Public Health Emergency Preparedness Cooperative Agreement

Budget Period 2
Performance Measure Specifications and Implementation Guidance

July 1, 2013 – June 30, 2014

Version 1.0

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Acknowledgements

From September 2012 to April 2013, the Division of State and Local Readiness (DSLR) conducted an in-depth, mixed methods evaluation of nearly all Public Health Emergency Preparedness (PHEP) performance measures. The purpose of the evaluation was to determine which performance measures should be retained, modified, or retired for PHEP Budget Period 2 (BP2) as well as to inform broader PHEP evaluation strategies and efforts in future years.

The evaluation included comprehensive analyses of current performance measure data as well as in-depth input from PHEP stakeholders across the spectrum. DSLR is grateful to all stakeholders, within and outside CDC, who took time to provide thoughtful feedback on the measures.

Special appreciation goes to PHEP awardee staff who dedicated substantial time to provide feedback to DSLR on the performance measures.

DSLR wishes to extend its gratitude to the following groups for their efforts in coordinating, aggregating, and providing feedback:

- Association for Public Health Laboratories (APHL)
- Association of State and Territorial Health Officials (ASTHO)
- ASTHO Performance Evaluation and Improvement Workgroup (PEIW)
- Career Epidemiology Field Officers (CEFOs)
- Council of State and Territorial Epidemiologists (CSTE)
- Directors of Public Health Preparedness (DPHP) Executive Committee
- National Association of County and City Health Officials (NACCHO)

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Introduction

Since 1999, the Centers for Disease Control and Prevention (CDC) has awarded approximately $9 billion to 50 states, four directly funded localities and eight territories and freely associated states through the Public Health Emergency Preparedness (PHEP) cooperative agreement, one of the largest sources of funding for state and local public health preparedness.

The Applied Science and Evaluation Branch (ASEB) in the Division of State and Local Readiness (DSLR) in CDC's Office of Public Health Preparedness and Response (OPHPR) is responsible for developing and implementing a standardized set of relevant, feasible, and useful performance measures and other evaluation strategies as part of the PHEP cooperative agreement, with a primary emphasis on program improvement and accountability.

Evaluating awardee performance provides critical information needed to report on how well this federal investment in preparedness has improved the nation's ability to prepare for, and respond to, public health emergencies. Working in close collaboration with internal and external subject matter experts (SMEs), PHEP awardees, national partner organizations, and federal partners such as the Department of Health and Human Services (HHS), Office of the Assistant Secretary for Preparedness and Response (ASPR), ASEB has developed performance measures that enable CDC and its PHEP awardees to:

- Support **program improvement** and **technical assistance** by identifying gaps and areas in need of improvement and tracking performance over time
- Monitor, for **accountability** purposes, the extent to which awardees are able to demonstrate acceptable levels of performance for specific public health preparedness capabilities
- Report **awardee accomplishments and performance** in publications such as CDC's State-by-State Preparedness Reports

Primer on Evaluation

This section provides basic information on evaluation concepts that can lay the foundation for effective performance measurement.

What is evaluation?

Evaluation can be thought of – in simple terms – as collecting, analyzing, and ultimately using data to make decisions.[1] **Program evaluation** entails collecting and analyzing data to make decisions about a program or aspects of a program, that is, a set of activities typically organized with specific structures and processes to accomplish a goal. Ideally, data are collected and analyzed systematically to determine how well a program is working and why (or why not).[2]

[1] Patton, M.Q. (1982). *Practical Evaluation*. London: Sage Publications.
[2] Government Accountability Office. (January 31, 2012). Designing Evaluations 2012 Revision. Accessible at http://www.gao.gov/assets/590/588146.pdf.

Various types of program evaluation can be conducted depending on the purpose of the evaluation. Table 1 shows two common types of program evaluation that relate to the performance measures found in this guidance, *process* and *outcome* evaluation. Process evaluations range the gamut from assessing the extent to which, and how well, program activities have been implemented to determining the degree of fidelity to program requirements. Process evaluations can also focus on whether grant recipients have "done what they said they were going to do" and determine how well program activities have been performed. Outcome evaluations determine whether desired program results have been achieved, the extent to which program activities contributed to these results, and distal impacts within a population, system or other intended "target" for a program.

Table 1: Types of Evaluation

Process	• What resources or inputs are needed to meet program requirements? • What activities are being conducted? • How well are activities being conducted? • Do activities comply with program requirements? • Have grantees accomplished their stated objectives? • What outputs have been produced from the activities?
Outcome	• What results have been achieved from the program? • To what extent can results be tied to program objectives and activities? • What is the impact within a population, system or other target of a program, due (at least in part) to program activities?

Why do we conduct evaluations?

There are two primary reasons for conducting evaluations are conducted:

1. To facilitate program improvement or organizational learning
2. To demonstrate accountability to stakeholders, including funders

The U.S. Congress, federal oversight agencies, state and local legislatures, and taxpayers alike are increasingly interested in knowing the concrete results of PHEP investments, including whether jurisdictions – and the country as a whole – are better prepared to respond to public health emergencies. As PHEP funds continue to decrease, the need to articulate PHEP successes and impact grows more urgent. Data gathered through program evaluation can enable state, local, and territorial PHEP awardees to respond to requests for information from various stakeholders and provide evidence that PHEP investments are being used as intended to achieve desired outcomes.

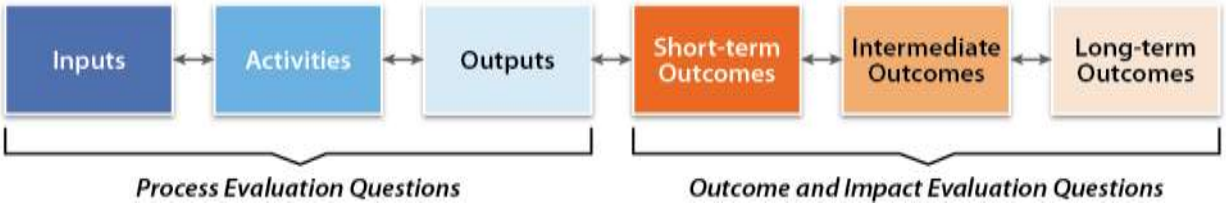
Improving program performance is equally important as demonstrating accountability. Program evaluation can help state, local, and territorial PHEP awardees to benchmark themselves in key areas, against which they can assess improvement over time. Evaluation that seeks to improve program performance tends to focus on the collection of data that organizations can use to learn about their strengths, weaknesses, and the critical chokepoints impeding optimal results.

How does logic modeling assist in program evaluation?

To evaluate a program, it is helpful to understand the connections between program resources, activities, and goals. Logic modeling is one way to display these connections. Logic models identify and propose relationships between and among program resources, activities, outputs, and outcomes.

Figure 1 provides a sample logic model followed by definitions of its components.

Figure 1: Sample Logic Model



Logic Model Components:

- **Inputs:** Resources that are required to support the program, including staff and volunteers, funding, facilities, and equipment
- **Activities:** Actions that use or involve program inputs
- **Outputs:** Products and services produced by program activities
- **Outcomes:** Changes or benefits resulting from program activities and outputs. Outcomes can be intended or unintended, positive or negative, and are often divided into short-term, intermediate, and long-term timeframes

What are the benefits of program evaluation?

The numerous benefits of program evaluation which include:

- Identifying program successes
- Identifying areas for improvement and increased efficiency
- Determining whether and how well the program or portions of the program work and why
- Increasing buy-in of staff, volunteers, collaborators, potential new partners, funders and the public through sharing information about the program
- Improving services provided through better management and monitoring [3]

Performance Measurement as an Evaluation Strategy

How does measurement link to evaluation?

Measurement is one evaluation strategy, among many others. Measures may be developed for program inputs, activities, outputs, or outcomes, depending on the level of program development and implementation and programmatic areas of interest. Historically, PHEP measures have focused on program activities and outputs, though ideally as the program and the evaluation framework matures, so too will its measures.

[3] Mattesich, P.W. (2003). *The Manager's Guide to Program Evaluation: Planning, Contracting, and Managing for Useful Results*. Saint Paul: Amherst H. Wilder Foundation.

How is measurement data used?
Just as with evaluation, measurement data can be used to facilitate program improvement and demonstrate accountability.

Program Improvement
Measures are designed to provide data to awardees and to CDC staff to enable identification of strengths, weaknesses, and areas of improvement, along with opportunities for training and technical assistance. The intended use of this measurement data is to facilitate program improvement and learning. *Most PHEP measures have an improvement component*.

Accountability
Measures are collected in compliance with specific federal requirements, statutes, or initiatives, such as the Public Health Service Act as amended by the Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA), the Government Performance and Results Act (GPRA), and the Healthy People 2020 Initiative. Data from these measures often are reported to requesting agencies and other entities, such as HHS, the White House Office of Management and Budget, and others. Data from these accountability measures will be used to provide evidence that the PHEP awardees are conforming to funding requirements and demonstrating effectiveness in public health preparedness practice. Other forms of accountability, which increasingly will be incorporated into PHEP measurement as the evidence base grows, relate to expectations, standards, and targets for performance in key areas deemed of critical for public health preparedness and response.

How are PHEP measures developed?

DSLR utilizes the following performance measure development process:

1. Review literature and existing measures.
2. Take into account existing federal requirements , statutes and initiatives.
3. Identify potential points of measurement with SMEs and program representatives.
4. Familiarize leadership with points of measurement to ensure they meet information needs and align with priorities and goals of the program.
5. Engage workgroups of SMEs, awardees, and program representatives to draft measure specifications, intent, data elements and reporting criteria.
6. Conduct pilot tests and/or desk reviews of draft measures with stakeholders (e.g., state and local PHEP awardees) to determine relevance, feasibility, and usefulness and solicit suggestions for improvement.
7. Develop final measures, implementation guidance and tools.
8. Facilitate performance measure training and technical assistance.
9. Evaluate performance measures for face validity, utility, feasibility of data collection and burden.
10. Retain, modify, or retire measures, as appropriate.

Is performance measurement always the best evaluation method?

Although much focus has been placed on measurement to date, not all aspects of the PHEP program or its capabilities are amenable to performance measurement. Some aspects may be better evaluated through methods such as descriptive questionnaires, site visits, and document review, as well as other evaluation tools and methods, such as special studies.

Overview of PHEP Measures

The PHEP *Budget Period 2 Performance Measures Specifications and Implementation Guidance* categorizes performance measures according to the following types:

- **Core public health** – measures that assess performance in the health department's critical, routine, day-to-day activities such as laboratory services, epidemiological investigations and public health surveillance.

- **Pre-incident planning** – process measures that assess crucial preparedness activities, such as identifying and coordinating with partners; defining operational roles; defining triggers for action; and identifying barriers to public health participation in response and recovery.

- **Response** – measures of performance that occur while conducting, demonstrating, or achieving a capability during an incident, planned event, or exercise.

In addition to classification by measure type, each PHEP performance measure is reportable to CDC according to one (and only one) of the following categories:

- **Annually required** applies to select measures across the three categories, above, including (but not limited to) measures that are collected for legislative and other federal requirements as well as those that measure performance in core public health services.
- Reportable **if PHEP funds are allocated** (directly or via contracts) to the associated capability (i.e., *any* amount of PHEP funding, from small allocations to sustain the capability to large allocations to build the capability). This criterion typically applies to pre-incident planning measures.
- Reportable **irrespective of allocation of PHEP funds** to the associated capability. This criterion applies to most response measures and some core public health measures.

A single incident, planned event, or exercise may be used to collect data on multiple performance measures across capabilities.

Awardees must identify the name and date of the incident, planned event, or exercise when reporting data in each capability or performance measure.

These criteria are indicated throughout the capability sections via graphics in the right-hand margin.

Reporting Requirements for PHEP Performance Measures

Each measure in this document contains information on its specific reporting requirements. Summary requirements across all measures for Budget Period 2 (including which awardees are required to report and under what circumstances) can be found in **Appendix A**. *Please note that Appendix A supersedes the information on PHEP performance measures requirements provided in the BP2 FOA Continuation Guidance.*

Table 2: Types of PHEP Measures

Type of Measure	Reporting Criteria	Exceptions / Notes
Core Public Health	Annually required (primarily)	• PHEP 12.1 depends on occurrence of incidents (otherwise no reporting required) • PHEP 12.4 is optional • PHEP 12.14 and 12.15 are required to be verified if PHEP funds are allocated towards Pulse Field Gel Electrophoresis (PFGE) activities (otherwise, no reporting required) • PHEP 13.3 and 13.4 are optional
Pre-incident Planning	Report only if allocating PHEP funds towards the capability in the Capability or Contracts Plan	In BP2, CDC will collect baseline information at mid-year for these measures.
Response	Report if incident (or exercise or planned event) utilizes the capability, irrespective of allocation of PHEP funds towards the capability	PHEP 3.1 and 3.3 as well as HPP-PHEP 6.1 are annually required.

In BP1, two types of **pre-incident planning measure** in each of several capabilities: one at the awardee level, and another at the local health department (LHD) level. In BP2, only one pre-incident measure appears in these capabilities; awardees only need to indicate at which jurisdictional level the activity is occurring (the awardee level, sub-awardee level, or both) and then report on its completion status. Regional or district entities that are part of state government are now classified at the awardee level (and are no longer considered "LHDs"). This additional flexibility is provided to ensure that measures accurately capture the variability in jurisdictional governance structures and the level at which public health activity occurs within PHEP jurisdictions.

Key Changes to PHEP Measures from BP1 to BP2

As part of its evaluation strategy, DSLR conducted an assessment of PHEP measures to determine which measures to retain, modify, or retire for BP2.

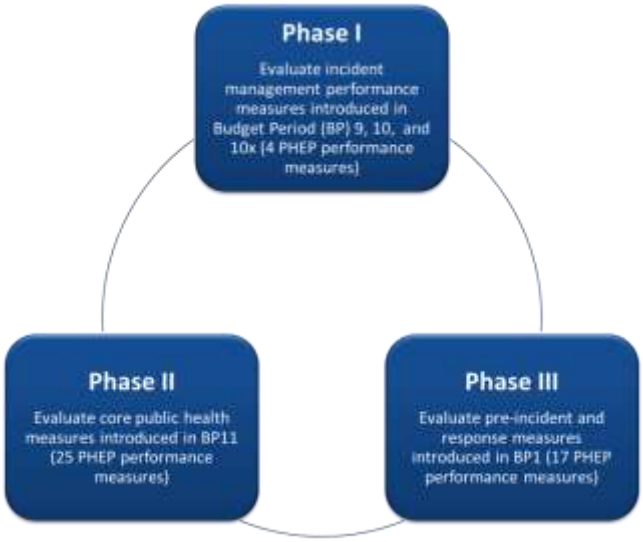
Key evaluation questions focused on the following:

- Utility of the measures as indicators of accountability and program improvement for CDC and awardees
- Relevance of the measures to public health preparedness and response
- Feasibility and burden of data collection for PHEP awardees
- Accuracy of the measures as a "snapshot" of performance for a given function or capability
- Perception of whether the measures are predictive of good emergency response
- Whether the intent of the measures is clearly understood

The performance measure evaluation project used a blended approach to assess 46 of the 47 PHEP performance measures. The Medical Countermeasures Distribution and Dispensing Composite Score was excluded from this evaluation. Also excluded were the two evaluation tools used for Capabilities 2 and 7.

The evaluation was conducted in three phases (see Figure 2). Each phase included collection and analysis of qualitative and quantitative data.

Figure 2: Phases of the PHEP Performance Measure Evaluation



Data was collected and analyzed from a myriad of sources, including PHEP awardees (via questionnaires and 1-on-1 consultations), national association stakeholders (questionnaires and group consultations), DSLR program staff (questionnaires and group consultations), and other OPHPR stakeholders (group consultations). Also analyzed were self-reported performance measure data submitted by awardees to CDC from Budget Period 9 (beginning August 2008) through mid-year of Budget Period 1 (December 2012). Findings from the evaluation were used to inform DSLR's decisions regarding performance measures for BP2.

Key Changes to PHEP Performance Measures in BP2:

- Reduction in the number of measures from 47 to 29
- Elimination of the county sampling strategy for Capabilities 1 and 13
- Surveillance measures now include jurisdiction-wide reporting
- Retirement of local level performance measures
- Retirement of all community preparedness measures and addition of a new community preparedness evaluation tool
- Modification of pre-incident planning measures to include awardee level reporting at any relevant jurisdictional level(s)
- Enhanced focus on tracking of quality improvement through addition of questions related to identification and implementation of corrective actions
- A question regarding barriers has been added to each measure containing standardized response options
- Open-ended text field provided for all measures so awardees can include any additional clarifying or contextual information as part of submission of self-reported data

A summary of the changes in PHEP performance measures from BP1 to BP2 are listed in Table 3.

Table 3: Summary of PHEP Performance Measure Modifications

Capability	PHEP Performance Measure	Retain without changes	Retain with Changes	Retire
1 Community Preparedness	1.1 Identification of Key Organizations			X
	1.2 Community Engagement in Risk Identification			X
	1.3 Community Engagement in Public Health Preparedness Activities			X
	1.4 Community Engagement in Recovery Planning			X
	Evaluation Tool - *New*			
2 Community Recovery	Evaluation Tool	X		
	3.1 Staff Assembly		X	
3 Emergency Operations Coordination	3.2 IAP			X
	3.3 AAR and IP		X	
4 Emergency Public Information Warning	4.1 Public Message Dissemination			X
5 Fatality Management	5.1 Identify Role with Partners (Awardee)		X	
	5.2 Identify Role with Partners (LHDs)			X
6 Information Sharing	6.1 Share Epidemiological/Clinical Data (Awardee)		X	
	6.2 Share Epidemiological/Clinical Data (LHDs)			X
HPP-PHEP 6.1	Information Sharing		X	
7 Mass Care	7.1 Define Role with Partners (Awardee)		X	
	7.2 Define Role with Partners (LHDs)			X
	Evaluation Tool	X		
8 Medical Countermeasure Dispensing	MCMDD Composite Score			X
9 Medical Materiel Management and Dispensing	MCMDD Composite Score			X
10 Medical Surge	N/A			
11 Non-pharmaceutical Interventions	11.2 Determine Role with Partners (LHDs)			X
	12.1 Laboratorian Reporting		X	
	12.2 24/7 Emergency Contact Drill (Bi-Directional)	X		

Capability	PHEP Performance Measure	Retain without changes	Retain with Changes	Retire
	12.3 LRN-C Emergency Response Exercise	X		
	12.4 Notification to Partners		X	
	12.5 Proficiency Testing (LRN-C Additional Methods)	X		
12 Public Health Laboratory Testing	12.6 Proficiency Testing (LRN-C Core Methods)	X		
	12.7 Sample Packing and Shipping Exercise (SPaSE)	X		
	12.8 LRN Surge Capacity Exercise			X
	12.9 Communication between PHEP-funded and Sentinel Clinical Laboratories		X	
	12.10 Notification Drill associated with Proficiency Testing			X
	12.11 Proficiency Testing (LRN-B)	X		
	12.12 Sample Quality - First Responders			X
	12.13 Specimen Quality - Sentinel Clinical Laboratories			X
	12.14 PFGE *E. coli*	X		
	12.15 PFGE *L. monocytogenes*	X		
13 Public Health Surveillance and Epidemiological Investigation	13.1 Disease Reporting		X	
	13.2 Disease Control		X	
	13.3 Outbreak Investigation Reports		X	
	13.4 Outbreak Reports with Minimal Elements		X	
	13.5 Exposure Reports			X
	13.6 Exposure Reports with Minimal Elements			X
	14.1 Deployment Safety and Health (Awardee)		X	
14 Responder Safety and Health	14.2 Deployment Safety and Health (LHDs)			X
	14.3 Screening/Out-Processing	X		
	14.4 Responder Health Outcomes	X		
15 Volunteer Management	15.1 Managing Volunteers (Awardee)		X	
	15.2 Managing Volunteers (LHDs)			X
HPP-PHEP 15.1	Volunteer Management		X	

Document Organization

The chapters in the *BP2 Performance Measures Guidance and Specifications* consist of measures and evaluation tools for 14 of the 15 public health preparedness capabilities found in CDC's *Public Health Preparedness Capabilities: National Standards for State and Local Planning, March 2011*.

The chapters are organized alphabetically and color-coded by capability. Each capability chapter follows the structure below:

1. Introduction to the capability, identification of the capability functions, and alignment of measures to capability functions
2. Detailed information and instructions to operationalize the measures
3. Key measurement terms and definitions

At the beginning of each capability section, a table demonstrates how the measures align to the capability functions (see the example in Table 4 below). Each measure may be reached from this table by clicking on the measure number in the first row. This number serves as a **hyperlink** to the selected measure. Reporting requirements for each measure and assessment tool are clearly indicated with bold font and check boxes in the following table.

Table 2: Example Reporting Requirements Table

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☐ States	☐ Annual Reporting	☐ Incident	☐ Optional
☐ Directly Funded Localities	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

Sections within a measure are indicated by icons (Figure 3) to help users quickly identify and find relevant information.

Figure 3: Measure Section Icons

The **compass** icon indicates the *measure specification*. Depending on the type of measure, this section will identify a numerator and denominator, a start and stop time, or criteria that must be addressed.

The **bull's eye** icon indicates the *intent of a measure*. Depending on the type of measure, this may include a description of what the measure will enable health departments to know or do and/or immediate and broader programmatic aims.

The **open book** icon indicates *implementation guidance*. This section identifies any other relevant information to help awardees collect and report measure data.

The **checklist** icon indicates *reporting requirements*. This section contains any additional reporting criteria that were not identified previously in the measure.

The **gears** icon indicates *data elements*. This section contains all questions that should be answered and reported to CDC.

Within the measures, terms that appear in **bold** font are hyperlinked to a definition. To access the definition, press CTRL and click + on the text.

Italic font is used to indicate emphasis.

New is used to indicate a section or data element contains significant additions or modifications since BP1.

CAPABILITY-SPECIFIC PERFORMANCE MEASURES

1. Community Preparedness

Introduction

The Community Preparedness (CP) capability represents a set of core public health activities related to community resilience. Homeland Security Presidential Directive 21 (HSPD-21), released in 2007, defines community resilience as the following:

"Where local civic leaders, citizens and families are educated regarding threats and are empowered to mitigate their own risk, where they are practiced in responding to events, where they have social networks to fall back upon, and where they have familiarity with local public health and medical systems, there will be community resilience that will significantly attenuate the requirement for additional assistance."

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Determine risks to the health of the jurisdiction**
2. **Build community partnerships to support health preparedness**
3. **Engage with community organizations to foster public health, medical, and mental/behavioral health social networks**
4. **Coordinate training or guidance to ensure community engagement in preparedness efforts**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4
Eval Tool	●	●	●	
PHEP 1.1	RETIRED	-	-	-
PHEP 1.2	RETIRED	-	-	-
PHEP 1.3	RETIRED	-	-	-
PHEP 1.4	RETIRED	-	-	-

Evaluation Tool - *New*

This instrument is intended to be completed by the awardee health department.

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting***	☐ Incident	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

**BP2 reporting required at mid-year, with opportunity to update at end-of-year*

Awardee Level

The following questions apply only to the awardee health department.

1. Has the awardee health department completed a Jurisdictional Risk Assessment (JRA)? [Yes/No]
2. As part of the JRA process, has the awardee health department completed the following: [Yes/No]
   - ☐ Identified and prioritized hazards in the jurisdiction
   - ☐ Identified vulnerabilities to the public health system in the jurisdiction
   - ☐ Identified vulnerabilities to the healthcare/medical system in the jurisdiction
   - ☐ Identified vulnerabilities to the **mental/behavioral health** system in the jurisdiction
   - ☐ Identified the size and geographic distribution of at-risk populations? (collaboration and utilization of other agencies' data is encouraged)
   - ☐ Identified the functional needs of at-risk populations? (collaboration and utilization of other agencies' data is encouraged)
3. Has the awardee compared JRA findings against current resources and plans in order to *identify and prioritize gaps* in preparedness and response planning? [Yes/No]
4. Has the awardee developed and incorporated strategies to address identified gaps and mitigate risks (based on JRA) in its current preparedness and response planning?
   - ☐ Developed strategies to address identified gaps and mitigate risks
   - ☐ Incorporated these strategies into planning
   - ☐ No
5. Has the awardee incorporated at-risk population information, including identified functional needs, into its plans (or updated this information, if previously completed)? [Yes/No]
6. Which, if any, of the following two items is the awardee health department responsible for? (If only autonomous (non-state operated) local entities, such as LHDs, etc., are responsible for these activities, please do not check boxes here)
   - ☐ Identification and prioritization of **key community partners** to engage in preparedness and response planning efforts
   - ☐ Participation/collaboration in healthcare coalitions
7. For each selected item, above, has the awardee completed it (or updated it, if completed previously)? [Yes/No]
8. Did the awardee health department participate in the jurisdiction's THIRA process? [Yes/No] (Participation refers to meaningful engagement such as serving on committees or workgroups for the THIRA, contributing language to the document, clearing certain information for release, providing subject-matter expertise on content, etc.)
9. Has the jurisdiction's **Emergency Management**/ Homeland Security agency participated in, or contributed to, the awardee's most recent JRA process? [Yes/No]
10. Has the awardee health department included the following agencies in its preparedness and response planning? (Select yes or no for each of the following)?
    - ☐ Department of Education
    - ☐ Emergency Management
    - ☐ Environmental Health Agency*

- ☐ Human Services*
- ☐ Law Enforcement
- ☐ Medical Examiner*
- ☐ Mental Health Agency*
- ☐ State Hospital Association
- ☐ State Office on Aging or equivalent*
- ☐ Transportation Agency

** Check box irrespective of whether this agency/entity is within or outside the health department so long as the awardee has included it in preparedness and response planning*

11. Please list the top 3 to 5 programs within the health department with which the awardee has partnered in order to reach prioritized at-risk populations? (e.g., chronic disease, community health, HIV, TB, etc.) [Text box]
12. To what extent has the awardee undertaken **pre-incident recovery planning** for the restoration of services, providers, facilities, and/or infrastructure with relevant agencies and partners?
    - ☐ Have not begun planning process
    - ☐ Have begun planning process
    - ☐ Completed planning

Local-level Questions (applicable to state awardees only)

Only select choice(s), below, if sub-awardees and/or relevant local level entities have been funded or are otherwise expected by the awardee to address and complete the selected items.

13. Which of the following items are sub-awardees and/or relevant local-level entities responsible for?
    - ☐ Identification of hazards in the local jurisdiction
    - ☐ Identification of vulnerabilities to the public health, healthcare/medical, and/or mental/behavioral health systems in the local jurisdiction
    - ☐ Identification of current resources and plans to mitigate or respond to identified hazards and vulnerabilities
    - ☐ Identification of the size and geographic distribution of at-risk populations? (utilization of other agencies' data is encouraged)
    - ☐ Identification of the functional needs of at-risk populations? (utilization of other agencies' data is encouraged)
    - ☐ Identification and prioritization of key community partners to engage in preparedness and response planning efforts
    - ☐ Participation/collaboration in healthcare coalitions
14. For each selected item, above, have sub-awardees and/or relevant local-level entities completed this item (or updated it, if completed previously)? [Yes/No] **Answer 'yes' only if all local entities funded, or otherwise expected to do this work, have completed it.**

Additional Questions

1. Please indicate any barriers to development or utilization of a JRA, identification of at-risk populations or other aspects related to community preparedness. [Select all that apply]
    - ☐ Communication
    - ☐ Equipment
    - ☐ Funding
    - ☐ Participation
    - ☐ Policies/procedures
    - ☐ Resource limitations
    - ☐ Staffing
    - ☐ Time constraints
    - ☐ Training
    - ☐ Other, please specify
    - ☐ None
2. (Optional) Please provide any additional contextual, clarifying, or other information.

Key Measurement Terms

Emergency management: Federal, state, and non-governmental organizations in the area of emergency management, homeland security, and first responders. Examples include the local emergency management agency, relevant tribal entities involved in emergency services or emergency management, the state emergency management agency, federal entities such as Federal Emergency Management Agency (FEMA) and other components of the U.S. Department of Homeland Security, the Medical Reserve Corps (MRC), Citizen Corps groups, Community Emergency Response Teams (CERTs), and others. This sector also includes traditional first responder groups including fire, police, and emergency medical services, as well as local public works agencies and nonprofit utility companies (e.g., city/county utilities, energy, water, and sanitation), and tribal utility authorities that may respond to an incident and/or provide services critical for an effective response.

Leaders from this sector may include emergency managers or their deputies; chiefs and assistant chiefs for divisions such as special operations, hazardous materials and fire suppression; state police, city police and county sheriffs involved in large-scale planning events; special weapons and tactics supervisors; directors and supervisors of emergency medical services; and senior-level public works administrators. Please note that to the extent that this sector covers public safety (e.g., police and sheriffs) it implies engagement to ensure incarcerated individuals are appropriately included in relevant public health preparedness efforts.

Mental/behavioral health: Organizations in the public or private sector that provide services related to supporting or enhancing the emotional/mental/behavioral well-being of individuals, families, and communities including state and local mental health authorities, community mental health facilities, Veterans' Administration (VA) hospitals and clinics, and the mental/behavioral health units of organizations including hospitals, Indian Health Services facilities, and academic institutions.

