This document provides an alphabetical list of all of the trainings included on the roadmap.  For each of the identified trainings, a hyperlink to the training website, description of the training, competencies that are addressed, cost, CEUs, length of training, and modality (online or in person workshop) is included.

| Trainings | Publisher | Description | Format | Cost | CEU | App. Length |
| --- | --- | --- | --- | --- | --- | --- |
| [9-minute Quick Interview Cardinal Rules for Outbreaks](https://www.youtube.com/watch?v=O6gKLQpEkfY) | Oregon CoE | Shorter version of the Interviewing Cardinal Rules that is useful as a refresher or as a quick introduction to interviewers when you need to get right to work interviewing.    **Tier 2 Competency:** [**7**](#Competency7T2) | Online | Free | N/A | 9 minutes |
| [A Day in the Life of a Stool Sample: Culture Methods Training](http://csph.ucdenver.edu/coe-foodsafety/captivate/lab_series/culture_methods.html) | Colorado CoE | This training takes public health professionals inside a public health laboratory to learn about lab tests that laboratorians perform on a daily basis. This module covers culture-based methods, including: plating, describing colony morphology, gram staining, and biochemical testing.  **Tier 1 Competency:** [8](#Competency8" \o "Lists the types of sampling, sampling tools and other equipment used as part of a foodborne illness outbreak environmental assessment) | Online | Free | N/A | 20 minutes |
| [Advanced Interviewing](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Pages/Live-Learning-Series.aspx) | Colorado CoE | Developed with the Arizona Department of Health, this is a 6-session series on advanced interview skills. Each hour-long session includes a didactic presentation from guest speakers and a group discussion. Topics include: interview techniques; listening skills; questionnaire types; and case follow up.  **Tier 2 Competency** [**7**](#Competency7T2) | In-person workshop (CO) | Free | N/A | 6 sessions, 1-hr each |
| [Applied Outbreak Investigation (AOI) Training](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Training1/Pages/Applied-Outbreak-Investigation-Training.aspx) | Colorado CoE | This in-person training is an intermediate level course for State and local public health agency staff who could potentially work on an outbreak investigation, including epidemiologists, public health nurses, environmental health specialists, emergency preparedness staff, etc. Ideally, attendees will have previously taken a "Basics of Communicable Disease" course or be familiar with communicable disease investigation in their jurisdiction.  This training is designed to be an intensive, interactive, full-day course to teach epidemiological skills during a foodborne outbreak investigation. It includes lectures, practical outbreak scenario exercises, and discussion. There is an option to integrate interactive polling clicker devises (Turning Point) for quizzing participants during the lectures and outbreak scenario.    **Tier 2 Competency:** [2](#Competency2), [4](#Competency10), [5](#Competency5T2" \o "Uses available information to develop hypotheses about the causative agent, implicated food, and contributing factors in preparation for the site visit), [9](#Competency9T2" \o "Analyzes information from a foodborne illness outbreak environmental assessment to identify contributing factors and  root causes or environmental antecedents), [10](#Competency10T2" \o "Recommends appropriate short- and long-term control measures given a specific outbreak scenario), [11](#Competency11T2), [12,](#Competency12T2) [13](#Competency13T2), [15](#Competency15T2), & [16](#Competency16T2" \o "Assists in the reporting of foodborne illness outbreaks to national surveillance ) | In-person workshop (CO) | Free | N/A | ½ day |
| [Applied Whole Genome Sequencing for Epidemiologists](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Pages/Live-Learning-Series.aspx) | Colorado CoE | This five-session training series provides hands-on training for epidemiologists on using whole genome sequencing (WGS) during foodborne illness outbreak investigations. Over five sessions, a cohort of 15-20 participants will work through case-based foodborne illness outbreak scenarios with available WGS data. Participants will meet weekly for five weeks via bi-directional video with each session lasting 1.5 hours. Discussions will be led by a facilitator and each section will include the participation of at least one other subject matter expert.    **Tier 2 Competency:** [**8**](#Competency8T2) | In-person workshop (CO) | Free | N/A | 5 sessions, 1.5 hrs each |
| [Basic Food Law for State Regulators](https://www.fda.gov/Training/ForStateLocalTribalRegulators/ucm119113.htm#FDA35) | US FDA | This course addresses the basic concepts of law that are applied to enforcing food law; the legal requirements that apply to food establishments; the legal remedies available to FDA if the food establishment owner/operator fails to comply with the FD&C Act; the role, responsibilities, and activities of the FDA Investigator; and how the Investigator should prepare for a court appearance. It also addresses the inspection process, decision-making, and the types of evidence that may be collected during an inspection.    **Tier 2 Competency:** [**3**](#Competency3)**,** [**4**](#Competency10)**,** [**5**](#Competency5T2)**,** [**10**](#Competency10T2)**, &** [**11**](#Competency11T2) | Online training | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | 0.1 | 60 min |
| [Basics of HACCP](https://www.fda.gov/training-and-continuing-education/office-training-education-and-development-oted/course-descriptions-objectives) | US FDA (OTED) | HACCP is a systematic approach to the identification, evaluation, and control of food safety hazards based on seven principles. The HACCP guidelines will facilitate the development and implementation of effective HACCP plans. While the specific application of HACCP to manufacturing facilities is emphasized here, these guidelines should be applied as appropriate to each segment of the food industry under consideration.    **Tier 1 Competency:**  [6](#Competency6" \o "Lists processes, practices, and records to observe and review during a site visit), [7](#Competency7" \o "Lists the types of information required when interviewing managers and staff during a foodborne illness outbreak environmental assessment), [10](#Competency10" \o "Lists appropriate short- and long- term control measures), [15](#Competency14" \o "Lists the items that would be included in a written summary of a foodborne illness outbreak environmental assessment ), & [16](#Competency16) | Online training | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | N/A | Self-paced |
| [Basics of Inspection: Beginning an Inspection](https://www.fda.gov/Training/ForStateLocalTribalRegulators/ucm119113.htm#FDA38) | US FDA | After completing this course, you will be able to identify how to prepare for an inspection. You will also recognize how to properly deal with management and recognize initial observations you should make at the start of an inspection. In addition, you will identify the purpose of a Hazard Analysis Critical Control Point (HACCP) plan. You will also recognize what to look for when searching for potential food contaminants, and you will identify examples of chemical and physical hazards. Finally, you will recognize the purpose of corrective actions    **Tier 2 Competency:** [2](#Competency2), [4](#Competency10), [5](#Competency5T2), [10](#Competency10T2), & [12](#Competency12T2) | Online training | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | 0.2 | 90 min |
| [Biological Hazards](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8028W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to biological hazards, focusing on sources of contamination, growth factors, and control methods. Course ID: CC8028W    **Tier 1 Competency:** [10](#Competency10) | Online content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Building Skills in Case Presentation](http://csph.ucdenver.edu/coe-foodsafety/captivate/TCHD/casepresentation.html) | Colorado CoE | This online training covers the fundamentals of prioritizing, organizing, and disseminating case information for communicable diseases. Participants will learn how to prepare and present a case during a public health investigation and use the case presentation to communicate with other public health professionals and implement disease control measures. ​    **Tier 2 Competency:** [3](#Competency3)  **Tier 3 Competency:** [13](#Competency13T3" \o "Responds to requests from the media, external partners and stakeholders for information on the foodborne illness outbreak investigation ) | Online | Free | N/A | 1.5 hrs |
| [Campylobacter Outbreak at a Colorado Correctional Facility Case Study](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Pages/Training.aspx) | Colorado CoE | This case study is based on an outbreak caused by Campylobacter at several Department of Corrections facilities in Colorado. It is designed to be completed by public health students or new foodborne outbreak investigators. Participants should have a basic knowledge of epidemiologic concepts and methods.    **Tier 1 Competency:** [4](#Competency10), [7](#Competency7), & [9](#Competency9)  **Tier 2 Competency:** [5](#Competency5T2) | Online materials | Free | N/A | 2 hrs |
