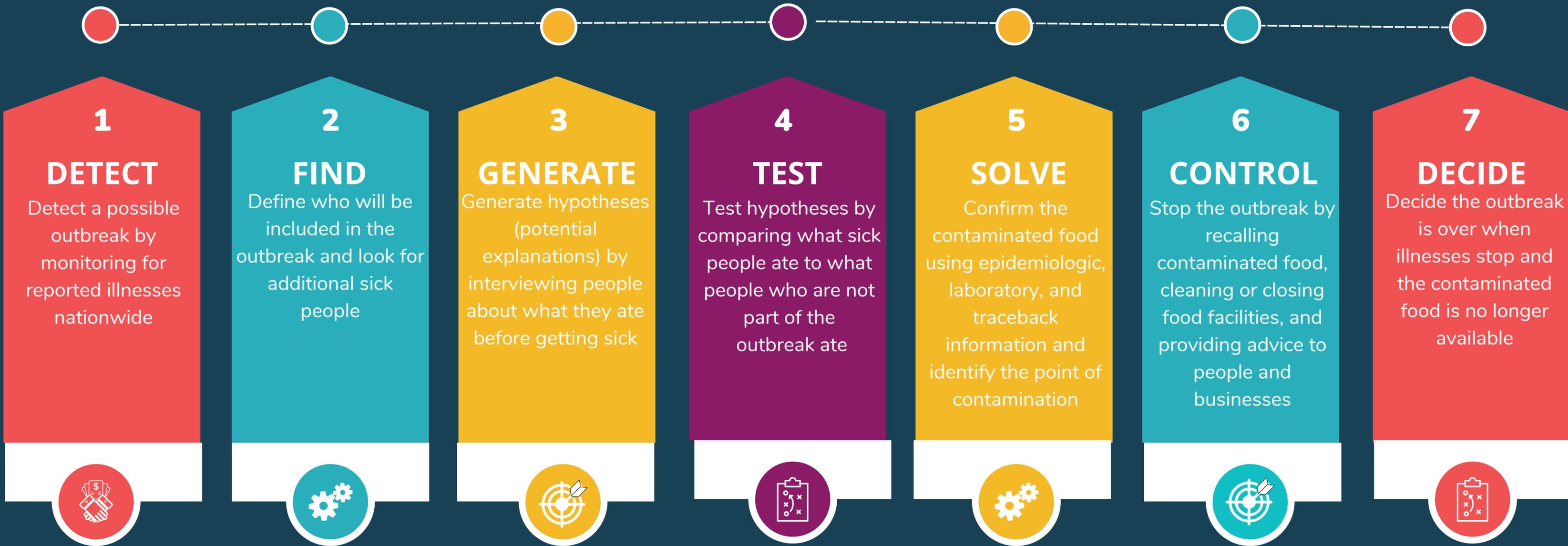


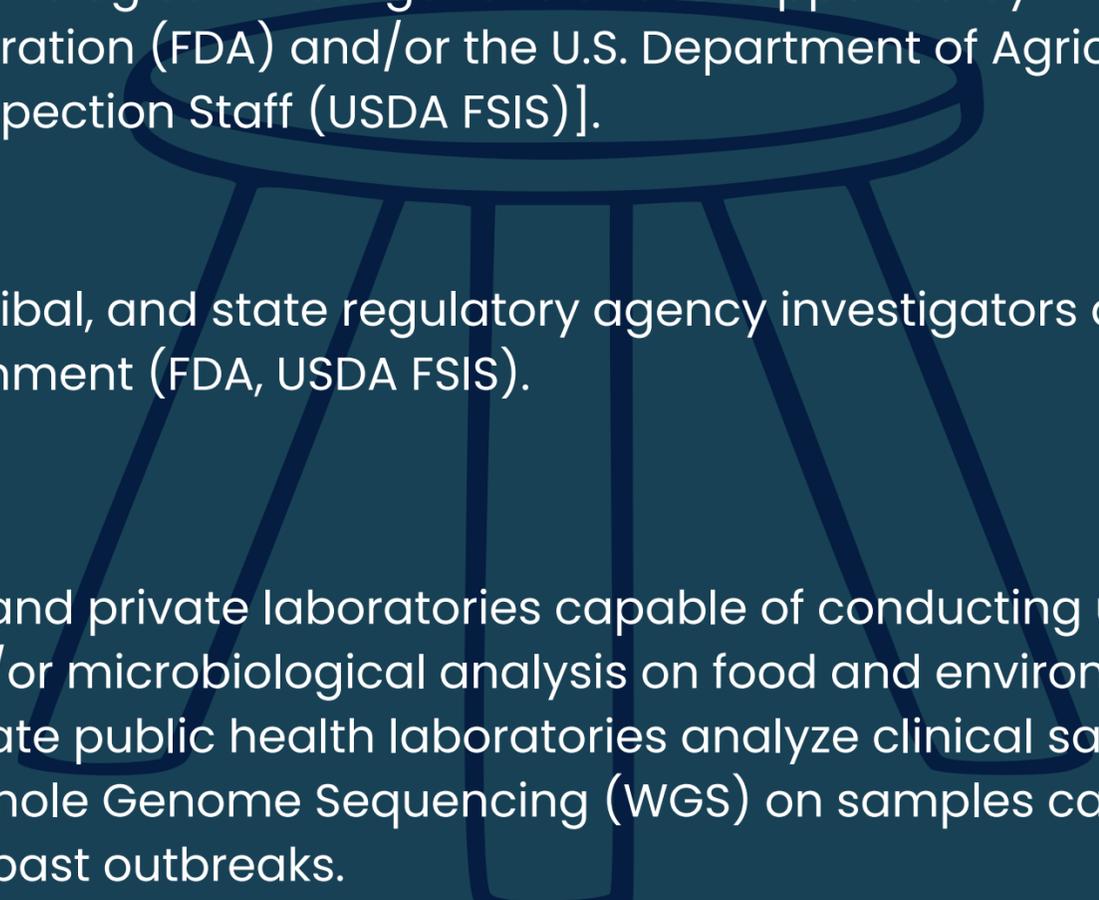
STEPS IN A FOODBORNE OUTBREAK INVESTIGATION

SOURCE: CENTERS FOR DISEASE CONTROL



FOODBORNE ILLNESS INVESTIGATION TEAM

PARTICIPATING AGENCIES VARY DEPENDING ON CIRCUMSTANCES OF FOODBORNE OUTBREAK RESPONSE.



EPIDEMIOLOGY

City, county, tribal, and state health departments, and the federal government [the Centers for Disease Control and Prevention (CDC) leads the federal epidemiological investigations and is supported by the Food and Drug Administration (FDA) and/or the U.S. Department of Agriculture Food Safety and Inspection Staff (USDA FSIS)].

ENVIRONMENTAL HEALTH

City, county, tribal, and state regulatory agency investigators as well as federal government (FDA, USDA FSIS).

LABORATORY

State, federal and private laboratories capable of conducting urgent chemical and/or microbiological analysis on food and environmental specimens. State public health laboratories analyze clinical samples from ill consumers. Whole Genome Sequencing (WGS) on samples can provide links to ongoing or past outbreaks.

For More Information see [Key Partners in Foodborne Outbreak Investigations | CDC](#)

FOODBORNE ILLNESS INVESTIGATION TEAM RESPONSIBILITIES

ENVIRONMENTAL ASSESSMENT

Investigators may assess kitchen or food production area. Some of the activities include reviewing written protocols, interviewing management or person in charge, interviewing employees, and observing practices. Employee health assessments may include interviewing employees to ask about any illnesses. Health departments may also require stool testing for employees to return to work.

Environmental Health

PATIENT INTERVIEWS/ SOURCE IDENTIFICATION

Epidemiologists interview people who became sick to try and determine which food(s) made them sick. They may ask the ill people about their symptoms, meal history, where they shop and/or for product packaging. Ill people may provide food purchase records (e.g. grocery receipts).

Epidemiology

TRACEBACK

Investigators may need to find out where a specific food came from. To do this, they may ask for invoices or bills of lading for food items that would have come in or been served on certain days.

