Public Health Emergency Preparedness and Response Capabilities

National Standards for State, Local, Tribal, and Territorial Public Health

Introduction

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Public health systems play an integral role in preparing communities to respond to and recover from threats and emergencies. The public health consequences of disasters and emergencies initially affect local jurisdictions. During the initial response, the people and communities that are impacted must rely on local community resources. As a result, all state, local, tribal, and territorial emergency response stakeholders must be prepared to coordinate, cooperate, and collaborate with cross-sector partners and organizations at all governmental levels when emergencies occur, regardless of the type, scale, or severity.

While public health agencies are expected to take the lead when infectious disease outbreaks occur, jurisdictional public health agencies also must be prepared to coordinate with a diverse array of partners and stakeholders, including other government agencies to refine public health lead and support roles, responsibilities, and assignments when other technological, human-caused, or natural disasters occur.

In 2011, the Centers for Disease Control and Prevention (CDC) established the Public Health Preparedness Capabilities: National Standards for State and Local Planning, a set of 15 distinct, yet interrelated, capability standards designed to advance the emergency preparedness and response capacity of state and local public health systems. These standards pioneered a national capability-based framework that helped jurisdictional public health agencies structure emergency preparedness planning and further formalize their public health agency Emergency Support Function (ESF) #8 role(s) in partnership with emergency management agencies.

Each capability standard identifies priority resource elements that are relevant to both routine public health activities and essential public health services. This helps support an “everyday use” model in which applying the capability standards to improve day-to-day effectiveness builds a stronger foundation from which a jurisdictional public health agency can surge when an emergency incident occurs. Although jurisdictional public health agencies can demonstrate capability through exercises, planned events, and real incident responses, they also are encouraged to incorporate routine public health agency activities strategically into demonstration projects to test and evaluate their emergency preparedness and response capacity.
Public Health Emergency Preparedness Cooperative Agreement Program

In 1999, CDC competitively awarded approximately $40 million to 50 states and four major metropolitan health departments to support bioterrorism preparedness and response. The program, now administered by CDC’s Center for Preparedness and Response, Division of State and Local Readiness (DSLR), evolved into the current Public Health Emergency Preparedness (PHEP) cooperative agreement.

Today, the PHEP program funds 62 cooperative agreement recipients: 50 states, four localities, and eight territories and freely associated states. Depending upon the organizational structure of the funded jurisdictional public health agency, directly funded PHEP recipients may share PHEP funding with local public health agencies, tribes, and native-serving organizations. This approach provides financial resources to help build public health emergency response capability both nationally and at state, local, tribal, and territorial government levels.

Since the initial publication of the preparedness capability standards in 2011, CDC has required that the 62 PHEP recipients develop and implement capability-based work plans and use their PHEP funding to build and sustain their public health preparedness and response capacity. However, use of the capability standards now extends well beyond informing jurisdictional public health agency cooperative agreement work plans. Today, the capability standards are a vital framework for jurisdictional public health agencies to organize and evaluate emergency responses and exercises, ensure the public health consequences of jurisdictional emergencies are a response priority, and promote collaboration by establishing a common language among preparedness professionals. Perhaps most importantly, the capability standards allow state, local, tribal, and territorial public health agencies to advance response strategies aligned with community needs, preferences, and resources without dictating or overprescribing “how” to specifically manage every jurisdictional response.

Operational Support for the National Preparedness System and the National Preparedness Goal

CDC’s capability standards and PHEP cooperative agreement program provide operational support for the Federal Emergency Management’s (FEMA) National Preparedness System to strengthen the security and resilience of the United States through systematic preparation for threats that pose the greatest risk to the nation’s security. The National Preparedness System has six parts that include identifying and assessing risk, estimating capability requirements, building and sustaining capabilities, planning to deliver capabilities, validating capabilities, and reviewing and updating.

The National Preparedness System outlines an organized process for everyone in the whole community to advance their preparedness activities and achieve the National Preparedness Goal

“A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.” (FEMA, 2015)
The National Preparedness Goal describes a vision for preparedness nationwide and identifies 32 core capabilities necessary to achieve that vision across five mission areas: Prevention, Protection, Mitigation, Response, and Recovery. Although only one of the 32 core capabilities within the National Preparedness Goal specifically focuses on public health and medical support (Public Health, Healthcare, and Emergency Medical Services), many of the core capabilities relate to and contain public health and medical considerations that are necessary to successfully achieve a secure and resilient nation.

CDC’s 2018 Public Health Emergency Preparedness and Response Capabilities: National Standards for State, Local, Tribal, and Territorial Public Health include operational considerations that support the public health and medical components of the 32 core capabilities specified in the National Preparedness Goal. Jurisdictions should use these operational considerations to develop their public health agency response strategies in greater alignment with the jurisdictional public health agency ESF #8 role.

**Capability Update Initiative**

Since the publication of the capability standards in 2011, public health emergency preparedness and response capacity has continued to be tested at national, state, local, tribal, and territorial levels. Ongoing risks related to chemical, biological, radiological, nuclear, and explosive incidents as well as cyberattacks further underscore the importance of updating and modernizing jurisdictional all-hazards public health preparedness and response strategies to address emerging technologies and new 21st century threats through a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action (in accordance with FEMA’s National Preparedness System).