| [Certified Professional - Food Safety (CP-FS) Credential](https://www.neha.org/professional-development/credentials/cpfs) | NEHA | CP-FS credential holders may be employed in any retail food environment — as a quality assurance or quality control manager, facility manager, food-safe chemical supplier, or in a more traditional food safety position such as a regulatory inspector/investigator. CP-FS holders are able to conduct facility plan reviews, evaluate hazard analysis and critical control points (HACCP) plans or other risk-based food safety programs, understand the causes and prevention of foodborne illnesses, and analyze and implement sanitation standard operating procedures for safety and effectiveness.  **Tier 3 Competency:** [2](#Competency2) & [11](#Competency11T3" \o "Evaluates the need to use state/local legal authorities during a foodborne illness outbreak, in consultation with other local, state and federal agencies) | See website, various scheduling options available | Member: US $260  Nonmember: US $405  In addition to exam and application fees. | N/A | 2.5 hrs |
| [CIFOR Webinar Series](https://nyfoodsafety.cals.cornell.edu/training/cifor-webinar-series/) | New York CoE | The goal of these webinars is to assist states and jurisdictions throughout the NY CoE region in using the [Council to Improve Foodborne Outbreak Response (CIFOR)](http://cifor.us/products/toolkit) Guidelines Toolkit to evaluate their preparation and capacity for effective foodborne illness surveillance and outbreak detection and investigation.    **Tier 1 Competency:** [14](#Competency14) | Online | Free | N/A | 1 hour per focus area |
| [Clinical Specimen Collection during a Foodborne Outbreak](https://www.youtube.com/watch?v=BLm4fCyj1CY&feature=youtu.be) | Colorado CoE | This video demonstrates how to collect, package, and transport stool specimens in Colorado as part of a foodborne disease outbreak investigation.    **Tier 2 Competency:** [8](#Competency8T2) | Online | Free | N/A | 5 min |
| [Clinical Specimen Collection during a Foodborne Outbreak (Supplies Kit)](https://www.youtube.com/watch?v=fn4njJM18v8) | Colorado CoE | In this video, Rachel Jervis reviews supplies which should be in your specimen supplies kit for patients providing a stool specimen during a foodborne outbreak investigation in Colorado.    **Tier 1 Competency:** [8](#Competency8) | Online | Free | N/A | 5 min |
| [Communication Skills](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8030W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to effective communication in the regulatory field. Discusses the skills required for an effective communicator in the regulatory field. Inspectors can expect to be introduced to the basic knowledge, skills, and abilities related to effective communication in the regulatory field. Topics discussed include foundations, specific communication skills (oral, written, effective listening, feedback, etc.), situational awareness, agency policies on communication, and educational resources. Course ID: CC8030W    **Tier 1 Competency** [7](#Competency7) & [13](#Competency13" \o "Recognizes the importance of communicating with external partners and stakeholders) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Communication Skills for Regulators](https://www.accessdata.fda.gov/ORAU/CommRegulators/indexMenu.htm) | US FDA | FDA hosted training for effective communication strategies for regulators focusing on a variety of topics and methods for managing conflict, establishing rapport, creating a strong foundation, and communicating across cultures.    **Tier 1 Competency** [1](#Competency1), [2](#Competency2),  [3](#Competency3), [13](#Competency13), & [15](#Competency14) | Online training | Free to regulatory and state agency personnel | N/A | 2-2.5 hrs |
| County Fair Chocolate Scare Case Study:   * [Instructor Guide (PDF)](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Documents/CountyFairChocolateScare_AMarijuanaCaseStudy_Instructor.pdf) * [Student Guide (PDF)](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Documents/CountyFairChocolateScare_AMarijuanaCaseStudy_Student.pdf) * [Tabletop Exercise (PPT)](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Documents/TTX-FBI-County%20Fair%20Chocolate%20Scare%20Case%20Study_12.2017.pptx) | Colorado CoE | This case study is based on a foodborne illness outbreak caused by the unintentional ingestion of marijuana-infused foods (edibles) at a county fair in Colorado. It is designed to facilitate a discussion among epidemiologists and other public health professionals about how to respond to an outbreak involving a marijuana-infused food.    **Tier 1 Competency:** [7](#Competency7) & [10](#Competency10) | Online materials | Free | N/A | 2 hrs |
| [E is for Epidemiology](https://sph.unc.edu/nciph/e-is-for-epi/) | University of North Carolina Gillings School of Global Public Health | The CD-ROM and facilitator’s guidebook contain five modules that provide an introduction to the basics of epidemiology: Epidemiology in the Context of Public Health, An Epidemiologist’s Toolkit, Descriptive and Analytic Epidemiology, Surveillance, Epidemiology Applications  Each module contains a PowerPoint™ presentation with detailed speaker’s notes, guided discussion questions for individuals or groups, and additional resources. These modules are designed to be used for computer-based self-study, or as a face-to-face teaching tool for trainers for lunch-and-learn seminars or in-service trainings.    **Tier 1 Competency:**  [1](#Competency1)  **Tier 2 Competency:** [3](#Competency3)  **Tier 3 Competency:** [13](#Competency13T3) | Online materials | Free | N/A | 5 hrs total, ~20-40 min per module |
| [Environmental Assessment Just-In-Time Training](http://cofoodsafety.wixsite.com/eajitt) | NACCHO | This training is targeted to environmental health professionals conducting environmental assessments for foodborne disease outbreak investigations. This just-in-time model provides a succinct, “on-the-go” training for environmental health professionals to refresh their skills on a variety of processes critical to conducting an environmental assessment. The training has been divided into 12 core topics.    **Tier 2 Competency:** [**2**](#Competency2)**,** [**3**](#Competency3)**,** [**4**](#Competency10)**,** [**5**](#Competency5T2)**,** [**6**](#Competency6T2)**,** [**7**](#Competency7T2)**,**  [**8**](#Competency8T2)**,**  [**9**](#Competency9T2)**,** [**10**](#Competency10T2)**,**  [**13**](#Competency13T2)**,** [**15**](#Competency15T2)**, &** [**16**](#Competency16T2) | Online training | Free | N/A | Self-paced |
| [Environmental Assessment Quick Train](http://csph.ucdenver.edu/coe-foodsafety/captivate/EAQT/SP/splash.html) | Colorado CoE | The training consists of four interactive, click-through modules covering the basics of environmental assessments. The modules are 10-15 minutes each and do not need to be completed together or sequentially, so they are ideal for a new employee with limited time.    **Tier 1 Competency:** [**1**](#Competency1)**,**  [**2**](#Competency2)**,** [**3**](#Competency3)**,** [**4**](#Competency10)**, 5,** [**8**](#Competency8)**,** [**9**](#Competency9)**, &** [**13**](#Competency13) | Online training | Free | N/A | 1 hr |
| [Environmental Assessment Training Series (EATS) 101: Foundation Skills](https://www.cdc.gov/nceh/ehs/elearn/eats/continuing-education-eats-101.html) | CDC | The goal of this training is to set a foundation of skills needed for conducting an environmental health assessment in an isolated food service setting. This training will teach participants how to use critical thinking, interviewing, sampling, and observation to identify an outbreak’s contributing factors and properly gather data to support the National Environmental Assessment Reporting System (NEARS).    **Tier 1 Competency** [1](#Competency1), [4](#Competency10), [5](#Competency5), [6](#Competency6), [7](#Competency7), [8](#Competency8), [9](#Competency9), [10](#Competency10), & [16](#Competency16)  **Tier 2 Competency** [15](#Competency15T2) | Online course | Free | 0.9 | 9 hrs |
| [Environmental Assessment Training Series (EATS) 102: Skill Building](https://www.cdc.gov/nceh/ehs/elearn/eats/continuing-education-eats-102.html) | CDC | The goal of this activity is to teach users how to conduct an environmental health assessment in a food service setting as part of a larger foodborne illness outbreak investigation that spans across regional and state boundaries. This training expands upon the foundation skills taught in EATS 101 by giving students additional practice with environmental assessments with an additional challenge of working within a larger investigation team comprised of regional, state, and federal partners.    **Tier 1 Competency** [**12**](#Competency12)  **Tier 2 Competency** [**1**](#Competency1)**,** [**3**](#Competency3)**,** [**4**](#Competency10)**,** [**5**](#Competency5T2)**,** [**6**](#Competency6T2)**,** [**7**](#Competency7T2)**,** [**8**](#Competency8T2)**,**  [**9**](#Competency9T2)**,** [**10**](#Competency10T2)**,** [**11**](#Competency11T2)**,**[[**13**](#Competency13T2)**, 15**](#Competency15T2)**, &** [**16**](#Competency16T2) | Online Course | Free | 0.6 | 6 hrs |
