



# Healthy People 2010 and 2020: Objectives in Food Safety

CDR Suzan Gordon and  
Elisa L. Elliot, Ph.D.

U.S. Food and Drug Administration  
Center for Food Safety and Applied Nutrition



# Learning Objectives

- Describe the Healthy People 2010 and 2020 initiatives.
- Become familiar with the food safety topic area objectives of the Healthy People 2010 and 2020 initiatives

# Healthy People Initiatives

- U.S. Department of Health and Human Services Initiatives
- Coordinated by HHS Office of Disease Prevention and Health Promotion
- HHS Agencies are represented on Steering Committee that meets quarterly
- New for HP2020: Representatives from HHS agencies and agencies within other departments form the Federal Interagency Working Group

# Federal Leadership for HP2020

## **Federal Interagency Working Group Representatives**

### **United States Department of Health and Human Services:**

- **Administration on Aging**
- **Administration for Children and Families**
- **Agency for Healthcare Research and Quality**
- **Centers for Disease Control and Prevention**
- **Centers for Medicare and Medicaid Services**
- **Food and Drug Administration**
- **Health Resources and Services Administration**
- **Indian Health Service**
- **National Institutes of Health**
- **Substance Abuse and Mental Health Services Administration**

### **Environmental Protection Agency**

### **United States Department of Agriculture:**

**Food Safety and Inspection Service**

**Food and Nutrition Service**

### **United States Department of Education**

# Healthy People Food Safety

## **Healthy People 2000**

- Food and Drug Safety Chapter (FDA lead)

## **Healthy People 2010 FDA Focus Area**

- Food Safety (co-leads FDA & FSIS)

## **Healthy People 2020—Topic Area (web based )**

- Food Safety (co-leads FDA & FSIS)

# HP2010 Food Safety

Through six objectives in Healthy People 2010, this focus area set out to decrease the rate of diseases caused by microorganisms transmitted mainly by food, such as *Salmonella* and *Campylobacter*.

# Healthy People 2020 - Planning

- NORC Review-Report-Recommendations
- Secretary's Advisory Committee
- Federal Interagency Work Group
- Regional Meetings
- Guidance

# Healthy People 2020

- **Vision**

A society in which all people live long, healthy lives.

- **Mission**

Healthy People 2020 strives to:

- Identify nationwide health improvement priorities;
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress;
- Provide measurable objectives and goals that are applicable at the national, state, and local levels;
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge;
- Identify critical research, evaluation, and data collection needs.

# Healthy People 2020 - Timeline

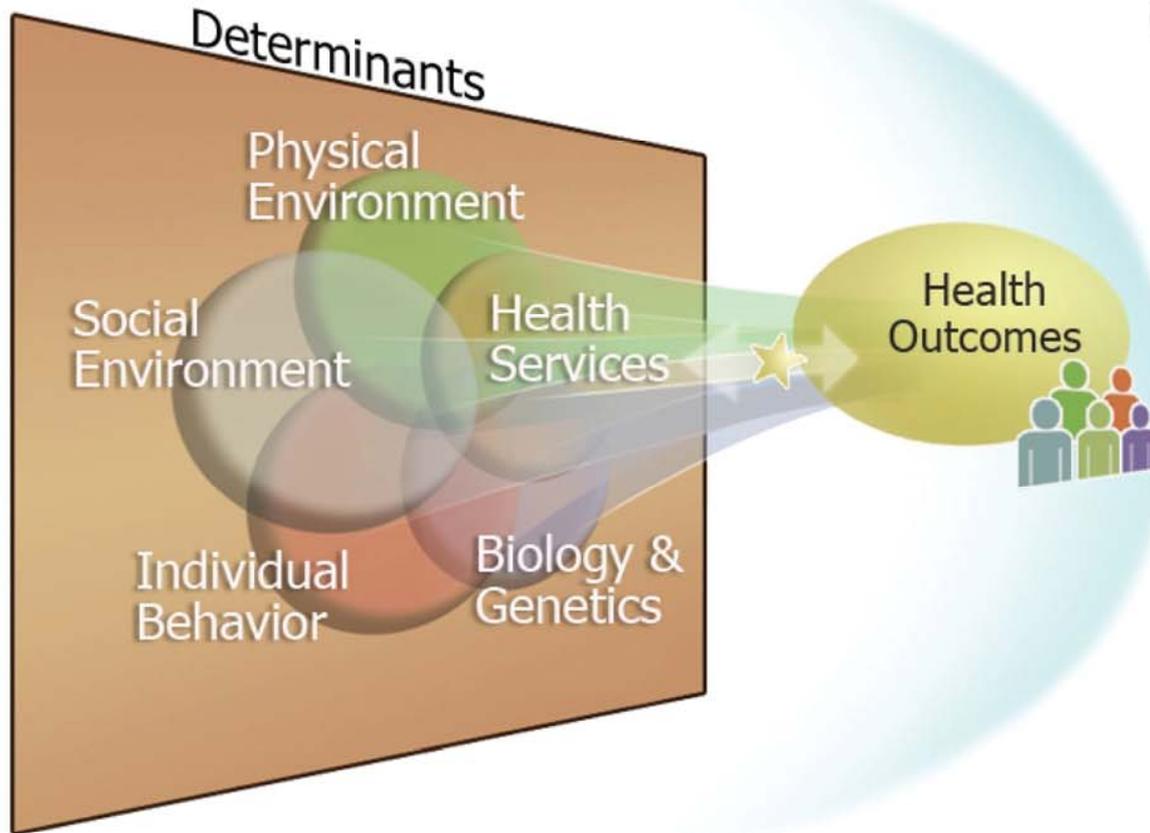
<b>Development Timeframe</b>	<b>Task</b>
October 31- December 31, 2009	Public Comment
January- February 2010	Workgroups review public comments and revise objectives
February-March- April 2010	FIW considers objective revisions
March 31, 2010	Workgroups submit baseline data, standard errors, definitions, and targets
April 15, 2010	Workgroups submit Topic Area narratives
May- June 2010	HHS Clearance
July-August 2010	Revise Objectives based on HHS Clearance
September 2010	Final Departmental Approval
<b>Fall, 2010</b>	<b>LAUNCH</b>

# Healthy People 2020

- Goals:
  - Reducing the Burden of Disease
  - Addressing Risk Factors
- Approaches:
  - Community initiatives
  - Collaboration with the private sector
  - Cooperation among policy makers to invest in disease prevention and health promotion
  - Health promotion programs to motivate and support responsible health choices
  - State and federal policies that invest in the promise of disease prevention for all Americans

# Healthy People 2020

*A society in which all people live long, healthy lives*



## Overarching Goals:

- Attain high quality, longer lives free of preventable disease, disability, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups
- Create social and physical environments that promote good health for all.
- Promote quality of life, healthy development and healthy behaviors across all life stages.

