

August 10, 2011 – August 9, 2012

**Centers for Disease Control and Prevention
Public Health Emergency Preparedness
Cooperative Agreement**

**Budget Period 11 (BP11)
Performance Measures Specifications and
Implementation Guidance**

October 2011

Version 4.0

Questions?

If you have questions about PHEP performance measures, please contact your Division of State and Local Readiness (DSLRL) project officer directly. Either the project officer or a staff member in the DSLR Outcome Monitoring and Evaluation Branch will respond to your question.

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Overview of Key Changes to PHEP Performance Measures for BP 11

- All PHEP performance measures are now associated to specific capabilities and functions as described CDC's *Public Health Preparedness: National Standards for State and Local Planning* guidance (National Standards).
- The Incident Management performance measures have been renamed and incorporated into the Emergency Operations Coordination (EOC) capability.
- The Staff Notification performance measure has been retired; several data elements from that measure have been incorporated into the EOC - Staff Assembly measure.
- The Crisis and Emergency Risk Communication (CERC) measure has been renamed and incorporated into the Emergency Public Information and Warning (EPIW) capability.
- New performance measures have been developed for the Community Preparedness (CP), Public Health Laboratory Testing (PHLT), and Public Health Surveillance and Epidemiological Investigation (SURV/EI) capabilities.
- The Laboratory Pulsed Field Gel Electrophoresis (PFGE) measures are no longer associated with the PHLT capability as originally published in the National Standards document; these will be collected as stand-alone measures and guidance will be provided in a separate document.
- Section 319C-1 of the Public Health Service (PHS) Act, as amended by the Pandemic and All-Hazards Preparedness Act (PAHPA) of 2006, requires that CDC's PHEP cooperative agreement awardees meet evidence-based benchmarks and objective standards. Section 319C-1 requires withholding of funding from entities that fail to achieve these benchmarks and objective standards. A new BP11 PAHPA benchmark requires that performance measures be submitted according to stated deadlines or a financial penalty may ensue the following year.
- The EOC - Priority Goal is a BP11 PAHPA benchmark and **must** be submitted as part of awardees' BP11 mid-year progress reports.
- The guidance for the SURV performance measures has been updated since the May 27, 2011, draft version was disseminated. Awardees must now report both confirmed and unknown cases of measles as well as confirmed and probable cases of tularemia. This requirement supersedes the requirements for those diseases as found in the previous version of this guidance.
- The CP and the SURV/EI performance measures incorporate sampling of counties at the local level as a requirement for data collection and reporting. Sampling is based on a predetermined county sample (a list will be provided separately to each awardee). For the SURV/EI performance measures, data should be collected on cases (for the SURV measures) or outbreaks/exposure investigations (for the EI measures) that occur in the sampled counties. For the CP measures, data should be collected from the health department that serves each of the counties in the sample. If more than one health department serves a county, the measures apply to the largest health department.

Executive Summary

Since 1999, the Centers for Disease Control and Prevention (CDC) has awarded more than \$7 billion to 50 states, eight territories, and four directly funded localities through the Public Health Emergency Preparedness (PHEP) cooperative agreement, the agency's largest investment in state and local preparedness. Measuring awardee performance provides critical information needed to evaluate and report on how well this federal investment in preparedness has improved the nation's ability to prepare for and respond to public health emergencies. The Outcome Monitoring and Evaluation Branch (OMEB) within the Division of State and Local Readiness (DSLRL) in CDC's Office of Public Health Preparedness and Response (OPHPR) has been charged with developing and implementing a standardized set of relevant, feasible, and useful performance measures for CDC's PHEP cooperative agreement that focus on both program accountability and program improvement. Detailed measures of performance can foster program improvement by assessing public health departments' capacity and operational capabilities, identifying gaps / areas in need of improvement, and informing technical assistance and other program support needs.

Working in close collaboration with local, state, and federal partners, DSLRL has developed performance measure that enable CDC and its PHEP awardees to

- monitor, for **accountability** purposes, the extent to which awardees are able to demonstrate performance on specific public health preparedness capabilities;
- support **program improvement/technical assistance**; and
- report awardee accomplishments and performance in publications such as CDC's Public Health Preparedness State Reports.

Beginning with the 2011 PHEP cooperative agreement, PHEP awardees will report on a range of capability-based performance measures. While awardees will not have to report on all performance measures every year, they will be required to collect and report select performance measure data annually to meet federally required reporting mandates (e.g., U.S. Department of Health and Human Services' Priority Goal for Preparedness), and other programmatic reporting requirements within the following public health preparedness capabilities:

- Community Preparedness
- Emergency Operations Coordination
- Emergency Public Information and Warning
- Medical Countermeasures Dispensing
- Medical Materiel Management and Distribution
- Public Health Surveillance and Epidemiological Investigation
- Public Health Laboratory Testing

Introduction to the PHEP BP 11 Performance Measures

This document provides detailed specifications and implementation guidance for 30 PHEP performance measures for BP11, which began August 10, 2011, and ends August 9, 2012.

Performance measures cover the following seven capabilities as detailed in CDC’s March 2011 publication, *Public Health Preparedness Capabilities: National Standards for State and Local Planning* (available at: <http://www.cdc.gov/phpr/capabilities>): Community Preparedness (CP), Emergency Operations Coordination (EOC), Emergency Public Information Sharing (EPIW), Medical Countermeasures Dispensing (MCD), Medical Material Management and Distribution (MMMD), Public Health Laboratory Testing (PHLT), and Public Health Surveillance and Epidemiological Investigation (SURV/EI).

Awardee Reporting Requirements

Reporting requirements vary depending on the awardee, the type of measure and whether a measure is annually required or optional. Generally, all state awardees are required to report on all annual measures. Reporting for all other measures varies. Please see Appendix A for specific information on reporting requirements for each BP11 performance measure.

Data Sources

Data for the BP11 performance measures may come from routine day-to-day activity, exercises, or real incidents / planned events, provided they meet the specifications and criteria outlined for each measure. Table 1 summarizes the acceptable data sources for each measure.

Table 1. Performance Measures Data Collection Methods

PERFORMANCE MEASURE CAPABILITY	DATA COLLECTION METHOD				
	Routine	Drill	Functional Exercise (FE)	Full-Scale Exercise (FSE)	Real Incident / Planned Event
CP	X				
EOC ¹		X	X	X	X
SURV - EI	X				
EPIW		X	X	X	X
Med Countermeasures Dispensing	REFER TO DSNS MEDICAL COUNTERMEASURE DISTRIBUTION AND DISPENSING (MCMDD) COMPOSITE MEASURE				
Med Materiel Management & Distribution					
PHLT	VARIES				

Organization of BP11 Performance Measures

Performance measures are presented in this guidance by domain. There are six domains specified in the CDC National Standards document: Biosurveillance, Community Resilience, Countermeasures and Mitigation, Incident Management, Information Management, and Surge Management. In BP 11, performance measures exist in five of the six domains. Surge Management currently does not have performance measures. Within each domain in this guidance, performance measures are presented by

¹ EOC – AAR/IP can include tabletop (TTX) exercises.

capability (e.g., Public Health Laboratory Testing, Emergency Operations Coordination, etc.). All measures are presented in a specified format (except the MCMDD/DSNS composite score). Table 2 describes this format for individual performance measures. Table 3 provides an overview of the 30 BP11 capability-based performance measures.

Table 2. Organization of BP11 Performance Measures

Performance Measure	Performance measure definition
Measurement Specifications	Data points for calculating the performance measure
Intent	The scientific and/or programmatic rationale for the measure
Reporting Criteria	Activity and reporting requirements: whether the measure is required or optional, to which awardees it applies, whether it is a best demonstration measure, etc.
Reported Data Elements	Additional data points used to further describe or help understand conditions of performance.
Additional Guidance	Additional information, references, or examples that further explain the requirements of the measure

Additional Considerations

Exercise types: Several performance measures permit reporting of data from exercises. Additional information on exercise types is available from the Homeland Security Exercise and Evaluation Program (HSEEP) at <https://hseep.dhs.gov/support/Volume1.pdf>

Maintenance of records: Please maintain appropriate documentation of all data reported for these performance measures. Documentation should contain sufficient information to substantiate performance measure data submitted to CDC. Documentation may be requested by CDC to clarify or verify information submitted by awardees.

Methods to record data: While a fully automated electronic system is an efficient means to maintain documentation of data for various performance measures, such a system is not necessary to meet measure requirements. Awardees may manually record all data elements.

Table 3. BP11 Performance Measures At-A-Glance

Community Preparedness (CP)	
CP – Identification of key organizations Annual	Median number of community sectors in which local health departments (LHDs) identified key organizations to participate in public health, medical, and/or mental/behavioral health-related emergency preparedness efforts
Measurement Specifications	When the numbers of community sectors engaged by each participating LHD are arranged from highest to lowest [maximum is 11, minimum is zero], the median is the midpoint number where half of the LHDs engaged a number of sectors at or above the midpoint and the other half of the LHDs engaged a number of sectors at or below it.
CP – Community engagement in risk identification Annual	Median number of community sectors that LHDs engaged in using hazards, and vulnerabilities assessment (HVA) data to determine local hazards, vulnerabilities, and risks that may impact public health, medical, and/or mental/behavioral health systems and services
Measurement Specifications	When the numbers of community sectors that each LHD engaged to determine local hazards, vulnerabilities, and risks are arranged from highest to lowest [maximum is 11, minimum is zero], the median is the midpoint number where half of the LHDs engaged a number of sectors at or above the midpoint and the other half of the LHDs engaged a number of sectors at or below it.
CP – Community engagement in public health preparedness activities Annual	Proportion of key organizations that LHDs engaged in a significant public health emergency preparedness activity
Measurement Specifications	<p>Numerator: Number of key organizations that LHDs engaged in one or more of the following significant public health emergency preparedness activities:</p> <ul style="list-style-type: none"> • Development of key organizations’ emergency operations or response plans related to public health, medical, and/or mental/behavioral health • Exercises containing objectives or challenges (e.g. injects) related to public health, medical, and/or mental/behavioral health. • Competency-based training related to public health, medical, and/or mental/behavioral health emergency preparedness and response <p>Denominator: Total number of key organizations identified by LHDs (as specified in data element #2 for CP 1)</p>

CP – Community engagement in recovery planning Annual	Median number of community sectors that LHDs engaged in developing and/or reviewing a community recovery plan related to the restoration and recovery of public health, medical, and/or mental/behavioral health systems and services
Measurement Specifications	When the numbers of community sectors that each LHD engaged in developing and/or reviewing their community recovery plan are arranged from highest to lowest [maximum is 11, minimum is zero], the median is the midpoint number where half of the LHDs engaged a number of sectors at or above the midpoint and the other half of the LHDs engaged a number of sectors at or below it.
Emergency Operations Coordination (EOC)	
EOC – Staff Assembly Annual	Time for <u>pre-identified staff</u> covering activated public health agency incident management lead roles (or equivalent lead roles) to report for <u>immediate duty</u>
Measurement Specification	Start time: Date and time that a <u>designated official</u> began notifying staff to report for <u>immediate duty</u> to cover activated <u>incident management lead roles</u> . Stop time: Date and time that the last staff person notified to cover an activated <u>IM lead role</u> reported for <u>immediate duty</u> .
EOC – Priority Goal (50 states only) Annual	Time for <u>pre-identified staff</u> covering activated public health agency <u>incident management lead roles</u> (or equivalent lead roles) to report for <u>immediate duty</u>. <u>Performance Target: 60 minutes</u>
Measurement Specification	Start time: Date and time that a <u>designated official</u> began notifying staff to report for <u>immediate duty</u> to cover activated <u>IM lead roles</u> . Stop time: Date and time that the last staff person notified to cover an activated <u>IM lead role</u> reported for <u>immediate duty</u> .
EOC - IAP	Production of the approved <u>Incident Action Plan (IAP)</u> before the start of the second operational period
Measurement Specifications	Was a written <u>IAP</u> approved before the start of the second operational period [Yes/No]?
EOC - AAR and IP Annual	Time to complete a draft of an <u>After Action Report (AAR)</u> and <u>Improvement Plan (IP)</u>
Measurement Specifications	Start time: Date exercise or public health emergency operation completed (may be prior to or during current BP). Stop time: Date the draft <u>AAR and IP</u> were submitted for clearance within the public health agency.

