Food Safety: A CDC Winnable Battle

> "I am the one asking you—on behalf of myself, my family, and the 1500 others who were sickened—please make our food system safe."
>
> —Testimony from the congressional hearing, "The Outbreak of *Salmonella* in Eggs," held September 22, 2010

Each year, 1 in 6 Americans get sick from and 3,000 die of foodborne diseases. Reducing foodborne illness by 10% would keep 5 million Americans from getting sick each year. Preventing a single fatal case of *E. coli* O157 infection would save an estimated $7 million.

What is CDC's role in food safety?

Food safety depends on strong partnerships. CDC and the regulatory agencies (the Food and Drug Administration [FDA] and the US Department of Agriculture's Food Safety and Inspection Service [FSIS]) play complementary roles in the federal food safety effort. State and local health departments also play critical roles in all aspects of food safety.

CDC provides the vital link between illness in people and the food safety systems of government agencies and food producers.

CDC does this by:

Monitoring human illness—
Tracking the occurrence of foodborne diseases

Defining the public health burden of foodborne illness

Attributing illness to specific foods and settings

Investigating outbreaks and sporadic cases—
Managing the DNA "fingerprinting" network for foodborne illness-causing germs in all states to detect outbreaks

Empowering state and local health departments

Targeting prevention measures to meet long-term food safety goals

Informing food safety action and policy—The new Food Safety Modernization Act and the egg safety regulation were driven in part by CDC data and investigative findings.

Current food safety challenges

Challenges to food safety will continue to arise in unpredictable ways, largely due to:

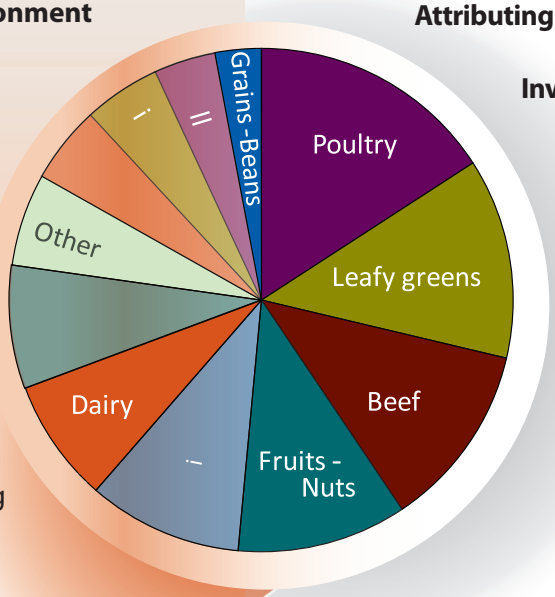
Changes in our food production and supply

Changes in the environment leading to food contamination

Rising number of multistate outbreaks

New and emerging germs, toxins, and antibiotic resistance

New and different contaminated foods, such as prepackaged raw cookie dough, bagged spinach, and peanut butter, causing illness



Causes of illness in 3,562 outbreaks of single food commodities, 1998–2010

Source: CDC National Outbreak Reporting System, 2004-2010

National Center for Emerging and Zoonotic Infectious Diseases
Division of Foodborne; Waterborne; and Environmental Diseases