“If we could first know where we are and whither we are tending, we would better judge what to do, and how to do it ...”

Abraham Lincoln



# Healthy People 2010 Focus Area 10: Food Safety

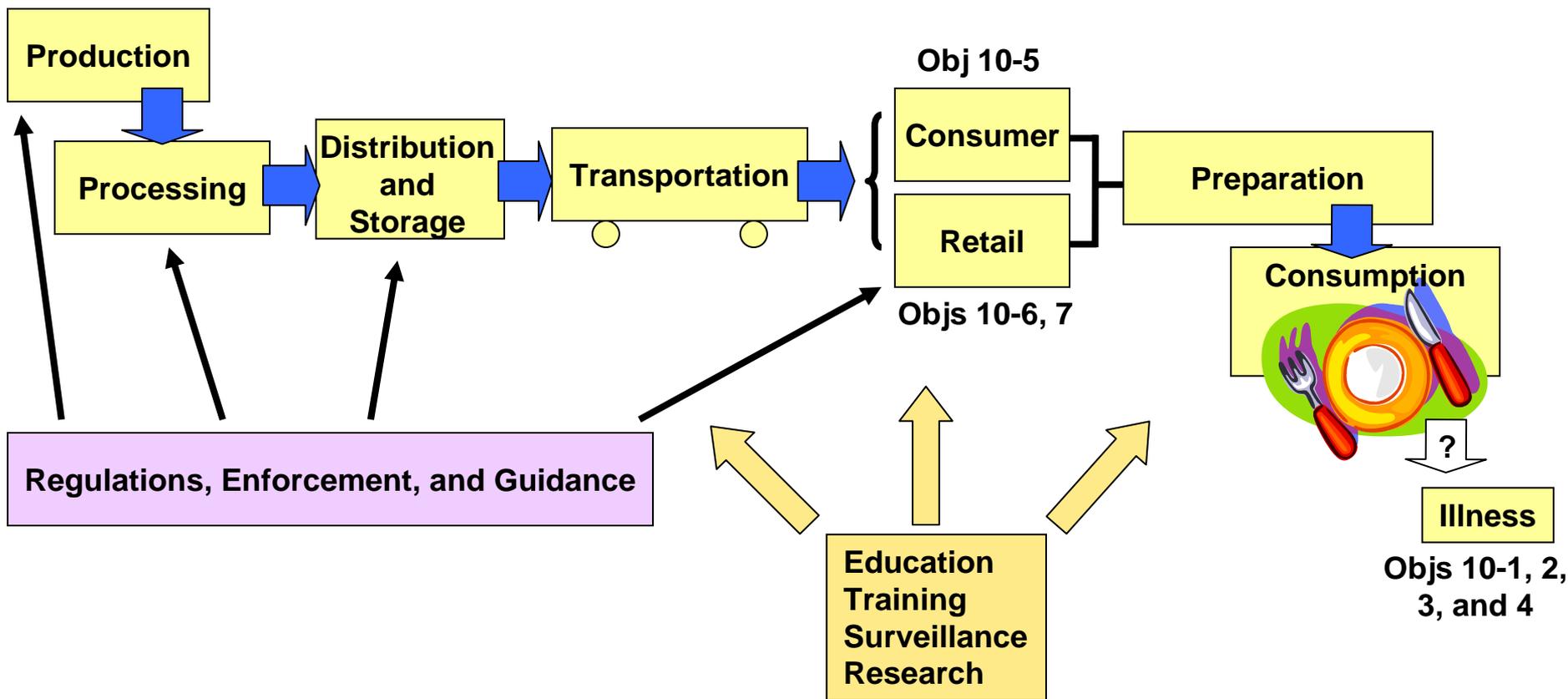
# Healthy People 2020 Topic Area: Food Safety



# Proposed Objectives

- Open for public comment October – December 31, 2009

# A Framework for Reducing Foodborne Illness Through Prevention, Intervention and Response



# HP2010 Food Safety Focus Area Objectives

- **Target met or exceeded**
  - 10-3c,d **Antimicrobial drug resistance**
- **Improving**
  - 10-1a-c,f **Foodborne infections (*Campy*, *E. coli* O157:H7, *Lm*, HUS)**
  - 10-2b **Foodborne outbreaks (*Salmonella* Enteritidis)**
  - 10-5 **Consumer food safety practices**
- **Little or no progress \***
  - 10-3a,b **Antimicrobial drug resistance**
  - 10-1d **Foodborne infections (*Salmonella* spp.)**
  - 10-2a **Foodborne outbreaks (*E. coli* O157:H7)**
- **Tracking data not yet reported**
  - 10-6a-i **Safe retail food preparation**
  - 10-4b **Severe allergic reactions to food**

\* Percent of targeted progress achieved is between -10% and 10%, and/or not statistically significant.

# HP2020 Food Safety Topic Area Proposed Objectives

## **Objectives Archived From Healthy People 2010**

- Archived objectives are Healthy People 2010 objectives that are not included in the proposed set of Healthy People 2020 objectives for data, target or policy reasons.

# HP2010 10-4a: Food Allergies.

## HP2010 10-4a:

Reduce deaths from severe food allergies.

### Developmental

- ICD-10 codes for food-induced anaphylaxis were developed but do not necessarily reflect all allergen-related deaths.
  - Research indicates expected number of deaths to be around 125 annually\*
  - Death certificates currently show about 20 deaths annually

\* Yocum, MW, and DA Khan. Assessment of patients who have experienced anaphylaxis: a 3-year survey. Mayo Clin. Proc. 1994; 69:16-23

# HP2020 Food Safety Topic Area Proposed Objectives

## **Objectives Retained As Is From Healthy People 2010**

- FS HP2020–1: Reduce severe allergic reactions to food among adults with a food allergy diagnosis.
- FS HP2020–2: (Developmental) Improve food-employee food preparation practices that directly relate to foodborne illnesses in retail food establishments.

