

Crosswalk - Requirements for Foodborne Illness Training Programs Based on Standard 5

Introduction:

The 2014 – 2016 Interdisciplinary Foodborne Illness Training Committee (IFITC) was charged with developing a Crosswalk that would identify areas where training programs could be compared to Standard 5 of the Voluntary National Retail Food Regulatory Program Standards. Using the FSMA 205 C (1) Phases of a Food Incident Response CIFOR/RRT/MFRPS/VNRFPS Crosswalk as a base, the Committee revised the Crosswalk to compare additional training programs that were identified. In addition to the training programs identified in the CIFOR/RRT/MFRPS/VNRFPS Crosswalk, the IFITC also reviewed:

1. National Environmental Health Association (NEHA) course “I-FITT-RR”
2. National Environmental Health Association (NEHA) Epi-Ready – Foodborne Illness Response Strategies, June 2006

The resulting Crosswalk now identified the content of all the training programs and indicated, using a table format, how these compared to Standard 5. This Crosswalk is called Crosswalk – Requirements for Foodborne Illness Training Programs Based on Standard 5.

The Committee also recognized that in the process of determining gaps the Crosswalk could now have an expanded purpose of (1) identifying available resources related to Foodborne Illness Training; (2) setting a content baseline for the development of Foodborne Illness Training Programs; (3) establishing some consistency for training programs as a whole. The Committee considered this a more powerful interpretation of the first Charge and as such did not include any references to best practices.

The Committee also agreed that this document will be useful to regulators, academics and NGO's when new training programs are being considered especially as it would introduce consistency, a much needed component in Foodborne Illness Training Programs.

In 2016-2018, the Program Standards Committee (PSC) was now charged with maintaining the document. The document was updated with current references for the training materials.

In 2018 – 2020, the PSC used this Crosswalk to identify essential education content of foodborne disease outbreak training programs and update the Crosswalk with additional information. Courses added to the document are CDC EHS e-Learning on Environmental Assessment of Foodborne Illness Outbreaks, FDA Food Related Emergency Exercise Bundle (FREE-B0, IS-305: Environmental Health Training in Emergency Response (EHTER) Awareness Level, NEHA Certified Foodborne Outbreak Investigator Credential (CFOI) and Integrated Food Safety Center of Excellence (CoE) Webinar Series.

The resulting Crosswalk now identifies the content of all the training programs as indicated, using a table format, comparing them to Standard 5. In the interest of saving space, identified “Tools” that did not have a correlating “Reference” to the Standard 5 element being evaluated were removed from the Standard 5 element listing.

Industry Related Sources

The PSC reached out to 50 industry food safety professionals to determine whether or not any companies had developed their own internal training system for investigating foodborne illnesses. We were unable to find any company that have developed their own comprehensive internal training system for investigating foodborne illnesses. There are a variety of documents from public resources, such as from state and federal agencies to teach the basics of investigations. For the most part, the PSC feels that industry needs to be knowledgeable enough to determine if the illness was related to the food that was served or sold and if there was a breakdown in safe food handling practices. Additionally, the industry needs to be as informed as the sanitarians or epidemiologists investigating the outbreak.

Acronyms Used:

RRT: Rapid Response Team

CIFOR: Council to Improve Foodborne Outbreak Response

MFRPS: Manufactured Food Regulatory Program Standards

IAFP: International Association of Food Protection

NASDA: National Association of State Departments of Agriculture – Food Emergency Response Plan Template

<https://www.nasda.org/policy/issues/food-safety/emergency-management/food-emergency-response-plans>

NEHA Epi-Ready: National Environmental Health Association

NEHA I-FITT-RR: Industry-Foodborne Illness Investigation Training and Recall Response

CDC – Center for Disease Control

VNRFRPS: Voluntary National Retail Food Regulatory Program Standards – Standard 5

CDC EHS: Centers for Disease Control Environmental Health Specialist

NEHA (CFOI): National Environmental Health Association Certified Foodborne Outbreak Investigator credential *NOTE: The CFOI procedures relate to policies that are part of the exam for purposes of obtaining the credential. Therefore the applicability of the CFOI to Standard 5 is limited.

