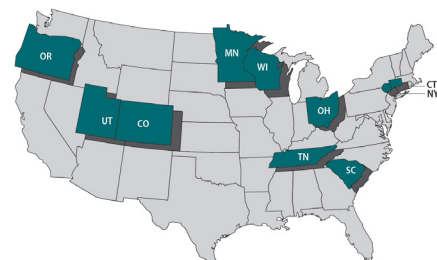# FoodCORE: Year Ten Summary Report
Foodborne Diseases Centers for Outbreak Response Enhancement
January 1, 2020 – December 31, 2020

Background

The Foodborne Diseases Centers for Outbreak Response Enhancement (FoodCORE) program addresses gaps in foodborne disease response through enhanced capacity in laboratory, epidemiology, and environmental health to improve timeliness and completeness of outbreak response activities. The FoodCORE centers during Year Ten (January 1, 2020–December 31, 2020) were Colorado, Connecticut, Minnesota, New York City, Ohio, Oregon, South Carolina, Tennessee, Utah, and Wisconsin.

Program Highlights

In 2020, public health agencies around the world faced the rapidly evolving and expanding COVID-19 pandemic. Staff were pulled from their regular job duties to support the pandemic response. Like other health departments, FoodCORE centers had fewer epidemiology, laboratory, and environmental health staff available to investigate foodborne outbreaks and conduct routine surveillance. Despite these challenges, FoodCORE centers leveraged their existing capacity to get the job done.

In non-pandemic times, FoodCORE centers utilize student teams either for temporary surge capacity during specific events or responses or as an integrated component of their surveillance and outbreak response teams to conduct daily disease surveillance and response activities. During the COVID-19 pandemic, FoodCORE student teams provided significant support to health departments who no longer had the capacity to conduct foodborne disease investigations. Students completed follow-up on cases, assisted with data entry, maintained enhanced surveillance activities, and carried out investigations while core enteric staff worked on the pandemic response.

The COVID-19 pandemic also presented an opportunity to re-examine and improve public health systems and processes. During the pandemic, a large portion of the public health workforce navigated the transition to maximum telework as agencies enforced new policies for workplace safety. To facilitate the transition, students in New York City converted enteric disease questionnaires into fillable PDF forms so that investigators working remotely could complete and process them more efficiently. In Tennessee, staff overhauled their Research Electronic Data Capture (REDCap) database that captures data elements for FoodCORE and other programs to provide users secure and remote access.

Due to limited staff capacity, some FoodCORE activities paused during 2020, including the development of success stories and revision of model practices.

To date, four FoodCORE model practices have been published that share the cumulative success of FoodCORE centers so that others can learn from their experiences. Centers will resume revising the earlier model practice on laboratory timeliness and completeness when staff are more available to participate and provide input.

Each year, FoodCORE staff at CDC and in FoodCORE centers share progress and updates on their activities at national meetings and conferences, including the Council of State and Territorial Epidemiologists (CSTE) annual conference and the Integrated Foodborne Outbreak Response and Management (InFORM) conference. Unfortunately, CSTE and InFORM were among the many events cancelled in 2020. However, FoodCORE centers continue to document and share their experiences, including successes and challenges during COVID-19, through FoodCORE monthly calls, success stories, and virtual meetings and conferences.

Program Performance

Centers report metrics once a year to document changes resulting from targeted FoodCORE resources. Metrics for *Salmonella*, Shiga toxin-producing *Escherichia coli* (STEC), and *Listeria* (SSL) have been collected since late 2010. Metrics for norovirus, other etiologies, and unknown etiology (NOU) investigations have been collected since 2012. The metrics collected by FoodCORE centers are revised as needed to best meet program goals.

While FoodCORE centers were able to maintain most of their core activities in 2020, some metrics capture the impacts of COVID-19 on enteric disease and staff capacity.

