

Draft Environmental Public Health Emergency Preparedness and Response Capability and Functions

Draft Environmental Public Health Emergency Preparedness and Response Capability Framework Functions Definitions and Tasks

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

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Identify EPH risks to the affected population with special focus on special needs populations
- Determine operational condition of key public health infrastructure (drinking water, wastewater, power, etc.)
- Assess programmatic and public health functionality
- Engage ICS planning team to forecast potential future EPH risks based on changing conditions
- Provide EPH subject matter expertise
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 2: Coordinate EPH Response and Resources

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

Tasks: This function consists of the ability to perform the tasks listed below.

- Gather and allocate EPH resources, including personnel, equipment, and supplies, ensuring they are deployed where needed most
- Work across different agencies and sectors to align EPH response efforts
- Establish and maintain effective communication channels to ensure timely sharing of information regarding EPH risks and response activities among all stakeholders
- Continuously identify EPH risks arising during the response and implement appropriate mitigation strategies to protect public health

- Actively participate in ICS structure, ensuring ongoing EPH needs and resources are accounted for in planning, operations, and recovery efforts
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 3: Ensure the Safety and Integrity of Water Systems

Definition: Conduct health assessments and monitoring of the potable water supply and delivery system for ensuring the availability of safe drinking water and prevention of waterborne pathogens and contaminants for 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Assure that damage assessments of the following systems occur:
 - Primary water systems
 - Alternative water supplies (e.g., hauled water, bulk water, bottled water)
 - Unregulated systems (e.g., private wells)
 - Temporary or mobile treatment systems (e.g., Reverse Osmosis Purification Unit, portable onsite treatment)
- Issue emergency orders for limited operations (i.e., boil water or do not drink order)
- Provide guidelines and education for the implementation of water-related emergency orders
- Verify access and operation of laboratory systems to conduct water quality testing
- Coordinate the provision of safe alternative water supplies
- Perform appropriate water sampling as required to assess impacts to water systems
- Provide expertise for the continuity and restoration of clean water for essential services like healthcare and food service
- Communicate technical information and health risks to the public regarding procurement of emergency drinking water supply including collection, storage, disinfection, and rationing
- Identify risks and implement mitigation measures for water related health and safety risks to emergency response personnel

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

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Provide initial assessment of waste and debris in impacted areas
- Provide initial assessment of the solid waste disposal facilities in the disaster area
- Provide an assessment of waste management and debris removal practices
- Provide pre-disaster planning and expertise for alternative/additional disposal sites
- Provide recommendations for alternate disposal methods (e.g., air curtain burning/incineration)



- Provide technical assistance and consultation for disaster site clean-up operations, waste haulers, and disposal facilities
- Communicate health risks and actions to take regarding debris removal programs, right of entry of property, debris removal sites, etc.
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 5: Ensure the Safety and Integrity of Wastewater Systems

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Conduct ongoing and follow-up assessment of systems to alternative wastewater and unregulated systems
- Provide technical assistance and conduct monitoring of wastewater systems
- Conduct assessments of temporary or emergency disposal practices in the disaster area
- Communicate health risks and actions to take regarding proper emergency sewage disposal
- Coordinate the availability of sanitary alternative toilet/latrine facilities
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 6: Ensure the Safety of Emergency Shelters

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Coordinate environmental health assessments and provide technical assistance of mass care and medical needs shelter operations
- Ensure EPH safety through effective coordination of animal shelter operations
- Assure proper location, setup, maintenance, and assessment of the safety of potable water at mass care facilities-shelters, feeding centers, and sources of ice
- Assure proper location, setup, maintenance, and assessment of the safety of food supply at mass care facilities-shelters, feeding centers, food/ice distribution centers
- Assure proper location, setup, maintenance, and assessment of the safety and sanitation of wastewater management at mass care facilities
- Assure proper location, set up, maintenance, and assessment of the safety and sanitation of solid waste, medical waste, and debris management/removal at mass care and shelter facilities



- Assure proper setup, maintenance, and assessment of the safety of vector control activities in mass care and medical needs shelter facilities
- Assure proper assessment and maintenance of safe indoor air quality for mass care and medical needs shelter facilities
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