This sector also includes nonprofit service providers and private practice settings where professionals including psychologists, psychiatrists, social workers, and licensed counselors provide mental/behavioral health services. Leaders in this sector may serve on disaster planning and response committees within their local, state, or national professional organizations.

Emergency operations and response plans: Emergency operations and response plans are written plans that identify key organizations policies, procedures, and organizational structure for implementation during and following an incident. Continuity of operations plans (COOP) are also within scope for this element.

Key Community Partners: A key community partner is an entity, group, agency, club, business, or professional association, as well as an individual service provider that public health deems critical typically in accordance with one or more of the following criteria.

- The entity is expected to provide health and human services (e.g., food, shelter/housing, social services, and mental/behavioral health services) to vulnerable or at-risk populations in the context of a significant disaster or public health emergency.
- The entity is an essential vehicle for community outreach, information dissemination, or other similar communications with vulnerable and hard-to-reach populations, as well as the general public, during response or recovery following an incident. Such key organizations may fit within one or more of the 11 community sectors (e.g., the media, community leaders, cultural and faith-based organizations, businesses) noted in CDC's Public Health Preparedness Capabilities: National Standards for State and Local Planning document (March 2011).
- The entity is or would be an essential primary partner in a jurisdictional disaster or public health emergency response in terms of emergency operations, resource sharing, provision of goods or services, or surge capacity.
- Representation in the Incident Management Structure (e.g., the emergency operations center) or other type of formal integration into an LHD's response to a public health emergency.

Key community partners are often characterized as:

- Having a significant footprint or service area in a community (e.g., hospitals, television/radio stations, food banks, or the local emergency management agency)
- High-volume or throughput in terms of goods or services provided (e.g., high-volume food providers and distributers [businesses]; low-income or publicly funded housing organizations; or shelters)
- Serving hard-to-reach, vulnerable, or at-risk populations (e.g., multi-service community- or faith-based organizations)
- Historically significant institutions, or key figures/icons, within a community, often with significant influence within one or more cultural or affinity groups (e.g., community leaders and cultural and faith-based organizations)
  Providers of narrow or unique, but critical, services to the community (e.g., media outlets, hospitals)

Pre-incident recovery planning (Jurisdictional or Community): Pre-disaster recovery planning describes the establishment of processes and protocols, prior to a disaster, for coordinated post-disaster recovery planning and implementation through engagement between public health and key partners and sectors – including emergency management, healthcare providers, community leaders, media, businesses, service providers for at-risk populations, and more. (Definition adapted from the National Disaster Recovery Framework).

2. Community Recovery

Introduction

This capability includes activities related to the recovery of public health, medical, and mental/behavioral health systems and services, including planning, advocacy, collaboration, and monitoring by health departments and community partners. These activities enable public health to prepare for alternative delivery and continuity of services during response and recovery operations as well as to plan for the restoration of impacted services.

The community recovery evaluation tool included in this section is designed to capture *descriptive* information about a health department's response and recovery activities – as a means to better understand how health departments, and systems of public health, medical, and mental/behavioral health services, recover after major disasters. The tool primarily focuses on response and recovery planning, service disruption and restoration, and risk communication.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Identify and monitor public health, medical, and mental/behavioral health system recovery needs**
2. **Coordinate community public health, medical, and mental/behavioral health system recovery operations**
3. **Implement corrective actions to mitigate damages from future incidents**

Alignment of Evaluation Tool to Capability

	Function 1	Function 2	Function 3
Evaluation Tool	●	●	

Evaluation Tool

This instrument is intended to be completed by any state or local health department(s) within the awardee jurisdiction involved in response and recovery of some aspect of the public health, medical, or mental/behavioral health system. However, the awardee will always be responsible for submitting these data to CDC.

Tool Applies To:	Circumstances for Reporting:	Data May Be Taken From	Other Considerations:
☑ **States**	☐ Annual Reporting	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ **Territories or Freely Associated States (Puerto Rico only)**	☑ **If Emergency Response Required Use of this Capability, Regardless of Funding**	☐ Planned Event	☐ Data Collected By

Incident Categorization

1. Type of incident: [Select all that apply]
   - ☐ Extreme weather (e.g., heat wave, ice storm)
   - ☐ Flooding
   - ☐ Earthquake
   - ☐ Hurricane/tropical storm
   - ☐ Hazardous material
   - ☐ Fire
   - ☐ Tornado
   - ☐ Biological hazard or disease, please specify
   - ☐ Radiation
   - ☐ Other, please specify
2. Health-related outcomes, if known
   - Number of injured
     - Number of injured ≤ 18 years
   - Number of ill (physical, mental/behavioral)
     - Number of ill ≤ 18 years
   - Number of exposed (biological, chemical, radiological)
     - Number of exposed ≤ 18 years
   - Number of fatalities
     - Number of fatalities ≤ 18 years
       - Please indicate whether these are estimates or exact. [Select one]
       - Please describe how these data were collected.
3. Name and date of the incident.
4. Approximate duration of recovery in days (please define start and stop dates, and indicate if ongoing)
   - ☐ Indicate if recovery is ongoing [Yes/No]
     a. If no, indicate approximate end date of recovery
5. Was a public health emergency declared by any authorized official for the impacted area? [Yes/No]
6. What type of disaster declaration was made? [Select one]
   - ☐ None
   - ☐ Local
   - ☐ State-Gubernatorial
   - ☐ Federal-Presidential
   - ☐ Other, please specify
7. Which county/counties were directly impacted by the incident?
8. How many local (i.e., county, district, regional, city, etc.) health departments will you be reporting recovery data on?

Health Department Information (repeat for each reporting health department)

1. What is the name of this health department?
2. This health department is: [Select one]
   - ☐ The awardee health department
   - ☐ A local/district/regional/municipal health department that is a unit of state government
   - ☐ A local/district/regional/municipal health department that is a unit of local government
3. What routine services were provided by this health department *prior to* the incident? [Select all that apply] **NOTE: For subsequent questions that state "Select all that apply" (when no list is provided), please reference the following list.**
   - ☐ Disease prevention
   - ☐ Adult immunization provision

- ☐ Child immunization provision
- ☐ Tobacco prevention
- ☐ Population-based nutrition services
- ☐ Food safety education
- ☐ Other, please specify

☐ Primary care and clinical services
- ☐ Tuberculosis screening-/-treatment
- ☐ HIV/AIDS screening-/-treatment
- ☐ STD screening-/-treatment
- ☐ Cancer screening
- ☐ Chronic disease treatment (e.g., diabetes, cancer, heart disease)
- ☐ Oral health
- ☐ Behavioral/mental health
- ☐ Well child clinic
- ☐ Obstetrical care
- ☐ Newborn screening
- ☐ Prenatal care
- ☐ Other, please specify

☐ Epidemiology, surveillance, and monitoring
- ☐ Communicable/infectious disease surveillance (e.g., enteric, zoonotic, vaccine preventable, hepatitis)
- ☐ Environmental health surveillance
- ☐ Other, please specify

☐ Specific prevention programs
- ☐ Women, Infants, and Children (WIC)
- ☐ MSCH Home visits
- ☐ Family planning
- ☐ Early Periodic Screening, Diagnosis, and Treatment (EPSDT) Program
- ☐ Other, please specify

☐ Regulation
- ☐ Healthcare regulation
- ☐ Environmental health regulation
- ☐ Schools/daycare center inspection
- ☐ Food service establishment inspection (e.g., Licensure and permits)
- ☐ Other, please specify

☐ Other
- ☐ Data analysis
- ☐ Laboratory services
- ☐ Medical examiner/forensics
- ☐ Emergency medical services
- ☐ Wellness, health promotion, and health communications
- ☐ Health insurance
- ☐ Vital records/statistics
- ☐ Animal control
- ☐ Health disparities
- ☐ Other, please specify

Response Planning Phase

1. Did the health department have an approved or accepted/reviewed *Continuity of Operations Plan (COOP)* or similar plan prior to the incident? [Yes/No]
   a. Were mission critical services (essential functions and activities necessary to continue or be stood up during a disaster) identified in the COOP (or similar plan) *prior to* the incident? [Yes/No]
      i. If yes, what *routine* services were identified as mission critical *prior to* the incident? [Select all that apply]
      ii. What *additional* services were identified as mission critical *prior to* the incident?
      iii. Was restoration of services to vulnerable populations (such as those ≤ 18 years) a priority when identifying mission critical services? [Yes/No]
      iv. Did the health department communicate its COOP to the emergency management agency as part of the jurisdiction's planning process? [Yes/No]
   b. Was risk communication a component of the COOP (or similar plan)? [Yes/No]
   c. Did the health department train its staff on COOP roles and responsibilities in the year leading up to the incident? [Yes/No]
   d. Did the health department exercise its COOP in the year leading up to the incident? [Yes/No]
2. Prior to the incident, did the health department engage in any **jurisdictional or community pre-incident recovery planning** [e.g., with state/local emergency management]? [Yes/No]

a. If yes, which sectors were engaged as part of jurisdictional or community pre-disaster recovery planning? [Select all that apply]
   - ☐ Business
   - ☐ Community leadership
   - ☐ Cultural and faith-based groups and organizations
   - ☐ Emergency management
   - ☐ Healthcare
   - ☐ Social services
   - ☐ Housing and sheltering
   - ☐ Media
   - ☐ Mental/behavioral health
   - ☐ Senior services
   - ☐ Education and childcare settings
   - ☐ Other, please specify
   - ☐ None

b. What were the main areas of focus or outcomes of the jurisdictional or community pre-disaster recovery planning process?

c. Did the health department conduct or participate in an exercise in which recovery was an objective in the year leading up to the incident? [Yes/No]

d. Please describe the extent to which, and how, health department engagement in jurisdictional or community pre-disaster recovery planning was helpful, or not, in actual recovery-related efforts

3. Prior to the incident, did the health department engage organizations that provide public health/medical and/or mental/behavioral health services *to children* ≤ 18 years (including those with special needs)? [Yes/No]
   a. Which partners did the health department engage, and for which services?
      i. If no, briefly describe key barriers or challenges to partnering with these organizations.
4. To what extent and how has the health department and/or its partners located pediatric populations for the purpose of planning for major public health emergencies?

Response Phase

1. Which routine services were *disrupted* as a result of the incident (not including those electively stood down)? [Select all that apply]
2. Which routine services were *electively stood down* by the health department as a result of the incident? [Select all that apply]
3. Did the health department activate its COOP? [Yes/No]
   a. If yes, which mission critical (routine) services identified in the COOP did the health department provide during the response? [Select all that apply]
4. Please describe in detail additional activities/operations that were implemented or activated by the health department during the acute response phase of the incident. (Examples include, but are not limited to, activating or supporting ICS/EOC, surge, providing technical assistance, deploying responders, active surveillance, etc.).

Recovery Phase

1. Of the routine health department services *disrupted* as a result of the incident (independent of those electively stood down), which ones were restored and/or modified? [Select all that apply]
   Questions 1a and 1b are repeatable for each service.
   a. How many days after each service was disrupted was it restored and/or modified?
   b. Please describe any particular challenges or barriers in restoring/modifying the service.
2. Of the routine health department services that were *electively 'stood down"* following the incident, which ones were restored and/or modified? [Select all that apply]
   Questions 2a and 2b are repeatable for each service.
   a. How many days after each service was 'stood down" was it restored and/or modified?
   b. Please describe any particular challenges or barriers in restoring/modifying the service.
3. What key health service (public health, medical, mental/behavioral health) recovery needs were identified during and following the acute response phase of the incident?
   a. Which sectors did the health department engage to assess these needs? [Select all that apply]
      - ☐ Business
      - ☐ Community leadership

- ☐ Cultural and faith-based groups and organizations
- ☐ Emergency management
- ☐ Healthcare
- ☐ Social services
- ☐ Housing and sheltering
- ☐ Media
- ☐ Mental/behavioral health
- ☐ Senior services
- ☐ Education and childcare settings
- ☐ Other, please specify
- ☐ None

4. Briefly describe how each of these needs was met or addressed, including (if applicable) the health department's role in providing, coordinating, or assuring a service or function to meet the need identified.
5. What key health service (public health, medical, mental/behavioral health) recovery needs *related to pediatric populations* (if any) were identified during and following the acute response phase of the incident?
6. Briefly describe how each of these needs was met or addressed, including (if applicable) the health department's role in providing, coordinating, or assuring a service or function to meet the need identified.
   a. Briefly describe key barriers or challenges to meeting/addressing these needs.
7. Of the activities/operations initiated by the health department during the acute response phase, which ones have been/will be incorporated into recovery or daily operations?
8. Please describe in detail any new methods or innovations (including non-traditional public health roles) developed during the response or recovery phases to modify or adapt services to meet new needs.
9. Did other health departments (state or local) provide material or substantive assistance during the response or recovery phases of the incident? [Yes/No]
   a. If yes, which health departments provided assistance?
   b. Briefly describe types of services provided by the other health departments.
10. Did the Federal government provide material or substantive assistance during the response or recovery phases of the incident? [Yes/No]
    a. If yes, which agencies or entities provided assistance?
    b. Briefly describe types of services provided by the federal government.

Risk Communications

1. Were health-related risk communication messages disseminated by the health department to the public or targeted populations? [Yes/No]
   a. If yes, what types of messages were delivered? [Select all that apply]
      - ☐ Impact on services
      - ☐ **Service restoration**
      - ☐ Morbidity updates
      - ☐ Mortality updates
      - ☐ Food/water Safety
      - ☐ **Access and functional needs**
      - ☐ **Vector safety**
      - ☐ Hope/improvement
      - ☐ **Mental and behavioral health services**
      - ☐ Physical health services
      - ☐ **Shelter information**
      - ☐ Lost/found animals
      - ☐ Missing people
      - ☐ **Volunteer information**
      - ☐ **Self-sufficiency**
      - ☐ Normalcy
      - ☐ Collaboration/importance of working together
      - ☐ Other, please specify
   b. Please identify the audiences: [Select all that apply]
      - ☐ Children/adolescents/parents
      - ☐ Seniors
      - ☐ Women/pregnant women
      - ☐ Immigrants/non-native English speakers
      - ☐ Other individuals with access and functional needs
      - ☐ General public
      - ☐ Other, please specify

c. How were the messages disseminated? [Select all that apply]

- ☐ Face-to-face meetings (e.g., community and town hall meetings)
- ☐ TV
- ☐ Radio
- ☐ Print media (e.g., newspapers, newsletters, pamphlets, brochures)
- ☐ Billboard posting
- ☐ Internet web site posting
- ☐ E-mail
- ☐ Text messaging
- ☐ Social media (e.g., Facebook, Twitter)
- ☐ Other methods, please specify

d. What was the frequency/duration of the message dissemination?

e. Please list any barriers to message dissemination (e.g., using social media).

Additional Questions

1. *New* - Please indicate any barriers to community recovery related to the public health, medical and mental/behavioral health systems. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None

2. *New* - (Optional) Please provide any additional contextual, clarifying, or other information.

Key Measurement Terms

Access and functional needs: Access and functional needs refers to maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; live in institutionalized settings; are seniors; are children; are from diverse cultures; have limited English proficiency or are non-English speaking; or are transportation disadvantaged.

Mental and behavioral health services: Mental and behavioral health services are health services that restore and/or provide coping strategies for a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, work productively and fruitfully, and is able to make a contribution to his or her community.

Pre-incident recovery planning (Jurisdictional or Community): Pre-disaster recovery planning describes the establishment of processes and protocols, prior to a disaster, for coordinated post-disaster recovery planning and implementation through engagement between public health and key partners and sectors – including emergency management, healthcare providers, community leaders, media, businesses, service providers for at-risk populations, and more. (Definition adapted from the National Disaster Recovery Framework).

Self-sufficiency: Self-sufficiency is independence and self-reliance for health and well-being. Examples include providing tips on self-care and staying safe and secure in one's environment.

Service restoration: Service restoration refers to the re-establishment of a utility or commodity, such as water, electricity, or gas offered by a public or private entity. Service restoration can include such things as access to a hospital, clinic, or daycare services.

Shelter information: Shelter information is content describing the pertinent features and characteristics (location, access/transportation, services offered, etc.) of one or more congregate locations that houses, feeds, and provides basic services to individuals in need in the context of a disaster or other emergency.

Vector safety: Vector safety is an activity focused on the prevention of illness, exposure, and/or death in humans due to an organism (e.g., ticks, mosquitoes) that transmits a pathogen (e.g., virus, bacteria, and parasite).

Volunteer information: Volunteer information is content distributed and/or posted to solicit individuals who voluntarily undertake or render a service.

3. Emergency Operations Coordination

Introduction

Emergency Operations Coordination (EOC) is required to direct and coordinate the implementation of other public health preparedness capabilities, and is critical to public health emergency preparedness and response.

As part of the Incident Management (IM) concept, emergency operations coordination allows public health agencies to make informed, timely, and effective decisions that direct resources and personnel to adaptively address ongoing and evolving health needs arising from emergencies.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Conduct preliminary assessment to determine need for public activation**
2. **Activate public health emergency operations**
3. **Develop incident response strategy**
4. **Manage and sustain the public health response**
5. **Demobilize and evaluate public health emergency operations**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4	Function 5
PHEP 3.1		●			
PHEP 3.2	RETIRED	-	-	-	-
PHEP 3.3					●

PHEP 3.1: Staff Assembly

Time for **pre-identified staff** covering activated public health agency **incident** management lead roles (or equivalent) to report for immediate duty.

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☑ **Accountability: GPRA Measure**
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

How is the measure calculated?

Start Time: Date and time that a **designated official** began notifying staff to report for **immediate** duty to cover activated **incident management (IM) lead roles**

Stop Time: Date and time that the last staff person notified to cover an activated incident management lead role reported for immediate duty

Performance Target: Awardee-determined, but must be less than or equal to 60 minutes.

Why is this measure important?

To ensure a timely and effective response to an incident, awardees must demonstrate the ability to immediately assemble public health staff with senior incident management lead roles.

This performance measure is designed to capture the ability to assemble appropriate leadership staff, e.g., key decision-makers, to cover all of the activated incident management lead roles needed to lead and manage an agency's response. It is *not* intended to measure an awardee's ability to assemble large groups of public health staff nor is it intended to measure the awardee's ability to deploy a group of responders.

What other requirements are there for reporting measure data?

All awardees are required to submit self-reported data for this measure. Data drawn from multiple incidents and **drills** may be reported, however at least one data point *must* meet all of the following criteria *(new)*.

- **Staff assembly** must have occurred during a real incident or drill only (**planned events** and other types of exercises in which assembly is pre-planned/pre-determined are excluded)
- Staff assembly must be **unannounced** and require immediate reporting for duty
- The following six ICS/IM lead roles,* at a minimum, must be activated and filled (to be staffed according to jurisdictional plans and procedures, e.g., 1 person may fill multiple roles in certain jurisdictions):
  - Incident Commander
  - Operations Section Chief
  - Planning Section Chief
  - Logistics Section Chief
  - Finance/Administration Section Chief
  - Public Information Officer

**The Safety Officer, Liaison Officer, and any additional key ICS/IM lead roles are optional as part of this first required data point.*

Awardees that wish to report additional instances of staff assembly do *not* need to meet the criteria above (e.g., an announced planned event with four roles activated and filled would be permissible).

Awardees may not report notification or assembly of staff at other agencies, including LHDs.

Awardees may report physical or **virtual assembly** of staff (or a combination of both).

What data must be reported?

1. Date and time that a designated official began notifying staff to report for immediate duty to cover activated incident management lead roles (Start time)
2. Date and time that the last staff person notified to cover an activiated incident management lead role reported for immediate duty (Stop time)
3. Awardee-determined performance target, in minutes. (must be less than or equal to 60 minutes)
4. Was the staff assembly part of a(n): [Select one]
   - ☐ Incident*
   - ☐ Drill*
   - ☐ Exercise (Full-scale or functional)
   - ☐ Planned Event

   **At least one instance of reporting for this measure must be drawn from an incident or unannounced drill (requiring immediate assembly) only*
5. Name and date of the incident or drill.
6. If applicable, type of incident. [Select all that apply]
   - ☐ Extreme weather (e.g., heat wave, ice storm)
   - ☐ Flooding
   - ☐ Earthquake
   - ☐ Hurricane/Tropical Storm
   - ☐ Hazardous Material
   - ☐ Fire
   - ☐ Tornado
   - ☐ Biological hazard or disease, please specify
   - ☐ Radiation
   - ☐ Other, please specify
7. Was this incident/drill unannounced?
8. Staff notification method(s) used. [Select all that apply]
   - ☐ Telecommunications (cell phone, land line, text message, etc.)
   - ☐ E-mail
   - ☐ Rapid notification system
   - ☐ Pager
   - ☐ Other, please specify
9. Was staff assembly virtual, physical, or a combination? [Select one]
   - ☐ Virtual
   - ☐ Physical
   - ☐ Combination
10. If not a drill, did your agency act in a **lead** or an **assisting** role?
11. IM lead roles (or equivalent lead roles) activated at the time of initial notification. [Select all that apply]
    - ☐ Incident commander*
    - ☐ Public information officer*
    - ☐ Operations section chief*
    - ☐ Planning section chief*
    - ☐ Logistics section chief*
    - ☐ Finance/Administration section chief*
    - ☐ Safety officer
    - ☐ Liaison officer
    - ☐ Additional lead roles, please specify

    **Filling this role is required to have been filled in at least one incident or drill (i.e., all six asterisked roles in the same incident or drill)*
12. Number of staff who reported for duty to cover activated IM lead roles
    a. *New* - Of these, number of staff that had completed jurisdictionally-required training for their respective roles.
13. *New* - Over the course of the *entire* incident/drill, were all activated roles continuously staffed? (do not include permissible down time, such as overnight, etc.) [Yes/no]
14. *New* - Continuous Quality Improvement:
    a. Were relevant corrective actions / improvement plan items from *prior responses* (including exercises, drills, etc.) related to staff assembly incorporated into

planning and/or response procedures before this incident/drill took place?

b. Have corrective actions/improvement plan items related to staff assembly been identified as a result of this incident/drill?
   i. Have they been implemented? [Yes/Some/No]

15. *New* - Please indicate any barriers to staff assembly. [Select all that apply]

- ☐ Communication
- ☐ Equipment
- ☐ Funding
- ☐ Participation
- ☐ Policies/procedures
- ☐ Resource limitations
- ☐ Staffing
- ☐ Time constraints
- ☐ Training
- ☐ Other, please specify
- ☐ None

16. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Incident management lead role: For the purposes of reporting data for this performance measure, the generic term "incident management lead role" refers to senior ICS functions or roles in an awardee health department, including command and general staff (see Key Terms section at end of this Capability chapter).

Not all lead roles will be activated for a given response. Also, some agencies may use different titles for equivalent roles.

Unannounced criteria: In terms of PHEP 3.1, unannounced assembly may include slow-onset incidents (such as hurricanes and other storms, infectious disease outbreaks, etc.) as long as the awardee does not pre-determine, and subsequently communicate to staff before official notification, when assembly will occur.

A key exception to this parameter is that staff may be provided possible assembly scenarios/times as part of prudent anticipatory planning for a slow-onset incident.

Example: A slow-moving hurricane is expected to make landfall in five days. The health department decides the operations center will open at 0800 the next morning and that formal staff notification and assembly will commence at that time. If advance notice of assembly is conveyed to staff the previous day, this incident *cannot be counted* towards the one required incident or drill for this measure staff assembly must be unannounced. If the incident commander indicates to staff that they may need to activate in the next 24 hours, and notification subsequently occurs at a time previously unknown to the staff, then this incident *may count* towards the one required incident or drill for this measure in which staff assembly must be unannounced.

Up-to-date contact list for pre-identified staff: Since rapid notification of staff depends on maintaining accurate contact information for pre-identified staff, awardees should keep a complete list of contact information for all public health personnel with IM lead responsibilities. Awardees should update this list at least once every six months and record the date of each update.

PHEP 3.3: AAR and IP

Time to complete a draft of an **After Action Report (AAR) and Improvement Plan (IP)**

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☑ **Accountability: HP2020 Measure**
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of Capability, Regardless of Funding	☑ **Planned Event**	☐ Data Collected By

How is the measure calculated?

Start Time: Date exercise or public health emergency operations completed

Stop Time: Date the draft AAR and IP were submitted for **clearance** within the public health agency

Why is this measure important?

Through the use of after-action reporting and improvement planning, awardees must demonstrate the capability to analyze real or simulated response actions, describe needed improvements, and prepare a plan for making improvements within an acceptable timeframe.

What other requirements are there for reporting measure data?

Awardees are encouraged to report data from multiple incidents and exercises. However, awardees are required to report data on their one best demonstration of an AAR and IP drafted during the budget period. This AAR and IP must have been drafted as a result of one of the following:

- **Tabletop exercise**
- Drill
- **Functional exercise**
- **Full-scale exercise**
- Incident
- Planned event

While the exercise, planned event, or incident can have occurred either prior to or during the budget period, the AAR and IP submission date must fall within the budget period.

What data must be reported?

1. Date exercise or public health emergency operations completed (Start time)
2. Date the draft AAR and IP were submitted for clearance within the public health agency (Stop time)
3. Type of incident. [Select one]
   - ☐ Tabletop exercise
   - ☐ Drill
   - ☐ Functional exercise
   - ☐ Full-scale exercise
   - ☐ Incident
   - ☐ Planned event
4. Name and date of the incident/planned event/exercise.
5. The type of incident/exercise/planned event. [Select all that apply]
   - ☐ Extreme weather (e.g., heat wave, ice storm)
   - ☐ Flooding
   - ☐ Earthquake
   - ☐ Hurricane/Tropical Storm
   - ☐ Hazardous Material
   - ☐ Fire
   - ☐ Tornado
   - ☐ Biological hazard or disease, please specify
   - ☐ Radiation
   - ☐ Other, please specify
6. Did your agency act in a lead or an assisting role? [Yes/No]

7. Date AAR and IP were approved by the public health agency.
8. Was this your quickest time? [Yes/No]
9. Please indicate any barriers to completion of an AAR and/or IP in a timely manner. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
10. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Not applicable

Key Measurement Terms

Acting in an assisting role: If the public health agency supports another agency in the response and / or recovery from an incident, either simulated or real, but is not responsible for the overall coordination of responding agencies and resources, the public health agency is considered to act in an assisting role during the response. For example, *if the awardee participated in an exercise led by the state emergency management agency, and the awardee had responsibility for drafting either its own AAR and IP or a portion of a larger AAR and IP for the entire exercise, the public health agency's draft AAR and IP (or portion drafted by the public health agency) can be reported for this measure*.

Acting in a lead role: If the public health agency assumes primary responsibility for managing the response and/or recovery to an incident, either simulated or real, including the coordination of resources in order to respond to an incident in an efficient manner, the public health agency is acting in a lead role.

After Action Report (AAR) and Improvement Plan (IP): After action reports and improvement plans are the main products of the evaluation and quality improvement process for both exercises and real incidents. The AAR captures observations of an exercise and makes recommendations for post-incident or post-exercise improvements.

The IP identifies specific corrective actions, assigns them to responsible parties, and establishes target dates for their completion. The report should include how response operations did and did not meet objectives, recommendations for correcting gaps or weaknesses, and a plan for improving response operations (NIMS, Aug 2007).

Clearance: Clearance is a process used to approve and finalize AARs and IPs. "Clearance" depends on accepted practice in the public health agency. It does not have to be a formalized process involving upper level management. For example, submission for review of the AAR and IP to an exercise director or emergency preparedness director would count as clearance as long as there is a written AAR and IP and documentation of the date that person receives the AAR and IP.

In this example, the stop time for this measure (PHEP 3.3) would be when the AAR and IP draft was submitted to the exercise director or preparedness director. If the person who clears the AAR and IP draft is the same person who drafts it, then the stop time is the time at which that person determines that the AAR and IP draft is complete. Ultimately, this measure should be applied to the specific circumstances and clearance policies and procedures of each jurisdiction.

Designated official: The designated official is any individual in the health department who has the authority to take appropriate action on behalf of the agency (e.g., decide to activate incident management roles).

Drill: A drill is a coordinated, supervised activity usually employed to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Drills are considered operations-based exercises.

Full-scale exercise (FSE): A full-scale exercise is a multi-agency, multi-jurisdictional activity involving actual deployment of resources in a coordinated response as if an incident had occurred. An FSE tests many components of one or more capabilities within emergency response and recovery, and is typically used to assess plans, procedures, and coordinated response under crisis conditions. Characteristics of an FSE include mobilized units, personnel, and equipment; a stressful, realistic environment; and scripted exercise scenarios. FSEs are considered operations-based exercises.

Functional exercise (FE): A functional exercise is a single or multi-agency activity designed to evaluate capabilities and multiple functions using a simulated response. Characteristics of an FE include simulated deployment of resources and personnel and rapid problem solving. FEs are considered operations-based exercises

Immediate: Immediate means an expectation of performance with no delay. There is an expectation that upon receipt of notification the pre-identified staff is to report for duty within 60 minutes.

Incident: For the purpose of PHEP performance measurement, an incident is any natural, technological or human-caused occurrence that requires specific mobilization and/or allocation of public health resources beyond routine, day-to-day activities. Incidents may range in size and duration, and may (but are not required to) involve partial or full activation of emergency operations (including incident command or an incident management structure), or declaration of a public health emergency.

Incident management lead roles: Incident management lead roles refer to the Command staff (incident commander, public information officer, safety officer, liaison officer) required to support the command function in an incident as well as General staff (operations section chief, planning section chief, logistics section chief, and finance/administration section chief), or their equivalent titles and/or roles, in an awardee health department.

