CDC and Food Safety

l 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

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 Each year, 1 in 6 Americans gets 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 and food industries 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 <u>burden</u> of foodborne illness

Attributing illness to specific foods and settings

Investigating outbreaks and sporadic cases—

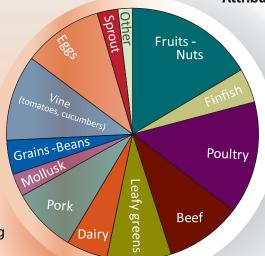
Managing the DNA "fingerprinting"

network for foodborne illness-causing
germs in all states to detect outbreaks

Empowering state and local health departments

Targeting <u>prevention measures</u> to meet longterm 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.



Total foodborne outbreak-associated illnesses, 2008–2012= 81,757

Source: CDC National Outbreak Reporting System, 2008-2012.



Food safety: a global concern

Every year, we eat more imported food. Protecting our food supply requires a global effort and effective food safety systems in the United States and other countries. Food sleuths at CDC and its partners across the country solved the mystery

of a <u>2012 multistate outbreak of Salmonella infections</u> that sickened 425 people in 28 states. Prompted by reports of an unusual cluster of cases, public health investigators used <u>DNA "fingerprinting"</u> to quickly identify two strains of the bacteria, <u>Salmonella</u> Bareilly and <u>Salmonella</u> Nchanga. <u>Disease detectives and environmental health specialists</u> pinpointed frozen raw, scraped ground tuna imported from India as the likely source of contamination. Staff from the Food and Drug Administration office in India traced the product to a seafood processing plant. The imported product was <u>recalled</u>, which likely prevented additional illnesses. This was the first documented outbreak of human salmonellosis linked to raw, scraped tuna product in the US. This was also the first foodborne outbreak of <u>Salmonella</u> Nchanga reported in the US.



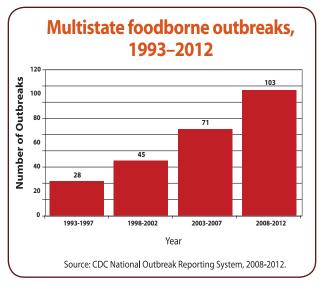
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Winnable battles in food safety

- 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

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:

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