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

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Identify high risk foods, food supplies and systems, and facilities with utility/service interruptions that may pose hygiene or safety issues because of the event
 - Recommend the closing of facilities or operations when appropriate and address non-compliance with recommendations
 - Conduct rapid assessments to identify impacted food service establishments and conduct inspections to assure safety of continuing or resuming operations
 - Provide technical assistance to assure proper food disposal of contaminated or potentially contaminated foods
- Coordinate with food supply chain regulating agencies to assure safety of food stocks
- Conduct investigations of disease outbreaks possibly related to food-borne exposure
- Provide guidance to the public for maintaining food safety inside and outside of homes to support proper food salvage or disposal of contaminated or potentially contaminated foods and beverages
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 8: Ensure the Safety and Integrity of Buildings

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Conduct a rapid assessment of the impacted area
- Identify and address environmental health issues of concern to the impacted populations such as air handling, water supply, wastewater and sanitation systems. This includes identification and treatment of mold, pathogens, and/or other contaminants.
- Provide technical assistance to responding agencies in the planning of temporary housing sites
- Provide technical assistance and guidance to the public for assessing, restoring, and maintaining the sanitation, safety, and EPH integrity of homes, public buildings, (e.g., schools, childcares), and businesses for safe re-occupancy



- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 9: Ensure the Safety of Indoor/Outdoor Air

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Design and conduct appropriate environmental sampling programs for outdoor air quality
- Analyze sampling results from various environmental sources against baseline results and/or preexisting standards
- Provide recommendations on exposure guidelines and health risks presented by indoor and outdoor air quality
- Communicate mitigation or remediation efforts for individual property owners and communities
- Assist in conducting assessments to collect and analyze data needed to determine safe re-entry and re-occupancy of homes and facilities in the community
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 10: Provide Vector Surveillance and Control

Definition: 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.

Tasks: This function consists of the ability to perform the tasks listed below.

- Conduct and coordinate assessments of insect, animal, and rodent vectors to include population densities, infectivity rates, and human risk potential
- Lead or support surveillance, mitigation, and control of insect and animal vectors
- Communicate vectorborne disease health risks and actions that the public can take to reduce vector populations and prevent disease transmission
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 11: Provide EPH Support to Hazardous Material Management

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

Tasks: This function consists of the ability to perform the tasks listed below.

- Participate in response to hazardous materials incidents
- Provide technical assistance, consultation, and support regarding decontamination procedures



- Provide technical assistance, consultation, and support for the appropriate collection and disposal of hazardous waste
- Provide technical assistance, consultation, and support for plume modeling and evacuation
- Communicate mitigation or remediation efforts for individual property owners and communities
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 12: Provide EPH Support to Radiological Management

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

Tasks: This function consists of the ability to perform the tasks listed below.

- Participate in response to radiological incidents
- Provide technical assistance, consultation, and support regarding decontamination procedures
- Provide technical assistance, consultation, and support for the appropriate collection and disposal of radiological waste
- Provide technical assistance, consultation, and support for plume modeling and evacuation
- Conduct assessment of radiation contamination to include exposure rate, extent of contamination, and human risk potential
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 13: Ensure the Safety of Recreational Water

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

Tasks: This function consists of the ability to perform the tasks listed below.

- Provide EPH assessments of recreational water operation practices
- Conduct field surveys to assess damage to pools, spas and splash pads in impacted areas
- Provide recommendations for closing facilities or ceasing operations when appropriate
- Provide recommendations for addressing non-compliant facilities or operations
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 14: Conduct Open Water Monitoring

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

Tasks: This function consists of the ability to perform the tasks listed below.

- Design and conduct appropriate environmental sampling and fish and shellfish sampling



- After a contaminant is identified, mobilize, and equip personnel with appropriate PPE and direct sampling and monitoring strategies in a manner that protects public and environmental safety
- Recommend closing or restricting the use of waters when appropriate
- Communicate health risks to the public
- Post closure signs and communicate when threat has passed
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

Function 15: Ensure Effective Environmental Sampling

Definition: Conduct effective environmental sampling where needed.

Tasks: This function consists of the ability to perform the tasks listed below.

- Design and conduct appropriate environmental sampling programs and an ongoing plan relevant to the event
- Geo-code all environmental samples and make them publicly available in a timely manner where appropriate
- Provide health impact assessment of sampling results from various sources such as water, air, soil, and food supply
- Assess potential health risks based on sampling results and communicate them to the public in a timely manner where appropriate
- Provide recommendations and/or lead remediation efforts for individual property owners and communities
- Identify risks and implement mitigation measures for health and safety risks to emergency response personnel