The level of complexity and characteristics of an incident will direct the activation of certain IM lead roles. Not all lead roles will be activated for a given response. Moreover, in certain scenarios, individual staff members may cover more than one IM role at a time. Finally, it is possible that an agency may include additional personnel in key IM lead roles (e.g., chief science officer).

Planned Event: For the purpose of PHEP performance measurement, a planned event is a scheduled non-emergency occurrence (often a social event of some significance, such as a major sporting, political or other entertainment event) that entails planning and demonstration of capabilities. Planned events may range in size and duration, and may (but are not required to) involve partial or full activation of emergency operations (including incident command or an incident management structure).

Pre-identified staff: Pre-identified staff refers to personnel who are selected, in advance of an incident, to fill specified incident management roles. Contact information for public health staff with incident management roles should be maintained and updated frequently.

Staff assembly: Staff assembly refers to the convening of health department staff who have been assigned to fill incident management lead roles. Staff assembly can occur at a physical location (e.g., Department or Emergency Operations Center), virtually (e.g., through a web-based interface such as WebEOC), or a combination of both.

Tabletop exercise (TTX): Table top exercises are intended to stimulate discussion of various issues regarding a hypothetical situation. They can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the prevention of, response to, or recovery from a defined incident. During a TTX, senior staff, elected or appointed officials, or other key personnel meet in an informal setting to discuss and work through simulated situations.

TTXs are typically aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and/or achieving a change in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem-solving rather than the rapid, spontaneous decision-making that occurs under actual or simulated emergency conditions. TTXs can be breakout (i.e. groups split into functional areas) or plenary (i.e., one large group). *Data from tabletop exercises may only be reported for the EOC – AAR and IP performance measure.*

Unannounced: This term refers to staff notification or assembly without *advanced* warning or notice. See specific guidance listed previously regarding PHEP 3.1 related to incidents with slow-onset.

Virtual assembly: The use of teleconference and/or Internet-based technology to convene two or more individuals in a real-time exchange of information/ideas/thoughts, etc. to facilitate efficient decision-making. This can include, but is not limited to, teleconferencing, web-based meetings, and other types of online interactive systems and technologies in which voice and/or visual exchange of information is present. Virtual assembly does *not* include an active e-mail exchange with all parties or other types of time-delayed communications that do not allow for an immediate feedback/response discussion.

4. Emergency Public Information and Warning

Introduction

Emergency Public Information and Warning (EPIW) is a term used by CDC to describe communications with the public during an emergency. EPIW is closely related to routine risk communication in that its purpose is to provide information to the public to reduce uncertainty and inform decision making. However, the emergency conditions under which messages must be developed and disseminated impose much tighter time constraints than are generally faced during routine operations.

EPIW represents a critical leverage point in shaping the perceptions, decisions, and actions of the public, who are a key partner in preventing, preparing for, responding to, and recovering from public health emergencies. Public involvement and cooperation are required to facilitate response activities such as evacuation, sheltering in place, social distancing, and queuing at points of dispensing. EPIW can be effective in influencing how the public responds to these activities.

Note: EPIW is distinguished from tactical communication, which involves communication among responders, as well as other types of information sharing. For more information on EPIW, including training curricula and tools, go to ***http://emergency.cdc.gov/cerc/index.asp.***

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Activate the emergency public information system**
2. **Determine the need for a joint public information system**
3. **Establish and participate in information system operations**
4. **Establish avenues for public interaction and information exchange**
5. **Issue public information, alerts, warnings, and notifications**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4	Function 5
PHEP 4.1	RETIRED	-	-	-	-

5. Fatality Management

Introduction

Fatality management refers to the recovery, handling, identification, transportation, tracking, storage, and disposal of human remains, certifying cause of death, and facilitating access to mental/behavioral health services. Preparing for mass fatality incidents requires collaboration among a variety of agencies, including health departments, to help ensure a coordinated and thorough response.

The fatality management pre-incident planning measure is designed to encourage health departments to collaborate with emergency management, law enforcement, medical examiners, coroners, funeral directors, and other key partners to determine what role public health will play in managing significant numbers of fatalities – or in supporting the management of fatalities by other agencies. *It is understood that a health department's role in this capability (i.e., from no role due to legislation/regulation to a supporting role in any number of the capability functions) will vary depending on the jurisdiction*. As long as a health department determines its role in conjunction with its key partners, it has met the intent of this measure.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Determine role for public health in fatality management**
2. **Activate public health fatality management operations**
3. **Assist in the collection and dissemination of antemortem data**
4. **Participate in survivor mental/behavioral health services**
5. **Participate in fatality processing and storage operations**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4	Function 5
PHEP 5.1	●				
PHEP 5.2	RETIRED	-	-	-	-

PHEP 5.1: Identify Role with Partners

Has public health identified its roles and responsibilities in support of fatality management in relation to those of key partners (e.g., emergency management, coroners and medical examiners, and funeral directors)? [Yes/No]

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan***	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

**BP2 EXCEPTION*: *Baseline reporting required at mid-year BP2, with opportunity to update at end-of-year.*

How is the measure calculated?

This is a "yes/no" measure, which CDC calculates based on self-report by the awardee indicating whether the **responsible entity or entities** *(new)* have completed *all* of the following elements:

- Identify planning and/or response duties of public health and key partners related to fatality management
- Identify legal/regulatory authority governing fatality management in the jurisdiction (e.g., determining cause of death, identifying remains, family notification, burial permits)
- Identify critical pathways, trigger points, and circumstances leading to public health response actions
- Identify any legal waivers that would need to be in place in order to carry out public health's fatality management activities
- *Only if requested by jurisdiction's fatality management lead* (e.g., emergency management, law enforcement, state medical examiner, etc.): A **formal written agreement** for public health to support fatality management activities in the jurisdiction.

Why is this measure important?

The immediate intent of this measure is to encourage public health agencies to coordinate with leaders/officials who manage fatalities, as well as other jurisdictional partners, to develop a shared understanding of roles and responsibilities related to fatality management.

The broader programmatic intent of this measure is to ensure that key fatality management partners are able to effectively coordinate a mass fatality response, including determining cause of death, identifying human remains, collecting and communicating antemortem data, and assuring access to family assistance centers, mental/behavioral health services, and related assistance.

What other requirements are there for reporting measure data?

Not applicable

What data must be reported?

The first two questions, below, will be asked in relation to all five of the bulleted elements listed above.

1. *New* - At which jurisdictional level(s) does public health have responsibility for this element?
   - ☐ Awardee level (including awardee-led or operatated regions, districts, offices, etc.)
   - ☐ Sub-awardee or autonomous local level entities (including autonomous regions, districts, counties, LHDs, coalitions, etc.)
   - ☐ Both
   - ☐ Other (please specify)

2. *New* - Has this element been completed by the entity/entities responsible for its completion? [Yes/No] (*Please refer to the "How is this measure operationalized?" section for additional guidance)*

3. *New* - Has this capability been exercised or demonstrated (in a real incident) in this budget period?
   a. Have corrective action/improvement plan items related to fatality management been identified? [Yes/No]
   b. Have corrective action/improvement plan items related to fatality management been implemented? [Yes/Some/No]

4. *New* - Please indicate any barriers to completion of elements. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None

5. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized? - *New*

This measure is meant to address two key questions related to each of the elements identified as critical for this measure: (1) Which entity or entities is responsible for completing these elements?; and (2) Have they done so?

Awardees are encouraged to develop internal tracking and monitoring processes and tools to ensure that sub-awardees and other entities responsible for any elements in this measure are, in fact, making progress towards completion of their activities.

The awardee is responsibe for determining which entity or entities is responsible for completing an element. This can refer to the awardee's central office, its regional or district offices, local health departments, etc.

<u>All entities responsible for completion of a given element must have completed the element in order to answer "Yes" to Question 2.</u>

Example #1 (decentralized state). In this state, there are 10 autonomous LHDs (or autonomous regions/districts) in the jurisdiction, but only 5 have been funded to complete a given element for this measure.

For the awardee to enter "Yes" on Question 2 for that element, the 5 LHDs (not 10) must have completed it. If the awardee itself was responsible for completion of a different element, it could only enter "Yes" on Question 2 for its element once it has been completed by the awardee.

Example #2 (centralized state with 8 regional or district offices). In this state, the awardee has determined that the main office and 4 of its 8 regional offices will be responsible for addressing all the elements for this measure in this budget period. The awardee will determine when it and these 4 regional offices have satisfactorily completed the element.

Once the main office and the 4 regional offices have done so, the awardee may enter "Yes" on Question 2 for those elements. If, in this example, the awardee main office is the only entity responsible for completing an element (i.e., it does not assign any responsibility to any of its regions), then it may enter "Yes" once it (the main office) has completed the element.

Example #3 (Directly funded city). In this hypothetical example, the directly funded city is the only entity responsible for all the elements for this measure. Therefore it does not need to track sub-awardees or autonomous local level entities. The city awardee will be able to enter "Yes" to Question 2 for each of the elements as it completes them.

Key Measurement Terms

Formal written agreement: A document between two or more parties that contains specific binding obligations or expectations that each involved party must attain. Examples of formal written agreements include the following:

- Contracts
- Emergency Operations Plans (EOP) and annexes, which describe roles and responsibilities of jurisdictional agencies
- Letters of Agreement
- Memoranda of Agreement (MOA)
- Memoranda of Understanding (MOU)
- Mutual Aid Agreements
- Any other official document which describes the role of public health and carries with it an expectation that public health will undertake certain fatality management-related activities.

Responsible entity or entities: A responsible entity or entities refers to an organization at the awardee or sub-awardee level that is accountable for completing the specific activity or element associated with one or more PHEP performance measures.

Awardee-level entities typically include the awardee central office and, in some states, regional or district (state-operated) offices.

Sub-awardee entities usually refer to autonomous regional, district or local health departments (LHDs). Occasionally this may also refer to local boards of health, coalitions, or other types of organizations.

6. Information Sharing

Introduction

The Information Sharing capability refers to the exchange of information among federal, state, local, territorial, and tribal governmental agencies and their key partners. Sharing information and maintaining situational awareness are essential for routine activities, as well as during an incident, so that leaders can make timely and informed decisions, including the appropriate allocation of resources.

The information sharing pre-incident planning measure gauges the extent to which health departments can "push" basic epidemiological and/or clinical data to healthcare organizations (HCOs) by determining whether points of contact, minimum sets of data elements, and processes to share data have been identified and communicated. The joint HPP-PHEP information sharing performance measure is designed to assess whether requests for information from the public health and medical lead to local partners are fulfilled in a timely manner.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Identify stakeholders to be incorporated into information flow**
2. **Identify and develop rules and data elements for sharing**
3. **Exchange information to determine a common operating picture**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3
PHEP 6.1	●		●
PHEP 6.**2**	RETIRED	-	-
HPP-PHEP 6.1			●

PHEP 6.1: Share Epidemiological/Clinical Data

Can public health share basic epidemiological and/or clinical data with relevant healthcare organizations? [Yes/No]

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan***	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

* *BP2 EXCEPTION: Baseline reporting required at mid-year BP2, with opportunity to update at end-of-year.*

How is the measure calculated?

This is a "yes/no" measure, which CDC calculates based on self-report by the awardee indicating whether the **responsible entity or entities** *(new)* have completed *all* of the following elements:

- Identified all relevant healthcare organizations (HCOs) with which it plans to share data
- Identified a position or specific point of contact for all relevant HCOs
- Identified a minimum set of data elements that would need to be shared with relevant HCOs
- Identified a platform or process to share data with relevant HCOs

Why is this measure important?

The immediate intent of this measure is to capture the extent to which public health agencies coordinate with the HCOs with which they would need to share data and have dedicated points of contact at these organizations. The measure is also designed to ensure that public health departments have pre-identified and communicated a minimum set of data elements (corresponding with prioritized hazards and risks in the jurisdiction), as well as processes they would use to share these data with HCOs.

A broader programmatic aim is to ensure that relevant HCOs are able to receive basic epidemiological and/or clinical data they would need to make surge-related decisions (e.g., patient diversions and changes in treatment modalities).

What other requirements are there for reporting measure data?

Not applicable

What data must be reported?

The first two questions, below, will be asked in relation to all four of the bulleted elements listed above.

1. *New* - At which jurisdictional level(s) does public health have responsibility for this element?
   - ☐ Awardee level (including awardee-led or operatated regions, districts, offices, etc.)
   - ☐ Sub-awardee or autonomous local level entities (including autonomous regions, districts, counties, LHDs, coalitions, etc.)
   - ☐ Both
   - ☐ Other (please specify)
2. *New* - Has this element been completed by the entity/entities responsible for its completion? [Yes/No] (*Please refer to the "How is this measure operationalized?" section, below, for additional guidance)*
3. Which types of HCOs have been identified for each element? *(Select all that apply)*
   - ☐ Hospitals
   - ☐ Long-term care facilities
   - ☐ Community health centers
   - ☐ Other, please specify

4. *New* - Has this capability been exercised or demonstrated (in a real incident) in this budget period?
    a. Have corrective action/improvement plan items related to information sharing been identified? [Yes/No]
    b. Have corrective action/improvement plan items related to information sharing been implemented? [Yes/Some/No]

5. *New* - Please indicate any barriers to completion of elements. [Select all that apply]
    - ☐ Communication
    - ☐ Equipment
    - ☐ Funding
    - ☐ Participation
    - ☐ Policies/procedures
    - ☐ Resource limitations
    - ☐ Staffing
    - ☐ Time constraints
    - ☐ Training
    - ☐ Other, please specify
    - ☐ None

6. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized? - *New*

This measure is meant to address two key questions related to each of the elements identified as critical for this measure: (1) Which entity or entities is responsible for completing these elements?; and (2) Have they done so?

Awardees are encouraged to develop internal tracking and monitoring processes and tools to ensure that sub-awardees and other entities responsible for any elements in this measure are, in fact, making progress towards completion of their activities.

It is the awardee's responsibility to determine which entity or entities is responsible for completing an element. This can refer to the awardee central office, its regional or district offices, local health departments, etc.

All entities responsible for completion of a given element must have completed the element in order to answer "Yes" to Question 2, above.

Example #1 (decentralized state). In this state, there are 10 autonomous LHDs (or autonomous regions/districts, etc.) in the jurisdiction, but only 5 have been funded to complete a given element for this measure.

For the awardee to enter "Yes" on Question 3 for that element, the 5 LHDs (not 10) must have completed it. If the awardee itself was responsible for completion of a different element, it could only enter "Yes" on Question 3 for its element once it has been completed by the awardee.

Example #2 (centralized state with 8 regional or district offices). In this state, the awardee has determined that the main office and 4 of its 8 regional offices will be responsible for addressing all the elements for this measure in this budget period. The awardee will determine when it and these 4 regional offices have satisfactorily completed the element.

Once the main office and the 4 regional offices have done so, the awardee may enter "Yes" on Question 3 for those elements. If, in this example, the awardee main office is the only entity responsible for completing an element (i.e., it does not assign any responsibility to any of its regions), then it may enter "Yes" once it (the main office) has completed the element.

Example #3 (Directly funded city). In this hypothetical example, the directly funded city is the only entity responsible for all the elements for this measure. Therefore it does not need to track sub-awardees or autonomous local level entities. The city awardee will be able to enter "Yes" to Question 3 for each of the elements as it completes them.

Additional information regarding intent:

Health departments are encouraged to review their JRA or other relevant planning documents to determine the hazards most pertinent to their jurisdiction. Health departments should determine the minimum set of data elements (i.e., epidemiological and clinical data) related to prioritized hazards and risks in their respective jurisdictions. Data elements may be all-hazard or scenario- or incident-specific.

Examples of basic epidemiological data include information related to person, place and time. Examples of clinical data include acuity, unusual cases, co-morbidities, adverse events, and treatment modalities.

An awardee should only answer "Yes" to Question 2, in relation to the "Identification of minimal set of data elements that would need to be shared with HCOs," if it has identified these data elements for the hazards it has prioritized in its jurisdiction. Example: An awardee has identified several hazards in its jurisdiction. Three priority hazards include: hurricanes, extreme cold, and (potentially) radiation from a nearby nuclear power plant. The health department is able to share a variety of basic clinical and epi data such as seasonal flu data, basic Health Alert Network warnings and similar information – but has not yet identified the types of information it would share for the three priority hazards listed above. Under this simplified scenario, the awardee would *not* be able to answer "Yes" to Question 2 related to identification of a minimum set of data elements until it has completed this planning work for *all priority hazards*.

HPP-PHEP 6.1: Information Sharing

Percentage of **local partners** that reported requested **Essential Elements of Information (EEI)** to the public health/medical lead within the **requested timeframe**

Measure Applies To :	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☐ Accountability
☑ **Territories or Freely Associated States**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☑ **Planned Event**	☑ **Data Collected By: HPP and/or PHEP**

How is the measure calculated?

Numerator: Number of local partners that reported requested EEI to the public health/medical lead within the requested timeframe

Denominator: Number of local partners that received a request for EEI

Why is this measure important?

The intent of this measure is to assess the extent to which local response entities communicate requested information to the public health/medical lead in order to facilitate situational awareness and the effective management of resources in a timely manner.

What other requirements are there for reporting measure data?

This measure requires submission of self-reported data. Data should be collected and reported by incident (or planned event or exercise).

New – Awardees are required to report *at least two* data points for this measure. One data point must reflect the awardee's best performance (highest percentage); the other must reflect performance which, based on a determination from the awardee, calls for focused quality improvement and – if applicable – technical assistance. Awardees are encouraged to submit data on additional incidents, planned events and exercises as well. There are no specific reporting requirements or parameters for these additional data points.

What data must be reported?

1. Number of local partners that received a request for EEI (denominator)
2. Number of local partners that reported requested EEI to the public health/medical lead within the requested timeframe (numerator)
3. The request for EEI occurred during a(n): [Select one]
   - ☐ Incident
   - ☐ Full scale exercise
   - ☐ Functional exercise
   - ☐ Drill
   - ☐ Planned event
4. Please identify the type of incident/exercise/planned event upon which the request for EEI was based: [Select all that apply]
   - ☐ Extreme weather (e.g., heat wave, ice storm)
   - ☐ Flooding
   - ☐ Earthquake
   - ☐ Hurricane/tropical storm
   - ☐ Hazardous material
   - ☐ Fire
   - ☐ Tornado
   - ☐ Biological hazard or disease, please specify
   - ☐ Radiation
   - ☐ Other, please specify
5. Name and date of the incident/planned event/exercise.

6. How many of each type(s) of local partners responded to the request?
   - ☐ Hospitals
   - ☐ Long-term care facilities
   - ☐ Community health centers
   - ☐ Healthcare coalitions
   - ☐ Local public health entities (LHDs, district or regional offices, etc.)
   - ☐ Other, please specify
7. Please identify the requesting entity (e.g., public health/medical lead at the state, sub-state regional, or local level). [Select one]
   - ☐ State public health/medical lead (or designee)
   - ☐ Sub-state regional public health/medical lead (or designee)
   - ☐ Local public health/medical lead (or designee)
   - ☐ Other, please specify
8. Please identify the types of EEI requested. [Select all that apply]
   - ☐ Facility operating status
   - ☐ Facility structural integrity
   - ☐ Status of evacuations/shelter in-place operations
   - ☐ Status of critical medical services (e.g., trauma, critical care)
   - ☐ Critical service/infrastructure status (e.g., electric, water, sanitation, heating, ventilation, and air conditioning)
   - ☐ Bed or patient status
   - ☐ Equipment/supplies/medications/vaccine status or needs
   - ☐ Staffing status
   - ☐ Emergency Medical Services (EMS) status
   - ☐ Epidemiological, surveillance or lab data (e.g., test results, case counts, deaths)
   - ☐ School-related data (closure, absenteeism, etc.)
   - ☐ POD/mass vaccination sites data (e.g., throughput, open/set-up status, etc.)
   - ☐ Other, please specify
9. Please identify the type of IT or other communication system used by local partners to report requested EEI. [Select all that apply]
   - ☐ Telecommunication (e.g., cell phone, satellite phone, land line)
   - ☐ E-mail
   - ☐ Online/web interface (electronic bed or patient tracking, survey tools, WebEOC or similar, etc.)
   - ☐ Health Alert Network
   - ☐ Other, please specify
10. *New* - Please indicate any barriers to submitting requested EEI within the requested timeframe. [Select all that apply]
    - ☐ Communication
    - ☐ Equipment
    - ☐ Funding
    - ☐ Participation
    - ☐ Policies/procedures
    - ☐ Resource limitations
    - ☐ Staffing
    - ☐ Time constraints
    - ☐ Training
    - ☐ Other, please specify
    - ☐ None
11. *New* - Continuous Quality Improvement:
    a. Were relevant corrective actions / improvement plan items from *prior responses* (including exercises, drills, etc.) related to information sharing incorporated into planning and/or response procedures before this incident/drill took place? [Yes/Some/No]
    b. Have corrective actions / improvement plan items related to information sharing been identified as a result of this incident/drill? [Yes/No]
       i. Have they been implemented? [Yes/Some/No]
12. *New*- [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

This measure can also be found in the Hospital Preparedness Program (HPP) Measure Manual: Implementation Guidance for the BP2 HPP Program Measures.

This measure intends to capture information on the communication of incident-specific public health/medical EEIs. Determination of which EEIs are to be requested or collected during a response, as well as which local entities should report the information and the timeframe in which the information should be reported, should be based on established plans, protocols and procedures, but are ultimately at the discretion of the incident commander or designee.

If large volumes of EEI are collected in an incident, it is the responsibility of the awardee to determine which of this information was "essential" – and therefore able to count towards the numerator and denominator – for this performance measure.

Key Measurement Terms

Essential Elements of Information (EEI): Essential elements of information are discrete types of reportable public health or healthcare-related incident-specific knowledge communicated or received concerning a particular fact or circumstance, preferably reported in a standardized manner or format, which assists in generating situational awareness for decision-making purposes. EEI are often coordinated and agreed upon pre-incident (and communicated to local partners) as part of information collection request templates and emergency response playbooks.

Local partners: Local partners are entities, at the local level, which receive requests for EEIs. Local partners may differ based on the type of incident/exercise/planned event (e.g., HCOs, LHDs, healthcare coalitions).

Requested timeframe: Requested timeframe is an awardee-defined period of time for receiving requested EEI (e.g., operational period, set time to meet special request, e.g., 1500 hours).

Responsible entity or entities: A responsible entity or entities refers to an organization at the awardee or sub-awardee level, which is accountable for completing the specific activity or element associated with one or more PHEP performance measures.

7. Mass Care

Introduction

The Mass Care capability includes planning for, responding to, and recovering from a public health incident requiring care for displaced or impacted individuals. In terms of public health involvement, coordinated mass care services in congregate locations are necessary to ensure that health and environmental assessments are conducted; needed public health, medical, and mental/behavioral health services are provided or referred out; and appropriate surveillance is conducted. Mass care service coordination can help reduce the risk of communicable disease transmission and ensure that the functional and access needs of individuals presenting at a congregate location are addressed, including those of children, older adults, and people with disabilities.

The Mass Care pre-incident planning measure gauges the extent to which health departments have coordinated with Emergency Support Function 6 (ESF-6) and other partners to define their roles and responsibilities with respect to mass care operations. The evaluation tool is designed to capture activities a health department conducted in congregate locations, which could include surveillance, assessments and assuring the provision of public health, medical, and mental/behavioral health services.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Determine public health role in mass care operations**
2. **Determine mass care needs of the impacted population**
3. **Coordinate public health, medical, and mental/behavioral health services**
4. **Monitor mass care population health**

Alignment of Performance Measures/Evaluation Tool to Capability

Measure	Function 1	Function 2	Function 3	Function 4
PHEP 7.1	●			
PHEP 7.2	RETIRED			
Evaluation Tool	●	●	●	●

PHEP 7.1: Define Role with Partners

Has public health defined its role in mass care operations in coordination with ESF-6 and other key partners? [Yes/No]

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan***	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

**BP2 EXCEPTION*: *Baseline reporting required at mid-year BP2, with opportunity to update at end-of-year.*

How is the measure calculated?

This is a "yes/no" measure, which CDC calculates based on self-report by the awardee indicating whether the **responsible entity or entities** *(new)* have completed *all* of the following elements:

- The health department emergency response plan identifies:
  - Public health mass care response actions (e.g., conducting pre-, ongoing, and post- shelter, health, and **environmental assessments** and monitoring; and decontamination)
  - Triggers for mass care response actions
- Identification of needed resources to carry out mass care response actions (e.g., staff, supplies, and transportation)
- Identifying local legal statutes or policies that define or inhibit public health involvement in mass care operations
- Identifying systems to communicate about the opening, location and/or closing of **congregate locations**
- Identifying tools or mechanisms to collect and receive health-related data from congregate locations
- *Only if requested by jurisdiction's mass care lead* (e.g., emergency management, etc.): A **formal written agreement** for public health to support coordinated mass care service provision in the jurisdiction

Why is this measure important?

Public health plays a critical support role in mass care operations by conducting surveillance as well as environmental, **functional needs** and other types of assessments, and providing or referring individuals to services at congregate locations. In some instances, health departments play a lead role by establishing and operating congregate locations such as medical shelters. Engaging in rigorous planning with key partners, including the identification of roles and responsibilities, is an important first step to ensure effective public health support of mass care operations.

The immediate intent of this measure is to capture the extent to which public health departments have established their role, if any, in a mass care response through engagement with ESF-6 and other key partners.

The broader programmatic aim of this measure is to ensure effective public health support of mass care operations with a particular emphasis on surveillance, various shelter and health assessment activities, and the provision of services to sheltered individuals – if requested or referred to public health.

What other requirements are there for reporting measure data?

Not applicable

What data must be reported?

The first two questions, below, will be asked in relation to all six of the bulleted elements listed above.

1. *New* - At which jurisdictional level(s) does public health have responsibility for this element?

- ☐ Awardee level (including awardee-led or operatated regions, districts, offices, etc.)
- ☐ Sub-awardee or autonomous local level entities (including autonomous regions, districts, counties, LHDs, coalitions, etc.)
- ☐ Both
- ☐ Other (please specify)

2. *New* - Has this element been completed by the entity/entities responsible for its completion? [Yes/No] *(Please refer to the "How is this measure operationalized?" section for additional guidance)*
3. *New* - Has this capability been exercised or demonstrated (in a real incident) in this budget period? [Yes/No]
   a. Have corrective action/improvement plan items related to mass care been identified? [Yes/No]
   b. Have corrective action/improvement plan items related to mass care been implemented? [Yes/Some/No]
4. *New* - Please indicate any barriers to completion of the elements. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
5. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized? - *New*

This measure is meant to address two key questions related to each of the elements identified as critical for this measure: (1) Which entity or entities is responsible for completing these elements?; and (2) Have they done so?

Awardees are encouraged to develop internal tracking and monitoring processes and tools to ensure that sub-awardees and other entities responsible for any elements in this part of state government or autonomous), other measure are, in fact, making progress towards completion of their activities.

It is the awardee's responsibility to determine which entity or entities is responsible for completing an element. This can refer to the awardee central office, its regional or district offices, local health departments, etc.

<u>All entities responsible for completion of a given element must have completed the element in order to answer "Yes" to Question 2, above.</u>

Example #1 (decentralized state). In this state, there are 10 autonomous LHDs (or autonomous regions/districts, etc.) in the jurisdiction, but only 5 have been funded to complete a given element for this measure.

For the awardee to enter "Yes" on Question 2 for that element, the 5 LHDs (not 10) must have completed it. If the awardee itself was responsible for completion of a different element, it could only enter "Yes" on Question 2 for its element once it has been completed by the awardee.

Example #2 (centralized state with 8 regional or district offices). In this state, the awardee has determined that the main office and 4 of its 8 regional offices will be responsible for addressing all the elements for this measure in this budget period. The awardee will determine when it and these 4 regional offices have satisfactorily completed the element.

Once the main office and the 4 regional offices have done so, the awardee may enter "Yes" on Question 2 for those elements. If, in this example, the awardee main office is the only entity responsible for completing an element (i.e., it does not assign any responsibility to any of its regions), then it may enter "Yes" once it (the main office) has completed the element.

Example #3 (Directly funded city). In this example, the directly funded city is the only entity responsible for all the elements for this measure. Therefore it does not need to track sub-awardees or autonomous local level entities. The city awardee will be able to enter "Yes" to Question 2 for each of the elements as it completes them.

Evaluation Tool

This instrument is intended to be completed by any state or local health department(s) within the awardee jurisdiction involved in mass care operations. However, the awardee will always be responsible for submitting these data to CDC. Health departments not involved in mass care operations are not required to complete this tool.

Tool Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☑ **If Emergency Response Required Use of this Capability, Regardless of Funding**	☐ Planned Event	☐ Data Collected By

Incident Categorization

1. Type of incident: [Select all that apply]
   - ☐ Extreme weather (e.g., heat wave, ice storm)
   - ☐ Flooding
   - ☐ Earthquake
   - ☐ Hurricane/tropical Storm
   - ☐ Hazardous material
   - ☐ Fire
   - ☐ Tornado
   - ☐ Biological hazard or disease, please specify
   - ☐ Radiation
   - ☐ Other, please specify
2. Duration of incident/response in days
3. Was a public health emergency declared by any authorized official in the impacted area? [Yes/No]
4. What type of disaster declaration was made? [Select one]
   - ☐ None
   - ☐ Local
   - ☐ State-Gubernatorial
   - ☐ Federal-Presidential
   - ☐ Other, please specify
5. Which county/counties were directly impacted by the incident?
6. How many local (e.g., county, district, regional, and city) health departments will you be reporting mass care operations data on?

