



# Food Safety Programs Reference Guide



OCTOBER 2019

**CIFOR** Council to  
Improve  
Foodborne  
Outbreak  
Response  
**Detect • Investigate • Control • Prevent**



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This Program Reference Guide is intended to provide a snapshot of current governmental food safety efforts aimed at detecting, investigating, controlling or preventing foodborne illness in the US. It is not intended to be an exhaustive, all-encompassing list of food safety activities across all sectors.

**Please note:** In many instances program descriptions have been copied directly from their respective websites in order to avoid any misinterpretation or misinformation.

## SURVEILLANCE NETWORKS

### ARLN: Antibiotic Resistance Laboratory Network

**Goal/Purpose:** Established in 2016, the US Centers for Disease Control and Prevention's (CDC) ARLN is comprised of the National Tuberculosis Molecular Surveillance Center (National TB Center) and regional, state, territorial and local public health laboratories. As a whole, the network tracks changes in resistance and helps identify and respond to outbreaks faster. All 50 states, five large cities, and Puerto Rico received funding in 2016 and 2017 to increase capabilities to test for carbapenem-resistant *Enterobacteriaceae* (CRE) and carbapenem-resistant *Pseudomonas aeruginosa* (CRPA) and perform whole genome sequencing (WGS) on all *Salmonella* isolates. The *Salmonella* testing builds on the National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS).

### CaliciNet: National Norovirus Outbreak Network

**Goal/Purpose:** Launched by CDC in 2009, CaliciNet is a national norovirus outbreak surveillance network of federal, state, and local public health laboratories that collects information on norovirus strains associated with gastroenteritis outbreaks in the US. The norovirus strains can be compared with other norovirus strains in the database, helping CDC link outbreaks to a common source, monitor norovirus strains that are circulating, and identify newly emerging norovirus strains.

### COVIS: Cholera and Other Vibrio Illness Surveillance

**Goal/Purpose:** CDC initiated COVIS in collaboration with the FDA and four Gulf Coast states (Alabama, Florida, Louisiana, and Texas) in 1989. Maintained by CDC, COVIS helps track human vibriosis and cholera infections and determine host, food, and environmental risk factors for these infections.

### CryptoNet

**Goal/Purpose:** CDC established CryptoNet, the first national molecular tracking system for a parasitic infection, in response to the inability of traditional clinical diagnostics to distinguish *Cryptosporidium* species, genotypes and subtypes and increased national reporting of cryptosporidiosis. CryptoNet is a multidisciplinary, molecular-based surveillance system built on the common BioNumerics platform successfully used by PulseNet and CaliciNet. CryptoNet aims to efficiently use existing infrastructure to facilitate regular analysis of systematically collected case exposure and molecular characterization data to further understand cryptosporidiosis epidemiology.

### FoodNet: Foodborne Diseases Active Surveillance Network

**Goal/Purpose:** Established in 1995, FoodNet is a collaborative program among CDC, several state health departments, the US Department of Agriculture (USDA) Food Safety and Inspection Service (FSIS), and the Food and Drug Administration (FDA). FoodNet conducts population-based, active surveillance for *Campylobacter*, *Cyclospora*, *Listeria*, *Salmonella*, Shiga toxin-producing *Escherichia coli* (STEC) O157 and non-O157, *Shigella*, *Vibrio* and *Yersinia* infections diagnosed by laboratory testing of patient samples. FoodNet has four main objectives: determine the burden of foodborne illness in the US, monitor trends in the burden of specific foodborne illness over time, attribute the burden of foodborne illness to specific foods and settings, disseminate information that can lead to improvements in public health practice and the development of interventions to reduce the burden of foodborne illness.

### FDOSS: Foodborne Disease Outbreak Surveillance System

**Goal/Purpose:** FDOSS is a CDC program for collection and periodic reporting of data on the occurrence and causes of foodborne disease outbreaks. The National Outbreak Reporting System (NORS) interfaces with FDOSS to collect information, such as date and location of the foodborne outbreak, number of people who became ill and their symptoms, food implicated in the outbreak, setting where the food was prepared and eaten, and pathogen that caused the outbreak.

### GenomeTrakr Network

**Goal/Purpose:** The US Food and Drug Administration's (FDA) GenomeTrakr network consists of federal and state public health and regulatory labs, other labs located in and outside the US, and collaborations with independent academic researchers that collect and share genomic and geographic data from foodborne pathogens mainly identified in food. The data, which are housed in public databases at the National Center for Biotechnology Information (NCBI), can be accessed for real time comparison and analysis.