The PHEP program underwent an internal review in 2015 to identify opportunities to strengthen program tools, resources, and guidance. The review identified the need for CDC to implement several public health emergency preparedness improvement initiatives, including the Capabilities Update Initiative, the formal process CDC used for revising the Public Health Preparedness Capabilities: National Standards for State and Local Planning.

The purpose of the Capability Update Initiative was to update, clarify, and streamline capability content and enact changes that would best support state, local, tribal, and territorial public health emergency preparedness work without drastically altering the established 15-capability structure. Thus, the update process applied a similar approach to that used for the initial development of the 2011 capability standards. The process included individual work groups for each of the 15 capabilities along with four additional cross-cutting work groups to address at-risk individuals with access and functional needs, tribal populations, environmental health, and pandemic influenza.

Lessons learned from public health emergency responses, updates to public health preparedness science, revised guidance and resources, findings from internal reviews and assessments, subject matter expert feedback from the practice community, and input from allied agencies all contributed to capability updates. In addition, representatives from professional associations, including the Association of Public Health Laboratories (APHL), the Association of State and Territorial Health Officials (ASTHO), the Council of State and Territorial Epidemiologists (CSTE), the National Association of County and City Health Officials (NACCHO), and the National Emergency Management Association (NEMA) were instrumental in helping to shape the updated capability content.
Summary of Capability Updates

The 2018 Public Health Emergency Preparedness and Response Capabilities: National Standards for State, Local, Tribal, and Territorial Public Health recognizes the maturity and experience jurisdictional public health emergency preparedness and response programs have gained since 2011. As with the 2011 version, technical content is informed by applicable guidance, science, practice, and input from subject matter experts. Examples of revisions include the addition of public health mission-ready packaging and the importance of identifying jurisdictional public health agency lead or support roles based on incident characteristics. Other revisions include updates to public health informatics, vaccine administration, coordination of infectious disease response, chemical laboratory requirements, environmental health, disaster epidemiology, and additional considerations for protecting the safety of emergency responders and volunteers. Unlike the 2011 version, this 2018 update does not include programmatic performance measures. However, jurisdictional public health agencies are encouraged to use the updated content to foster their own evaluation strategies.

The original capability structure remains in place, and capability titles are consistent with 2011 except for Capability 8. Previously recognized as Medical Countermeasure Dispensing, the new title, Capability 8: Medical Countermeasure Dispensing and Administration, better recognizes that pharmaceutical countermeasures, such as vaccines, antidotes, and antitoxins, can also be “administered” rather than “dispensed” like pills.

Overarching changes include:
- Revising, resequencing, and merging some capability functions
- Defining capability tasks
- Changing “planning” resource elements to “preparedness” resource elements
- Revising all preparedness, skills and training, and equipment and technology resource elements
- Moving all suggested resources (hyperlinks to resource documents) to the CDC website, the CDC Online Technical Resource and Assistance Center (On-TRAC), and other publicly available websites

Capability Structure

Domains and Tiers

The capability standards are organized into six domains and two tiers. Tier 1 capability standards form the foundation for public health emergency preparedness and response. Tier 2 capability standards are more cross-cutting, and their development relies upon having Tier 1 capability standards established in collaboration with external partners and stakeholders. Although jurisdictional public health agencies should consider prioritizing development of Tier 1 capabilities, jurisdictional risk assessment findings and other community factors also may influence jurisdictional prioritization of some Tier 2 capabilities. For example, based on risk assessment findings and depending on the public health agency’s ESF #8 role, a jurisdiction also may need to prioritize development of volunteer management strategies to ensure staffing support for medical countermeasure dispensing and administration activities.
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Composition

Each capability standard comprises capability functions, and each capability function contains specific capability tasks that are supported by multiple capability resource elements.

- **Capability Title and Definition**—Description of the capability as it applies to state, local, tribal, and territorial public health agencies. Each definition includes a list of potential partners and stakeholders with which jurisdictions may consider working to achieve the capability.
- **Capability Functions**—Critical segments of the capability that must occur to achieve the capability definition.
- **Capability Tasks**—Action steps aligned to one or more capability functions. Capability tasks must be accomplished to complete a capability function.
- **Capability Resource Elements**—Resources a jurisdiction should have or have access to in order to successfully perform capability tasks associated with capability functions. Resource elements are listed sequentially to align with corresponding tasks in each function. While not necessarily listed first, "priority" resource elements are potentially the most critical for completing capability tasks based on jurisdictional risk assessments and other forms of community input. The three categories of capability resource elements are:
  - **Preparedness (P)**—Components to consider within existing operational plans, standard operating procedures, guidelines, documents, or other types of written agreements, such as contracts or memoranda of understanding (MOUs).
  - **Skills and Training (S/T)**—General baseline descriptions, competencies, and skills that personnel and teams should possess in order to achieve a capability.
  - **Equipment and Technology (E/T)**—Infrastructure a jurisdiction should have or have access to with sufficient quantities or levels of effectiveness to achieve the intent of any related capability task.

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**Capability Structure: Composition**

- **Title and Definition**
- **Functions**
  - **Tasks**
  - **Resource Elements**