



Leveraging Enhanced Capacity During the COVID-19 Pandemic

Accessible link: <https://www.cdc.gov/foodcore/successes/leveraging-capacity.html>

During the COVID-19 pandemic, public health staff were pulled from their regular job duties to support the unprecedented pandemic response. Like other health departments, Foodborne Diseases Centers for Outbreak Response Enhancement (FoodCORE) and OutbreakNet Enhanced (OBNE) sites were faced with the challenge of conducting routine enteric disease surveillance and outbreak response activities with fewer epidemiology, laboratory, and environmental health staff. FoodCORE and OBNE sites found innovative ways to maintain routine work during the pandemic by leveraging their enhanced capacity and adapting their workflows. This included expanding the use of student interviewer teams, quickly adapting trainings

and resources to function in a remote work environment, and updating data management processes and systems to improve efficiency as staff took on additional responsibilities.



Expanding Use of Student Interviewers

Many FoodCORE and OBNE sites use student teams to support their routine surveillance and outbreak response activities. Specific roles and responsibilities of student teams vary across jurisdictions and can include conducting patient interviews, assisting with surge capacity during a response to a specific outbreak or event, data entry, and special projects.

During the pandemic, existing student teams in the FoodCORE and OBNE sites took on additional tasks and responsibilities as health department staff were redirected to focus on critical COVID-19 pandemic response activities. Beyond their pre-pandemic roles, students were instrumental in maintaining surveillance and outbreak response activities.



Student teams improve the ability of health departments to respond to and solve outbreaks, while also providing students with real-world public health experience.

To learn more about how to establish, implement, and maintain a team of student interviewers, please see [FoodCORE Model Practice: Student Interview Teams](#).

FoodCORE student teams in Connecticut and Tennessee conducted interviews and completed data entry for all persons with enteric illness, maintained enhanced surveillance activities, and carried out cluster investigations. In addition to their usual salmonellosis investigations, New York City's FoodCORE student team investigated cases of Shiga toxin-producing *E. coli* (STEC), campylobacteriosis, vibriosis, cryptosporidiosis, hepatitis A, and shigellosis that would previously have been investigated by full-time staff.

In 2020, several student interviewer teams were faced with the challenging task of conducting all enteric interviews for local jurisdictions while full-time disease investigators shifted their work to the COVID-19 response. Pennsylvania's student team was responsible for 17% of the state's total completed enteric interviews in 2020, compared to 7% in 2018–2019. In Illinois, the OBNE student team assisted 40 local health departments with conducting enteric disease interviews. As part of a routine interview, the Illinois OBNE student team was able to identify a STEC outbreak at a local restaurant, which allowed the local health department to promptly follow up and implement control measures. Rhode Island's OBNE student team assisted with interviews to successfully detect a *Campylobacter* outbreak linked

to consumption of raw oysters. During a multistate *Salmonella* Oranienburg cluster investigation, the Kansas centralized OBNE student team alerted epidemiologists about leftover food at the home of one of the case-patients they interviewed. A food sample tested positive for the outbreak strain, providing critical information for solving the outbreak. To address a need for interviewing surge capacity, the California and Nebraska OBNE sites partnered with the Washington and Colorado Integrated Food Safety Centers of Excellence (CoEs), respectively, to have CoE students conduct interviews from the CoE state.



Adapting Trainings and Resources

The COVID-19 pandemic has presented many challenges, including the logistic difficulties of continuing operations with many staff working remotely, creating the need to adapt resources and training materials to work in a virtual format. Sites found new ways to ensure all team members could seamlessly and efficiently access the most up-to-date information for surveillance and response. For example, some sites fully transitioned to using cloud-based shared documents for collaborative editing and sharing, such as Google Drive and MS Teams. Additionally, many sites used individual and group chats to stay in touch with colleagues throughout

the day. Sites also had to adapt the process of onboarding and training new team members, as in-person options were limited or unavailable. Georgia's OBNE student team created a training manual for enteric disease interviewing and data cleaning based on virtual work processes. The OBNE student team in Rhode Island collaborated with the Minnesota CoE to create online trainings for future student interviewers. These updated trainings were designed to aid health department staff when they are not able to provide traditional one-on-one training as student interviewers join the team.

“One of our student interviewers created a training manual for enteric disease interviewing and data cleaning based on virtual work processes. This has since been used to train six student interviewers. This manual is dynamic and will be easily adaptable to transitioning back to office-based work.”

OBNE Team in Georgia

Updating Data Management

The shift to remote work also prompted FoodCORE centers and OBNE sites to adopt innovative approaches to modify existing data management strategies. To maintain continuity and security during remote work, FoodCORE and OBNE student teams moved from paper-based interview forms to electronic forms so investigators working remotely could complete and process the questionnaires more efficiently. New York City's FoodCORE student team and Georgia's OBNE student team each converted enteric disease questionnaires into fillable PDF forms and reformatted routine questionnaires to match the order of the questions in their state surveillance systems.

The Georgia OBNE student team also created a SharePoint site that housed all interviewing documents, training manuals, and data for their epidemiologists and student interviewers.



Before the pandemic, some FoodCORE and OBNE sites were unable to use online data management systems like Research Electronic Data Capture (REDCap), a free and secure web application for building and managing online surveys and databases. The pressures of the pandemic and adapting to remote work allowed more centers and sites to use REDCap. The Hawaii OBNE site, for instance,

was able to adopt REDCap to conduct foodborne illness surveys. Hawaii noted that their data mapping and import processes from REDCap meant staff no longer had to enter data into more than one system, streamlining the workflow and reducing the burden on their staff. In Tennessee, FoodCORE staff overhauled their existing REDCap database to securely provide remote access.

Persevering During the Pandemic

Despite the strain that the COVID-19 pandemic placed on the public health workforce, FoodCORE centers and OBNE sites showed creativity and flexibility by using their existing resources to maximize support for enteric disease investigations while simultaneously responding to the COVID-19 pandemic. Centers and sites expanded their use of existing student teams to maintain critical surveillance and response. They developed new training materials for people working in remote settings, including

student interviewers and new staff. They also improved data management systems and processes to ensure that critical work could continue efficiently in a fully remote work environment.

Throughout the COVID-19 pandemic, FoodCORE and OBNE sites leveraged their enhanced capacity so they could continue their enteric disease surveillance and response activities and help keep people from getting sick from enteric diseases.