# HP2020 Objectives Retained As Is From Healthy People 2010

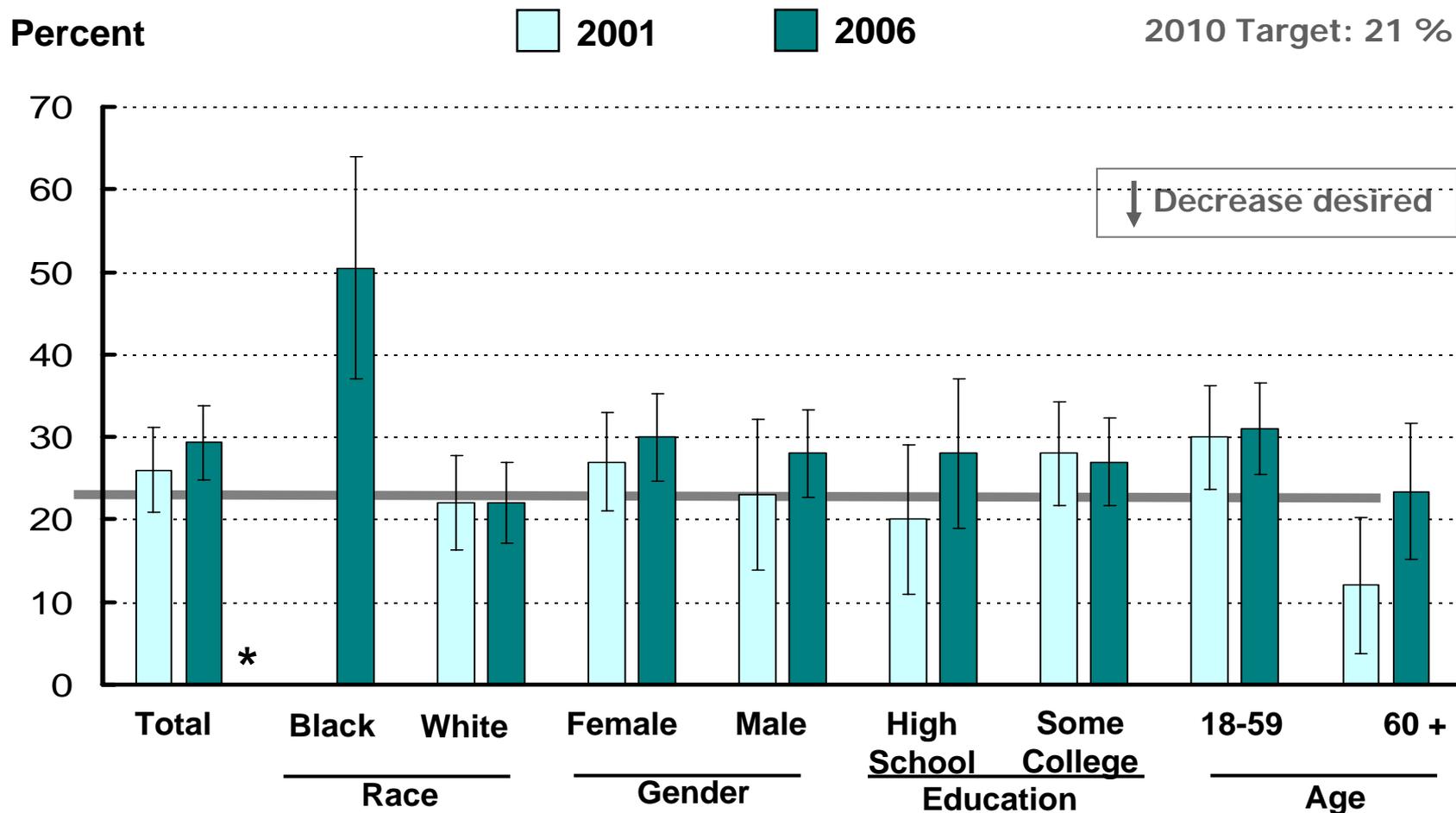
## Healthy People 2010 Objective

- 10-4b. Reduce severe allergic reactions to food among adults with a food allergy diagnosis. (Corresponds to FS HP2020-1)

## Proposed HP2020 ACTION

- Retain as is.

# HP2010 10-4b Severe Allergic Reactions (corresponds to FS HP2020-1)



Notes: † Persons 18 years and older with doctor-diagnosed food allergies who report an allergic reaction within the last 5 years and who report that the allergic reaction was severe (required the use of epinephrine, or treatment in a hospital or doctor's office, or an overnight stay in a hospital). \* Data are statistically unreliable and are suppressed.

Source: Food Safety Survey (FSS), FDA and USDA, FSIS.

**Obj. 10-4b**

# HP2020 Objectives Retained As Is from Healthy People 2010

## **Healthy People 2010 Objective**

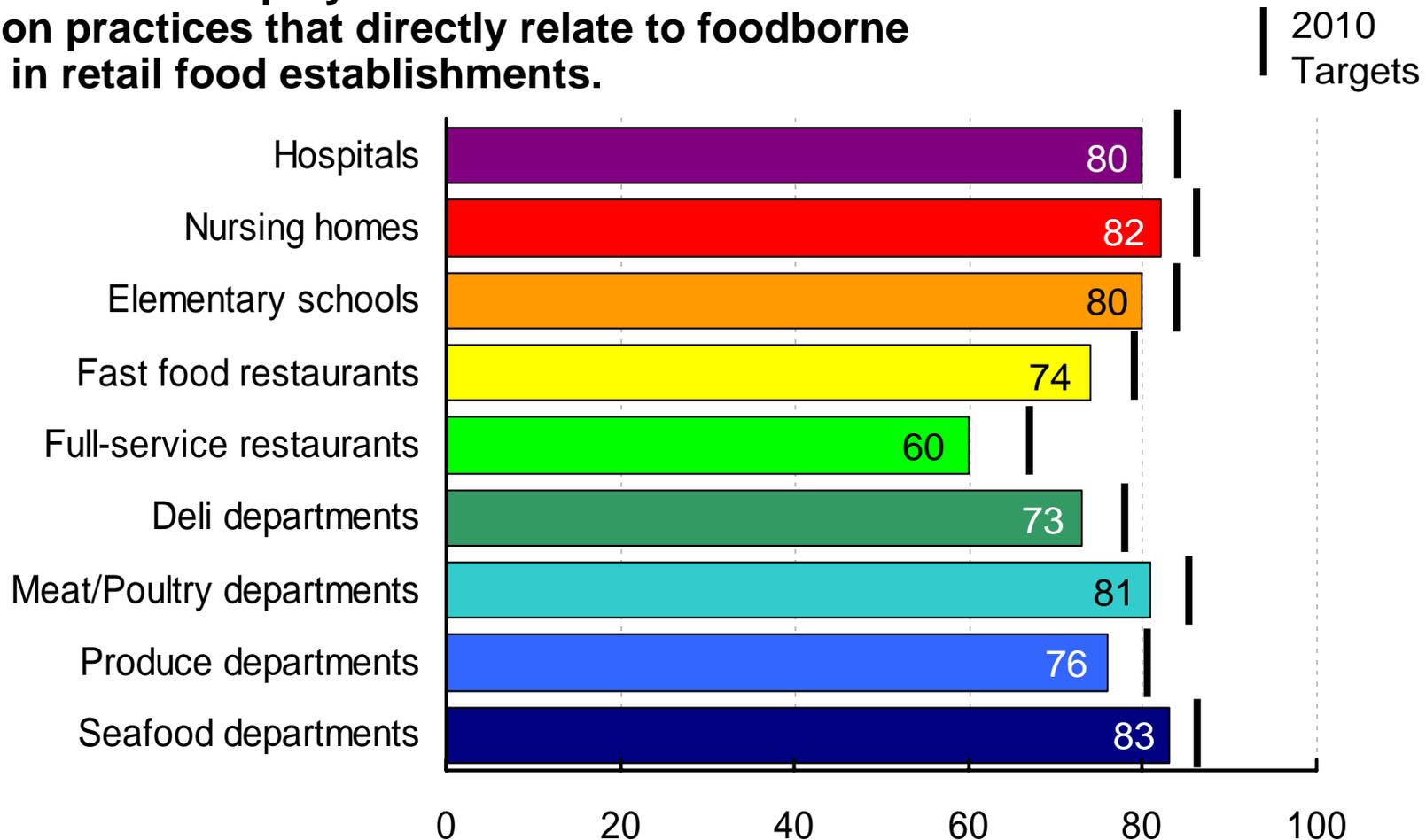
10-6. Improve food-employee food preparation practices that directly relate to foodborne illnesses in retail food establishments. (Corresponds to FS HP2020-2)

