

# **NEHA Certified Foodborne Outbreak Investigator Credential (CFOI)**

## Candidate Information Brochure



Welcome! Thank you for your interest in the Certified Foodborne Outbreak Investigator (CFOI) credential offered by the National Environmental Health Association (NEHA). This handbook contains the application procedures, requirements for eligibility to sit for the CFOI credential examination, and the policies that guide the decisions on credentialing. The credentialing program is administered by the NEHA staff headquartered in Denver, Colorado.

NEHA is dedicated to offering a credentialing program that is credible and based on best credential practices; it is a goal of NEHA to seek accreditation of the CFOI program under ISO/IEC 17024 administered by the American National Standards Institute (ANSI). In an effort to meet accreditation requirements, NEHA offers a full-scope credentialing program that is comprised of the following key components:

- Eligibility requirements and application submission and review procedures
- An examination testing the competency and knowledge requirements of food safety auditors today
- Recertification requirements for maintenance the credential
- A Code of Ethics all credential holders must abide by and uphold
- Complaints and disciplinary procedures

NEHA has spent considerable time and resources to develop a credential program of integrity, balancing the interests of all stakeholders served by the credential, including regulatory agencies, business, academia, and food safety professionals. In developing the program requirements, NEHA has adhered to practices that assure the following important program outcomes:

- Validity of the credential examination
- Fairness of the procedures associated with granting, maintaining, suspending and removing the credential
- Establishment of requirements for qualifying to earn the credential
- Establishment of the requirements for maintaining the credential
- Assurances that the public trust is served through the credential program
- Credibility in the administration and maintenance of the program.

The competency requirements of the CFOI credential examination emanate from a comprehensive job task analysis study which defines the job description for the Foodborne Outbreak Investigator:

A Foodborne Outbreak Investigator utilizes environmental health principles and food safety knowledge in collaboration with outbreak response partners to assess foodborne illness risks, perform environmental assessments, identify contributing factors and antecedents, and implement control measures to prevent the spread of foodborne illness and protect the public.

## **CFOI Examination and Exam Processes Summary**

### **Eligibility Requirements**

To be eligible for the CFOI credential, a candidate must meet the criteria for the Degree Track or the Experience Track as follows:

- Degree Track
  - Bachelor's degree, or equivalent, with 30 semester hours (45 quarter hours) of science and a college level math class; AND
  - Two years of experience in environmental health, food safety, or a related field
  
  - "In-Training" Status: If you are applying under the degree track, but do not yet have the required work experience, you may apply for an "In-Training" Status registration. You will have three (3) years to acquire the necessary experience to transfer your registration to full-credential status. If you do not acquire the necessary experience in three years, your "In-Training" status will expire. In order to obtain the credential, you will need to once again apply and be found eligible to take the exam.
  
- Experience Track
  - Bachelor's degree, or equivalent, with 5 years of experience; OR
  - Associate's degree with 15 semester hours of science (one course must be microbiology) and 7 years of experience in environmental health, food safety, or a related field

### **Foreign Applicants**

If you have college or university education from outside the United States or its territories, you must have your foreign education evaluated by a "third party" foreign education evaluation service to determine equivalency to a Bachelor's degree in the United States. You must submit an evaluation report with your NEHA Credential Application or the report can be sent by the evaluation service directly to NEHA.

NEHA strongly recommends you choose a service that is a member of the National Association of Credential Evaluation Services (NACES). For information on NACES member companies, go to [www.naces.org](http://www.naces.org).

Official Canadian university transcripts are accepted without a third party evaluation if they are in English.

### **Completing the Application**

Applications must be completed and returned to NEHA for review at least four (4) weeks prior to the exam date. If an application is received by NEHA less than 4 weeks prior to when an examination is being given you may have to schedule the exam for another date.

A complete application should include:

1. Completed *NEHA Application for Professional Credentials*.
2. Official college transcripts or official high school transcripts or GED. To be considered an official transcript it should be received at the NEHA office in the sealed envelope from the school's Registrar's Office/Transcript Office. We will also accept official electronic transcripts.
3. Appropriate fees.
4. Third party review (applicable for candidates with foreign education).

### **Exam Fees**

All fees should accompany the *NEHA Application for Professional Credentials*.

	<u>Member Rate</u>	<u>Non-Member Rate</u>
Application fees:	\$95.00	\$130.00
Examination fees:	\$165.00	\$275.00
Pearson VUE fee (if applicable):	\$110.00	\$110.00

### **Exam Scheduling and Locations**

Candidates may choose to schedule the CFOI examination in two ways:

1. The CFOI exam is offered annually on paper at the NEHA Annual Educational Conference (AEC) & Exhibition.
2. Candidates may take the exam on computer through **Pearson VUE**. By choosing this option candidates can schedule the examination at their convenience at one of **Pearson VUE's** testing locations worldwide. To find a **Pearson VUE** testing center near you please visit [www.pearsonvue.com/neha](http://www.pearsonvue.com/neha). Taking the exam at **Pearson VUE** not only offers the candidate flexibility in scheduling the exam, but also allows the candidate to receive his/her unofficial score immediately following the conclusion of the exam.