Health Department Information (repeat for each reporting health department)

1. What is the name of this health department?
2. This health department is: [Select one]
   - ☐ The awardee health department
   - ☐ A local/district/regional/municipal health department that is a unit of state government
   - ☐ A local/district/regional/municipal health department that is a unit of local government

Pre-incident Planning

1. Did the health department have a pre-defined role in mass care operations? [Yes/No]
   a. If yes, please describe this role
   b. If yes, was this role defined in partnership with ESF-6 and other key partners? [Yes/No]
      i. If yes, please identify the key partners: [Select all that apply]
         - ☐ Voluntary organizations (e.g., Volunteer Organizations Active in Disasters (VOADs), faith-based organizations, non-governmental organizations)
         - ☐ Red Cross
         - ☐ Law enforcement
         - ☐ EMS
         - ☐ Media
         - ☐ Transportation
         - ☐ Local emergency management agency

- ☐ State emergency management agency
- ☐ Healthcare (e.g., hospitals, private medical providers)
- ☐ Military (e.g., National Guard)
- ☐ State or local disability services agency
- ☐ State or local social services agency
- ☐ State or local mental/behavioral health agency
- ☐ State or local education agency
- ☐ State or local parks and recreation agency
- ☐ State or local substance abuse agency
- ☐ Other partners, please specify

ii. If yes, did the health department have the lead role in establishing or operating any mass care congregate locations (i.e., general population or medical shelter)? [Yes/No]
   a. If yes, which type?
      - ☐ General population shelter
      - ☐ Medical shelter
      - ☐ Other, please specify
   b. If no, which agency led the establishment or operation of medical shelters?

iii. Please identify any barriers to coordinating with key partners: [Select all that apply]

- ☐ Lack of health department personnel due to funding issues
- ☐ Lack of health department personnel due to hiring issues
- ☐ Lack of health department contacts with key partners
- ☐ Other health department priorities
- ☐ Lack of partner availability/capacity to participate
- ☐ Lack of partner cooperation/willingness
- ☐ Lack of communication between public health and other disparate response agencies
- ☐ Legal barriers
- ☐ Other, please specify

Response

1. How many congregate locations were opened for this incident?

For <u>each</u> congregate location opened in which public health had a lead or supporting role in mass care operations, please provide the following information:

2. Type of congregate location:
   - ☐ General population shelter
   - ☐ Medical shelter
   - ☐ Combined shelter (general and medical)
   - ☐ Other, please specify
3. Total number of individuals sheltered in the congregate location
   a. Please indicate whether this is an estimate or an exact figure.
   b. Please describe how these data were collected.
      i. If unable to provide numbers for individuals sheltered, please describe the challenges or barriers to collecting this information
4. Which agency served as the lead for operations in the congregate location?
   a. If public health was the lead to establish/set-up the congregate location, please indicate the time in hours or days from request/decision to establish the shelter to actual establishment. Please define the start time (e.g., request from Emergency Management Agency) and stop time (e.g., doors open; first evacuees) used to calculate this time
      i. Please describe challenges or barriers to establishing/setting-up this shelter
5. Did public health conduct surveillance at the congregate location? [Yes/No]
   a. If yes, was surveillance conducted based on a request from the shelter operator? [Yes/No]
   b. If no, did the lead operator of the congregate location communicate health-related findings to public health (i.e., directly or via incident command)? [Yes/No]
      i. If yes, please describe types of information shared, how findings were communicated (phone, data link, etc.), and the frequency of communication.

   ii. If no, please describe barriers or challenges to receiving surveillance data.
c. Please describe the type of surveillance information collected by public health.

6. Did public health provide services to individuals at the congregate location? [Yes/No]
   a. Only if public health provided services, how many persons received services (please enter a number, state "unable to determine", or "other")?
      i. If a number is entered, how many were <18 years of age?
      ii. If other, please explain
      iii. If unable to determine, please describe the barriers or challenges to collecting this information
   b. What types of services did public health provide? [Select all that apply]
      - ☐ Medical treatment
      - ☐ Mental/behavioral health treatment
      - ☐ Referral for medical treatment
      - ☐ Referral for mental/behavioral health treatment
      - ☐ Counseling
      - ☐ Equipment
      - ☐ Supplies
      - ☐ Food/water
      - ☐ Transportation
      - ☐ Other social services/assistance
      - ☐ Other, please specify
      - ☐ None
7. Did public health conduct any assessments (other than surveillance) at the congregate location? [Yes/No]
   a. If yes, which of the following assessment did public health conduct: [Select all that apply]
      - ☐ Environmental (food, water, shelter conditions, sanitation, etc.)
      - ☐ **Access and functional needs** (e.g., disability/assistive; non-/limited English; dietary, etc.)
      - ☐ Medical (e.g., infectious disease, chronic disease, injury, etc.)
      - ☐ Mental/behavioral health needs
      - ☐ Other, please specify

   Questions 7b., 7c., and 7d. are repeatable for each assessment.
   b. Was a specific tool used to conduct the assessment? [Yes/No]
      i. If yes, please describe the specific tool(s) used?
   c. Please indicate the time in hours or days from request/decision to conduct an assessment to completion of the assessment. Please define the start time (e.g., request from operator of congregate location) and stop time (e.g., completion of visual inspection, review of all intake forms) used to calculate this time
      i. Please describe any challenges or barriers to completion of the assessment
   d. Did public health identify any deficiencies or needs through the assessment? [Yes/No]
      i. If yes, please describe the types of deficiencies identified
      ii. If yes, were the deficiencies addressed (i.e., physical correction of deficiencies, recommendations, or guidance/resources for correction)? [Yes/No]
         a. Please describe how the deficiencies or needs were addressed
         b. Please describe barriers or challenges to correcting the deficiencies
         c. Based on deficiencies noted, have corrective actions been identified for future mass care planning/operations? (Yes/No)
8. Please describe additional public health activities undertaken either at the congregate location or in support of it (e.g., deploying volunteers)
9. [Optional] Please provide any additional clarifying, contextual, or other information.

Key Measurement Terms

Congregate location: A congregate location is defined as a physical place designated to provide shelter and access to other health-related services for a population impacted by an incident. *For the purposes of measurement, congregate locations refer to those locations of which public health has knowledge and to which it has access*.

Environmental assessment: An environmental assessment is a process by which environmental- and facility-related information is collected for the purpose of evaluating and addressing facility needs during an incident (either prior to, or after, shelter set-up). Examples of environmental assessments include the examination food and water, availability of power, and presence of functioning lavatories.

Formal written agreement: A document between two or more parties that contains specific binding obligations or expectations that must be attained by each involved party. Examples of formal written agreements include the following:

- Contracts
- Emergency Operations Plans (EOP) and annexes, which describe roles and responsibilities of jurisdictional agencies
- Letters of Agreement
- Memoranda of Agreement (MOA)
- Memoranda of Understanding (MOU)
- Mutual Aid Agreements
- Any other official document which describes the role of public health and carries with it an expectation that public health will undertake certain fatality management-related activities.

Functional needs (or access and functional needs) assessment: A functional needs assessment refers to a process to determine whether sheltered individuals with specific requirements to assist with daily living and functioning have the appropriate assistance they need to remain safe, healthy, and function relatively independently in a congregate location.

In general, individuals with functional needs are able to act on their own or with specialized support. Functional needs include, but are not limited to specific services for the elderly, dietary needs, chronic medical conditions requiring durable medical equipment (e.g., oxygen tank, assistive devices, etc.) or medication (e.g., insulin), hearing and vision loss, mental/behavioral health issues, physical/cognitive/developmental disability, substance abuse, and limited English-speaking.

Responsible entity or entities: A responsible entity or entities refers to an organization at the awardee or sub-awardee level, which is accountable for completing the specific activity or element associated with one or more PHEP performance measures.

8./9. Medical Countermeasure Dispensing and Medical Materiel Management and Distribution

The Medical Countermeasures Distribution and Dispensing Composite Score has been retired.

10. Medical Surge

Introduction

The Medical Surge capability refers to the ability to provide adequate medical evaluation and care when the normal medical infrastructure of an affected community is overwhelmed.

Health departments generally assume a support and coordination role for this capability and fulfill the critical role of collecting, synthesizing, and exchanging information with response partners to support surge operations.

Capability Functions

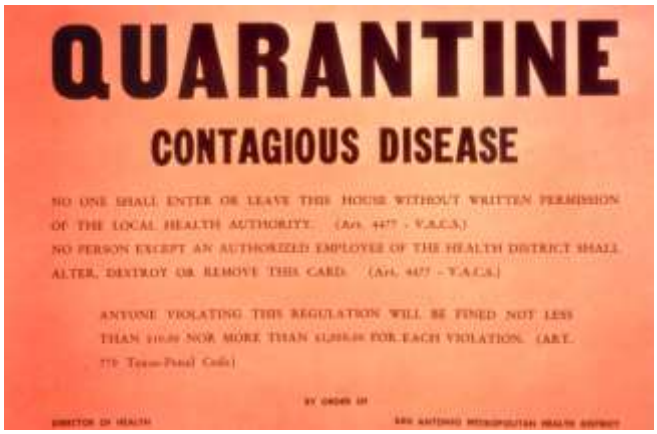
This capability consists of the ability to perform the following functions:

1. **Assess the nature and scope of the incident**
2. **Support activation of medical surge**
3. **Support jurisdictional medical surge operations**
4. **Support demobilization of medical surge operations**

There are currently no PHEP performance measures for this capability.

11. Non-pharmaceutical Interventions

Introduction



The Non-pharmaceutical Interventions (NPI) capability refers to the ability of health departments, in coordination with their partners, to recommend or implement non-drug and non-vaccine-based containment, mitigation or decontamination strategies in order to prevent or control disease, injuries, and exposures. NPIs are designed both to save lives and to alleviate the surge of individuals placing demands on the healthcare system during an emergency.

The NPI pre-incident planning measure gauges the ability of health departments to identify and collaborate with partners to define roles for the development and implementation of NPIs and to identify factors that affect NPI implementation (e.g., legal barriers or intended and unintended consequences). The NPI response measure assesses a health department's ability to bring key partners to the table to develop and/or implement an NPI at the time of an incident.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Engage partners and identify factors that impact non-pharmaceutical interventions**
2. **Determine non-pharmaceutical interventions**
3. **Implement non-pharmaceutical interventions**
4. **Monitor non-pharmaceutical interventions**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4
PHEP 11.1	●			
PHEP 11.2	RETIRED	-	-	-
PHEP 11.3	●	●	●	

PHEP 11.1: Determine Role with Partners

Has public health collaborated with legal, scientific and community partners to determine roles and responsibilities for the development and implementation of NPI recommendations? [Yes/No]

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan***	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

**BP2 EXCEPTION*: *Baseline reporting required at mid-year BP2, with opportunity to update at end-of-year.*

How is the measure calculated?

This is a "yes/no" measure, which CDC calculates based on self-report by the awardee indicating whether the **responsible entity or entities** *(new)* have completed *all* of the following elements:

Legal

- Identification of legal authorities for NPI implementation (hazard-specific)
- Identification of legal barriers to NPI implementation
- Identification of authorities able to alter legal statutes as needed

Scientific

- Identification of SMEs needed to assess the severity of exposure and/or transmission
- Identification of triggers for needing an NPI
- Development of NPI recommendations prior to incidents
- Agreement to participate in NPI recommendation development/adjustment at the time of an incident

Community

- Identification of key community organizations needed for NPI implementation (hazard-specific)
- *New* - Up-to-date contact information for each identified key community organization
- Development of written agreements or jointly developed operational plans
- Identification of **secondary factors** (e.g., those based on intended and unintended consequences) that affect NPI implementation

Why is this measure important?

Development and implementation of non-pharmaceutical interventions is made more effective through the establishment of partnerships and a determination of roles and responsibilities among a range of legal, scientific and community partners.

The immediate intent of this measure is to assess the extent to which health departments engage in pre-incident planning with partners to determine roles and responsibilities for the development and implementation of NPI recommendations.

The broader programmatic aim of this measure is to increase the likelihood that NPI recommendations will be effectively implemented in the community by ensuring that the right partners are engaged at the right time to produce the right NPI recommendations should an incident necessitating NPI arise.

What other requirements are there for reporting measure data?

Not applicable

What data must be reported?

The first two questions, below, will be asked in relation to all eleven of the bulleted elements listed.

1. *New* - At which jurisdictional level(s) does public health have responsibility for this element?
   - ☐ Awardee level (including awardee-led or operatated regions, districts, offices, etc.)

- ☐ Sub-awardee or autonomous local level entities (including autonomous regions, districts, counties, LHDs, coalitions, etc.)
- ☐ Both
- ☐ Other (please specify)

2. *New* - Has this element been completed by the entity/entities responsible for its completion? [Yes/No] (*Please refer to the "How is this measure operationalized?" section for additional guidance)*
3. *New* - Has this capability been exercised or demonstrated (in a real incident) in this budget period? [Yes/No]
   a. Have corrective action/improvement plan items related to non-pharmaceutical interventions been identified? [Yes/No]
   b. Have corrective action/improvement plan items related to non-pharmaceutical interventions been implemented? [Yes/Some/No]
4. *New* - Please indicate any barriers/challenges to completing the pre-incident planning elements for non-pharmaceutical interventions [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
5. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized? - *New*

This measure is meant to address two key questions related to each of the elements identified as critical for this measure: (1) Which entity or entities is responsible for completing these elements?; and (2) Have they done so?

Awardees are encouraged to develop internal tracking and monitoring processes and tools to ensure that sub-awardees and other entities responsible for any elements in this measure are, in fact, making progress towards completion of their activities.

It is the awardee's responsibility to determine which entity or entities is responsible for completing an element. This can refer to the awardee central office, its regional or district offices, local health departments, etc.

<u>All entities responsible for completion of a given element must have completed the element in order to answer "Yes" to Question 2, above.</u>

Example #1 (decentralized state). In this state, there are 10 autonomous LHDs (or autonomous regions/districts, etc.) in the jurisdiction, but only 5 have been funded to complete a given element for this measure.

For the awardee to enter "Yes" on Question 2 for that element, the 5 LHDs (not 10) must have completed it. If the awardee itself was responsible for completion of a different element, it could only enter "Yes" on Question 2 for its element once it has been completed by the awardee.

Example #2 (centralized state with 8 regional or district offices). In this state, the awardee has determined that the main office and 4 of its 8 regional offices will be responsible for addressing all the elements for this measure in this budget period. The awardee will determine when it and these 4 regional offices have satisfactorily completed the element.

Once the main office and the 4 regional offices have done so, the awardee may enter "Yes" on Question 2 for those elements. If, in this example, the awardee main office is the only entity responsible for completing an element (i.e., it does not assign any responsibility to any of its regions), then it may enter "Yes" once it (the main office) has completed the element.

Example #3 (Directly funded city). In this example, the directly funded city is the only entity responsible for all the elements for this measure. Therefore it will be able to enter "Yes" to Question 2 for each of the elements as it completes them.

PHEP 11.3: Develop NPI Recommendations with Partners

Proportion of key partners identified to have an **incident-specific role** that participated in the development or implementation of NPI during an incident

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☑ **If Emergency Response Required Use of this Capability, Regardless of Funding**	☐ Planned Event	☐ Data Collected By:

How is the measure calculated?

Numerator: Number of key partners that participated in the development/implementation of NPI (for a specific hazard) at the time of the incident

Denominator: Total number of key partners identified (pre-incident and at the time of the incident) to have a role in developing/implementing NPI for a specific hazard

Why is this measure important?

An important dimension for evaluating the effectiveness of NPI planning and collaboration prior to an incident is assessing the participation of needed partners during an incident. Incorporating the right partners into the response is more likely to develop more timely and better NPI recommendations that have a greater chance for effective implementation and uptake in the community. In combination with special studies to assess the effectiveness of NPIs and specific outcomes (e.g., implementation, uptake, morbidity/mortality), this measure is intended to provide awardees with data to address challenges and barriers in bringing the right partners into discussions to develop and implement NPIs prior to, and during, a response.

The immediate intent of this response measure is to assess the extent to which partners targeted by the health department to participate in the development or implementation of an incident-specific non-pharmaceutical intervention actually did participate.

The broader programmatic aim of this response measure is to increase engagement of public health partners in developing non-pharmaceutical intervention recommendations and implementation strategies prior to an incident, expediting the development and implementation of recommendations during incidents that will assist disease, injury, and exposure control.

What other requirements are there for reporting measure data? - *New*

- Awardees may report the numerator and denominator of this measure *by incident* at the awardee or local level.
- *Awardees that experience two or more incidents or exercises* involving non-pharmaceutical interventions must report on at least two of those.
  - One data point must reflect the awardee's best performance (highest proportion);
  - The other data point must reflect performance which, based on a determination from the awardee, calls for focused quality improvement and – if applicable – technical assistance.
  - Awardees are encouraged to submit data on additional incidents and exercises as well. There are no specific reporting requirements or parameters for additional data points.
- *Awardees that experience only one incident or exercise* involving non-pharmaceutical interventions must report on it.
- *Awardees that experience no incidents or exercises* involving non-pharmaceutical interventions do not need to report on this measure.

What data must be reported?

1. How many key partners were identified, *in pre-incident planning*, to have a role in developing /implementing NPI for the specified hazard(s) in this incident (part of denominator):
    a. Legal partners?
    b. Scientific partners?
    c. Community partners?
2. How many *additional* key partners (not part of the pre-incident planning process), were identified/requested to have a role in developing/implementing NPI for the specified hazard(s) in this incident (part of denominator):
    a. Legal partners?
    b. Scientific partners?
    c. Community partners?
3. Out of the total number of key partners identified for participation, how many key partners participated in the development/implementation of NPI (for a specific hazard) during an incident? (numerator)
4. What type of entity is reporting on this measure?
    a. Awardee health department
    b. LHD
5. Name and date of the incident.
6. Please identify/describe the NPI recommendation. [Select all that apply]
    - ☐ Isolation
    - ☐ Quarantine
    - ☐ Restrictions on movement
    - ☐ Travel advisories/warnings
    - ☐ Halting public transportation
    - ☐ School closure
    - ☐ Childcare closure
    - ☐ Mass gathering postponement/cancellation
    - ☐ Recommendation to avoid crowded places
    - ☐ External decontamination
    - ☐ Other, please specify
7. *New* - Continuous Quality Improvement:
    a. Were relevant corrective actions / improvement plan items from *prior responses* (including exercises, drills, etc.) related to non-pharmaceutical interventions incorporated into planning and/or response procedures before this incident/drill took place? [Yes/Some/No]
    b. Have corrective actions / improvement plan items related to non-pharmaceutical interventions been identified as a result of this incident/drill? [Yes/No]
        i. Have they been implemented? [Yes/Some/No]
8. Please indicate any barriers to development of recommendations or implementation of non-pharmaceutical interventions. [Select all that apply]
    - ☐ Communication
    - ☐ Equipment
    - ☐ Funding
    - ☐ Participation
    - ☐ Policies/procedures
    - ☐ Resource limitations
    - ☐ Staffing
    - ☐ Time constraints
    - ☐ Training
    - ☐ Other, please specify
    - ☐ None
9. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Any health department within an awardee jurisdiction that experiences a significant public health incident involving recommendations or implementation of NPI should collect and report data for this measure. In all cases, the awardee shall submit these data to CDC.

This measure is meant to *exclude* frequent public health or environmental concerns, including but not limited to common or low-acuity illness stemming from food-borne pathogens, unremarkable seasonal influenza, standard public health campaigns (e.g., interventions for common sexually-transmitted diseases), and general water, air, or other environmental quality issues – including mold, lead, asbestos, and noise.

There is no expectation that all key planning partners (for NPI) are expected to be incorporated into all responses for all hazards. For example, if an incident

only requires 2 out of 10 key planning partners, and 5 additional (i.e., new) partners for the specific response/hazard in question, then that is what should be reported in Data Elements 1 and 2, respectively. If a different incident, involving a different hazard, requires participation by a different set (and number) of key partners, then those numbers should be reported for those data elements.

To be considered to have participated in the development/implementation of an NPI, a key partner must have satisfactorily met at least one of the following criteria:

- Substantial engagement in review and approval or revision of an existing/planned NPI recommendation
- Substantial engagement in the development of a new NPI recommendation or adjustment of existing non-pharmaceutical intervention
- Provided information considered central to the development of an NPI recommendation, including: describing circumstances, triggers, populations, risks, policies, strategies, etc., in which an NPI might be used, as well as consequences of NPI implementation
- Implementation of a non-pharmaceutical intervention

Key Measurement Terms

Community partners: Community partners represent jurisdictions, sectors, agencies, organizations, and segments of a population having a stake in the recommendation, implementation, and/or termination of non-pharmaceutical interventions. Examples of community partners include schools, businesses, faith-based organizations, the media, emergency management, and relevant healthcare entities.

Incident-specific role: Incident-specific role indicates a key partner role based on a specific hazard (e.g., flooding, pandemic flu, radiation). The intent of delineating this term is to ensure that reporting health departments only include in this measure those key partners deemed necessary for the specific hazard(s) in question.

Legal partners: Legal partners include, but are not limited to, individuals and organizations with the legal and jurisdictional authority to recommend, implement, and/or terminate non-pharmaceutical interventions. Examples of legal partners include elected officials, general counsel of a health department or other agencies, court/judicial officials, law enforcement, and municipal or state authorities such as a board of education, (state) office of education, or superintendent.

Responsible entity or entities: A responsible entity or entities refers to an organization at the awardee or sub-awardee level, which is accountable for completing the specific activity or element associated with one or more PHEP performance measures.

Scientific partners: Scientific partners include, but are not limited to, individuals and organizations with the ability to provide the rationale and science-based expert opinion for the recommendation, implementation, and/or termination of non-pharmaceutical interventions. Examples of scientific partners include subject-matter experts in areas such as infectious disease, radiation and environmental health as well as public health nurses, physicians, and those in academia.

Secondary factors of non-pharmaceutical interventions: Secondary factors of non-pharmaceutical interventions are indirect, often unintentional, effects of an NPI which, if not properly mitigated, may lead to decreased adoption of the intervention. Examples of secondary factors include lost revenue due to implementation of social distancing measures; lack of child supervision (potentially causing inability to report to work) for working parents of children affected by school closure; or lack of meals for poor or homeless children resulting from school closure.

12. Public Health Laboratory Testing

Introduction

Public health laboratories are critical to the nation's ability to rapidly detect and respond to a variety of public health incidents. The laboratory testing performance measures were developed to assess routine and other frequent activities that occur at PHEP-funded laboratories (primarily, but not exclusively, state public health laboratories) across the nation.

In addition, a number of measures utilized by the Laboratory Response Network (LRN-B and LRN-C) have also been incorporated. Although not encompassing all aspects of laboratory functions, the intent of these performance measures is to serve as a foundation for describing and assessing laboratory capabilities among PHEP-funded laboratories.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Manage laboratory activities**
2. **Perform sample management**
3. **Conduct testing and analysis for routine and surge capacity**
4. **Support public health investigations**
5. **Report results**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4	Function 5
PHEP 12.1	●				
PHEP 12.2				●	
PHEP 12.3			●		
PHEP 12.4 (optional)					●
PHEP 12.5			●		
PHEP 12.6			●		
PHEP 12.7		●			
PHEP 12.8	RETIRED				
PHEP 12.9	●				
PHEP 12.10	RETIRED				
PHEP 12.11			●		
PHEP 12.12	RETIRED				
PHEP 12.13	RETIRED				
PHEP 12.14					●
PHEP 12.15					●

PHEP 12.1: Laboratorian Reporting

New – Proportion of incidents in which laboratorian reported to laboratory (after hours) prior to receipt of specimen or sample

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

How is the measure calculated? - *New*

Numerator: Number of incidents in which an **appropriate laboratorian** reported (after hours) to the public health laboratory prior to receipt of a specimen or sample.

Denominator: Number of incidents in which a specimen or sample was shipped to the public health laboratory with an arrival time outside of normal business hours *and* requiring immediate testing.

Why is this measure important?

Timely laboratory testing is crucial in recoginzing potential public health emergencies. The public health laboratory must be able to receive specimens and samples 24 hours a day, 7 days a week to initiate testing if needed. The intent of this measure is to ensure that an appropriately trained and authorized laboratorian is able to report to the laboratory prior to receipt of a specimen or sample in need of urgent testing.

What other requirements are there for reporting measure data?

Laboratorian reporting for duty must have been **outside of normal business hours**. An incident itself is not restricted to this timeframe, only reporting for duty. If applicable, it is permissible to indicate that there were no incidents during the budget period involving shipping of specimens to public health laboratory for immediate testing after-hours.

What data must be reported?

a. *New* – Number of incidents in which an appropriate laboratorian reported to the public health laboratory (after hours) prior to receipt of specimen or sample. (Numerator)
b. *New* – Number of incidents in which a specimen or sample was shipped to the public health laboratory with an arrival time after normal business hours *and* requiring immediate testing. (Denominator)
c. *New* – Please indicate any barriers to after-hours laboratorian reporting. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
d. *New* – [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

Not applicable.

PHEP 12.2: 24/7 Emergency Contact Drill (Bi-directional)

Time to complete **notification** between CDC, **on-call laboratorian**, and **on-call epidemiologist;** or time to complete notification between CDC, on-call epidemiologist and on-call laboratorian – depending on drill direction

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC EOC**

How is the measure calculated?

Start Time: Date and time that CDC EOC staff first dialed the contact number for the on-call laboratorian or epidemiologist, depending on drill direction.

Stop Time: Date and time that on-call laboratorian or epidemiologist (depending on drill direction) contacted CDC EOC to complete the drill cycle.

Performance Target: 45 minutes

Why is this measure important?

Timely communication between on-call epidemiologists and laboratorians (and vice versa) is critical for effective public health emergency response. As stewards of PHEP funds, the awardee plays a crucial role in assuring good communication between laboratory and epidemiology staff and in fostering improvements in communication response gaps revealed by exercises and incidents.

The purpose of the 24/7 Emergency Contact Drill is to ensure a timely and effective response to incidents of public health significance by promoting rapid communication between the epidemiologist and the laboratorian (and vice versa). The measure is *not intended to adhere to, or assess, CDC's emergency notification protocol to state public health labs or state epidemiologists*. Although conducted by the CDC Emergency Operations Center (EOC), the drill is not an EOC or LRN measure; it is strictly a PHEP measure. It does not replace or substitute any other CDC drill (e.g., LRN notification drill).

What other requirements are there for reporting measure data?

Data will be generated from CDC-initiated drills; start and stop time data will be collected by CDC's EOC and shared with the Division of State and Local Readiness (DSLR).

New - Awardees are expected to maintain updated contact information for their jurisdiction's on-call LRN-B laboratorian, on-call LRN-C laboratorian, and on-call epidemiologist as described in **Appendix B**.

New - CDC staff may contact the awardee at any time during the budget period to verify contact information for on-call (and alternate on-call) contact information for LRN-B/LRN-C laboratorians and/or epidemiologists.

What data must be reported?

Data for this measure is collected by CDC EOC. Additional data may be collected by DSLR as part of technical assistance and overall program improvement (e.g., factors accounting for not meeting the performance target or communication barriers).

How is this measure operationalized?

Please refer to Appendix B for details on how this measure is operationalized.

BP2 drill direction for awardees with separate biologcal and chemical laboratories:

Drill #1: CDC EOC→LRN-B→EPI→ CDC EOC

Drill #2: CDC EOC→LRN-C→EPI→CDC EOC

BP2 drill direction for awardees with joint biological and chemical laboratories:

Drill #1: CDC EOC→LRN-B/C→EPI→CDC EOC

Drill #2: CDC EOC→Epi →LRN-B/C→CDC EOC

The term "LRN" (B, C, or B/C) refers to the on-call laboratorian in the awardee's LRN laboratory; the term "EPI" refers to the awardee's on-call epidemiologist.

Failure to complete a critical activity within each drill segment may result in pitfalls that may prevent the awardee either from successfully completing the drill or completing it within the 45-minute time target.

Please refer to Appendix B for an overview of pre-drill, drill, and post-drill activities, including what PHEP directors can do to ensure drill success (e.g., how to update contact informaton for the on-call laboratorian and on-call epidemiologist contact information).

PHEP 12.3: LRN-C Emergency Response Exercise

Percentage of biomarkers of chemical agents successfully detected by Level 1 and/or Level 2 laboratories during the LRN-C Emergency Response Exercise

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC LRN-C Program**

How is the measure calculated?

Numerator: Number of biomarkers of chemical agents successfully detected by Level 1 and/or Level 2 laboratories.

Denominator: Number of biomarkers of chemical agents included in the exercise.

Successful detection requires a score of 80% or higher.

Please note: Only spiked samples are used for the calculation for this measure.

Why is this measure important?

This exercise focuses on a laboratory's ability to detect, identify, and quantify biomarkers of chemical agents in clinical samples in which the presence and amount of the biomarkers are unknown. This exercise also tests the laboratory's emergency contact process and its ability to report results.

