

Contents

Purpose and Overview
Background on Environmental Public Health Emergency Response
How to Use This Assessment Tool
The Assessment Process
Understanding the 15 Core Functions of Environmental Public Health Emergency
Preparedness and Response (EPHEPR) Capability Framework
Preparing for the Assessment
Scoring Guide and Interpretation
Action Planning Process
Integration with Other Preparedness Activities
Environmental Public Health Emergency Response Capability Assessment Worksheets 17
Instructions
Function 1: Identify EPH Risks for the Affected Population and Design Plan for Mitigation 18
Function 1: Action Planning
Function 2: Coordinate EPH Response and Resources
Function 2: Action Planning
Function 3: Assure the Safety and Integrity of Water Systems
Function 3: Action Planning
Function 4: Assure the Safety and Integrity of Solid Waste/Debris Management Systems 26
Function 4: Action Planning
Function 5: Assure the Safety and Integrity of Wastewater Systems
Function 5: Action Planning
Function 6: Assure the Safety of Emergency Shelters
Function 6: Action Planning
Function 7: Assure the Integrity of Food Supply and Delivery Systems
Function 7: Action Planning
Function 8: Assure the Safety and Integrity of Buildings
Function 8: Action Planning
Function 9: Assure the Safety of Indoor/Outdoor Air
Function 9: Action Planning

Contents

	Function 10: Provide Vector Surveillance and Control	38
	Function 10: Action Planning	39
	Function 11: Provide EPH Support to Hazardous Material Management	40
	Function 11: Action Planning	41
	Function 12: Provide EPH Support to Radiological Management	42
	Function 12: Action Planning	43
	Function 13: Assure the Safety of Recreational Water	44
	Function 13: Action Planning	45
	Function 14: Conduct Open Water Monitoring	46
	Function 14: Action Planning	47
	Function 15: Conduct Open Water Monitoring	48
	Function 15: Action Planning	49
	Staff and Resource Assessment	50
	Staff and Resource: Action Planning	52
	Overall Assessment Summary	53
۱	bbreviations	71
ι	unding Statement	72

Purpose and Overview

The purpose of this self-assessment guide is to assist the Environmental Public Health (EPH) workforce in their efforts to be better prepared for emergencies. It is a comprehensive workforce assessment tool that helps define the roles, competencies, and capacity needed for the EPH workforce to address environmental health threats during emergencies and disasters. It serves as a companion document to the NEHA Environmental Public Health Emergency Preparedness and Response (EPHEPR) Capability Framework.

There can be many benefits to completing the assessment:

- Provides a broad evaluation across agency and department responsibilities
- Defines gaps in preparedness related to staff training, equipment, plans and processes
- Identifies important areas in which EPH must maintain situational awareness in emergency events
- Evaluates emergency guidance needed for the public and permitted businesses
- Drives continuous program improvement



Background on Environmental Public Health Emergency Response

The EPH plays a crucial role in protecting community health and safety before, during, and after an emergency. EPH professionals are key players in mitigating the wide-ranging environmental hazards that affect human health.

Before

EPH assists in preparedness efforts by assessing potential environmental risks, developing response plans, and educating the public on safety measures. EPH assists businesses and institutions such as food establishments, water systems, schools, and childcare in preparing for emergency events.

During

EPH collaborates with other departments and volunteer organizations to deliver services to affected communities. EPH professionals often work from Emergency Operations Centers (EOCs) to monitor developing environmental threats and coordinate with other emergency responders, often as a part of Emergency Support Function (ESF) #8 Public Health and Medical Services.

After

EPH professionals are most active in helping communities recover after an event. Their roles can include the following:

- Rapid EPH assessments to identify immediate risks
- · Ensuring safe drinking water by testing water sources, implementing boil water advisories
- · Monitoring food safety and providing guidance on safe food handling and storage
- $\cdot \ \mathsf{Assessing} \ \mathsf{and} \ \mathsf{mitigating} \ \mathsf{risks} \ \mathsf{from} \ \mathsf{sewage} \ \mathsf{overflows} \ \mathsf{and} \ \mathsf{wastewater} \ \mathsf{treatment} \ \mathsf{system} \ \mathsf{failures}$
- Identifying and addressing hazardous materials (HAZMAT) releases from damaged industrial facilities or households
- · Implementing vector control measures to prevent outbreaks of mosquito-borne diseases
- · Providing guidance on safe cleanup of mold and other biological contaminants in damaged buildings
- Monitoring air quality
- · Ensuring proper management and disposal of disaster debris to prevent environmental contamination
- · Conducting health and safety assessments of emergency shelters and temporary housing
- · Providing public education on EPH risks and protective measures
- Assisting permitted facilities such as daycare, schools, food establishments and lodging facilities, in a rapid but safe reopening process

The effectiveness of EPH professionals in these roles often depends on their ability to navigate the complex interactions between national, state, local, and regional response systems by adapting their approach to the specific governance and incident management structures of the affected area. This includes understanding and utilizing various mutual aid agreements and a working knowledge of the National Incident Management System (NIMS). (NEHA, 2024)

Past disasters highlight the need for rapid response, consistent public messaging, strong interagency communication, and robust public education on disaster preparedness to improve environmental health outcomes during and after disasters. An effective emergency response is defined by its speed, precision, adaptability, and impact. It is the ability to act swiftly while maintaining coordination across all levels of an organization. It involves mobilizing resources, making informed decisions under pressure, and ensuring minimal disruption to critical operations. Only through close examination of existing plans and the identification of gaps can we improve EPH response capability.



How to Use This Assessment Tool

The assessment tool can be completed as a single departmental assessment or used more broadly across a jurisdiction, state or region. It requires the participation of individuals with an in-depth knowledge of emergency plans, available resources, equipment and current guidance documents. Having the right people at the table, with the inclusion of a broad group of participants in the process, can help ensure a more accurate and comprehensive assessment.

Some suggested participants could include:

- EPH Director
- EPH Section Managers
- · County/local/state emergency management staff
- EPH field staff
- · EPH Strike Team Leaders
- · Public Health Emergency Preparedness staff
- · Local Emergency Management
- Other environmental agency representatives

The frequency of the assessment can vary depending on the organization's needs. The Federal Emergency Management Agency (FEMA) recommends reviewing and revising emergency response plans each year or more often if changes in the jurisdiction warrant (e.g., changes in administration or procedures, newly added



resources/training, revised phone contacts or numbers). (FEMA, 2010) An annual assessment should suffice for most jurisdictions. The assessment guide includes areas to identify gaps and resource needs. Progress should be tracked regularly to ensure that identified tasks are completed.

The Assessment Process

The assessment process can sometimes seem a daunting task. Breaking down the process into simple steps can help make the work more manageable. (CDC, 2024)



Define the Purpose and Scope

- Clarify the Goal: What do you hope to achieve with this self-assessment?
- Determine the Timeline: When will you conduct this self-assessment? Yearly, quarterly, or monthly?
- Identify Key Areas: What areas of assessment are most important to focus on?



Reflect on Past Events/ Exercises/Drills

- Review Past Performance: Identify and review all relevant documents
- Identify Strengths and Weaknesses: What are your strengths, and where could you improve?
- Seek Feedback: Ask for feedback from colleagues, supervisors, or other departments and organizations.



Set Goals and Create an Action Plan

- Define SMART Goals: Set Specific, Measurable, Achievable, Relevant, and Time-bound goals.
- Develop an Action Plan: Outline the steps you will take to achieve your goals.
- Prioritize Tasks: Identify the most important tasks and allocate your time accordingly.



Implement and Monitor Progress

- Act: Put your action plan into practice.
- Track Progress: Regularly monitor your progress towards your goals.
- Adjust: Be flexible and willing to adjust your plan as needed.



Review and Reflect

- Evaluate Your Progress: Assess your progress against your goals.
- · Identify Lessons Learned: What did you learn from this assessment process?
- Prepare for the Next Cycle: Use your insights to prepare for the next assessment.

Note: The time required to complete the assessment should be approximately 1 hour per section, depending on the number of group discussions, the number of gaps, and the number of action items identified. A thorough review of existing plans and current resources before the assessment can significantly expedite the process.

This self-assessment can offer additional benefits when combined with other reviews and assessments such as response plans, PHEP, and public health accreditation.

Understanding the 15 Core Functions of Environmental Public Health Emergency Preparedness and Response (EPHEPR) Capability Framework

This self-assessment tool is built around the 15 Core functions of the NEHA EPHEPR framework, so it is important to have a good understanding of each function. If you are familiar with these functions, skip to the next section.

EPHEPR framework was developed to support public health agencies in formally integrating environmental public health into their emergency preparedness, response, and recovery planning and coordination activities within the health agency. It also serves to more clearly define the roles and responsibilities of cross-sector partner organizations, further strengthening emergency management across the public health system.