## **Proposed HP2020 ACTION**

- Retain as is.

# 10-6 Retail Food Establishment Compliance with FDA Guidelines, 1998

- 10-6 Improve food employee behaviors and food preparation practices that directly relate to foodborne illnesses in retail food establishments.



Notes: Percent of employee behaviors and food preparation practices, directly related to foodborne illness risk, that are observed to be in compliance during observational, non-regulatory inspections by FDA.

Source: Retail Food Database of Foodborne Illness Risk Factors, FDA, CFSAN.

# Retail Level Establishment Performance Indicator

<b>RISK FACTOR</b>	<b>Number of Data Items for each Risk Factor</b>
<b>Food from Unsafe Sources</b>	7
<b>Inadequate Cooking</b>	12
<b>Improper Holding/Time Temperature</b>	10
<b>Contaminated Equipment/Protection from Contamination</b>	5
<b>Poor Personal Hygiene</b>	5
<b>Other (Chemical Contamination)</b>	3
<b>TOTAL NUMBER OF DATA ITEMS</b>	42

# HP2020 Food Safety Topic Area

## Proposed Objectives

### **Objectives Retained But Modified From Healthy People 2010**

- FS HP2020–3: Reduce infections caused by key pathogens commonly transmitted through food.
- FS HP2020–4: Reduce infections associated with foodborne outbreaks due to pathogens commonly transmitted through food.
- FS HP2020–5: Prevent an increase in the proportion of nontyphoidal *Salmonella* and *Campylobacter jejuni* isolates from humans that are resistant to antimicrobial drugs.
- FS HP2020–6: Increase the proportion of consumers who follow key food safety practices.

# HP2020 Objectives Retained But Modified From Healthy People 2010

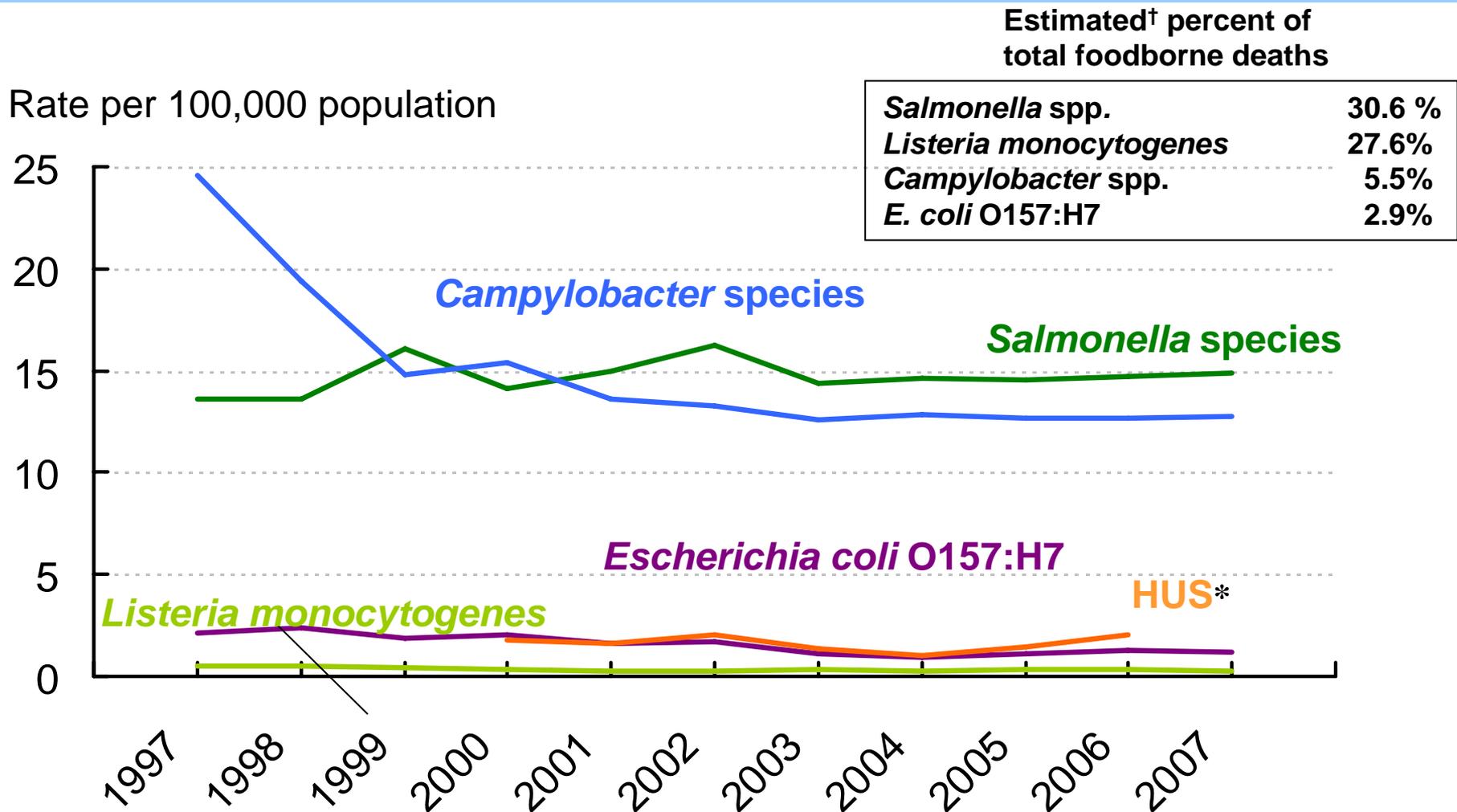
**FS HP2020–3:** Reduce infections caused by key pathogens commonly transmitted through food.