Emergency Public Information and Warning (EPIW)	
EPIW - Public Message Dissemination	Time to issue a risk communication message for dissemination to the public
Measurement Specifications	<p>Start time: Date and time that a designated official requested that the first risk communication message be developed.</p> <p>Stop time: Date and time that a designated official approved the first risk communication message for dissemination.</p>
Medical Countermeasure Dispensing and Medical Materiel Management and Distribution	
Medical Countermeasure Distribution and Dispensing (MCMDD) composite measure	
<p>Each MCMDD composite measure score will be calculated based on performance data collected from the following preparedness activities:</p> <ul style="list-style-type: none"> • Technical Assistance Review (annual requirement beginning 2011-2012) • DSNS operational drills (annual requirement beginning 2011-2012) • Compliance with programmatic standards (annual requirement beginning 2012-2013) <ul style="list-style-type: none"> ○ Points of dispensing standards ○ Medical countermeasure distribution standards • Full-scale exercises (FSE) <ul style="list-style-type: none"> ○ Medical countermeasure distribution (one state-level FSE required during the 2011-2016 PHEP cycle) ○ Medical Countermeasure dispensing (one CRI-level FSE during the 2011-2016 PHEP cycle) 	
Public Health Lab Testing (PHLT)	
Communication between PHEP-funded Laboratory and Sentinel Clinical Laboratories Bio Only	Time for sentinel clinical laboratories to acknowledge receipt of an urgent message from PHEP-funded laboratory
Measurement Specifications	<p>Start time: Time PHEP-funded laboratory sends urgent message to first sentinel clinical laboratory</p> <p>Intermediate stop time 1: Time at least 50% of sentinel clinical laboratories acknowledged receipt of urgent message</p> <p>Intermediate stop time 2: Time at least 90% of sentinel clinical laboratories acknowledged receipt of urgent message</p> <p>Stop time: Time last sentinel clinical laboratory acknowledged receipt of urgent message</p>

Laboratorian Reporting Bio & Chem	Time for initial laboratorian to report for duty at the PHEP-funded laboratory
Measurement Specifications	<p>Start Time: Date and time that a public health designated official began notifying on-call laboratorian(s) to report for duty at the PHEP-funded LRN laboratory</p> <p>Stop Time: Date and time that the first laboratorian reported for duty at the PHEP-funded LRN laboratory</p>
LRN-EPI 24/7 Emergency Contact Drill Bio & Chem Annual	<p>Time to complete notification between CDC, on-call laboratorian, and on-call epidemiologist</p> <p><u>Performance Target: 45 minutes</u></p>
Measurement Specifications	<p>Start Time: Date and time that CDC Emergency Operations Center official began notification to on-call laboratorian. [In BP11, this applies only to LRN-B in this direction.]</p> <p>Stop Time: Date and time on-call epidemiologist (after receiving notification from on-call laboratorian) notifies CDC Emergency Operations Center that notification drill is complete.</p>
LRN-EPI 24/7 Emergency Contact Drill Bio & Chem Annual	<p>Time to complete notification between CDC, on-call epidemiologist, and on-call laboratorian</p> <p><u>Performance Target: 45 minutes</u></p>
Measurement Specifications	<p>Start Time: Date and time that CDC Emergency Operations Center official began notification to on-call epidemiologist</p> <p>Stop Time: Date and time on-call laboratorian (after receiving notification from on-call epidemiologist) notifies CDC Emergency Operations Center that notification drill is complete. [In BP11, this applies only to LRN-C in this direction.]</p>
LRN Emergency Response Pop Proficiency Test (PopPT) Exercise Chem Only Annual	Ability of PHEP-funded LRN-C Level 1 and/or Level 2 laboratories to detect and quantify biomarkers of chemical agents in clinical samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise
Measurement Specifications	<p>Numerator: Number of biomarkers of chemical agents detected by Level 1 and/or Level 2 laboratories</p> <p>Denominator: Number of biomarkers of chemical agents in the exercise.</p>

Notification Drill associated with Proficiency Testing Bio Only Annual	Ability of PHEP-funded LRN-B reference laboratory to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill
Measurement Specifications	Notification drill results [Passed/did not pass/did not participate]
Notification to Partners Bio & Chem Annual	Time for PHEP-funded laboratory to notify public health partners of significant laboratory results
Measurement Specifications	Start time: Time PHEP-funded laboratory obtains a significant laboratory result Stop time: Time PHEP-funded laboratory completes 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)
Proficiency Testing Bio Only Annual	Proportion of LRN-B proficiency tests successfully passed by PHEP-funded laboratories
Measurement Specifications	Numerator: Number of LRN-B proficiency tests successfully passed by PHEP-funded laboratory(ies) Denominator: Total number of LRN-B proficiency tests participated in by PHEP-funded laboratory(ies)
Proficiency Testing - Chemical Additional Chem Only Annual	Proportion of LRN-C proficiency tests (additional methods) successfully passed by PHEP-funded laboratory
Measurement Specifications	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

Proficiency Testing - Chemical Core Chem Only Annual	Proportion of LRN-C proficiency tests (core methods) successfully passed by PHEP-funded laboratory
Measurement Specifications	Numerator: Number of LRN-C core methods successfully proficiency tested by the PHEP-funded laboratory Denominator: Total number of LRN-C core methods (9)
Sample Collection, Packing, and Shipping (SCPaS) Chem Only Annual	Ability of PHEP-funded LRN-C laboratory to collect, package, and ship samples properly during LRN exercise.
Measurement Specifications	SCPaS Exercise Results [Passed/Did not pass]
Sample Quality-First Responders Bio Only Annual	Percentage of LRN nonclinical samples received at the PHEP-funded laboratory for confirmation or rule-out testing from first responders without any adverse quality assurance events
Measurement Specifications	Numerator: Number of LRN nonclinical samples received at the PHEP-funded laboratory for confirmation or rule-out testing from first responders without any adverse quality assurance events Denominator: Total number of LRN nonclinical samples received at the PHEP-funded laboratory for confirmation or rule-out testing from first responders
Specimen Quality-Sentinel Clinical Laboratories Bio Only Annual	Percentage of LRN clinical specimens received at PHEP-funded laboratory for confirmation or rule-out testing from sentinel clinical laboratories without any adverse quality assurance events
Measurement Specifications	Numerator: Number of LRN clinical specimens received at PHEP-funded laboratory for confirmation or rule-out testing from sentinel clinical laboratories without any adverse quality assurance events Denominator: Total number of LRN clinical specimens received at CDC PHEP-funded laboratory for confirmation or rule-out testing from sentinel clinical laboratories

Surge Capacity Exercise Chem Only Annual	Ability of each PHEP-funded LRN-C Level 1 laboratory to process and report results to CDC for 500 samples during the LRN Surge Capacity Exercise
Measurement Specifications	Start Time: Date and time of delivery of 500 samples to LRN-C Level 1 laboratory Stop Time: Date and time result from last sample was reported to CDC
Public Health Surveillance and Epidemiological Investigation (SURV – EI)	
SURV – Disease Reporting Annual	Proportion of reports of selected reportable diseases received by a public health agency within the awardee-required timeframe
Measurement Specifications	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
SURV – Disease Control Annual	Proportion of reports of selected reportable diseases for which initial public health control measure(s) were initiated within the appropriate timeframe
Measurement Specifications	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
EI – Outbreak Investigation Reports Annual	Percentage of infectious disease outbreak investigations that generate reports
Measurement Specifications	Numerator: Number of infectious disease outbreak investigation reports generated Denominator: Number of infectious disease outbreaks investigated
EI – Outbreak Reports with Minimal Elements Annual	Percentage of infectious disease outbreak investigation reports that contain all minimal elements
Measurement Specifications	Numerator: Number of infectious disease outbreak investigation reports containing all minimal elements Denominator: Number of infectious disease outbreak reports generated

EI – Exposure Investigation Reports	Percentage of EI of acute environmental exposures that generate reports	
Annual		
Measurement Specifications	Numerator:	Number of EI reports of acute environmental exposures generated
	Denominator:	Number of EI of acute environmental exposures
EI – Exposure Reports with Minimal Elements	Percentage of EI reports of acute environmental exposures that contain all minimal elements	
Annual		
Measurement Specifications	Numerator:	Number of EI reports of acute environmental exposures containing all minimal elements
	Denominator:	Number of EI reports of acute environmental exposures generated

DOMAIN ONE: BIOSURVEILLANCE

Public Health Laboratory Testing Capability Performance Measures

Introduction

Public health laboratories are critical to the nation's ability to rapidly detect and respond to a variety of public health incidents. The Public Health Laboratory Testing (PHLT) 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. These performance measures were developed to capture a spectrum of laboratory testing performance. In addition, several measures utilized by the Laboratory Response Network (LRN-B and C) have been incorporated as PHEP laboratory performance measures. Although not encompassing of 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 Definition²

The PHLT capability is defined as follows:

The ability to conduct rapid detection, characterization, confirmatory testing, data reporting, investigative support, and laboratory networking to address actual, real, or potential exposure to all hazards which include chemical, radiological, and biological agents in all matrices including clinical samples, food, and environmental samples (e.g., water, air, soil). This capability supports routine surveillance, including pre-event or pre-incident and post-exposure activities. All-hazard incidents include those deliberately released with criminal intent, as well as those that may be present as a result of unintentional or natural occurrences.

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

Performance Measures Related to PHLT

There are 14 performance measures associated with this capability. Seven of these are already collected through the Laboratory Response Network (LRN), and have been incorporated into the PHEP Cooperative Agreement.

Reporting Requirements

To assist with the collection and reporting of performance measure data, refer to the following guidance.

1. The laboratory testing performance measures are generally divided into two types:
 - Drills and testing currently conducted by the LRN-B and C programs at CDC. This includes SCPaS, proficiency testing, PopPT, the Surge Capacity Exercise, and the notification drill associated with proficiency testing. The LRN-B and C programs at CDC will collect data from select awardee laboratories for these measures during BP11, and share these data with DSLR. Awardee preparedness offices will be requested to validate results of these drills and tests through PERFORMS or other means. Measures in Table 1.1 with (LRN-B) or (LRN-C) next to them indicate that the LRN program will be collecting these data.
 - Additional PHEP lab testing performance measures. This includes: laboratorian reporting, communication between awardee and sentinel labs, specimen quality, sample quality, the LRN-Epi 24-7 Emergency Contact Drill, and notification to partners. It is intended that state

² Centers for Disease Control and Prevention (2011) *Public Health Preparedness Capabilities: National Standards for State and Local Planning*. Accessible at <http://www.cdc.gov/phpr/capabilities>

awardees submit performance measure data for their state public health laboratories; District of Columbia, Los Angeles County and New York City are expected to submit performance measures data for their public health laboratories as well. Measures in Table 1 with the terms “Required” or “Optional” indicate the reporting requirements for these types of measures.

- Depending on the measure, the reporting requirement may pertain to biological laboratories ONLY (e.g. communicating with sentinel labs), chemical laboratories ONLY (e.g. SCPaS), or both biological and chemical laboratories (i.e. laboratorian reporting to duty and notification to partners). Table 1.1, below, indicates which performance measures apply to which type(s) of lab through use of the terms “Bio” and/or “Chem” in brackets (e.g., [Bio & Chem]).

Table 1.1. Alignment of Public Health Laboratory Testing Performance Measures to Capability and Functions

Capability	Function	Performance Measure(s)
Public Health Laboratory Testing	Manage Laboratory Activities	<u>Lab [Bio & Chem]</u> : Laboratorian Reporting (Optional) <u>Lab [Bio]</u> : Communication between awardee and sentinel clinical labs (Optional)
	Perform Sample Management	<u>Lab [Bio]</u> : Specimen quality – sentinel clinical labs (Required) <u>Lab [Bio]</u> : Sample quality – first responders (Required) <u>Lab [Chem]</u> : Sample collection, packing, and shipping (SCPaS) (LRN-C)
	Conduct Testing & Analysis for Routine & Surge Capacity	<u>Lab [Bio & Chem]</u> : Proficiency testing (x3) (LRN-B and C) <u>Lab [Chem]</u> : LRN Emergency Response Pop Proficiency Test (PopPT) Exercise (LRN-C) <u>Lab [Chem]</u> : Surge Capacity Exercise (LRN-C)
	Support Public Health Investigations	<u>Lab [Bio & Chem]</u> : LRN-EPI 24/7 emergency contact drill (x2) (Required)
	Report Results	<u>Lab [Bio & Chem]</u> : Notification to partners (Required) <u>Lab [Bio]</u> : Notification drill associated with proficiency testing (LRN-B)

Definition of Key Terms for the PHLT Performance Measures

Acknowledgement: Notified sentinel clinical laboratories confirm receipt of urgent message. Sentinel clinical laboratories can acknowledge receipt of the message through cell phone, e-mail outside of rapid notification system, fax, rapid notification system (e.g. Health Alert network), land-line telephone, pager, satellite communication system, or another method. Method of acknowledgement can differ from method of notification.

