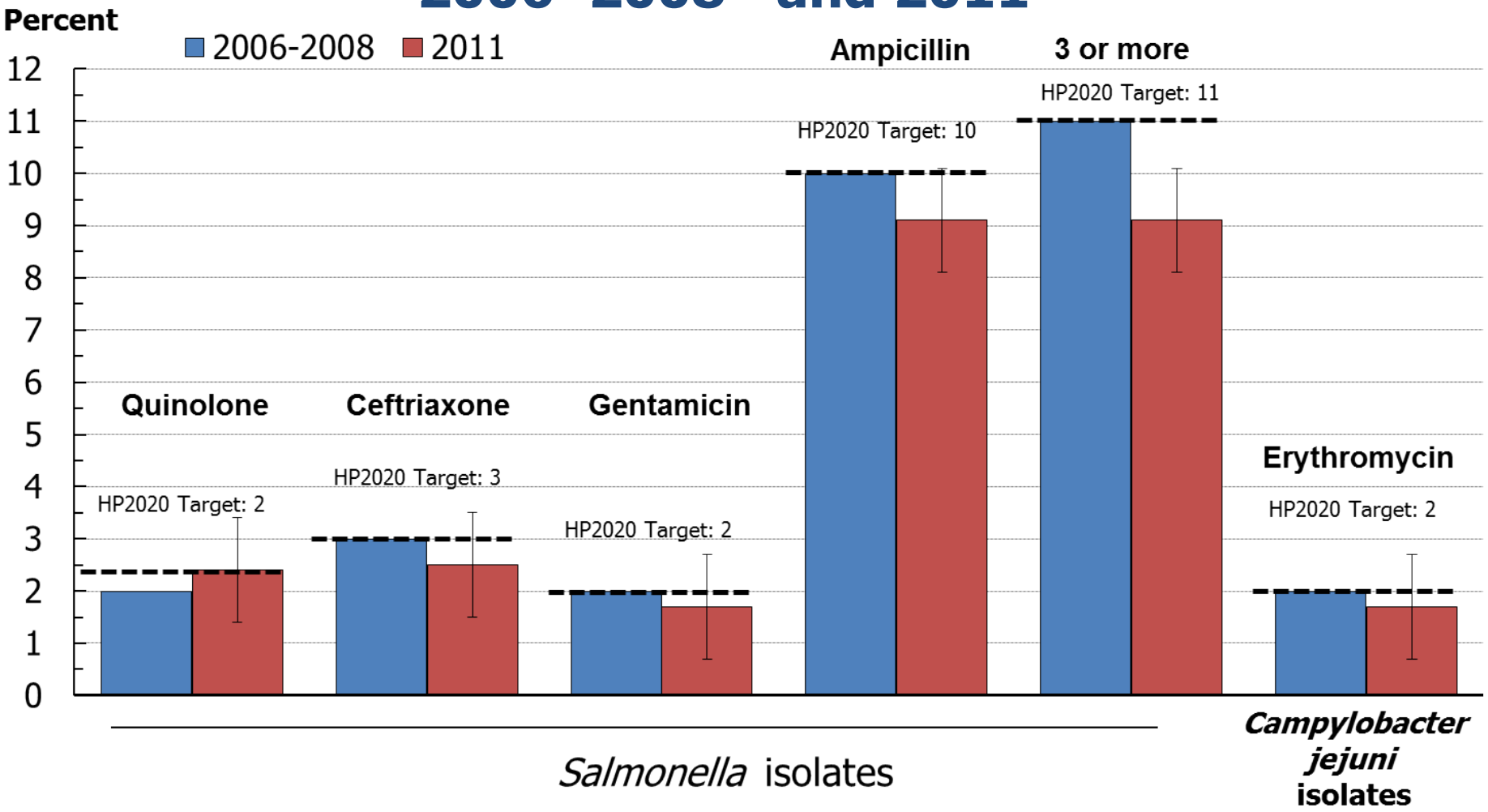
Outbreak-Associated Infections Attributed to Five Food Groups, 2006–2008* through 2011



*The baseline figure was calculated using a 3-year average (2006-08).
SOURCE: National Outbreak Reporting System (NORS), CDC/NCEZID and CSTE.

Obj. FS-2.1 through 2.5
Decrease desired

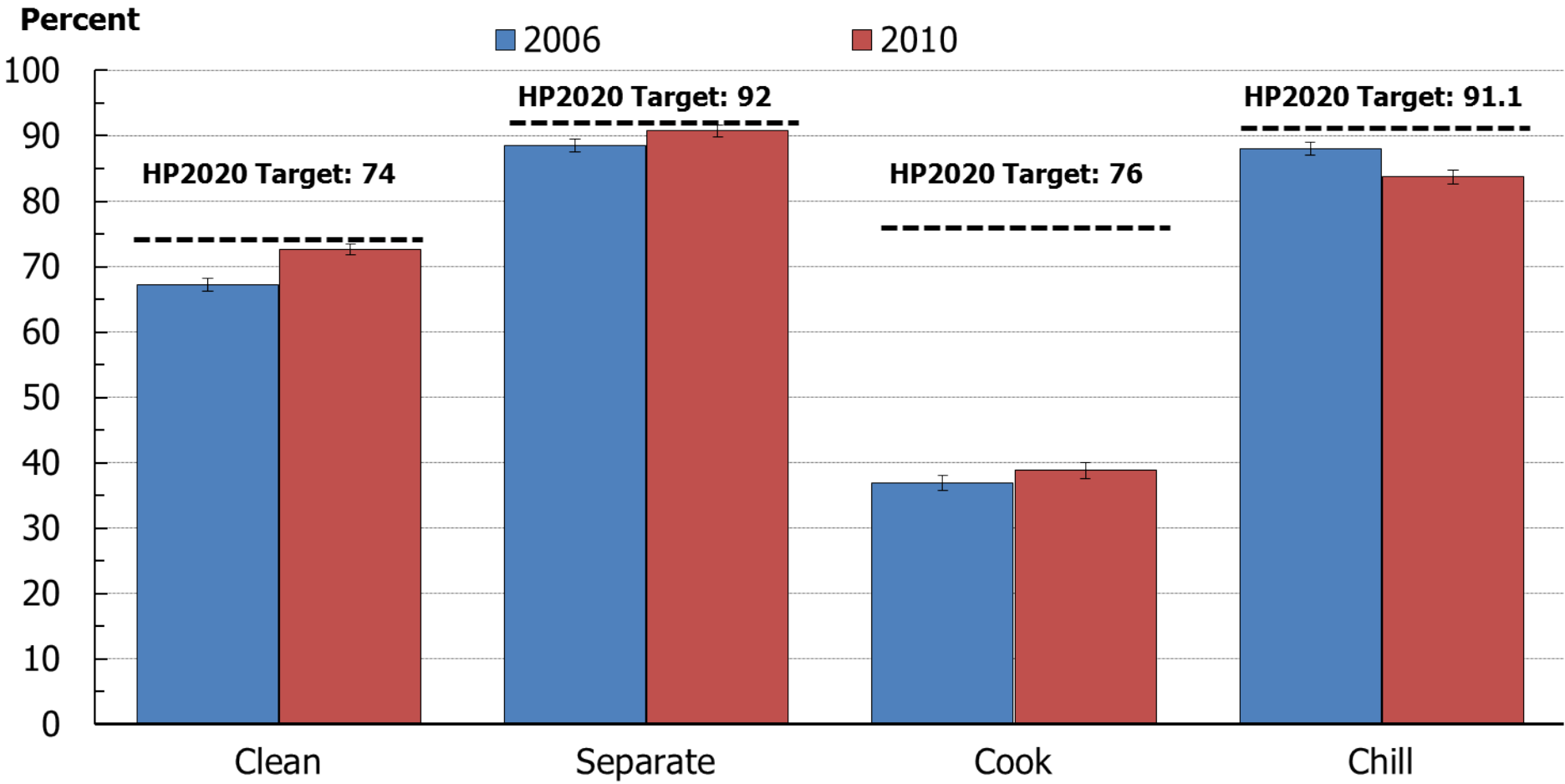
Percent of *Salmonella* and *Campylobacter* Clinical Isolates Resistant to Antibiotics, 2006–2008* and 2011



NOTES: I = 95% confidence interval; FS-3.5 tracks resistance of 3 or more from among 24 antibiotics; Confidence intervals were not available for baseline estimates.
SOURCE: National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS), CDC/NCEZID.
* The baseline is a 3-year average (2006-08).