- a. *Campylobacter* species
- b. Shiga toxin-producing *Escherichia coli* (STEC) O157:H7
- c. *Listeria monocytogenes*
- d. *Salmonella* species
- e. Postdiarrheal hemolytic-uremic syndrome (HUS) in children under 5 years of age
- f. *Vibrio* species
- g. *Yersinia* species

**Data Source:** Foodborne Disease Active Surveillance Network (FoodNet), CDC, NCID

**Status:** Retained but modified Healthy People 2010 objective 10-1

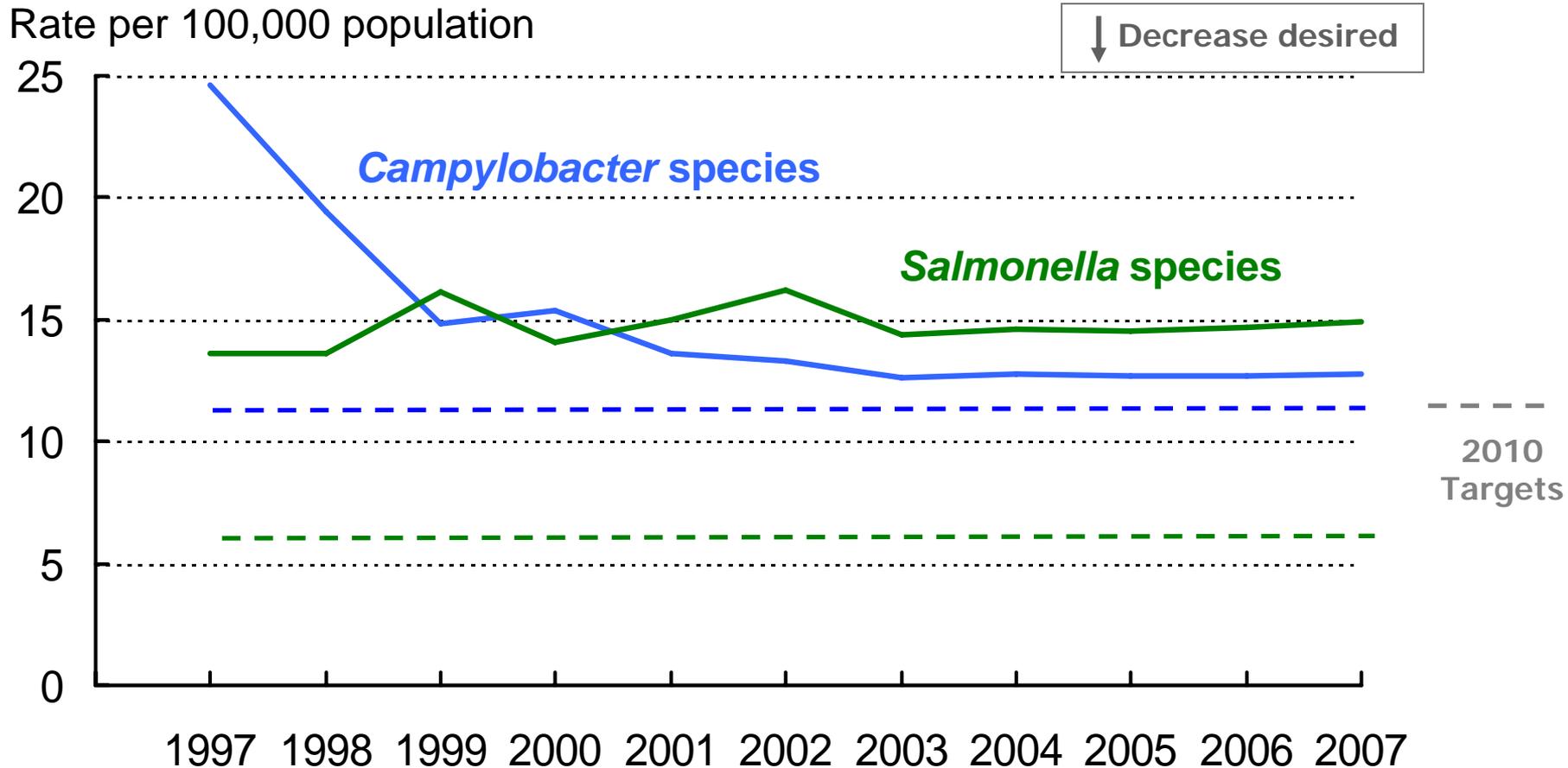
# HP2010 10-1 Major Foodborne Infections (corresponds to FS HP2020-3)



Notes: Rates are the number of culture-confirmed cases of illness for all persons. \*Data for for postdiarrheal hemolytic uremic syndrome (HUS) (2000-2004) are for children under 5 years. Source: Foodborne Disease Active Surveillance Network (FoodNet), CDC, FDA, USDA, and State agencies. <sup>†</sup>Source: Mead PS, Slutsker L, Dietz V, McCaig LF, Bresee JS, Shapiro C, Griffin PM, Tauxe RV. Food-Related Illness and Death in the United States. Emerging Infectious Diseases 5(5):607-625. 1999.