IFSCOE: Integrated Food Safety Center of Excellence

CoE: Center of Excellence

EATS: Environmental Assessments Training Series - EATS 102 is a training program designed to reinforce the lessons learned in EATS 101 by providing 4 additional scenarios. The training does reinforce how to perform an environmental investigation and the roles for different team members. It does not necessarily provide written guidelines for a program to incorporate into their procedures.

EHTER: Environmental Health Training in Emergency Response **NOTE: EHTER is a face-to-face introductory course designed to provide an overview of potential environmental health topics and guidance that an EH professional may encounter in a disaster situation (primarily focused on natural disasters). It does not address foodborne illness.

STANDARD 5 - Voluntary National Retail Food Regulatory Program Standards	
1. Investigative procedures.	
a. The program has written operating procedures for responding to and /or conducting investigations of foodborne illness and food- related injury*. The procedures clearly identify the roles, duties and responsibilities of program staff and how the program interacts with other relevant departments and agencies. The procedures may be contained in a single source document or in multiple documents.	
Tool	Reference
RRT	II. A. Chapter 1
CIFOR	3.1
MFRPS	5.3
IAFP	Page 3-4
NASDA Version 4.0 August 2011	III, V, VI, VII, IX, X
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Modules 1, 2, 3, 4,5, 6, 7
NEHA I-FITT-RR	Module 1 Building a Partnership: Who and Why?
NEHA (CFOI)	*Performing Environmental Assessment
IFSCOE	The CoE's are integral to quantitative analysis of foodborne illness investigation. The Crosswalk does more than simply identify the content of the training content but makes it easy to access track and verify through certification.
EATS	Lessons 1-4. All four scenarios provide information on the roles and responsibilities of the investigation team in an outbreak. The material is presented in an e-learning formatted and participants are not provided with written guidelines for further use.
Food Related Emergency Exercise Bundle (FREE)	Information contained in the Resource, Lead planner and Facilitator's guidelines are provided depending on scenario.
b. The program maintains contact lists for individuals, departments, and agencies that may be involved in the investigation of foodborne illness, food-related injury* or contamination of food.	
Tool	Reference
RRT	II.B. Chapters 2&3
CIFOR	3.6.2.1
MFRPS	5.3.1.2.6
IAFP	Page3-4
NASDA Version 4.0 August 2011	VI, XIV

NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 1
NEHA I-FITT-RR	Module 1 Building a Partnership: Who and Why?
EATS	NEHA, in collaboration with CDC's Environmental Health Services Branch, the National Network of Public Health Institutes (NNPHI), EATS provides training on the role of environmental assessments in the broader context of outbreak investigations and the food safety system.
Food Related Emergency Exercise Bundle (FREE)	Several of the scenarios provide contact lists for appropriate contacts on federal level, websites where key information can be gathered.
c. The program maintains a written operating procedure or a Memorandum of Understanding (MOU) with the appropriate epidemiological investigation program/department to conduct foodborne illness investigations and to report findings. The operating procedure or MOU clearly identifies the roles, duties, and responsibilities of each party.	
Tool	Reference
RRT	II.A. Chapter 1
CIFOR	3.1
MFRPS	5.3.1.1
NASDA Version 4.0 August 2011	V, VI, IX, XIII
NEHA I-FITT-RR	Module 1 Building a Partnership: Who and Why? Module 4 Epidemiologic Investigation
IFSCOE	The trainings are subject based.
Food Related Emergency Exercise Bundle (FREE)	The modules would help a jurisdiction to develop the MOU's with the appropriate program/department.
d. The program maintains logs or databases for all complaints or referral reports from other sources alleging food-related illness, food-related injury* or intentional food contamination. The final disposition for each complaint is recorded in the log or database and is filed in or linked to the establishment record for retrieval purposes.	
Tool	Reference
RRT	II.E. Chapter 11
CIFOR	4.3.4.9
MFRPS	5.5
IAFP	Page 2,3,4 Example logs: page 139-140
NASDA Version 4.0 August 2011	
NEHA Epi-Ready. Foodborne Illness Response	Module 2