| [Environmental Hazards](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8024W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to environmental hazards as sources of contamination, and associated control methods. The student should be able to explain the properties of environmental hazards. Topics covered in this course include foundations, environmental hazards of concern, sources and pathways, and control factors.  Course ID: CC8024W    **Tier 1 Competency:** [10](#Competency10) | Online content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Environmental Health Investigations](https://foodsafety.utk.edu/?page_id=29) | Tennessee CoE | This course covers key elements of an epidemiologic investigation into a foodborne outbreak. Also, this course covers topics including initiating the investigation; collecting and interpreting data; identifying illness sources; and implementing outbreak control measures.  **Tier 2 Competency:** [**1**](#Competency1)**,**  [**2**](#Competency2)**,**  [**4**](#Competency10)**,**  [**5**](#Competency5T2)**,** [**9**](#Competency9T2)**,** [**10**](#Competency10T2)**,** [**11**](#Competency11T2)**, &** [**12**](#Competency12T2) | Online course | Free | 0.4 | 3-5 hrs |
| [Environmental Health Quick Train Videos: Assembling Tools and Preparation for Sampling](https://youtu.be/5sanM2Gl0EE) | New York CoE | These Environmental Health Quick Train Videos were requested by the Rhode Island Department of Health and created by Ana Barsallo, Alexa Cohn, Genevieve Sullivan, and Martin Wiedmann of the New York Food Safety Center of Excellence. They are to be used as a supplement to previous environmental investigation trainings and to provide short refreshers in an easily accessible video format. Assembling Tools and Preparations for Sampling is a short video outlining the tools and preparation required for sampling of food facilities during an outbreak investigation.    **Tier 1 Competency:** [**2**](#Competency2)**,** [**3**](#Competency3)**, &** [**8**](#Competency8) | Online | Free | N/A | 4 min |
| [Environmental Health Quick Train Videos: Basics of Swabbing](https://youtu.be/Y4GB48SRPpo) | New York CoE | These Environmental Health Quick Train Videos were requested by the Rhode Island Department of Health and created by Ana Barsallo, Alexa Cohn, Genevieve Sullivan, and Martin Wiedmann of the New York Food Safety Center of Excellence. They are to be used as a supplement to previous environmental investigation trainings and to provide short refreshers in an easily accessible video format. A short video on the basics of swabbing during an outbreak investigation.  **Tier 2 Competency:** [6](#Competency6T2) & [8](#Competency8T2) | Online | Free | N/A | 9 min |
| [Environmental Health Quick Train Videos: General Considerations for Choosing Sampling Sites](https://youtu.be/L9u-p1_bzuo) | New York CoE | These Environmental Health Quick Train Videos were requested by the Rhode Island Department of Health and created by Ana Barsallo, Alexa Cohn, Genevieve Sullivan, and Martin Wiedmann of the New York Food Safety Center of Excellence. They are to be used as a supplement to previous environmental investigation trainings and to provide short refreshers in an easily accessible video format. A short video on considerations for choosing where to sample during an outbreak investigation.  **Tier 2 Competency:** [5](#Competency5T2), [6](#Competency6T2), & [8](#Competency8T2) | Online | Free | N/A | 6-7 min |
| [Environmental Health Quick Train Videos: General Considerations for Sampling for Listeria](https://youtu.be/qZra80rd1vU) | New York CoE | These Environmental Health Quick Train Videos were requested by the Rhode Island Department of Health and created by Ana Barsallo, Alexa Cohn, Genevieve Sullivan, and Martin Wiedmann of the New York Food Safety Center of Excellence. They are to be used as a supplement to previous environmental investigation trainings and to provide short refreshers in an easily accessible video format. A short video on considerations when sampling for Listeria during an outbreak investigation.  **Tier 2 Competency:** [5](#Competency5T2), [6](#Competency6T2), [8](#Competency8T2), & [9](#Competency9T2) | Online | Free | N/A | 5-6 min |
| [Environmental Health Quick Train Videos: General Considerations for Sampling for Salmonella](https://youtu.be/tjv5Eg6T-nI) | New York CoE | These Environmental Health Quick Train Videos were requested by the Rhode Island Department of Health and created by Ana Barsallo, Alexa Cohn, Genevieve Sullivan, and Martin Wiedmann of the New York Food Safety Center of Excellence. They are to be used as a supplement to previous environmental investigation trainings and to provide short refreshers in an easily accessible video format. A short video on considerations for sampling for Salmonella during an outbreak investigation.  **Tier 1 Competency:** [8](#Competency8)  **Tier 2 Competency:** [5](#Competency5T2), [6](#Competency6T2), [8](#Competency8T2), & [9](#Competency9T2) | Online | Free | N/A | 4 min |
| [Environmental Health Quick Train Videos: Getting into the Mindset](https://youtu.be/umK_Su2u0tw) | New York CoE | These Environmental Health Quick Train Videos were requested by the Rhode Island Department of Health and created by Ana Barsallo, Alexa Cohn, Genevieve Sullivan, and Martin Wiedmann of the New York Food Safety Center of Excellence. They are to be used as a supplement to previous environmental investigation trainings and to provide short refreshers in an easily accessible video format. Getting into the Mindset is a short video outlining the importance of environmental health monitoring during outbreak investigations.    **Tier 1 Competency:** [**1**](#Competency1)**,** [**4**](#Competency10)**, &** [**8**](#Competency8) | Online | Free | N/A | 5-6 min |
| [Epidemiologic Investigations Related to Foodborne Outbreaks](https://foodsafety.utk.edu/?page_id=29) | Tennessee CoE | Course 5: This course covers key elements of an epidemiologic investigation into a foodborne outbreak. Also, this course covers topics including initiating the investigation; collecting and interpreting data; identifying illness sources; and implementing outbreak control measures.    **Tier 1 Competency:** [5](#Competency5) | Online | Free | 0.4 | 3-5 hrs |
| [Epi-Ready for Response Teams](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=ER324) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to the elements of feed and food regulatory programs. The student will be able to exhibit introductory knowledge, skills, and abilities related to the elements of feed and food regulatory programs. Topics covered in this course include foundations, laws and regulations, feed/food protection agencies, program standard areas, IFSS, mutual reliance (recognition and reciprocity).  Course ID: CC8021W    **Tier 3 Competency:** [**2**](#Competency2)**,** **[5,](#Competency5T2" \o "Mentors others on the use of epidemiological, laboratory and other data when developing hypotheses about the causative agent, implicated food, and contributing factors  in preparation for the site visit)** [**6**](#Competency6T3)**,** [**9**](#Competency9T3)**, &** [**12**](#Competency12T3) | Online content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Epi-Ready: Foodborne Disease Outbreak Investigation Team Training](https://www.neha.org/professional-development/education-and-training/epi-ready-team-training/epi-ready-online-materials) | NEHA | The two-day Epi-Ready workshop is delivered by three discipline-specific, experienced instructors. A NEHA staff person will provide coordination and support throughout planning and during the workshop.  **Tier 1 Competency:** [**1**](#Competency1)**,** [**2**](#Competency2)**,** [**4**](#Competency10)**,** [**5**](#Competency5)**,** [**6**](#Competency6)**,**  [**7**](#Competency7)**,** [**11**](#Competency11)**, &** [**12**](#Competency12)  **Tier 2 Competency:** [**2**](#Competency2)**,** [**3**](#Competency3)**,** [**5**](#Competency5T2)**,** [**6**](#Competency6T2)**,** [**11**](#Competency11T2)**,** [**12,**](#Competency12T2)[**13**](#Competency13T2)**,** [**14**](#Competency14)**, &** [**15**](#Competency15T2) | In-person workshop, with online materials | Free | 1.3 | 2 days |
| [Evidence Development](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=MP102) | US FDA, Office of Training Education & Development (OTED) | Entry Level Feed/Food Protection Professionals at the federal, state, local, tribal, or territorial level who perform feed/food regulatory activities. The student will be able to describe an investigation. Topics covered in this course include foundations, communication, agency collaboration, investigation skills pre-investigation, investigation, and post-investigation. Course ID: CC8020W  **Tier 1 Competency:** [7](#Competency7), [8](#Competency8), & [9](#Competency9)  **Tier 2 Competency:** [4](#Competency10) &[6](#Competency6T2) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Food Related Emergency Exercise Bundle (FREE-B)](https://www.fda.gov/food/fooddefense/toolseducationalmaterials/ucm295902.htm) | US FDA | The Food Related Emergency Exercise Bundle (FREE-B) is a compilation of scenarios based on both intentional and unintentional food contamination events. It is designed with the intention of assisting government regulatory and public health agencies in assessing existing food emergency response plans, protocols and procedures that may be in place, or that they are in the process of revising or even developing. The FREE-B is designed to allow for multiple jurisdictions and organizations (medical community, private sector, law enforcement, first responder communities) to ‘play’ with the host agency, or, quite simply, for an individual agency to test their own plans, protocols and procedures independently. The FREE-B is a set of eight (8) scenarios, each of which contains a Facilitator’s Guide, a Lead Planner’s guide and a Situation Manual. The exercise’s include: How Sweet It Isn’t (6 hrs), Stealthy Situation (2 days), Wilted Woes (5 hrs), High Plains Harbinger (7 hrs), Insider Addition (4 hrs), and Foul Fodder (6 hrs).    **Tier 2 Competency:** [**1**](#Competency1)**,** [**2**](#Competency2)**,** [**3**](#Competency3)**,** [**11**](#Competency11T2)**,** [**12**](#Competency12T2)**,** [**13**](#Competency13T2)**, &** [**15**](#Competency15T2) | Online resources | Free | N/A | Variable exercise, 4hrs – 2days |