The EPHEPR capability framework is divided into functional areas, with corresponding tasks that provide a tactical-level explanation of each function, serving to protect against health threats in the environment. Each function is a priority EPH service essential to ensuring the safety of communities.

Function 1: Identify EPH Risks for the Affected Population and Design Plan for Mitigation

In compliance with NIMS/ICS, work to identify and design efforts to address EPH-specific threats to human health in water, food, soil, waste, and air during a disaster and into the recovery period. Contribute to the incident action planning process for each operational period.

Function 2: Coordinate EPH Response and Resources

Coordinate the EPH response needs and resources across the ICS structure based on identified threats and subsequent planning.



Function 3: Assure the Safety and Integrity of Water Systems

Conduct health assessments and monitoring of the potable water supply and delivery system to ensure the availability of safe drinking water and prevent the spread of waterborne pathogens and contaminants to the affected population. Ensure the safety and treatment of alternate sources of water for public consumption and cleaning to prevent the spread of waterborne disease.

Function 4: Assure the Safety and Integrity of Solid Waste/Debris Management Systems

Conduct ongoing assessments of solid waste/debris management to ensure they are functioning properly. If not functioning, provide recommendations regarding temporary or emergency disposal practices in the affected area. Continue to conduct testing/assessment of alternative waste disposal options during the disaster and recovery period.

Function 5: Assure the Safety and Integrity of Wastewater Systems

Conduct ongoing assessments of wastewater systems to ensure they are functioning properly. If not functioning, provide recommendations regarding temporary or emergency disposal practices in the affected area. Continue to conduct testing/assessment of alternative wastewater disposal options during the disaster and recovery period.

Function 6: Assure the Safety of Emergency Shelters

Conduct environmental health assessments of emergency shelter conditions and relay information on hazard identification and preventative actions within the facilities. These include conducting pre-, during, and post-disaster monitoring of key areas, such as water, feeding, sanitation, spatial considerations, structural hazards, pests, and nuisances, in those facilities.

Function 7: Assure the Integrity of Food Supply and Delivery Systems

Conduct ongoing assessments of the food supply and food delivery systems to ensure the affected population has access to a food supply that meets health and safety codes. Address any high-risk food or food delivery systems and conduct any food-related disease outbreak inspections.

Function 8: Assure the Safety and Integrity of Buildings

Once a building is deemed structurally sound by appropriate engineers, conduct environmental health assessments to ensure public and residential buildings are fit for human habitation.

Function 9: Assure the Safety of Indoor/Outdoor Air

Conduct health assessments (environmental sampling) of air in the affected area to ensure air quality is safe. Make recommendations on exposure guidelines when potential health risks are identified.

Function 10: Provide Vector Surveillance and Control

Perform vector control operations that identify, trap, control, and monitor vectors of concern in the affected area. Communicate the health risks and recommended actions to the public through the appropriate channels.

Function 11: Provide EPH Support to Hazardous Material Management

Conduct and coordinate health assessments for hazardous material and support response efforts to ensure material management and decontamination are done in a way that protects environmental safety and health.

Function 12: Provide EPH Support to Radiological Management

Conduct and coordinate health assessments for radiological incidents and support response efforts to ensure material management and decontamination are done in a way that protects environmental safety and health.

Function 13: Assure the Safety of Recreational Water

Conduct health assessments and take actions necessary to ensure beaches, pools, lakes, and rivers meet the health and safety codes of the local jurisdiction.

Function 14: Conduct Open Water Monitoring

Conduct health assessments and take necessary actions to ensure safety and protect human health from contaminated or potentially contaminated water, fish, or shellfish.

Function 15: Assure Effective Environmental Sampling

Conduct effective environmental sampling where needed.



During a disaster, there may be a need to increase the number of people performing a task, which can be performed by a combination of governmental agencies at different levels, as well as by cross-sectoral organizational partners (e.g., the private sector and non-governmental agencies). Agencies are not expected to be independently responsible for all tasks, as the ability to perform the functions relies heavily on partnerships. Additionally, agency functions may vary across jurisdictions. It is important to understand that the draft EPHEPR capability framework is provided as a reference document and planning guide for EPH disaster readiness and does not serve as a prescription for program or resource requirements.

While not specifically listed as EPH functions within the framework, the following are cross-cutting emergency management functions that the EPH workforce supports:

- · Communication, including risk communication
- · Responder safety and health
- Assuring health equity during emergencies and disasters

Additional details on the EPHEPR framework can be found on the NEHA website at https://www.neha.org/epr-framework. (NEHA, Environmental Public Health Emergency Preparedness and Response Capability Framework, 2022)

Preparing for the Assessment

Documents to gather and review beforehand:

- · Emergency Response Plans and applicable annexes (both local, state, and regional)
- Existing MOUs
- Emergency Response Team Training Records: Document training records for emergency response personnel
- EPH field staff
- Past Emergency Response Reports: Review of exercises/drills, hotwash, and AAR reports from past incidents/events
- Consultation with response partners (EM, Environmental Agencies, Volunteer Orgs) on areas to improve collaboration and response
- · Historical review of past events (Hotwash Reports, After Action Reports, etc.)

Scoring Guide and Interpretation

There are three choices for each question in the assessment:

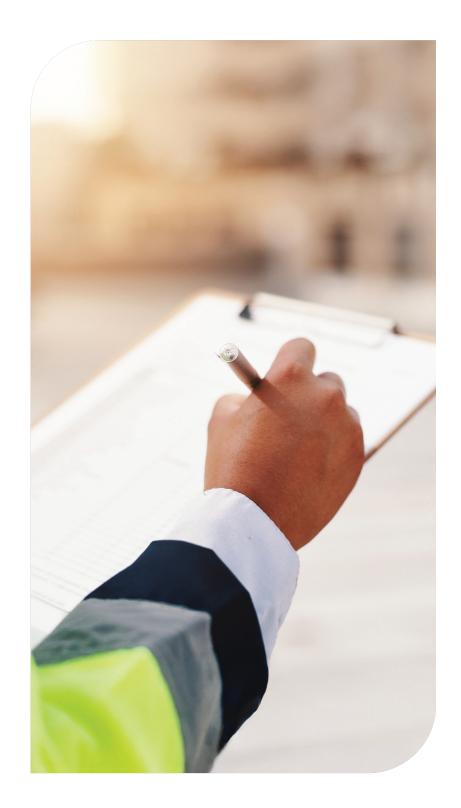
- Yes the item in question exists
- No the item in question does not exist
- Don't Know acknowledges uncertainty; more information may be needed to answer correctly

The notes section is provided to record important details such as:

- · Specific follow-up needed on Don't Know answers
- Details on improvements
- · Additional review needed
- Not applicable (NA) to the Environmental Health Department because it's the responsibility of another Department or Agency
- · An identified gap in plans, staffing, and equipment needs

How to interpret results:

- Identify strengths and weaknesses, and what items are complete and where can we improve
- Prioritize gaps by listing items of most importance
- Prioritization methodology for addressing gaps
- Develop an action plan



Action Planning Process

After identifying gaps, it's important to move forward with an effective action plan. There are several items to consider in action planning (PennState, 2023). The list below will help get the work completed in a timely manner:

1. Prioritize

- Urgency vs. Importance: Distinguish between tasks that need immediate attention (urgent) and those that are crucial to your goals (important).
- · Dependencies: Identify which tasks rely on others being completed first.
- Time Requirements: Estimate how long each task will take and factor in your energy levels throughout the day.
- Impact and Effort: Consider the potential impact of each task and the effort required to complete it.

2. Identifying Resource Requirements

- Access Existing Resources: Review current staff, equipment and supply inventory, funding and partnerships to understand what is already available for response & recovery.
- Determine Resource Gaps: Identify additional personnel, supplies or capabilities needed to carry out priority actions effectively during response activities and emergencies.

3. Break Down Tasks and Create a Work Breakdown Structure (WBS)

- Divide the project into smaller, manageable tasks: This makes it easier to estimate and track progress.
- · Create a WBS: A hierarchical breakdown of the project into work packages and tasks.

4. Estimate Task Durations

- · Accurately estimate the time needed for each task: Consider potential delays and setbacks.
- Use historical data, expert judgment, or industry benchmarks: This assists in estimating durations effectively.