Adverse quality assurance event: Any deviation from established and written policies and procedures for an ongoing mechanism that monitors, assesses, and, when indicated, corrects identified problems that could result in a negative or potentially negative outcome (as stated in the Clinical Laboratory Improvement Amendments (CLIA) sec. 493).

CDC EOC official: A staff member of CDC’s Emergency Operation Center (EOC) who initiates the LRN-EPI 24/7 emergency contact drill, and who receives confirmation of receipt from awardees’ on-call epidemiologists and laboratorians.

Exercise types: Additional information on exercise types is available from the Homeland Security Exercise and Evaluation Program at <https://hseep.dhs.gov/support/Volume1.pdf>

First responders: First trained professionals to arrive on scene for response efforts. Examples of first responders include firefighters (e.g., professional and volunteer), police officers, emergency medical services (EMS), and hazardous material teams

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

Notification: 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: Those hours outside of which most business is conducted (i.e. non-working hours).

On-call epidemiologist: Personnel 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: Laboratory personnel who have 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: 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 DC, LA County and New York City. 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(ies) should report data.

Public health designated official: Any individual in the public health agency who has the authority to take necessary action in the context of a public health response. A designated official may be the lab director, state or city health officer, state epidemiologists, emergency management official, or any other individual with such authority.

Public health partners: 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: On-call laboratorian arrives at appropriate testing laboratory ready to receive specimens and can ensure that testing, packaging, and 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 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 by APHL in the document entitled “LRN Sentinel Laboratories: Clinical” The document can be found here:

http://www.aphl.org/aphlprograms/phpr/Documents/LRN_Sentinel_Clinical.pdf

Significant laboratory results: 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 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.

Unannounced: A notification with no advanced warning / notice.

Urgent message: 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.

U.S. Territory health department samples: Samples received by awardee laboratories or first responders from American Samoa, Guam, Marshall Islands, Federated States of Micronesia, Northern Mariana Islands, Puerto Rico, Palau, and the Virgin Islands

U.S. Territory health department specimens: Specimens received by awardee laboratories from American Samoa, Guam, Marshall Islands, Federated States of Micronesia, Northern Mariana Islands, Puerto Rico, Palau, and / or the Virgin Islands.

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

PHLT Performance Measures
Chemical

Table 1.2. Laboratorian Reporting for Duty (Chemical)

Laboratorian Reporting- Chemical	Time for initial laboratorian to report for duty at the PHEP-funded laboratory
Measurement Specifications	<p>Start Time: Date and time that a <u>public health designated official</u> began notifying on-call laboratorian(s) to report for duty at the PHEP-funded laboratory</p> <p>Stop Time: Date and time that the first laboratorian reported for duty at the PHEP-funded laboratory</p>
Intent	<p>Timely specimen testing is crucial for the recognition of a public health emergency. PHEP-funded laboratories must be able to receive specimens 24 hours a day, seven days a week to initiate testing. The intent of this measure is to ensure that a laboratorian can report for duty to a PHEP-funded public health laboratory in a timely manner, if notified to do so.</p>
Reporting Criteria	<p>Reporting on this performance measure is OPTIONAL.</p> <p>This performance measure requires self-reported data.</p> <p>This performance measure applies to LRN-C laboratories of all levels (i.e., 1, 2 and 3).</p> <p>Data collected for this measure must fall within PHEP Budget Period 11 (BP11): August 10, 2011, through August 9, 2012.</p> <p>Laboratorian reporting for duty to the PHEP-funded laboratory must be unannounced and occur outside of normal business hours.</p> <p>Awardees are strongly encouraged to report data elements from multiple real incidents or exercises that necessitated unannounced, off-hours reporting by a laboratorian at the PHEP-funded laboratory. However, awardees that choose to report on this measure are required, at a minimum, to report data on their one best demonstration of a laboratorian reporting for duty at the PHEP-funded laboratory. Ideally, the demonstration would have occurred during a real incident. If a real incident did not occur in your jurisdiction, the demonstration must have taken place during a drill, functional exercise, or full-scale exercise.</p> <p>Note: This measure applies to both biological and chemical laboratories. If the awardee’s biological and chemical laboratories function as a single entity (e.g. same laboratory director) the awardee would only report once for this measure.</p>

Reported Data Elements

The following information will be collected from the PHEP-funded LRN-C laboratory in support of the performance measure:

1. Name/location of PHEP-funded LRN-C laboratory [text box]
 - Level of lab (i.e., 1,2, or 3)
2. Normal/regular hours of operation for the lab:
 - Start of day Monday – Friday (e.g. 8a.m.)
 - End of day Monday - Friday (e.g. 5p.m.)
3. Routine weekend hours? [Yes/No]
 - If yes, please note [text box]
4. Total number of **operations-based exercises** (drill, functional, or full-scale only) testing laboratorian reporting conducted between August 10, 2011 and August 9, 2012
 - 1a. Number of operations-based exercises testing unannounced and outside of normal business hours laboratorian reporting
5. Total number of **real incidents, if any**, involving laboratorian reporting that occurred between August 10, 2011 and August 9, 2012
 - 2a. Number of real incidents involving unannounced and outside of normal business hours laboratorian reporting

For each unannounced and outside of normal business hours laboratorian reporting being reported:

6. Was the laboratorian reporting part of a drill, functional exercise, full-scale exercise, or real incident? [select one]
 7. Was the laboratorian reporting unannounced? [Yes/No]
 8. Did the laboratorian reporting occur outside of normal business hours? [Yes/No]
 9. Type of real incident or event/incident upon which exercise scenario was based [select the closest description of the real event]
 - Biological outbreak / exposure – specify type (e.g., measles, anthrax, etc.)
 - Chemical exposure – specify type
 - Infrastructure (e.g., power grid failure)
 - Mass casualty scenario
 - Mutual aid incident
 - Natural disaster – specify type (e.g., hurricane, tornado, ice storm)
 - Nuclear incident
 - Planned event
 - Radiological incident
 - Strategic National Stockpile exercise/response
 - Transportation disaster
 - Other – specify [text box]
 10. Start time (see measurement specifications above)
 11. Stop time (see measurement specifications above)
 12. **For real incidents only:** Provide the date and time that the specimen arrived at the PHEP-funded laboratory.

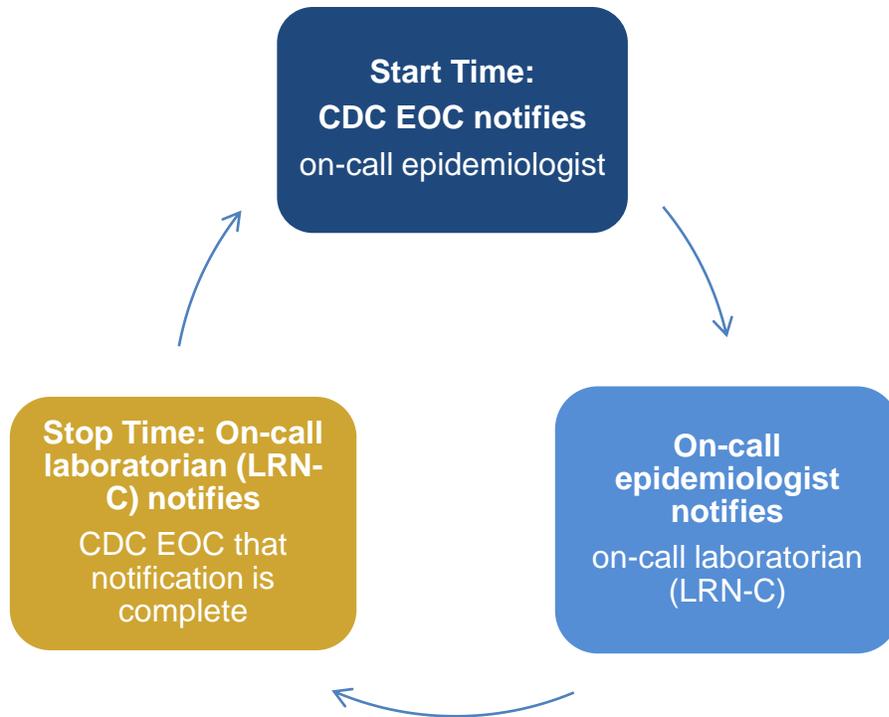
Note: It is possible that the specimen may arrive before or after the laboratorian.
 13. Does this incident or exercise represent the best demonstration of your
-

agency's laboratorian reporting for duty capability? [Yes / No]

14. Please select why this exercise or incident was chosen as the best demonstration of a laboratorian reporting [select the closest description of the real event]
- Context of the public health response – potential for substantial public health impact
 - Real incident
 - 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
 - Only example / demonstration available
 - Other – specify [text box]
15. Was this your quickest time? [Yes / No]
-

Table 1.3. LRN-EPI 24/7 Emergency Contact Drill (chemical)

LRN-EPI 24/7 Emergency Contact Drill Chemical Annual	Time to complete notification between CDC, <u>on-call epidemiologist</u>, and <u>on-call laboratorian</u> <u>Performance Target: 45 minutes or less</u>
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Measurement Specifications	Start Time: Date and time that <u>CDC Emergency Operations Center official</u> began notification of <u>on-call epidemiologist</u> Stop Time: Date and time the LRN-C <u>on-call laboratorian</u> (after receiving notification from <u>on-call epidemiologist</u>) notifies CDC Emergency Operations Center that notification drill is complete
Intent	To ensure a timely and effective response to incidents of public health significance, epidemiologists and laboratorians must be able to demonstrate an ability to rapidly communicate with one another. The intent of this measure is to be able to rapidly notify and receive acknowledgement between awardee <u>on-call epidemiologists</u> and awardee <u>on-call laboratorians</u> . In addition, testing notification abilities between CDC, awardee epidemiologists, and awardee laboratorians ensures that the federal/state system is tested on a regular basis. Performance target determined by LRN and CDC epidemiology programs.
Reporting	This performance measure is REQUIRED for all 50 state PHEP awardees as well as District of Columbia, Los Angeles County, and New York City.