**Objs. 10-1a-d, f**

# HP2010 10-1 Major Foodborne Infections (corresponds to FS HP2020-3)

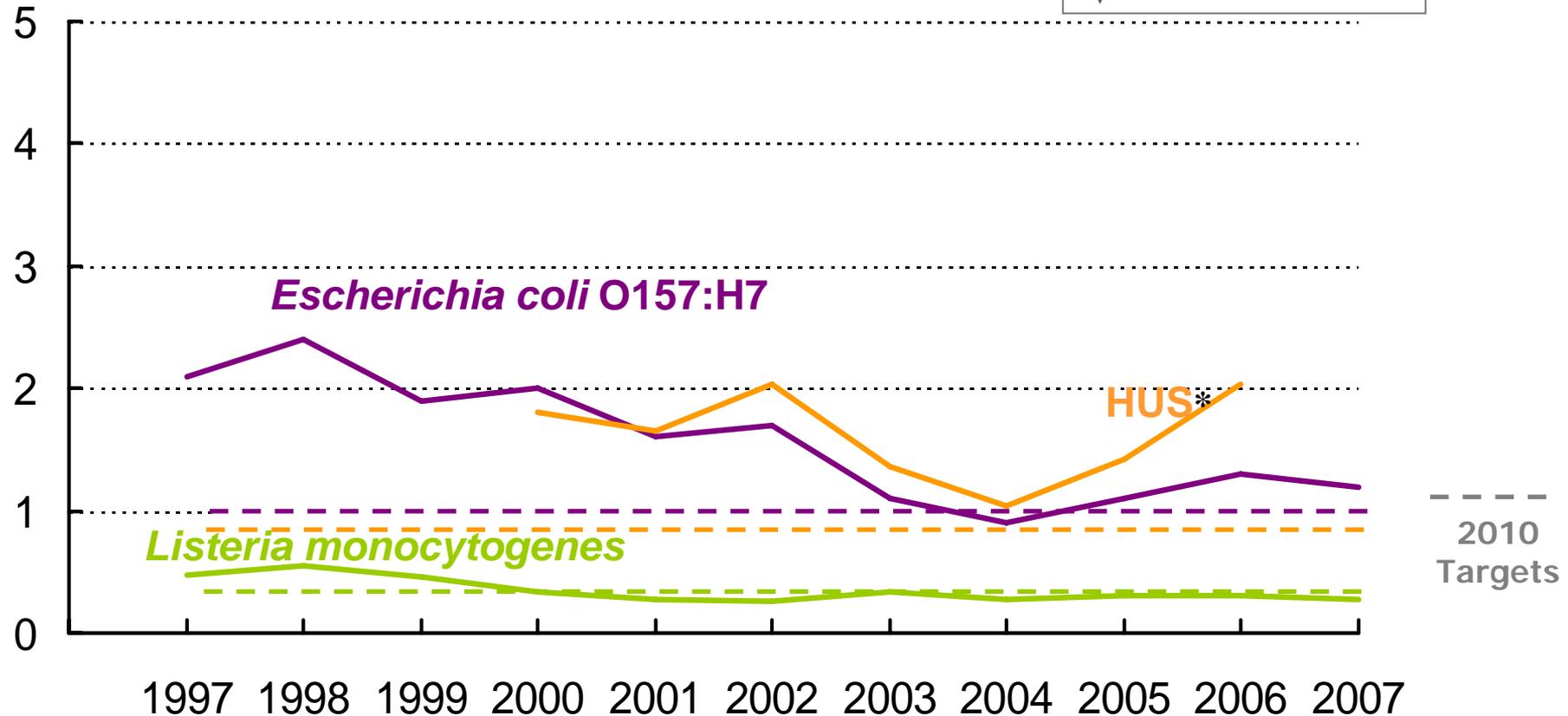


Notes: Rates are the number of culture-confirmed cases of illness for all persons.  
Source: Foodborne Disease Active Surveillance Network (FoodNet), CDC, FDA, USDA, and State agencies.

**Objs. 10-1a,d**

# HP2010 10-1 Major Foodborne Infections (corresponds to FS HP2020-3)

Rate per 100,000 population



Notes: Rates are the number of culture-confirmed cases of illness for all persons.

\*Data for for postdiarrheal hemolytic uremic syndrome (HUS) (2000-2006) are for children under 5 years.

Source: Foodborne Disease Active Surveillance Network (FoodNet), CDC, FDA, USDA, and State agencies.

**Objs. 10-1b,c, f**

# HP2020 Objectives Retained But Modified From Healthy People 2010

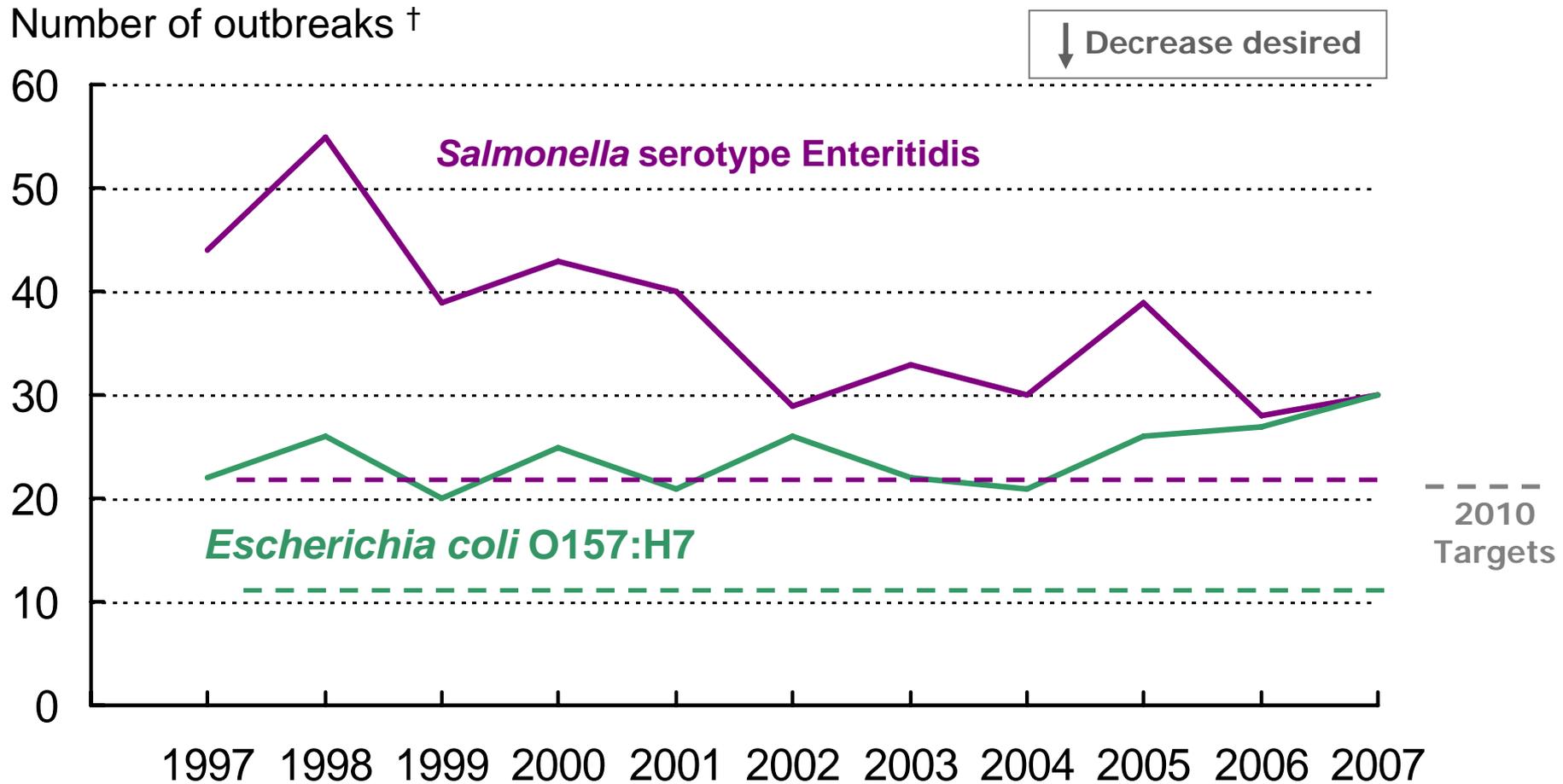
**FS HP2020–4:** Reduce infections associated with foodborne outbreaks due to pathogens commonly transmitted through food.