2 Identifying Resource Requirements

Break Down
Tasks and Create
a Work Breakdown
Structure (WBS)

Estimate Task
Durations

5 Identify Task
Dependencies

6 Setting Realistic Timelines

Monitoring Progress

5. Identify Task Dependencies

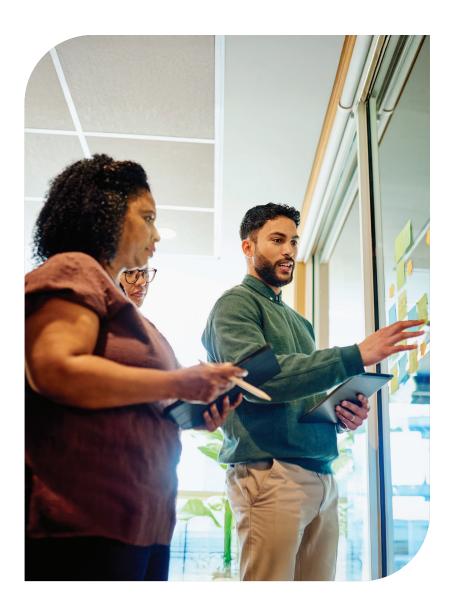
- Determine which tasks depend on others: Some tasks must be completed before others can start.
- · Understand the relationships between tasks: This helps in scheduling and resource allocation.

6. Setting Realistic Timelines

- Be realistic about your estimates: Don't underestimate the time needed for tasks.
- · Include buffers: Add extra time for unexpected delays or setbacks.
- Be flexible: Be prepared to adjust the timeline as needed.
- Communicate effectively: Keep stakeholders informed of progress and any changes.

7. Monitoring Progress

- Make sure everyone understands their assignments
- · Create a system for recording action items
- · Immediately record any new developments
- · Follow up with all team members



Integration with Other Preparedness Activities

Consider using the assessment to complement other efforts, such as annual emergency response plan reviews, attaining Public Health Emergency Preparedness (PHEP) Capability requirements, and Public Health (PH) accreditation related to emergency response. The assessment tool can help to support many of the preparedness requirements outlined in the national preparedness efforts listed below.

- Emergency Management Accreditation Program (EMAP) standards The ANSI/EMAP 5-2022 Emergency Management Standard is a set of 73 standards by which programs applying for EMAP accreditation are evaluated. The Emergency Management Standard is designed as a tool for continuous improvement as part of the voluntary accreditation process for local, state, federal, higher education, and tribal Emergency Management Programs. Environmental public health helps emergency management meet these standards by participating in the development of emergency response plans.
- CDC Public Health Preparedness and Response Capabilities In 2011, CDC established 15 capabilities that serve as national standards for public health preparedness planning. Since then, these capability standards have served as a vital framework for state, local, tribal, and territorial preparedness programs as they plan, operationalize, and evaluate their ability to prepare for, respond to, and recover from public health emergencies. Environmental health preparedness is part of overall public health preparedness and has specific responsibilities listed in these capabilities.
- The **FEMA National Preparedness Goal** aims for a secure and resilient nation equipped to prevent, protect against, mitigate, respond to, and recover from threats and hazards, encompassing both natural and man-made events. The National Preparedness Goal outlines five mission areas—prevention, protection, mitigation, response, and recovery—and 32 core capabilities that address the nation's greatest risks. Public Health, Healthcare, and Emergency Medical Services are one of the 32 capabilities. Within public health capability, there are specific items listed that fall under the responsibility of environmental health departments.
- Public Health Accreditation is a process administered by the Public Health Accreditation Board (PHAB) that assesses and recognizes the performance of public health departments against national standards, ultimately aiming to improve public health quality and accountability. Public health accreditation, particularly through the Public Health Accreditation Board (PHAB), includes specific standards and measures to ensure health departments are prepared for and can respond effectively to public health emergencies, encompassing areas like timely investigations, containment, communication, and emergency operations planning. The preparedness standards relate to many areas of environmental health practice.

Environmental Public Health Emergency Response Capability Assessment Worksheets

Instructions

Complete this assessment to evaluate your health department's emergency preparedness capabilities in environmental public health. For each question:

- 1. Check the appropriate box: YES (fully capable/implemented), NO (not capable/not implemented), or DON'T KNOW (uncertain).
- 2. Add relevant notes not applicable to your agency, list the agency in charge of function, identify gaps.
- 3. After each functional area, complete the action planning section to identify the next steps.



Function 1: Identify EPH Risks for the Affected Population and Design Plan for Mitigation

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
1. Does your agency have dedicated staff trained to identify EPH-specific threats to human health for the following:				
• Water				
· Food				
· Soil				
• Waste				
• Air				
2. Does your agency maintain a current inventory of vulnerable populations (elderly, disabled, medically dependent) that may be disproportionately affected during emergencies?				
3. Has your agency established protocols to assess the operational condition of key public health infrastructure during emergencies:				
Drinking water				
• Wastewater				
• Electric power				
· Gas power				
4. Does your agency have staff trained in the Incident Command System (ICS) who can effectively contribute to incident action planning?				
5. Does your staff regularly participate in multi-agency exercises to practice forecasting potential environmental health risks based on changing disaster conditions?				

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
6. Has your agency developed pre-disaster environmental health risk assessment tools specific to your jurisdiction's hazard vulnerabilities?				
7. Does your agency have plans for implementing mitigation measures to protect environmental health staff responding to emergencies?				

Function 1: Action Planning

entified Strengths:
entified Gaps:
riority Action Items:
esources Needed:
meline for Implementation:

Function 2: Coordinate EPH Response and Resources

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency maintain a current inventory of environmental health equipment and supplies available for emergency deployment?				
2. Has your agency established formal agreements (MOUs, MAAs, DSAs) with partner agencies for sharing environmental health resources during emergencies?				
3. Has your agency identified backup environmental health staffing resources for extended emergency operations?				
4. Does your agency have a dedicated environmental health representative assigned to your jurisdiction's Emergency Operations Center (EOC)?				
5. Does your agency regularly test communication systems and protocols for sharing EPH information with response partners?				
6. Do your staff participate in joint training exercises with other agencies to practice coordinated EPH response?				
7. Does your agency have a process to continuously identify emerging EPH risks during a response and adjust resource allocation accordingly?				
8. Does your agency provide training on psychological first aid for responders?				
9. Does your agency have a process for developing a Health and Safety Plan for responders during emergencies?				

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
10. Does your agency have a communications plan for responders?				
11. Does your agency have just-in-time training developed for staff and volunteers?				

Function 2: Action Planning

entified Strengths:	
entified Gaps:	
iority Action Items:	
esources Needed:	
meline for Implementation:	

Function 3: Assure the Safety and Integrity of Water Systems

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency maintain current contact information for all public water systems in your jurisdiction?				
Does your agency have staff trained to conduct damage assessments of drinking water infrastructure?				
3. Does your agency have established protocols for issuing and communicating drinking water advisories (boil water, do not drink, do not use)?				
4. Does your agency maintain equipment for emergency water quality testing?				
5. Does your agency have procedures to coordinate with water utilities and state primacy agencies during emergencies?				
6. Has your agency identified alternative water sources (bottled water suppliers, water haulers) and established relationships with these providers?				
7. Do you have staff trained to assess private wells and provide guidance to owners after disasters?				
8. Does your agency have procedures to coordinate with laboratories for rapid analysis during emergencies?				
9. Does your agency maintain guidance for homeowners and businesses on water wells for emergencies? (i.e., purging, disinfection)				

Function 3: Action Planning

entified Strengths:
entified Gaps:
riority Action Items:
esources Needed:
meline for Implementation:

Function 4: Assure the Safety and Integrity of Solid Waste/Debris Management Systems

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency have staff trained to conduct assessments of solid waste disposal facilities after disasters?				
2. Has your agency established protocols for monitoring temporary debris storage and reduction sites?				
3. Does your agency have pre-identified locations suitable for alternative/additional disposal sites during emergencies?				
4. Has your agency developed guidance for the public regarding the separation and disposal of disaster debris?				
5. Does your agency have procedures for monitoring and providing guidance on the disposal of different waste streams (vegetative, construction, household hazardous, electronic waste)?				
6. Has your agency established protocols for coordinating with waste haulers and disposal facilities during emergency operations?				
7. Does your agency have the capacity to provide technical assistance for disaster site clean-up operations?				

Function 4: Action Planning

dentified Strengths:
dentified Gaps:
riority Action Items:
•
esources Needed:
imeline for Implementation:

Function 5: Assure the Safety and Integrity of Wastewater Systems

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency maintain current contact information for all wastewater treatment facilities in your jurisdiction?				
2. Does your agency have staff trained to conduct assessments of wastewater infrastructure following disasters?				
3. Has your agency established protocols for responding to sewage backups and overflows during emergencies?				
4. Does your agency have established guidance for temporary or emergency sanitation practices?				
5. Has your agency developed protocols for coordinating with wastewater utilities during emergency operations?				
6. Does your agency have plans for monitoring surface water quality following wastewater system failures?				
7. Has your agency established procedures for providing guidance on alternative toilet/latrine facilities during extended wastewater system outages?				
8. Does your agency maintain guidance for homeowners and businesses for on-site sewage treatment systems during emergencies?				