<p>Criteria</p>	<p>Data will be generated from CDC-initiated drills; start- and stop-time data will be collected by CDC’s Emergency Operations Center and shared with the Division of State and Local Readiness (DSLRL).</p> <p>Data collected for this measure must fall with BP11: August 10, 2011, through August 9, 2012.</p> <p>Additional data may be collected by DSLR for this performance measure (e.g., factors accounting for not meeting the performance target, barriers in communication, etc.).</p>
<p>Additional Guidance</p>	<p>Awardees must update their contact list of <u>on-call epidemiologists</u> and <u>on-call laboratorians</u> with CDC as necessary, but no less than annually. This includes both biological and chemical laboratorians for those awardees that have different points of contact for both labs. On-call LRN-B and LRN-C numbers are maintained on the CDC LRN secure website. <u>On-call epidemiologists’</u> numbers will be maintained by DSLR.</p> <p>Note: In some jurisdictions, the contact number for the <u>on-call laboratorian</u> and the <u>on-call epidemiologist</u> is a central after-hours emergency number or answering service. If there is a central contact number (e.g. toll-free number), ensure that the number is current and works when dialed from outside the state.</p> <p>This is a bidirectional drill; a separate drill call will be conducted for each direction in BP11.</p> <p>For laboratories with different points of contact for LRN-B and LRN-C: One direction engages awardees’ LRN-C laboratories; the other direction engages awardees’ LRN-B laboratories. Please note the direction of each drill:</p> <p style="padding-left: 40px;">Direction 1: CDC EOC to Epi to LRN-C to CDC EOC</p> <p style="padding-left: 40px;">Direction 2: CDC EOC to LRN-B to Epi to CDC EOC</p> <p>For laboratories with the same points of contacts for LRN-C and LRN B: Both directions engage awardees’ (combined) LRN-B/C laboratories. The only difference between each direction (i.e., drill) is that in one direction the on-call epidemiologist is contacted first; in the other direction, the LRN-B/C lab is contacted first.</p> <p style="padding-left: 40px;">Direction 1: CDC EOC to Epi to LRN-B/C to CDC EOC</p> <p style="padding-left: 40px;">Direction 2: CDC EOC to LRN-B/C to Epi to CDC EOC</p>

Table 1.4. LRN Emergency Response Pop Proficiency Test (PopPT) Exercise

LRN Emergency Response Pop Proficiency Test (PopPT) Exercise Chemical Annual	Ability of PHEP-funded LRN-C Level 1 and/or Level 2 laboratories to detect and quantify biomarkers of chemical agents in clinical samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise
Measurement Specifications	Numerator: Number of biomarkers of chemical agents detected by Level 1 and/or Level 2 laboratories Denominator: Number of biomarkers of chemical agents included in the exercise.
Intent	<p>This exercise tests a laboratory’s emergency response capabilities focusing 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.</p> <p>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 PopPT exercise results and validate the information on an annual basis.</p>
Reporting Criteria	<p>Data will be collected for PHEP-funded LRN-C laboratories Level 1 and 2 only.</p> <p>To participate in a PopPT 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 PopPT exercise are called the day before the exercise, are sent approximately 10 clinical samples, and must test these samples within a certain number of hours (depending on the methods needed).</p> <p>Data collected for this measure will fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Data are collected internally by the LRN-C program. Results will be shared with DSLR.</p> <p>Proficiency testing data must be validated by the awardee preparedness office in PERFORMS.</p>
Additional Guidance	LRN-C “Pop” PT Exercise Guidelines available from LRN-C program

Table 1.5. Notification to partners (chemical)

Notification to partners – Chemical Annual	Time for <u>PHEP-funded laboratory</u> to notify <u>public health partners of significant laboratory results</u>
Measurement Specifications	<p>Start time: Date and time <u>PHEP-funded laboratory</u> obtains a <u>significant laboratory result</u></p> <p>Stop time: Date and time <u>PHEP-funded laboratory</u> completes notification of <u>public health partners of significant laboratory results</u> (i.e., time when last <u>public health partner</u> was notified, if partners were not simultaneously notified)</p>
Intent	<p>Rapidly notifying <u>public health partners</u> 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.</p>
Reporting Criteria	<p>Reporting on this performance measure is REQUIRED.</p> <p>This performance measure requires self-reported data.</p> <p>This performance measure applies to LRN-C laboratories Level 1 and 2.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Reporting is for real incidents only. PHEP-funded laboratories that did not receive a significant laboratory result for a clinical specimen or a nonclinical sample will be able to indicate this when submitting performance measure data.</p> <p>Awardees are strongly encouraged to report data from multiple real incidents. However, awardees that choose to submit data for this measure are required, at a minimum, to report data on their one best demonstration of a notification based on a test of a clinical specimen.</p> <p><u>Nonclinical samples</u> have been added for optional reporting for awardees that want to demonstrate performance in notifying <u>public health partners</u> of a significant result from a nonclinical sample. Samples can include rule-out requests.</p> <p>Note: This measure applies to both biological and chemical laboratories, but if the awardee’s biological and chemical laboratories function as a single entity (e.g. same laboratory director), the awardee would only report once for this measure.</p>
Reported Data Elements	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Total number of significant laboratory results between August 10, 2011 and August 9, 2012 for: <ol style="list-style-type: none"> a. Clinical specimens (required) b. <u>Nonclinical samples</u> (optional) 2. Did the PHEP-funded laboratory notify <u>public health partners</u> of at least one <u>significant laboratory result</u> obtained from a clinical specimen? [Yes / No]

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3. If yes, provide the following information for each reported example of a notification of significant index test results obtained from a **clinical specimen**:
- a. Date and time PHEP-funded laboratory obtained a significant laboratory result [Start time]
 - b. 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]
 - c. Did the PHEP-funded laboratory notify all of the appropriate partners of the significant laboratory results? [Yes / No]
 - d. Which partners did the PHEP-funded laboratory notify? [Select all that apply]
 - Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
 - e. Which partners did the PHEP-funded laboratory notify **within** two hours? [Select all that apply]
 - Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
 - f. Which partners deemed appropriate for notification did the PHEP-funded laboratory **not** notify?
 - Specimen submitter
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- State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) [text box]
- g. Which partners deemed appropriate for notification did the PHEP-funded laboratory not notify **within** 2 hours?
- Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) [text box]
- h. Briefly describe why appropriate partners were **not** notified, either at all or within two hours [text box].
- i. Does this incident represent the best demonstration of your agency's capability to notify partners of a significant lab result? [Yes / No]
- j. Please select the reason why this exercise or incident was chosen as the best demonstration of notification to partners [Select the primary / most significant reason]
- Context of the public health response – potential for substantial public health impact
 - Real incident
 - 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
 - Only example / demonstration available
 - Other – specify [text box]
-

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- k. Was this your quickest time? [Yes / No]
- l. Briefly describe the scenario or incident (if known), including name of substance(s) or agent(s), type of specimen, and other pertinent information, for this best demonstration.
4. [*Optional Reporting Measure*] Did the PHEP-funded laboratory notify public health partners of at least one significant laboratory results obtained from a nonclinical sample? [Yes / No]
5. If yes, provide the following information for each reported example of a notification of significant index test results obtained from a nonclinical sample, please provide:
- Time PHEP-funded laboratory obtained a significant laboratory result [start time]
 - 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]
 - Did the PHEP-funded laboratory notify all of the appropriate partners of the significant laboratory results? [Yes / No]
 - Which partners did the PHEP-funded laboratory notify? [Select all that apply]
 - Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
 - Which partners did the PHEP-funded laboratory notify **within** two hours? [Select all that apply]
 - Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
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- Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
- f. Which partners deemed appropriate for notification did the PHEP-funded laboratory **not** notify?
- Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) [text box]
- g. Which partners deemed appropriate for notification did the PHEP-funded laboratory **not** notify **within 2 hours**?
- Specimen submitter
 - State public health lab director
 - On-call or state epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) [text box]
 - Briefly describe why appropriate partners were *not* notified, either at all or within two hours [text box].
- h. Does this incident represent the best demonstration of your agency's capability to notify partners? [Yes / No]
- i. Please select the reason why this exercise or incident was chosen as the best demonstration of notification to partners [Select the primary / most significant reason]
- Context of the public health response – potential for substantial public health impact
 - Real incident
 - 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
- Only example / demonstration available
- Other – specify [text box]

j. Was this your quickest time? [Yes / No]

k. Briefly describe the scenario or incident (if known), including name of substance(s) or agent(s), type of specimen, and other pertinent information, for this best demonstration.

Table 1.6. Proficiency Testing – Additional Methods (chemical)

Proficiency Testing- Chemical Additional Annual	Proportion of LRN-C proficiency tests (additional methods) successfully passed by <u>PHEP-funded laboratories</u>
Measurement Specifications	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 <u>PHEP-funded laboratory is qualified</u> to test
Intent	<p>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.</p> <p>With the exception of Reported Data Element 5, no new data collection will be required outside of the existing proficiency testing conducted or sponsored by CDC’s LRN-C.</p>
Reporting Criteria	<p>Proficiency testing is conducted annually by CDC.</p> <p>This performance measure is REQUIRED for LRN-C Level 1 laboratories. It is OPTIONAL for Level 2 laboratories.</p> <p>Data collected for this measure will fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Reported Data Elements 1-4 are collected internally by the LRN-C program. Awardees will submit information for Reported Data Element 5. Results will be shared with DSLR.</p> <p>Proficiency testing data must be validated by the awardee preparedness office in PERFORMS.</p>
Reported Data Elements	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Number of LRN-C additional methods successfully proficiency tested by the PHEP-funded laboratory [numerator] 2. Total number of LRN-C additional methods for which the PHEP-funded laboratory is qualified to test [denominator] 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 <u>validated</u> 5. If the <u>PHEP-funded laboratory</u> did not pass or participate in all LRN-C additional methods proficiency tests, please explain why and any remediation taken [open text box]

Table 1.7. Proficiency Testing – Core Methods (chemical)

Proficiency Testing- Chemical Core Annual	Proportion of LRN-C proficiency tests (core methods) successfully passed by PHEP-funded laboratories
Measurement Specifications	Numerator: Number of LRN-C core methods successfully proficiency tested by the PHEP-funded laboratory Denominator: Total number of LRN-C core methods (9)
Intent	<p>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.</p> <p>With the exception of Reported Data Element 5, no new data collection will be required outside of the existing proficiency testing conducted or sponsored by CDC’s LRN-C. The intent is to ensure that the awardee preparedness office is aware of proficiency testing activities and capabilities, and that information is validated by the awardee on an annual basis.</p>
Reporting Criteria	<p>Proficiency testing is conducted annually by CDC.</p> <p>Data will be collected for PHEP-funded LRN-C laboratories Level 1 and 2 only. All Level 1 and Level 2 laboratories are expected to participate.</p> <p>Data collected for this measure will fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Reported Data Elements 1-4 are collected internally by the LRN-C program. Awardees will submit information for Reported Data Element 5. Results will be shared with the Division of State and Local Readiness.</p> <p>Proficiency testing data must be validated by the awardee preparedness office in PERFORMS.</p>
Reported Data Elements	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 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 <u>qualified</u> to test 3. Total number of LRN-C core methods in which the PHEP-funded laboratory has <u>trained</u> 4. <u>Total number of LRN-C core methods</u> for which the PHEP-funded laboratory has been <u>validated</u> 5. If the PHEP-funded laboratory did not pass or participate in all LRN-C core methods proficiency tests, please explain why and any remediation taken [open text box]

Table 1.8. Sample Collection, Packing, and Shipping (chemical)

Sample Collection, Packing, and Shipping (SCPaS) Chemical Annual	Ability of PHEP-funded LRN-C laboratories to collect, package, and ship samples properly during LRN exercise
Measurement Specifications	Sample collection, packaging, and shipping (SCPaS) exercise results [Passed/did not pass]
Intent	<p>The proper collection, packaging, and shipping of specimens is important to ensure the integrity of the specimen and the safety of all those involved.</p> <p>This annual exercise evaluates the ability of a laboratory to collect relevant samples for clinical chemical analysis and ship those samples in compliance with International Air Transport Association, U.S. Department of Transportation, and state regulations.</p> <p>No new data collection will be required outside of the existing SCPaS exercise by CDC’s LRN-C, but the intent is to ensure that awardee preparedness offices are aware of SCPaS activities and validate the information on an annual basis.</p>
Reported Data Elements Reporting Criteria	<p>The following information will be collected for the PHEP-funded LRN-C laboratories in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Name/location of all LRN-C laboratories <ol style="list-style-type: none"> a. Level of lab (i.e., 1, 2, or 3) 2. SCPaS results for each laboratory (Pass, did not pass, did not participate) <p>This is an annual LRN-C exercise.</p> <p>Data will be collected for LRN-C laboratories of all levels (i.e., 1, 2 and 3).</p> <p>At least one PHEP-funded laboratory for each awardee must participate annually and is expected to pass. Additional laboratories may participate if they choose. An awardee will be rated as “Passed” if at least one of their LRN-C laboratories participated and passed (e.g., if an awardee has one laboratory pass and another fail or not participate, the awardee will be rated as passed, since the awardee had at least one laboratory demonstrate the capability). If an 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.”</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Data are collected internally by the LRN-C program office at CDC. Results will be shared with DSLR.</p> <p>SCPaS data must be validated in PERFORMS by the awardee preparedness office.</p>

Table 1.9. Surge Capacity Exercise (chemical)