Strategies. Edition 2012	
NEHA I-FITT-RR	Module 2 How Do You Recognize a Foodborne Illness?
IFSCOE	Yes
EHTER	
Food Related Emergency Exercise Bundle (FREE)	Similar logs or databases are used to facilitate discussion throughout several of the scenarios presented.
e. Program procedures describe the disposition, action or follow-up and reporting required for each type of complaint or referral report.	
Tool	Reference
RRT	Chapter 9, 10, 11 & 13
CIFOR	Chapter 4, 4.3, Chapter 5
MFRPS	5.5
IAFP	Page 3-11
NASDA Version 4.0 August 2011	VI, IX
NEHA Epi- Ready. Foodborne Illness Response Strategies. Edition 2012	Module 2
NEHA I-FITT-RR	Module 2 How Do You Recognize a Foodborne Illness?
IFSCOE	Yes the methodologies are covered in the COE
Food Related Emergency Exercise Bundle (FREE)	Similar procedures are referenced throughout the scenarios
f. Program procedures require disposition, action or follow-up on each complaint or referral report alleging food-related illness or injury within 24 hours.	
Tool	Reference
RRT	Chapters 9, 10, 11 & 13 (pg.212) Subsection D
CIFOR	Chapter 4,5
MFRPS	5.5
NEHA (CFOI)	Detecting Outbreaks
g. The program has established procedures and guidance for collecting information on the suspect food's preparation, storage or handling during on-site investigations of food-related illness, food-related injury*, or outbreak investigations.	
Tool	Reference
RRT	Chapters 9,10, 11 & 13 (Page 212) Subsection D
CIFOR	Chapter 4, 5
MFRPS	5.5
IAFP	Pages 41-45
NEHA Epi-	Module 3, 5, 8

Ready. Foodborne Illness Response Strategies. Edition 2012	
NEHA I-FITT-RR	Module 3 Environmental Assessment Exercise
CDC Foodborne Illness Outbreak Environmental Assessments	Lesson 4, 5
NEHA (CFOI)	Performing Environmental Assessment
IFSCOE	Step 1: Detect a Possible Outbreak. Step 2: Define and Find Cases Step 3: Generate Hypotheses about Likely Sources Step 4: Test Hypotheses Step 5: Solve Point of Contamination and Source of the Food Step 6: Control an Outbreak Step 7: Decide an Outbreak is Over
EATS	Lessons 1-4 provides guidance on what information to collect during on site evaluations.
Food Related Emergency Exercise Bundle (FREE)	The established procedures are referenced and explained throughout several of the scenarios.
h. Program procedures provide guidance for immediate notification of appropriate law enforcement agencies if at any time intentional food contamination is suspected.	
Tool	Reference
RRT	Chapter 6, 10
CIFOR	3.1, 3.10, 6.3
MFRPS	5.5
IAFP	Pages 99-103
NASDA Version 4.0 August 2011	V, VI, IX
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 7
Food Related Emergency Exercise Bundle (FREE)	The established procedures are referenced and explained throughout several of the scenarios.
i. Program procedures provide guidance for the notification of appropriate state and/or federal agencies when a complaint involves a product that originated outside the agency's jurisdiction or has been shipped interstate.	
Tool	Reference
RRT	Chapter 6, 10
CIFOR	3.1, 3.10, 7.3
MFRPS	5.3.1.2.2

IAFP	Pages 6-7
NASDA Version 4.0 August 2011	IV, V, VI, IX, XII, XV
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 7
CDC Foodborne Illness Outbreak Environmental Assessments	Lesson 7
NEHA (CFOI)	Detecting Outbreaks
IFSCOE	Colorado Integrated Food Safety Center of Excellence (CoE). The CoE's identify and develop model practices in foodborne disease surveillance and outbreak response.
Food Related Emergency Exercise Bundle (FREE)	The established procedures are referenced and explained throughout several of the scenarios.
2. Reporting Procedures	
a. Possible contributing factors to the food-related illness, food-related injury* or intentional food contamination are identified in each on-site investigation report.	
Tool	Reference
RRT	Chapters 9, 10, 11
CIFOR	5.2
MFRPS	5.3
IAFP	Pages 34-41
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Modules 5, 8
NEHA I-FITT-RR	Module 3 Environmental Assessment Exercise
CDC Foodborne Illness Outbreak Environmental Assessments	Lesson 2
NEHA (CFOI)	Reviewing Investigation Findings
IFSCOE	An example: Evaluation of Nebraska Foodborne Illness and Outbreak Response Using the Council to Improve Foodborne Outbreak and Response (CIFOR) Proposed Performance Measures 01/11/2017
EATS	Lessons 1-4. The training focuses on understanding how the foodborne illness could have occurred and identifying the contributing factors.
Food Related Emergency Exercise Bundle (FREE)	Covered under several modules detailing the foodborne illness investigation.
b. The program shares final reports of investigations with the state epidemiologist and reports of confirmed foodborne disease outbreaks*	