Function 5: Action Planning

entified Strengths:	
entified Gaps:	
riority Action Items:	
esources Needed:	
meline for Implementation:	

Function 6: Assure the Safety of Emergency Shelters

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
1. Does your agency have staff trained to conduct environmental health assessments of emergency shelter facilities?				
Has your agency established protocols for regular monitoring of shelter conditions during operations?				
3. Does your agency have procedures for providing technical assistance to shelter operators regarding food safety, water safety, and sanitation?				
4. Has your agency developed pre-disaster agreements with shelter providers (Red Cross, faith-based organizations) regarding health and safety standards?				
5. Does your agency maintain environmental health assessment forms specifically for shelter facilities?				
6. Has your agency established protocols for addressing environmental health issues in special needs and medical shelters?				
7. Does your agency have procedures for monitoring and responding to communicable disease concerns in shelter settings?				

Function 6: Action Planning

dentified Strengths:
dentified Gaps:
riority Action Items:
•
esources Needed:
imeline for Implementation:

Function 7: Assure the Integrity of Food Supply and Delivery Systems

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency maintain a current inventory of food establishments in your jurisdiction?				
2. Has your agency established protocols for conducting rapid assessments of food establishments following disasters?				
3. Does your agency have procedures for providing technical guidance to food establishments operating during utility outages?				
4. Has your agency developed protocols for monitoring emergency feeding operations?				
5. Does your agency have established procedures for addressing unlicensed/unpermitted food operations during emergencies?				
6. Does your agency maintain equipment (thermometers, test strips) for emergency food safety inspections?				
7. Has your agency developed guidance for the public regarding food safety during emergencies (power outages, flooding)?				
8. Does your agency maintain a list of partner agencies' points of contact for different food facilities? (i.e., restaurants, grocery stores, bars/lounges, etc.)				

Function 7: Action Planning

dentified Strengths:
dentified Gaps:
riority Action Items:
•
esources Needed:
imeline for Implementation:

Function 8: Assure the Safety and Integrity of Buildings

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
1. Does your agency have staff trained to conduct environmental health assessments of buildings after they've been cleared for structural safety?				
2. Has your agency established protocols for addressing mold and other biological contamination in buildings after disasters?				
3. Does your agency have procedures for providing technical assistance regarding the restoration of utilities in buildings?				
4. Has your agency developed guidance for the public on safely re-entering and cleaning homes after disasters?				
5. Does your agency have established protocols for coordinating with building officials regarding the re-occupancy of structures?				
6. Has your agency developed procedures for addressing environmental health concerns in temporary housing?				
7. Does your agency have protocols for monitoring indoor air quality in buildings after disasters?				

Function 8: Action Planning

entified Strengths:	
entified Gaps:	
riority Action Items:	
esources Needed:	
meline for Implementation:	

Function 9: Assure the Safety of Indoor/Outdoor Air

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency have staff trained to design and conduct appropriate environmental sampling programs for air quality?				
2. Does your agency maintain equipment for air quality monitoring during emergencies?				
3. Has your agency established protocols for interpreting air quality data and determining health risks?				
4. Does your agency have procedures for communicating air quality concerns and protective actions to the public?				
5. Has your agency developed guidance for addressing indoor air quality issues after disasters (mold, carbon monoxide, etc.)?				
6. Does your agency have established protocols for coordinating with state and federal agencies on air quality concerns?				
7. Has your agency developed procedures for addressing air quality concerns in sensitive populations during emergencies?				

Function 9: Action Planning

dentified Strengths:
dentified Gaps:
riority Action Items:
•
esources Needed:
imeline for Implementation:

Function 10: Provide Vector Surveillance and Control

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
1. Does your agency have staff trained in vector surveillance and control operations?				
2. Does your agency maintain equipment for emergency vector surveillance and control (traps, sprayers, etc.)?				
3. Has your agency established protocols for monitoring vector populations after disasters?				
4. Does your agency have procedures for implementing emergency vector control measures?				
5. Has your agency developed guidance for the public regarding personal protection from vectors during emergencies?				
6. Does your agency have established protocols for coordinating with state and federal agencies on vector control operations?				
7. Has your agency developed plans to address increased vector activity following disasters (flooding, storms, etc.)?				
8. Has your agency developed guidance for the public regarding vector control after emergencies?				

Function 10: Action Planning

entified Strengths:
entified Gaps:
riority Action Items:
esources Needed:
meline for Implementation:

Function 11: Provide EPH Support to Hazardous Material Management

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency have staff trained to support hazardous materials response operations?				
2. Has your agency established protocols for coordinating with hazmat teams and emergency management on hazardous materials incidents?				
3. Does your agency have procedures for providing technical assistance regarding decontamination operations?				
4. Has your agency developed guidance for the public regarding protective actions during hazardous materials incidents?				
5. Does your agency have established protocols for environmental monitoring following hazardous materials releases?				
6. Has your agency developed procedures for addressing hazardous materials discovered during disaster operations?				
7. Does your agency participate in Local Emergency Planning Committee (LEPC) or similar hazardous materials planning groups?				

Function 11: Action Planning

entified Strengths:
entified Gaps:
riority Action Items:
esources Needed:
meline for Implementation:

Function 12: Provide EPH Support to Radiological Management

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency have staff trained to support radiological incident response?				
Does your agency maintain equipment for radiation detection and monitoring?				
Has your agency established protocols for coordinating with radiation control agencies during incidents?				
4. Does your agency have procedures for providing technical assistance regarding radiological decontamination?				
5. Has your agency developed guidance for the public regarding protective actions during radiological incidents?				
6. Does your agency have established protocols for environmental monitoring following radiological releases?				
7. Has your agency participated in training or exercises focused on radiological emergency response?				

Function 12: Action Planning

entified Strengths:
entified Gaps:
riority Action Items:
esources Needed:
meline for Implementation:

Function 13: Assure the Safety of Recreational Water

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
 Does your agency maintain a current inventory of public pools, beaches, and other recreational water facilities in your jurisdiction? 				
2. Does your agency have staff trained to conduct damage assessments of recreational water facilities after disasters?				
3. Has your agency established protocols for monitoring recreational water quality after disasters?				
4. Does your agency have procedures for closing recreational water facilities when necessary?				
5. Has your agency developed guidance for aquatic venue operators regarding recovery after disasters?				
6. Does your agency maintain equipment for recreational water quality testing after emergencies?				
7. Has your agency established procedures for addressing unauthorized use of compromised recreational water facilities?				

Function 13: Action Planning

entified Strengths:
entified Gaps:
riority Action Items:
esources Needed:
meline for Implementation:

Function 14: Conduct Open Water Monitoring

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency have staff trained to design and conduct environmental sampling of open waters?				
Does your agency maintain equipment for open water quality testing for emergencies?				
3. Has your agency established protocols for monitoring fish and shellfish following disasters?				
4. Does your agency have procedures for issuing fish and shellfish consumption advisories?				
5. Has your agency developed guidance for the public regarding the recreational use of open waters after disasters?				
6. Does your agency have established protocols for coordinating with state and federal agencies on open water monitoring?				
7. Has your agency developed procedures for monitoring open waters affected by wastewater overflows or other contamination sources?				

Function 14: Action Planning

entified Strengths:
entified Gaps:
riority Action Items:
esources Needed:
meline for Implementation:

Function 15: Conduct Open Water Monitoring

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
Does your agency have staff trained in environmental sampling techniques for various media:				
• Water				
·Food				
· Soil				
• Waste				
·Air				
Does your agency maintain sampling equipment and supplies for emergency operations?				
3. Has your agency established relationships with laboratories for emergency sample analysis?				
4. Does your agency have procedures for sample collection, handling, and chain of custody during emergencies?				
5. Has your agency developed protocols for geo-coding and tracking environmental samples?				
6. Does your agency have established procedures for interpreting environmental sampling results and determining public health actions?				
7. Has your agency developed mechanisms for sharing environmental sampling data with partner agencies and the public?				

Function 15: Action Planning

lentified Strengths:
lentified Gaps:
riority Action Items:
esources Needed:
imeline for Implementation:

Staff and Resource Assessment

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
1. What percentage of your environmental health staff has completed basic NIMS/ICS training (ICS-100, ICS-200, IS-700, IS-800)?				
2. What percentage of your environmental health staff have advanced ICS training (ICS-300, ICS-400)?				
3. What percentage of staff have completed the Environmental Health Training in Emergency Response-Awareness Course (AWR-922 W)?				
4. What percentage of staff have completed the Environmental Health Training in Emergency Response-Operations Course (EHTER OPS PER-309)?				
5. What percentage of your strike team or task force leads have completed advanced training (ICS All-Hazards Task Force/Strike Team Leader)?				
6. Does your agency have a system to track environmental health staff training and certifications relevant to emergency response?				
7. Does your agency have established procedures for mobilizing environmental health staff during emergencies?				
8. Has your agency identified and addressed gaps in environmental health emergency response capabilities?				