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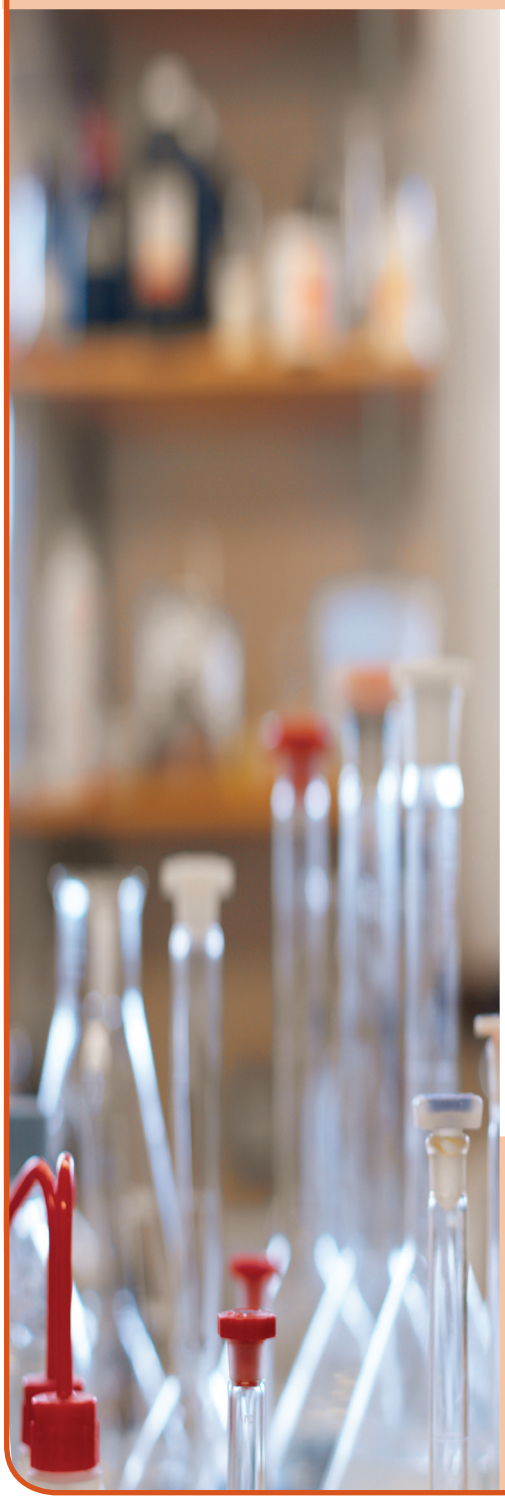
A food sleuth + shoppers' cards = Successful investigation

CDC's disease detective Casey Barton Behravesh helped track the source of a 2010 outbreak of *Salmonella* infections that sickened more than 270 people in more than 40 states. What clue unlocked the mystery? Something most of us have in our wallets or on our key rings—a shopper card you swipe at the grocery store. After the Washington State Department of Health discovered that many ill people shopped at one grocery chain, they used shopper card information (with shoppers' permission) to identify a food that the ill people had eaten: salami from one producer. A multistate investigation identified salami coated with pepper as the source, and it was recalled. The resourceful use of unconventional data helped CDC and its partners across the country quickly identify the source of the problem and stop the outbreak. Food sleuths continue to solve outbreaks by using shopper cards—including *Salmonella* contaminated Turkish Pine Nuts that sickened 43 people in 5 states in 2011.



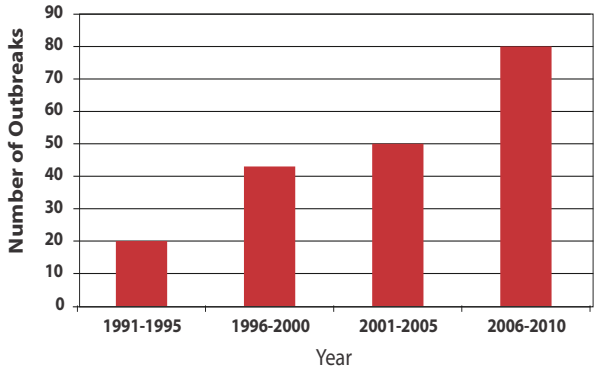
Winnable battles in food safety

- **Decrease *Salmonella* and other food-related infections**
- **Accelerate the public health response to foodborne illness at the local, national, and global levels**

We're taking action:

- **Discovery**—Tracking trends and risk factors, defining the burden, finding new pathogens and drug resistance, and attributing illness to specific foods
- **Innovation**—Developing new tools, methods, and analytics in epidemiology, laboratory science, and environmental health
- **Implementation**—Sharing new technology and information with local, state, and federal partners; improving communications with the public health community, industry, and consumers; and targeting information to guide policy

Multistate foodborne outbreaks, 1991–2010



Source: CDC National Outbreak Reporting System, 2004–2010

What's next:

- Centers that are faster at responding to foodborne outbreaks
- More effective methods in public health laboratories to quickly identify, characterize, and fingerprint *Salmonella* and other food-related pathogens
- Improved integration of foodborne illness surveillance systems and expanded data sharing as called for in the new food safety bill

Germs (and some foods) responsible for most foodborne illnesses:

- *Campylobacter* (poultry)
- *E. coli* O157 (ground beef, leafy greens, raw milk)
- *Listeria* (deli meats, unpasteurized soft cheeses, produce)
- *Salmonella* (eggs, poultry, meat, produce)
- *Vibrio* (raw oysters)
- Norovirus in many foods (sandwiches, salads)
- *Toxoplasma* (meats)

Please visit us at www.cdc.gov/foodsafety