Surge Capacity Exercise Chemical Annual	Ability of each PHEP-funded LRN-C Level 1 laboratory to process and report results to CDC for 500 samples during the LRN Surge Capacity Exercise
Measurement Specifications	Start Time: Date and time of delivery of 500 samples to LRN-C Level 1 laboratory Stop Time: Date and time result from last sample was reported to CDC
Intent	<p>This exercise demonstrates the ability of each Level 1 laboratory to test and report results for 500 samples (a total of 5000 samples for 10 LRN-C Level 1 laboratories) on a 24/7 basis as would be required by a large scale chemical incident.</p> <p>Note: The 5,000 samples include approximately 4,000 unspiked and 1,000 spiked samples to mimic the expected exposed/unexposed ratio. The spiked samples are spiked at low-high levels with a minimum of three and a maximum of five different values. Each Level 1 laboratory receives approximately 80% unspiked and 20% spiked samples.</p> <p>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 Surge Capacity Exercise results and validate the information on an annual basis.</p>
Reporting Criteria	<p>Data will be collected for PHEP-funded LRN-C laboratories Level 1 only.</p> <p>Data collected for this measure will fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Data are collected internally by the LRN-C program. Results will be shared with DSLR.</p> <p>Results must be validated by the awardee preparedness office in PERFORMS.</p>

PHLT Performance Measures

Biological

Table 1.10. Communication between PHEP-funded Laboratory and Sentinel Clinical Laboratories (Biological)

<p>Communication between PHEP-funded Laboratory and Sentinel Clinical Laboratories Biological</p>	<p>Time for <u>sentinel clinical laboratories</u> to acknowledge receipt of an <u>urgent message</u> from PHEP-funded LRN-B laboratory</p>
<p>Measurement Specifications</p>	<p>Start time: Date and time PHEP-funded LRN-B laboratory sends <u>urgent message</u> to first <u>sentinel clinical laboratory</u></p> <p>Intermediate stop time: Date and time at least 50% of <u>sentinel clinical laboratories</u> <u>acknowledged</u> receipt of <u>urgent message</u></p> <p>Intermediate stop time: Date and time at least 90% of <u>sentinel clinical laboratories</u> <u>acknowledged</u> receipt of <u>urgent message</u></p> <p>Stop time: Date and time last <u>sentinel clinical laboratory</u> <u>acknowledged</u> receipt of <u>urgent message</u></p>
<p>Intent</p>	<p>Ensuring that <u>PHEP-funded laboratories</u> and the <u>sentinel clinical laboratories</u> 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.</p>
<p>Reporting Criteria</p>	<p>Reporting on this performance measure is OPTIONAL.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Awardees are strongly encouraged to report data from multiple drills or exercises and / or real-incidents. However, awardees that choose to report on this measure are required, at a minimum, to report data on their one best demonstration of the ability of <u>sentinel clinical laboratories</u> to acknowledge receipt of an <u>urgent message</u> from the <u>PHEP-funded laboratory</u>. The demonstration must have occurred as part of one of the following:</p> <ul style="list-style-type: none"> ▪ <u>Drill</u> ▪ <u>Functional exercise</u> ▪ <u>Full-scale exercise</u> ▪ Real <u>incident</u>
<p>Reported Data Elements</p>	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Please specify the definition of <u>sentinel clinical laboratory</u> used in the awardee’s jurisdiction <ol style="list-style-type: none"> a. Definition as approved by the LRN Joint Leadership Committee (JLC see definitions section) or b. Jurisdictionally defined (provide definition) <ul style="list-style-type: none"> • Please describe any barriers to adopting the LRN JLC approved definition [text box] 2. Number of <u>sentinel clinical laboratories</u> in the awardee’s jurisdiction

-
- a. Total
 - b. Advanced, if defined
 - c. Basic, if defined
3. Total number of operations-based exercises (drill, FE, or FSE only) testing communication between PHEP funded LRN-B laboratory and sentinel labs conducted between August 10, 2011, and August 9, 2012
 4. Total number of real incidents testing communication between the PHEP funded LRN-B laboratory and sentinel labs that occurred between August 10, 2011, and August 9, 2012

For each communication between the PHEP funded LRN-B laboratory and sentinel lab being reported:

5. Date and time PHEP-funded LRN-B laboratory sends urgent message to **first** sentinel clinical laboratory [start time]
 6. Date and time at least **50%** of sentinel clinical laboratories acknowledged receipt of urgent message) [intermediate stop time]
 7. Date and time at least **90%** of sentinel clinical laboratories acknowledged receipt of urgent message) [intermediate stop time]
 8. Date and time **last** sentinel clinical laboratory acknowledged receipt of urgent message) [stop time]
 9. Final percentage of sentinel clinical laboratories that acknowledged receipt of urgent message [%]
 - a. If 50%, 90%, or 100% of sentinel clinical laboratories did **not** acknowledge receipt of the urgent message:
 - i. Briefly describe, in general terms, key factors that account for less than 100% of sentinel clinical laboratories **not** acknowledging receipt of the urgent message. [text box]
 - ii. What steps has the awardee taken to improve ability to send an urgent message and receive acknowledgement from sentinel clinical laboratories? [text box]
 10. Method(s) PHEP-funded LRN-B laboratory used to send urgent message to sentinel clinical laboratories [Select all that apply]
 - Cell phone
 - E-mail outside of rapid notification system
 - Fax
 - Rapid notification system (e.g. Health Alert Network)
 - Land-line telephone
 - Pager
 - Satellite communication system
 - Other - specify
 11. Method(s) sentinel clinical laboratories used to acknowledge receipt of urgent message [Select all that apply]
 - Cell phone
 - E-mail outside of rapid notification system
 - Fax
 - Rapid notification system (e.g. Health Alert Network)
 - Land-line telephone
 - Pager
 - Satellite communication system
-

-
- Other - specify
12. Does this exercise or incident represent the best demonstration of the capability to communicate between PHEP-funded LRN-B laboratory and sentinel clinical laboratories? [Yes / No]
 13. Please select the reason why this exercise or incident was chosen as the best demonstration of a communication between PHEP-funded LRN-B laboratory and sentinel clinical laboratories [Select the primary / most significant reason]
 - Context of the public health response – potential for substantial public health impact
 - Real Incident
 - 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
 - Only example / demonstration available
 - Other - specify
 14. Was this your quickest time? [Yes / No]
-

Table 1.11. Laboratorian Reporting for Duty (Biological)

Laboratorian Reporting – Biological	Time for initial laboratorian to <u>report for duty</u> at the <u>PHEP-funded laboratory</u>
Measurement Specifications	<p>Start Time: Date and time that a <u>public health designated official</u> began notifying <u>on-call laboratorian(s)</u> to <u>report for duty</u> at the <u>PHEP-funded laboratory</u></p> <p>Stop Time: Date and time that the first laboratorian <u>reported for duty</u> at the <u>PHEP-funded laboratory</u></p>
Intent	<p>Timely specimen testing is crucial for the recognition of a public health emergency. PHEP-funded laboratories must be able to receive specimens 24 hours per day, seven days per week to initiate testing. Having the <u>on-call laboratorian</u> report to the appropriate <u>PHEP-funded laboratory</u> to begin receiving samples and ensure that the testing process can begin is a crucial first step in the detection of a public health emergency.</p>
Reporting Criteria	<p>Reporting on this performance measure is OPTIONAL.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Laboratorian <u>reporting for duty</u> to the <u>PHEP-funded laboratory</u> must be <u>unannounced</u> and occur <u>outside of normal business hours</u>.</p> <p>Awardees are strongly encouraged to report data elements from multiple real incidents or exercises that necessitated unannounced, off-hours reporting by a laboratorian at the PHEP-funded laboratory. However, awardees that choose to report on this measure are required, at a minimum, to report data elements on their one best demonstration of a laboratorian reporting for duty at the <u>PHEP-funded laboratory</u>. Ideally, the demonstration would have occurred during a real incident. If a real incident did not occur in your jurisdiction, the demonstration must have taken place during a drill, functional exercise, or full-scale exercise.</p> <p>Note: This measure applies to both biological and chemical laboratories. If the awardee’s biological and chemical laboratories function as a single entity (e.g. same laboratory director) the awardee would only report once for this measure.</p>
Reported Data Elements	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Number of <u>PHEP-funded reference laboratories</u> in your jurisdiction 2. The following data elements will be collected for each of these <u>PHEP-funded laboratories</u>: <ol style="list-style-type: none"> a. Name/location of PHEP-funded laboratory [open text box] b. Normal/regular hours of operation for the lab: <ol style="list-style-type: none"> 1. Start of day Monday – Friday (e.g. 8 a.m.) 2. End of day Monday - Friday (e.g. 5 p.m.) c. Routine weekend hours? [Yes / No]

-
1. If yes, please note [open text box]
 3. Total number of operations-based exercises (drill, FE or FSE only) testing laboratorian reporting conducted between August 10, 2011, and August 9, 2012
 - 3a. Number of operations-based exercises testing unannounced and outside of normal business hours laboratorian reporting;
 4. Total number of real incidents involving laboratorian reporting that occurred between August 10, 2011, and August 9, 2012
 - 4a. Number of real incidents involving unannounced and outside of normal business hours laboratorian reporting
- For each unannounced and outside of normal business hours laboratorian reporting being reported:
5. Was the laboratorian reporting part of a drill, a FE, a FSE, or a real incident? [select one]
 6. Was the laboratorian reporting unannounced? [Yes / No]
 7. Did the laboratorian reporting occur outside of normal business hours? [Yes / No]
 8. Type of real incident or event/incident upon which exercise scenario was based [select the closest description of the real event/incident]
 - Biological outbreak / exposure – specify type (e.g., measles, anthrax, etc.)
 - Chemical exposure – specify type
 - Infrastructure (e.g., power grid failure)
 - Mass casualty scenario
 - Mutual aid incident
 - Natural disaster – specify type (e.g., hurricane, tornado, ice storm)
 - Nuclear incident
 - Planned event
 - Radiological incident
 - Strategic National Stockpile exercise/response
 - Transportation disaster
 - Other – specify [text box]
 9. Start time (see measurement specifications above)
 10. Stop time (see measurement specifications above)
 11. **For** real incident only: provide the date and time that the specimen arrived at the PHEP-funded laboratory.

Note: It is possible that the specimen may arrive before or after the laboratorian.
 12. Does this incident or exercise represent the best demonstration of your agency's laboratorian reporting for duty capability? [Yes / No]
 13. Please select why this exercise or incident was chosen as the best demonstration of a laboratorian reporting [select the primary / most significant reason]
 - Context of the public health response – potential for substantial public health impact
 - Real Incident
 - Complexity of the demonstration / response – scale of the demonstration / response requiring significant laboratory resources
-

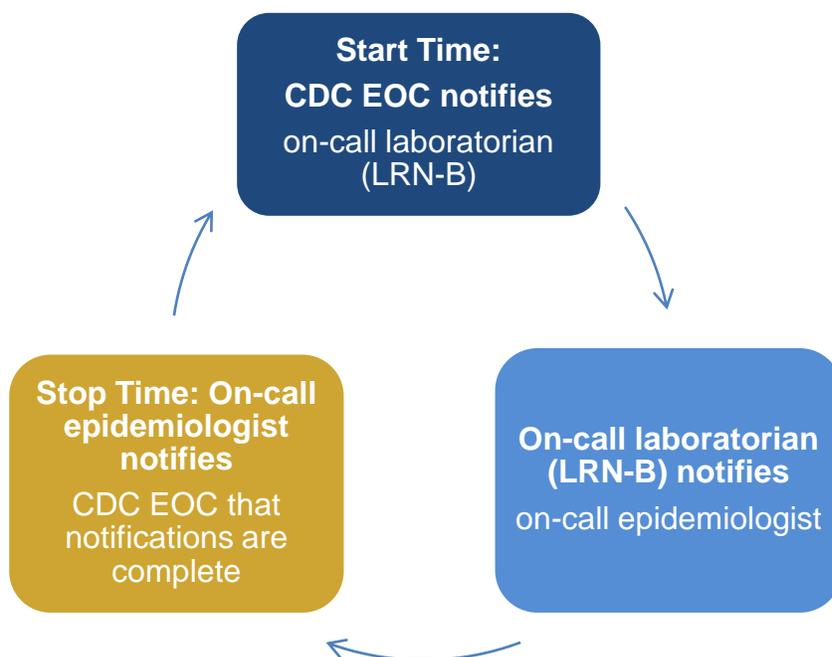
(staff, resources, etc)

- Duration of the demonstration / response
- Required the mobilization of resources outside of the affected area
- Quickest time
- Only example / demonstration available
- Other – specify [text box]

14. Was this your quickest time? [Yes / No]

Table 1.12. LRN-EPI 24/7 Emergency Contact Drill (biological)

LRN-EPI 24/7 Emergency Contact Drill Biological Annual	Time to complete notification between CDC, <u>on-call laboratorian</u>, and <u>on-call epidemiologist</u> <u>Performance Target: 45 minutes or less</u>
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Measurement Specifications	<p>Start Time: Date and time that <u>CDC Emergency Operations Center official</u> began <u>notification</u> of <u>on-call laboratorian (LRN-B)</u>.</p> <p>Stop Time: Date and time <u>on-call epidemiologist</u> (after receiving <u>notification</u> from LRN-B <u>on-call laboratorian</u>) notifies CDC Emergency Operations Center that notification drill is complete.</p>
Intent	<p>To ensure a timely and effective response to incidents of public health significance, awardee laboratorians and epidemiologists must be able to demonstrate the capability to rapidly communicate between one another. Ensuring that these groups are able to rapidly communicate assists in the characterization of an incident by connecting two crucial but often separate roles and expertise in responding to public health emergencies.</p> <p>The intent of this measure is to be able to rapidly notify and receive <u>acknowledgement</u> between <u>on-call laboratorians</u> and <u>on-call epidemiologists</u>. In addition, testing the <u>notification</u> abilities between CDC, <u>on-call laboratorians</u> and <u>on-call epidemiologists</u> ensures that the federal/state system is tested on a regular basis.</p> <p>Performance target determined by LRN and CDC epidemiology programs.</p>

**Reporting
Criteria**

This performance measure is **REQUIRED** for all 50 state PHEP awardees as well as District of Columbia, Los Angeles County, and New York City.