Question	Yes	No	Don't Know	Notes/Not Applicable/Gaps
9. Does your agency have a plan for sustaining environmental health operations during extended emergency responses?				
10. Has your agency integrated environmental health emergency response into the overall emergency operations plan or as an annex?				
11. Does your agency have a schedule for review and revision of Continuity of Operations Plans (COOP)?				

Staff and Resource: Action Planning

dentified Strengths:
dentified Gaps:
riority Action Items:
•
esources Needed:
imeline for Implementation:

Overall Assessment Summary

Top 5 Priority Areas for Improv	ement:		
1			
2			
3			
4			
5			
Resource Needs:			
Training Needs:			
Equipment/Supply Needs:			
Partner Coordination Needs:			
Implementation Timeline:			
Next Review Date:	Completed By:	Title:	Date:

Function 1: Identify EPH Risks for the Affected Population and Design Plan for Mitigation

- 1. Environmental Public Health Tracking Populations and Vulnerabilities https://www.cdc.gov/environmental-health-tracking/php/data-research/populations-vulnerabilities.html
- 2. Planning for an Emergency: Strategies for Identifying and Engaging At-Risk Groups https://www.cdc.gov/disaster-epidemiology-and-response/media/pdfs/2025/01/AtRiskGuidance_Updated.pdf
- 3. Access and Functional Needs Toolkit Integrating a Community Partner Network to Inform Risk Communication Strategies https://www.cdc.gov/readiness/media/pdfs/CDC_Access_and_Functional_Needs_Toolkit_March2021.pdf
- 4. Local Vulnerable Population Assessment Tool https://www.floridahealth.gov/programs-and-services/emergency-preparedness-and-response/community-preparedness/access-functional-needs/_documents/county-planning-assessment-tool.doc
- 5. Emergency Response for Drinking Water and Wastewater Utilities https://www.epa.gov/waterutilityresponse
- 6. FEMA Incident Action Planning Guide https://www.fema.gov/sites/default/files/2020-07/Incident_Action_Planning_Guide_Revision1_august2015.pdf
- 7. ICS-300 Intermediate ICS for Expanding Incidents https://training.fema.gov/nims/
- 8. FEMA Exercise and Preparedness Tools https://www.fema.gov/emergency-managers/national-preparedness/exercises/tools
- 9. Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) Guide https://www.fema.gov/sites/default/files/2020-04/CPG201Final20180525.pdf
- 10. Public Health Risk Assessment Tool for Planning for At-Risk Populations https://pmc.ncbi.nlm.nih.gov/articles/PMC6737822/
- 11. Personal Protective Equipment https://www.cdc.gov/niosh/emres/safety/ppe.html
- 12. PPE for Emergency Response and Recovery Workers https://www.osha.gov/emergency-preparedness
- 13. Site-Specific Health and Safety Plan (HASP) Development https://response.epa.gov/ healthsafetymanual/Chapter 1 HASP Chapter July 2024 final.docx
- 14. National Clearinghouse for Worker Safety and Health Training https://tools.niehs.nih.gov/wetp/

Function 2: Coordinate EPH Response and Resources

- 1. NEHA Environmental Public Health Strike Team Guidance https://www.neha.org/PDFs/Strike_Team_White_Paper_FINAL.pdf
- 2. Emergency Management Assistance Compact https://www.emacweb.org/
- 3. Best Practices & Lessons Learned in Deploying Private Sector & Volunteer Resources Though EMAC https://www.emacweb.org/index.php/files/74/Deploying-Private-Sector-Through-EMAC/6/EMAC-Best-Practices-and-Lessons-Learned.pdf
- Project Public Health Ready (PPHR) https://www.naccho.org/programs/public-health-preparedness/pphr
- 5. Writing a Memorandum of Understanding https://www.npstc.org/resourceCD/Writing%20Guide%20for%20MOUs.pdf
- 6. Writing Memorandums of Understanding (MOU) and Mutual Aid Agreements (MAA) https://www.nedcc.org/assets/media/documents/dPlan/0301-mutualaidoverview.pdf
- 7. NACCHO Emergency Staffing Plan Template for Public Health https://www.naccho.org/uploads/full-width-images/Emergency-Staffing-Plan-FINAL-April-2023.pdf
- Crisis & Emergency Risk Communication (CERC) https://www.cdc.gov/cerc/php/about/index.html
- 9. Disaster Preparedness, Response, and Recovery Resources https://www.neha.org/disaster-preparedness-response-recovery
- 10. NEHA Hurricane Response Guide https://www.neha.org/hurricane-response-guide
- 11. Disaster Field Manual for Environmental Health https://www.ccdeh.com/content.aspx?page_id=586&club_id=909133&item_id=18960
- 12. Public Health Surveillance During a Disaster https://www.cdc.gov/disaster-epidemiology-and-response/php/disaster/surveillance.html
- 13. Emergency preparedness for public health threats, surveillance, modeling & forecasting https://pmc.ncbi.nlm.nih.gov/articles/PMC8204835/#:~:text=The%20public%20health%20surveillance%20is,rapid%20instigation%20of%20responses22
- 14. Comprehensive Overview of Flood Modeling Approaches: A Review of Recent Advances https://www.mdpi.com/2306-5338/10/7/141

Function 3: Assure the Safety and Integrity of Water Systems

- Drinking Water Advisory Communication Toolbox https://www.cdc.gov/water-emergency/php/dwact/index.html
- 2. Emergency Water Supply Planning Guide for Hospitals and Health Care Facilities, CDC, AWWA https://www.cdc.gov/water-emergency/hcp/toolkit/index.html
- 3. Emergency Response for Drinking Water and Wastewater Utilities https://www.epa.gov/waterutilityresponse
- 4. Planning for an Emergency Drinking Water Supply https://www.epa.gov/waterutilityresponse/emergency-drinking-water-supply-guidance
- 5. EPA Resilience Tool Wizard https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard
- 6. Sampling Guidance for Unknown Contaminants in Drinking Water https://www.epa.gov/waterlabnetwork/sampling-guidance-unknown-contaminants-drinking-water
- 7. EPA Water System Status Report https://www.epa.gov/sites/default/files/2015-10/documents/water_system_status_report.pdf
- 8. EPA Mutual Aid and Assistance for Drinking Water and Wastewater Utilities https://www.epa.gov/waterutilityresponse/mutual-aid-and-assistance-drinking-water-and-wastewater-utilities
- 9. Sample Water and Wastewater Damage Assessment Forms https://www.epa.gov/fedfunds/sample-water-and-wastewater-damage-assessment-forms
- 10. CDC Emergency WASH Planning, Training, and Response Resources https://www.cdc.gov/water-emergency/php/training/index.html
- 11. NEHA Private Wells and Natural Disasters: Prepare, Respond, and Recover Factsheets https://www.neha.org/private-drinking-water
- 12. Restoring and Testing Your Private Well After a Flood https://www.health.ny.gov/publications/6562/index.htm
- 13. EPA What to Do with Your Private Well After a Flood https://www.epa.gov/privatewells/what-do-your-private-well-after-flood
- 14. Well Water Safety https://www.cdc.gov/drinking-water/safety/index.html
- 15. RCAP Natural Disaster Preparedness Guidelines for Water and Wastewater Utilities https://www.rcap.org/resources/natural-disaster-preparedness-guidelines-for-water-and-wastewater-utilities

16. Incident Action Checklists for Water Utilities https://www.epa.gov/waterutilityresponse/incident-action-checklists-water-utilities

Function 4: Assure the Safety and Integrity of Solid Waste/Debris Management Systems

Resources

- 1. Disaster Debris Planning https://www.epa.gov/disaster-debris/disaster-debris-recovery-tool
- 2. EPA Resilience Tool Wizard https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard
- 3. Planning for Natural Disaster Debris https://www.epa.gov/homeland-security-waste/guidance-about-planning-natural-disaster-debris
- 4. FEMA Public Assistance Debris Management Guide https://www.fema.gov/pdf/government/grant/pa/demagde.pdf
- 5. Wildfire Debris Removal and Recovery Operations https://calrecycle.ca.gov/disaster/wildfires/
- 6. USACE Debris Management https://www.usace.army.mil/Missions/Emergency-Operations/National-Response-Framework/Debris-Management/
- 7. NEHA Wildfire Response Guide https://www.neha.org/epr-wildfire-resources
- 8. CDC Hazards During Wildland Fire Cleanup https://www.cdc.gov/niosh/outdoor-workers/about/wildfire-cleanup-hazards.html
- Dealing with Debris and Damaged Buildings
 https://www.epa.gov/natural-disasters/dealing-debris-and-damaged-buildings

