



Foodborne Illness Allegation, Investigation and Crisis Management

Course Syllabus

1. Food Safety and Foodborne Illness - Background and Trends
2. Disease Characterisation
 - Characteristics of Viruses, Bacteria and Parasites
 - Classification of Foodborne Illness
 - Clinical Features of Foodborne Illness
 - The Carrier State
3. Pathogenesis
 - The Digestive Tract
 - The Body's Defense System
 - High-Risk Populations
 - Infective or Toxic Dose
4. Foodborne Illness Complaint Action
 - Preparation
 - Receiving and Monitoring Foodborne Illness Complaints
 - Human Psychology and Human Behaviour related to handling complaints
 - Criteria to Determine if a Complaint is Valid
 - Expanding the Investigation
 - Notifying the Dubai Municipality - Food Control Department
 - Restricting an Infected Food Worker
 - Collecting Leftover Food Samples

- Summary - Sequential Steps in the Investigation of Foodborne Illness Complaints and Outbreaks

5. Conducting an Epidemiology Investigation

- What is Epidemiology
- Conducting an Epidemiological Investigation
- Steps in an Epidemiological Investigation
- Submission of Clinical Specimens

6. Conducting an Environmental Investigation

- What does the Environmental Investigation Entail?
- Background to a Hazard Analysis Critical Control Point (HACCP) Risk Assessment
- Application of HACCP Principles in a Foodborne Illness Investigation

7. Summarising the Investigation

- The Report
- Purpose of The Report
- Outbreak Report Format

8. Media and Crisis Management

- Principles of Crisis Management
- Communication methods
- Human Behaviour and Understandings
- Dealing with Media, handling interviews and journalists
- Minimising brand damage

Assessment: Case Studies completed during the training

Duration: 2 days

Course Learning Outcomes

Module 1

Foodborne Disease and Outbreaks

At the end of this module the trainees will be able to:

1. Describe the burden of foodborne diseases on business and the economy.
2. List examples of common foodborne disease causative agents.
3. Define the terms “outbreak” and “cluster.”
4. List the goals of a foodborne disease outbreak investigation.
5. Describe the desirable knowledge and skills available in a foodborne outbreak investigation team.

Module 2

Foodborne Disease Outbreak Detection/Surveillance

At the end of this module the trainees will be able to:

1. Describe the surveillance of foodborne illness through notification/complaint systems.
2. List ways to improve the accuracy of a food history obtained in a foodborne illness complaint.
3. Describe the surveillance of foodborne illness through pathogen-specific surveillance.
4. Recognize a possible outbreak using a notification/complaint system or pathogen-specific surveillance.
5. Describe the role of local public health in national pathogen-specific surveillance.

Module 3

Preliminary Investigation Elements

At the end of this module the trainees will be able to:

1. Describe the initial investigation steps used to confirm an incident/case/outbreak.
2. Develop a case definition for an outbreak given details about the causative agent and circumstances surrounding the outbreak.
3. Use knowledge of the causative agent, the implicated facility, the descriptive epidemiology among cases, and information collected through case interviews to generate hypotheses about an outbreak.
4. Given initial details from an outbreak, prioritize the outbreak for further investigation.

Module 4

Environmental Health Investigation

Learning Outcomes

At the end of this module the trainees will be able to:

1. Discuss how contributing factors are related to the causative agent, suspect food, and the food processing method.
2. Compare an environmental health assessment with a HACCP plan review, facility plan review, and a regulatory inspection.
3. List types of activities included in an environmental health assessment.
4. Describe the likely role of local jurisdictions in a traceback investigation.

Module 5

Epidemiological Investigation

Learning Outcomes

At the end of this module, the trainees will be able to

1. Compare a case series, a cohort study, and a case-control study.
2. Interpret the measure of association for a cohort and a case-control study.
3. Explain what is meant by the term “statistically significant.”
4. Identify potential problem areas in the conduct of an epidemiologic study which might impact the findings.

Module 6

Laboratory/Clinical Investigation

Learning Outcomes

At the end of this module, the trainees will be able to:

1. Determine the likely causative agent for a foodborne outbreak based on laboratory/clinical findings and/or suspect food.
2. List important considerations in the collection and submission of clinical and food specimens to the laboratory.
3. Interpret results from testing of clinical and food specimens.
4. Describe three ways subtyping of the causative agent can be used in an outbreak investigation.

Module 7

Communications and Stakeholders

Learning Outcomes

At the end of this module, the trainees will be able to:

1. Discuss ways to improve communications among outbreak investigation team members.
2. Identify key stakeholders to be notified in the event of a foodborne outbreak.
3. List considerations in dealing with the media about a foodborne disease outbreak.
4. Outline the components of a final report from an outbreak investigation.