Obj. FS-3.1 through 3.6
Maintain Baseline

Key Food Safety Practices, 2006 and 2010



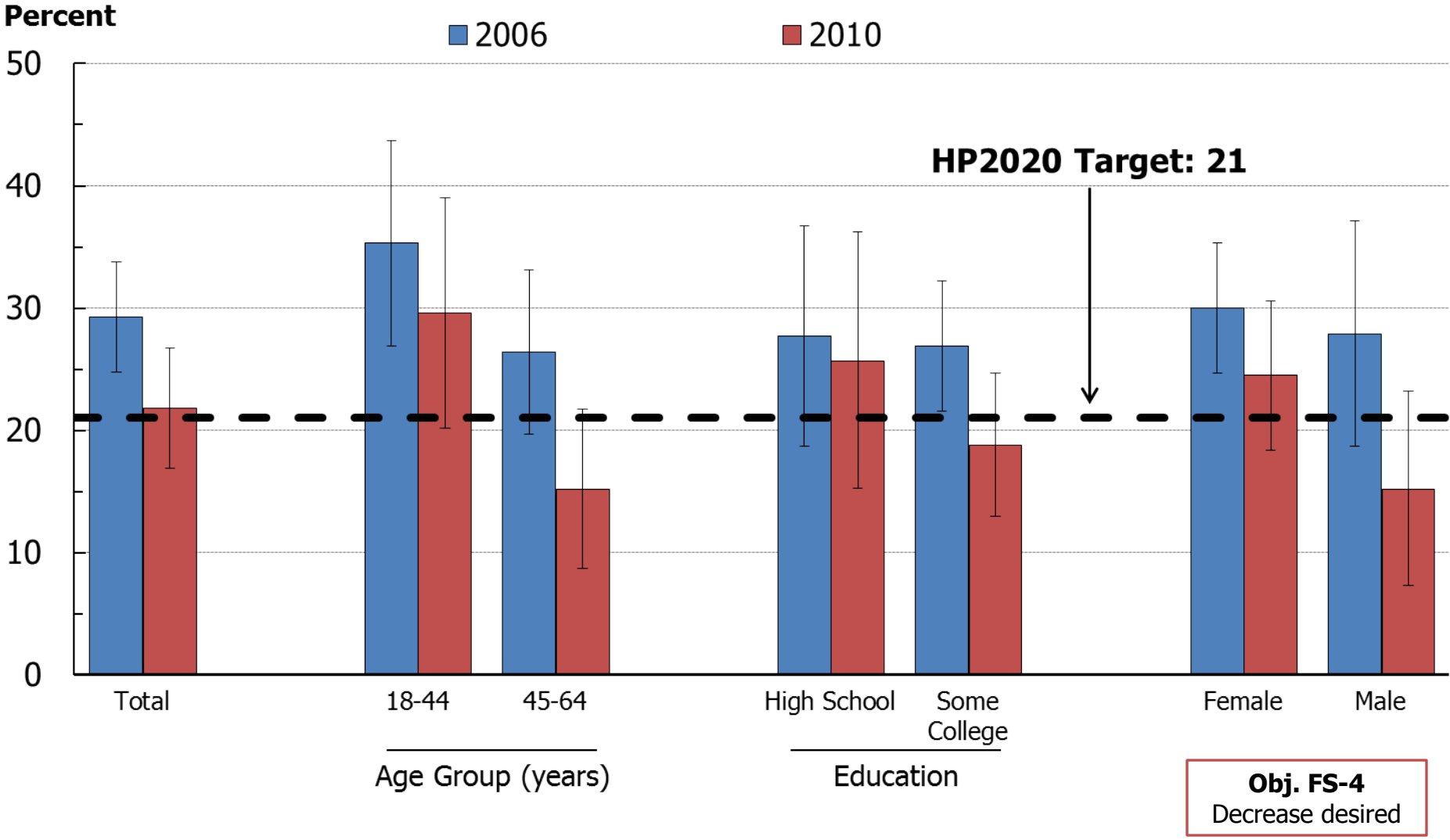
NOTES: I = 95% confidence interval.
FightBAC!™ Messages:

Clean – Wash hands and surfaces often
Cook – Cook to proper temperature
Separate – Don't cross-contaminate
Chill – Refrigerate promptly

SOURCE: Food Safety Survey, FDA/CFSAN.

Obj. FS-5.1 through 5.4
Increase desired

Severe Allergic Reactions to Food Among Adults with a Food Allergy Diagnosis, 2006 and 2010



NOTE: I = 95% confidence interval. Data are statistically unreliable for age 65+ year and less than high school education.
SOURCE: Food Safety Survey, FDA/CFSAN.

MEDICAL PRODUCT SAFETY

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Presentation Outline

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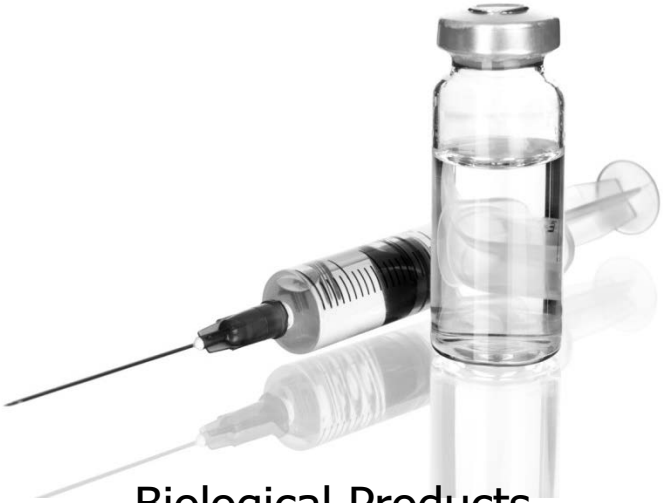
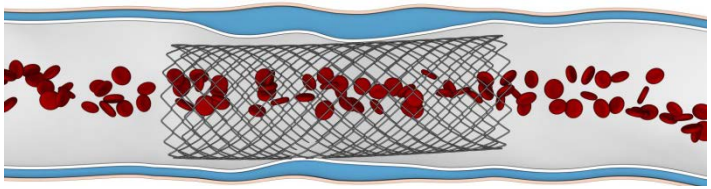
Medical Products

Drugs



Biological Products



Medical Devices

Medical Product Safety

- 3 billion prescriptions written annually
- 1.5 million preventable adverse drug events occur within the healthcare system each year costing more than $4 billion annually
- Major Causes of Injury
  - Medication overdoses in children
  - Prescription pain medication overdoses

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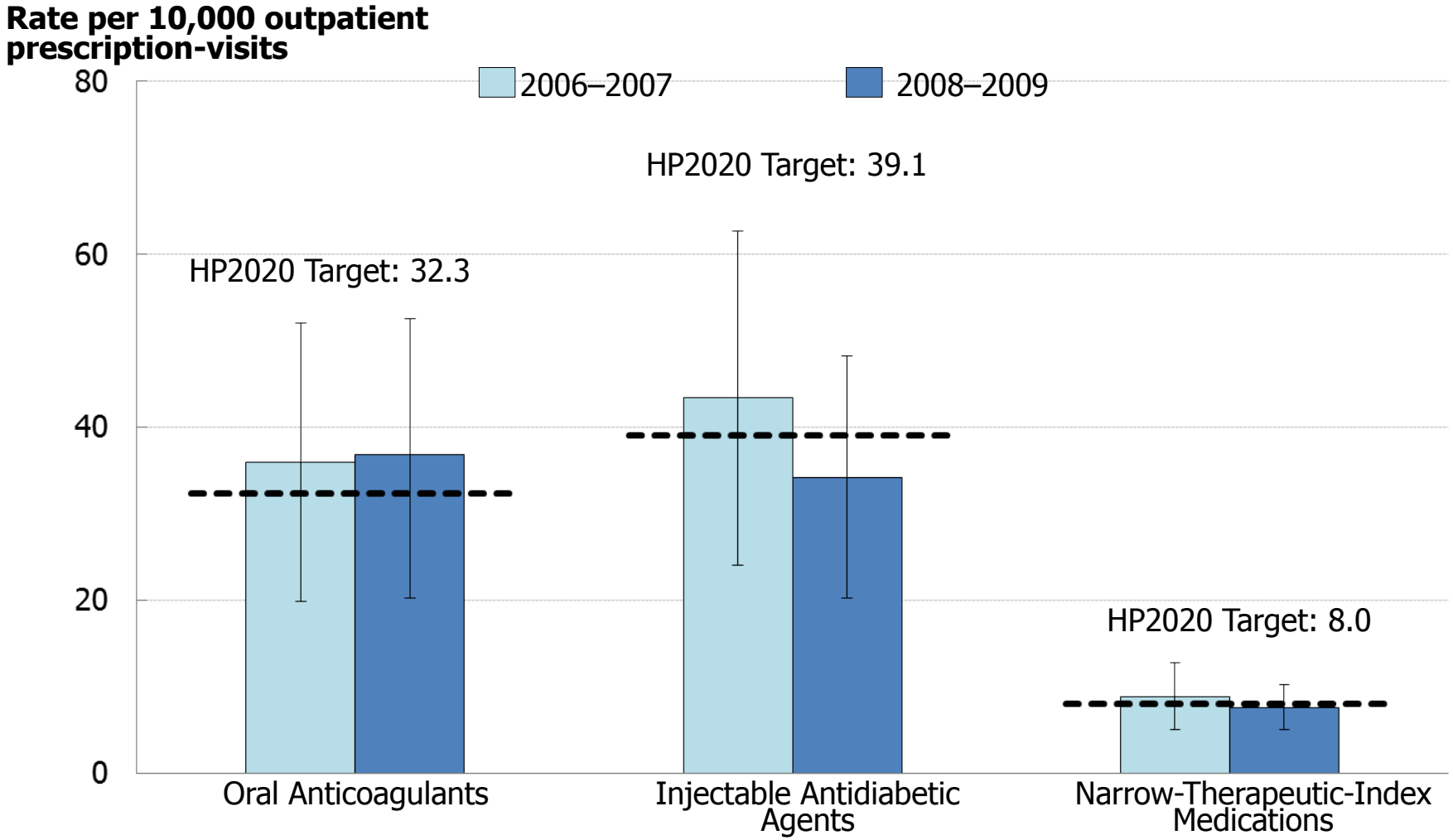
SOURCE: FDA. Safe Use Initiative Fact Sheet. 2012. Accessed 10/10/2013. Available from: http://www.fda.gov/Drugs/DrugSafety/SafeUseInitiative/ucm188760.htm.