No new data collection will be required (outside of the existing data collected by CDC's LRN-C), but the intent is to ensure that awardee preparedness offices are aware of the LRN-C Emergency Response exercise results and validate the information on an annual basis.

What other requirements are there for reporting measure data?

Data will be collected for PHEP-funded LRN-C laboratories Level 1 and 2 only.

To participate in the LRN-C Emergency Response exercise, the laboratory must have attained a "Qualified" status for the method. To attain "Qualified" status, a laboratory must have completed training, the validation exercise, and passed at least one scheduled PT exercise. Laboratories participating in the emergency response exercise are contacted the day before the exercise, sent at least 10 clinical samples, and must test these samples within a certain number of hours (depending on the methods needed).

Data are collected internally by the CDC LRN-C program. Results will be shared with DSLR.

Proficiency testing data must be validated by the awardee preparedness office in the PHEP performance measurement reporting system.

What data must be reported?

Not applicable

How is this measure operationalized?

Awardees should see LRN-C Emergency Response PT Exercise Guidelines available from the CDC LRN-C program.

PHEP 12.4: Notification to Partners

Time for **PHEP-funded laboratory** to notify **public health partners** of **significant laboratory results**

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☑ **Incident**	☑ **Optional** - *New*
☑ **Directly Funded Localities: NYC Bio Only; Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☐ Accountability
☐ Territories or Freely Associated States	☑ **If Emergency Response Required Use of this Capability, Regardless of Funding** - *New*	☑ **Planned Event**	☐ Data Collected By

How is the measure calculated?

Start Time: Date and time PHEP-funded laboratory obtained a significant laboratory result

Stop Time: Date and time PHEP-funded laboratory completed notification of public health partners of significant laboratory results (i.e., time when last public health partner was notified, if partners were not simultaneously notified)

Why is this measure important?

Rapidly notifying public health partners of a significant laboratory result is a critical step in a public health response. Contacting public health partners and sharing information on positive or negative results allows the public health system to begin to prepare for an incident or adjust response efforts as needed

What other requirements are there for reporting measure data?

New - Reporting is permissible for incidents, exercises and planned events. Awardees are encouraged to report data from multiple incidents.

Laboratories may include data from clinical specimens or **nonclinical samples**.

What data must be reported?

1. Date and time PHEP-funded laboratory obtained a significant laboratory result (Start time)
2. Date and time PHEP-funded laboratory completed notification of public health partners of significant laboratory results (i.e., time when last public health partner was notified, if partners were not simultaneously notified) (Stop time)
3. Is reporting for this measure in reference to a clinical specimen or non-clinical sample? [Select one]
4. Briefly describe the incident, including name of substance(s) or agent(s), type of specimen/sample, and other pertinent information.
5. Which partners did the PHEP-funded laboratory notify? [Select all that apply]
   - ☐ Specimen submitter
   - ☐ PHEP director or designee
   - ☐ State public health lab director
   - ☐ On-call or state epidemiologist
   - ☐ Health officer
   - ☐ CDC Emergency Operations Center
   - ☐ LHD (including regional or district offices)
   - ☐ FBI
   - ☐ State homeland security or emergency management (including EM watch staff)
   - ☐ Law Enforcement / Public Safety
   - ☐ Other partners, please specify
6. *New* - Rationale for submitting data for *this* incident [Check all that apply]
   - ☐ Context of the public health response – potential for substantial public health impact
   - ☐ Complexity of the demonstration/response – scale of the demonstration/response

requiring significant laboratory resources (staff, resources, etc.)

- ☐ Duration of the demonstration/response
- ☐ Required the mobilization of resources outside of the affected area
- ☐ Quickest time

6. *New* - Please indicate any barriers to notification of partners. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
7. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

- ☐ Only example/demonstration available
- ☐ Other, please specify

How is this measure operationalized?

Not applicable.

PHEP 12.5: Proficiency Testing (LRN-C Additional Methods)

Proportion of LRN-C proficiency tests (additional methods) successfully passed by PHEP-funded laboratories

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☑ **Accountability: PAHPA Benchmark**
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC LRN-C Program**

How is the measure calculated?

Numerator: Number of LRN-C additional methods successfully proficiency tested by the PHEP-funded laboratory

Denominator: Total number of LRN-C additional methods for which the PHEP-funded laboratory is qualified to test

Why is this measure important?

Recognition of a public health emergency requires accurate laboratory testing of samples to detect disease or potential exposure. Once a laboratory is qualified to test for certain biological or chemical agents, it is important to ensure that this qualification is maintained, and that the awardee preparedness office is aware of the laboratory's testing capability. Additional methods build upon the foundation established by the core methods, providing modifications to core techniques which allow for laboratories to test for additional agents and thereby expand their testing capabilities.

The intent is to ensure that awardee preparedness offices are aware of proficiency testing activities and capabilities and validate the information on an annual basis in the PHEP reporting system.

What other requirements are there for reporting measure data?

This performance measure is REQUIRED for LRN-C Level 1 laboratories. It is OPTIONAL for Level 2 laboratories.

Data Elements 1-4 are collected internally by the CDC LRN-C program and are shared with DSLR. Awardees will self-report information for Data Elements 5 and 6 in the PHEP performance measurement reporting system.

Proficiency testing data must be validated by the awardee preparedness office in the PHEP performance measurement reporting system.

What data must be reported?

1. Total number of LRN-C additional methods for which the PHEP-funded laboratory is qualified to test (denominator)
2. Number of LRN-C additional methods successfully proficiency tested by the PHEP-funded laboratory (numerator)
3. Total number of LRN-C additional methods in which the PHEP-funded laboratory has trained
4. Total number of LRN-C additional methods for which the PHEP-funded laboratory has been validated
5. *New* - Please indicate any barriers to passing or participating in proficiency testing. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations

- ☐ Staffing
- ☐ Time constraints
- ☐ Training
- ☐ Other, please specify
- ☐ None

6. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

Proficiency testing in additional methods is routinely conducted by the LRN-C program office at CDC. Results from these tests will be shared with DSLR as part of PHEP performance measurement and monitoring.

PHEP 12.6: Proficiency Testing (LRN-C Core Methods)

Proportion of LRN-C proficiency tests (core methods) successfully passed by PHEP-funded laboratories

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☑ **Accountability: PAHPA Benchmark**
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC LRN-C Program**

How is the measure calculated?

Numerator: Number of LRN-C core methods successfully proficiency tested by the PHEP-funded laboratory

Denominator: Total number of LRN-C core methods (9)

Why is this measure important?

Recognition of a public health emergency requires accurate laboratory testing of samples to detect disease or potential exposure. Once a laboratory is qualified to test for certain biological or chemical agents, it is important to ensure both that this qualification is maintained, and that the awardee preparedness office is aware of the laboratory's testing capability. The core methods are significant as they offer new technical fundamentals in the methods that provide the foundation of LRN-C laboratory capabilities.

The intent is to ensure that awardee preparedness offices are aware of proficiency testing activities and capabilities and validate the information on an annual basis in the PHEP reporting system.

What other requirements are there for reporting measure data?

Data Elements 1-3 are collected internally by the CDC LRN-C program and are shared with DSLR. Awardees will submit information for Data Elements 4-5 in the PHEP performance measurement reporting system.

Proficiency testing data must be validated by the awardee preparedness office in the PHEP performance measurement reporting system.

What data must be reported?

1. Number of LRN-C core methods successful proficiency tested by the PHEP-funded laboratory (numerator)
2. Total number of LRN-C core methods for which the PHEP-funded laboratory is qualified to test
3. Total number of LRN-C core methods for which the PHEP-funded laboratory has been validated
4. *New* - Please indicate any barriers to passing or participating in proficiency testing. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
5. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

Not applicable.

PHEP 12.7: Specimen Packaging and Shipping Exercise (SPaSE)

Ability of PHEP-funded LRN-C laboratories to package and ship specimens properly during an LRN exercise

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☑ **Accountability: PAHPA Benchmark**
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC LRN-C Program**

How is the measure calculated?

Specimen packaging and shipping exercise (SPaSE) results [Passed/Did not pass]

An awardee will be rated as "Passed" if at least one LRN-C laboratory in the jurisdiction participated and passed. If an applicable awardee does not have at least one PHEP-funded laboratory participate in this exercise during the year, the awardee will be rated as "Did not pass."

Why is this measure important?

The proper packaging and shipping of specimens is important to ensure the integrity of the specimen and the safety of all those involved.

This annual exercise evaluates the ability of a laboratory to package and ship patient specimens in compliance with International Air Transport Association, U.S. Department of Transportation, and state regulations.

What other requirements are there for reporting measure data?

This measure applies LRN-C levels 1, 2 and 3.

At least one PHEP-funded laboratory within an applicable awardee jurisdiction must participate annually. Additional laboratories may participate if they choose.

Data elements 1 and 2 are reported by the LRN-C program and shared with DSLR. Awardees should report data elements 3 and 4 in the PHEP performacne measurement reporting system. SCPaS data must be validated in the PHEP performance measurement reporting system by the awardee preparedness office.

What data must be reported?

1. Specimen Packaging and Shipping Exercise (SPaSE) results for each laboratory (Pass, Did not pass, Did not participate)
2. Name/location of all LRN-C laboratories
   a. Level of lab (i.e., 1, 2, or 3)
3. *New* - Please indicate any barriers to successful sample collection, packing, and shipping. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
4. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

Not applicable

PHEP 12.9: Communication between PHEP-funded and Sentinel Clinical Laboratories

Time for **sentinel clinical laboratories** to acknowledge receipt of an **urgent message** from PHEP-funded LRN-B laboratory

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☑ **Incident**	☐ Optional
☐ Directly Funded Localities	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☑ **Planned Event**	☐ Data Collected By

How is the measure calculated?

Start Time: Date and time PHEP-funded LRN-B laboratory sends urgent message to first sentinel clinical laboratory

Intermediate stop time 1: Date and time at least 50% of sentinel clinical laboratories acknowledged receipt of urgent message

Intermediate stop time 2: Date and time at least 90% of sentinel clinical laboratories acknowledged receipt of urgent message

Stop Time: Date and time last sentinel clinical laboratory acknowledged receipt of urgent message

Why is this measure important?

Ensuring that PHEP-funded laboratories and sentinel clinical laboratories are able to rapidly communicate important information with one another enhances their ability to recognize and respond to potential public health emergencies in a timely manner.

What requirements are there for reporting measure data?

New - This measure is now required in BP2.

Awardees are required to report data from *at least one* drill, exercise and/or real-incident, but are encouraged to provide data from additional incidents, etc., as feasible.

What data must be reported?

1. Date and time PHEP-funded LRN-B laboratory sends urgent message to first sentinel clinical laboratory (Start time)
2. Date and time at least 50% of sentinel clinical laboratories acknowledged receipt of urgent message (Intermediate stop time 1)
3. Date and time at least 90% of sentinel clinical laboratories acknowledged receipt of urgent message (Intermediate stop time 2)
4. Date and time last sentinel clinical laboratory acknowledged receipt of urgent message) (Stop time)
5. Total number of sentinel clinical laboratories in the jurisdiction
6. Total number of sentinel laboratories to which the LRN-B laboratory sent an urgent message
7. Total number of sentinel laboratories that acknowledged receipt of the urgent message
8. Method(s) used to send and receive urgent messages to/from sentinel clinical laboratories [Select all that apply]
   - ☐ Telecommunications (e.g., cell phone, satellite phone, land line)
   - ☐ E-mail outside of rapid notification system
   - ☐ Fax
   - ☐ Health Alert Network or similar rapid notification system
   - ☐ Laboratory reporting/messaging system
   - ☐ Other, please specify
9. Was this your quickest time? [Yes/No]
10. *New* - Please indicate any barriers to communication between the LRN-B laboratory

(e.g., state public health laboratory) and sentinel clinical laboratories. [Select all that apply]

- ☐ Communication
- ☐ Equipment
- ☐ Funding
- ☐ Participation
- ☐ Policies/procedures
- ☐ Resource limitations
- ☐ Staffing
- ☐ Time constraints
- ☐ Training
- ☐ Other, please specify
- ☐ None

11. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

Not applicable

PHEP 12.11: Proficiency Testing (LRN-B)

Proportion of LRN-B proficiency tests successfully passed by PHEP-funded laboratories

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☑ **Accountability: PAHPA Benchmark**
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC LRN-B Program**

How is the measure calculated?

Numerator: Number of LRN-B proficiency tests successfully passed by PHEP-funded laboratory(s)

Denominator: Total number of LRN-B proficiency tests participated in by PHEP-funded laboratory(s)

Why is this measure important?

Recognition of a health emergency requires accurate laboratory testing of samples to detect disease or potential exposure. Once a laboratory is qualified to test for certain biological or chemical agents, it is important to ensure that this qualification is maintained so that the CDC's LRN and the awardee preparedness offices are aware of awardee testing capabilities.

What other requirements are there for reporting measure data?

Data elements 1-6 will be collected by the LRN-B program and shared with DSLR. Awardees should report data elements 7 and 8 in the PHEP performance measurement reporting system. Awardees must validate performance measure data on an annual basis in the PHEP performance measurement reporting system.

What data must be reported?

1. Number of LRN-B proficiency tests participated in by the PHEP-funded laboratory (denominator)
2. Number of LRN-B proficiency tests successfully passed by the PHEP-funded laboratory during first attempt (numerator)
3. Number of LRN-B proficiency tests successfully passed by the PHEP-funded laboratory after remediation
4. Number of LRN-B proficiency tests participated in by all public health laboratories
5. Number of LRN-B proficiency tests successfully passed by all public health laboratories during first attempt
6. Total number of public health LRN-B laboratories.
7. *New* - Please indicate any barriers to participation and/or passing LRN-B proficiency testing. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
8. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Please consult with the LRN-B program office or e-mail the LRN Helpdesk (LRN@cdc.gov) for specific questions about proficiency testing.

PHEP 12.14: PFGE E. coli

Percentage of pulsed field gel electrophoresis (PFGE) sub-typing data results for *E. coli* O157:H7 submitted to the PulseNet (PN) national database **within four working days** of receiving isolate at the PFGE laboratory.

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan**	☐ Exercise	☑ **Accountability: GPRA Measure**
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC ELC Program and CDC PulseNet**

How is the measure calculated?

Numerator: Number of results from PFGE sub-typing of *E. coli* O157:H7 isolates that were submitted to the PulseNet (PN) database within four **working days** of receipt at the PFGE laboratory.

Denominator: Total number of *E. coli* O157:H7 isolates for which the state performed PFGE subtyping

Target: 90%.

Why is this measure important?

Awardees need to be able to inform local, state, and national laboratorians and epidemiologists of disease occurrences in a timely manner to determine the extent and scope of potential outbreaks and to minimize the effects of these outbreaks.

Performing PFGE subtyping and submitting data results to the PulseNet electronic database in a timely manner indicates the public health laboratory's ability to subtype specific bacteria and share results quickly.

What other requirements are there for reporting measure data?

Data for this performance measure will be collected by the Epidemiology and Laboratory Capacity cooperative agreement program (from its awardees) as well as extracted from the PulseNet national database, and shared with DSLR. PHEP awardees that allocate PHEP funding towards PFGE activities will be required to verify these data. Data from this measure, irrespective of PHEP funding, may be reported in CDC's State-by-State Public Health Preparedness Report.

What data must be reported?

1. Number of *E. coli* O157:H7 isolates received by the *state public health laboratory.* (ELC*)
   a. Of these, number of isolates sent to another laboratory (out of state) for PFGE sub-typing. (ELC)
2. Number of *E. coli* O157:H7 isolates for which the *PFGE laboratory* performed PFGE sub-typing. (denominator) (ELC)
   a. ELC grantees will self-report this number as the total number of isolates run with primary enzyme
3. Number of primary patterns from sub-typed isolates uploaded into the PulseNet national database (PN*)
   a. Of these, number of primary patterns with a valid 'receive date' (i.e., date received at the *PFGE laboratory*) (PN).
4. Number of results from PFGE sub-typing of *E. coli* O157:H7 isolates that were submitted to the PulseNet database within four working days of receipt at PFGE laboratory (numerator) (PN)
5. If calculated percentage for this performance measure (determined by CDC PulseNet) < 90 percent, please describe barriers or challenges to meeting this target (90 percent of subtyping results submitted to PulseNet within four working days of receipt at PFGE laboratory)

*Reporting entity in parentheses (e.g., ELC, PN)

How is this measure operationalized?

Awardees should not count duplicates in the isolates they receive if they are not sub-typed.

Isolates refers to reference or clinical human isolates.

PHEP 12.15: PFGE *L. monocytogenes*

Percentage of pulsed field gel electrophoresis (PFGE) sub-typing data results for *Listeria monocytogenes* submitted to the PulseNet (PN) national database within four working days of receiving isolate at the PFGE laboratory.

Measure Applies To :	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan**	☐ Exercise	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☑ **Data Collected By: CDC ELC Program and CDC PulseNet**

How is the measure calculated?

Numerator: Number of results from PFGE sub-typing of *Listeria monocytogenes* isolates that were submitted to the PulseNet (PN) database within four working days of receipt at the PFGE laboratory.

Denominator: Total number of *Listeria monocytogenes* isolates for which the state performed PFGE subtyping

Target: 90%.

Why is this measure important?

Awardees need to be able to inform local, state, and national laboratorians and epidemiologists of disease occurrences in a timely manner to determine the extent and scope of potential outbreaks and to minimize the effects of these outbreaks.

Performing PFGE subtyping and submitting data results to the PulseNet electronic database in a timely manner indicates the public health laboratory's ability to subtype specific bacteria and share results quickly.

What requirements are there for reporting measure data?

Data for this performance measure will be collected by the Epidemiology and Laboratory Capacity cooperative agreement program (from its awardees) as well as extracted from the PulseNet national database, and shared with DSLR. PHEP awardees that allocate PHEP funding towards PFGE activities will be required to verify these data. Data from this measure, irrespective of PHEP funding, may be reported in CDC's State-by-State Public Health Preparedness Report.

What data must be reported?

1. Number of *Listeria monocytogenes* isolates received by the *state public health laboratory.* (ELC*)
   a. Of these, number of isolates sent to another laboratory (out of state) for PFGE sub-typing. (ELC*)
2. Number of *Listeria monocytogenes* isolates for which the *PFGE laboratory* performed PFGE subtyping. (denominator) (ELC)
   a. ELC grantees will self-report this number as the total number of isolates run with primary enzyme
3. Number of primary patterns from sub-typed isolates uploaded into the PulseNet national database (PN*)
   a. Of these, number of primary patterns with a valid 'receive date' (i.e., date received at the *PFGE laboratory*) (PN).
4. Number of results from PFGE sub-typing of *Listeria monocytogenes* isolates that were submitted to the PulseNet database within four working days of receipt at PFGE laboratory (numerator) (PN)
5. If calculated percentage for this performance measure (determined by CDC PulseNet) < 90%, please describe barriers or challenges to meeting this target (90%of sub-typing results submitted to PulseNet within four working days of receipt at PFGE laboratory)

* Reporting entity in parentheses (e.g., ELC, PN)

How is this measure operationalized?

Awardees should not count duplicates in the isolates they receive if they are not sub-typed.

Isolates refers to reference or clinical human isolates.

Key Measurement Terms

Appropriate laboratorian: An appropriate laboratorian is an individual who is properly trained in the most up-to-date standard operating procedures to receive specimens/samples, and has the knowledge and skill set to initiate, conduct or oversee testing.

Nonclinical sample: Non-clinical samples exclude any human specimens. Examples of nonclinical samples include soils, water, powders, food, and animal products.

Notification: Notification is communication by the PHEP-funded laboratory (through phone, fax, e-mail, or other methods) to public health partners indicating that it has obtained significant laboratory results from a clinical specimen or nonclinical sample.

Outside of normal business hours: Outside of normal business hours are those times of the day outside of which most business is conducted (e.g., non-working hours, evenings, weekends, legal holidays, etc.).

On-call epidemiologist: An on-call epidemiologist is the person from the awardee epidemiology office or health department who has authority to act or process the notification from an on-call laboratorian.

On-call laboratorian: An on-call laboratorian is the person from the laboratory who have has authority to receive samples and ensure that testing can be conducted. Ensuring that testing can be conducted includes responsibilities such as assessing the need to initiate testing and/or contacting a properly trained laboratorian that can begin testing samples. This does not include security personnel that can only receive samples.

PHEP-funded laboratory: A PHEP-funded laboratory is an awardee-level laboratory that is partially or fully funded with PHEP funds – either directly from the awardee health department or via contract. Generally, measures that apply to LRN-B labs refer to the state public health laboratories – as well as the public health labs in Los Angeles County, New York City, and Washington, D.C. States with multiple state-level LRN-B reference labs should report data on all of them, as applicable, depending on whether the performance measure is self-report or reported through CDC's LRN (the latter may only collect data from a subset of all state labs). Measures that apply to LRN-C indicate what level of lab needs to report (i.e., Level 1, 2, and/or 3). Performance measures will specify which PHEP-funded laboratory should report data.

Public health partners: Public health partners are any local, state, or federal agency, or healthcare provider, routinely involved in the public health response process – or otherwise involved due to the specific circumstances of an incident.

Report for duty at laboratory: To report for duty at laboratory describes when an on-call laboratorian arrives at appropriate testing laboratory ready to receive specimens and can ensure that testing, packaging, shipping, or referral can begin.

Sentinel clinical laboratories: As developed by CDC, the Association of Public Health Laboratories (APHL), and the American Society for Microbiology (ASM) and approved by the LRN Joint Leadership Committee (JLC), sentinel clinical laboratories are those that have the ability to perform routine assays of human specimens for the presence of microbial agents. Depending on the level of diagnostic testing, sentinel clinical laboratories should be characterized as advanced or basic. CDC recognizes the definition of Advanced and Basic Sentinel Laboratories as described in the following document: http://www.asm.org/images/PSAB/SentinelLaboratoryDefinition-Final.pdf

Significant laboratory results: Significant laboratory results are any result (i.e., positive or negative) obtained from testing a clinical specimen or nonclinical sample that requires notification to CDC and other key partners. Refer to the CDC/LRN-B Policy Statement on Notification of Officials of Significant Laboratory Results (LGE-00010) and agency-specific protocols. While no formal CDC/LRN notification policy exists for LRN-C laboratories, each state should maintain its own policy.

Submission of results within four working days: Submission of results within four working days is the target of this measure. PFGE subtyping results are submitted to PulseNet within four working days from the date that the PFGE laboratory has a pure culture of a viable organism with known identification.

Urgent message: An urgent message is a message that requires rapid acknowledgment from sentinel clinical laboratories. PHEP-funded laboratories should develop a message that is appropriate for their sentinel clinical laboratory network and are encouraged to explicitly request that sentinel clinical laboratories rapidly acknowledge receipt of the message.

Working days: Working days are equivalent to business days and include every official working day. Working days do not include public holidays, regularly scheduled non-business days (e.g., Sunday), or furlough days.

13. Public Health Surveillance and Epidemiological Investigation

Introduction

This capability includes activities related to surveillance and detection of public health threats; conducting and documenting epidemiological investigations; and the recommendation or implementation of public health control measures. Case reporting is a prerequisite for an effective public health system and is an essential component of public health emergency preparedness. Timely reporting permits public health agencies to initiate investigations and recommend interventions, thereby protecting the health of the community. Conducting and documenting investigations with complete reports enables public health agencies to improve the quality of these investigations by ensuring that the incident is appropriately characterized, and that results and recommendations are documented and shared with decision makers.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Conduct Public Health Surveillance and Detection**
2. **Conduct Public Health and Epidemiological Investigation**
3. **Recommend, Monitor, and Analyze Mitigation Actions**
4. **Improve Public Health and Epidemiological Investigation Systems**

Alignment of Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4
PHEP 13.1	●			
PHEP 13.2			●	
PHEP 13.3 (optional)		●		
PHEP 13.4 (optional)		●		
PHEP 13.5	RETIRED	-	-	-
PHEP 13.6	RETIRED	-	-	-

PHEP 13.1: Disease Reporting

Proportion of reports of selected reportable diseases received by a public health agency within the **awardee-required timeframe**

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago and Los Angeles County**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

How is the measure calculated?

Numerator: Number of reports of selected reportable disease received by a public health agency within the awardee-required timeframe

Denominator: Number of reports of selected reportable disease received by a public health agency

Why is this measure important?

Case reporting of reportable infectious diseases is a prerequisite for an effective public health system. Timely reporting permits public health agencies to initiate investigations and recommend meaningful interventions, thereby protecting the health of individuals as well as the broader community.

The immediate intent of this performance measure is to capture the extent to which specific diseases of local and national public health significance are first reported to any level of the public health system (e.g., local, state, regional, county) from reporting entities (e.g., hospitals, labs, providers) within awardee-required timeframes.

The broader programmatic aim of this performance measure is to improve the timeliness of **disease reporting** by providers, hospitals, and laboratories to public health agencies as part of systematic program and process improvement for health department surveillance programs.

Note: The intent of this measure is not to capture the timeliness of disease "reporting" from LHDs to an awardee health department (or vice versa) or notification from an awardee to CDC.

What other requirements are there for reporting measure data?

New - Starting in BP2, awardees should report jurisdictionwide (e.g., statewide) performance measure data for PHEP 13.1. The sample of counties previously provided by CDC for reporting on this measure in Budget Periods 11 and 1 *no longer applies*. Awardees that are unable to report jurisdictionwide performance measure data should report as much as feasible and indicate the percentage of the jurisdictional population covered by these data.

Awardees are required to report data on case reports with CDC notification dates between MMWR Week 27, 2013 (beginning Sunday, June 30, 2013) through MMWR Week 26, 2014 (ending Saturday, June 28, 2014).

Awardees are required to provide data on the following diseases according to the specified case classification criteria noted in parentheses:

- Diseases associated with the following Category A agents:
  - Botulism (*Clostridium botulinum*), all types excluding infant botulism (confirmed)
  - Tularemia (*Francisella tularensis*) (confirmed and probable)
- *E. coli,* STEC (confirmed - *new*)
- Hepatitis A, acute (confirmed)
- Measles (confirmed)

- Meningococcal disease (*Neisseria meningitides*) (confirmed)

New - Awardees have the *option* to provide data on:

- Salmonellosis (confirmed), all types excluding Typhoid Fever (*Salmonella enterica* serovar Typhi)
- Up to three additional diseases of interest in the awardee jurisdiction (e.g., Shigella, Pertussis, etc.)

New - Awardees should calculate the numerator and denominator for this performance measure at the public health system level (i.e., to reflect how disease reporting actually occurs in the awardee's jurisdiction, irrespective of whether reporting first comes through the state or local level).

Awardees should ensure counts exclude duplicate cases.

Awardees should exclude cases of disease from the numerator that are missing pertinent data (e.g., dates), which preclude definitive calculation of timeliness. These cases must be included in the denominator.

What data must be reported?

1. Total number of disease reports received by a public health agency, by disease (denominator).
2. Total number of disease reports received by a public health agency within the awardee-required reporting timeframe, by disease (numerator).
3. Are the values reported in data elements 1 and 2 drawn from surveillance and disease reporting covering the entire jurisdiction? [Yes/No]
   a. If no, approximately what percentage of the population covered by the surveillance system is included as part of reporting for this measure?
   - ☐ < 25%
   - ☐ 26% 50%
   - ☐ 51% - 75%
   - ☐ 76% - 99%
4. For each of the selected diseases, please indicate the awardee-required reporting timeframe for *providers and laboratories* [Select one]
   - ☐ Immediately
   - ☐ 24 hours
   - ☐ 48 hours
   - ☐ 72 hours
   - ☐ 7 days
   - ☐ Other, please specify
5. Case event date type selected for each disease [Select one]
   - ☐ Date of diagnosis – lab-confirmed
   - ☐ Date of diagnosis – presumptive/clinical
   - ☐ Date of laboratory report
   - ☐ Date of laboratory result
   - ☐ Date of specimen collection
6. Has the awardee health department reviewed disease reports and related information for the purposes of improving disease reporting between providers, laboratories and the public health system? [Yes/No]
   a. Has the awardee health department identified corrective actions to improve disease reporting between providers, laboratories and the public health system? [Yes/No]
   b. Has it implemented them? [Yes/Some/No]
7. Please indicate any barriers to timely disease reporting. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
8. *New*- [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Assessing timeliness: Timeliness should be based on calendar days (including weekends and holidays), not business days.

Case event dates – assessing timeliness of disease reporting by providers and labs: Time requirements for disease reporting by providers and labs to public health agencies are typically determined at the awardee level through statute or regulation (e.g., providers should report measles within 24 hours to their LHD). For the purpose of this measure, awardees will need to determine the length of time between two specific case event dates noted for each case to determine whether a report was received within the required timeframe. Awardees may choose the first case event date type. The second case event date (and type) is always the date of first report to a public health agency.

Note: for each disease, awardees are encouraged to select the earliest case event that is feasible to collect from a program standpoint and subtract that from the date of first report to a public health agency. The result is a period of time that falls either within or outside the awardee-required reporting timeframe for a given disease. Once a case event date type is selected for a given disease, all cases of that disease must use that case event date type to calculate timeliness. For example, if presumptive diagnosis date is selected for measles, timeliness calculations for all measles cases must subtract date presumptive diagnosis date from first report to public health agency.

Case event date types – *considerations for selection*: With input from LHDs, awardees should select one case event date type for each disease prior to the start of the performance period. All health departments participating in data collection for this performance measures should then uniformly use the same case event date for that disease.