| [Food Safety Practices for Salmonella and Campylobacter Control in Poultry](https://www.youtube.com/watch?v=6VCbPj-F094) | Florida CoE | This seminar will discuss the characteristics of these poultry-borne pathogens and the challenges they pose for the poultry industry and the food safety practices that would result in safer supply of poultry and poultry products. This recording was presented by Dr. Manpreet Singh with the Poultry Sciences Department at the University of Georgia on January 23, 2019.  **Tier 1 Competency:** [**5**](#Competency5)  **Tier 2 Competency:** [10](#Competency10T2)  **Tier 3 Competency:** [5](#Competency5T2) | Online | Free | N/A | 1 hr |
| [Food Source Information Wiki](https://fsi.colostate.edu/) | Colorado CoE | This Wiki is an interactive website created as a working guide to food production methods for public health professionals. The goal of the Food Source Information Wiki is to provide public health professionals with rapid access to basic information on production practices and food distribution systems for a range of agricultural food products, from farm to fork. By centralizing this information and delivering it in a format that meets the needs of public health professionals, we aim to bridge an important knowledge gap and improve outbreak response nationwide.    **Tier 2 Competency:** [5](#Competency5T2) | Online | Free | N/A | N/A |
| [Foodborne Disease Outbreak Investigation Tabletop Exercise (Hepatitis A)](https://azdhs.gov/documents/preparedness/epidemiology-disease-control/infectious-diseases-training/2017/presentations/hep-a-sitman-azid-2017-player-web.pdf) | Arizona Department of Health Services | This tabletop exercise will involve epidemiologists and preparedness staff from Local Health Departments, Infection Control Practitioners and other partners from State and Federal agencies in responding to a health emergency caused by a foodborne disease. The purpose of this exercise is to provide participants an opportunity to evaluate differential diagnoses, interpret lab results, create and analyze questionnaires, explore environmental health involvement and response, disease prevention and prophylaxis and public messaging during a foodborne outbreak investigation. The exercise will focus on communication within your agency as well as with other local, state and federal partners and the response that would be required for such an event.    **Tier 2 Competency:** [**9**](#Competency9T2) **&** [**11**](#Competency11T2)  **Tier 3 Competency:** [**7**](#Competency7T3) **&** [**13**](#Competency13T3) | In-person workshop (CO) | Free | N/A | Full day |
| [Foodborne Illness Investigations](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=ER325) | US FDA, Office of Training Education & Development (OTED) | The course primarily focuses on the components and systematic approaches required when conducting a foodborne illness investigation and identify and define team roles. For this reason, representatives from each of the disciplines need to attend the course, environmental, laboratory, and epidemiologists. Methods of instruction include lectures, discussions, and hands-on problem solving exercises.    **Tier 2 Competency** [1](#Competency1), [2](#Competency2), [4](#Competency10), [5](#Competency5T2), [8](#Competency8T2), [9](#Competency9T2), & [10](#Competency10T2) | Classroom | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Foodborne Illness Investigations 1: Collecting Surveillance Data](https://www.fda.gov/Training/ForStateLocalTribalRegulators/ucm119113.htm#FI01) | US FDA | After completing this course, you will be able to recognize the importance of developing and maintaining a surveillance system, identify sources of surveillance information (including FoodNet and PulseNet), recognize the reportable disease process used in the U.S., recognize the procedures for using a surveillance log, and distinguish between passive and active surveillance.    **Tier 1 Competency:** [1](#Competency1) & [16](#Competency16) | Online course | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | 0.2 | 90 min |
| [Foodborne Illness Investigations 2: Beginning an Investigation](https://www.fda.gov/training-and-continuing-education/office-training-education-and-development-oted/course-descriptions-objectives#FI02) | US FDA | After completing this course, you will know how to prepare for a foodborne illness investigation and assemble an investigation team. You will recognize the information you need to gather when a consumer makes an initial complaint and when a foodborne illness is suspected. You will also recognize how to surmise data from a surveillance log, decide whether to initiate follow-up action, and develop a hypothesis and case definition for each investigation.    **Tier 1 Competency:** [1](#Competency1) | Online course | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | 0.2 | 90 min |
| [Foodborne Illness Investigations 3: Expanding the Investigation](https://www.fda.gov/Training/ForStateLocalTribalRegulators/ucm119113.htm#FI03) | US FDA | After completing this course, you will know how to conduct an interview, recognize case definitions, and find additional cases. You will also know how to use questionnaires, line lists, and epidemic curves to gather and organize information. Finally, you will know when to implement control measures and how to deal with the media during an investigation.    **Tier 2 Competency:** [**1**](#Competency1) **&** [**2**](#Competency2) | Online course | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | 0.2 | 90 min |
| [Foodborne Illness Investigations 4: Conducting a Food Hazard Review](https://www.fda.gov/Training/ForStateLocalTribalRegulators/ucm119113.htm#FI04) | US FDA | After completing this course, you will know what a food hazard review is, how to plan for one, and how to interview key people. You will be able to identify factors that affect the growth of pathogens, contamination and survival opportunities for these pathogens, and the how and why of collecting samples. Finally, you will know how to implement control measures and handle any information gathered during the food hazard review.    **Tier 2 Competency:** [**2**](#Competency2) | Online course | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | 0.2 | 90 min |
| [Foodborne Illness Investigations 6: Final Report](https://www.fda.gov/Training/ForStateLocalTribalRegulators/ucm119113.htm#FI06) | US FDA | After completing this course, you will recognize the components that should be included in most final reports and the necessary steps for creating and submitting a helpful final report. You will also be familiar with the stylistic rules you need to follow when generating a final report.    **Tier 2 Competency:** [**2**](#Competency2) **&** [**15**](#Competency15T2) | Online course | Free to state, local and tribal regulatory partners with OTED Compliance Wire login and password | N/a | 90 min |
| [Foodborne Illness Outbreak Investigation - CIFOR Updates](https://www.train.org/virginia/course/1019164/live_event) | Virginia Department of Health - TRAIN Virginia | The Foodborne Outbreak Investigation Training Course provides course attendees with an overall approach to outbreaks of foodborne diseases, including preparation, detection, investigation, control, and follow-up.  This course describes the role of all key organizations and individuals involved in foodborne outbreaks, provides recommendations based on the Council to Improve Foodborne Outbreak Response (CIFOR) for processes to improve communication and coordination among multiple agencies during multijurisdictional outbreaks, and identifies indicators that can be used to gauge performance in responding to foodborne disease outbreaks.  The course is designed to be a foundation for epidemiologists, laboratorians, environmental health specialists, public health nurses, food safety specialists and others involved in food-safety programs.    **Tier 1 Competency:** [1](#Competency1), [11](#Competency11), [12](#Competency12), & [14](#Competency14) | In-person workshop (VA) | $20.00 | N/A | 2 days |
| [Foodborne Illness: What Problem?](https://www.youtube.com/watch?v=2QQvhFPZedM) | Florida CoE | This production is the first in a series of seven videos. It 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. This video also offers a historical perspective on the changes that have occurred within the food industry and their effects on public health and food safety professionals today.    **Tier 1 Competency:** [1](#Competency1), [2](#Competency2), & [11](#Competency11) | Online videos | Free | N/A | 11 min |