Data will be generated from CDC-initiated drills; start- and stop-time data will be collected by CDC's EOC and shared with DSLR

Data collected for this measure must fall with BP11: August 10, 2011 through August 9, 2012.

Additional data may be collected by DSLR for this performance measure (e.g., factors accounting for not meeting the performance target, barriers in communication, etc.).

**Additional
Guidance**

Awardees must update their contact list of on-call epidemiologists and on-call laboratorians with CDC as necessary but no less than annually. This includes both biological and chemical laboratorians for those awardees that have different point of contacts for both labs. On-call LRN-B and LRN-C numbers are maintained on the CDC LRN secure website. On-call epidemiologist numbers will be maintained by DSLR.

Note: In some jurisdictions, the contact number for the on-call laboratorian and the on-call epidemiologist is a central after-hours emergency number or answering service. If there is a central contact number (e.g. toll-free number), ensure that the number is current works when dialed from outside the state.

This is a bidirectional drill; a separate drill call will be conducted for each direction in BP11.

For laboratories with **different points of contact** for LRN-B and LRN-C: One direction engages awardees' LRN-C laboratories; the other direction engages awardees' LRN-B laboratories. Please note the direction of each drill:

Direction 1: CDC EOC to Epi to LRN-C to CDC EOC

Direction 2: CDC EOC to LRN-B to Epi to CDC EOC

For laboratories with the **same points of contacts** for LRN-C and LRN B: Both directions engage awardees' (combined) LRN-B/C laboratories. The only difference between each direction (i.e., drill) is that in one direction the on-call epidemiologist is contacted first; in the other direction, the LRN-B/C lab is contacted first.

Direction 1: CDC EOC to Epi to LRN-B/C to CDC EOC

Direction 2: CDC EOC to LRN-B/C to Epi to CDC EOC

Table 1.13. Notification Drill associated with Proficiency Testing (biological)

Notification Drill associated with Proficiency Testing Biological Annual	Ability of PHEP-funded LRN-B reference laboratory to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill
Measurement Specifications	Notification drill results [Passed/did not pass/did not participate]
Intent	<p>LRN notification drills ensure that biological laboratories can contact the CDC Emergency Operations Center to report results to the watch staff and duty officers within 2 hours of obtaining a result. These drills are associated with participation in a specific proficiency test; laboratories that cannot participate in the test (e.g., they do not test for the agent in question, or are “offline” due to facility/equipment issues) are excluded from this drill.</p> <p>No new data collection will be required (outside of the existing notification drill data collected by CDC’s LRN-B), but the intent is to ensure that awardee preparedness offices are aware of notification drill results and validate the information on an annual basis.</p> <p>Performance target determined by the CDC LRN-B program.</p>
Reporting Criteria	<p>This performance measure is REQUIRED for all 50 state PHEP awardees as well as District of Columbia, Los Angeles County, and New York City.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Notification drill results 2. Month(s) drills were conducted <p>Data will be collected by LRN-B program. Results will be shared with DSLR. Notification drill data must be validated in PERFORMS by the awardee’s preparedness office.</p>

Table 1.14. Notification to Partners (biological)

<p>Notification to Partners - Biological Annual</p>	<p>Time for <u>PHEP-funded laboratory</u> to notify <u>public health partners of significant laboratory results</u></p>
<p>Measurement Specifications</p>	<p>Start time: Date and time <u>PHEP-funded laboratory</u> obtains a <u>significant laboratory result</u></p> <p>Stop time: Date and time <u>PHEP-funded laboratory</u> completes <u>notification of public health partners of significant laboratory results</u> (i.e., time when last public health partner was notified, if partners were not simultaneously notified)</p>
<p>Intent</p>	<p>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.</p>
<p>Reporting Criteria</p>	<p>Reporting on this performance measure is REQUIRED of all 50 state PHEP awardees as well as District of Columbia, Los Angeles County and New York City.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Awardees are strongly encouraged to report data from multiple real incidents. However, awardees are required, at a minimum, to report data from two best demonstrations of significant index test result notifications:</p> <ul style="list-style-type: none"> • One notification based on a test of a clinical specimen and • One notification based on a test of a <u>nonclinical</u> sample. <p>These samples can include rule-out requests.</p> <p>Note: This measure applies to both biological and chemical laboratories, but if the awardee’s biological and chemical laboratory function as a single entity (e.g. same laboratory director), the awardee would only report once for this measure.</p>
<p>Reported Data Elements</p>	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Total number of <u>significant laboratory results</u> between August 10, 2011, and August 9, 2012, for: <ol style="list-style-type: none"> a. Clinical specimens b. Nonclinical samples 2. Did the <u>PHEP-funded laboratory</u> notify <u>public health partners</u> of at least one <u>significant laboratory result</u> obtained from a clinical specimen? [Yes / No] 3. If YES, provide the following information for each reported example of a <u>notification of significant index test results</u> obtained from a clinical specimen: <ol style="list-style-type: none"> a. Date and time <u>PHEP-funded laboratory</u> obtained a <u>significant laboratory result</u> [Start time]

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- b. 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]
- c. Did the PHEP-funded laboratory notify all of the appropriate partners of the significant laboratory results? [Yes / No]
- d. Which partners did the PHEP-funded laboratory notify? [Select all that apply]
- Specimen submitter
 - State public health lab director
 - On-call or state epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
- e. Which partners did the PHEP-funded laboratory notify **within two hours**? [Select all that apply]
- Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
- f. Which partners deemed appropriate for notification did the PHEP-funded laboratory **not** notify?
- Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
-

-
- State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) [text box]
- g. Which partners deemed appropriate for notification did the PHEP-funded laboratory **not** notify **within** 2 hours?
- Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State law enforcement
 - Local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) [text box]
 - Briefly describe why appropriate partners were *not* notified, either at all or within two hours [text box].
- h. Does this incident represent the best demonstration of your agency's capability to notify partners? [Yes / No]
- i. Please select the reason why this exercise or incident was chosen as the best demonstration of notification to partners [select the primary / most significant reason]
- Context of the public health response – potential for substantial public health impact
 - Real incident
 - 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
 - Only example / demonstration available
 - Other – specify [text box]
- j. Was this your quickest time? [Yes / No]
- k. Briefly describe the scenario or incident (if known), including name of substance(s) or agent(s), type of specimen, and other pertinent information, for this best demonstration.
4. Did the PHEP-funded laboratory notify public health partners of at least one significant laboratory results obtained from a nonclinical sample? [Yes / No]
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5. If YES, provide the following information for each reported example of a notification of significant index test results obtained from a nonclinical sample, please provide:
- a. Time PHEP-funded laboratory obtains a significant laboratory result [start time]
 - b. Time PHEP-funded laboratory completes 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]
 - c. Did the PHEP-funded laboratory notify all of the appropriate partners of the significant laboratory results? [Yes / No]
 - d. Which partners did the PHEP-funded laboratory notify? [Select all that apply]
 - Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State or local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
 - e. Which partners did the PHEP-funded laboratory notify **within two hours**? [Select all that apply]
 - Specimen submitter
 - State public health lab director
 - On-call or State epidemiologist
 - Health officer for state health department
 - Duty officer at CDC Emergency Operations Center
 - Other CDC point of contact (e.g., LRN, lab SME, etc.)
 - Local health department
 - FBI
 - State homeland security or emergency management agency
 - State natural resources department or environmental health department
 - State or local law enforcement
 - Civil support team and/or first response team
 - Other - specify partner(s) and why they were notified- [text box]
 - f. Does this incident represent the best demonstration of your agency's capability to notify partners? [Yes / No]
 - g. Please select the reason why this exercise or incident was chosen as the best demonstration of notification to partners (select the primary/ most significant reason)
 - Context of the public health response – potential for substantial
-

public health impact

- Real Incident
 - 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
 - Only example / demonstration available
 - Other – specify [text box]
- h. Was this your quickest time? [Yes / No]
- i. Briefly describe the scenario or incident (if known), including name of substance(s) or agent(s), type of specimen, and other pertinent information, for this best demonstration.
-

Table 1.15. Proficiency Testing (Biological)

Proficiency Testing – Biological Annual	Proportion of LRN-B proficiency tests successfully passed by PHEP-funded laboratories
Measurement Specifications	Numerator: Number of LRN-B proficiency tests successfully passed by <u>PHEP-funded laboratory(s)</u> Denominator: Total number of LRN-B proficiency tests participated in by <u>PHEP-funded laboratory (s)</u>
Intent	<p>Recognition of a health emergency requires accurate laboratory testing of samples in order 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.</p> <p>With the exception of Reported Data Element 4, no new data collection will be required (outside of the existing proficiency testing conducted by CDC’s LRN-B or LRN-B sponsored proficiency tests), but the intent is to ensure that awardee preparedness offices are aware of proficiency testing activities, testing capabilities, and validate the information on an annual basis.</p>
Reporting Criteria	<p>This performance measure is REQUIRED for all 50 state PHEP awardees, New York City, Los Angeles County, and District of Columbia.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Data are collected internally by the LRN-B program. Awardees will submit information for Reported Data Element 4. Results will be shared with DSLR. Proficiency testing data must be validated in PERFORMS by the awardee’s preparedness office.</p>
Reported Data Elements	<p>The following information will be collected:</p> <ol style="list-style-type: none"> 1. Number of LRN-B proficiency tests participated in by the <u>PHEP-funded laboratory</u> [denominator] 2. Number of LRN-B proficiency tests successfully passed by the <u>PHEP-funded laboratory during first attempt</u> [numerator] 3. Number of LRN-B proficiency tests successfully passed by the PHEP-funded laboratory after remediation 4. If the PHEP-funded laboratory did not pass all LRN-B proficiency tests during first attempt, please explain why, and remediation taken [text box] 5. Number of LRN-B proficiency tests participated in by all public health laboratories 6. Number of LRN-B proficiency tests successfully passed by all public health laboratories during first attempt 7. Number of PHEP-funded public health LRN-B laboratories as of August 9, 2012. 8. Total number of public health LRN-B laboratories as of August 9, 2012.
Additional Guidance	<p>Please consult with the LRN-B program office or e-mail the LRN Helpdesk (LRN@cdc.gov) for specific questions about proficiency testing.</p>

Table 1.16. Sample Quality - First Responders (biological)