Function 5: Assure the Safety and Integrity of Wastewater Systems

Resources

1. RCAP Natural Disaster Preparedness Guidelines for Water and Wastewater Utilities https://www.rcap.org/resources/natural-disaster-preparedness-guidelines-for-water-and-wastewater-utilities

- 2. EPA Resilience Tool Wizard https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard
- 3. Emergency Response for Drinking Water and Wastewater Utilities https://www.epa.gov/waterutilityresponse
- 4. Mutual Aid and Assistance for Drinking Water and Wastewater Utilities https://www.epa.gov/waterutilityresponse/mutual-aid-and-assistance-drinking-water-and-wastewater-utilities
- 5. Sample Water and Wastewater Damage Assessment Forms https://www.epa.gov/fedfunds/sample-water-and-wastewater-damage-assessment-forms
- 6. Incident Action Checklists for Wastewater Utilities https://www.epa.gov/waterutilityresponse/incident-action-checklists-water-utilities
- 7. CDC Emergency WASH Planning, Training, and Response Resources https://www.cdc.gov/water-emergency/php/training/index.html
- 8. EPA Wastewater Utility Emergency Response Plan https://www.epa.gov/system/files/documents/2021-08/ww-erp-template-instructions.pdf
- 9. Sanitary Sewer Overflow (SSO) Resources https://www.epa.gov/npdes/sanitary-sewer-overflow-sso-additional-resources
- 10. NEHA Preparedness & Response for Septic Systems https://www.neha.org/preparedness-septic
- 11. Guidelines for Septic and Onsite Wastewater Systems https://www.cdc.gov/floods/safety/guidelines-for-septic-and-onsite-wastewater-systems.html
- 12. Safeguarding Against Natural Hazards and Extreme Weather Events: A Resource Guide for Onsite Wastewater Treatment Systems https://www.epa.gov/system/files/documents/2024-12/septic-tanks-and-natural-hazards-resource-guide.pdf

Function 6: Assure the Safety of Emergency Shelters

- CDC Disaster Shelter Assessment
 https://www.cdc.gov/environmental-health-response-and-recovery/php/disaster-shelter-assessment/index.html
- Environmental Health Training in Emergency Response (EHTER) https://www.cdc.gov/environmental-health-response-and-recovery/php/ehter/index.html
- 3. FEMA Shelter Field Guide (FEMA P-785) http://www.nationalmasscarestrategy.org/wp-content/uploads/2015/10/Shelter-Field-Guide-508_f3.pdf

- 4. Environmental Public Health Online Courses (EPHOC) Disaster Sanitation https://www.cdc.gov/environmental-health-practice/php/training/index.html
- 5. Infection Control for Shelters During Disasters https://apic.org/Resource_/TinyMceFileManager/Practice_Guidance/Emergency_Preparedness/Shelters_Disasters.pdf
- 6. FEMA Emergency Management Institute (EMI) Independent Study Course IS-806 ESF #6: Mass Care, Emergency Assistance, Housing, and Human Services https://training.fema.gov/is/coursematerials.aspx?code=IS-806
- 7. FEMA Emergency Management Institute (EMI) Independent Study Course IS-406: Operating a Shelter https://training.fema.gov/is/courseoverview.aspx?code=IS-406&lang=en
- 8. FEMA K0419 Shelter Field Guide Training for State and Local Communities https://training.fema.gov/emicourses/schedules.aspx
- 9. National Mass Care Strategy Sheltering https://nationalmasscarestrategy.org/nmcs-resource-center/nmcs-sheltering/
- 10. International Association of Assembly Managers (IAAM), Mega-Shelter Planning Guide: A Resource and Best Practices Reference Guide https://www.fema.gov/pdf/emergency/disasterhousing/mspg.pdf
- 11. FEMA Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters www.fema.gov/pdf/about/odic/fnss_guidance.pdf
- 12. Multi-Agency Shelter Plan Template https://www.nationalmasscarestrategy.org/wp-content/uploads/2014/10/Multi-Agency-Shelterin-Plan-Template-Final_100114.pdf
- 13. CDC Natural Disaster Morbidity Surveillance- Shelters https://www.cdc.gov/environmental-health-response-and-recovery/php/about/mortality-surveillance.html

Function 7: Assure the Integrity of Food Supply and Delivery Systems

- Mass Care Strategy Feeding Operations https://nationalmasscarestrategy.org/nmcs-resource-center/nmcs-feeding/
- Multi-Agency Feeding Support Plan Template https://www.nationalmasscarestrategy.org/wp-content/uploads/2015/09/MAFSPT_v2_June_2015.pdf
- 3. Disaster Guide Reopening a Retail Food Establishment https://www.neha.org/disaster-guide-retail-food
- 4. Emergency Handbook for Food Managers https://www.naccho.org/uploads/resource-hub-images/Emergency_Handbook_for_Food_Managers_1.pdf

- 5. Minimum Standards for Operation of a Retail Food Establishment While Under a Boil Advisory https://www.neha.org/lmages/resources/ER310_BoilAdvisory.pdf
- 6. CDC Resources for Environmental Health https://www.cdc.gov/environmental-health-response-and-recovery/php/about/recovery-resources.html
- 7. FDA Food Defense & Emergency Response for Retail Food <a href="https://www.fda.gov/food/retail-food-protection/food-defense-emergency-response-retail-food-defense-emergency-retail-food-defense
- 8. USDA Food Defense and Emergency Response https://www.fsis.usda.gov/food-safety/food-defense-and-emergency-response
- Environmental Health Emergency Response Guide https://stacks.cdc.gov/view/cdc/39018
- 10. Emergency Action Plan for Retail Food Establishment https://www.foodprotect.org/Guides-and-Documents
- 11. Flip Chart of Emergency Procedures for Retail Food Establishments (Grocery & Convenience Stores)

 https://www.michigan.gov/mdard/-/media/Project/Websites/mdard/documents/food-dairy/emergency/fspr_emergency_procedures_flip_chart.pdf
- 12. USDA Foods Program Disaster Manual https://www.fns.usda.gov/usda-foods/program-disaster-manual
- 13. Epi-Ready Team Training https://www.neha.org/epi-ready
- 14. CIFOR Guidelines for Foodborne Disease Outbreak Response https://cifor.us/products/guidelines

Function 8: Assure the Safety and Integrity of Buildings

- 1. Post-disaster Building Safety Evaluation Guidance https://www.fema.gov/sites/default/files/2020-07/fema_p-2055_post-disaster_buildingsafety_evaluation_2019.pdf
- Dealing with Debris and Damaged Buildings https://www.epa.gov/natural-disasters/dealing-debris-and-damaged-buildings
- 3. ATC-45 Detailed Evaluation Safety Assessment Form https://www.atcouncil.org/pdfs/ATC45Detail.pdf
- 4. CDC Natural Disasters Resources https://www.cdc.gov/natural-disasters/site.html

- 5. ICC When Disaster Strikes Training Resources https://www.iccsafe.org/professional-development/education/disaster-strikes-institutes
- 6. CDC Guidelines for Cleaning after Disasters https://www.cdc.gov/natural-disasters/safety/index.html
- 7. CDC Reopening Buildings Guidance Legionella https://www.cdc.gov/control-legionella/php/guidance/building-water-system.html
- 8. Homeowners and Renters Guide to Mold Cleanup After Disasters https://www.cdc.gov/mold-health/communication-resources/guide-to-mold-cleanup.html
- 9. Assessing Impact and Damage Post-Emergency https://www.ruralhealthinfo.org/toolkits/emergency-preparedness/5/assess-impact-and-damage
- 10. FEMA National Disaster Recovery Framework https://www.fema.gov/sites/default/files/2020-06/national_disaster_recovery_framework_2nd.pdf
- 11. Managing Disasters at the County Level: A Focus on Public Health https://www.naco.org/featured-resources/managing-disasters-county-level-focus-public-health
- 12. EPA Resilience Tool Wizard https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard

Function 9: Assure the Safety of Indoor/Outdoor Air

- 1. Emergencies and Indoor Air Quality (IAQ) https://www.epa.gov/emergencies-iaq/emergencies-and-indoor-air-quality-iaq
- 2. EPA Resources About Emergencies and Indoor Air Quality https://www.epa.gov/emergencies-iaq/resources-about-emergencies-and-indoor-air-quality
- 3. Homeowner's and Renter's Guide to Mold Cleanup after Disasters https://www.epa.gov/mold/homeowners-and-renters-guide-mold-cleanup-after-disasters
- 4. Wildfire Smoke: A Guide for Public Health Officials https://document.airnow.gov/wildfire-smoke-guide.pdf
- 5. NEHA Wildfire Response Guide https://www.neha.org/epr-wildfire-resources
- 6. Managing Indoor Air Quality Before and During Wildfire Smoke Events: Smoke-Ready Schools https://www.epa.gov/indoor-air-quality-iag/webinars-meetings-and-resources

- 7. ASHRAE Guideline 44-2024: Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events https://www.epa.gov/indoor-air-quality-iaq/webinars-meetings-and-resources
- 8. Smoke-Ready Toolbox for Wildfires https://www.epa.gov/air-research/smoke-ready-toolbox-wildfires
- 9. Wildland Fire Research to Protect Health and the Environment https://www.epa.gov/air-research/wildland-fire-research-protect-health-and-environment
- 10. Wildfire Smoke Air Monitoring Response Technology (WSMART) https://www.epa.gov/air-sensor-toolbox/wildfire-smoke-air-monitoring-response-technology-wsmart
- 11. EPA Ambient Air Sampling https://www.epa.gov/system/files/documents/2022-06/Ambient%20Air%20Sampling%28SESDPROC-303-R5%29_0.pdf
- 12. Mitigating Indoor Air Quality Problems https://www.epa.gov/sites/default/files/2014-08/documents/sec_7.pdf
- 13. Indoor Air Quality by Building Type https://www.epa.gov/indoor-air-quality-iaq/indoor-air-quality-building-type
- 14. EPA Resilience Tool Wizard https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard

Function 10: Provide Vector Surveillance and Control

- 1. NEHA Vectors and Pest Resources https://www.neha.org/vectors-pests
- 2. Vector Control for Environmental Health Professionals (VCEHP) Online Learning https://www.cdc.gov/environmental-health-services/php/vector-control-resources/vcehp.html
- 3. Mosquito Control Emergency Preparedness and Response to Natural Disasters https://pmc.ncbi.nlm.nih.gov/articles/PMC7871406/
- 4. Resources for Mosquito Control Professionals https://www.cdc.gov/mosquitoes/php/toolkit/index.html
- 5. NEHA Vector Control Toolkit https://www.neha.org/vector-toolkit
- 6. Environmental Health Training in Emergency Response Awareness Course Vectors and Pest Module https://cdp.dhs.gov/training/course/AWR-922%20W

- Operational Insights into Mosquito Control Disaster Response https://stacks.cdc.gov/view/cdc/128741/cdc_128741_DS1.pdf
- 8. Contingency Pest Management Guide https://www.med.navy.mil/Portals/62/Documents/NMFA/NMCPHC/root/Field%20Activities/Pages/NEPMU6/Operational%20Support/Entomology/AFPMB-TG24-CONTINGENCY-PEST-MGMT.pdf
- 9. Mosquito Control Emergency Preparedness and Response to Natural Disasters https://jamca.kg/meridian.com/view/journals/moco/36/2/moco.36.issue-2.xml
- 10. FEMA Public Assistance Program and Policy Guide –Mosquito Abatement, App. G https://www.fema.gov/sites/default/files/documents/fema_pappg-v4-updated-links_policy_6-1-2020.pdf

Function 11: Provide EPH Support to Hazardous Material Management

- Assessment of Chemical Exposures Toolkit https://www.atsdr.cdc.gov/ace/php/toolkit/index.html
- 2. Epi Case Toolkit https://www.atsdr.cdc.gov/ace/php/epi-case-toolkit/index.html
- Comprehensive Disaster Assessment and Readiness Tools (CDART) https://www.atsdr.cdc.gov/emergency-response/cdart/index.html
- 4. FEMA Hazardous Materials Incidents Guidance for State, Local, Tribal, Territorial, and Private Sector Partners https://www.fema.gov/sites/default/files/2020-07/hazardous-materials-incidents.pdf
- 5. EPA Emergency Response Research https://www.epa.gov/emergency-response-research/webinar-series
- 6. Chemical Hazards Emergency Medical Management https://chemm.hhs.gov/
- CDC Chemical Emergencies Resources
 https://www.cdc.gov/chemical-emergencies/php/resources/index.html
- 8. NACCHO Chemical Preparedness Resources https://www.naccho.org/programs/public-health-preparedness/chemical-preparedness
- 9. NACCHO Chemical Preparedness Handbook https://www.naccho.org/uploads/downloadable-resources/Chemical-Preparedness-Handbook_Final.pdf
- 10. Strategy for Developing a Community Chemical Response Plan https://chemm.hhs.gov/responseplanstrategy.htm#ref1

- 11. A Guide to Aid Local Health Directors and Staff in Planning for and Responding to Hazardous Materials Releases https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/environmental_health/eoha/Toxicology_Risk_Assessment/LHD-Response-to-Hazardous-Material-Releases.pdf
- 12. Guidance about Planning for Natural Disaster Debris https://www.epa.gov/homeland-security-waste/guidance-about-planning-natural-disaster-debris
- 13. Incident Waste Decision Support Tool (I-Waste DST) <a href="https://iwaste.epa.gov/guidance/natural-disaster/fact-sheets/regulations-guidance-facilities/disposal-guidance-facilities/disp
- 14. Safety Awareness for Responders to Hurricanes: Protecting Yourself While Helping Others https://tools.niehs.nih.gov/wetp/public/hasl_get_blob.cfm?ID=13942

Function 12: Provide EPH Support to Radiological Management

- CDC Radiation Emergencies Resources
 https://www.cdc.gov/radiation-emergencies/index.html
- 2. Implementing Public Health Preparedness Capabilities https://www.cdc.gov/radiation-emergencies/php/rad-capabilities/index.html
- 3. Radiological Terrorism: Public Health Officials Toolkit https://www.cdc.gov/radiation-emergencies/php/toolkit/index.html
- 4. Nuclear/Radiological Incident Annex to the Response and Recovery Federal Interagency Operational Plan https://www.epa.gov/radiation/radiological-emergency-response-planning-and-past-responses
- 5. Federal Radiological Monitoring and Assessment Center https://nnss.gov/mission/federal-radiological-monitoring-and-assessment-center-frmac/
- 6. A Guide to Operating Public Shelters in a Radiation Emergency https://www.cdc.gov/radiation-emergencies/media/pdfs/2024/04/operating-public-shelters-1.pdf
- 7. Population monitoring in radiation emergencies A Guide for State and Local Public Health Planners https://www.cdc.gov/radiation-emergencies/media/pdfs/2024/04/population-monitoring-guide.pdf
- U.S. Nuclear Regulatory Commission https://www.nrc.gov/about-nrc.html
- 9. Radiation Emergency Assistance Center/Training Site https://orise.orau.gov/reacts/
- 10. FEMA Radiological Emergency Preparedness https://www.fema.gov/emergency-managers/practitioners/hazardous-response-capabilities/radiological

- 11. Sample Collection Plan (SCP) Template Tool for Addressing Radiochemical Analytes in Environmental Matrices https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=360387&Lab=CESER
- 12. Sample Collection Procedures for Radiochemical Analytes in Environmental Matrices Report https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=541934&Lab=CESER
- 13. Sample Collection Procedures for Radiochemical Analytes in Outdoor Building and Infrastructure Materials https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NHSRC&dirEntryId=335065

Function 13: Assure the Safety of Recreational Water

- CDC Healthy Swimming https://www.cdc.gov/healthy-swimming/index.html
- Model Aquatic Health Code <u>https://www.cdc.gov/model-aquatic-health-code/php/our-work/index.html</u>
- 3. NEHA Best Practice Guide Standard for Aquatic Facility Environments (SAFE-D) https://www.neha.org/lmages/resources/SAFE-D%20Best%20Practices%20Guide.pdf
- 4. Recreational Water Quality Criteria and Methods https://www.epa.gov/wgc/recreational-water-quality-criteria-and-methods#rec3
- 5. EPA Beach Monitoring https://www.epa.gov/beaches/technical-resources-beach-monitoring-and-notification-programs
- 6. Recommended Water Quality Criteria, Beach Action Values, and Values for Swimming Advisories https://www.epa.gov/wqc/recreational-water-quality-criteria-and-methods
- 7. Creating Predictive Models https://www.epa.gov/beaches/models-predicting-beach-water-quality
- 8. Conducting Sanitary Surveys https://www.epa.gov/beaches/sanitary-surveys-recreational-waters
- 9. Creating Advisories and Notifying the Public https://www.epa.gov/sites/default/files/2018-12/documents/national-beach-guidance-2014-report.pdf
- Harmful Algal Bloom (HAB)-Associated Illness https://www.cdc.gov/harmful-algal-blooms/about/index.html
- 11. CDC Waterborne Disease Outbreak Investigation Toolkit https://www.cdc.gov/water-emergency/media/pdfs/waterborne-disease-outbreak-toolkit-h.pdf