## **NARMS: National Antimicrobial Resistance Monitoring System for Enteric Bacteria**

**Goal/Purpose:** Established in 1996, NARMS is a collaboration among state and local public health departments, CDC, FDA, and USDA that tracks changes in the antimicrobial susceptibility of certain enteric bacteria found in ill people, retail meats, and food animals in the United States. The NARMS program at CDC helps protect public health by providing information about emerging bacterial resistance, the ways in which resistance is spread, and how resistant infections differ from susceptible infections.

## **NEARS: National Environmental Assessment Reporting System**

**Goal/Purpose:** Overseen by CDC, NEARS is a voluntary surveillance system intended to capture local and state food safety program environmental assessment data from foodborne illness outbreak investigations. Environmental assessments help identify the underlying environmental causes of foodborne illness outbreaks.

## **NNDSS: National Notifiable Diseases Surveillance System**

**Goal/Purpose:** Overseen by CDC, NNDSS is a nationwide collaboration that enables all levels of public health—local, state, territorial, federal, and international—to share notifiable disease related health information. Public health uses this information to monitor, control and prevent the occurrence and spread of state-reportable and nationally notifiable infectious and noninfectious diseases and conditions and outbreaks.

NNDSS is a multifaceted program that includes the surveillance system for collection, analysis, and sharing of health data. It also includes policies, laws, electronic messaging standards, people, partners, information systems, processes and resources at the local, state, territorial and national levels.

## **NoroSTAT: Norovirus Sentinel Testing and Tracking Network**

**Goal/Purpose:** Established in 2012, NoroSTAT is a collaborative network of several state health departments and CDC working together to establish and maintain standard practices for norovirus outbreak reporting to CDC surveillance systems. These standards aim to improve the timeliness, completeness, and consistency of norovirus outbreak reporting.

## **NREVSS: The National Respiratory and Enteric Virus Surveillance System**

**Goal/Purpose:** NREVSS is a voluntary laboratory-based surveillance system which has prospectively monitored respiratory and enteric virus activity in the United States since 1989. Norovirus was added to NREVSS in 2018 due to the increased availability of diagnostic tests that include norovirus. NREVSS only collects the aggregate weekly number of tests performed and the aggregate number of positive tests detected. Participating laboratories spend approximately five minutes per week to report the required data for this surveillance system. Starting in 2019, states can participate in NREVSS Enhanced, which seeks to increase clinical laboratory participation in NREVSS and collect supplemental information on sporadic norovirus infections, including demographic characteristics and genotypes.

## **PulseNet: National Molecular Subtyping Network for Foodborne Diseases**

**Goal/Purpose:** Launched in 1996, CDC PulseNet is a national laboratory network of public health and food regulatory laboratories designed to rapidly characterize foodborne pathogens and detect foodborne outbreaks. PulseNet allows scientists to compare DNA fingerprinting profiles locally and nationally to detect and define clusters of bacterial foodborne pathogens such as *Salmonella*, *Listeria*, *Campylobacter*, *Vibrio*, *Shigella* and *E. coli*. PulseNet uses whole genome sequence data to characterize foodborne pathogens and PulseNet members receive training and certification in standardized laboratory and analysis workflows.

## **WBD OSS: Waterborne Disease & Outbreak Surveillance System**

**Goal/Purpose:** WBD OSS is a national surveillance system initiated in 1971 in a partnership between the CDC, EPA, and CSTE. WBD OSS collects data on waterborne disease and outbreaks associated with recreational water, drinking water, and environmental and undetermined exposures to water. Data from WBD OSS have supported EPA efforts to develop drinking water regulations and have provided guidance for CDC's recreational water activities, such as the Healthy Swimming program. Waterborne disease outbreak data are reported to WBD OSS via the National Outbreak Reporting System (NORS).

## CAPACITY BUILDING NETWORKS

### CDC CoEs: Integrated Food Safety Centers of Excellence

**Goal/Purpose:** Funded by CDC, the CoEs build capacity in other health departments by developing and providing online and in-person resources, training and assistance for foodborne illness detection, surveillance and investigation. CoEs are funded under the authority of the Food Safety Modernization Act and are partnerships between state health departments and academic institutions. The Centers serve as a resource for public health professionals at state, local and regional levels.

