

Advanced Course for Enteric Epidemiologists (ACE)

Course Syllabus

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Integrated Food Safety Centers of Excellence: This course was developed by the Integrated Food Safety Centers of Excellence (Food Safety CoEs) with the Rocky Mountain Public Health Training Center. The Food Safety CoEs were established in 2012 by the Centers for Disease Control and Prevention under the authority of the Food Safety Modernization Act. The mission of the Food Safety CoEs is to improve the detection and investigation of enteric disease outbreaks by providing in-person and online trainings, developing resources and tools, delivering technical assistance, and conducting evaluations and analyses of current practices.

Core Competencies: This course was built on the [Core Competencies for Epidemiologists who Detect and Investigate Enteric Disease Outbreaks](#), which represent the knowledge and skills desirable for epidemiologists engaged in foodborne illness outbreak detection, investigation, and response at local, state, and territorial public health agencies, and map to three tiers which progress from lower to higher levels of skill complexity.

Target Audience: This course is designed to be taken by Tier 2 investigators in the epidemiology role. The course assumes basic knowledge of public health, infectious disease epidemiology, and enteric diseases.

Course Objective: Prepare practicing public health professionals in the epidemiology role to detect and investigate enteric disease outbreaks.

Required Textbook: Council to Improve Foodborne Outbreak Response Guidelines for Foodborne Disease Outbreak Response, Third Edition (available online: <https://cifor.us/downloads/clearinghouse/CIFOR-Guidelines-Complete-third-Ed.-FINAL.pdf>)

How much time does this course take?

This course translates to a 1-credit semester long course. It will take approximately 1-3 hours per week over 12 weeks to complete if the student intends to take all modules.

Self-Evaluation: There is a self-assessment test at the beginning of the course, which highlights competencies and modules which the student may want to focus on. Each section includes a knowledge check, with a recommended passing score of 80% or higher.

Course Schedule:

Each module includes competencies and learning objectives, a short (5-10 minute) lecture from a leading expert, readings from the course textbook and articles from the peer-reviewed literature, a practice-based activity, emerging issues, and resources highlighting equity, diversity, and inclusion. This course is self-paced, however we include a recommended schedule below.

Section	Module	Week	Estimated Time
	Course Introduction	Week 1	0.5 hours
Background & Preparation	Impact of foodborne disease	Week 1	1.5 hours
	Enteric disease biology	Week 2	2 hours
	Teams, partners, and internal communication	Week 3	1.5 hours
	Legal preparedness	Week 4	2 hours
	Knowledge check	Week 4	
Surveillance & Outbreak Detection	Pathogen-based surveillance	Week 5	1 hour
	Complaint-based surveillance	Week 6	2 hours
	Knowledge check	Week 6	
Investigation	Hypothesis generation	Week 7	2.5 hours
	Hypothesis testing: Analytical skills	Week 8	2 hours
	Hypothesis testing: Data analysis	Week 9	2 hours
	Hypothesis testing: Environmental health	Week 10	2 hours
	Knowledge check	Week 10	
Control & Prevention	Control measures	Week 11	1.5 hours
	Teams, partners, and external communication	Week 11	1 hour
	Reporting to surveillance	Week 12	2 hours
	Knowledge check	Week 12	