Additional considerations for selecting a case event date type: Awardees may select different case event date types for each of the six diseases included in this performance measure. Awardees may also choose the same case event date type for multiple diseases. Although awardees have flexibility to determine which case event date type they will use for each disease, certain case event types may be less amenable for use for a given disease. Examples of questionable case event date types for specific diseases include date of presumptive diagnosis for hepatitis A or date of lab report, lab result, or lab-confirmed diagnosis for measles. Please see below for specific issues to consider regarding case event date types for *E. coli* and measles.

Category A agents: Category A agents can create situations that significantly impact community health. Most require broad public health preparedness efforts, such as enhanced surveillance and rapid public health response, particularly if used intentionally or found to be widespread. For this performance measure, awardees should report only for botulism and tularemia.

Date of diagnosis – presumptive/clinical: Selection of this case event date type presumes awardees (and LHDs) have or will have a standardized process and defined data field in place in their surveillance system(s) to capture this information. Awardees that have a generic date of diagnosis field on their case report forms or in their electronic disease surveillance systems should be sure they have clearly defined whether this field refers to presumptive/clinical or lab-confirmed diagnosis. Please see definitions section for more information.

E. coli (STEC), Hemolytic Uremic Syndrome (HUS) and case event date types: A small percentage of STEC cases result in an extremely serious condition known as HUS. Although these cases differ clinically from other STEC (which suggests using different case event date types for each), awardees are requested to choose only one case event date type for STEC and calculate timeliness against only that type.

First report to a public health agency: Awardees should use the time that a public health agency was first alerted to a case of selected disease whether by phone, fax, online surveillance system, case report form, or another means of notification.

Low or zero incidence of disease: In many jurisdictions there may be few or no cases of certain diseases. Although low incidence rates may create challenges for instituting program improvement, the selected diseases are significant nationally and require surveillance systems and processes for timely reporting. CDC will not interpret denominators with a value of zero as poor performance.

Measles – case event date type options: Due to the relative feasibility of recognizing and reporting suspected measles cases prior to lab confirmation, CDC recommends awardees select date of diagnosis – presumptive or date of specimen collection for this disease.

Reporting timeframes – provider and lab differences: In some awardee jurisdictions, reporting timeframes for select diseases differ depending on whether reported by providers or labs. Awardees are requested to ensure that calculations of timeliness of reporting for each case of disease are compared against the appropriate required timeframe.

Note: for cases in which both a provider and a lab report the same case of disease, awardees should count the first instance of reporting the case for the purpose of this performance measure.

PHEP 13.2: Disease Control

Proportion of reports of selected reportable diseases for which initial public health **control measure**(s) were initiated within the **appropriate timeframe**

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☐ Incident	☐ Optional
☑ **Directly Funded Localities: Excludes Chicago and Los Angeles County**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ Territories or Freely Associated States	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

How is the measure calculated?

Numerator: Number of reports of selected reportable diseases for which public health control measure(s) were initiated within an appropriate timeframe

Denominator: Number of reports of selected reportable diseases received by a public health agency

Why is this measure important?

Effective control measures and mitigation strategies are fundamental to the health of communities and populations by limiting the spread of disease and, as feasible, eliminating or reducing sources of infection.

The immediate intent of this performance measure is to capture the extent to which initial public health control measures are initiated within an appropriate timeframe following the first report of a selected disease (i.e., either probable or confirmed depending on what is appropriate in practice for that disease) received by a public health agency.

The broader programmatic aim of this measure is to improve the timeliness of appropriate interventions to limit the spread of disease in human populations and communities.

What other requirements are there for reporting measure data?

New - Starting in BP2, awardees should report jurisdictionwide (e.g., statewide) performance measure data for PHEP 13.2. The sample of counties previously provided by CDC for reporting on this measure in Budget Periods 11 and 1 *no longer applies*. Awardees that are unable to report jurisdictionwide performance measure data should report as much data as feasible and indicate the percentage of the jurisdictional population covered by these data.

Awardees are required to report data on case reports with CDC notification dates between MMWR Week 27, 2013 (beginning Sunday, June 30, 2013) through MMWR Week 26, 2014 (ending Saturday, June 28, 2014).

Awardees are required to provide data on the following diseases according to the specified case classification criteria noted in parentheses:

- Diseases associated with the following CDC Category A agents:
  - Botulism (*Clostridium botulinum*) , all types excluding infant botulism (confirmed)
  - Tularemia (*Francisella tularensis*) (confirmed and probable)
- *E. coli*, STEC (confirmed - *new*)
- Hepatitis A, acute (confirmed)
- Measles (confirmed)
- Meningococcal disease (*N. meningitides*) (confirmed)

Awardees have the *option* to provide data on:

- Salmonellosis (confirmed), all types excluding Typhoid Fever (*Salmonella enterica* serovar Typhi)

- Up to 3 additional diseases of interest in the awardee jurisdiction (e.g., Shigella, Pertussis, etc.) (Awardees must provide their own target timeframe(s) for initiation of control measures for these diseases.

Awardees should calculate the numerator and denominator for this performance measure by disease, and should ensure counts exclude duplicate cases.

Awardees should exclude cases of disease from the numerator that meet inclusion criteria but are missing pertinent data (i.e., dates), and include them in the denominator.

What data must be reported?

1. Total number of disease reports received by a public health agency, by disease (denominator).
2. Total number of reports for which a control measure was initiated within the appropriate timeframe, by disease (numerator) – see **Appendix C** for established timeframes
3. Are the values reported in data elements 1 and 2 drawn from surveillance and disease reporting covering the entire jurisdiction? [Yes/No]
   a. If no, approximately what percentage of the population covered by the surveillance system is included as part of reporting for this measure?

   ☐ < 25%

   ☐ 26% - 50%

   ☐ 51% - 75%

   ☐ 76% - 99 %
4. [If awardee is reporting additional disease(s) of interest, please enter timeframe for initiation of control measure(s) in calendar days.]
5. Has the awardee health department reviewed disease reports and related information for the purposes of improving initiation of disease control measures in the jurisdiction? [Yes/No]
   a. Has the awardee health department identified corrective actions to improve initiation of disease control measures? [Yes/No]
   b. Has it implemented them? [Yes/Some/No]
6. Please indicate any barriers to successful initiation of disease control measures. [Select all that apply]

   ☐ Communication

   ☐ Equipment

   ☐ Funding

   ☐ Participation

   ☐ Policies/procedures

   ☐ Resource limitations

   ☐ Staffing

   ☐ Time constraints

   ☐ Training

   ☐ Other, please specify
7. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Assessing timeliness: Timeliness should be based on calendar days (including weekends and holidays), not business days. Weekends and holidays *should be included* when determining timeliness of control measure initiation.

Assessing control measure timeliness: For a given case to count toward the numerator, awardees will need to compare case data with the Public Health Control Measures Table (Appendix C) to determine whether a control measure(s) was initiated within the appropriate timeframe. Awardees should use the time that the first report of a selected disease was received by a public health agency as the start time for this performance measure. For example, a case report for meningococcal disease documenting prophylaxis or recommendations for prophylaxis of indicated contacts within 24 hours of receipt of the case *would count* toward the numerator for this performance measure.

Category A agents: [see PHEP 13.1]

First report to a public health agency: [see PHEP 13.1]

Public health control measures and initiation: This performance measure focuses on the timely *initiation* of public health control measures. Depending on the disease, measures range from identification (and removal, as feasible) of a source of infection, to

immunization or prophylaxis of contacts, to exclusions from child care or food-handling. Awardees have some flexibility to determine which documented actions will count as an apppropriate control measure, though they should used the examples provided in Appendix C as a guide. Important points to note:

- This performance measure is meant to capture *initiation* of public health control measures, *not* completion.
- In general, the intent of this performance measure is *not* to capture the first phone call to a healthcare provider to discuss a case patient, unless that discussion entails recommendations and/or education regarding specific control measures (e.g., calling a parent and/or a day care center to exclude an infectious child from child care due to *E. coli* or hepatitis A would count).
- If a health department documents timely *initiation* of either (a) an appropriate control measure, (b) a *recommendation* for a control measure, (c) a decision *not* to initiate a control measure, or (c) *inability* to initiate a control measure despite an effort to do so, this will meet the intent of the measure and count toward the numerator.
- Awardees may wish to consider standardizing, an operational definition of initiation. Examples may include date of patient contact or date of interview, as long as these explicitly entail implementation or recommendation of control measures in addition to routine fact-finding.

Key Measurement Terms

Appropriate timeframe: An appropriate timeframe is a period of time for intervention(s) or control measures with meaningful public health relevance. Although individual cases may vary in practice, appropriate timeframes for each of the six selected diseases, plus Salmonellosis, have been standardized for the purpose of this performance measure. Awardees are requested to determine their own target timeframes for any additional diseases they wish to report for PHEP 13.1 and 13.2.

Awardee-required timeframe: The awardee-required timeframe is a jurisdictionally-mandated period of time either by law or regulation for healthcare providers to report.

Case: Awardees should provide aggregate data solely on cases that meet the classification criteria for each disease described below (e.g., meningococcal disease: confirmed cases only). These criteria meet CDC's most recent Morbidity and Mortality Weekly Report (MMWR) print criteria for each disease. Due to the provisional nature of some case data and the likelihood of eventual rule-outs of some cases, it is understood that case counts may change following awardee reporting for this performance measure. Awardees are not required to reconcile this performance measure data to their final National Notifiable Disease Surveillance System (NNDSS) data. Provisional case counts for this performance measure are acceptable.

Case event date types: Case events mark the occurrence of specific clinical or laboratory activities or milestones that, in the context of the Disease Reporting performance measure, serve as the "start time" (measured via the "case event date") against which timeliness of reporting for cases of disease can be calculated. There are five options for case event date types, all defined below. Awardees may utilize only one type of case event date for all cases of a given disease, but are free to use that same type for multiple diseases (e.g., Date of diagnosis-lab confirmed for Hepatitis A and *E. coli* [STEC]). Please see the Additional Guidance section of PHEP 13.1 for further instructions and recommendations regarding *E. coli* and measles.

- *Date of diagnosis – lab-confirmed*: Date of medical determination of a disease state following confirmation of the presence of an organism or toxin (e.g., positive blood or stool culture, antigen test, botulinum toxin test, etc.) or physiological effects (e.g., presence or increase in antibodies associated with a disease, etc.) from laboratory testing. This refers to definitive, as opposed to preliminary, laboratory results.
- *Date of diagnosis – presumptive/clinical:* Date of medical determination indicating suspected presence of a particular disease for which initial interventions can be initiated and/or further testing undertaken. By definition, a presumptive diagnosis has not (yet) been confirmed. Instead, this type of diagnosis may be based on empirical observations by a clinician, patient histories, establishment of epidemiological linkages, preliminary laboratory findings (e.g. Gram's stain), or special diagnostic procedures (e.g. using an EMG test on a person with suspected botulism).
- *Date of laboratory report:* Date that first positive laboratory test result is either posted or communicated to appropriate clinical or organizational entity (i.e., a provider, not the public health agency). The report date can refer to communication of preliminary (if applicable or necessary) or confirmed lab results.
- *Date of laboratory result:* Date that a test, assay or other procedure is first determined to be either positive for the existence of an organism or otherwise significantly indicative of a relevant disease state.
- *Date of specimen collection:* Date that a clinical specimen is collected for analysis and/or testing. Specimen collection generally refers to the collection of blood, feces, or cerebrospinal fluid.

Immediate reporting timeframe: Immediate reporting is within 12 standard (i.e., not business) hours. If health departments do not capture dates and times of specific case events, they may consider cases as immediately reported if the selected case event date and date of first report to a health department occur on the same date.

Initiation of a control measure: Initiation of a control measure refers to the first substantive activity by public health staff to prevent or control the spread of disease. Please see the Additional Guidance section of the SURV – Disease Control performance measure for more information regarding activities that constitute initiation and examples of control measures. Examples may also be found in Appendix C.

Reporting of selected disease: Reporting of a selected disease is an initial communication by a hospital, lab, or provider to report a suspected or confirmed case of disease, or positive test result, either to an awardee health department (including its local, regional or branch offices in centralized states) or autonomous LHDs participating in the data collection effort for this performance measure.

PHEP 13.3: Outbreak Investigation Reports

Percentage of infectious disease outbreak investigations that generate reports

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☑ **Optional** - *new*
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☐ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

How is the measure calculated?

Numerator: Number of infectious disease outbreak **investigation reports** generated

Denominator: Number of infectious disease outbreaks investigated

Why is this measure important?

The immediate intent of this measure is to capture the ability of health departments to document epidemiological **investigations of infectious disease outbreaks.**

The broader programmatic aim of this measure is to improve the ability of health departments to conduct epidemiological investigations of infectious disease outbreaks by appropriately documenting and reporting on investigation activities and findings.

What other requirements are there for reporting measure data?

This measure is OPTIONAL *(new)*

Awardees are required to report summary data generated from real infectious disease outbreak investigations and investigation reports only (i.e., not drills or exercises).

Draft reports are acceptable for inclusion in the numerator for this measure under select circumstances, including:

- The completion of an investigation near the end of the reporting period for this performance measure, with insufficient time to complete an investigation report
- Completed investigations for which a draft investigation report has not yet been finalized or approved.
- Long-term or ongoing investigations for which the timeline for completion of a final investigation report is unknown.

Awardees should calculate a numerator and denominator for this performance measure:

- At the awardee level (including awardee-operated regional or district offices, etc.); and
- *New* – At the sub-awardee level (e.g., autonomous regional, district, and local health departments [LHDs] or other local entities from which the awardee has requested such data)

What data must be reported?

Questions 1 through 6 refer to *awardee-level* investigation activities only (i.e., no data from autonomous LHDs should be included in these responses).

1. Total number of infectious disease outbreaks reported to the awardee by all sources
2. Total number of infectious disease outbreak investigations in which the awardee
   a. *led* the investigation – solely or as part of a **joint investigation** (denominator for awardee metric)
   b. ***supported*** any LHD or other local-level investigation

   c. supported any other type of joint investigation (i.e., *not* supporting an LHD; this may include supporting CDC or another state)
3. The total number of infectious disease outbreak investigations for which *a report was generated*
   a. in which the *awardee led* the investigation (numerator for awardee metric)
   b. in which the awardee supported *any LHD or other local level investigation* and contributed to the investigation report
   c. in which the awardee supported *any other type* of joint investigation and contributed to the investigation report (i.e., *not* supporting an LHD; this may include supporting CDC or another state)
4. *New* - As it relates to this performance measure, please provide an operational definition and inclusion/exclusion critieria for the term "infectious disease outbreak"
5. Rank the key factors that accounted for the awardee health department *not* conducting investigations of infectious disease outbreaks. [Rank only those that apply]
   - Interagency collaboration and coordination challenges (i.e., between a health department and another government agency or department)
   - Intraagency collaboration and coordination challenges (i.e., within the health department)
   - Insufficient resources (e.g., funding, staffing, time). If selected, please describe, to the extent feasible, how this impacted awardee's ability to investigate outbreaks. (e.g., numbers or types of outbreaks not investigated)
   - Major or unexpected shifts in priorities due to emergent events, changes in mission or organization, etc.
   - Policy decision not to investigate certain types of infectious disease outbreaks (e.g., norovirus): please elaborate.
   - Other, please specify
6. What type(s) of processes, procedures, etc., does the awardee health department have in place for review of its epidemiological investigations of infectious disease outbreaks for the purposes of program improvement? [Select all that apply]
   a. Periodic or annual reviews
   b. Episodic reviews or hotwashes
   c. After-action reports
   d. No procedure in place
   e. Other, please specify

The following questions (7-13) refer to sub-awardees, autonomous regional, district, and local health departments (LHDs), or other entities from which the awardee has requested such data. Specifically, these questions concern outbreak investigations led by these entities, without any support from the awardee or federal agencies.

7. The total number of infectious disease outbreaks occurring within jurisdictions covered by these local entities.
8. The total number of infectious disease outbreak investigations *led by reporting LHDs or other local level entities* (denominator for local metric)
9. The total number of infectious disease outbreak investigations for which a report was generated (LHD or other local level entity must have *led* the investigation) (numerator for local metric)
10. What were the most frequent factors that accounted for *not* investigating infectious disease outbreaks among the LHDs and local level entities reporting data for this performance measure? [Select all that apply]
    - ☐ Interagency collaboration and coordination challenges (i.e., between a health department and another government agency or department)
    - ☐ Intraagency collaboration and coordination challenges (i.e., within a health department)
    - ☐ Insufficient resources (e.g., funding, staffing, time)
    - ☐ Major or unexpected shifts in priorities due to emergent events, changes in mission or organization, etc.
    - ☐ Policy decision not to investigate certain types of infectious disease outbreaks (e.g., norovirus). Please elaborate.
    - ☐ Other, please specify
11. Number of sub-awardees (e.g., LHDs) and other local level entities reporting data for this measure
12. Please identify the total number of sub-awardees and other local level entities (from the reporting sample) that have a process, procedure, etc., in place for review of epidemiological investigations of infectious disease outbreaks for the purposes of program improvement. Examples can include, but are not limited to, periodic or annual reviews, hotwashes, after-action reports
13. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

Infectious disease outbreak reporting: Only reported outbreaks, which should include notifiable disease cases and clusters – and might include other unusual cases – should be included in this performance measure. Food-borne outbreaks should be included here.

Note: HIV, STDs, and tuberculosis are not included in this definition.

Investigation: For the purpose of these performance measures, initial investigative activity of a more preliminary or exploratory nature that results in either a decision not to investigate further or referral to another agency without further significant involvement by the health department, should not count as an investigation. Referrals to other agencies that entail further significant involvement by the health department should count as an investigation. Investigations that take place across reporting periods for this performance measure may, at the awardees discretion, be included in the denominator for the following reporting period.

PHEP 13.4: Outbreak Reports with Minimal Elements

Percentage of infectious disease outbreak investigation reports that contain all **minimal elements**

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☑ **Optional** - *new*
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

How is the measure calculated?

Numerator: Number of infectious disease outbreak investigation reports containing all minimal elements

Denominator: Number of infectious disease outbreak reports generated

Why is this measure important?

The immediate intent of this measure is to capture the ability of health departments to document epidemiological investigations of infectious disease outbreaks with complete reports (i.e., reports that contain a set of minimal elements).

The broader programmatic aim of this measure is to improve the quality of epidemiological investigations reports by ensuring that awardee and LHDs appropriately characterize and investigate the incident, document results and recommendations, and share these data as appropriate with decision makers.

What other requirements are there for reporting measure data?

This measure is OPTIONAL *(new)*

Awardees are required to report summary data generated from real infectious disease outbreak investigations and investigation reports only (i.e., not drills or exercises).

Draft reports are acceptable for inclusion in the numerator for this measure under select circumstances, including:

- The completion of an investigation near the end of the reporting period for this performance measure, with insufficient time to complete an investigation report
- Completed investigations for which a draft investigation report has not yet been finalized or approved.
- Long-term or ongoing investigations for which the timeline for completion of a final investigation report is unknown.

Awardees should calculate a numerator and denominator for this performance measure:

- At the awardee level (including awardee-operated regional or district offices, etc.); and
- *New* - At the sub-awardee level (e.g., autonomous regional, district and local health departments [LHDs] or other local entities from which the awardee has requested such data).

What data must be reported?

1. The total number of infectious disease outbreak investigations for which a report was generated in which the awardee
   a. led the investigation (denominator for awardee metric)
   b. supported any LHD or local level investigation and contributed to writing the investigation report
   c. supported any other type of joint investigation and contributed to writing the investigation report (i.e., not supporting an LHD; this may include CDC or another state).
2. Total number of infectious disease outbreak reports containing all minimal elements in which the awardee

a. led the investigation (numerator for awardee metric)
b. supported any LHD or local level investigation and contributed to writing the investigation report
c. supported any other type of joint investigation and contributed to writing the investigation report (i.e., not supporting an LHD; this may include CDC or another state)

3. For the reports identified above that do not contain all of the minimal elements, please identify the elements that were most frequently missing [Select all that apply]
   - ☐ Context/background
   - ☐ Initiation of investigation
   - ☐ Investigation methods
   - ☐ Investigation findings/results
   - ☐ Discussion and/or conclusions
   - ☐ Recommendations
   - ☐ Key investigators and/or report authors
     a. Briefly explain why this element(s) was most frequently missing.

The following questions refer to sub-awardees, autonomous regional, district, and local health departments (LHDs), or other local level entities from which the awardee has requested such data.

4. The total number of infectious disease outbreak investigations for which a report was generated (LHD or other local level entity must have led the investigation) (denominator for local metric)
5. The total number of infectious disease outbreak investigation reports containing all minimal elements (numerator for local metric)
6. For the reports identified above that do not contain all of the minimal elements, please identify the elements that were most frequently missing. [Select all that apply]
   - ☐ Context/background
   - ☐ Initiation of investigation
   - ☐ Investigation methods
   - ☐ Investigation findings/results
   - ☐ Discussion and/or conclusions
   - ☐ Recommendations
   - ☐ Key investigators and/or report authors
     a. Briefly explain why this element(s) was most frequently missing.
7. Number of sub-awardees (e.g., LHDs) or other local level entities reporting data for this measure
8. *New-* [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Minimal Elements: [See Key Measurement Terms for a detailed description of the seven Minimal Elements] Health departments reporting on this performance measure should determine whether investigation reports include all of the seven minimal elements. Report elements do not have to be labeled exactly as shown below but should, if applicable, contain all of the content (bullets) within each element, as described. In some instances, some content (bullets) may appear under another minimal element (e.g., population affected may be reported in the results section of the report and not in context/background). This is acceptable for the purpose of calculating a numerator for this measure.

Key Measurement Terms

Infectious disease outbreak: An infectious disease outbreak is an increase in the number of observed cases (over expected) of a given disease or illness of public health importance caused by a specific infectious agent. Please see the Additional Guidance sections of PHEP 13.3 and 13.4 for more information regarding reported/non-reported outbreaks and food-borne outbreaks. For the purpose of collecting data for these measures, awardees are encouraged to develop a standardized definition as well as inclusion/exclusion criteria.

Investigation: An investigation is the systematic collection and analysis of facts or data to determine the scope of an incident and the cause(s) of illness as well as identify a means of intervention or prevention strategy. In general, the term refers to systematic investigative activity beyond that required for routine follow-up and basic documentation (e.g., of single cases). It may (but is not required to) call for the allocation of additional organizational resources such as staff, funding, etc. Example activities include, but are not limited to, site visits, field assessments, case finding, record reviews, and lab testing. The term refers explicitly to epidemiological investigations conducted in the context of infectious disease outbreaks. There is no expectation by CDC that all outbreaks shall lead to epidemiological investigations.

Investigation report: An investigation report is the written or electronic documentation describing the event, methods of investigation (e.g., lab, epidemiological, and statistical methods), findings, recommendations, etc., produced as a result of an epidemiological investigation of an infectious disease outbreak or acute environmental exposure(s). Although in practice elements of a report vary, generally all should contain each of seven main "minimal elements" listed here. Further, while reports are often generated in traditional "report" style, other formats can be included for the purpose of this performance measure. Examples include memoranda, e-mails, written correspondence, templates, forms, etc.

Joint investigation: A joint investigation is any detailed or careful examination involving the awardee and at least one other agency. Awardees can lead or support joint investigations. Examples include investigations conducted by both the awardee and CDC or investigations conducted by multiple agencies (e.g., the awardee, CDC, and an LHD).

Minimal elements: Minimal elements are a core set of components that are necessary for an investigation report to be considered complete. Generally, all sub-bullets relevant to an infectious disease outbreak or acute environmental exposure investigation must be part of a report for it to be considered complete. Sub-bullets that are not relevant to a given type of investigation (infectious disease or acute environmental exposure) are not required. Recognizing that investigation reports take various forms, and are presented in various ways, these elements do not have to be in the exact format laid out below.

- Context/background – Information that helps to characterize the incident, including:
  - Population affected (e.g., estimated number of persons exposed and number of persons ill)
  - Location (e.g., setting or venue)
  - Geographical area(s) involved
  - Suspected or known etiology
- Initiation of investigation – Information regarding receipt of notification and initiation of the investigation, including:
  - Date and time initial notification was received by the agency
  - Date and time investigation was initiated by the agency
- Investigation methods – Epidemiological or other investigative methods employed, including:
  - Any initial investigative activity (e.g., verified laboratory results)
  - Data collection and analysis methods (e.g., case-finding, cohort/case-control studies, environmental investigation or testing, etc.)
  - Tools that were relevant to the investigation (e.g., epidemic curves, attack rate tables, questionnaires)
  - Case definitions (as applicable)
  - Exposure assessments and classification (as applicable)

    - Reviewing reports developed by first responders, lab testing of environmental media, reviews of environmental testing records, industrial hygiene assessments, questionnaires
- Investigation findings/results – All pertinent investigation results, including:
    - Epidemiological results
    - Laboratory results (as applicable)
    - Clinical findings (as applicable)
    - Other analytic findings (as applicable)
- Discussion and/or conclusions – Analysis and interpretation of the investigation results, and/or any conclusions drawn as a result of performing the investigation. In certain instances, a conclusions section without a discussion section may be sufficient (this is left to awardees' discretion).
- Recommendations for controlling disease and/or preventing/mitigating exposure – Specific control measures or other interventions recommended for controlling the spread of disease or preventing future outbreaks and/or for preventing/mitigating the effects of an acute environmental exposure.
- Key investigators and/or report authors – Names and titles are critical to ensure that lines of communication with partners, clinicians and other stakeholders can be established.

Supporting role (in an investigation): A supporting role is technical assistance or consultation provided by the awardee health department to an LHD or other agency. The term generally does not refer to routine involvement by a state public health laboratory in support of a local investigation or to aid in establishing a diagnosis (e.g., to conduct 'rule-out' or confirmation testing). In some jurisdictions, support in an investigation occurs as a function of an outbreak crossing jurisdictional lines; in others, it may be initiated upon request from a single, typically local level agency. See above: Joint investigation.

14. Responder Safety and Health

Introduction

The Responder Safety and Health capability refers the ability to protect public health agency staff responding to an incident by identifying safety and health risks; providing medical countermeasures and/or personal protective equipment; facilitating risk-specific training; and monitoring responder health. Implementing these activities enables health departments to assure that public health responders are medically fit, appropriately trained, and monitored for potential adverse health effects, if needed.

The Responder Safety and Health pre-incident planning measure gauges the extent to which health departments have deployment safety and health programs for public health responders in place. The first response measure determines whether public health responders received health screening before and after deployment – so that medical readiness and any adverse health effects as a result of the deployment can be determined. The second response measure provides health outcome data for deployed public health responders (i.e., injuries, illnesses, exposures and fatalities) to enable health departments to address health and safety concerns and continually improve their deployment safety and health programs.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Identify responder safety and health risks**
2. **Identify safety and personal protective needs**
3. **Coordinate with partners to facilitate risk-specific safety and health training**
4. **Monitor responder safety and health actions**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4
PHEP 14.1	●		●	●
PHEP 14.2	RETIRED	-	-	-
PHEP 14.3				●
PHEP 14.4				●

PHEP 14.1: Deployment Safety and Health Program

Does public health have a **deployment** safety and health program in place for **public health responders?** [Yes/No]

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan***	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

**BP2 EXCEPTION*: *Baseline reporting required at mid-year BP2, with opportunity to update at end-of-year.*

How is the measure calculated?

This is a "yes/no" measure, which CDC calculates based on self-report by the awardee indicating whether the **responsible entity or entities** *(new)* have completed *all* of the following elements by having processes and procedures in place for public health responders to:

- Meet medical requirements prior to deployment
- Receive **risk-specific training** (e.g., on hazard awareness and recognition, communication of potential personal risks, and proper personal protective equipment [PPE] use) prior to and, if necessary, at the time of an incident
- Receive exposure, mental/behavioral health, and medical **monitoring** during and after an incident (if necessary)
- Have access to needed **Personal Protective Equipment** (PPE) or countermeasures

Why is this measure important?

Implementing an effective deployment safety and health program is an important mechanism for health departments to prepare public health responders adequately for deployment assignments and assure they are monitored for medical and mental/behavioral health sequelae post-incident, if necessary.

The immediate intent of this measure is to assess the extent to which health departments have in place processes, procedures, and other elements necessary to determine responders' basic medical **readiness**; provide or assure training appropriate to the specific hazards faced in a response; and provide or assure access to needed personal protective equipment/medical countermeasures. Additionally, this measure is intended to ensure that health departments have a process in place to provide or assure the provision of medical, mental/behavioral health, and exposure monitoring for public health responders, if warranted.

The broader programmatic aim of this measure is to provide for, or assure, the safety and health of deployed public health responders through proper screening, training, and monitoring.

What other requirements are there for reporting measure data?

Not applicable

What data must be reported?

The first two questions, below, will be asked in relation to all four of the bulleted elements listed above.