### **Special Accommodations for Candidates with Disabilities or Impairments**

NEHA is committed to ensuring that no individual is deprived of the opportunity to take a credentialing examination solely by reason of a disability or impairment. All test centers are fully accessible and compliant with the American with Disabilities Act (ADA).

To make a request for special accommodations you must complete the NEHA ADA Request Form, including the specific diagnosis of your disability; submit medical records, or other written proof of the diagnosis by an appropriate licensed professional; and the type of accommodation being requested. All forms and documentation must be returned to NEHA at least 8 weeks prior to the scheduled test date. To receive a copy of the form please contact [Credentialing@neha.org](mailto:Credentialing@neha.org).

If the forms are not returned to NEHA at least 8 weeks prior to the scheduled test date your request for special accommodations may not be honored or may be delayed.

With respect to all matters related to testing accommodations, NEHA will only communicate with the candidate, professionals knowledgeable about the candidate's disability or impairment, those responsible for administering the exam, and the candidate's authorized representative (if applicable).

### **TAKING THE EXAM**

**Pearson VUE Computer Candidates:** NEHA will send you an authorization email when your application is processed as approved. The email will have your Pearson VUE ID number and the Pearson VUE website to schedule a testing time. On test day please bring your photo identification (i.e. driver's license or passport). *After scheduling your exam with Pearson VUE, please verify the information is correct and read the Pearson VUE Testing Center policy in your e-mail confirmation.* Please contact Pearson VUE if you have any questions regarding what forms of identification are accepted.

### **Scores**

The scaled passing score for the CFOI is 650. Your score will be based on the number of questions answered correctly. If you are unsure of the answer, it is better to guess. You will not be given credit for any question left blank.

The NEHA CFOI examination reports scores using scaled scores that range from 0 to 900 with a passing score of 650. The raw passing score is mathematically transformed so that the passing scaled score equals 650. This process is similar to the way one adjusts Celsius and Fahrenheit temperature scales. While the values may differ the temperatures are the same. For example, water boils at the same temperature regardless of the scale used.

Candidates who pass the examination will earn scaled scores between 650 and above and those who fail earn a scaled score between 0 and 649. A scaled score is NOT a percentage score. In summary, a scaled score is merely a transformation of a raw score. Scaling is done to report comparable results when forms and raw passing scores vary over time. Exam results will be mailed and/or emailed to you from the NEHA office 4-6 weeks after the administration.

### **Retaking the Exam**

An individual who fails a credential exam will receive a retake application 4-6 weeks after they tested. The individual must wait 90 days after the date of their last exam before they may retake the exam. There is no limit to the number of times an individual may retake the exam.

After submitting your retake application and payment, you will receive a notification 4-6 weeks later with information on setting up the exam. Retake applications are valid for a period of 2 years from the date of your last exam. If you do not take the exam within 2 years of your last exam, then you will need to reapply for the credential and pay all applicable fees.

### **Credential Maintenance**

Once you have obtained the CFOI credential you must maintain it. To keep your credential in good standing you must:

1. Submit a minimum of 24 hours of continuing education every two years; and

- Submit renewal fees for your credential every two years (\$130.00 members; \$345.00 non-members).

### **NEHA’s Credentialing Handbook**

It is strongly recommended that you read NEHA’s Credentialing Handbook: *Guide to Policies and Procedures for NEHA’s Credentialing Programs*. This handbook, which can be downloaded from the NEHA website at <http://neha.org/professional-development/credentials>, outlines all the policies you are expected to follow by being a NEHA credential holder. The handbook also outlines in further detail the procedures for applying for a credential, submitting continuing education, and maintaining your credential.

### **Exam Description and Content Outline**

The CFOI examination consists of a total of 140 multiple-choice questions. Candidates are given a total of two and ½ hours (2.5) hours to complete the exam. There will be a total of 140 items on the examination, 125 of which will be scored and 15 unscored pilot items. The scored items are reflective of the exam blueprint listed below.

Below is an outline of the nine (9) different content areas the examination covers and the percentages allotted to each of those areas. Please use this outline as a guide when preparing for the examination.

