

OBNE: Year One Summary

OutbreakNet Enhanced (January 1, 2016 – December 31, 2016)

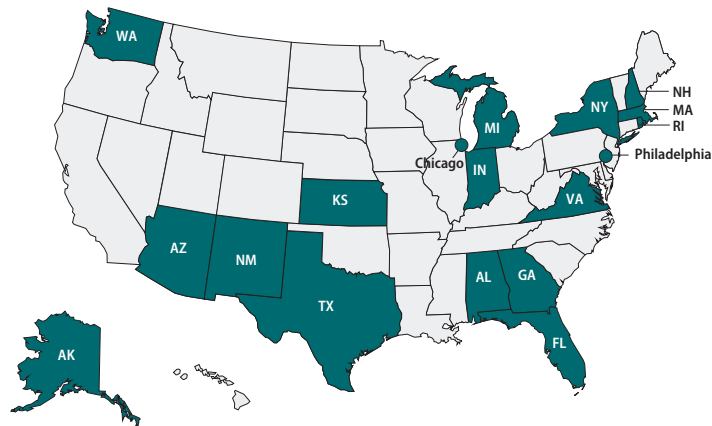
Background

OutbreakNet Enhanced (OBNE) is a Centers for Disease Control and Prevention (CDC) program that is designed to provide support to state and local health departments to improve their capacity to detect, investigate, control and respond to enteric disease outbreaks. OBNE started in August 2015 with 11 sites and expanded to 18 sites during 2016.

OBNE sites collaborated with CDC staff to develop performance metrics to document the burden, timeliness, and completeness of enteric disease outbreak activities. Sites report metrics once a year on both laboratory and epidemiologic aspects of outbreak investigations.

During Year One, sites used cooperative agreement resources, technical assistance, and OBNE metrics to:

- Identify and address gaps in communication between laboratory, epidemiology, and environmental health
- Improve ability to respond to enteric disease outbreaks
- Evaluate their enteric investigation processes
- Hire additional staff and/or student interview teams to improve accuracy and efficiency of interviewing



The OBNE sites during Year One were: Alabama, Alaska, Arizona, Chicago, Florida, Georgia, Indiana, Kansas, Massachusetts, Michigan, New Hampshire, New Mexico, New York, Philadelphia, Rhode Island, Texas, Virginia, and Washington.

Program Highlights

To showcase the value and impact of providing targeted resources to enteric disease programs, program overviews were presented at scientific conferences, programmatic meetings, and invited talks including presentations at:

- Council of State and Territorial Epidemiologists (CSTE) Annual Meeting
- American Public Health Association (APHA) Annual Meeting
- Food and Drug Administration (FDA) Rapid Response Team (RRT) Annual Program Meeting
- PulseNet and OutbreakNet regional meetings
- American Evaluation Association Conference
- Site-specific meetings and training events

During 2016, the first OutbreakNet Enhanced success story was published on the program's website. This success story highlights how active communication played a key role in solving and controlling a [Michigan E. coli outbreak](#) linked to cheese.

OutbreakNet Enhanced

Active Communication Plays Key Role in Solving Michigan Cheese Outbreak

When people get sick from the food they eat, how do public health professionals figure out exactly which food is causing the illness? What if it seems like all people didn't eat any of the same foods?

In April 2016, the Michigan Department of Health and Human Services (MDHHS) was notified of two people in the state who were sick with the same strain of *E. coli*. MDHHS worked with local health department staff in Michigan to quickly interview the two sick people about what they ate and where they had been before they became sick. However, it appeared that there was no common meal or restaurant to connect the two ill people.

From April to July, the number of people who became sick with this same strain of *E. coli* grew from two to six in Michigan, plus one traveler from Wisconsin. It was clear that the seven illnesses constituted an outbreak. MDHHS continued to work with local health departments throughout Michigan as well as epidemiologists in Wisconsin to interview patients, but still could not identify a common food that was making people sick.

Then, in late July, MDHHS got its first clue in solving the outbreak. In looking at the restaurants where sick people reported visiting, one MDHHS foodborne epidemiologist saw that many of these restaurants were advertising the use of locally produced ingredients in their meals, including different kinds of cheeses. Further investigation showed that some of the restaurants had used cheddar and Gouda cheese from the same local producer as an ingredient in meals that sick people ate.