Emergency Department Visits for Overdoses, 2006–2007 and 2008–2009

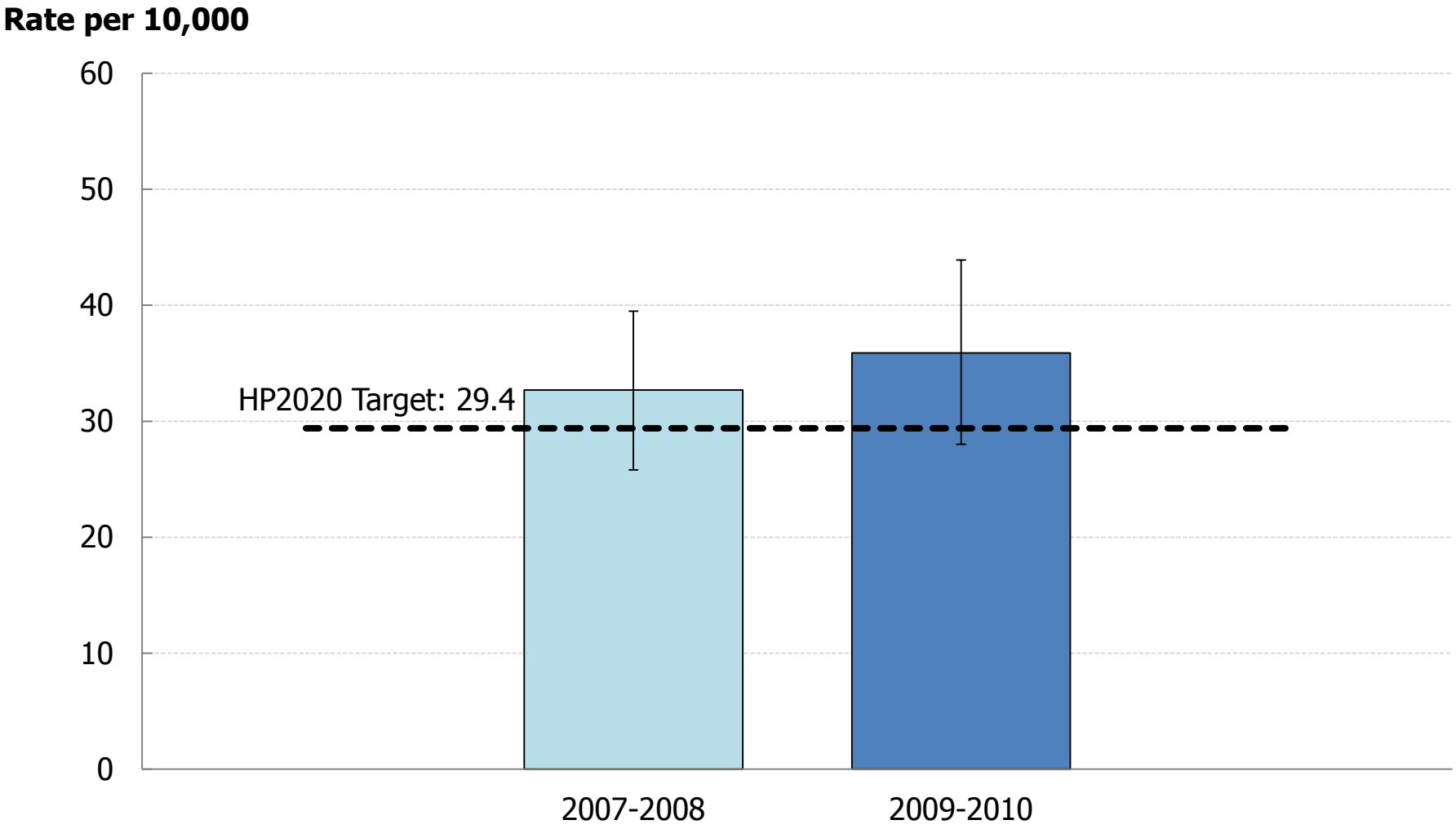


NOTES: I = 95% confidence interval. Data are for the number of emergency department visits for overdoses per 10,000 outpatient prescription-visits.

SOURCES: National Electronic Injury Surveillance System–Cooperative Adverse Drug Events Surveillance Project (NEISS-CADES), CDC/NCIPC, CPSC, and FDA; National Ambulatory Medical Care Survey (NAMCS), CDC/NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC/NCHS.

Objs. MPS-5.1 through 5.3
Decrease desired

Emergency Department Visits for Medication Overdoses, Children < 5 years, 2007–2008 and 2009–2010

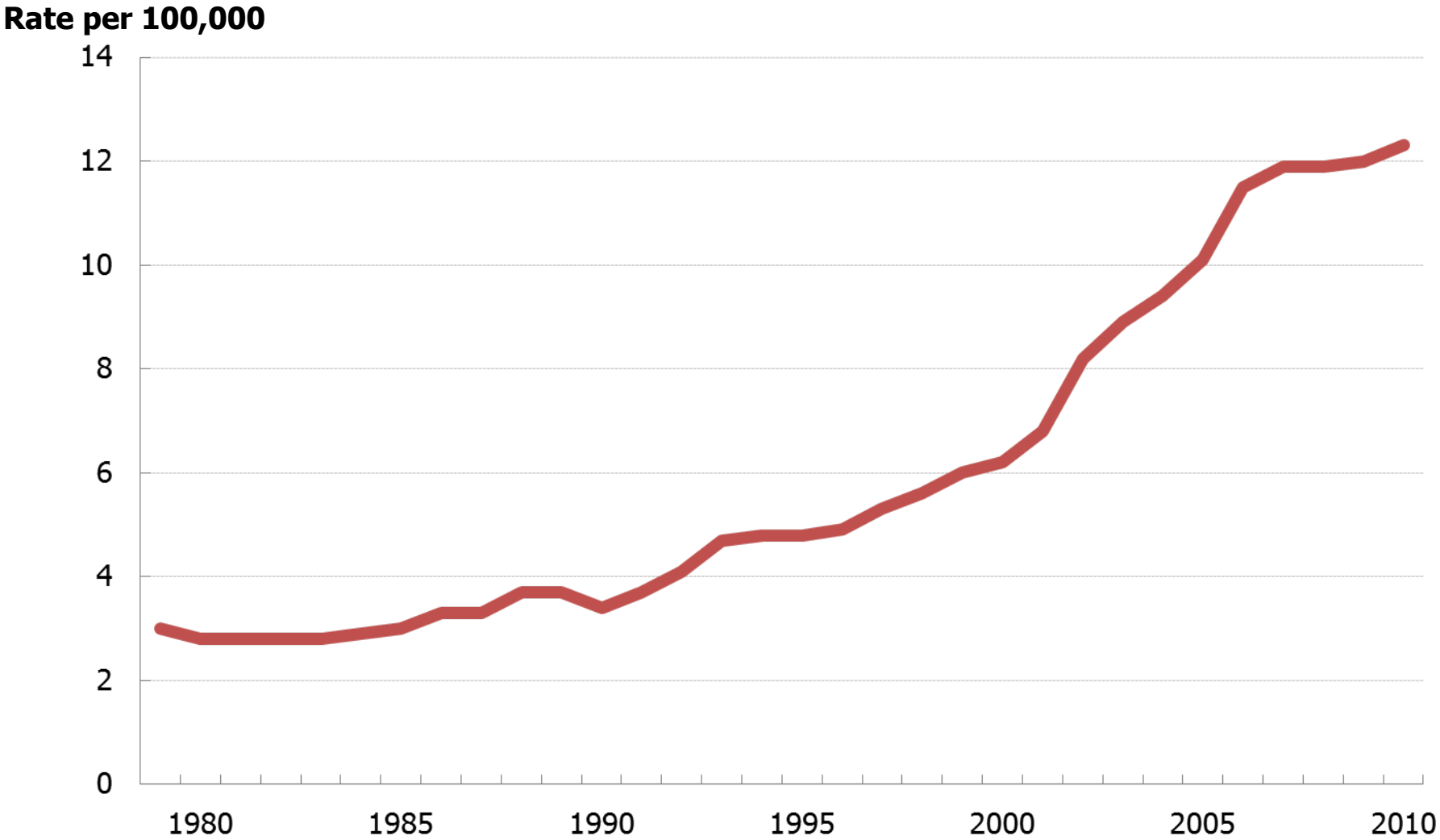


NOTES: I = 95% confidence interval. Data are for the number of emergency department visits for overdoses per 10,000 children under age 5 years.

SOURCES: National Electronic Injury Surveillance System-Cooperative Adverse Drug Events Surveillance Project (NEISS-CADES), CDC/NCIPC, CPSC, and FDA.