<b>Duties and Tasks</b>		<b>Final Weight</b>	<b>125 Items</b>
<b>A</b>	<b>Detecting Outbreaks</b>	<b>6%</b>	<b>7</b>
1	Collect Complaints	2%	3
2	Review Complaint Log to Determine if there are Possible Associated Foodborne Illnesses	2%	2
2	Link Complaint Information with Other Data Sources	2%	2
<b>B</b>	<b>Preparing for Investigation</b>	<b>14%</b>	<b>17</b>
1	Review Available Information	2%	3
2	Determine Scope of Investigation	2%	3
3	Inform Agency Administration	1%	1
4	Assemble Outbreak Team	1%	1
5	Convene Outbreak team	1%	1
6	Develop Response Plan	5%	6
7	Gather Requisite Equipment	2%	2
<b>C</b>	<b>Contributing to Epidemiologic Investigation</b>	<b>7%</b>	<b>9</b>
1	Develop Questionnaires	2%	3
2	Conduct Interviews	2%	3
3	Search for Additional Cases	2%	3
<b>D</b>	<b>Performing Environmental Assessment</b>	<b>32%</b>	<b>40</b>

1	Review Facility Inspection and Complaint Reports	2%	2
2	Meet with Person-In-Charge	2%	2
3	Conduct Walk-Through	6%	8
4	Interview Employees	3%	4
5	Conduct Food Flow Analysis	7%	9
6	Formulate Root-Cause Analysis	2%	2
7	Document Evidence	3%	4
8	Conduct Exit Interview	4%	5
9	Implement Interventions	3%	4
<b>E</b>	<b>Collecting Samples</b>	<b>7%</b>	<b>9</b>
1	Determine Sampling Plan	2%	2
2	Preparing to Sample	2%	2
3	Collect Samples	2%	3
4	Package and Transport Samples	2%	2
<b>F</b>	<b>Reviewing Investigation Findings</b>	<b>13%</b>	<b>16</b>
1	Compile and Share Findings with Partners	3%	4
2	Evaluate Investigation Evidence	8%	10
3	Develop Communication Plan	2%	2
<b>G</b>	<b>Conducting Product Tracing</b>	<b>5%</b>	<b>6</b>
1	Identify Necessity of Product Tracing	3%	4
2	Conduct Product Tracing	2%	2
<b>H</b>	<b>Implementing Control Measures</b>	<b>14%</b>	<b>17</b>
1	Identify Control Measures	6%	8
2	Implement Control Measures	4%	5
3	Evaluate Control Measure Effectiveness	3%	4
<b>I</b>	<b>Concluding Actions</b>	<b>3%</b>	<b>4</b>
1	Create Final Reports	2%	2
2	Conduct After-Action Report	2%	2
<b>Total</b>		<b>100%</b>	<b>125</b>

## **Recommended Study References**

Below is a list of study references that are recommended to assist the candidate in preparing for the CFOI examination.

1. CIFOR Guidelines

<http://www.cifor.us/documents/CIFOR%20Industry%20Guidelines/CIFOR-Industry-Guideline.pdf>

2. CIFOR Industry Guidelines

<http://cifor.us/documents/CIFOR%20Industry%20Guidelines/CIFOR-Industry-Guidelines.pdf>

3. Epi-Ready  
<http://neha.org/professional-development/education-and-training/epi-ready-team-training>
4. Team approached to foodborne outbreak response – LSU  
<https://www.ncbrt.lsu.edu/Course/PER-298>
5. Bad bug book  
<https://www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM297627.pdf>
6. CCDM – Control of Communicable Disease Manual  
<https://www.apha.org/ccdm>
7. 2013 FDA Food Code  
<https://www.fda.gov/downloads/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/UCM374510.pdf>
8. CDC e-Learning program on foodborne outbreak environmental assessment  
[https://www.cdc.gov/NCEH/EHS/eLearn/EA\\_FIO/index.htm](https://www.cdc.gov/NCEH/EHS/eLearn/EA_FIO/index.htm)
9. CO Center of Excellence for Food Safety  
<http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/foodsafety/Pages/default.aspx>
10. NEHA's Online Environmental Assessment Training  
<https://www.neha.org/eh-topics/food-safety-0/environmental-assessments>
11. Tennessee Center of Excellence (COE)  
<http://foodsafety.utk.edu/>
12. IAFP Procedures to conduct foodborne outbreak investigations  
<https://www.foodprotection.org/about/news-releases/iafp-procedures-to-investigate-foodborne-illness-revised/>
13. CDC Basic epidemiology courses and case studies  
<https://www.cdc.gov/epicasestudies/index.html>
14. North Carolina's foodborne and epi  
<http://epi.publichealth.nc.gov/cd/diseases/food.html>  
<http://ehs.ncpublichealth.com/faf/food/fd/docs/GuidelinesforEnvironmentalFieldInvestigations-August%202012.pdf>
15. NIMS Guideline  
<https://www.fema.gov/national-incident-management-system>
16. Homeland security and exercise program

[https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep\\_apr13\\_.pdf](https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf)

17. Foodnet atlas of food exposures

[https://www.cdc.gov/foodnet/surveys/foodnetexposureatlas0607\\_508.pdf](https://www.cdc.gov/foodnet/surveys/foodnetexposureatlas0607_508.pdf)