with CDC.	
Tool	Reference
RRT	Chapters 3, 6, 13
CIFOR	4.2, 4.3, 4.4, 7.5, 9.1
MFRPS	5.5
IAFP	Page 75
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 8
NEHA I-FITT-RR	Module 7 Final Report & Recovery
CDC Foodborne Illness Outbreak Environmental Assessments	Lesson 8
IFSCOE	Yes
EATS	Lessons 1-4. The training includes reporting on findings from the investigation
Food Related Emergency Exercise Bundle (FREE)	Sharing of final reports is outlined within the scenarios
3. Laboratory Support Documentation	
a. The program has a letter of understanding, written procedures, contract or MOU acknowledging, that a laboratory(s) is willing and able to provide analytical support to the jurisdiction's food program. The documentation describes the type of biological, chemical, radiological contaminants or other food adulterants that can be identified by the laboratory. The laboratory support available includes the ability to conduct environmental sample analysis, food sample analysis, and clinical sample analysis.	
Tool	Reference
CIFOR	4.2, 4.3, 4.4, 9.1,
MFRPS	5.3.3.4
IAFP	
NASDA Version 4.0 August 2011	VI
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Modules 4 & 5
NEHA I-FITT-RR	Module 5 Collecting Samples and Laboratory Testing
IFSCOE	Yes
Food Related Emergency Exercise Bundle (FREE)	Lab documentation procedures are shared during the scenarios.
b. The program maintains a list of alternative laboratory contacts from which assistance could be sought in the event that a food-related	

emergency exceeds the capability of the primary support lab(s) listed in paragraph 3.a. This list should also identify potential sources of laboratory support such as FDA, USDA, CDC, or environmental laboratories for specific analysis that cannot be performed by the jurisdiction's primary laboratory(s).

Tool	Reference
CIFOR	4.2, 4.3, 4.4, 9.1
MFRPS	5.5
NASDA Version 4.0 August 2011	VI
NEHA (CFOI)	Collecting Samples
IFSCOE	Yes
Food Related Emergency Exercise Bundle (FREE)	The scenarios presented in the modules address these issues.

4. Trace-back Procedures

a. Program management has an established procedure to address the trace-back of foods implicated in an illness, outbreak or intentional food contamination. The trace-back procedure provides for the coordinated involvement of all appropriate agencies and identifies a coordinator to guide the investigation. Trace-back reports are shared with all agencies involved and with CDC.

Tool	Reference
RRT	Chapter 9
CIFOR	5.2
MFRPS	5.3.3.3
IAFP	Forms J 1, 2 & 3 (pg. 154-154)
NASDA Version 4.0 August 2011	VI, IX
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 5
NEHA I-FITT-RR	Module 8 Food Recalls
CDC Foodborne Illness Outbreak Environmental Assessments	Lesson 7
NEHA (CFOI)	Conducting Product Tracing
IFSCOE	Yes
Food Related Emergency Exercise Bundle (FREE)	Lab documentation procedures are shared during the scenarios.

5. Recalls

a. Program management has an established procedure to address the recall of foods implicated in an illness, outbreak or intentional food contamination.