- a. Shiga toxin-producing *Escherichia coli* (STEC) O157:H7
- b. *Salmonella* serotype Enteritidis
- c. *Salmonella* serotype Typhimurium
- d. Norovirus

**Data Sources:** Foodborne Disease Outbreak Surveillance System (FoodNet), CDC, NCID; National Outbreak Reporting System (NORS)

**Status:** Retained but modified Healthy People 2010 objective 10-2

# HP2010 10-2 Outbreaks of Infections (corresponds to FS HP2020-4)



Notes: † A foodborne disease outbreak is defined as the occurrence of two or more cases of a similar illness resulting from the ingestion of a common food, among the U.S. resident population and reported to CDC.  
Source: Foodborne Disease Outbreak Surveillance System, CDC, NCID.

**Objs. 10-2a, b**

# HP2020 Objectives Retained But Modified From Healthy People 2010

**FS HP2020–5:** Prevent an increase in the proportion of nontyphoidal *Salmonella* and *Campylobacter jejuni* isolates from humans that are resistant to antimicrobial drugs.

**Nontyphoidal *Salmonella* isolates from humans that are resistant to**

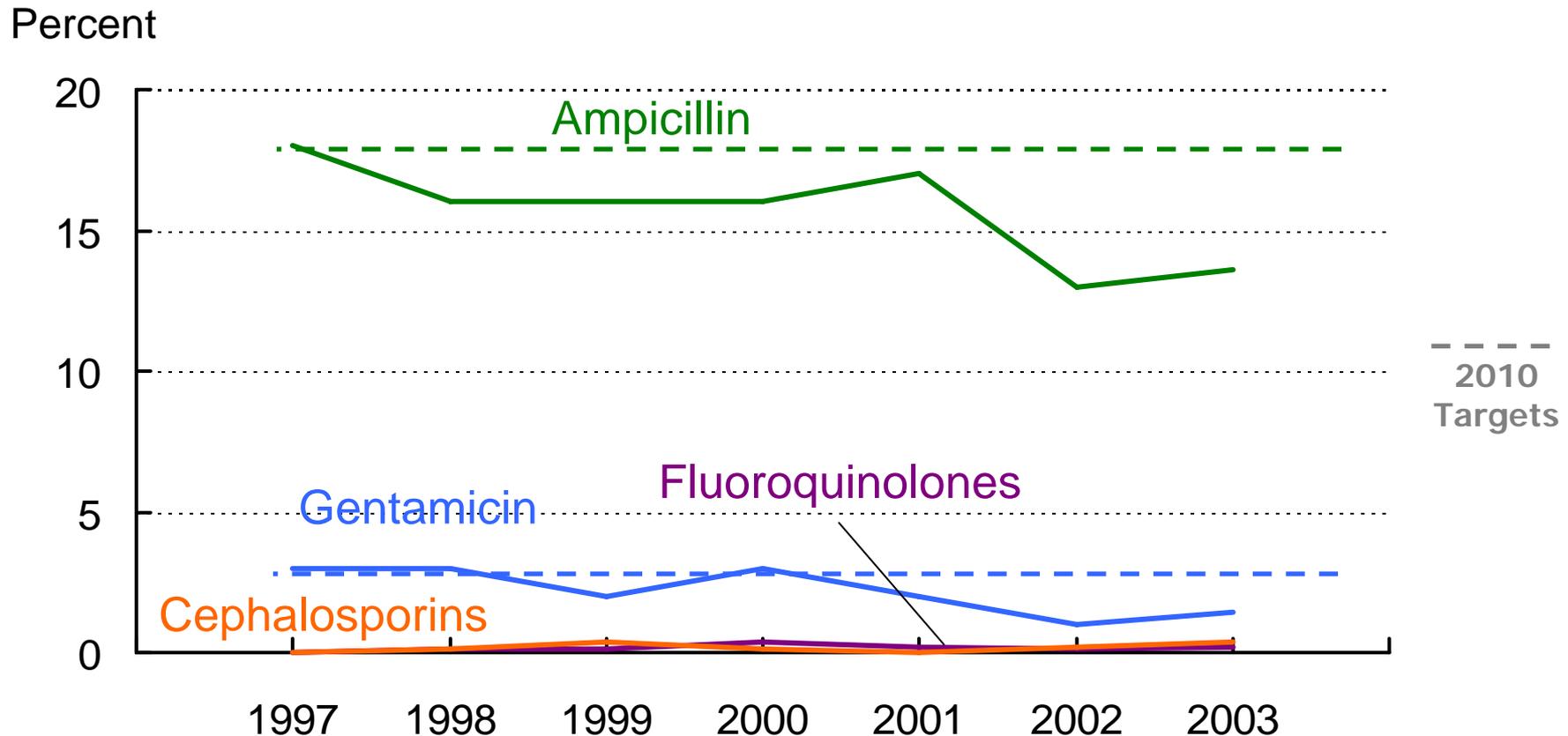
- a. Nalidixic acid (quinolone)
- b. Ceftiofur (third-generation cephalosporin)
- c. Gentamicin
- d. Ampicillin
- e. Three or more classes of antimicrobial agents

***Campylobacter jejuni* isolates from humans that are resistant to**

- f. Erythromycin

**Data Source:** National Antimicrobial Resistance Monitoring System (NARMS),  
CDC, NCID

# HP2010 10-3 Human Samples of Non-Typhi *Salmonella* Resistant to Antibiotics (corresponds to FS HP2020-5)



Notes: The target for 10-3a and 10-3b is zero (0).

Source: National Antimicrobial Resistance Monitoring System: Enteric Bacteria-Salmonella (NARMS-Enteric Bacteria), CDC, NCID; FDA, CVM; USDA, FSIS, APHIS, and ARS; Foodborne Disease Active Surveillance Network (FoodNet), CDC, FDA, USDA, and State agencies..