Obj. MPS-5.4
Decrease desired

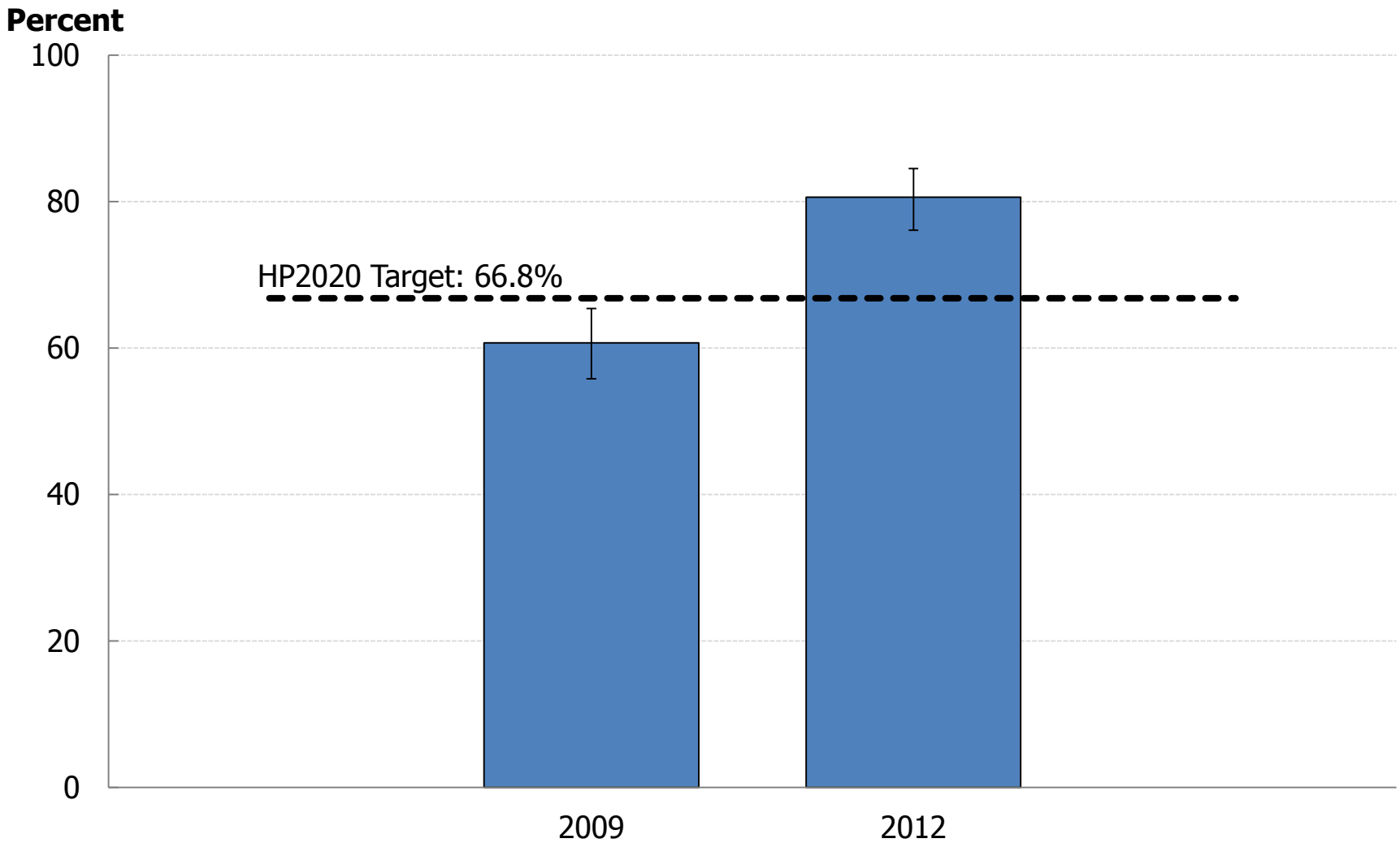
Drug Overdose Deaths, 1979–2010



NOTE: Data are for deaths with an underlying cause of drug overdose by all intents: unintentional, suicide, homicide, and undetermined intent. 1979-1998: ICD-9 codes E850-E858, E950.0-E950.5, E962.0, or E980.0-E980.5; 1999-2010: ICD-10 codes X40-X44, X60-X64, X85, or Y10-14. Data are age adjusted to the 2000 standard population.

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

Hospitals Reporting Adverse Drug Events, 2009 and 2012



NOTES: For this objective, an adverse drug event is defined as an injury resulting from the use of, or not using, a needed medication. Adverse drug events include both adverse drug reactions and medication errors, including both errors of commission and omission, that result in adverse clinical outcomes. Hospitals were counted as reporting adverse drug events externally if they reported to FDA, Medwatch, Institute for Safe Medication Practices, or the manufacturer.

SOURCE: National Survey of Pharmacy Practice in Hospital Care Settings, American Society of Health-System Pharmacists (ASHP).

Obj. MPS-1
Increase desired

National Hospital Care Survey

The National Hospital Care Survey (NHCS) integrates three long-standing surveys:

- NHDS - the longest continuously fielded sample of inpatient care from 1965–2010
- NHAMCS - surveying hospital emergency departments and outpatient departments since 1992, hospital ambulatory surgery locations since 2009, and freestanding ambulatory surgery centers since 2010
- DAWN - collected data on drug-involved emergency department visits since 1970s; conducted by SAMHSA from 1992–2011

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Key Takeaways – Food Safety

- Foodborne pathogens continue to be a major cause of illnesses, despite significant reduction in some infections.
  - The very young and the elderly are the most vulnerable to foodborne illnesseses.
  - Antimicrobials are still effective against *Salmonella* and *Campylobacter.*
- Severe allergic food reactions in adults have decreased and have nearly met the HP2020 target.
- Most consumer food safety practices are near their HP2020 target.

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Key Takeaways – Medical Product Safety

- Adverse drug events are a major problem, although progress in reducing them is possible.
  - Some HP2020 objectives for reducing ED visits for adverse drug events may have been met. However, estimates must be interpreted cautiously.
- The tracking of adverse drug events is improving.
  - The percent of hospitals that report adverse drug events has exceeded the HP2020 target.
- Healthy People anticipates developing objectives on pain treatment, medical products, and personalized medicine.

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John Whyte, M.D.,M.P.H.

Director of Professional Affairs
and Stakeholder Engagement
U.S. Food and Drug Administration
Center for Drug Evaluation and Research

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Medical Product Safety: Future Direction

- **HHS Initiative: National Action Plan for Adverse Drug Event Prevention**
  - MPS-1: Monitoring and analysis of adverse events associated with medical therapies
  - MPS-2: Pain treatment (developmental)
  - MPS-3: Adverse events from medical products (developmental)
  - MPS-4: Medical products associated with predictive biomarkers (developmental)
  - MPS-5: Emergency department visits for adverse events from medications
- **FDA Advancing Regulatory Science Initiative**
  - MPS-2: Pain treatment (developmental)
  - MPS-3: Adverse events from medical products (developmental)
  - MPS-4: Medical products associated with predictive biomarkers (developmental)
- **FDA Initiative: Personalized Medicine**
  - MPS-4: Medical products associated with predictive biomarkers (developmental)

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HHS National Action Plan for Adverse Drug Event Prevention

- In 2006, 82% of US population reported using at least one prescription medication, over the counter medication or dietary supplement, and 29% reported using five or more prescription medications.
- Among older adults (65 years of age or older), 57-59% reported taking five to nine medications and 17-19% reported taking 10 or more.
- Given the ever-increasing magnitude of medication exposure, the potential for harms from ADEs constitutes a critical patient safety and public health challenge.
- Two objectives:
  - Identify common, clinically significant, preventable, and measurable adverse drug events (ADEs)
  - Align the efforts of federal health agencies to reduce patient harms from these specific ADEs nationally

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U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2013). National Action Plan for Adverse Drug Event Prevention. Washington, DC

HHS National Action Plan for Adverse Drug Event Prevention

Three initial targets of the Action Plan:

- Anticoagulants (bleeding)
  - Aligned with HP2020 MPS Objective -5.1: Reduce emergency department visits for overdoses from anticoagulants
- Diabetes agents (hypoglycemia)
  - Aligned with HP2020 MPS Objective -5.2: Reduce emergency visits for overdoses from injectable antidiabetic agents
- Opioids (accidental overdoses, oversedation, respiratory depression)
  - Aligned with HP2020 MPS Objective -2: Increase the safe and effective treatment of pain (developmental)

FDA Surveillance Systems

- FDA Sentinel Initiative
- FDA Adverse Event Reporting System (FAERS)

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U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2013). National Action Plan for Adverse Drug Event Prevention. Washington, DC

FDA Advancing Regulatory Science Initiative

- Launched in February 2010
- Regulatory Science: the science of developing new tools, standards and approaches to assess the safety, efficacy, quality and performance of FDA-regulated products
- 8 priority research areas
  - Example: Modernize Toxicology to Enhance Product Safety

http://www.fda.gov/ScienceResearch/SpecialTopics/RegulatoryScience/default.htm

FDA Initiative: Personalized Medicine

- Paving the Way for Personalized Medicine: FDA's Role in a New Era of Medical Product Development
- Developing Regulatory Standards, Research Methods, and Tools
  - MPS-4: Medical products associated with predictive biomarkers (developmental)

Example: Biomarker Qualification Program

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http://www.fda.gov/ScienceResearch/SpecialTopics/PersonalizedMedicine/ucm20041021.htm

FDA's Efforts in Decreasing Prescription Painkiller Overdoses in the U.S.

Medical Product Safety Objective - 2: Increase the safe and effective treatment of pain (developmental)

- Safety labeling changes and post market study requirements
- Risk Evaluation and Mitigation Strategy (REMS) for Extended Release and Long-Acting Opioids
- Recommendation to reclassify hydrocodone combination products from Schedule III to Schedule II
- Opioid Patient-Prescriber Agreement

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Conclusion

Next steps for the Medical Product Safety Working Group:

- Continue to address medical product safety issues
- Develop measurable objectives that align with HHS and FDA initiatives and priorities

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Roberta F. Wagner, B.S., M.S.

Deputy Director for Regulatory Affairs
FDA/Center for Food Safety and Applied Nutrition

Protecting and Promoting Your Health

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FDA

Department of Health & Human Services · USA

Office of Disease Prevention and Health Promotion

FOOD SAFETY: PREVENTING FOODBORNE ILLNESS

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FDA and Food Safety

- **FDA regulates 80% of food consumed in the U.S.**
  - **All human foods except the meat, poultry, and processed egg products regulated by USDA/FSIS**
  - **FDA's Center for Food Safety and Applied Nutrition and its Office of Regulatory Affairs in partnership with State counterparts are responsible for the regulatory oversight of this food industry**
- **Challenges**
  - **Too many preventable foodborne illnesses, causing costly disruptions in the marketplace, loss of public confidence in the food supply**
  - **An increasingly complex global supply chains resulting in pressures on food safety and oversight system**

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FDA

Healthy People 2020 Food Safety Topic Area Objectives

FS-1 **Reduce infections caused by bacterial pathogens transmitted commonly through food.**

FS-2 **Reduce number of outbreak-associated bacterial infections associated with food commodity groups.**

FS-3 **Prevent increase in proportion of non-typhoidal *Salmonella* and *Campylobacter jejuni* isolates from humans resistant to antimicrobial drugs.**

FS-4 **Reduce severe allergic reactions among adults with food allergies.**

FS-5 **Increase proportion of consumers who follow key food safety practices.**

FS-6 **Improve food safety practices in food service and retail establishments (developmental).**

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FDA

FS-1: Reduce Infections Caused By Pathogens Transmitted through Food

Key Food Safety Modernization Act (FSMA) Principles

- **Modernizes and enhances FDA's authorities and oversight of the global food supply**
- **Recognizes "industry's" responsibility for food safety**
- **Prevention focus as opposed to reactionary**
- **Focus on farm to table prevention; reliant on science/risk based, flexible standards**
- **Provides for enhanced domestic/foreign inspections, new enforcement tools and modern import oversight**
- **Partnerships are key to success**

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FS-1 FSMA Key Rules Proposed