### EHS-Net: Environmental Health Specialists Network

**Goal/Purpose:** EHS-Net (pronounced S-Net) is a collaborative forum of environmental health specialists whose mission is to improve environmental health practice and prevent foodborne illness outbreaks. These specialists collaborate with epidemiologists and laboratorians to identify and prevent environmental factors contributing to foodborne illness outbreaks.

### FDA CFSAN CoE: FDA Center for Food Safety and Applied Nutrition Centers of Excellence Program

**Goal/Purpose:** CFSAN's CoE Program is a collaboration effort between the Agency and several academic institutions that yields critical information that enhances FDA's on-going efforts to protect the food supply.

### FoodCORE: Foodborne Diseases Centers for Outbreak Response Enhancement

**Goal/Purpose:** Funded by CDC, FoodCORE centers work together to develop better methods to detect, investigate, respond to, and control multi-state outbreaks of foodborne diseases. This project was launched in 2009 with support from the U.S. Department of Agriculture's Food Safety and Inspection Service and the Association of Public Health Laboratories. Areas specifically targeted for improvement include: public health laboratory surveillance, epidemiologic interviews and investigations, and environmental health assessments. Efforts are primarily focused on outbreaks caused by bacteria, including *Salmonella*, *Shiga* toxin-producing *E. coli* (STEC), and *Listeria*. The ability to detect and investigate viral and parasitic foodborne disease outbreaks will also be strengthened.

### OutbreakNet Enhanced

**Goal/Purpose:** Started by CDC in August 2015, the OutbreakNet Enhanced program provides support to state and local health departments to improve their capacity to detect, investigate, control and respond to enteric disease outbreaks. OutbreakNet Enhanced activities focus on improving detection and rapid interviewing of cases of *Salmonella*, *Shiga* toxin-producing *E. coli* (STEC), and *Listeria* as well as any cases of enteric disease with pathogens that demonstrate antimicrobial resistance.

## RESPONSE NETWORKS

### FERN: Food Emergency Response Network

**Goal/Purpose:** FERN integrates the nation's food-testing laboratories at the local, state, and federal levels into a network that is able to respond to emergencies involving biological, chemical, or radiological contamination of food. The FERN structure is organized to ensure federal and state interagency participation and cooperation in the formation, development, and operation of the network. FDA and USDA's FSIS staff the FERN National Program Office and coordinate daily operations and the network's response, training and other activities.

### LRN: Laboratory Response Network

**Goal/Purpose:** Established by CDC, the Federal Bureau of Investigation (FBI) and the Association of Public Health Laboratories (APHL), the LRN is a national network of local, state and federal public health, food testing, veterinary diagnostic, and environmental testing laboratories. The LRN provides laboratory infrastructure and capacity to respond to biological and chemical terrorism and other public health emergencies.

## RRTs: Rapid Response Teams

**Goal/Purpose:** RRTs are multi-agency, multi-disciplinary teams that operate using Incident Command System (ICS)/ National Incident Management System (NIMS) principles and a Unified Command structure to respond to human and animal food emergencies. Funded by FDA, RRTs are intended to minimize the time between agency notification of a human or animal food contamination event and implementation of effective control measures.

## Vet-LIRN: Center for Veterinary Medicine (CVM) Veterinary Laboratory Investigation and Response Network Veterinary Diagnostic Laboratory Program

**Goal/Purpose:** The Vet-LIRN program coordinates facilities, equipment, and professional expertise of government and veterinary diagnostic laboratories across the country and Canada to respond to high priority chemical and microbial feed/drug contamination events. The network provides the means for rapid response to reports of animal injury and establishes protocols to facilitate veterinary diagnostic reporting to FDA.

## DATA INFORMATION SHARING NETWORKS

### eLEXNET: Electronic Laboratory Exchange Network

**Goal/Purpose:** eLEXNET is an integrated, secure network that allows multiple government agencies engaged in food safety activities to compare, communicate, and coordinate findings of laboratory analyses. eLEXNET enables health officials to assess risks, analyze trends and provides the necessary infrastructure for an early-warning system that identifies potentially hazardous foods.

### LEDS: Laboratory-based Enteric Disease Surveillance

**Goal/Purpose:** LEDS collects laboratory data, such as serotype, on Salmonella. Initially, all surveillance data were transmitted through the Public Health Laboratory Information System (PHLIS), but other methods of data transmission have been implemented over time; currently data are collected into the Laboratory-based Enteric Disease Surveillance (LEDS) system, which has replaced PHLIS.