**Objs. 10-3a-d**

# HP2020 Objectives Retained But Modified From Healthy People 2010

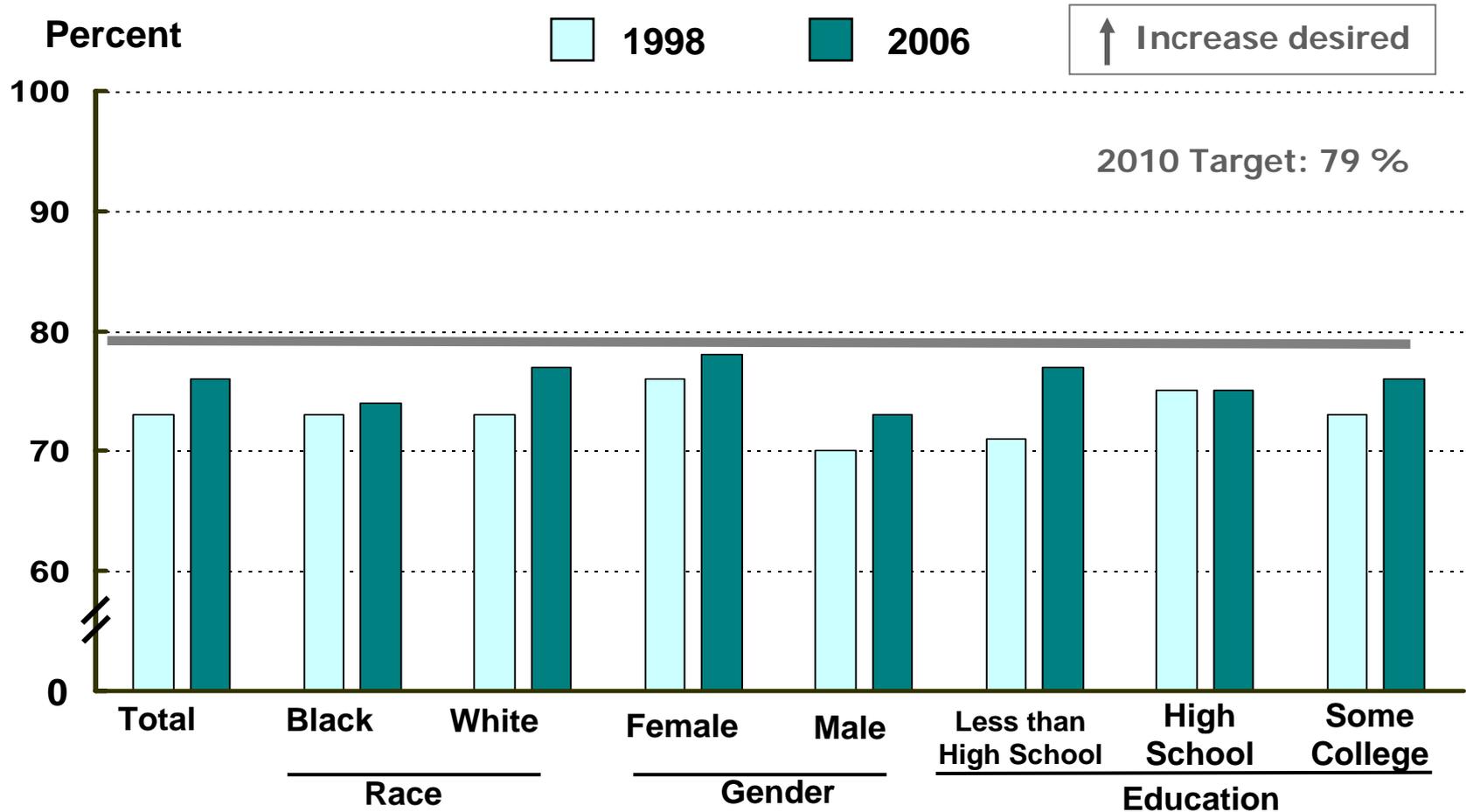
- FS HP2020–6:** Increase the proportion of consumers who follow key food safety practices.
- a. **Clean:** wash hands and surfaces often
  - b. **Separate:** don't cross-contaminate
  - c. **Cook:** cook to proper temperatures
  - d. **Chill:** refrigerate promptly



**Data Sources:** FDA; Food Safety Survey, USDA, FSIS

**Status:** Retained but modified Healthy People 2010  
objective 10-5

# HP2010 10-5 Consumer Food Safety Practices (corresponds to FS HP2020-6)



Notes: † The percents of consumers over 18 years of age who report they follow each of 4 key food safety practices, Clean, separate, cook, and chill, among the U.S. civilian non-institutionalized population.

Source: Food Safety Survey (FSS), FDA and USDA, FSIS.

**Obj. 10-5**

# HP2020 Food Safety Topic Area

## Proposed Objectives

### **Objectives New to Healthy People 2020**

FS HP2020-7: Reduce the number of outbreak-associated infections caused by food commodity group:

FS HP2020–8: Reduce contamination of meat and poultry products by foodborne pathogens:

FS HP2020–9: (Developmental) Increase the number of States that have prohibited sale or distribution of unpasteurized dairy products. (as defined by FDA, unpasteurized liquid milk and cheeses aged < 60 days).

# HP2020 Objectives New to HP2020

**FS HP2020–7:** Reduce the number of outbreak-associated infections caused by food commodity group:

- a. Beef
- b. Dairy
- c. Fruits/nuts
- d. Leafy vegetables
- e. Poultry

**Data Source:** National Outbreak Reporting System (NORS)—an update of the national Electronic Foodborne Outbreak Reporting System (eFORS), CDC

# HP2020 Objectives New to HP2020

**FS HP2020–8:** Reduce contamination of meat and poultry products by foodborne pathogens:

- a. *Escherichia coli* O157:H7 in ground beef
- b. *Listeria monocytogenes* in ready-to-eat (RTE) products
- c. *Salmonella* in broiler, turkey, steer/heifer, cow/bull, market hog, ground chicken, ground turkey, and ground beef product classes

**Data Sources:** Microbiological Testing Program for *E. coli* O157:H7, USDA, FSIS; Microbiological Testing Program for post-lethality-exposed ready-to-eat meat and poultry products, USDA, FSIS; Pathogen Reduction: HACCP verification testing program, USDA, FSIS.

# HP2020 Objectives New to HP2020

**FS HP2020–9:** (Developmental) Increase the number of States that have prohibited sale or distribution of unpasteurized dairy products. (as defined by FDA, unpasteurized liquid milk and cheeses aged < 60 days).

***Potential Data Source:*** Annual survey of State public health and agriculture agencies, CDC

# Summary of New Objectives in HP2020 Food Safety

- Reduce incidence of *Vibrio* species infections and *Yersinia* species infections
- Reduce the number of foodborne outbreak-associated cases of *Salmonella* Typhimurium infections and Norovirus infections
- Reduce the number of foodborne outbreak-associated cases attributed to food commodity groups
- Prevent the increase of multiple antimicrobial drug resistant *Salmonella* species isolates
- Prevent the increase of Erythromycin-resistant *Campylobacter* species isolates
- Reduce contamination of meat and poultry products by foodborne pathogens
- Increase the number of states that prohibit sale or distribution of unpasteurized dairy products.

# **Related Public Meeting**

## **Public Workshop on Measuring Progress on Food Safety: Current Status and Future Directions**

**March 30, 2010**

**9:00 a.m. - 5:00 p.m.**

**Hyatt Regency Washington**

**Regency A Ballroom**

**400 New Jersey Avenue, NW**

**Washington, DC 20001**

**Docket No: FDA-2010-N-0104**

## Contact Information

Elisa Elliot

(301) 436-2049

[Elisa.elliott@fda.hhs.gov](mailto:Elisa.elliott@fda.hhs.gov)

Suzan Gordon

(301) 436-2278

[Suzan.gordon@fda.hhs.gov](mailto:Suzan.gordon@fda.hhs.gov)

# Thank You