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

Program Performance

Metrics for *Salmonella*, Shiga toxin-producing *Escherichia coli* (STEC), and *Listeria* (collectively referred to as SSL metrics), as well as optional metrics for *Shigella* and *Campylobacter* (collectively referred to as SC metrics) were reported for January 1, 2016 – December 31, 2016. See page two for figures and graphs of select metrics. Information on all of the [metrics](#), including complete data tables, are available on the [OBNE website](#).



Select Metrics for *Salmonella*, *STEC*, *Listeria*, *Shigella* and *Campylobacter*



More than
59,000 cases
reported

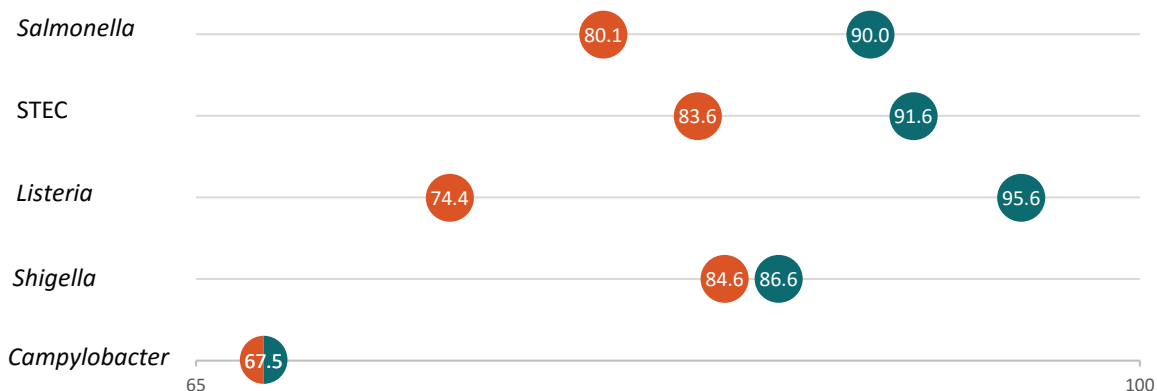


Over
1,000 clusters
detected



Average of
3.1 days
to initial interview attempt

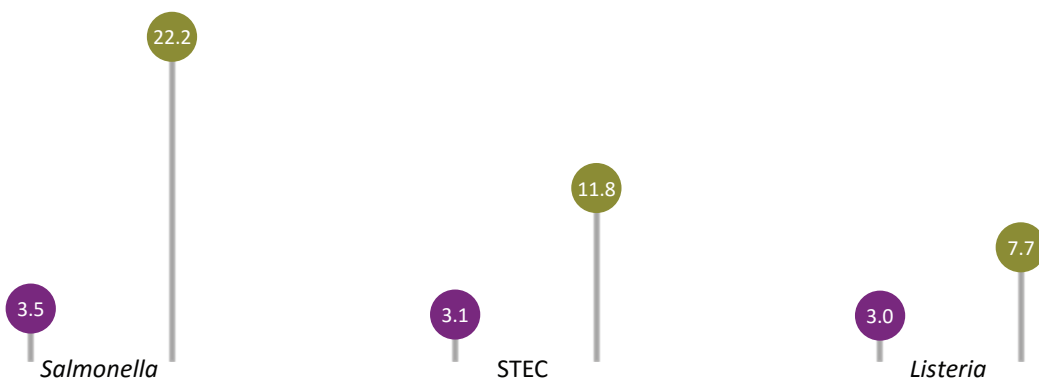
Sites **attempted to interview** a high percentage of cases to obtain complete **exposure histories**



Obtaining exposure history information is a critical element in effectively investigating and solving outbreaks.

Sites maintained the timeliness of completing **PFGE** for *Salmonella*, *STEC*, and *Listeria* while transitioning to **WGS** (in median days)

WGS is a newer technique and takes longer to complete. As WGS becomes more routine, this metric will show change in timeliness.



OBNE sites will continue to improve the timeliness and completeness of enteric disease outbreak surveillance and response activities. They will continue to strengthen their outbreak response programs to conduct faster, better, and more complete investigations, to help limit the spread of foodborne diseases. For an online version of this fact sheet and data to accompany the graphs, please visit <https://www.cdc.gov/foodsafety/outbreaknetenhanced/resources/obne-year-one-summary.html>.