### LivestockNET

**Goal/Purpose:** Managed by FDA, LivestockNET is one of two distinct, secure reporting portals that make up the Animal Feed Network. The portal is intended for feed-related illnesses and product defects associated with livestock animals, aquaculture species and horses.

### NEDSS: National Electronic Disease Surveillance System

**Goal/Purpose:** NEDSS is a secure online framework maintained by CDC that allows healthcare professionals and government agencies to communicate about disease patterns and coordinate national response to outbreaks. The NEDSS framework includes a set of specifications that includes software, hardware, databases and data format standards.

### NBS: National Electronic Disease Surveillance System Base System

**Goal/Purpose:** NBS is a CDC-developed integrated information system that helps local, state, and territorial public health departments manage reportable disease data and send notifiable disease data to CDC. NBS provides a tool to support the public health investigation workflow and to process, analyze, and share disease-related health information. NBS also provides reporting jurisdictions with a NEDSS-compatible information system to transfer epidemiologic, laboratory, and clinical data efficiently and securely over the Internet. Built and maintained by CDC, NBS integrates data from many sources on multiple public health conditions to help local, state, and territorial public health officials identify and track cases of disease over time. This capability allows public health to provide appropriate interventions to help limit the severity and spread of disease.

### NORS: National Outbreak Reporting System

**Goal/Purpose:** Launched in 2009, NORS is a web-based platform used by local, state, and territorial health departments in the United States to report to CDC all waterborne, foodborne, and enteric disease outbreaks transmitted by contact with environmental sources, infected persons or animals, or unknown modes of transmission.

### **PETNet: Pet Event Tracking Network**

**Goal/Purpose:** PETNet is a secure, web based network that allows the exchange of information between FDA and other federal and state regulatory agencies about pet-food related incidents, such as illness associated with the consumption of pet food or pet food product defects. Using the shared information, state and federal agencies can work together to quickly determine what regulatory actions are needed to prevent or quickly limit adverse effects associated with pet food products.

### **SampleNet**

**Goal/Purpose:** SampleNet is a reporting network under FDA's Animal Feed Network intended to share violative animal feed and pet food laboratory samples considered adulterated by state and/or FDA statutes with commissioned officials.

## **COLLABORATION AND HARMONIZATION EFFORTS**

### **CFP: Conference for Food Protection**

**Goal/Purpose:** CFP brings together representatives from the food industry, government, academia and consumer organizations to identify and address emerging problems of food safety and to formulate recommendations. It seeks to balance the interests of regulatory and industry people while providing an open forum for the consideration of ideas from any source.

### **CIFOR: Council to Improve Foodborne Outbreak Response**

**Goal/Purpose:** CIFOR is a multidisciplinary collaboration of national associations and federal agencies working together since 2006 to improve methods at the local, state and federal levels for detecting, investigating, controlling and preventing foodborne disease outbreaks. CIFOR convened development teams to address four key priorities and eight objectives to achieve its mission and guide activities.

### **Gen-FS: Interagency Collaboration on Genomics for Food and Feed Safety**

**Goal/Purpose:** Gen-FS represents a substantial effort to strengthen collaboration among and coordination of several federal agencies by addressing cross-cutting priorities. Priorities include public health, regulatory food safety, and One Health responsibilities of the CDC, FDA, and the National Institutes of Health (NIH) (specifically the National Center for Biotechnology Information (NCBI) within the National Library of Medicine (NLM)) within the US Department of Health and Human Services; and the FSIS, the Agricultural Research Service (ARS), and the Animal and Plant Health Inspection Service (APHIS) within the US Department of Agriculture. Gen-FS will strengthen collaboration among these federal agencies by addressing cross-cutting priorities for molecular sequencing of foodborne and other zoonotic pathogens causing human illness, for data collection and analysis, and for the use of these data in support of surveillance and outbreak investigation activities.

### **IFORC: Interagency Foodborne Outbreak Response Collaboration**

**Goal/Purpose:** IFORC is a joint effort by CDC, FDA and USDA's FSIS to improve coordination of multi-state outbreak investigations. It develops and coordinates federal best practices for a) detection of foodborne outbreaks; b) generation and testing of hypotheses about outbreak causation, with input from industry partners; c) identification of food vehicles for outbreak-causing microbes; d) enhancement of data-sharing and analyses; and e) development of interagency and public health communication strategies and processes.