- Preventive Controls (Human Food)
  - Jan 2013
- Preventive Controls (Animal Food)
  - Oct 2013
- Produce Safety
  - Jan 2013
- Foreign Supplier Verification Programs for Importers
  - July 2013
- Accredited 3rd Party Certification
  - July 2013
- Intentional Adulteration
  - Dec 2013
- Safe Food Transport

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FS-1 FSMA in Action: New Enforcement Tools Used to Improve Food Safety

- **Mandatory Recall Authority**
  - **Mandatory recalls of adulterated pet treats and adulterated dietary supplements in 2013**
- **Administrative Detention**
  - **Used 6 times since the enactment of FSMA**
  - **In 2013 detained $8 million dietary supplements containing DMAA, a new dietary ingredient that has not been shown to be safe**
- **Suspension of Registration**
  - **Suspended registration of peanut butter processor linked to a nation-wide *Salmonella* outbreak**

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FDA

FS-1
FS-2

FDA CORE NETWORK | COORDINATED OUTBREAK RESPONSE & EVALUATION

- **FDA works with partners, through CORE, to:**
  - **Find the outbreak**
    - ❖ **Signals and Surveillance Team**
  - **Stop the outbreak**
    - ❖ **Response Teams**
  - **Prevent the next outbreak**
    - ❖ **Post-Response Team**

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FS-2: Reduce Outbreak-Associated Infections Associated with Food Categories

- Agencies need to know how many cases of foodborne disease are attributable to each food commodity group they regulate
- CDC, FSIS, and FDA have historically pursued their own attribution analyses
- Interagency Food Safety Analytics Collaboration (IFSAC) formed to improve coordination of Federal food safety agencies
  - Developed a shared tri-agency food scheme for attribution analysis
  - Updated attribution estimates

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FDA

FS-1/FS-2: OMB HHS Priority Goal

Reduce Foodborne illness in the Population

- **By December 31, 2013, decrease the rate of *Salmonella* Enteritidis illness in the population from 2.6 cases per 100,000 (2007-2009 baseline) to 2.1 cases per 100,000**
  - ***Salmonella* serotype Enteritidis (SE), a *Salmonella* subtype, is now the most common type of *Salmonella* in the United States and accounts for approximately 20% of all *Salmonella* cases in humans.**

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FDA

FS-3: Prevent an Increase in Clinical Isolates Resistant to Antimicrobial Drugs

- Antimicrobial resistance is a complex issue with many causes; uses of antimicrobial drugs in humans and animals contribute to antimicrobial resistance

- Dec 2013: FDA announced a plan to limit the effect that animal antimicrobial use may have on increasing drug resistance to help preserve the effectiveness of medically important antimicrobials for treating disease in humans

- Plan phases out the use of medically important antimicrobials in food animals for production purposes only, i.e., to enhance growth or improve feed efficiency, and phases in veterinary oversight of the therapeutic uses of these drugs

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FDA

FS-4: Reduce Illness from Food Allergies

Reducing the presence of undeclared allergens by:

- **Reducing cross-contamination through modernized food GMPs and new preventive controls**
- **Conducting focused enforcement activities for problematic allergens in foods**
- **Developing improved methods for accurate measurement of allergens in complex foods**
- **Completing a risk assessment to determine if thresholds can be established for undeclared allergens**

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FDA

FS-5: Consumer Focused Safe Food Handling Education and Outreach

- http://www.Foodsafety.gov
  - Food Safety Recalls & Tips Widget; Tips includes 4 FightBac!® Messages - Clean, Separate, Cook, and Chill
- http://www.fda.gov
  - FDA launched an we version of its website Nov 2013
  - Works well with most mobile devices, including smartphones and tablets
  - Continues to support traditional desktop and laptop computers.
  - Provides easy access to the most popular content
  - Makes it easier for people to report problems with FDA regulated products to the Agency
- CFSAN Outreach and Information Center
  - Phone: 1-888-SAFEFOOD (1-888-723-2266)
  - Email:
    - consumer@fda.gov Industry@fda.gov

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FDA

FS-5: Consumer Focused Safe Food Handling Education and Outreach

- http://www.Foodsafety.gov
  - Food Safety Recalls & Tips Widget
  - Tips includes 4 FightBac!® messages
    - Clean: Wash hands and surfaces often
    - Separate: Don't cross-contaminate
    - Cook: Cook to proper temperatures
    - Chill: Refrigerate promptly

Healthy People 2020

FDA

FS-5: Consumer Focused Safe Food Handling Education and Outreach

- http://www.fda.gov
  - FDA launched a new version of its website Nov 2013
  - Works well with most mobile devices, including smartphones and tablets
  - Continues to support traditional desktop and laptop computers.
  - Provides easy access to the most popular content
  - Makes it easier for people to report problems with FDA regulated products to the Agency

Healthy People 2020

FDA

FS-5: Consumer Focused Safe Food Handling Education and Outreach

- http://www.Foodsafety.gov
- http://www.fda.gov
- **CFSAN Outreach and Information Center**
  - **Phone: 1-888-SAFEFOOD (1-888-723-2266)**
  - **Email:**
    - Consumer@fda.gov
    - Industry@fda.gov

Healthy People 2020

FDA

FS-6: Retail Food Safety

- *Prevent foodborne illness from foods prepared in retail establishments through a collaborative Federal, state, and local effort, with the FDA as the lead Federal agency*

- **Develop /implement strategies to leverage and enhance food safety and defense capacities of state/local/tribal regulatory retail food protection programs**
- **Form cooperative working relationships with foodservice and retail food industries to promote the implementation of effective food safety management systems**
- **Update the *Food Code*, engage the Conference for Food Protection**
  - **Food Code published in December 2013**
- **Maintain the Retail Program Standards**

Healthy People 2020

FDA

USDA Food Safety and Inspection Service

David Goldman, MD, MPH

Assistant Administrator, Office of Public Health Science

Healthy People 2020

USDA

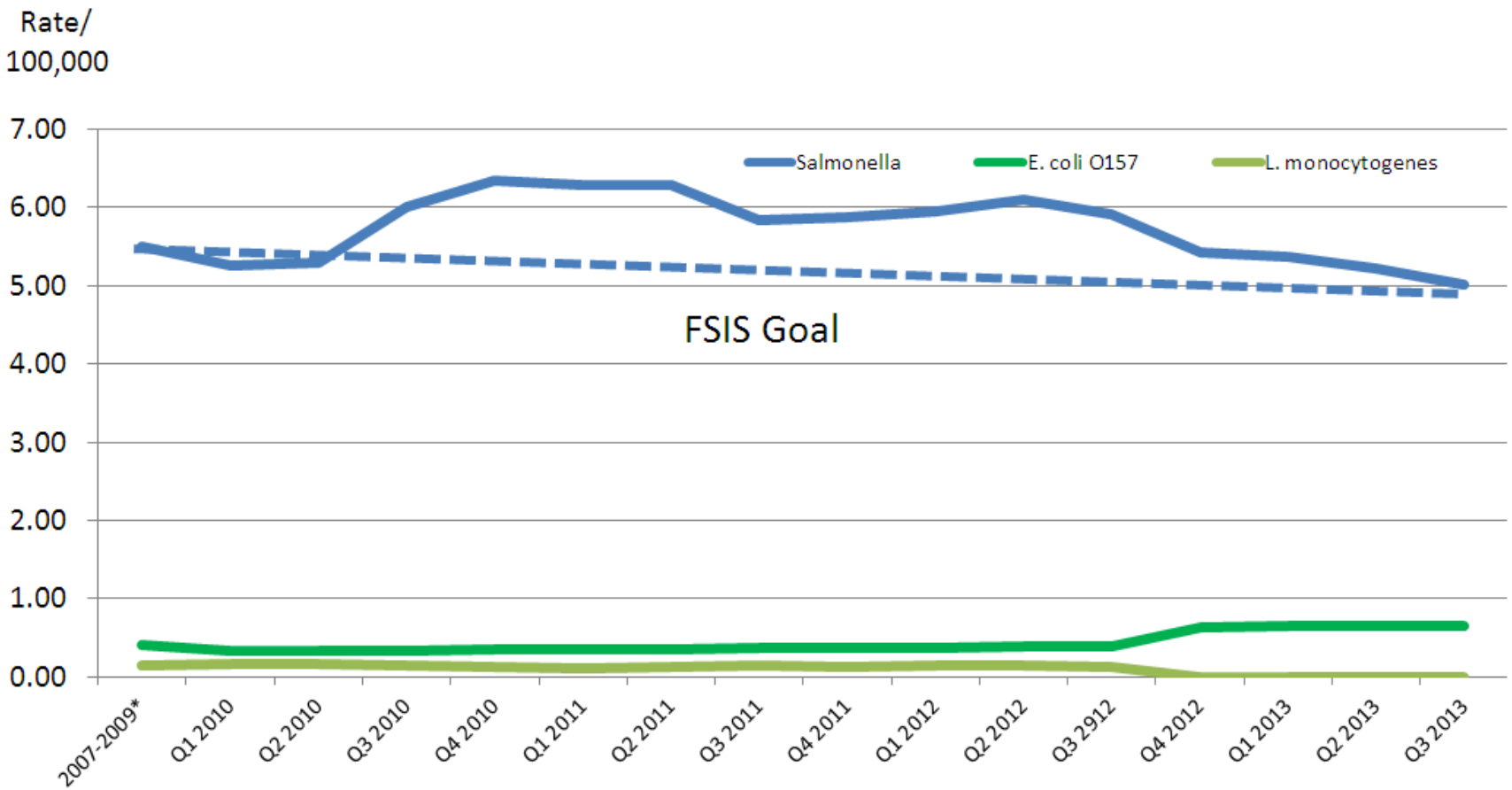
Office of Disease Prevention and Health Promotion

The Role of FSIS

- FSIS is the public health regulatory agency within the U.S. Department of Agriculture
  - FSIS ensures that the commercial supply of ***meat***, ***poultry***, and ***egg*** products in the U.S. is safe, secure, wholesome, and correctly labeled and packaged
- ~10,000 people – inspectors, scientists, veterinarians, educators
- In more than 6,200 plants every day; 150 million head of livestock and 9 billion birds annually
- Outbreak response, enforcement, laboratory testing, food defense, food safety education, industry performance standards

Healthy People 2020

Illness Rates by Pathogen Attributed to FSIS-Regulated Foods



* Baseline established from from 2007-2009

USDA

Focus on *Salmonella*

- Rates of salmonellosis have not decreased significantly since the inception of FoodNet
- *Salmonella* is found in nearly all foods, commonly found in poultry and meat products
- FSIS is raising expectations on food producers through more stringent performance standards and implementation of an Agency action plan

Healthy People 2020

10-Point Plan to Reduce *Salmonella*

- Implement pre-harvest lessons learned
- Modernize poultry and swine slaughter rules
- Revise sampling activities and performance standards
- Revise and develop in-plant and enforcement strategies and expedited feedback to industry
- Provide improved food safety messages related to *Salmonella*
- Implement focused research e.g.,
  - Does *Salmonella* from lymph nodes provide a contamination pathway?