- 12. EPA Surface Water Sampling https://www.epa.gov/quality/surface-water-sampling
- 13. EPA Recreational Waters Research https://www.epa.gov/water-research/recreational-waters-research
- 14. EPA Resilience Tool Wizard

https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard

Function 14: Conduct Open Water Monitoring

- 1. National Shellfish Sanitation Program (NSSP) https://www.fda.gov/food/federal-state-local-tribal-and-territorial-cooperative-human-food-programs/national-shellfish-sanitation-program-nssp
- 2. Fish and Fishery Products Hazards and Controls https://www.fda.gov/food/seafood-guidance-documents-regulatory-information/fish-and-fishery-products-hazards-and-controls#Downloads
- 3. EPA Technical Resources and Studies https://www.epa.gov/choose-fish-and-shellfish-wisely/technical-resources-and-studies
- 4. EPA Support for Fish and Shellfish Advisory Programs https://www.epa.gov/choose-fish-and-shellfish-wisely/support-fish-and-shellfish-advisory-programs
- 5. EPA Preparing for Emergencies https://www.epa.gov/sourcewaterprotection/preparing-emergencies
- 6. EPA Resources for Source Water Protection https://www.epa.gov/sourcewaterprotection/resources-source-water-protection
- 7. EPA Water Quality Standards: Regulations and Resources https://www.epa.gov/wqs-tech
- 8. EPA Water Quality Standards Handbook https://www.epa.gov/wqs-tech/water-quality-standards-handbook
- 9. Florida Shellfish Harvesting Area Classification https://www.fdacs.gov/Agriculture-Industry/Aquaculture/Shellfish-Harvesting-Area-Classification
- 10. NOAA-FDA Re-Opening Protocol Oil Spill https://www.fisheries.noaa.gov/content/noaa-fda-re-opening-protocol

Function 15: Assure Effective Environmental Sampling

Resources

1. EPA Drinking Water Training https://www.epa.gov/dwreginfo/drinking-water-training

2. Quick Guide to Drinking Water Sample Collection https://www.epa.gov/sites/default/files/2015-11/documents/drinking_water_sample_collection.pdf

3. Sample Collectors Handbook https://epa.illinois.gov/topics/compliance-enforcement/drinking-water/sample-collectors-handbook.html

Private Well Resources https://wellowner.org/

 EPA Surface Water Sampling https://www.epa.gov/quality/surface-water-sampling

6. Sampling Guidance for Unknown Contaminants in Drinking Water https://www.epa.gov/waterlabnetwork/sampling-guidance-unknown-contaminants-drinking-water

7. EPA Drinking Water Mapping Application to Protect Source Waters (DWMAPS) https://geopub.epa.gov/dwwidgetapp/?page=main

8. EPA Environmental Sampling and Analytical Methods (ESAM) Program https://www.epa.gov/esam

9. EPA Environmental Sample Collection Procedures and Strategies https://www.epa.gov/esam/sample-collection-procedures-and-strategies

10. USEPA/USGS Sample Collection Protocol for Bacterial Pathogens in Surface Soil https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=520008&Lab=NHSRC

11. EPA Soil Sampling https://www.epa.gov/sites/default/files/2015-06/documents/Soil-Sampling.pdf

12. EPA Air Monitoring Methods https://www.epa.gov/amtic/air-monitoring-methods

13. EPA Regulations, Guidance, and Monitoring Plans https://www.epa.gov/amtic/regulations-guidance-and-monitoring-plans

14. EPA Sample Collection Information Document for Chemicals, Radiochemicals, Pathogens and Biotoxins: Companion to Selected Analytical Methods for Environmental Remediation and Recovery (SAM) 2022 https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=357683&Lab=CESER

15. EPA Sample Collection Information Documents (SCID) https://www.epa.gov/esam/sample-collection-information-documents-scid

- 16. National Response Team Oil and Chemical Spills, and Hazardous Material Releases https://www.nrt.org/
- 17. Marion County Emergency Communications Plan Annex https://www.naccho.org/uploads/resource-hub-images/Communications_Annex_Update-id1301.pdf

Staff and Resource Assessment

- NIMS ICS Training https://training.fema.gov/nims/
- 2. Environmental Health Training in Disaster Response Awareness Course https://cdp.dhs.gov/training/course/AWR-922%20W
- 3. Environmental Health Training in Disaster Response Operations Course https://cdp.dhs.gov/training/course/PER-309
- 4. NIMS ICS All-Hazards Task Force/Strike Team Leader https://www.firstrespondertraining.gov/frts/npccatalog?catalog=EMI
- 5. Emergency Response Surge Staffing Toolkit https://www.naccho.org/resource-hub-articles/emergency-response-preparedness-toolkit
- 6. NEHA's Repository of Resources: Disaster Preparedness, Response, and Recovery Resources https://www.neha.org/disaster-preparedness-response-recovery
- 7. Clay County Environment Health Response Annex https://www.naccho.org/resource-hub-articles/example-environmental-health-annex
- 8. Georgia Environmental Health Section Emergency Response Plan https://www.fultoncountyga.gov/-/media/Departments/Board-of-Health/Environmental-Health/9-E1-Emergency-Response-Plan.pdf
- 9. North Carolina- Environmental Health Emergency Preparedness and Response https://ehs.dph.ncdhhs.gov/emprepresp.htm
- 10. North Carolina Environmental Health Emergency Preparedness and Recovery Guidance Manual https://ehs.dph.ncdhhs.gov/faf/food/fd/docs/EH-PreparednessManual-Final.pdf
- 11. Kent County Health Department Environmental Health Annex https://www.naccho.org/resource-hub-articles/environmental-health-annex
- 12. Salt Lake City Environmental Health Response Plan https://www.naccho.org/uploads/resource-hub-images/Salt-Lake-City-Environmental-Health-Plan.pdf

- 13. Broome County Health Department Environmental Health Response Plan https://www.naccho.org/uploads/resource-hub-images/Environmental-Health-Response-Plan.pdf
- 14. Pima County Environmental Health Response Plan https://www.naccho.org/uploads/resource-hub-images/Environmental-Health-Response-Plan-Example-Update.pdf
- 15. Prince William Health District Environmental Health and Surety Plan https://www.naccho.org/resource-hub-articles/environmental-health-and-surety-plan
- 16. San Diego County Environmental Health Operations Annex https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/plans/op-area-plan/2022/EOP2022_Annex%20H%20.pdf
- 17. Mineral County Colorado Environmental Surety Plan https://www.naccho.org/uploads/resource-hub-images/Environmental-Surety-Plan-Example-Mineral-County-Update-2.pdf
- 18. Michigan Imminent Health Hazard Emergency Response Reference for Regulators https://www.michigan.gov/mdard/-/media/Project/Websites/mdard/documents/food-dairy/fsss_regulator_reference.pdf

References

National Environmental Health Association, 2024, Hurricane Response Guide for Environmental Public Health Professionals

Federal Emergency Management Agency, 2010, Comprehensive Planning Guide 101

Centers For Disease Control and Prevention, 2024, Program Evaluation Framework Action Guide

National Environmental Health Association, 2022, Environmental Public Health Emergency Preparedness and Response Capability Framework

Pennsylvania State University, 2023, The Seven Steps of Action Planning

Liability Statement

This tool is not intended to provide legal advice with regard to emergency response, life safety, or life-saving efforts, actions, decisions, or activities. All content herein is solely for informational purposes and does not replace practitioner, professional, organizational, agency, or departmental decision-making, incident action planning, or other emergency response actions.

Abbreviations	Definitions
ANSI	American National Standards Institute
CDC	Centers for Disease Control and Prevention
COOP	Continuity of Operations Plan
DSA	Data Sharing Agreement
EMAP	Emergency Management Standard
EPH	Environmental Public Health
EPHEPR	Environmental Public Health Emergency Preparedness and Response
EM	Emergency Management
EOC	Emergency Operations Center
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
HAZMAT	Hazardous Materials
ICS	Incident Command System
IS	Independent Study
MAA	Mutual Aid Agreement
MOU	Memorandum of Understanding
NA	Not Applicable
NACCHO	National Association of County and City Health Officials
NEHA	National Environmental Health Association
NIMS	National Incident Management System
PHAB	Public Health Accreditation Board
PHEP	Public Health Emergency Preparedness
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound
WBS	Work Breakdown Structure