| [Foodborne Outbreak Challenge](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Training1/Pages/FOC_Organizer_Materials.aspx) | Colorado CoE | The Foodborne Outbreak Challenge (FOC) is a one-day event for students designed by the Colorado Integrated Food Safety Center of Excellence at the Colorado School of Public Health. Multidisciplinary student teams compete to solve a foodborne illness outbreak and address a food safety problem.    **Tier 1 Competency:** [1](#Competency1), [2](#Competency2), [4](#Competency10), [5](#Competency5), [9](#Competency9" \o "Summarizes multiple sources of  information from a foodborne illness outbreak environmental assessment), [12](#Competency12" \o "Explains the purpose of traceback and trace forward investigations and the roles of local, state and federal agencies), [15](#Competency14), & [16](#Competency16) | In-person (CO) | Free | N/A | 1 day |
| [Foodborne Outbreak Investigation and Response Team Roles and Responsibilities: Part A](https://foodsafety.utk.edu/?page_id=29) | Tennessee CoE | The goal for this online course, which is the first part of a two part course, will be to train public health professionals and other involved personnel to rapidly identify, investigate and implement control measures for a foodborne disease outbreak to reduce the incidence of foodborne illness.    **Tier 1 Competency:** [1](#Competency1), [2](#Competency2), [3](#Competency3), [13](#Competency13), & [15](#Competency14) | Online course | Free | 0.4 | 3-5 hrs |
| [Foodborne Outbreak Investigation and Response Team Roles and Responsibilities: Part B](https://foodsafety.utk.edu/?page_id=29) | Tennessee CoE | The goal for this online course is to train public health professionals and other personnel to rapidly identify, investigate and implement control measures for a foodborne disease outbreak to reduce the incidence of foodborne illness.  **Tier 1 Competency:** [1](#Competency1), [2](#Competency2), & [16](#Competency16) | Online course | Free | 0.4 | 3-5 hrs |
| [Foodborne Outbreak Investigation: What does a laboratorian do?](https://www.youtube.com/watch?v=YIrrVM7Z55Y) | Florida CoE | This production is the fifth video in the Foodborne Illness Introductory Video Series developed by the Florida Integrated Food Safety Center of Excellence. This video provides a broad overview of the primary roles and responsibilities that a public health laboratorian will conduct during a foodborne outbreak investigation.    **Tier 1 Competency:** [2](#Competency2) | Online | Free | N/A | 15 min |
| [Foodborne Outbreak Investigation: What does an environmental health professional do?](https://www.youtube.com/watch?v=ksDbdv1w8PM) | Florida CoE | This production is the sixth video in the Foodborne Illness Introductory Video Series developed by the Florida Integrated Food Safety Center of Excellence. This video provides a broad overview of the primary roles and responsibilities that an environmental health professional will conduct during a foodborne outbreak investigation.    **Tier 1 Competency:** [2](#Competency2) | Online | Free | N/A | 12 min |
| [Foodborne Outbreak Investigation: What does an epidemiologist do?](https://www.youtube.com/watch?v=nuwl9ik-7pA) | Florida CoE | This production is the fourth video in the Foodborne Illness Introductory Video Series developed by the Florida Integrated Food Safety Center of Excellence. This video provides a broad overview of the primary roles and responsibilities of an epidemiologist and how they work together to detect, investigate, and respond to foodborne disease.    **Tier 1 Competency:** [2](#Competency2) & [3](#Competency3) | Online | Free | N/A | 22 min |
| [Foundational Interviewing Skills](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Pages/Live-Learning-Series.aspx) | Colorado CoE | The Foundational Interview Skills training includes two 1.5 hour sessions using bi-directional video. The first day includes an introductory exercise, a review of outbreak questionnaires, and a presentation on interview techniques. Participants complete a practice assignment, then de-brief their assignment on the second day of the training, while receiving mentoring and advice from facilitators and peers.    **Tier 1 Competency:** [7](#Competency7) | Online | Free | N/A | Two 1.5 hr session in one week |
| [FSIS Foodborne Illness Investigations: Current Thinking](https://slideplayer.com/slide/7516868/) | USDA Food Safety and Inspection Service | Explanation of FSIS Investigation objectives, multidisciplinary areas, coordination and collaboration between partners, and opportunities for improvement.    **Tier 2 Competency:** [3](#Competency3), [9](#Competency9T2), [10](#Competency10T2), & [15](#Competency15T2) | Online | Free | N/A | 31 slides |
| [Gastroenteritis at a University in Texas](https://www.cdc.gov/epicasestudies/classroom_gast.html) | CDC | This case study is based on a real-life outbreak investigation undertaken in Texas in 1998.    **Tier 2 Competency**: [1](#Competency1) & [10](#Competency10T2) | Available for download | Free | N/A | 3-4 hrs |
| [General Education Course: HACCP](http://www.vet.utk.edu/cafsp/online/ge_haccp.php) | University of Tennessee, Center for Agriculture and Food Security and Preparedness | This course provides an overview of the role that HACCP plays in human and animal food programs. This course introduces the seven principles of HACCP and can be used as a foundation for applying HACCP principles in various regulatory programs to ensure food safety from harvest to consumption. The course will cover introductory-level knowledge, skills, and abilities related to the hazard analysis and critical control points (NACCP) system. The Food Safety Modernization Act (FSMA) requires the use of HACCP principles for all food operations from farm to fork under Preventive Controls.    **Tier 1 Competency:** [5](#Competency5), [6](#Competency6), [10](#Competency10), [14](#Competency14), &[15](#Competency14) | Online | $100.00 or 3 courses for $250 | N/A | 4 hrs |
| [General Education Course: Sampling](http://www.vet.utk.edu/cafsp/online/ge_sampling.php) | University of Tennessee, Center for Agriculture and Food Security and Preparedness | The course provides an overview of human and animal food sample collection as well as the role that laboratories play in sampling for human and animal food safety. The course will cover introductory-level knowledge, skills, and abilities related to feed and food sample collection, and the role of the laboratory and its functions pertaining to samples.    **Tier 1 Competency:** [**8**](#Competency8) | Online | $100.00 or 3 courses for $250 | N/A | 4 hrs |
| [Get the Scoop Stool Collection Operation and Optimum Packaging](https://www.youtube.com/watch?v=hKlwSWZfzB8&feature=youtu.be) | Tennessee CoE | Generic (not state specific) Stool Collection Training for Public Health Staff  **Tier 1 Competency:** [8](#Competency8) | Online | Free | N/A | 8 min |
| [HACCP](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8033W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to the hazard analysis and critical control points (HACCP) system There are five modules in this course. Course ID: CC8033W  **Tier 1 Competency:** [**5**](#Competency5)**,** [**6**](#Competency6)**,** [**7**](#Competency7)**, &** [**10**](#Competency10) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Hypothesis Generation During a Foodborne Outbreak Investigation ECHO](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Pages/Live-Learning-Series.aspx) | Colorado CoE | Developed with ECHO Colorado, this is a 6-session series on hypothesis generation during a foodborne illness outbreak. Each hour-long session includes a didactic presentation, a participant-led outbreak presentation, and discussion. Topics include: introduction to hypothesis generation, food-pathogen pairs, questionnaires and unstructured interviews, interviewing techniques, and analytical tools.    **Tier 2 Competency:** [7](#Competency7T2) **&** [8](#Competency8T2) | In-person workshop (CO) | Free | N/A | 6 sessions, 1 hr each |
| [I is for Investigation](https://sph.unc.edu/nciph/i-is-for-investigation/) | University of North Carolina Gillings School of Global Public Health | The *I is for Investigation* training series CD-ROM and facilitator’s guidebook contains seven modules that use case studies to examine the concepts of an outbreak investigation: Recognizing an Outbreak, Study Design, Designing Questionnaires, Interviewing Techniques, Analyzing Data, Writing an Outbreak Report, and Risk and Crisis Communication. This training package is designed to follow the [E is for Epi](https://sph.unc.edu/nciph/e-is-for-epi/) trainings. Each module contains a PowerPoint™ presentation with detailed speaker’s notes, guided discussion questions for individuals or groups, and additional resources. These modules are designed to be used for computer-based self-study, or as a face-to-face teaching tool for trainers for lunch-and-learn seminars or in-service trainings.    **Tier 1 Competency:** [1](#Competency1), [4](#Competency10), [5](#Competency5), [7](#Competency7), [13](#Competency13), [15](#Competency14), & [16](#Competency16)  **Tier 2 Competency:** [5](#Competency5T2) | Online materials | Free | N/A | 5 hrs total, ~35-50 min each session |
| [In the Lab: Gram Stain Process](https://www.youtube.com/watch?v=XraLIl0lg-U) | Colorado CoE | The 'In the Lab' series demonstrates basic laboratory techniques performed at a public health laboratory. In this video, the laboratorian demonstrates how to perform a gram stain to differentiate bacteria.    **Tier 1 Competency:** [8](#Competency8) | Online | Free | N/A | * 1. min |