Healthy People 2020

Focus on Shiga Toxin-Producing *E. coli* (STECs)

- Changed *E. coli* O157:H7 sampling and testing
- Implemented non-O157 STEC testing
- Proposed new traceback and recall procedures
- Completed risk assessment for mechanically-tenderized beef rule

Healthy People 2020

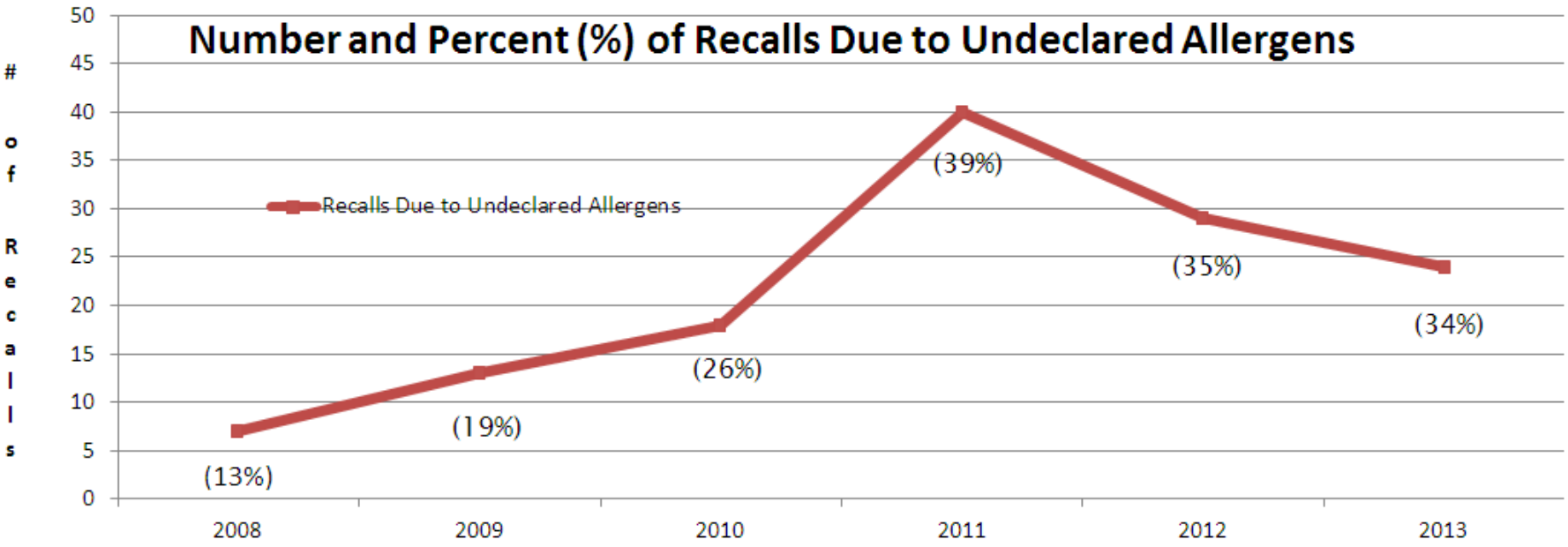
Listeria monocytogenes

- Joint risk assessment with FDA to evaluate public health impact of retail practices and conditions
- Zero tolerance in Ready-to-Eat foods
- FSIS continues sampling and testing foods, food contact surfaces, and the environment
- Completed 3 studies on transmission in retail grocery stores
- Developing guidance for retail markets and retail enforcement strategy

Healthy People 2020

FSIS Actions to Reduce Food-Related Allergens

FSIS found undeclared allergens in processed foods and changed verification processes



USDA

Food Safety Education

FSIS uses many different communication tools to reach the public to ensure food safety

	2010 Baseline	2012	2013	2016 Target
Web Site Visits	17,671,000	26,000,000	45,367,990	23,000,000
YouTube	35,487	171,000	401,465	46,100
Twitter Followers	112,000	332,000	488,500	145,000
Discovery Zone	434,480	669,000	619,539	500,000

USDA

FSIS Summary

- Healthy People food safety goals are FSIS goals
  - FSIS regulates but also serves
- Reducing foodborne disease is the goal of every team member
  - Reducing *Salmonella*-related illnesses is a priority
- FSIS collaborates with multiple stakeholders to leverage scientific knowledge and technology
- Through outreach and other service, we aim to further reduce foodborne disease

Healthy People 2020

Partnership for Food Safety Education

Together: A Food Safe America

Shelley Feist, Executive Director

HP2020 Progress Review * January 8, 2014

The Partnership delivers trusted, science-based behavioral health messaging & a network of resources that support consumers in their efforts to reduce risk of foodborne illness.

WHAT WE ARE KNOWN FOR

TRUSTED CONTENT

Holiday Food Safety Success Kit

WHAT WE BRING

COLLABORATION

Unique network of resources helps organizations in public and private sectors realize their food safety and consumer education objectives.

CREDIBILITY & TRUST

Evidence-based messages and materials on basic consumer practices proven to reduce risk of infection. These messages and materials are revisited and reviewed by expert panels. Clean, Separate, Cook and Chill.

CONNECTIONS

BAC! Fighters network of 14,000 health and food safety educators includes dozens of retailers. 25+ major associations, non-profits and corporations comprise our Partnership.

CORE FOCUS AREAS

Partnership for Food Safety Education

Together: A Food Safe America

Convenes

Convening practitioners inside and outside government to work together to improve outcomes in food safety education.

Amplifies

Amplifying - Telling the story of the impact educators have on protecting the health of consumers.

Leads Evaluation

Evaluation – leading this effort among partners and Agency liaisons and better aligning programs with intended outcomes.

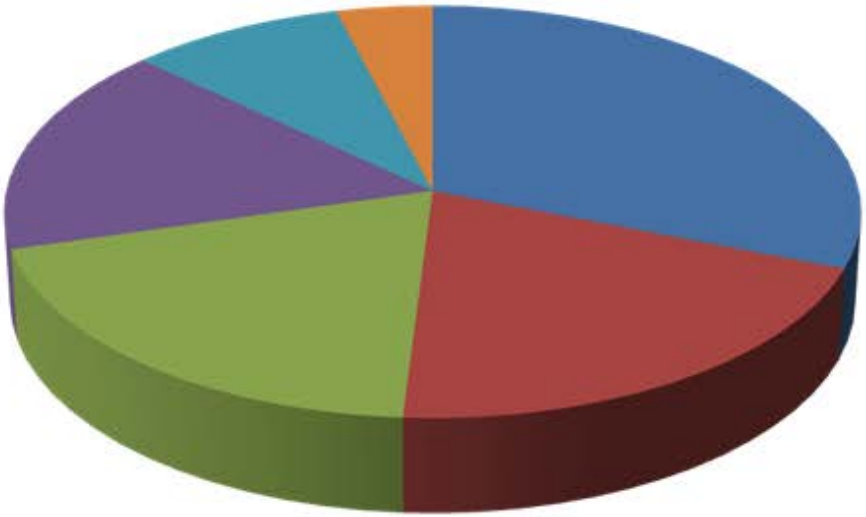
Contributing Partners

Academy of Nutrition and Dietetics
AIB International
American Beverage Association
American Frozen Food Institute
Association of Food and Drug Officials
Cargill
Consumer Federation of America
Food Marketing Institute
Grocery Manufacturers Association
Institute of Food Technologists
International Association for Food Protection
International Dairy-Deli Bakery Association
International Food Information Council Foundation
Maines Paper & Food Service, Inc.
National Chicken Council
National Grocers Association
National Pork Board
National Turkey Federation
North American Millers' Association
NSF International
Pet Food Institute
Produce Marketing Association
Publix Supermarkets, Inc.
ServSafe
Tyson Foods, Inc.
United Fresh Produce Association

PFSE government liaisons:

USDA FDA CDC

BAC Fighters! by sector



- Local Govt/ Public School
- Coop Ext. / University
- Non-Profit Employees
- Private Sector
- State Govt Officials
- Federal Govt Officials

Convenes

The 5th conference will bring together 600 health and food safety educators from across the U.S.

Other Convening

- Quarterly information-exchange meetings with partners and Federal agency liaisons
- Webinars for health and food safety educators
- Expert panels review messaging and assist with program development

Amplifies

BAC Fighter
Field Report Blog

www.teamfoodsafety.org

14,000

We communicate weekly with 14,000 health & food safety educators – BAC Fighters!

Leads Evaluation

Providing leadership in better aligning programs with intended outcomes.

Seeking pro bono & grant support to strengthen internal & external capacities in evaluation.