Environmental Health

SAMPLE ANALYSIS / RESULTS REPORTING

Food samples from the time period of interest may be collected and tested. Investigators may also collect environmental samples by using swabs in the area food was made. Environmental samples are helpful to identify bacteria that survive in areas where food is made for a long time. Whole Genome Sequencing (WGS) can connect an outbreak to current or past events.

Laboratory

CONTROL MEASURES

If the outbreak is ongoing, control measures may be implemented. This could include not selling certain food, excluding employees from work, deep cleaning a kitchen, recalling a potentially contaminated product, or even closing a facility. If the outbreak is not ongoing, investigators may identify ways to prevent similar events in the future.

Environmental Health

INDUSTRIAL INVOLVEMENT

Works with local, state, federal agencies to provide insight to manufacturing process, traceback and distribution records, release shopper history records, and identify the root cause.

Industry

RESOURCE LIBRARY: FOODBORNE OUTBREAK OVERVIEW



Industry Tips To Prepare for an Outbreak

The Council to Improve Foodborne Outbreak Response (CIFOR) describes the steps food establishments can take to strengthen their ability to respond effectively should foodborne illness or an outbreak occur.



What Is an Outbreak?

This video by the Food Safety Centers of Excellence introduces novice outbreak investigation team members to the concept of foodborne illness and the current health and financial burden it has in the United States. (11 minutes, 2014).



Quick Start Food Emergency Response Job Aids

The Partnership for Food Protection has developed quick start guides detailing the roles and responsibilities of epidemiologists, environmental health professionals, and laboratories during an outbreak.



Need More?

The Integrated Food Safety Centers of Excellence created a series of 7 online modules and 4 virtual tabletop exercises. This is a 32 hour course that provides an overview of all the steps in a foodborne outbreak investigation.

RESOURCE LIBRARY: STEPS IN AN OUTBREAK INVESTIGATION



How Is an Outbreak Investigated?

The CDC explains the basics of outbreak investigations in this video. (12 minutes, 2022).



7 Steps in an Outbreak Investigation

CDC describes the 7 step process for investigating a multistate foodborne outbreak.



How FDA Investigates Foodborne Illness Outbreaks

The FDA explains how it works with public health partners to respond to foodborne illness outbreaks using science and modern technology in this video. (12 minutes, 2022).



How FSIS Investigates Foodborne Illness Outbreaks

A brief document describing FSIS's role in foodborne outbreak investigations.

RESOURCE LIBRARY: EPIDEMIOLOGY AND LABORATORY



What Does an Epidemiologist Do?

The CDC explains the basics of outbreak investigations in this video (12 minutes, 2022).



What Is Whole Genome Sequencing?

The CDC explains what Whole Genome Sequencing is and how it is used in an outbreak investigation, including how data is stored and accessed in PulseNet.



Sampling 101

This webinar was developed by the New York Integrated Food Safety Center of Excellence and is targeted to those who are responsible for collecting environmental samples in response to outbreak investigations (53 minutes, 2019).



What Does a Laboratorian Do?

This video by the Integrated Food Safety Centers of Excellence provides a broad overview of the primary roles and responsibilities that a public health laboratorian will have during a foodborne outbreak investigation. (15 minutes, 2018).

RESOURCE LIBRARY: ENVIRONMENTAL HEALTH



What Does an Environmental Health Professional Do?

This CDC video provides a broad overview of the primary roles and responsibilities that an environmental health professional will have during a foodborne outbreak investigation. (12 minutes, 2018).



Environmental Assessments Just-in-Time Training

This module created by the Colorado Center of Excellence provides “on-the-go” training for environmental health professionals to refresh their skills prior to conducting an environmental assessment.



Environmental Assessments Quick Train

This training created by the Colorado Center of Excellence is designed for environmental health professionals as an introduction or refresher on conducting environmental assessments during an outbreak investigation.



Industry Guidance For Recalling Food

This FDA guidance discusses what preparations food firms should consider making to establish recall procedures, identify product problems, and to issue recall communications and press releases.