### **IFSAC: Interagency Food Safety Analytics Collaboration**

**Goal/Purpose:** IFSAC is a collaboration among CDC, FDA and USDA's FSIS aimed at improving coordination of federal food safety analytic efforts and addressing cross-cutting priorities for food safety data collection, analysis, and use. Projects and studies aim to identify foods that are important sources of illnesses.

### **PFP: Partnership for Food Protection**

**Goal/Purpose:** The PFP is a multidisciplinary partnership across local, state and federal agencies that has been tasked with helping to develop and implement an Integrated Food Safety System (IFSS). Convened following the FDA 50-state meeting in 2008, the PFP utilizes a work group structure to develop and implement procedures, best practices and other work products that would advance food safety integration.

## REGULATORY PROGRAM STANDARDS / LABORATORY QUALITY MANAGEMENT SYSTEM EFFORTS

### AFRPS: Animal Feed Regulatory Program Standards

**Goal/Purpose:** In 2011, the FDA and the Association of American Feed Control Officials (AAFCO) partnered to develop the Animal Feed Regulatory Program Standards (referred to as the feed standards). The feed standards establish a uniform foundation for the design and management of state programs responsible for the regulation of animal feed. Under the AFRPS cooperative agreement, there is also a funding option for laboratories that support animal feed programs and are pursuing accreditation under the international standard ISO/IEC 17025:2005.

### ISO/IEC 17025:2005 Accreditation for State Food Testing Laboratories

**Goal/Purpose:** The goal of FDA's ISO/IEC 17025:2005 Cooperative Agreement Program (CAP) is for microbiological and chemical food analyses to be performed on behalf of state manufactured food regulatory programs conducted within the scope of an ISO/IEC 17025:2005 accredited laboratory. This is accomplished by preparing the primary food testing laboratories for state manufactured food regulatory programs to achieve and maintain ISO/IEC 17025:2005 laboratory accreditation. Laboratories will also be prepared for accreditation enhancements.

### MFRPS: Manufactured Food Regulatory Program Standards

**Goal/Purpose:** The goal of MFRPS is to implement a nationally integrated, risk-based, food safety system focused on protecting public health. The MFRPS establish a uniform basis for measuring and improving the performance of prevention, intervention, and response activities of manufactured food regulatory programs in the United States. The development and implementation of the standards will help federal and state programs better direct their regulatory activities toward reducing foodborne illness.

### Retail Program Standards: Voluntary National Retail Food Regulatory Program Standards

**Goal/Purpose:** The Retail Program Standards define what constitutes a highly effective and responsive program for the regulation of food service and retail food establishments. They are intended to reinforce proper sanitation (good retail practices) and operational and environmental prerequisite programs while encouraging regulatory agencies and industry to focus on the factors that cause and contribute to foodborne illness, with the ultimate goal of reducing the occurrence of those factors.

## INSPECTION PROGRAMS

### Animal Food/BSE (Bovine Spongiform Encephalopathy) Inspection Contract Program

**Goal/Purpose:** Under this program, inspections are performed in both licensed and non-licensed animal food establishments using Category II Type medicated articles to make medicated feeds. Inspections are also conducted to ensure compliance to the prohibition of mammalian protein use in ruminant feeds, which can lead to the spread of BSE.

### Human Food Inspection Contract Program

**Goal/Purpose:** Under this program, inspections are performed in selected food manufacturers/processors to determine compliance with the Federal Food, Drug and Cosmetic (FD&C) Act, state law or both. During inspections, the emphasis is placed on determining significant good manufacturing practices (GMP), unsanitary conditions and practices that may render the food injurious to health (particularly those involving the introduction or growth of pathogenic organisms, and other conditions that may cause food to become filthy, putrid, decomposed or contaminated with foreign objects.)

### Meat and Poultry Inspection “at least equal to” Cooperative Agreement

**Goal/Purpose:** The Federal Meat Inspection Act (FMIA) and the Poultry Products Inspection Act (PPIA) authorize USDA's FSIS to cooperate with state agencies in developing and administering their own Meat and Poultry Inspection (MPI) programs. Individual state MPI programs are required to operate under authorities that are “at least equal to” the provisions for ante-mortem and post-mortem inspection, reinspection, sanitation, recordkeeping and enforcement in the FMIA and PPIA and implementing regulations. State MPI programs are also expected to ensure livestock are treated humanely by assuring the methods of handling livestock are “at least equal to” those outlined in the Humane Methods

of Slaughter Act of 1978. FSIS also administers, and renews, the Talmadge-Aiken and Cross Utilization agreements with States that provide inspection coverage for FSIS-regulated establishments, as well as the Cooperative Interstate Shipment agreements where State-inspected establishments can sell product outside of their respective State boundaries and in foreign commerce. Product produced under state inspection is limited to intrastate commerce, unless a state opts into an additional program, such as the Cooperative Interstate Shipment Program.