| [In the Lab Video Series: Plating a Stool Sample](https://www.youtube.com/watch?v=2DvtOm6Mc2U) | Colorado CoE | The 'In the Lab' series demonstrates basic laboratory techniques performed at a public health laboratory. In this video, the laboratorian demonstrates how stool specimens are plated during a foodborne outbreak investigation.    **Tier 1 Competency:** [8](#Competency8) | Online | Free | N/A | 2 min |
| [Initial Foodborne Illness Investigation](https://foodsafety.utk.edu/?page_id=29) | Tennessee CoE | The goal of this course is to provide information on the initial actions taken during the investigation of foodborne illness. Information includes specimen and sample collection, effective interviewing techniques, and communication strategies that can be effective during the initial investigation.    **Tier 2 Competency:** [1](#Competency1), [2](#Competency2), [7](#Competency7T2), [8](#Competency8T2), [9](#Competency9T2), [10](#Competency10T2), & [13](#Competency13T2) | Online Course | Free | 0.4 | 3-5 hrs |
| [Interviewing Cardinal Rules](https://www.youtube.com/watch?v=HNZm7z_JELw) | Oregon CoE | Complete interviewing video that explains background and is very helpful for understanding outbreak investigation interviewing. Please reference this [worksheet](https://health.oregonstate.edu/sites/health.oregonstate.edu/files/FOMES/pdf/cardinal-rules-training-activity.pdf) (pdf) for the training activity.    **Tier 1 Competency:** [**7**](#Competency7) | Online | Free | N/A | 30 min |
| [Interviewing During an Outbreak Course](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Pages/OutbreakResponseTraining.aspx) | Colorado CoE | This course was designed by the Colorado Integrated Food Safety Center of Excellence (CoE). The Center is dedicated to identifying and implementing best practices for outbreak detection and response. The Center also provides training to public health professionals and responders. The focus of this interactive half-day course is to introduce participants to foodborne disease outbreak investigations and train them in interview techniques. Those who have successfully completed this course could be called to assist in future outbreak investigations within the organization/agency. This Instructor’s Guide is designed to serve as a comprehensive, step-by-step guide for Course Coordinators and Instructors. This page contains all the required materials for this course.    **Tier 2 Competency:** [7](#Competency7T2) | Online materials | Free | N/A | Half-day |
| [Interviewing Skills and Personal Safety Reports](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=MP118) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to the concept of a national collaborative and cooperative network of federal, state, local, tribal, and territorial feed and food protection agencies working in concert to protect the U.S. human and animal food supply. Goal: Describe how collaborative interrelationships of regulatory agencies promote and protect public health in a global environment. This course will cover introductory knowledge, skills, and abilities related to the concept of a national collaborative and cooperative network of federal, state, local, tribal, and territorial feed and food protection agencies working in concert to protect the U.S. human and animal food supply. Topics include foundations of IFSS, stakeholders, mutual reliance, and program standards.    **Tier 2 Competency:** [7](#Competency7T2) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Interviewing the Frustrating Four](https://www.youtube.com/watch?v=-uZsoal0by0) | Colorado CoE | Nicole Comstock and Rachel Jervis from Colorado Department of Public Health and Environment (CDPHE) demonstrate how to respond to difficult interviewees during phone interviews. This video is used as part of the Student Outbreak Response training. Visit [http://www.COFoodSafety.org](https://www.youtube.com/redirect?q=http%3A%2F%2Fwww.COFoodSafety.org&v=-uZsoal0by0&event=video_description&redir_token=sYKue9X3t67IG3qyeVFtWTiWZ-t8MTU1NjYzNDY4N0AxNTU2NTQ4Mjg3) for more details.    **Tier 1 Competency:** [7](#Competency7) | Online | Free | N/A | 12 min |
| [Introduction to NEARS](https://www.youtube.com/watch?v=6d6oGPxyBB0) | Colorado CoE | ​In this video, Erik Coleman, MS, gives an introduction to the National Environmental Assessment Reporting System.    **Tier 1 Competency:** [**2**](#Competency2)**,** [**4**](#Competency10)**,** [**5**](#Competency5)**,** [**6**](#Competency6)**, &** [**16**](#Competency16) | Online video | Free | N/A | 30 min |
| [Introduction to the Food Emergency Response Network (FERN)](https://www.fernlab.org/index.cfm/resources/) | Food Emergency Response Network | The FERN Introduction training provides background on the creation, mission member, and organizational structure of FERN. The training also provides information on FERN's associated support programs, and functioning during an emergency.  **Tier 1 Competency** [**11**](#Competency11) **&** [**12**](#Competency12) | Online training | Free | N/A | 1.5-2 hours |
| [Investigation Principles](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8020W) | US FDA, Office of Training Education & Development (OTED) | Entry Level Feed/Food Protection Professionals at the federal, state, local, tribal, or territorial level who perform feed/food regulatory activities. The student will be able to describe an investigation. Topics covered in this course include foundations, communication, agency collaboration, investigation skills pre-investigation, investigation, and post-investigation.    **Tier 1 Competency:** [3](#Competency3), [4](#Competency10), [7](#Competency7), [8](#Competency8), & [13](#Competency13) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Jurisdiction](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8037W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to various regulatory agencies and their authority over feed and food. The student will be able to describe which agencies have authority to conduct specific regulatory activities. The topics covered in this course include foundations, law, crossing boundaries, inter-agency agreements. Course ID: CC8037W  **Tier 1 Competency:** [11](#Competency11) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Laws, Regulations, Policies, and Procedures](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8039W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to the system of federal, state, and local laws that provide the authority to regulate feed and food, and associated policies and procedures. The student will be able to employ legal authorities when conducting regulatory activities. The topics covered in this course include foundations, constitution, law, regulation, policy, procedures, and guidance. Course ID: CC8039W    **Tier 1 Competency:** [11](#Competency11) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Legal Aspects of Public Health Food Safety](http://www.nwcphp.org/training/opportunities/online-courses/legal-aspects-food-safety) | Northwest Center for Public Health Practice, University of Washington | This course is an introduction to legal issues that arise in public health food safety, from surveillance and outbreak investigation through restaurant inspections and detention of food.    **Tier 1 Competency:** [**10**](#Competency10)**,** [**11**](#Competency11)**,** [**12**](#Competency12)**, &** [**13**](#Competency13) | Online course | Free | N/A | 1 hr |
| [Legally Covered - Understanding Public Health Authority to Prevent Foodborne Disease in the Community](https://www.youtube.com/watch?v=amm8y1zxv2k) | Colorado CoE | In this lecture, Alicia Cronquist (epidemiologist at Colorado Department of Public Health and Environment) and Lane Drager (environmental health at Boulder County Health Department) describe the legal authority to perform routine environmental health inspections, routine disease surveillance, and outbreak investigation and control measures. This lecture may have some broad applications, but is specific to laws in Colorado.    **Tier 1 Competency:** [11](#Competency11) | Online | Free | N/A | 1 hr |
| [National Outbreak Reporting System (NORS) Form Video](https://publichealthpractice.org/civicrm/event/info?id=125) | Colorado School of Public Health | This video demonstrates how to complete the CDC NORS form for reporting foodborne outbreaks.    **Tier 2 Competency:** [15](#Competency15T2" \o "Prepares a foodborne illness outbreak environmental assessment report) & [16](#Competency16T2" \o "Assists in the reporting of foodborne illness outbreaks to national surveillance ) | Online | Free | N/A | 15 min |
| [ORA Risk Management in 7 Steps](https://www.accessdata.fda.gov/ORAU/ORARiskManagement/welcome_welcome.html) | US FDA | This course introduces you to risk management terms, principles, and processes. The presentation describes each phase of the risk management process and demonstrates how to apply the principles to the types of decisions that are made every day in the Food and Drug Administration (FDA), Office of Regulatory Affairs (ORA). Examples and a case based scenario are provided to demonstrate the use of the process to identify problems, assess risk and support decisions.    **Tier 1 Competency:** [**1**](#Competency1) **&** [**10**](#Competency10) | Online course | Free | N/A | 2 hrs |