Sample Quality - First Responders Biological Annual	Percentage of LRN <u>nonclinical samples</u> received by the <u>PHEP-funded LRN-B laboratory</u> for confirmation or rule-out testing from <u>first responders</u> without <u>any adverse quality assurance (QA) events</u>
Measurement Specifications	Numerator: Number of LRN <u>nonclinical samples</u> without <u>any adverse QA events</u> received at the PHEP-funded LRN-B laboratory for confirmation or rule-out testing from <u>first responders</u> Denominator: Total number of LRN <u>nonclinical samples</u> received at the PHEP-funded LRN-B laboratory for confirmation or rule-out testing from <u>first responders</u>
Intent	The proper collection, packaging, and shipping of samples is important to ensure the integrity of the sample and the safety of all those involved. Assessing the overall quality of samples from <u>first responders</u> will help ensure the effective and timely recognition of potential health emergencies. To complement the requirement for <u>PHEP-funded laboratories</u> to demonstrate PCPaS to CDC, this measure allows for a standardized evaluation of these practices by <u>first responders</u> .
Reporting Criteria	This performance measure is REQUIRED for all 50 state PHEP awardees. Other awardees have the option to report these data, as applicable. This performance measure requires self-reported data. All state-level, PHEP-funded LRN-B reference laboratories must participate in proficiency testing for this measure. Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012. Data are to be reported on the quality of LRN <u>nonclinical samples</u> received from <u>first responders</u> on a day-to-day basis (i.e., not via exercises). Only LRN <u>nonclinical samples</u> received from <u>first responders</u> (e.g., hazardous material team) within the awardee’s jurisdiction or a <u>U.S. Territory</u> (if applicable) may be included in this performance measure.
Reported Data Elements	The following information will be collected in support of the performance measure: <ol style="list-style-type: none"> 1. Total number of LRN <u>nonclinical samples</u> received for confirmation or rule-out testing from <u>first responders</u> [denominator] <ol style="list-style-type: none"> a. Number of samples from <u>first responders</u> within the awardee’s jurisdiction b. Number of samples from <u>first responders</u> in a <u>U.S. Territory</u> (if applicable) 2. Total number of LRN non-clinical samples for confirmation or rule-out testing <u>without any adverse QA events</u> received from [numerator] <ol style="list-style-type: none"> a. <u>First responders</u> within the awardee’s jurisdiction b. <u>U.S. Territory</u> (if applicable) 3. Please specify definition of <u>adverse QA event</u> used in the awardee’s jurisdiction [select one] <ol style="list-style-type: none"> a. Definition as written in Definitions of Key Terms section or

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- b. Jurisdictionally-defined. Please provide definition. [text box]
4. For those LRN nonclinical samples received from first responders within your jurisdiction that had adverse QA events:
 - a. What types of adverse QA events occurred? [text box]
 - b. What steps has the awardee taken to improve performance by first responders? [text box]
 5. For those LRN nonclinical samples received from first responders in U.S. Territories that had adverse QA events (if applicable):
 - a. What types of adverse QA events occurred? [text box]
 - b. What steps, if any, has the awardee taken to improve performance by U.S. Territory first responders? [text box]
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Table 1.17. Specimen Quality -Sentinel Clinical Laboratories (biological)

Specimen Quality - Sentinel Clinical Laboratories Biological Annual	Percentage of LRN clinical specimens received by <u>PHEP-funded LRN-B laboratory for confirmation or rule-out testing from sentinel clinical laboratories without any adverse QA events</u>
Measurement Specifications	<p>Numerator: Number of LRN clinical specimens received by <u>PHEP-funded LRN-B laboratory for confirmation or rule-out testing from sentinel clinical laboratories without any adverse QA events</u></p> <p>Denominator: Total number of LRN clinical specimens received by <u>PHEP-funded LRN-B laboratory for confirmation or rule-out testing from sentinel clinical laboratories</u></p>
Intent	<p>The proper collection, packaging, and shipping of specimens is important to ensure the integrity of the specimen and the safety of all those involved. Assessing the overall quality of specimens received from <u>sentinel clinical laboratories</u> will help ensure the effective and timely recognition of potential public health emergencies. To complement the requirement for <u>PHEP-funded laboratories</u> to demonstrate proper SCPaS to CDC, this measure allows for a standardized evaluation of these practices at the <u>sentinel clinical laboratory level</u>.</p>
Reporting Criteria	<p>This performance measure is REQUIRED for all 50 state PHEP awardees. Other awardees have the option to report these data, as applicable.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>Data are to be reported on the quality of LRN clinical specimens received from <u>sentinel clinical laboratories</u> on a day-to-day basis (i.e., not via exercises). Only LRN clinical specimens received from <u>sentinel clinical laboratories</u> and/or <u>U.S. Territory</u> health departments (if applicable) may be included in this performance measure.</p>
Reported Data Elements	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Total number of LRN clinical specimens received for confirmation or rule-out testing from <u>sentinel clinical laboratories</u> [denominator] <ol style="list-style-type: none"> a. Number of specimens from <u>sentinel clinical laboratories</u> within the awardee’s jurisdiction b. Number of specimens from a <u>U.S. Territory</u> (if applicable) 2. Total number of LRN clinical specimens received from <u>sentinel clinical laboratories</u> for confirmation or rule-out testing without any <u>adverse QA events</u> [numerator] <ol style="list-style-type: none"> a. Number of specimens from <u>sentinel clinical laboratories</u> within the awardee’s jurisdiction b. Number of specimens from a <u>U.S. Territory</u> (if applicable) 3. Please specify the definition of <u>adverse QA event</u> used in the awardee’s jurisdiction [select one]

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- a. Definition as written in Definitions of Key Terms section **or**
 - b. Jurisdictionally-defined. Please provide definition. [text box]
4. For those LRN clinical specimens received from sentinel clinical laboratories within your jurisdiction that had adverse QA events:
 - a. What types of adverse QA events occurred? [text box]
 - b. What steps, if any, has the awardee taken to improve performance by sentinel clinical laboratories? [text box]
 5. For those LRN clinical specimens received from U.S. Territories that had adverse QA events (if applicable):
 - a. What types of adverse QA events occurred? [text box]
 - b. What steps, if any, has the awardee taken to improve performance by U.S. Territories? [text box]
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**PUBLIC HEALTH SURVEILLANCE and
EPIDEMIOLOGICAL INVESTIGATION**

Public Health Surveillance and Epidemiological Investigation Performance Measures

Introduction

The Public Health Surveillance (SURV) and Epidemiological Investigation (EI) capability represents a set of core public health activities related to the surveillance and detection of significant public health threats; conducting and documenting epidemiological investigations of infectious disease outbreaks and acute environmental exposures; and the recommendation or implementation of mitigation and public health control measures. Taken together, these activities form a key pillar for effective public health emergency response. Case reporting of reportable infectious diseases is a prerequisite for an effective public health system and is an essential component of effective public health emergency preparedness. 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. Conducting and documenting EIs 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 Definition

The Public Health SURV and EI capability is defined as follows:

The ability to create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological investigation processes, as well as to expand these systems and processes in response to incidents³ of public health significance.

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 surveillance and epidemiological investigation systems

The following table illustrates how the Public Health SURV and EI performance measures align with the defined public health preparedness capability and its associated functions.

Table 1.19. Public Health Surveillance and Epidemiological Investigation Functions and the Associated Performance Measures

Capability	Function	Performance Measure(s)
Public Health SURV and EI	Conduct Public Health Surveillance and Detection	SURV – Disease Reporting
	Conduct Public Health and Epidemiological Investigation	EI – Outbreak Investigation Reports EI – Exposure Investigation Reports EI – Outbreak Investigation Reports with Minimal Elements EI – Exposure Investigation Reports with Minimal Elements
	Recommend, Monitor, and Analyze Mitigation Actions	SURV – Disease Control
	Improve Public Health Surveillance and Epidemiological Investigation Systems	None

³ The term “incident” is used throughout this document. It is defined in the National Incident Management System Incident Command Structure as “an occurrence either human caused or by natural phenomena, that requires action to prevent or minimize loss of life or damage to property and/or natural resources.”

Reporting Requirements

All state PHEP awardees, Washington, D.C., and New York City are required to report data for the SURV performance measures. All awardees are required to report data for all EI performance measures.

Local Health Department Data – County Sampling

For most awardees, the Public Health SURV and EI performance measures require data collection from a pre-selected sample of counties within each awardee's jurisdiction. **Specifically, performance measure data should be collected related to cases of select diseases (for SURV measures) and outbreaks/exposures (for EI measures) occurring in the pre-selected sample of counties.** Local health departments (LHDs) that take the case reports or do the investigations in those counties should report performance measure data to the awardee. The actual sample of counties for each state is provided separately from this performance measures guidance. The purpose of the sampling strategy is to ensure that awardees do **not** have to report performance measure data to CDC from all counties/LHDs.

Although data from all counties/LHDs is not required, awardees are **strongly encouraged** to collect these data from all counties/LHDs for their own program improvement purposes – that is, to document areas for improvement and track progress related to system and organizational improvements over time. It is anticipated that the sample selected to report Public Health SURV and EI performance measures data for BP11 will remain the same in subsequent years. Awardees that do not have LHDs should report data at the awardee-level only, as applicable. The sampling strategy and related information are detailed in Appendix B.

Definition of Key Terms Related to the Public Health SURV and EI

Below is a list of terms and definitions that appear throughout the Public Health SURV and EI performance measures. Please use the provided definitions when interpreting the guidelines for data collection and reporting on these performance measures. Some terms below refer to a specific performance measure. The performance measure will be indicated in parentheses next to the term itself.

Acute environmental exposure (all EI measures): Discrete, sudden, and/or generally unexpected exposure to a **non-infectious** agent that could potentially cause adverse symptoms, conditions, illness, or disease in a human population within either an immediate or relatively short timeframe. Please see the Special Notes section below and Table 1.20 for further guidance on the types of exposures that these performance measures are designed to capture.

Appropriate timeframe (SURV – Disease Control): A timeframe 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 (described in the SURV – Disease Control performance measure above) have been standardized for the purpose of this performance measure. Please see the Special Notes section below and Table 1.21 for examples of control measures and the initiation timeframe for each of the six selected diseases included in the surveillance performance measures.

Awardee-required timeframe (SURV – Disease Reporting): State-mandated timeframe either by law or regulation for healthcare providers and, in some states, laboratories, to report cases (or positive test results) of specific reportable diseases.

Case (SURV – both measures): 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 (SURV – Disease Reporting): Case events mark the occurrence of specific clinical or laboratory activities or milestones that, in the context of the SURV – 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 the SURV – Disease Reporting performance measure 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 the first positive laboratory test result is either **posted** or **communicated** to an appropriate clinical or organizational entity (i.e., a provider, not the public health agency). The laboratory report date can refer to communication of **preliminary** (if applicable or necessary) or confirmed lab results.
- Date of laboratory result: Date that a laboratory test, assay or other procedure is **first** determined to be either positive for the existence of an organism or otherwise significantly indicative of a disease state relevant to this performance measure.
- 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 (SURV – Disease Reporting): 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.

Incident of public health significance (EI – both acute environmental exposure measures): A discrete, sudden, and/or generally unexpected real event marked by human exposure to a toxic, poisonous, or otherwise harmful **noninfectious** agent for which (a) acute and immediate adverse symptoms, conditions, illness, or disease can feasibly be expected, and (b) additional exposure beyond the initial exposure case can feasibly be anticipated.

Infectious disease outbreak (EI – both outbreak measures): 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 the EI – Outbreak Investigation Reports and EI – Outbreak Investigation Reports with Minimal Elements performance measures for more information regarding reported/nonreported outbreaks and food-borne outbreaks.

Initiation of a control measure (SURV – disease control): 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 B.

Investigation (all EI measures): 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 in the context of the outbreak and acute environmental exposure EI performance measures. The term does **not** refer to an environmental health assessment or regulatory-related investigation. There is **no** expectation by CDC that *all* outbreaks or documented exposures shall lead to epidemiological investigations.

Investigation report (all EI measures): 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” (see below). 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 (all EI measures): Any investigation 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 a LHD).

Minimal elements (EI – outbreak reports with minimal elements and exposure reports with minimal elements): A core set of elements that are necessary for an investigation report to be considered complete. Generally, all subbullets relevant to an infectious disease outbreak or acute environmental exposure investigation, below, must be part of a report for it to be considered complete. **Sub-bullets 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. Please see the Additional Guidance sections of the EI – Outbreak Reports with Minimal Elements and EI – Exposure Reports with Minimal Elements performance measures for further information.

- **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.

Reporting of selected disease (SURV – disease reporting): 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. Please note, by definition, awardees should **not** count cases of disease reported to the awardee (e.g., state health department) from a LHD.