Tool	Reference
RRT	Chapter 12
CIFOR	5.2.4.1.1
MFRPS	5.3.2.2
NASDA Version 4.0 August 2011	VI, IX
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 5
NEHA I-FITT-RR	Module 8 Food Recalls
Food Related Emergency Exercise Bundle (FREE)	The scenarios presented in the modules address these issues.
b. When the jurisdiction has the responsibility to request or monitor a product recall, written procedures equivalent to 21 CFR, Part 7 are followed.	
Tool	Reference
RRT	Chapter 12
CIFOR	5.2
NASDA Version 4.0 August 2011	VI, IX
NEHA I-FITT-RR	Module 8 Food Recalls
Food Related Emergency Exercise Bundle (FREE)	The scenarios presented in the modules address these issues.
c. Written policies and procedures exist for verifying the effectiveness of recall actions by firms (effectiveness checks) when requested by another agency.	
Tool	Reference
RRT	Chapter 12
CIFOR	5.2
IAFP	
NEHA I-FITT-RR	Module 8 Food Recalls
NEHA (CFOI)	Conducting Product Testing
Food Related Emergency Exercise Bundle (FREE)	The scenarios presented in the modules address these issues.
6. Media Management	
a. The program has a written policy or procedure that defines a protocol for providing information to the public regarding a foodborne illness outbreak or food safety emergency. The policy/procedure should address coordination and cooperation with other agencies involved in the investigation. A media person is designated in the protocol.	

Tool	Reference
RRT	Chapters 3 & 6
CIFOR	3.6
MFRPS	5.3.4.2
IAFP	Page 73 and 105
NASDA Version 4.0 August 2011	VI, IX, XI
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 8
NEHA I-FITT-RR	Module 6 Control Measures Module 8 Food Recalls
NEHA (CFOI)	Preparing for Investigation Reviewing Investigation Findings
IFSCOE	Yes
Food Related Emergency Exercise Bundle (FREE)	The scenarios presented in the modules address these issues.
7. Data Review and Analysis	
a. At least once per year, the program conducts a review of the data in the complaint log or database and the foodborne illness and food-related injury* investigations to identify trends and possible contributing factors that are most likely to cause foodborne illness or food-related injury*. These periodic reviews of foodborne illnesses may suggest a need for further investigations and may suggest steps for illness prevention.	
Tool	Reference
RRT	Chapters 13 & 14
CIFOR	4.3, Chapter 8, 5.2.9
IAFP	2 & 3
NASDA Version 4.0 August 2011	XIV
NEHA Epi-Ready. Foodborne Illness Response Strategies. Edition 2012	Module 2
IFSCOE	Yes
Food Related Emergency Exercise Bundle (FREE)	The scenarios presented in the modules address these issues.
b. The review is conducted with prevention in mind and focuses on, but is not limited to, the following: 1) Foodborne Disease Outbreaks*, Suspect Foodborne Outbreaks* and Confirmed Foodborne Disease Outbreaks* in a single establishment; 2) Foodborne Disease Outbreaks*, Suspect Foodborne Outbreaks* and Confirmed Disease Outbreaks* in the same establishment type; 3) Foodborne Disease Outbreaks*, Suspect Foodborne Outbreaks* and Confirmed Foodborne Disease Outbreaks* implicating the same food;	

- 4) Foodborne Disease outbreaks*, Suspect Foodborne Outbreaks* and Confirmed Foodborne Disease Outbreaks* associated with similar food preparation processes;
- 5) Number of confirmed foodborne disease outbreaks*;
- 6) Number of foodborne disease outbreaks* and suspect foodborne disease outbreaks*;
- 7) Contributing factors most often identified;
- 8) Number of complaints involving real and alleged threats of intentional food contamination; and
- 9) A number of complaints involving the same agent and any complaints involving unusual agents when agents are identified.

Tool	Reference
RRT	Chapters 13 & 14
CIFOR	4.3, Chapter 8
IFSCOE	Campylobacter Outbreak at a Colorado Correctional Facility A Foodborne Outbreak Investigation Case Study [Available at the COE in Colorado]

c. In the event that there have been no food-related illness or food-related injury* outbreak investigations conducted during the twelve months prior to the data review and analysis, program management will plan and conduct a mock foodborne illness investigation to test program readiness. The mock investigation should simulate a response to an actual confirmed foodborne disease outbreak* and include on-site inspection, sample collection, and analysis. A mock investigation must be completed at least once per year when no foodborne disease outbreak* investigations occur.

Tool	Reference
RRT	Chapter 8
IFSCOE	Mock scenarios are part of the investigative process