| [Outbreak Investigation Case Series](http://mnfoodsafetycoe.umn.edu/training-2/) | Minnesota CoE | This series focuses on investigations of outbreaks caused by commercially distributed food items and detected through pathogen–specific surveillance. The etiologic agents often are Salmonella, Shiga toxin-producing E. coli (STEC), or Listeria monocytogenes, but other pathogens are sometimes responsible. The primary target audience is foodborne disease epidemiologists who investigate (or are training to do so) these types of outbreaks, but others might find this series informative as well. The primary focus of this series is methods used by epidemiologists (in concert with their co-investigators) to generate, develop, and confirm hypotheses about the outbreak vehicle. Descriptions will generally begin with the detection of a cluster (typically by molecular subtyping of submitted clinical isolates at a public health lab) and end when the food source is identified to a level of certainty/confidence that public health interventions are implemented.    **Tier 2 Competency:** [5](#Competency5T2)  **Tier 3 Competency:** [6](#Competency6T3) | Online | Free | N/A | Self-paced |
| [Outbreak Investigation Training: Sample Interviews](https://www.youtube.com/watch?time_continue=1&v=8oigheug0L4) | Oregon CoE | Two sample interviews for good outbreak investigation interviewing, starring members of the Oregon Public Health Division.    **Tier 1 Competency:** [7](#Competency7) | Online | Free | N/A | 12 min |
| [Pining for a Common Source, a Foodborne Illness Outbreak Investigation: Table Top Exercise](https://nyfoodsafety.cals.cornell.edu/training/case-studies/) | New York CoE | This case study, developed by the New York Integrated Food Safety Center of Excellence, was adapted from an actual Salmonella investigation initiated by the New York State Department of Health in 2011, heralding a multistate outbreak. It was the first Salmonella outbreak in the U.S. associated with pine nuts. The case study is designed to be completed as a self-paced individual activity or as a moderated small group exercise. Obtaining shopper card information and engaging industry proved essential throughout this cluster investigation. Product recalls likely prevented additional illnesses. As evidenced in this outbreak investigation, early identification of patient exposures can assist in determining a common source of infection so that effective control efforts can be implemented.  **Tier 1 Competency:** [**2**](#Competency2), [3](#Competency3), [4](#Competency10), [7](#Competency7), [8](#Competency8), [9](#Competency9), [12](#Competency12), [13](#Competency13), & [15](#Competency14) | Online | Free | N/A | Self-paced |
| [Preventive Controls](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8040W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to measures implemented by feed and food manufacturing facilities to ensure feed and food safety. The student will be able to describe the principles of preventive controls. Topics covered in this course include foundations, food safety plans, hazard analysis, monitoring preventive control programs, corrective action plans, verification procedures, recordkeeping. Course ID: CC8040W    **Tier 1 Competency:** [5](#Competency5), [6](#Competency6), & [10](#Competency10) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Principles of Epidemiology](https://health.mo.gov/living/healthcondiseases/communicable/communicabledisease/upcomingevents.php) | Missouri Department of Health and Senior Services | The purpose of the Principles of Epidemiology course is to prepare public health professionals to conduct communicable disease surveillance and epidemiologic investigations. The course was developed by epidemiologists within the Missouri Department of Health and Senior Services (DHSS) to introduce students to the core principles and concepts of epidemiological practices in the realm of public health. This course covers basic epidemiology principles, concepts, and procedures useful in the surveillance and investigation of health-related states or events that pertain particularly to infectious disease.    **Tier 1 Competency:** [1](#Competency1) & [4](#Competency10) | Online and in-person (MO) | Free | N/A | 8 online modules and 2 full days in-person |
| [Professionalism](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8025W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to ethics, integrity, and personal conduct during job-related activities. The student will be able to exhibit the use of integrity and positive interpersonal conduct in the performance of professional and personal activities. Topics covered in this course include foundations, ethics, conduct, personal management, communication, and interpersonal skills. Course ID: CC8025W    **Tier 1 Competency:** [13](#Competency13) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Protecting the Food Supply: Federal Partners](https://www.youtube.com/watch?v=I7uCw5bcj6Y) | Florida CoE | This production is the second video in the Foodborne Illness Introductory Video Series developed by the Florida Integrated Food Safety Center of Excellence. The video aims to provide a basic understanding of how federal agencies work together to protect the food supply in the United States. Featured agencies include the Food and Drug Administration, United States Department of Agriculture, Environmental Protection Agency, and the Centers for Disease Control and Prevention.    **Competency Tier 1:** [**1**](#Competency1) | Online | Free | N/A | 15 min |
| [Protecting the Food Supply: State Partners](https://www.youtube.com/watch?v=1BMH2M05PxQ) | Florida CoE | This production is the third video in the Foodborne Illness Introductory Video Series developed by the Florida Integrated Food Safety Center of Excellence. Each state is unique in how they operate their government organizations. This video provides a broad overview of the duties of state-level public health and agriculture agencies in the United States.  **Tier 1 Competency:** [3](#Competency3) & [11](#Competency11) | Online | Free | N/A | 8 min |
| [Protecting the Food Supply: State Partners in Florida](https://www.youtube.com/watch?v=rURwMJsCmUk) | Florida CoE | This production is the third video in the Foodborne Illness Introductory Video Series developed by the Florida Integrated Food Safety Center of Excellence. Each state is unique in how they operate their government organizations. This video provides a broad overview of the duties of food regulatory agencies in Florida and how they work together to detect, investigate, and respond to foodborne disease.  **Tier 1 Competency:** [3](#Competency3) & [11](#Competency11) | Online | Free | N/A | 16 min |
| [Protecting the Food Supply: State Partners in Georgia](https://www.youtube.com/watch?v=i1DdjDi5u5E) | Florida CoE | This production is the third video in the Foodborne Illness Introductory Video Series developed by the Florida Integrated Food Safety Center of Excellence. Each state is unique in how they operate their government organizations. This video provides a broad overview of the duties of food regulatory agencies in Georgia and how they work together to detect, investigate, and respond to foodborne disease.  **Tier 1 Competency:** [3](#Competency3) & [11](#Competency11) | Online | Free | N/A | 16 min |
| [Providing a Solid Foundation for a Hazard Analysis and Critical Control Points (HACCP) System](http://www.vet.utk.edu/cafsp/online/haccp.php) | University of Tennessee, Center for Agriculture and Food Security and Preparedness | This web-based course will introduce participants to HACCP definitions and terminology, and provide an overview of the benefits and use of HACCP at food processing facilities and at the retail level. Examples specific to food manufacturing and retail will be incorporated in the course. The Food Code requires HACCP application for certain food flow situations at food processing facilities and at the retail level. This course will benefit those seeking information about when HACCP is required and on the principles of HACCP in general. This course will also provide an overview of the requirements of HACCP both at the manufacturing and retail level. Interactive activities specific to food manufacturing and retail will enhance and affirm participant learning.    **Tier 1 Competency:** [5](#Competency5), [6](#Competency6), [10](#Competency10), [14](#Competency14), & [15](#Competency14) | Online | $100.00 or 3 courses for $250 | N/A | 4 hrs |
| [PUBH 541 Student Outbreak Rapid Response Training (SORRT)](https://publichealth.utk.edu/certificates/food-safety/) | University of Tennessee | Basic instruction on the steps involved in investigating a real disease outbreak, working in partnership with the Tennessee Department of Health, the Knox County Health Department, and the East Tennessee Regional Health Office. Following the initial session, students will be available throughout the semester to assist these public health offices in response to a call for expanded capacity to investigate and address a real disease outbreak. Requires at least four hours of community service learning.    **Tier 1 Competency:** [1](#Competency1), [2](#Competency2), [3](#Competency3), [11](#Competency11), [13](#Competency13), [15](#Competency14" \o "Lists the items that would be included in a written summary of a foodborne illness outbreak environmental assessment ), & [16](#Competency16" \o "Describes the importance of reporting foodborne illness outbreaks to national surveillance) | Classroom | 1 credit hr | N/A | Semester course |