1. *New* - At which jurisdictional level(s) does public health have responsibility for this element?
   - ☐ Awardee level (including awardee-led or operatated regions, districts, offices, etc.)
   - ☐ Sub-awardee or autonomous local level entities (including autonomous regions, districts, counties, LHDs, coalitions, etc.)
   - ☐ Both
   - ☐ Other (please specify)

2. *New* - Has this element been completed by the entity/entities responsible for its completion? [Yes/No] (*Please refer to the "How is this measure operationalized?" section for additional guidance)*
3. *New* - Has this capability been exercised or demonstrated (in a real incident) in this budget period? [Yes/No]
   a. Have corrective action/improvement plan items related to responder safety & health been identified? [Yes/No]
   b. Have corrective action/improvement plan items related to responder safety & health been implemented? [Yes/Some/No]
4. *New* - Please indicate any barriers to completion of elements. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
   - ☐ None
5. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized? - *New*

Health departments are encouraged to base the elements of their responder safety and health programs on relevant hazards/risks identified in existing (or, as appropriate, new) jurisdictional hazard and risk assessments.

Either direct provision by a health department, or assurance (e.g., through partner agencies, third-party organizations, contractors, etc.) of health screening, risk-specific training, health monitoring, and PPE for public health responders meets the intent of this measure.

Ensuring that public health responders meet medical requirements/screening for medical readiness prior to deployment could include identifying any pre-existing medical and psychiatric conditions, current medical concerns, changes in medical history, immunization status, functional and access needs, and any need for additional training. A comprehensive physical or medical examination of responders prior to deployment is not a requirement of this measure. Public health agencies have flexibility to use a variety of methods (e.g., e-mail, phone call, in-person meeting) to ascertain whether public health responders meet medical requirements.

This measure is meant to address two key questions related to each of the elements identified as critical for this measure: (1) Which entity or entities is responsible for completing these elements?; and (2) Have they done so?

Awardees are encouraged to develop internal tracking and monitoring processes and tools to ensure that sub-awardees and other entities responsible for any elements in this measure are, in fact, making progress towards completion of their activities.

The awardee is responsible for determining entity or entities is responsible for completing an element. This can refer to the awardee central office, its regional or district offices, local health departments, etc.

<u>All entities responsible for completion of a given element must have completed the element in order to answer "Yes" to Question 2, above.</u>

Example #1 (decentralized state). In this state, there are 10 autonomous LHDs (or autonomous regions/districts, etc.) in the jurisdiction, but only 5 have been funded to complete a given element for this measure.

For the awardee to enter "Yes" on Question 2 for that element, the 5 LHDs (not 10) must have completed it. If the awardee itself was responsible for completion of a different element, it could only enter "Yes" on Question 2 for its element once it has been completed by the awardee.

Example #2 (centralized state with 8 regional or district offices). In this state, the awardee has determined that the main office and 4 of its 8 regional offices will be responsible for addressing all the elements for this

measure in this budget period. The awardee will determine when it and these 4 regional offices have satisfactorily completed the element.

Once the main office and the 4 regional offices have done so, the awardee may enter "Yes" on Question 2 for those elements. If, in this example, the awardee main office is the only entity responsible for completing an element (i.e., it does not assign any responsibility to any of its regions), then it may enter "Yes" once it (the main office) has completed the element.

Example #3 (Directly funded city). In this example, the directly funded city is the only entity responsible for all the elements for this measure. Therefore it does not need to track sub-awardees or autonomous local level entities. The city awardee will be able to enter "Yes" to Question 2 for each of the elements as it completes them.

PHEP 14.3: Screening/Out-processing

Percentage of deployed public health responders screened for medical readiness prior to deployment and out-processed post-deployment

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☐ Accountability:
☑ **Territories or Freely Associated States (Puerto Rico only)**	☑ **If Emergency Response Required Use of this Capability, Regardless of Funding**	☑ Planned Event	☐ Data Collected By

How is the measure calculated?

Numerator: Number of deployed public health responders screened for medical readiness prior to deployment and out-processed post-deployment

Denominator: Number of public health responders deployed

Why is this measure important?

Screening for medical readiness prior to deployment is important to ensure that public health responders are fit for duty. Similarly, out-processing is imperative to identify any injuries, illnesses, or exposures incurred by public health responders as a result of deployment so that public health responders receive follow-up monitoring and care, if needed.

The immediate intent of this measure is to capture the extent to which public health responders are screened/assessed, before and after they are deployed, for basic medical fitness as well as for exposure, illness or injury incurred as a result of the response.

The broader programmatic aims of the measure are to (1) improve the likelihood that health departments assign public health responders deployment roles for which they are medically fit; and (2) to increase health department awareness of any injuries, illnesses, or exposures incurred by public health responders so that they can initiate or assure appropriate medical, mental/behavioral health, and/or exposure monitoring.

What other requirements are there for reporting measure data? - *New*

- Awardees may report the numerator and denominator of this measure *by incident or exercise* at the awardee or local level.
- *Awardees that experience two or more incidents or exercises* involving deployment of public health responders must report on at least two of those.
  - One data point must reflect the awardee's best performance (highest percentage);
  - The other data point must reflect performance which, based on a determination from the awardee, calls for focused quality improvement and – if applicable – technical assistance.
  - Awardees are encouraged to submit data on additional incidents and exercises as well. There are no specific reporting requirements or parameters for additional data points.
- *Awardees that experience only one incident or exercise* involving deployment of public health responders must report on it.
- *Awardees that experience no incidents or exercises* involving deployment of public health responders in BP2 do not need to report on this measure.

Responders "deployed" into administrative and other support roles, e.g., at headquarters or in the emergency operations center are *excluded* from this measure. This measure is intended principally for "field" deployments and related deployments of public health staff.

What data must be reported?

1. Number of public health responders deployed (denominator)
2. Number of deployed public health responders screened for medical readiness prior to deployment *and* out-processed post-deployment (numerator)
3. Number of deployed public health responders only screened for medical readiness prior to deployment (not out-processed post-deployment)
4. Number of deployed public health responders only out-processed post-deployment (not screened for medical readiness prior to deployment)
5. Which entity is reporting on this measure? [Select one]
   - ☐ Awardee health department (including regional or district offices)
   - ☐ Sub-awardee or autonomous regional, district, local or similar health department
6. Screening/out-processing occurred during a(n): [Select one]
   - ☐ Functional exercise
   - ☐ Full-scale exercise
   - ☐ Incident
7. Name and date of the incident/planned event/exercise.
8. Type of incident. [Select one]
   - ☐ Extreme weather (e.g., heat wave, ice storm)
   - ☐ Flooding
   - ☐ Earthquake
   - ☐ Hurricane/tropical storm
   - ☐ Hazardous material
   - ☐ Fire
   - ☐ Tornado
   - ☐ Biological hazard or disease, please specify
   - ☐ Radiation
   - ☐ Other, please specify
9. *New* - Please indicate any barriers to screening/out-processing public health responders [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
10. *New* - Continuous Quality Improvement:
    a. Were relevant corrective actions / improvement plan items from *prior responses* (including exercises, drills, etc.) related to deployment of public health responders incorporated into planning and/or response procedures before this incident/drill took place? [Yes/No]
    b. Have corrective actions / improvement plan items related to deployment of public health responders been identified as a result of this incident/drill? [Yes/No]
       i. Have they been implemented? [Yes/Some/No]
11. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

Ensuring that public health responders meet medical requirements/screening for medical readiness prior to deployment could include identifying any pre-existing medical and psychiatric conditions, current medical concerns, changes in medical history, immunization status, functional and access needs, and any need for additional training.

A comprehensive physical or medical examination of responders prior to deployment is not a requirement of this measure. Public health agencies have flexibility to use a variety of methods (e.g., e-mail, phone call, in-person meeting) to ascertain whether public health responders meet medical requirements.

PHEP 14.4: Responder Health Outcomes

Percentage of public health responders who were injured, ill, exposed, or killed as a result of deployment during an incident

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☑ **Annual Reporting**	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

How is the measure calculated?

Numerator: Number of public health responders who were injured, ill, exposed, or killed as a result of deployment during an incident

Denominator: Number of public health responders deployed

This is an aggregate measure across public health incidents involving responder deployment.

Why is this measure important?

Responder injuries, illnesses, exposures, and fatalities are often preventable. Responder health outcome data represent a critical information category useful to address immediate operational safety and health concerns (during a response) as well as identify broader programmatic factors for which corrective actions can be developed and implemented (post-incident).

The immediate intent of this measure is to capture the extent to which deployed public health responders are injured, exposed, killed, or become ill as a result of deployment during an incident. Annual tracking of these data is an essential component of a broader strategy to assess the extent to which health departments are conducting assurance and monitoring of the health and safety of deployed responders.

The broader programmatic aim of the measure is continuous quality improvement for deployment health and safety programs. Data collected through this measure are meant to enable health departments to identify and implement strategies to address the root cause(s) of injuries, illnesses, exposures, or fatalities, with a particular emphasis on the implementation of appropriate medical screening, targeted training, or monitoring during and/or after an incident, if needed.

What other requirements are there for reporting measure data?

Not applicable

What data must be reported?

1. Number of public health responders deployed (denominator)
2. Number of public health responders who were injured, exposed, killed, or become ill as a result of deployment during an incident (numerator) *Note: Please do not double-count responders. If a responder experienced more than one of these health outcomes as a result of deployment, please report the responder in the category that corresponds with the most serious health outcome.*
   a. Number of responders with documented exposures
   b. Number of responders with documented illnesses
   c. Number of responders with documented injuries
   d. Number of responder fatalities
3. How many incidents are these data based on?
4. Please identify the data source(s) used for the collection of data related to injury, fatality, illness, or exposure [Select all that apply]
   ☐ ICS form (e.g., 200 and 209)
   ☐ OSHA form (e.g., 300 and 301)

- ☐ Other, please specify

5. Please indicate any barriers to reducing injury, illness, etc., among deployed public health responders. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation
   - ☐ Policies/procedures
   - ☐ Resource limitations
   - ☐ Staffing
   - ☐ Time constraints
   - ☐ Training
   - ☐ Other, please specify
6. Please identify and describe any hazards/risks to which deployed public health responders were exposed during these incidents. [Select all that apply]
   - ☐ Extreme temperatures (e.g., hot or cold)
   - ☐ Structural (e.g., building) instability
   - ☐ Fire
   - ☐ Contaminated food/water
   - ☐ Respiratory hazards (e.g. dust, smoke, mold)
   - ☐ Chemical/hazardous materials
   - ☐ Communicable diseases
   - ☐ Debris
   - ☐ Noise
   - ☐ Animal bites
   - ☐ Radiological hazard
   - ☐ Social unrest/violence
   - ☐ Human remains
   - ☐ Other, please specify
   - ☐ None
7. How many incidents required the use of medical countermeasures and/or PPE?
   a. In how many incidents requiring the use of medical countermeasures and/or PPE were they provided?
8. Please identify and describe any injuries, illnesses, or exposures sustained by deployed public health responders that were noted as a result of these incidents.
9. Please identify the most important contributing factors to exposures, injuries, and/or illnesses sustained by public health responders. [Select all that apply]
   - ☐ Public health responders were not medically fit to deploy
   - ☐ Public health responders lacked appropriate training
   - ☐ PPE/medical countermeasure recommendation was untimely (e.g., too late)
   - ☐ PPE/medical countermeasure recommendation did not address full range of applicable hazards
   - ☐ Necessary PPE/medical countermeasure was not available
   - ☐ Public health responders did not use PPE/medical countermeasures
   - ☐ Public health responders used PPE improperly
   - ☐ Other, please specify (examples may include fatigue, behavioral issues (e.g., drugs/alcohol), sleep deprivation, negligence)
10. *New* - Have corrective action/improvement plan items been identified to help reduce risk of exposure, injury or illness of deployed public health responders? [Yes/No]
    a. Have these corrective action/improvement plan items been implemented? [Yes/Some/No]
11. Has a "registry" and/or similar tracking system been developed and/or utilized (by the awardee or a partner agency) for monitoring public health responders, particularly for long-term or chronic health effects? [Yes/No]
    a. If yes, please describe this system and its implementation
12. *New* - [Optional] Please provide any additional clarifying, contextual, or other information.

How is this measure operationalized?

Awardee health departments should report aggregate data on all non-routine incidents. Examples of non-routine incidents can include, but are not limited to:

- Presence of life-threatening circumstances
- Declaration of a disaster/public health emergency

Inclusion criteria for injury, exposure, or illness include, but are not limited to:

- Filing of a worker's compensation claim
- Responder fatality
- Documented exposure to a harmful radiological, chemical, or biological agent
- Provision of medical assistance beyond first aid
- Scores on mental/behavioral health assessments exceed a certain threshold (if conducted)

Data sources may include, but are not limited to, Incident Command System (ICS) Forms 201 and 209, the OSHA 300 log or equivalent employer injury log, and data from the Emergency Responder Health Monitoring and Surveillance (ERHMS) system or its equivalent. This measure does not presently include established timeframes for long-term monitoring of public health responders. Please consult the CDC EHRMS website (http://www.cdc.gov/niosh/topics/erhms/document/) and manual (http://nrt.sraprod.com/ERHMS/) for general guidance regarding establishing and implementing responder safety and health programs. Chapter 10 of the EHRMS manual focuses on post-incident monitoring. Key points from this chapter relevant to this measure include:

- ERHMS does not specify a time period for monitoring
- Medical monitoring programs should be designed prior to deployments and be conducted by qualified health and scientific professionals
- Data collected from the pre- and during event phases will help inform post-event tracking decisions
- Post-event tracking is "event/exposure" specific. The duration of the tracking needed may be better defined once the medical consequences are better known.

Key Measurement Terms

Deployment: Deployment is defined as physical assignment of public health responders to non-routine incident sites or relevant support locations (e.g., warehouses, distribution centers, PODs, etc.). Generally, headquarters, the EOC, and similar locations are not considered part of responder deployment for the purpose of this measure. Routine fieldwork, such as, restaurant inspections, investigations of common or relatively low-threat outbreaks, or mold or lead inspections are excluded for this measure.

Medical requirements/readiness (for deployment): Medical requirements/readiness refers to an acceptable level of physical, medical and mental/behavioral well-being, or health, appropriate for an individual responder's deployment. For the purpose of this measure, this threshold should be determined by or within each jurisdiction. Awardees are encouraged to work with their occupational health units and other partners to determine appropriate thresholds and definitions of medical readiness for responders.

Monitoring: Monitoring refers to the ongoing and systematic collection, analysis, interpretation, and dissemination of health-related data associated with an individual responder's injury, illness, and/or exposure incurred during an incident. Monitoring is distinct from – and often follows from – a basic out-processing assessment, in which public health responders are assessed for injury, illness or exposure immediately following their deployment.

Personal Protective Equipment (PPE): Please refer to CDC's Public Health Preparedness Capabilities: National Standards for State and Local Planning (March 2011) document, page 129, Resource Element E1, which describes Level D basic safety equipment and references OSHA and CDC guidelines for PPE in clinical / healthcare settings.

Public health responders: Public health responders refer to public health agency staff deployed by public health agencies to support incidents with public health/medical missions.

Risk-specific training: Risk-specific training includes pre-incident education or instruction (e.g., on concepts such as hazard awareness and recognition, self-care, and proper PPE use) and site-specific education or instruction (e.g., on specific topics or problems that arise after the arrival of public health responders at an incident site, including immediate exposure risks, safety hazards, etc.).

15. Volunteer Management

Introduction

Volunteer Management includes coordinating, notifying, dispatching, and demobilizing volunteers to support a public health agency's response to an incident of public health significance. Public health and medical volunteers enable the public health and healthcare systems to surge and meet the elevated needs of an event or incident and therefore coordinated management is crucial.

The Volunteer Management pre-incident planning measure gauges the extent to which health departments have developed plans, processes, and procedures to manage volunteers, including receiving, confirming credentials, providing training, and tracking. The Volunteer Management response measure assesses the public health/medical lead's ability to meet requests for volunteers from response entities in a timely manner.

Capability Functions

This capability consists of the ability to perform the following functions:

1. **Coordinate volunteers**
2. **Notify volunteers**
3. **Organize, assemble, and dispatch volunteers**
4. **Demobilize volunteers**

Alignment of Performance Measures to Capability

Measure	Function 1	Function 2	Function 3	Function 4
PHEP 15.1	●	●		
PHEP 15.2	RETIRED	-	-	-
HPP-PHEP 15.1			●	●

PHEP 15.1: Managing Volunteers

Does public health have plans, processes, and procedures in place to manage **volunteers** supporting a public health or medical incident? [Yes/No]

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☐ Incident	☐ Optional
☑ **Directly Funded Localities**	☑ **If PHEP Funds Allocated to the Capability or Contracts Plan***	☐ Exercise	☐ Accountability
☑ **Territories or Freely Associated States (Puerto Rico only)**	☐ If Emergency Response Required Use of this Capability, Regardless of Funding	☐ Planned Event	☐ Data Collected By

* *BP2 EXCEPTION: Baseline reporting required at mid-year BP2, with opportunity to update at end-of-year.*

How is the measure calculated?

This is a "yes/no" measure, which CDC calculates based on self-report by the awardee indicating whether the **responsible entity or entities** *(new)* have completed *all* of the following elements by having plans, processes, procedures and systems in place for:

- Receiving volunteers
- Determining volunteer affiliation, including procedures for integrating or referring non-registered or spontaneous volunteers
- Confirming volunteer credentials
- Assigning roles and responsibilities to volunteers
- Providing Just-in-Time Training for volunteers
- **Tracking volunteers**
- **Out-processing** volunteers

Why is this measure important?

The immediate intent of this measure is to ensure that the public health/medical lead has the plans, processes and/or procedures in place to be able to manage volunteers during each phase of a response.

The broader programmatic intent of this measure is to ensure that the public health/medical lead is able to efficiently and effectively utilize and incorporate public health/medical volunteers in an incident.

What other requirements are there for reporting measure data?

Not applicable

What data must be reported?

The first two questions, below, will be asked in relation to all seven of the bulleted elements listed above.

1. *New -* At which jurisdictional level(s) does public health have responsibility for this element?
   - ☐ Awardee level (including awardee-led or operatated regions, districts, offices, etc.)
   - ☐ Sub-awardee or autonomous local level entities (including autonomous regions, districts, counties, LHDs, coalitions, etc.)
   - ☐ Both
   - ☐ Other (please specify)
2. *New -* Has this element been completed by the entity/entities responsible for its completion? [Yes/No] *(Please refer to the "How is this measure operationalized?" section for additional guidance)*
3. *New -* Has this capability been exercised or demonstrated (in a real incident) in this budget period? [Yes/No]
   a. Have corrective action/improvement plan items related to volunteer management been identified? [Yes/No]
   b. Have corrective action/improvement plan items related to volunteer management been implemented? [Yes/Some/No]
4. *New -* Please indicate any barriers to completion of elements. [Select all that apply]
   - ☐ Communication
   - ☐ Equipment
   - ☐ Funding
   - ☐ Participation

- ☐ Policies/procedures
- ☐ Resource limitations
- ☐ Staffing
- ☐ Time constraints
- ☐ Training
- ☐ Other, please specify

5. *New* - [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized? - *New*

Public health departments are encouraged to utilize resources/competencies available through key partners to meet the intent of this measure as long as the plans, processes and procedures are clearly articulated.

This measure is meant to address two key questions related to each of the elements identified as critical for this measure: (1) Which entity or entities is responsible for completing these elements?; and (2) Have they done so?

Awardees are encouraged to develop internal tracking and monitoring processes and tools to ensure that sub-awardees and other entities responsible for any elements in this measure are, in fact, making progress towards completion of their activities.

The awardee is responsible for determining which entity or entities is responsible for completing an element. This can refer to the awardee central office, its regional or district offices, local health departments, etc.

<u>All entities responsible for completion of a given element must have completed the element in order to answer "Yes" to Question 2, above.</u>

Example #1 (decentralized state). In this state, there are 10 autonomous LHDs (or autonomous regions/districts, etc.) in the jurisdiction, but only 5 have been funded to complete a given element for this measure.

For the awardee to enter "Yes" on Question 2 for that element, the 5 LHDs (not 10) must have completed it. If the awardee itself was responsible for completion of a different element, it could only enter "Yes" on Question 2 for its element once it has been completed by the awardee.

Example #2 (centralized state with 8 regional or district offices). In this state, the awardee has determined that the main office and 4 of its 8 regional offices will be responsible for addressing all the elements for this measure in this budget period. The awardee will determine when it and these 4 regional offices have satisfactorily completed the element.

Once the main office and the 4 regional offices have done so, the awardee may enter "Yes" on Question 2 for those elements. If, in this example, the awardee main office is the only entity responsible for completing an element (i.e., it does not assign any responsibility to any of its regions), then it may enter "Yes" once it (the main office) has completed the element.

Example #3 (Directly funded city). In this example, the directly funded city is the only entity responsible for all the elements for this measure. Therefore it does not need to track sub-awardees or autonomous local level entities. The city awardee will be able to enter "Yes" to Question 2 for each of the elements as it completes them.

HPP-PHEP 15.1: Volunteer Management

Percentage of volunteers **deployed** to support a public health/medical incident within the **requested timeframe**.

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
☑ **States**	☐ Annual Reporting	☑ **Incident**	☐ Optional
☑ **Directly Funded Localities**	☐ If PHEP Funds Allocated to the Capability or Contracts Plan	☑ **Exercise**	☐ Accountability
☑ **Territories or Freely Associated States**	☑ **If Emergency Response Required Use of this Capability, Regardless of Funding**	☐ Planned Event	☑ **Data Collected By: HPP and/or PHEP**

How is the measure calculated?

Numerator: Number of volunteers, determined to be needed for the response by the public health/medical lead or other authorized official, that arrived on scene (including staging area or other designated area) within the requested timeframe

Denominator: Number of volunteers determined to be needed for the response by the public health/medical lead or other authorized official

Why is this measure important?

The immediate intent of this measure is to assess the timeliness of implementing key stages of volunteer management – from receipt of **request**, to activation of volunteers, to deployment – in order to determine key bottlenecks and chokepoints which inhibit timely deployment of volunteers.

The broader programmatic intent of this measure is to ensure that the public health/medical lead meets requests for volunteers in a timely manner.

This measure is NOT intended to assess routine or day-to-day volunteer activities in healthcare organizations.

What other requirements for reporting measure data? - *New*

- Awardees may report the numerator and denominator of this measure *by incident or exercise* at the state, sub-state regional or local level.
- *Awardees that experience two or more incidents or exercises* involving deployment of volunteers must report on at least two of those.
  - One data point must reflect the awardee's best performance (highest percentage);
  - The other data point must reflect performance that, based on a determination from the awardee, calls for focused quality improvement and – if applicable – technical assistance.
  - Awardees are encouraged to submit data on additional incidents and exercises as well. There are no specific reporting requirements or parameters for additional data points.
- *Awardees that experience only one incident or exercise* involving deployment of volunteers must report on it.
- *Awardees that experience no incidents or exercises* involving deployment of volunteers in BP2 do not need to report on this measure; however, they must conduct a call down and acknowledgement drill. The call down and acknowledgement drill contains the following data elements:
  - Number of volunteers contacted (registered in the ESAR-VHP system)
  - Number of volunteer contacted (registered in other systems)
  - Number of volunteers in the ESAR-VHP system that acknowledged contact within the requested timeframe
  - Number of volunteers registered in other systems that acknowledged contact within the requested timeframe
  - The requested timeframe for acknowledgment (e.g., 4 hours, 8 hours, 12 hours, etc.)
  - Date of call down drill
- The call down and acknowledgement drill, above, may *not* be reported in lieu of performance

measure HPP-PHEP 15.1, if there occurred incidents or exercises involving actual deployment of volunteers in the budget period.

- In future budget periods, awardees may be required to exercise actual volunteer deployment if there are no volunteer deployments during a public health/medical incident in two consecutive budget periods.

What data must be reported?

For each incident/exercise reported on, please provide the following information.

1. *New* - The number of volunteers determined to be needed for the response by the public health/medical lead or other authorized official (denominator)
2. The number of volunteers who arrived on scene (including staging area or other designated area) within the requested timeframe (numerator)
   - Of these:
     - ☐ Number of deployed volunteers registered in the Emergency System for the Advance Registration of Volunteer Health Professionals (ESAR-VHP)
     - ☐ Number of deployed volunteers registered in other systems
3. Requested timeframe for on-scene (including staging area or other designated area) arrival of volunteers
4. The request for volunteers occurred during a(n): [Select one]
   - ☐ Incident
   - ☐ Full Scale Exercise
   - ☐ Functional Exercise
   - ☐ Drill
5. This incident or exercise utilized or demonstrated one or more functions within the: [Select one]
   - ☐ HPP Volunteer Management Capability
   - ☐ PHEP Volunteer Management Capability
   - ☐ Both HPP and PHEP Volunteer Management Capabilities
6. The name and date of the incident or exercise.
7. The type of incident or exercise upon which the request for volunteers was based: [Select all that apply]
   - ☐ Extreme weather (e.g., heat wave, ice storm)
   - ☐ Flooding
   - ☐ Earthquake
   - ☐ Hurricane/tropical storm
   - ☐ Hazardous material
   - ☐ Fire
   - ☐ Tornado
   - ☐ Biological hazard or disease, please specify
   - ☐ Radiation
   - ☐ Other, please specify
8. The entity that made the original request for volunteers [Select one]
   - ☐ Local health department
   - ☐ State health department
   - ☐ Healthcare organization
   - ☐ Healthcare coalition
   - ☐ Other, please specify
9. The requested location for the deployment: [Select all that apply]
   - ☐ Staging/assembly area(s) (not actual incident site)
   - ☐ Hospital(s)
   - ☐ Shelter(s)
   - ☐ Points of Dispensing (POD or PODs)
   - ☐ Alternate care site(s):
   - ☐ Other, please specify
10. The number of volunteers who were contacted for potential deployment.
11. *New* - Please indicate any barriers to deploying volunteers to support a public health/medical incident within requested timeframe. [Select one]
    - ☐ Communication
    - ☐ Equipment
    - ☐ Funding
    - ☐ Participation
    - ☐ Policies/procedures
    - ☐ Resource limitations
    - ☐ Staffing
    - ☐ Time constraints
    - ☐ Training

- ☐ Other, please specify

12. *New* - Continuous Quality Improvement:
    a. Were relevant corrective actions / improvement plan items from *prior responses* (including exercises, drills, etc.) related to volunteer management incorporated into planning and/or response procedures before this incident/drill took place? [Yes/Some/No]
    b. Have corrective actions / improvement plan items related to volunteer management been identified as a result of this incident/drill? [Yes/No]
        a. Have they been implemented? [Yes/Some/No]
13. *New* – [Optional] Please provide any additional clarifying, contextual or other information.

How is this measure operationalized?

This measure can also be found in the Hospital Preparedness Program (HPP) Measure Manual: Implementation Guidance for the BP2 HPP Program Measures.

The numerator and denominator for this measure should refer to aggregate numbers of volunteers across a given incident. For example, the public health/medical lead determines in Week 1 of an incident that 100 volunteers are needed. In Week 2 it is determined that an additional 100 volunteers are needed. The denominator for this incident is 200.

Awardees should ensure that the number of volunteers included in the denominator does *not* refer to the total number of *potential* volunteers that have been contacted to determine deployment availability or "requested" to deploy. It should only refer to the number of volunteers that the public health/medical lead has determined are needed for the response and has requested for the incident. This number may or may not coincide with how many have been "requested" to deploy via a call down or activation, and should be independent of how many are known to be available. For example, the public health/medical lead determines that 75 volunteers are needed on-scene within 3 days. She makes this request to the state volunteer coordinator, who contacts 900 individuals currently in the ESAR-VHP database. After contacting the entire database of potential volunteers, the volunteer coordinator informs the public health/medical lead that only 20 are available for deployment. The public health/medical lead agrees to take however many are available. Twenty volunteers arrive at the staging area within the 3 day timeframe. The numerator for this incident is 20. The denominator is 75. The denominator is *not* 20 even though the public health/medical lead "agrees" that 20 is acceptable, since this number did not reflect true need, but rather was a function of how many volunteers were available for deployment. Similarly, the denominator is not 900 since this number simply reflects how many individuals were contacted for potential deployment.

Key Measurement Terms

Acute incident: An acute incident refers to an individual occurrence or event in which response activities do not exceed 96 hours.

Requested timeframe: Requested timeframe is the period of time in which volunteers are requested to report for duty.

Deploy: Deployment is defined as the movement of activated volunteers to a staging area or assigned mission location such as the scene of an incident, planned event, or exercise.

Long running incident: A long running incident refers to an incident in which response activities are underway beyond 96 hours.

Out-processing volunteers: Out-processing volunteers refers to the return of equipment, operational debriefing, and any transfer of command or responsibilities.

Request: A request is a formal application to ask for a specified number of needed volunteers, typically by local response entities, to the health and medical lead at the local, regional or state level.

Responsible entity or entities: A responsible entity or entities refers to an organization at the awardee or sub-awardee level, which is accountable for completing the specific activity or element associated with one or more PHEP performance measures.

Tracking volunteers: Tracking volunteers refers to the process, plans, or procedures to capture volunteer activities, roles, locations, etc.

Volunteers: Volunteers are individuals supporting the public health/medical incident, including public health, medical and non-medical professionals (e.g., from the ESAR-VHP system, Medical Reserve Corps, health department, etc.)

