FOOD SAFETY

Keep America's food supply safe by preventing and responding to foodborne illness

Key Strategies

- Drive policy and prevention with data and analyses

- Investigate outbreaks to stop current and prevent future foodborne outbreaks

- Address challenges of culture-independent diagnostic testing with advanced technologies.

- Support state and local public health and other partners to fulfill their primary roles in addressing food safety priorities.

- Improve environmental public health practice to prevent foodborne illness outbreaks at restaurants.

Key Highlights 2014

- Available for hands-on web access for the first time, the **Atlas of _Salmonella_ in the United States, 1968-2011** summarizes surveillance data on 32 types of _Salmonella_ isolates from people, animals, and other sources. The information is organized by demographic, geographic and other categories. The Atlas enables the reader to compare trends in _Salmonella_ serotypes by following their spread or decline over time and location. This could lead to tailored prevention efforts targeted at specific serotypes.

- Since CDC began applying advanced molecular detection (AMD) and enhanced epidemiology methods for nationwide surveillance of _Listeria_ infections, CDC has been able to detect seven clusters of illness that would not have been detected by the older methods. The percentage of _Listeria_ clusters for which a food source was found increased from 6% in FY 2013 to 21% in FY 2014. One example of a success is a _Listeria_ outbreak that affected at least 32 people in 11 states between October and December 2014. Seven of those people died. Using whole genome sequencing, CDC was able to identify the illnesses as a cluster one week faster than would have occurred with the older methods. CDC worked with state and local health departments, the Food and Drug Administration, and food industries to identify prepackaged caramel apples as the source of the outbreak. Investigation partners were then able to take action to inform the public and get caramel apples off the shelves to keep more people from becoming ill.

- The country's largest grocery retailer is partnering with CDC to decrease pathogens such as _Salmonella_ and _Campylobacter_ in chicken products provided by its suppliers. The new program, announced in December 2014, requires the retailer's poultry suppliers to implement holistic controls from farm to final product and is designed to significantly reduce potential contamination levels, in fresh whole chickens and chicken parts. It also requires suppliers to validate that the measures they have implemented are effective through specialized testing. All poultry suppliers of this grocery retailer must be in compliance with the new requirements by June 2016.

- CDC released the **2012 National Antimicrobial Resistant Monitoring System (NARMS) Annual Human Isolates Report** to aid in better understanding trends in antibiotic resistance, which helps doctors prescribe effective treatment and helps public health officials investigate outbreaks faster.

- Researchers provided evidence for the importance of kitchen manager certification in restaurant food safety through a CDC-funded study on "Restaurant manager and worker food safety certification and knowledge" (December 2014 _Foodborne Pathogens and Disease_). Findings from this study and others indicate certified managers have better food safety knowledge with improvement in food safety practices.

- Researchers also identified gaps in restaurant policies and practices concerning ill workers (e.g., lack of policies requiring sick workers to stay home), that if addressed, could help prevent foodborne illness outbreaks, according to a CDC-funded study on "Managerial practices regarding workers working while ill" (January 2015 _Journal of Food Protection_).

- The **National Voluntary Environmental Assessment and Information System (NVEAIS)**, launched in April 2014, is a national effort to systematically collect, analyze, interpret, and disseminate environmental factor data from foodborne illness outbreak investigations. More than half of all foodborne illness outbreaks are associated with restaurants, banquet halls, and schools and other institutions. The environmental factor data collected through NVEAIS will be used to help determine the causes of outbreaks in these settings, improve outbreak response efforts, and prevent future outbreaks. 8 state and 3 local health departments have registered for NVEAIS since its launch, and 44 outbreaks have been reported by sites in NVEAIS.

- CDC's **e-Learning on Environmental Assessment of Foodborne Illness Outbreaks** is new, free virtual training that teaches state, local, territorial and tribal environmental health professionals how to collect environmental factor data during foodborne illness outbreak investigations. Over 1,100 people from 48 states and 282 localities across the nation have participated in the e-Learning course since its April 2014 launch.
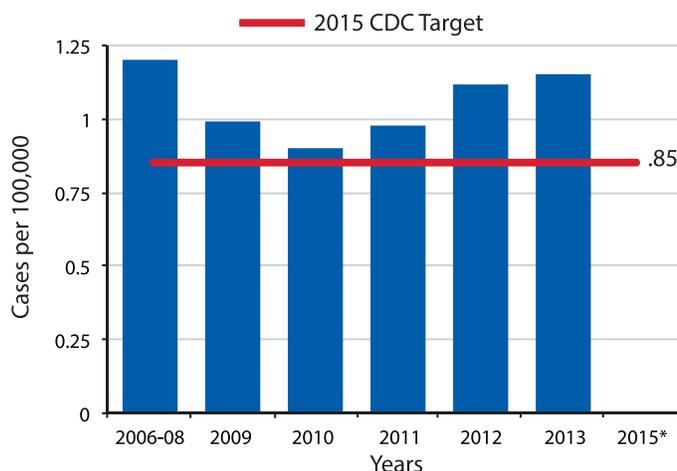
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Progress to Date

Trends in the rate of infections caused by *Salmonella*, 2006–2013
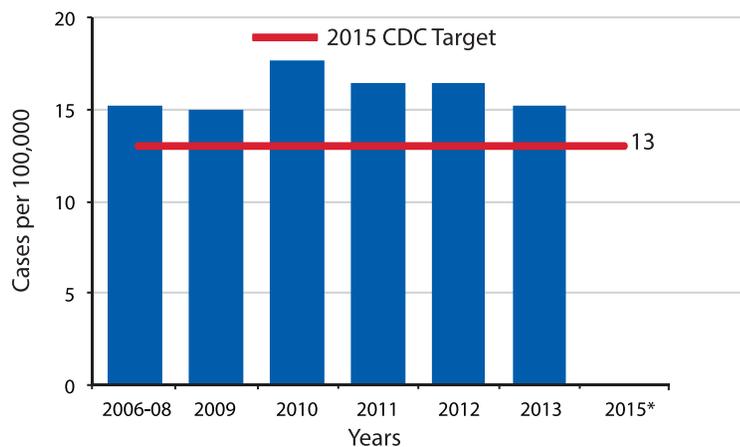
Source: Foodborne Diseases Active Surveillance Network (FoodNet)   *data anticipated August 2016

Trends in the rate of infections caused by Shiga toxin-producing
Escherichia coli (STEC) 0157:H7, 2006–2013

Source: Foodborne Diseases Active Surveillance Network (FoodNet)   *data anticipated August 2016