Programming Overview

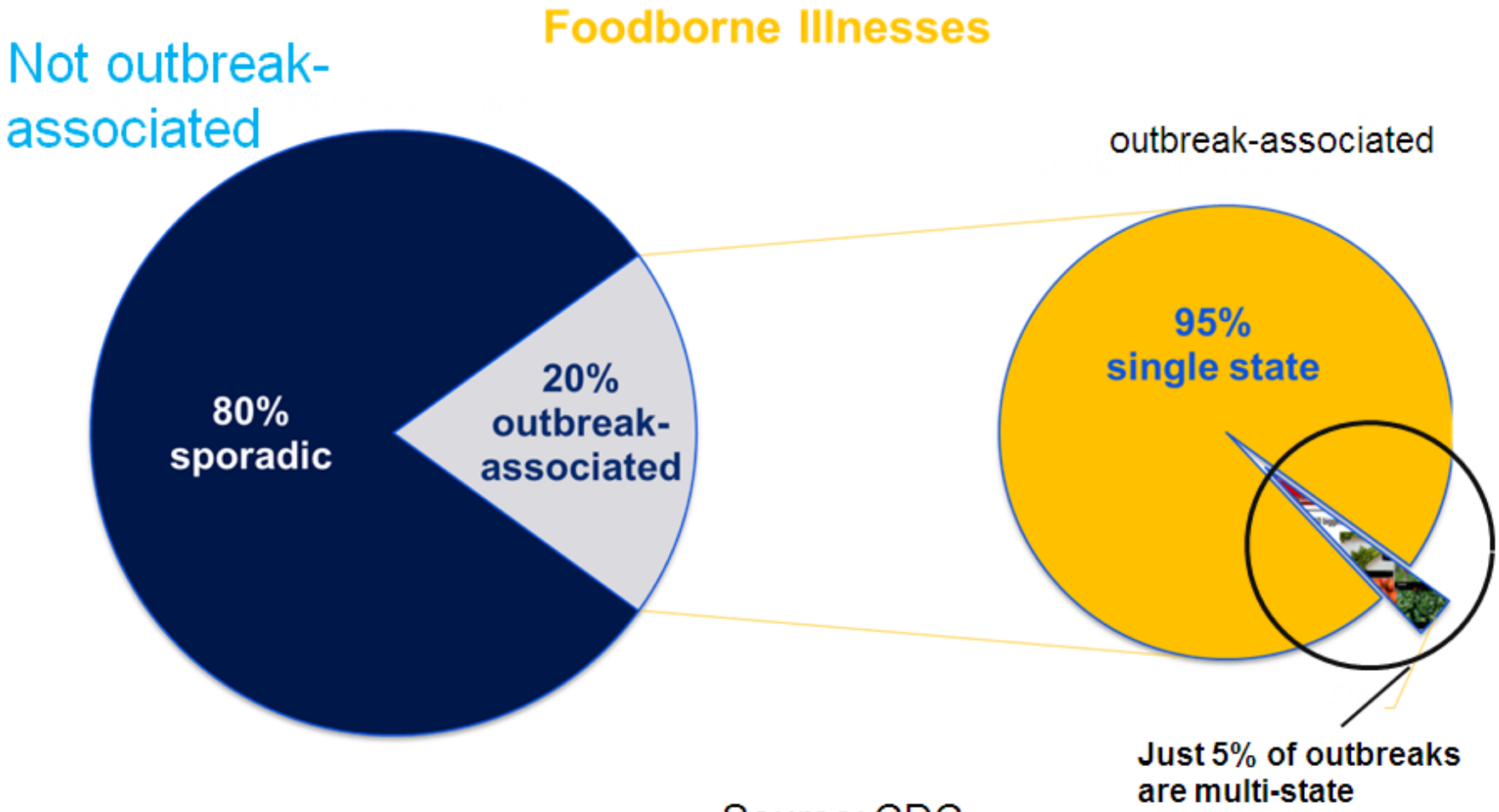
Recent feedback from BAC Fighters!

"Thank you for helping us put complex, scientific material into easier to understand language. This really helps us be able to communicate better with our audience."

14,000 BAC Fighters nationwide!

"Have always used your materials, so thank you for everything! Excellent site, materials and resources!"

Sporadic Cases – majority of illnesses



Source: CDC

Consumer Behavior - snapshot

Recent research confirms consumers do not consistently follow recommended practices, <u>even when observed</u>

[UC Davis, Christine Bruhn PhD. Study included observation of burger and salad preparation in people's homes]

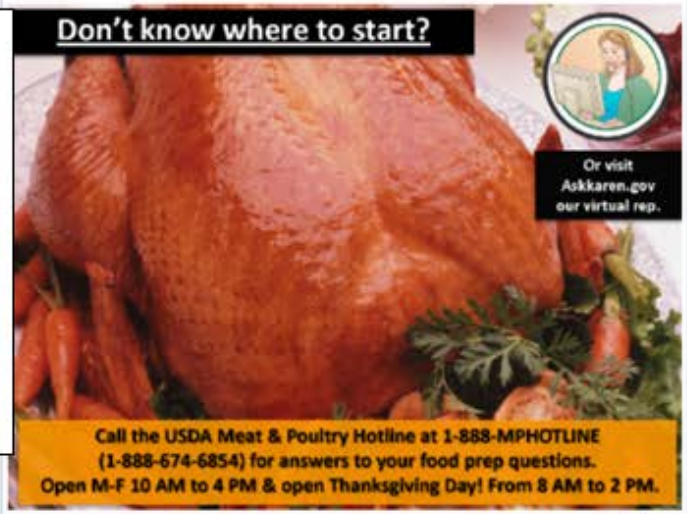
- 32% did not wash hands directly after handing raw meat
- 23% of those observed "washed" hands for duration of just 2 seconds
- Potential cross contamination occurred in 74% of households observed – avg. of 35 observed incidences per household
- In 30% of households the refrigerator measured above 41°F

FDA analysis of trends

- Increases in velocity of news coverage raise top-of-mind awareness of food safety hazards but may or may not change consumer beliefs.
- When news is sufficiently novel or dramatic it can trigger belief change (as occurred betw. 1993 & 1998).
- When reminded or primed about potential hazards, people perform more safely.
- Lapses in safe food preparation appear more problem of <u>attention & vigilance</u> than knowledge or beliefs.

*Sara Fein, Amy Lando, Mario Teisl, and Alan Levy; Food and Drug Administration; Center for Food Safety & Applied Nutrition. Published in Journal of Food Protection Vol. 74, No. 9, 2011.

On the Web



They'll be open from 8 AM to 2 PM today!

Like · Comment · Share 6

Angelica Montiel Guardado, Marilyn Robinson, Asif Ali and 8 others like this.

Write a comment...

377 people saw this post Boost Post

The Partnership for Food Safety Education
November 27

Leftover tip: divide leftovers into smaller portions and store in shallow containers in the refrigerator.

Like · Comment · Share 5

Zeena Zenalden, Squeeky Clean Cleaning Service, Tony Pasquarella and 9 others like this.

Write a comment...

427 people saw this post Boost Post

Recent

Admin Panel

950 people saw this post Boost Post

FOLLOW ME ON TWITTER

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www.fightbac.org

Dozens of free downloads

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FIGHT BAC! Keep Food Safe From Bacteria™

Partnership for Food Safety Education

Cook

Cook to proper temperatures.

• Clean • Separate • Cook • Chill

Home | Safe Food Handling | Foodborne Illness | For Kids | Campaigns | Store | Downloads | E-Cards | Retailers

Go

BECOME A BAC FIGHTER!

Join our email list to get weekly updates on what you can do to fight harmful BAC (bacteria)!

New from the Partnership for Food Safety Education

The Partnership for Food Safety Education is the leader in food safety education content for kids of all ages. Just in time for summer, we are happy to announce the launch of the BAC! Fighter National Youth Campaign and release of two great new products:

Perfect Picnic! **A new iPhone game for kids!**

Fight BAC!® at Picnic Park **guide for parents and teachers.**

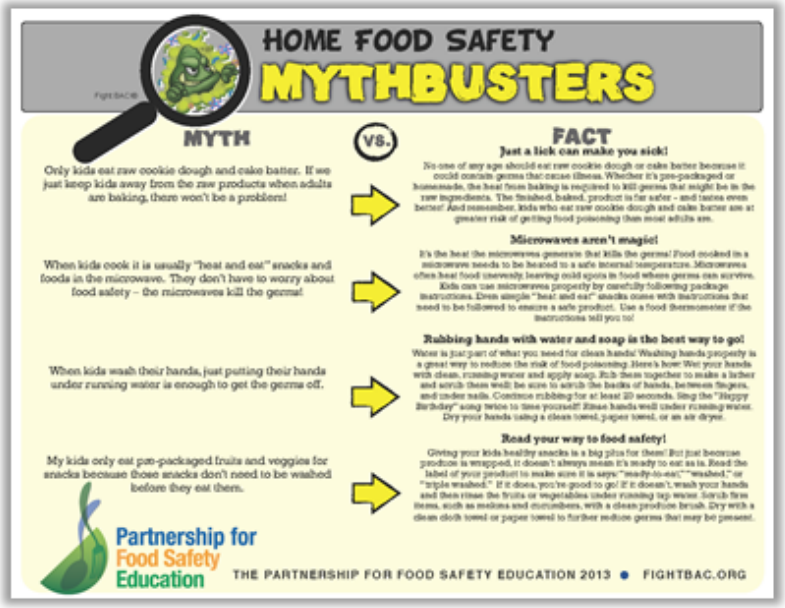
We invite BAC Fighters across the United States to join with us in engaging kids in learning about preventing food poisoning in the classroom, at home, and on their mobile devices.