APPENDICES

Appendix A: Alignment of Capabilities, Performance Measures and Reporting Requirements

Note: Supersedes the BP2 FOA Continuation Guidance

			Applies To			Reporting Criteria[1]		Comments
Capability and Measure	Function Alignment	States	Directly Funded Localities	Territories and Freely Associated States	Annual Reporting	Report if PHEP Funded[2]	Report if Response	Optional, Accountability, Exclusions
Community Preparedness								
Evaluation Tool	1.2.3	X	X	X	X			New for BP2[3]
PHEP 1.1	RETIRED	-	-	-	-	-	-	-
PHEP 1.2	RETIRED	-	-	-	-	-	-	-
PHEP 1.3	RETIRED	-	-	-	-	-	-	-
PHEP 1.4	RETIRED	-	-	-	-	-	-	-
Community Recovery								
Evaluation Tool	1, 2	X	X	Puerto Rico only			X	
Emergency Operations Coordination								
PHEP 3.1	2	X	X	Puerto Rico only	X			GPRA Measure
PHEP 3.2	RETIRED	-	-	-	-	-	-	-
PHEP 3.3	5	X	X	Puerto Rico only	X			HP2020 Measure
Emergency Public Information and Warning								
PHEP 4.1	RETIRED	-	-	-	-	-	-	-
Fatality								

[1] Unless otherwise noted, measures and evaluation tools are required to be reported at End-of-Year.

[2] **BP2 EXCEPTION: Mid-Year Reporting Required (applies to all "Report if PHEP-Funded" measures except PHEP 12.14 and 12.15)**

[3] Mid-year reporting required

			Applies To			Reporting Criteria[1]		Comments
Capability and Measure	Function Alignment	States	Directly Funded Localities	Territories and Freely Associated States	Annual Reporting	Report if PHEP Funded[2]	Report if Response	Optional, Accountability, Exclusions
Management								
PHEP 5.1	1	X	X	Puerto Rico only		X		
PHEP 5.2	RETIRED	-	-	-	-	-	-	-
Information Sharing								
PHEP 6.1	1, 3	X	X	Puerto Rico only		X		
PHEP 6.2	RETIRED	-	-	-	-	-	-	-
HPP-PHEP 6.1	3	X	X	X	X			
Mass Care								
PHEP 7.1	1	X	X	Puerto Rico only		X		
PHEP 7.2	RETIRED	-	-	-	-	-	-	-
Evaluation Tool	ALL	X	X				X	
Medical Surge								
N/A	-	-	-	-	-	-	-	-
Medical Countermeasure Dispensing								
MCMDD Composite	RETIRED	-	-	-	-	-	-	-
Medical Materiel Management and Distribution								
MCMDD Composite	RETIRED	-	-	-	-	-	-	-
Non Pharmaceutical Interventions								
PHEP 11.1	1	X	X			X		
PHEP 11.2	RETIRED	-	-	-	-	-	-	-
PHEP 11.3	1, 2, 3	X	X				X	
Public Health								

			Applies To			Reporting Criteria[1]		Comments
Capability and Measure	Function Alignment	States	Directly Funded Localities	Territories and Freely Associated States	Annual Reporting	Report if PHEP Funded[2]	Report if Response	Optional, Accountability, Exclusions
Laboratory Testing								
PHEP 12.1	1	X	X		X			Mandatory *(new)*; Excludes Chicago
PHEP 12.2	4	X	X		X			Excludes Chicago
PHEP 12.3	3	X	X		X			Levels 1 and 2 Required; Excludes Chicago
PHEP 12.4	5	X	X					Optional *(new)*, New York City Bio Only; Excludes Chicago
PHEP 12.5	3	X	X		X			PAHPA Benchmark, Levels 1 Required, Levels 2 Optional; Excludes Chicago
PHEP 12.6	3	X	X		X			PAHPA Benchmark, Levels 1 and 2 Required; Excludes Chicago
PHEP 12.7	2	X	X		X			PAHPA Benchmark, Excludes Chicago
PHEP 12.8	RETIRED	-	-	-	-	-	-	-
PHEP 12.9	1	X			X			Mandatory in BP2 - *new*
PHEP 12.10	RETIRED	-	-	-	-	-	-	-
PHEP 12.11	3	X	X		X			PAHPA Benchmark, Excludes Chicago
PHEP 12.12	RETIRED	-	-	-	-	-	-	-
PHEP 12.13	RETIRED	-	-	-	-	-	-	-
PHEP 12.14	5	X	X			X		GPRA Measure Excludes Chicago
PHEP 12.15	5	X	X			X		Excludes Chicago
Public Health Surveillance and Epidemiologic								

			Applies To			Reporting Criteria[1]		Comments
Capability and Measure	Function Alignment	States	Directly Funded Localities	Territories and Freely Associated States	Annual Reporting	Report if PHEP Funded[2]	Report if Response	Optional, Accountability, Exclusions
Investigation								
PHEP 13.1	1	X	X		X			Excludes Chicago, L.A. County
PHEP 13.2	3	X	X		X			Excludes Chicago, L.A. County
PHEP 13.3	2	X	X	Puerto Rico only				Optional in BP2 - *new*
PHEP 13.4	2	X	X	Puerto Rico only				Optional in BP2 - *new*
PHEP 13.5	RETIRED	-	-	-	-	-	-	-
PHEP 13.6	RETIRED	-	-	-	-	-	-	-
Responder Safety and Health								
PHEP 14.1	1, 3, 4	X	X	Puerto Rico only		X		
PHEP 14.2	RETIRED	-	-	-	-	-	-	-
PHEP 14.3	4	X	X	Puerto Rico only			X	
PHEP 14.4	4	X	X	Puerto Rico only	X			
Volunteer Management								
PHEP 15.1	1, 2	X	X	Puerto Rico only		X		
PHEP 15.2	RETIRED	-	-	-	-	-	-	-
HPP-PHEP 15.1	3, 4	X	X	X			X	Must do call down and acknowledgment drill if no incidents or exercises involving actual volunteer deployment occurred

Appendix B: PHEP 12.2: 24/7 Emergency Contact Drill (Bi-direction) Overview

Importance of this Drill to PHEP Awardees:

Timely communication between on-call epidemiologists and laboratorians (and vice versa) is critical for effective public health emergency response. As stewards of PHEP funds, awardees play a crucial role in assuring effective and efficient communication between laboratory and epidemiology staff, and for fostering improvements in communication systems in response to gaps revealed by exercises and real incidents.

Measure Purpose:

The purpose of PHEP 12.2: 24/7 Emergency Contact Drill is to ensure a timely and effective response to incidents of public health significance by promoting rapid communication between the epidemiologist and the laboratorian. The measure is **not intended to adhere to or assess CDC's emergency notification protocol with state public health laboratories or state epidemiologists**. Although conducted by CDC Emergency Operations Center (EOC), the drill is not an EOC or LRN measure; it is strictly a PHEP measure. It does not replace or substitute any other CDC drill (e.g., LRN notification drill).

Measure Details:

The 24/7 Emergency Contact Drill (PHEP 12.2) applies to 53 PHEP awardees: the 50 states, the District of Columbia, Los Angeles County, and New York City. The 24/7 emergency contact drill is **bi-directional**, therefore two (2) drills are held each budget period; one in each "direction." In BP2, "Drill #1" the on-call LRN-B *laboratorian* is contacted first by CDC EOC. In "Drill #2" the on-call *epidemiologist* is contacted first by CDC EOC. The drills can occur at any point during the budget period.

Drills will be **unannounced** and **after-hours,** conducted between 8:00 p.m. and 11:00 p.m. (awardee's local time) over a 5-day period, Monday through Friday. The order of the drills may vary (e.g. Drill #2 of a drill cycle may be conducted before Drill #1 of the cycle). During PHEP BP2 (July 1, 2013-June 30, 2014) and thereafter, the drills will be conducted in the following manner:

Drill Directions for Awardees with Separate Biological and Chemical Laboratories

BP2 and BP4 drill direction:

Drill #1: CDC EOC→LRN-B→EPI→CDC EOC

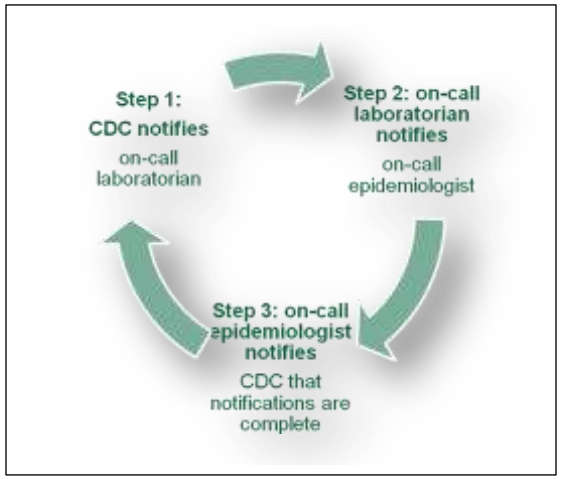
Drill #2: CDC EOC→EPI→LRN-C→CDC EOC

BP3 and BP5 drill direction:

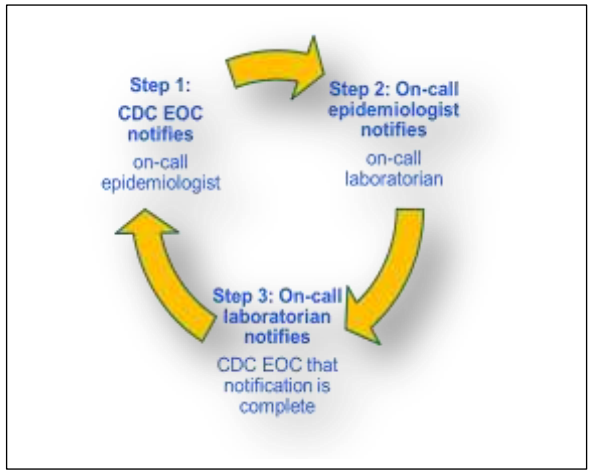
Drill #1: CDC EOC→LRN-C→EPI→CDC EOC

Drill #2: CDC EOC→EPI→LRN-B→ CDC EOC

Drill #1:



Drill #2:



Drill Directions for Awardees with Joint Biological and Chemical Laboratories (BP2 and BP4)

Drill #1: CDC EOC→LRN-B/C→EPI→CDC EOC

Drill #2: CDC EOC→EPI→LRN-B/C→CDC EOC

The time to complete the drill is measured using a Start Time and Stop Time **(Performance Target is 45 minutes)**.

Start Time: Date and time that the CDC EOC first dials the contact number for the appropriate on-call laboratorian or epidemiologist, depending on drill direction.

Stop Time: Date and time the on-call laboratorian or epidemiologist (depending on drill direction) contacts CDC EOC that the drill notification cycle is complete.

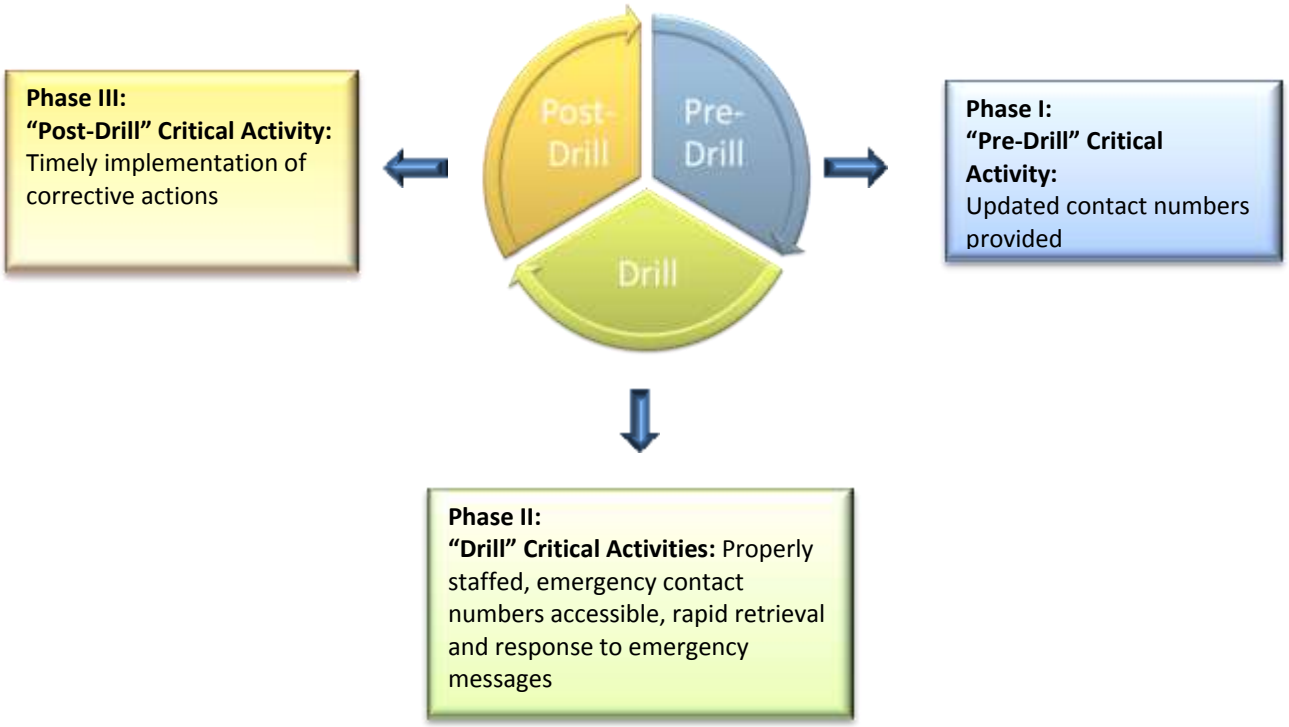
Drill Process:

The 24/7 emergency contact drill is composed of three (3) major phases—

Phase I: Pre-drill
Phase II: Drill
Phase III: Post drill

Each phase is comprised of various activities which must be completed in order to ensure the successful completion of the 24/7 emergency contact drill. Failure to complete a critical activity within each drill segment may result in pitfalls that may prevent the awardee from successfully completing the drill within the 45-minute time target. The critical activities for each drill segment are identified in the diagram below.

24/7 Drill Phases and Critical Activities for Drill Success



Phase I: Pre-Drill Activities

To complete this phase successfully, two (2) tasks should be completed.

Task 1: Verify and update on-call contact numbers

In order for CDC EOC to initiate the drill, correct contact information for either the on-call laboratorian or the on-call epidemiologist, depending on the drill direction, must be available.

The PHEP director should ensure that the CDC EOC uses the correct information by:

a. Ensuring the PHEP program is aware of and has access to the on-call epidemiologist and alternate on-call epidemiologist contact information from the state epidemiologist.
b. Ensuring that the state LRN director (biological and chemical) keeps updated contact information on file with the CDC LRN program by updating on-call LRN-B and LRN-C laboratorian contact information on the LRN website at https://lrnb.cdc.gov.

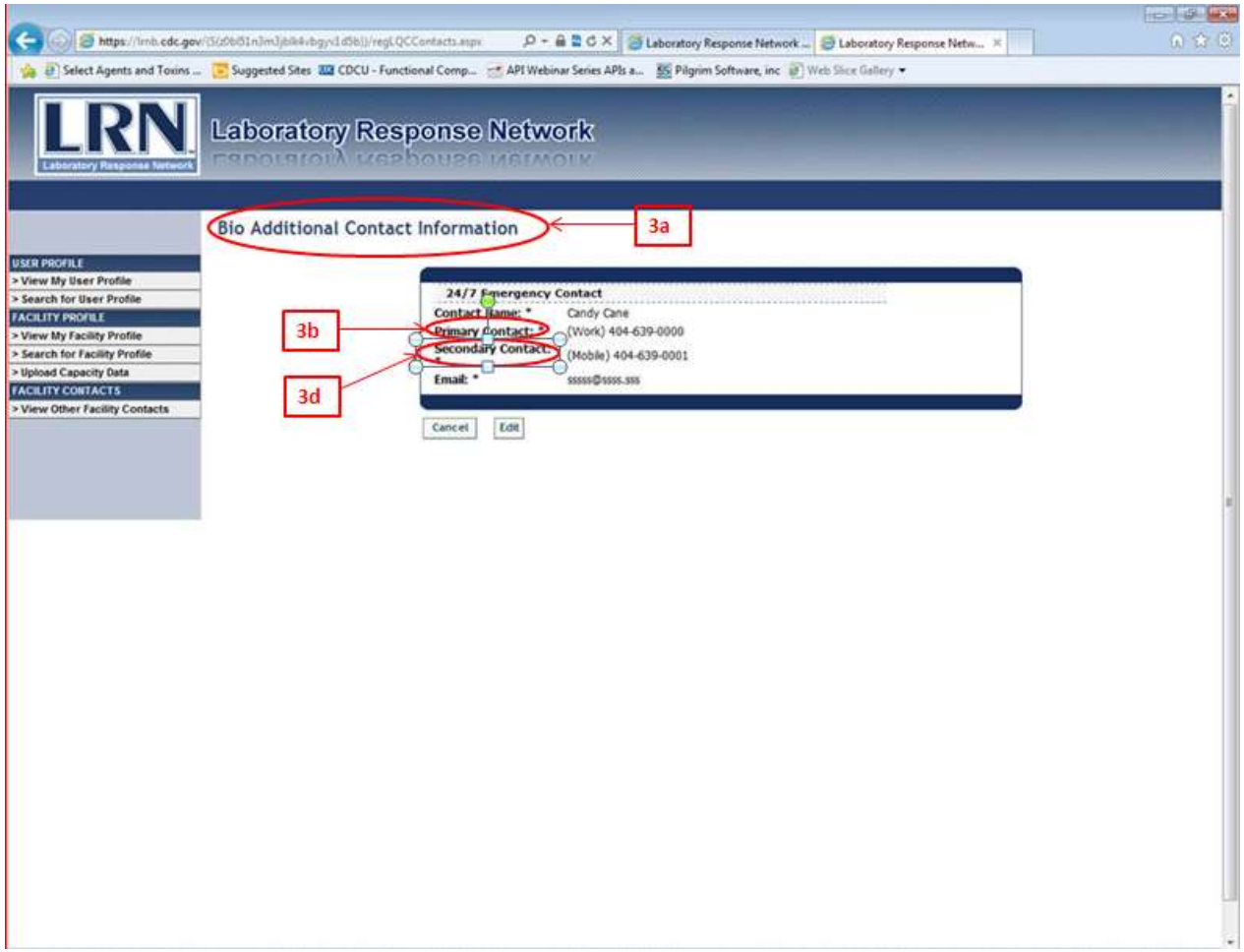
Process to update on-call LRN-B and LRN-C laboratorian contact information:

c. The individuals at the awardee level that have rights to update/modify on-call contact information are as follows:
    I. Laboratory Director
    II. Laboratory Administrator
    III. BT Coordinator

d. Access the LRN website by clicking the following link: https://lrnb.cdc.gov

e. To update the on-call LRN-B laboratorian contact information

I. Go to the 'Bio Additional Contact Information' page
II. Under the 'Responsible Official' box, click "24/7 Emergency Contact", 'Primary Contact:'
III. Enter the number to contact the on-call LRN-B laboratorian during *non-regular business hours, including after-hours, evenings, weekends, holidays, etc.*
IV. Then click "24/7 Emergency Contact ", 'Secondary Contact:'
V. Enter the *alternate* number to contact the on-call LRN-B laboratorian during *non-regular business hours, including after-hours, evenings, weekends, holidays, etc.*



Note: CDC staff may request the PHEP director to verify on-call (and alternate on-call) laboratorian contact numbers at any time.

f. To update the alternate on-call LRN-C laboratorian contact information

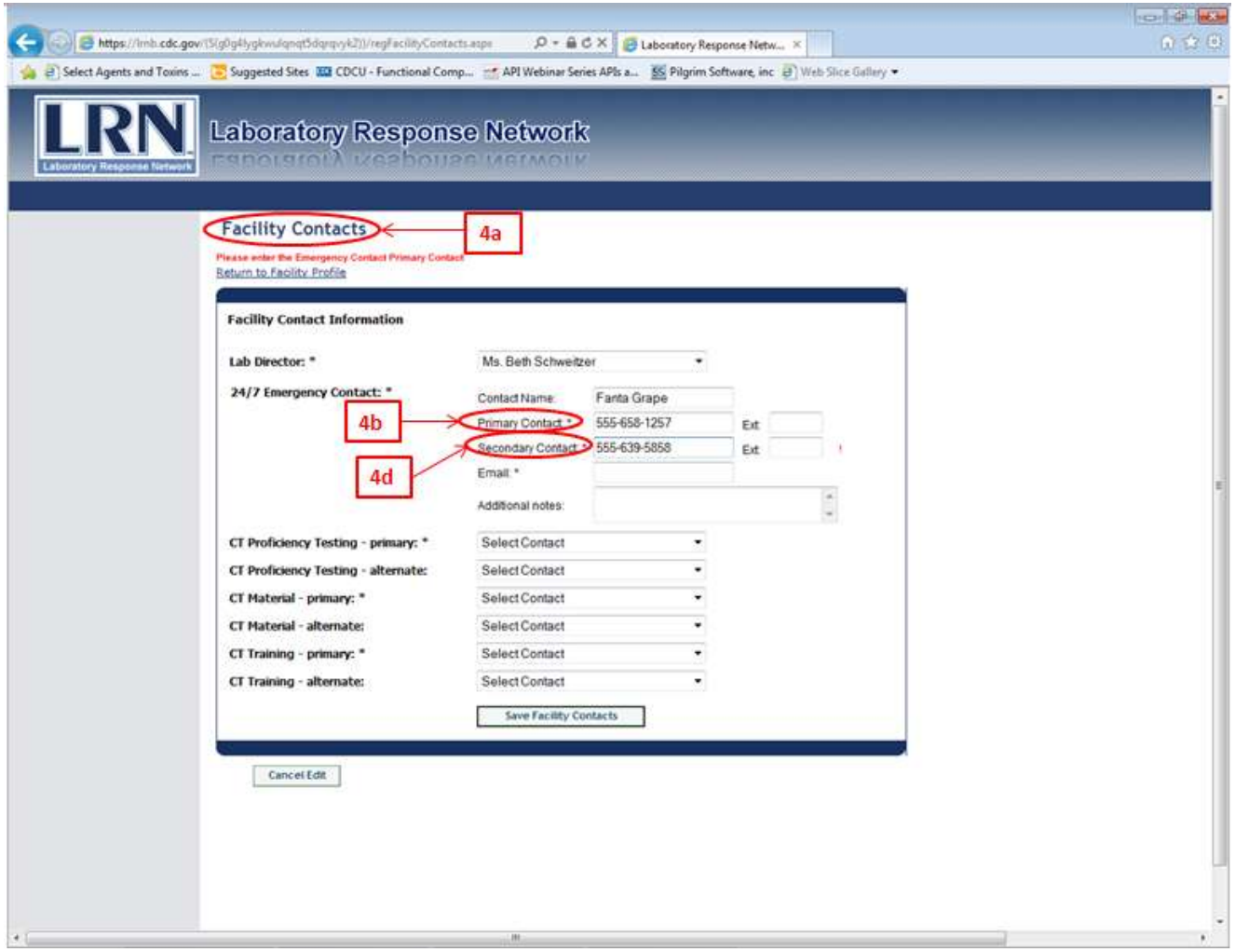
I. Go to the 'Chem Facility Contacts' page

II. Under the 'Facility Contact Information' box, click "24/7 Emergency Contact", 'Primary Contact:'

III. Enter the number to contact the on-call LRN-C laboratorian during *non-regular business hours, including after-hours, evenings, weekends, holidays, etc.*

IV. Then click "24/7 Emergency Contact ", 'Secondary Contact:'

V. Enter the *alternate* number to contact the on-call LRN-C laboratorian during *non-regular business hours, including after-hours, evenings, weekends, holidays, etc.*



g. Process to Verify On-call Epidemiologist Contact Information (i.e., contact number during non-regular business hours, including after-hours, evenings, weekends, holidays, etc.):

I. After the start of BP2 (i.e., July 1, 2013), CDC *Epi-X* staff will distribute an e-mail to 53 awardee state epidemiologists to request on-call epidemiologist's and alternate on-call epidemiologist's contact information for the 24/7 emergency contact drill. *PHEP directors are strongly encouraged to communicate with their jurisdiction's state epidemiologist to ensure awareness and access to the on-call (and alternate on-call) contact information.*

II. Changes in on-call (and/or alternate on-call) epidemiologist's contact information should be provided to CDC *Epi-X* staff via e-mail at aevanson@cdc.gov.

Note: CDC staff may request the PHEP director to verify on-call (and alternate on-call) epidemiologist's contact numbers at any time.

Task 2: Ensure on-call staff have/have access to on-call contact numbers

PHEP directors should ensure that the on-call laboratorians and on-call epidemiologists have/have access to each other's contact information. CDC EOC only *initiates* the drill; it is up to the on-call laboratorian or on-call epidemiologist to complete the drill by calling the next person, who must then call the CDC EOC to end the drill.

It is the awardee's responsibility to ensure that lines of communication are identified and clear and contact information between these two key entities (laboratory and epidemiology) is known, understood, shared, and tested.

Phase II: Drill Activities

1. Depending on the drill direction, DSLR will obtain the most recent on-call laboratorian and epidemiologist contact numbers from the appropriate source.

2. Using the updated on-call contact information, ASEB will generate a data collection spreadsheet for CDC EOC Watch Officers to conduct the drills.

3. CDC EOC Watch Officers will use the data collection spreadsheet and a standardized call script to conduct the drill calls. If the on-call (LRN-B / LRN-C laboratorian or epidemiologist) contact that is listed cannot be reached, CDC EOC Watch Officers will leave a message and wait ten (10) minutes for the on-call contact to return the call to CDC EOC Watch Officer before calling the alternate on-call contact

number, if one is provided. If there is no alternate on-call contact number, CDC EOC Watch Officer will dial the on-call contact number again.

4. CDC EOC Watch Officers will record drill start time and stop time as well as the names of the on-call laboratorian and epidemiologist participating in the drill.

   Start Time: Date and time that the CDC EOC first dials the contact number for the appropriate on-call laboratorian or epidemiologist, depending on drill direction.

   Stop Time: Date and time the on-call laboratorian or epidemiologist (depending on drill direction) contacts CDC EOC that the drill notification cycle is complete.

5. The CDC EOC will conduct drill calls between the hours of 8 p.m. and 11 p.m., local (awardee) time, during the traditional work week, i.e., Monday through Friday.

Phase III: Post-Drill Activities

- CDC EOC will provide DSLR the completed drill data collection templates with awardees' drill start times, stop times, drill date, and names and contact phone numbers of the participating epidemiologist and laboratorian.

- All drill data collected by CDC EOC will be provided to DSLR for analysis and dissemination.

- Awardees that do not complete the drill cycle within two (2) hours will receive drill notifications with an "Incomplete" as their drill time and are to state the challenges, barriers and/or root causes preventing them from competing the drill – as well as proposed corrective actions. Root causes, corrective actions, and the corrective action implementation timeframe should be provided to ASEB and the awardee's Project Officer within 30 calendar days of drill notification receipt.

- DSLR will e-mail a copy of each awardee's official drill notification to the awardee and carbon copy the awardee's project officer.

- Awardees are expected to confirm receipt of the e-mail and notify the appropriate individuals (e.g., laboratory director of the participating lab and state epidemiologist) of the drill results. Awardees are to consult with the laboratories and epidemiologists during the drill verification process to ensure accuracy of drill results.

- ASEB staff and PHEP Project Officers will follow-up with awardees to verify the initial results before preparing a final report.

- Results of the BP2 24/7 emergency contact drills should be used to encourage program and system improvement within awardee jurisdictions as well as drill execution by CDC.

PHEP Directors Ensuring Success:

- Form and maintain close working relationships with participating biological and chemical laboratory directors.
- Work with biological and chemical laboratory programs to ensure the CDC LRN program has up-to-date contact numbers.
- Work with the State Epidemiologist to ensure that CDC *Epi-X* staff has up-to-date on-call epidemiologist contact information.
- Ensure that DSLR have up-to-date on-call epidemiologist contact information in case this number needs to be verified.
- Notify participating laboratory directors of the drill performance time and verify drill results.
- Provide root cause and corrective actions for "incomplete" or "not specified" drill times within 30 days of receipt of drill performance notification.
- Work with PHEP project officer and laboratory director (biological and/or chemical) to implement strategies to improve communication cycle.

Appendix C: Examples of Public Health Control Measures for the Selected Six Diseases (plus Salmonellosis)

Disease agent	Example control measures	Initiation timeframe
Botulism	Identification of potentially exposed individuals Identification / recovery of suspected source of infection, as applicable	Within 24 hours of initial case identification
***E. coli* (STEC)**	Contact tracing Education: contacts as applicable Exclusions: child care, food handling as applicable	Within 3 days of initial case identification
Hepatitis A, Acute	Contact tracing Education: contacts Immunization (active/passive) administered or recommended to contacts, as appropriate	Within 1 week of initial case identification
Measles	Contact tracing Education: contacts Immunization (active/passive) administered or recommended for susceptible individuals Isolation: confirmed cases	Within 24 hours of initial case identification
Meningococcal Disease	Contact tracing Education: contacts Prophylaxis administered or recommended for susceptible individuals	Within 24 hours of initial case identification
Tularemia	Identification of potentially exposed individuals Identification of source of infection, as applicable	Within 48 hours Within 48 hours of initial case identification
Salmonellosis (optional)	Identification and exclusion of sources of infection (e.g., food, animals, contaminated water, food handlers) Recommendation: environmental cleaning / disinfection Recommendation: hand hygiene procedures	Within 3 days of initial case identification