

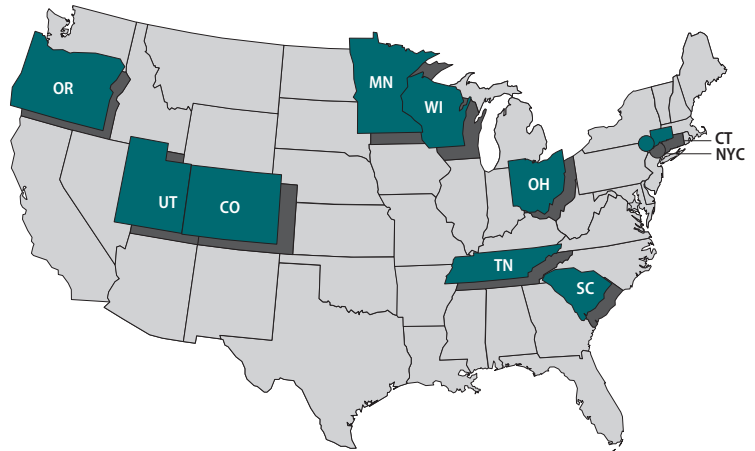
FoodCORE Foodborne Diseases Centers for Outbreak Response Enhancement

Improving foodborne disease investigation and response in state and local health departments

“FoodCORE improves our capacity to interview ill persons sooner and more comprehensively about what they ate, conduct faster DNA fingerprinting of the bacteria that made them sick, and pool information swiftly to determine sources of more contaminated foods, so solutions can be found more rapidly.”

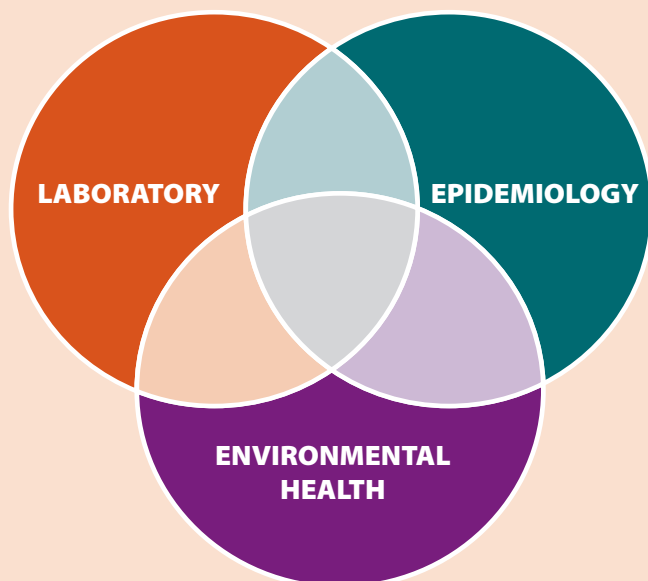
Dr. Robert Tauxe, Deputy Director, CDC's Division of Foodborne, Waterborne, and Environmental Diseases

FoodCORE is a program managed by the Centers for Disease Control and Prevention (CDC) to enhance the ability of state and local health departments to respond to foodborne disease outbreaks.



Started in 2009, the program has grown to include 10 state and local health departments. The centers cover 18% of the U.S. population, or 58 million people.

Increased Internal Collaboration Translates Into Greater Capacity



Centers work to increase collaboration across their health department's laboratory, epidemiology, and environmental health teams.

Staff from each area play a critical role in ongoing foodborne surveillance and outbreak response including finding what sick people ate, completing DNA fingerprinting of the bacteria that made them sick, and collecting samples of contaminated foods or environments.

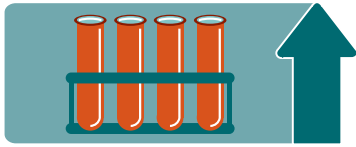
With increased coordination between these three areas, the centers are able to:

- Detect more outbreaks
- Conduct thorough investigations
- Control outbreaks faster
- Protect other people from getting sick

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



IMPACT: Better, Faster, More Complete



Complete PFGE for more isolates

14% increase in PFGE for *Salmonella*, *E. coli*, and *Listeria* from 86% (baseline) to 99% (Year 3)



Complete PFGE faster

>50% faster for *Salmonella*, *E. coli*, and *Listeria* from 13 days to 5 days



Attempt interviews with more cases

12% increase in outreach to cases with *Salmonella* from 88% to 99%

All FoodCORE centers work together to develop model practices for outbreak response. They do this so that others can learn from their experiences and replicate what works best.

FoodCORE Helps Solve Outbreak Mysteries

FoodCORE centers were instrumental partners during a 2014 multistate outbreak of *Salmonella* infections involving three serotypes (Newport, Hartford, and Oranienburg). Laboratories at six of the ten FoodCORE centers identified sick people that were linked to the outbreak through complete and timely PFGE subtyping. The quick response of health department staff was crucial in linking the ill people and identifying the source of the outbreak.

Initial interview data from multiple states revealed that many of the ill people were “healthy eaters.” A routine interview from Wisconsin conducted before the multistate outbreak was recognized included questions about consuming smoothies. The ill person reported adding a chia product to their smoothie in the week before becoming sick. This information was shared by Wisconsin and provided one of the first clues about the source of the outbreak. As a result, other states and CDC began asking ill people about eating any chia products before they became sick. More ill people reported the same exposure to chia products.



Public health laboratories also isolated *Salmonella* from five samples of leftover product collected from ill persons’ homes, as well as two samples of unopened product from retail locations. Using all this information, organic sprouted chia powder was identified as the source of the infections.

By interviewing ill persons quickly and asking the right questions from the beginning, FoodCORE centers provided critical evidence that helped to solve this outbreak quickly. The investigation resulted in multiple recalls of chia products in both the U.S. and Canada, removing contaminated products from store shelves, which likely prevented additional illnesses.

Partners are Key

FoodCORE collaborates with other federal food safety programs that focus on various aspects of surveillance and outbreak response. All ten FoodCORE centers participate in [PulseNet](#), five are [FoodNet](#) sites, and four are [Integrated Food Safety Centers of Excellence](#). [Cross-program collaborations](#) enhance and complement FoodCORE’s internal capacity building.