HOME FOOD SAFETY MYTHBUSTERS 2013

- ✓ 4 Myth Flyer
- ✓ Cookie Dough Myth Flyer
- ✓ Heat and Eat Myth Flyer
- ✓ Handwashing Myth Flyer
- ✓ Pre-Packaged Produce Myth Flyer
- ✓ PowerPoint Presentation
- ✓ Mythbusters Story: Kids in the Kitchen
- ✓ Mythbusters Quiz

Free at:

http://www.fightbac.org/campaigns/mythbusters



HOME FOOD SAFETY MYTHBUSTERS

MYTH	VS.	FACT
Only kids eat raw cookie dough and cake batter. If we just keep kids away from the raw products when adults are baking, there won't be a problem!		**Just a lick can make you sick!** No one of any age should eat raw cookie dough or cake batter because it could contain germs that cause illness. Whether it's pre-packaged or homemade, the heat from baking is required to kill germs that might be in the raw ingredients. The finished, baked, product is far safer – and tastes even better! And remember, kids who eat raw cookie dough and cake batter are at greater risk of getting food poisoning than most adults are.
When kids cook it is usually "heat and eat" snacks and foods in the microwave. They don't have to worry about food safety – the microwaves kill the germs!		**Microwaves aren't magic!** It's the heat the microwaves generate that kills the germs! Food cooked in a microwave needs to be heated to a safe internal temperature. Microwaves often heat food unevenly leaving cold spots in food where germs can survive. Kids can use microwaves properly by carefully following package instructions. Even simple "heat and eat" snacks come with instructions that need to be followed to ensure a safe product. Use a food thermometer if the instructions tell you to!
When kids wash their hands, just putting their hands under running water is enough to get the germs off.		**Rubbing hands with water and soap is the best way to go!** Water is just part of what you need for clean hands! Washing hands properly is a great way to reduce the risk of food poisoning. Here's how: Wet your hands with clean, running water and apply soap. Rub them together to make a lather and scrub them well: be sure to scrub the backs of hands, between fingers, and under nails. Continue rubbing for at least 20 seconds. Sing the "Happy Birthday" song twice to time yourself! Rinse hands well under running water. Dry your hands (using a clean towel, paper towel, or an air dryer.
My kids only eat pre-packaged fruits and veggies for snacks because those snacks don't need to be washed before they eat them.		**Read your way to food safety!** Giving your kids healthy snacks is a big plus for them! But just because produce is wrapped, it doesn't always mean it's ready to eat as is. Read the label of your product to make sure it is says: "ready-to-eat," "washed," or "triple washed." If it does, you're good to go! If it doesn't, wash your hands and then rinse the fruits or vegetables under running tap water. Scrub firm items, such as melons and cucumbers, with a clean produce brush. Dry with a clean cloth towel or paper towel to further reduce germs that may be present.

Partnership for Food Safety Education

THE PARTNERSHIP FOR FOOD SAFETY EDUCATION 2013 • FIGHTBAC.ORG

Perfect Picnic

iOS game for kids

Recommended for kids ages 8 and up.

Kids build, manage and grow their own picnic park – but watch out! Lapses in food safety and hand hygiene can bring the entire park down!

Get it at iTunes!

4352
0
Park Store
Development Build

Other Stuff for Kids!

"Partnership for Food Safety Education provides resources that allow me to provide a better education for my students"

-Pam, Family & Consumer Science Teacher

www.fightbac.org/kids:

- Smart Kids Fight BAC!®
- The Story of BAC! (K-3)
- Fight BAC!® at Picnic Park (grades 3-5)
- How Our School Fought BAC!® (grades 4-8)
- More!

Fight BAC!® has been recognized as a Parents' Choice Approved Award winner!

Retailer Resources

Retailers, here you'll find resources and customizable materials especially for your use

Be Food Safe was developed specifically for retailers and food manufacturers. It is designed to remind consumers about important safe food handling practices.

Holiday Food Safety is rich with free retailer downloads for supporting customers during the winter holiday season and the summer grilling season.

Food Safe Families is a consumer-tested national Ad Council campaign. A comprehensive toolkit accompanies video public service announcements that can be used in store.

Get to know the Partnership

Join our E-List

Receive weekly emails with links to resources, materials, and language for newsletters and more

Join us on

LinkedIn

Our group is called
Team Food Safety

Follow us on

Fight BAC!
@Fight_BAC
The Partnership for Food Safety Educ
with consumers on saf
they can do to Fi ria)
Washington, DC c.org

Hold the Date!

National Consumer Food Safety Education Conference

December 4-5, 2014
Arlington, VA

The purpose of the conference is to advance the knowledge, practice and reach of health and food safety educators in support of Healthy People 2020 goals.

GREATNONPROFITS 2013
TOP-RATED NONPROFIT

Shelley Feist
Executive Director
sfeist@fightbac.org

COLLABORATION | **CREDIBILITY & TRUST** | **CONNECTIONS**

Thank you!

Join our e-list at
www.fightbac.org

Roundtable Discussion

Please take a moment to fill out our brief survey

Healthy People 2020

Office of Disease Prevention and Health Promotion

HealthyPeople.gov

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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

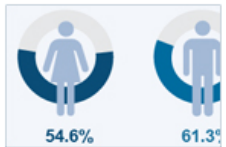
May 2013

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

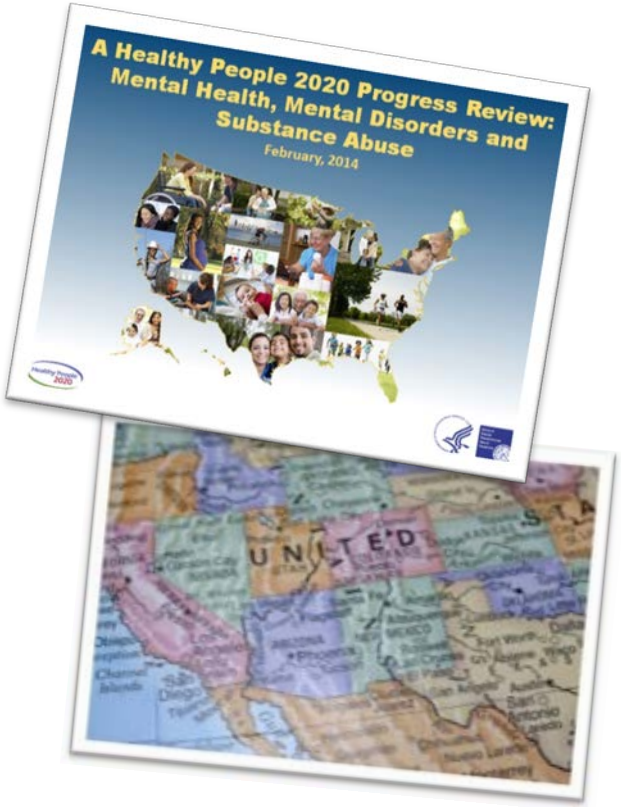
Healthy People 2020 Progress Review Webinar

Please join us as we review select Healthy People 2020 objectives in the Mental Health, Mental Disorders and Substance Abuse topic areas.

February 2014

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

To register, visit:
www.healthypeople.gov



Healthy People 2020

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

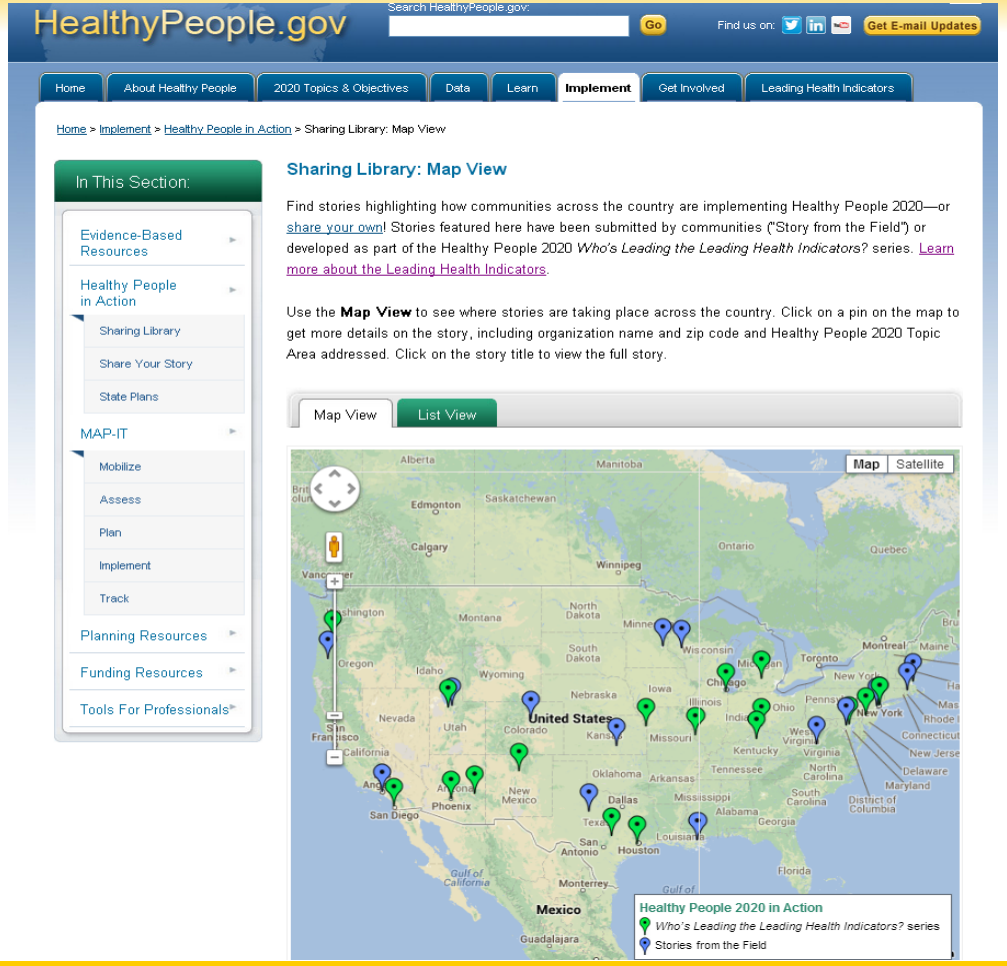
Healthy People 2020
Oral Health LHI Webinar

Join us on January 23rd for a
Who's Leading the Leading Health Indicators?
Webinar to learn how one group is working to address the importance of oral health.
Register soon!
www.healthypeople.gov

Healthy People 2020

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

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- Dan Budnitz, CDC/OID
- Lee Hampton, CDC/OID
- Stan Lehman, CDC/NCHHSTP
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- Yen Luong, HHS/ODPHP

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