FoodCORE Web Resources

FoodCORE Program Website
https://www.cdc.gov/foodcore/index.html

FoodCORE Success Stories and Highlights
https://www.cdc.gov/foodcore/successes.html

FoodCORE Model Practices
https://www.cdc.gov/foodcore/modelpractices.html

**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention

Graphs for Selected Metrics

The average number of *Salmonella*, STEC, and *Listeria* primary isolates/isolate-yielding specimens submitted to or recovered at the PHL was lower in Year 10 than compared to Year 9 and previous years.
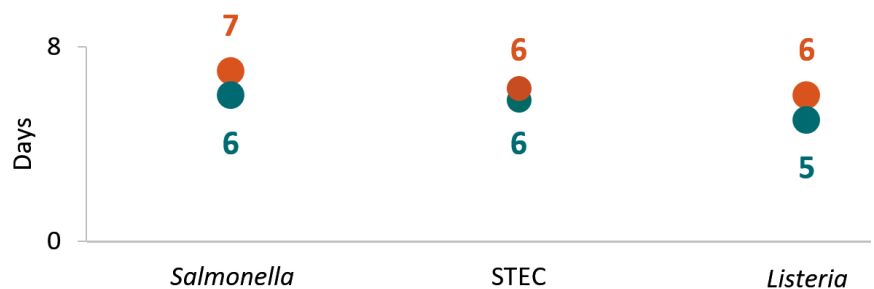
Year 9

Year 10

	Year 9	Year 10
Salmonella	1010	732
STEC	242	158
Listeria	19	15

The average number of laboratory-confirmed cases reported to epidemiology staff decreased from Year 9 to Year 10. In Year 9, each center reported an average of 1100 SSL cases to epidemiology staff (864, 218, and 18 cases for *Salmonella*, STEC, and *Listeria*, respectively) compared to an average of 825 SSL cases (679, 131, and 15 cases for *Salmonella*, STEC, and *Listeria*, respectively) in Year 10.

In Year 10, centers conducted **35 SSL** and **62 NOU*** environmental health assessments as part of investigations where there was a link to a common location of exposures.
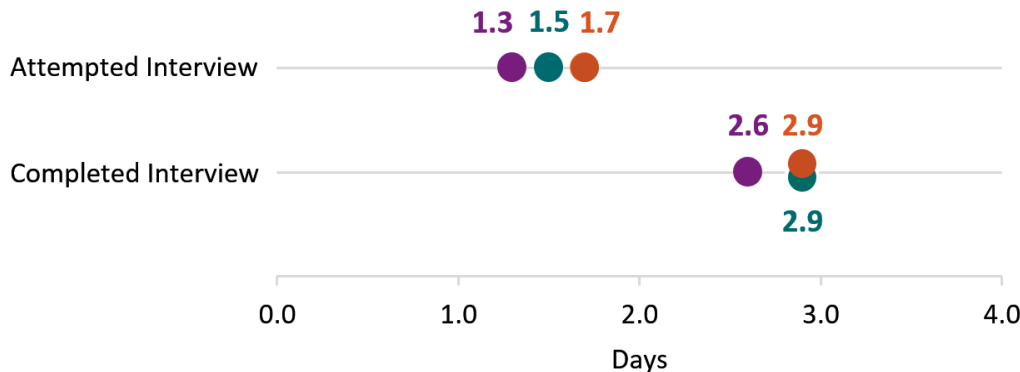
Environmental health assessments provide information needed to recommend effective short and long-term interventions that stop ongoing foodborne outbreaks and prevent them in the future.

Since 2016, centers have continued to reduce the turnaround time[†] (TAT) from receipt (or recovery) at WGS laboratory to sequence being shared with national database. From **Year 9** to **Year 10**, FoodCORE centers decreased the TAT for *Salmonella* and *Listeria*. STEC timeliness was maintained.

8 — 7 / 6 (Salmonella) 6 / 6 (STEC) 6 / 5 (Listeria)

Days

0

Salmonella   STEC   *Listeria*

In Year 10, centers maintained a high proportion of primary *Salmonella*, STEC, and *Listeria* isolates with WGS results at **99%**, **99%**, and **94%**, respectively. Further, the average proportion of *Salmonella*, STEC, and *Listeria* confirmed cases reported to epidemiology staff with WGS information was **91%**, **87%**, and **87%**, respectively.

In Year 10, the time[†] to attempt and complete interviews for *Salmonella*, STEC, and *Listeria* was under 2 days and 3 days, respectively. This TAT is consistent with previous years.

Attempted Interview — 1.3 1.5 1.7

Completed Interview — 2.6 2.9 / 2.9

0.0   1.0   2.0   3.0   4.0

Days

During the COVID-19 pandemic, FoodCORE centers had fewer epidemiology, laboratory, and environmental health staff available to investigate foodborne outbreaks and conduct routine surveillance. While centers were able to maintain most of their core activities in 2020, some metrics capture the impacts of COVID-19 on enteric disease and staff capacity.