



Cornell CALS
College of Agriculture and Life Sciences



Department
of Health



Integrated Food Safety
Centers of Excellence
www.CoEFoodSafetyTools.org

New York Integrated Food Safety Center of Excellence (NY CoE) Epi Trainings Toolkit *Resources for epi/EH staff who investigate enteric disease clusters*

Food Safety CoE Core Curriculum The epidemiology and environmental health core curriculums offer a curated collection of training designed to address the epidemiology and environmental health competencies developed by the Food Safety CoEs. The outbreak team core curriculum is for public health professionals needing a high-level overview of foodborne outbreak investigations. These trainings blend epidemiology and environmental health skills, emphasizing a team-based approach. Whether you're involved with detecting, investigating, or responding to foodborne illness outbreaks at local or state levels, the core curriculums will equip you with the knowledge and skills necessary to uphold the highest professional standards.

Whole Genome Sequencing (WGS) Curriculum The WGS Curriculum is designed to provide epidemiologists working on foodborne and enteric disease resources to (1) interpret WGS-based results with confidence, and (2) carry out investigations more efficiently and accurately. This curriculum will: provide an understanding of the genetics and genomics of microbial organisms; provide insight into WGS data acquisition and processing; show how to generate allele codes, phylogenetic trees, and single nucleotide polymorphism (SNP) distance matrices; demonstrate how to visualize data using SEDRIC; and review effective epi-lab communication.

Molecular Epidemiology and Sequencing Approaches in Public Health These online molecular epidemiology trainings were developed through a collaboration with the CDC and the CDC Integrated Food Safety CoEs. This project is a multi-pronged approach to deliver training on whole genome sequencing (WGS) to health department and agriculture department staff who use WGS data for foodborne disease surveillance and outbreak investigations. The training includes four online [modules](#) that provide foundational knowledge on WGS, and four [webinars](#) on basic genomic principles.

Application of WGS (wgMLST) Activity This activity is designed to provide public health staff and students of public health with an understanding of how whole genome sequencing and whole genome multi-locus sequence typing functions as a subtyping model.

Enteric Disease Outbreak Data Analysis Training This interactive, self-study course designed for local and state health department staff will provide training on the data analysis portion of an event-based enteric disease outbreak investigation. The modules will cover foundations of creating line lists, epidemic curves, case definitions, and performing data analysis for a cohort study. Modules can also be used for just-in-time trainings during outbreak investigations.

Showcasing Online Foodborne Illness Complaint Systems This 60-minute webinar showcases a variety of online foodborne illness complaint systems. Speakers from the Maryland, Rhode Island, Utah, and Wisconsin Departments of Health share the successes of their systems, including how they support enteric disease response and best practices for implementation.

[Implementing Student Interview Teams](#) A webinar and checklists to assist state and local public health departments in implementing student interview teams for foodborne disease investigations is available. The webinar reviews processes to implement student interview teams (remote or in-person) at state and local public health departments. Key documents include (1) Student/Intern Logistics Checklist: This document highlights planning, logistical, budget, and infrastructure considerations at the agency level and (2) Student/Intern Orientation Checklist: This resource outlines activities and tools to develop fundamental interviewing skills.

[Pining for a Common Source: Foodborne Illness Outbreak Investigation](#) This interactive learning experience, designed for state and local public health agency staff, bridges the gap between theoretical knowledge and practical application in foodborne outbreak investigations. The case study emphasizes the importance of rapid exposure identification, cross-agency collaboration, and timely implementation of control measures in real-world scenarios.

[Investigating and Preventing Raw Milk Outbreaks an Expert Webinar - Food Safety Centers of Excellence \(CoE\)](#) Understand the health risks associated with raw milk consumption and its potential impact on consumer trust and dairy farm viability. Learn about: unique challenges in outbreak investigations; proper sample collection techniques, and effective prevention strategies. Includes an expert panel Q&A with state health officials from New York, Maine, and Pennsylvania.

[Interviewing Food Workers During Outbreak Investigations - Food Safety Centers of Excellence \(CoE\)](#) This training equips environmental health professionals with best practices for interviewing food workers and managers during a foodborne illness outbreak investigation. Featuring a recorded webinar and a just-in-time refresher video, this course offers essential guidance for effective outbreak response.

[Salmonella Serovar Wiki](#) This Wiki provides public health professionals with a centralized resource for Salmonella serovar information, including their likely sources, geographic distribution, previous outbreak histories, associations with human illnesses, and specific genomic characteristics. This resource is designed to support both epidemiologists and environmental health professionals in their investigations. The Wiki provides valuable context about common sources and ecological niches for specific serovars, which can help guide sampling strategies.

[Outbreak Response \(Interviewing Skills\) Training](#) This remote (or in-person) half-day course, introduces participants to foodborne disease outbreak investigations and provides training on effective interview techniques. Contact the NY CoE for further details.

Recorded Webinars

- [Using the NCBI Pathogen Detection Pipeline as Part of the Epi Workflow](#)
- [The Use of Whole Genome Sequencing During Foodborne Outbreak Investigations](#)
- [Using Epi Info Templates to Build Questionnaires](#)
- [Using the NCBI Pathogen Detection Portal for Surveillance](#)

<p>To contact the NY CoE for assistance, send an email to: paula.pennell-huth@health.ny.gov</p>
<p>All-CoE products and trainings available at: https://foodsafetycoe.org/</p>