## OTHER REGULATORY PROGRAMS

### FIFRA (Federal Insecticide, Fungicide and Rodenticide Act) Cooperative Agreements

**Goal/Purpose:** The goal of the National Pesticide Program, consistent with FIFRA, is to assure that pesticides are made available for use and are properly sold, distributed and used in a way that is protective of human health and the environment. The FIFRA cooperative agreements through the US Environmental Protection Agency (EPA) provide funding and support to laboratories performing the testing.

### NSSP: National Shellfish Sanitation Program

**Goal/Purpose:** NSSP is the federal/state cooperative program recognized by the FDA and the Interstate Shellfish Sanitation Conference (ISSC) for the sanitary control of shellfish produced and sold for human consumption. The purpose of the NSSP is to promote and improve the sanitation of shellfish (oysters, clams, mussels and scallops) moving in interstate commerce through federal/state cooperation and uniformity of state shellfish programs.

### PMO: Grade “A” Pasteurized Milk Ordinance

**Goal/Purpose:** The Grade “A” PMO is a recommended standard for legal adoption by states, counties and municipalities in order to encourage greater uniformity and a higher level of excellence of milk sanitation practice in the US.

### PDP: Pesticide Data Program

**Goal/Purpose:** PDP is a national monitoring program managed by USDA’s Agricultural Marketing Service and implemented through state agriculture departments and other federal agencies. Participants sample, test and report on pesticide residues on agricultural commodities in the US food supply, with an emphasis on those commodities highly consumed by infants and children. PDP produces the most comprehensive pesticide residue database in the US.

## INTERACTIVE TOOLS

### CIFOR OUE (Outbreaks of Undetermined Etiology) Guidelines

**Goal/Purpose:** The CIFOR OUE Guidelines include recommendations on “universal” collection, shipment, testing and retention of foodborne outbreak specimens, even in the early stages of an investigation. Based on syndromes and specific outbreak profiles, the guidelines are designed to provide adequate specimens for second-tier testing and pathogen discovery should an etiology prove elusive.

### FoodNet Fast

**Goal/Purpose:** FoodNet Fast is CDC’s interactive online program for getting information on cases of illness reported to FoodNet. FoodNet Fast makes it easy for users to see how rates of illness have changed over the past 20 years for nine pathogens transmitted commonly through food: *Campylobacter*, *Cyclospora*, *Listeria*, *Salmonella*, Shiga toxin-producing *E. coli* (STEC), *Shigella*, *Vibrio* and *Yersinia*.

### NARMS Now

**Goal/Purpose:** NARMS Now is an interactive data display developed in collaboration with CDC, FDA and USDA that shows how antibiotic resistance for four bacteria transmitted commonly through food has changed over time.

### NORS Dashboard

**Goal/Purpose:** The NORS Dashboard is a web-based platform for searching CDC’s Foodborne Disease Outbreak Surveillance System database. It’s designed to allow the public direct access to information on foodborne outbreaks reported to CDC since 1998.

## SEDRIC: System for Enteric Disease Response, Investigation, and Coordination

**Goal/Purpose:** SEDRIC is a CDC web-based platform that combines epidemiologic, laboratory, and traceback data in real time to make collaboration easier when investigating information from different sources. SEDRIC lets disease investigators in many different locations work together faster and more effectively when responding to foodborne and animal-related outbreaks. Detecting and solving outbreaks faster leads to fewer illnesses and deaths.

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## **COUNCIL TO IMPROVE FOODBORNE OUTBREAK RESPONSE**

The Council to Improve Foodborne Outbreak Response (CIFOR) is a multidisciplinary collaboration of national associations and federal agencies working together since 2006 to improve methods to detect, investigate, control and prevent foodborne disease outbreaks. Council member representatives include expertise in epidemiology, environmental health, public health laboratory activities and food regulation at the local, state and federal levels. CIFOR is co-chaired by the Council of State and Territorial Epidemiologists (CSTE) and the National Association of County and City Health Officials (NACCHO).

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