| [Regulatory Foundations](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8021W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to the elements of feed and food regulatory programs. The student will be able to exhibit introductory knowledge, skills, and abilities related to the elements of feed and food regulatory programs. Topics covered in this course include foundations, laws and regulations, feed/food protection agencies, program standard areas, IFSS, mutual reliance (recognition and reciprocity). Course ID: CC8021W    **Tier 1 Competency:** [1](#Competency1) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Salmonella in the Caribbean](https://www.cdc.gov/epicasestudies/classroom_salmonella.html) | CDC | This case study is based on real-life investigations undertaken in Trinidad and Tobago in 1998-1999 and published in Clinical Infectious Diseases and the West Indian Medical Journal.    **Tier 2 Competency:** [**2**](#Competency2)**,** [**3**](#Competency3)**,** [**15**](#Competency15T2)**, &** [**16**](#Competency16T2) | Online | Free | no | 3-4 hours |
| [Sampling](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8035W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to feed and food sample collection, and the role of the laboratory. The student will be able to employ sampling protocols when collecting samples. Topics covered in this course include foundations, sampling methodology, procedures, and laboratory. Course ID: CC8035W    **Tier 1 Competency:** [**8**](#Competency8) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Sampling 101: How to Find Pathogens in Food Facilities](https://youtu.be/DXWgfmkhJTU) | New York CoE | Presentation delivered by Martin Wiedmann, targeted at public health officials that would be responsible for collecting environmental samples in response to an outbreak investigation.    **Tier 1 Competency:** [**1**](#Competency1)**,** [**2**](#Competency2)**,** [**3**](#Competency3)**,** [**4**](#Competency10)**, &** [**8**](#Competency8)  **Tier 2 Competency:** [**4**](#Competency10)**,**  [**5**](#Competency5T2)**,**  [**6**](#Competency6T2)**,**  [**8**](#Competency8T2)**, &** [**9**](#Competency9T2) | Online | Free | N/A | 1 hr |
| [Soft Skills for Professionals](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=MG132) | US FDA, Office of Training Education & Development (OTED) | This three-day instructor-led course details the topics of The DISC Assessment Tool, Interpersonal Skills for clear verbal and non-verbal communications, Change Management, Partnering, and Conflict Management & Negotiation. The topics were designed and structured to provide the necessary information on how to share invaluable ideas and strengths to a wide-range of personality diverse and cultural diverse people at the workplace. This course teaches the skills to empower the participant and empower coworkers to contribute their best. Practice exercises are provided after each topic to reinforce all individual and team concepts.    **Tier 3 Competency:** [2](#Competency2) & [3](#Competency3) | Classroom | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | 1.70 | 3 days |
| [The 3 C’s of Listeria: Characteristics, Contamination, and Control](https://youtu.be/I8NSscc-B2o) | New York CoE | This live 90-minute webinar was hosted by the Maryland Department of Health and was offered in partnership with the New York Integrated Food Safety Center of Excellence (NYCoE). Genevieve Sullivan from Cornell University provided an overview of the characteristics, minimizing contamination and the control of Listeria. The contents of the webinar are targeted for public health investigators of retail as well as manufactured foods.    **Tier 2 Competency:**  [5](#Competency5T2),  [6](#Competency6T2),  [8](#Competency8T2), & [9](#Competency9T2) | Online | Free | N/A | 1 hr |
| [The Role of the Environmental Assessments in Understanding Foodborne Illness Outbreaks](https://www.fsis.usda.gov/wps/wcm/connect/fd3253f1-61f0-410a-893a-4ab3cf53d764/Slides_FSEC_KDelea.pdf?MOD=AJPERES&amp;CACHEID=310e494c-3b43-4091-9e82-78800b35c6f6) | CDC and FSIS | This training describes the role of environmental health assessments in understanding how Environmental Health Specialist Network (EHS-Net) has utilized systems theory as a construct to understand the interaction between food systems and public health, identifies the EHS-Net program and describes how EHS-Net utilizes a collaborative forum comprised of environmental health specialists, epidemiologists and laboratorians to understand contributing factors and environmental antecedents in foodborne disease outbreaks, and evaluates the role of environmental assessments to understand the systems during the investigation of foodborne disease outbreaks and identifying environmental factors related to these disease outbreaks.    **Tier 3 Competency:** [2](#Competency2" \o "Leads activities undertaken as part of a foodborne illness outbreak in collaboration with partners at local, state and federal agencies ), [3](#Competency3" \o "Builds partnerships with local, state and federal agencies engaged in outbreak detection and response ), [4](#Competency10" \o "Continuously improves the process for conducting foodborne illness outbreak environment assessments), & [5](#Competency5T2" \o "Mentors others on the use of epidemiological, laboratory and other data when developing hypotheses about the causative agent, implicated food, and contributing factors  in preparation for the site visit) | Online | Free | N/A | 21 slides |
| [Three Steps and a Hop: A Foodborne Illness Outbreak Investigation Case Study (Online)](http://csph.ucdenver.edu/coe-foodsafety/captivate/polka/polkacasestudy.html) | Colorado CoE | This beginner level case study, that includes an instructor and student version, is based on a local foodborne illness outbreak at a polka dance festival. It is designed to be completed by public health students or new foodborne illness outbreak investigators in a discussion based group setting, led by an instructor. For optimal use, participants should have a basic knowledge of epidemiologic concepts and methods.    **Tier 1 Competency:** [**1**](#Competency1)**,** [**2**](#Competency2)**,** [**4**](#Competency10)**,**[**5**](#Competency5)**, [6](#Competency6" \o "Lists processes, practices, and records to observe and review during a site visit), &** [**13**](#Competency13) | Online materials | Free | N/A | 2 hours |
| Three Steps and a Hop: A Foodborne Illness Outbreak Investigation Case Study (Paper Based)   * [Instructor Guide (PDF)](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Documents/Polka%20Table%20Top%20Instructor%20with%20Appendices.pdf) * [Student Guide (PDF)](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Documents/Polka%20Table%20Top%20Participant%20with%20Appendices.pdf) * [Tabletop Slides (PPT)](http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Documents/Polka%20Table%20Top%20Slides.pptx) | Colorado CoE | This version of the case study based on a local foodborne illness outbreak at a polka dance festival offers an online alternative to the paper based format. The interactive, online version is designed to be taken by public health students or new foodborne illness outbreak investigations and can be completed individually. For optimal use, participants should have a basic knowledge of epidemiologic concepts and methods.  **Tier 1 Competency:** [**1**](#Competency1)**,** [**2**](#Competency2)**,** [**4**](#Competency10)**,** [**5**](#Competency5)**,** [**6**](#Competency6)**, &** [**13**](#Competency13) | In-person table-top activity | Free | N/A | 3 hours |
| [Traceability](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=CC8042W) | US FDA, Office of Training Education & Development (OTED) | Introductory knowledge, skills, and abilities related to tracking feed and food throughout the supply chain. The student will be able to describe the role of traceability in feed and food programs. Topics covered in this course include foundations, preliminary review, supply chain, documentation, communications, and technology. Course ID: CC8042W  **Tier 1 Competency:** [12](#Competency12" \o "Explains the purpose of traceback and trace forward investigations and the roles of local, state and federal agencies) | Online Content | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | N/A | Self-paced, may bookmark and resume as needed |
| [Traceback Investigations](https://orauportal.fda.gov/stc/ora/psciis.dll?COURSE=ora&CODE=ER220) | US FDA, Office of Training Education & Development (OTED) | This course is intended for FDA or State emergency response coordinators, investigators, supervisors, or other staff who may conduct or assist with traceback investigations. Priority for this course should be given to individuals who will be able and willing to conduct this training (either alone or with other instructors) for other regulatory personnel in their jurisdiction or as outreach to other regulatory partners. Course ID: 0000079418    **Tier 2 Competency:** [4](#Competency10), [5](#Competency5T2), [9](#Competency9T2), [11](#Competency11T2), & [12](#Competency12T2) | Classroom | Free to state, local and tribal regulatory partners with OTED Pathlore login and password | 2.70 | 3 days |