Supporting role (in an investigation) (all EI measures): Technical assistance or consultation provided by the awardee health department to a 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 awardee 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 (all EI measures)

Table 1.20. SURV – Disease Reporting

SURV – Disease Reporting	Proportion of reports of selected reportable diseases received by a public health agency within the <u>awardee-required timeframe</u>	
Annual		
Measurement Specifications	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
Intent	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 awardee and LHD 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.	
Reporting Criteria	Reporting for this performance measure is required for the 50 awardee states, New York City and District of Columbia.	
	This performance measure requires self-reported data.	
	This performance measure requires data collection from a sample of counties in the awardee’s jurisdiction. LHDs that receive reports of select cases of disease in these counties should report all necessary data for this measure to the awardee.	
	Awardees are required to report data on case reports with CDC notification dates between MMWR Week 33, 2011 and Week 31, 2012 (August 14, 2011, and August 4, 2012).	
	Awardees are required to provide data on the following diseases according to the specified case classification criteria noted in parentheses: ⁴	
	<ul style="list-style-type: none"> ▪ Diseases associated with the following Category A agents: <ul style="list-style-type: none"> ○ Botulism (<i>Clostridium botulinum</i>), all types excluding infant botulism⁵ (confirmed) 	

⁴ Source: http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/NNDSS_event_code_list_February_2011_07_FINAL.pdf. Awardees must use the CDC/Council or State and Territorial Epidemiologists (CSTE) case definitions for these diseases. In addition: Reporting data for this performance measure is **separate from, and requires no change to**, notifiable disease reporting to CDC’s Nationally Notifiable Disease Surveillance System (NNDSS).

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- Tularemia (*Francisella tularensis*) (confirmed and probable)
 - *E. coli*, STEC⁶ (all reports)
 - Hepatitis A, acute (confirmed)
 - Measles (confirmed and unknown)
 - Meningococcal disease (*Neisseria meningitides*)⁷ (confirmed)

Awardees should calculate the numerator and denominator for this performance measure at the public health system level (i.e., to include reports first received by the awardee health department *and* reports first received by LHDs in pre-selected sample of counties). In other words, awardees should aggregate all reports first received by the awardee health department *and* by LHDs receiving case reports in the pre-selected sample of counties – excluding duplicate cases.

Reports occurring in counties not included in the sample should be excluded from the numerator and denominator in reporting to CDC. Awardees should strongly consider collecting performance measures data from all counties/LHDs for program and surveillance improvement purposes.

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.

Awardees may be asked to provide information on counties, or LHDs reporting data for this performance measure, to verify sample.

Reported Data Elements

The following information should be collected in support of the performance measure:

1. Do the awardee-required reporting timeframes differ for **providers** and **laboratories** for any of the selected diseases? [Y/N] If NO, please skip to Question 4.
 2. For each of the selected diseases, please indicate the awardee-required reporting timeframe for **providers** [select one]
 - Immediately
 - 24 hours
 - 48 hours
 - 72 hours
 - 7 days
 - Other – specify [text box]
 3. For each of the selected diseases, please indicate the awardee-required reporting timeframe for laboratories [select one] – Please skip to Question 5.
 - Immediately
 - 24 hours
 - 48 hours
 - 72 hours
 - 7 days
 - Other – specify [text box]
-

⁵ Awardees should aggregate all botulism cases (except infant botulism) into one numerator and denominator for this measure (i.e., sum food-borne plus wound plus other, etc.).

⁶ Awardees that only require reporting of *E. coli* O157:H7 (not all shiga-positive *E. coli*) may report on those data instead.

⁷ Isolated from a sterile site (e.g., blood or cerebrospinal fluid).

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4. For each of the selected diseases, please indicate the awardee-required reporting timeframe [select one]
 - Immediately
 - 24 hours
 - 48 hours
 - 72 hours
 - 7 days
 - Other – specify [text box]
 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. Total number of disease reports received within the awardee-required reporting timeframe [numerator]. Please aggregate reports received by the awardee health department **and** by LHDs receiving reports in counties in the pre-selected sample; do **not** include reports from counties that were not included in the sample.
 - By disease
 7. Total number of disease reports received [denominator]. Please aggregate reports received by the awardee health department **and** by LHDs receiving reports in counties in the pre-selected sample; do **not** include reports from counties that were not included in the sample.
 - By disease
 8. Does the awardee health department have in place processes, procedures, etc., for periodic (e.g., annual) review of data related to timeliness of disease reporting for the purposes of program improvement? [Y/N] – If NO, skip to Question 11.
 9. Please describe processes, procedures, etc., the awardee health department has in place for periodic (e.g., annual) review of data related to timeliness of disease reporting for the purposes of program improvement. [text box]
 10. Total number of LHDs reporting data for this performance measure.
 11. Total number of LHDs (from the reporting sample) that has a process, procedure, etc., in place for periodic (e.g., annual) review of data related to timeliness of reporting for the purposes of program improvement.
 12. Please describe the key barriers to timely reporting of the select diseases for this performance measure by hospitals, providers and labs. [text box]
-

**Additional
Guidance**

Definitions and Discussions for SURV performance measures: below are terms and phrases that were first defined in the Key Definitions section above.

Case: [in Key Definitions]

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.

Note: 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 above 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: It is understood that in many jurisdictions (awardee and local), there may be few or no cases of certain diseases. Although there may be challenges in instituting program improvement processes on the basis of extremely low incidence diseases, the diseases selected for this performance measure are of significance nationally and require surveillance systems and processes for timely reporting irrespective of incidence rates. It should also be noted that reporting low or zero incidence of disease by awardees is not, in and of itself, a reflection of poor performance and will not be interpreted as such by CDC.

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.

Sample of LHDs: [see Reporting Requirements]

Simultaneous reporting to state and LHDs: In some instances, disease reports may be submitted to, or populate, local and state health department surveillance systems simultaneously. This should not impact total counts for this performance measure if duplicate cases are not included.

Table 1.21. SURV – Disease Control

SURV – Disease Control	Proportion of reports of selected reportable diseases for which initial public health control measure(s) were initiated within the appropriate timeframe
Annual	
Measurement Specifications	<p>Numerator: Number of reports of selected reportable diseases for which public health control measure(s) were initiated within an appropriate timeframe</p> <p>Denominator: Number of reports of selected reportable diseases received by a public health agency</p>
Intent	<p>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.</p> <p>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.</p> <p>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.</p>
Reporting Criteria	<p>Reporting for this performance measure is required for the 50 states, New York City, and Washington, D.C..</p> <p>This performance measure requires self-reported data.</p> <p>Awardees are required to report data on case reports with CDC notification dates between MMWR Week 33, 2011 and Week 31, 2012 (August 14, 2011, and August 4, 2012).</p> <p>Awardees are required to provide data on the following diseases according to the specified case classification criteria noted in parentheses^{8 9}:</p> <ul style="list-style-type: none"> ▪ Diseases associated with the following CDC Category A agents: <ul style="list-style-type: none"> ○ Botulism (<i>C. botulinum</i>), all types excluding infant botulism¹⁰ (confirmed) ○ Tularemia (<i>F. tularensis</i>) (confirmed and probable) ▪ <i>E. coli</i>, STEC¹¹ (all reports) ▪ Hepatitis A, acute (confirmed) <ul style="list-style-type: none"> ○ Measles (confirmed and unknown) ○ Meningococcal disease (<i>N. meningitides</i>)¹² (confirmed) <p>Awardees should calculate the numerator and denominator for this performance</p>

⁸ Awardees must use CDC/CSTE case definitions for these diseases.

⁹ Please note: Reporting data for this performance measure is **separate from, and requires no change to**, notifiable disease reporting to CDC’s Nationally Notifiable Disease Surveillance System (NNDSS).

¹⁰ Awardees should aggregate all botulism cases (except infant botulism) into one numerator and denominator for this measure (i.e., sum food-borne plus wound plus other, etc.).

¹¹ Awardees that only require reporting of *E. coli* O157:H7 (not all *E. coli* STEC) may report on those data instead.

¹² Isolated from a sterile site (e.g., blood or cerebrospinal fluid).

measure:

- By disease

Awardees 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.

Awardees may be asked to provide information on LHDs reporting data for this measure (including name of department, county or population served, etc.)

Reported Data Elements

The following information should be collected in support of the performance measure:

1. Total number of reports for which a control measure was initiated within the appropriate timeframe [numerator]
 - By disease
 - By awardee health department
 - By reporting LHDs (aggregated)
 2. Total number of disease reports received [denominator]. Please aggregate reports received by awardee health department **and** by LHDs receiving reports in counties in the pre-selected sample; do **not** include reports from counties that were not included in the sample.
 - By disease
 3. Does the awardee health department have in place processes, procedures, etc., for periodic (e.g., annual) review of data related to timely initiation of public health control measures for the purposes of program improvement? [Y/N] – If NO, skip to Question 5.
 4. Please describe processes, procedures, etc., the awardee health department has in place for periodic (e.g., annual) review of data related to timely initiation of public health control measures for the purposes of program improvement. [text box]
 5. Total number of LHDs reporting data for this performance measure.
 6. Total number of reporting LHDs that has a process, procedure, etc., in place for periodic (e.g., annual) review of data related to timely initiation of public health control measures for the purposes of program improvement.
 7. Please describe the key barriers faced by health departments in the timely control or mitigation of the select diseases for this performance measure. [text box]
-

Additional Guidance

Assessing control measure timeliness: For a given case to count toward the numerator for the SURV – Disease Control performance measure, awardees will need to compare case data with the Public Health Control Measures Table (see Appendix B) 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 (i.e., either probable or confirmed depending on what is appropriate in practice for that disease) was received by a public health agency as the start time for this performance measure. Note that this time should be the same as the stop time used to calculate timeliness for the SURV - Disease Reporting performance measures. 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.

Case: [See Key Definitions]

Category A agents: [see Additional Guidance for SURV – Disease Reporting (Table 3)]

First report to a public health agency: [see Additional Guidance for SURV – Disease Reporting (Table 3)]

Public health control measures and initiation: This performance measure focuses on the timely **initiation** of any one of a variety 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 are given some latitude to determine which documented actions will count as an appropriate control measure, although in general the examples provided in the table of control measures (Appendix B) are meant to highlight the actions for each disease for which timeliness should be measured. 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, with input from LHDs, an operational definition of initiation. Examples may include date of patient contact or date of interview, etc., as long as these explicitly entail implementation or recommendation of control measures in addition to routine fact-finding.

Sample of LHDs: [See Reporting Requirements]

Special Note regarding the performance measures SURV – disease control:

Table 1.22 outlines illustrative inclusion and exclusion criteria for determining which environmental exposures to include for the epidemiological investigation performance measures. **Meeting any one criterion is sufficient for inclusion/exclusion.** For incidents that are judged to meet both inclusion and exclusion criteria, inclusion will be at the discretion of the awardee.

To determine whether a public health control measure was initiated within an appropriate timeframe for any given case of the selected diseases (i.e., whether it should be included in the numerator of the SURV - Disease Control performance measure), awardees will need to compare case data with the table below.

Table 1.22. Examples of Public Health Control Measures for the selected six diseases

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
<i>E. coli</i> (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	a) Identification of potentially exposed individuals b) identification of source of infection, as applicable	a) Within 48 hours b) within 48 hours of initial case identification

Table 1.23. EI – Outbreak Investigation Reports

EI – Outbreak Investigation Reports	Percentage of infectious disease outbreak investigations that generate reports
Annual	
Measurement Specifications	<p>Numerator: Number of infectious disease outbreak investigation reports generated</p> <p>Denominator: Number of infectious disease outbreaks investigated</p>
Intent	<p>The immediate intent of this measure is to capture the ability of awardees and LHDs to document EIs of infectious disease outbreaks.</p> <p>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.</p>
Reporting Criteria	<p>Reporting for this performance measure is REQUIRED for all awardees.</p> <p>This performance measure requires self-reported data.</p> <p>Awardees are required to report summary data generated from real infectious disease outbreak investigations and investigation reports only (i.e., not drills or exercises).</p> <p>Draft reports are acceptable for inclusion in the numerator for this measure under select circumstances, including:</p> <ul style="list-style-type: none"> ▪ 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. <p>Awardees should calculate a numerator and denominator for this performance measure:</p> <ul style="list-style-type: none"> ▪ At the awardee level and ▪ For LHDs reporting on outbreaks in the pre-selected sample of counties. Please see the Additional Guidance section for further instructions. <p>Awardees may be asked to provide information on counties or LHDs reporting data for this measure.</p>
Reported Data Elements	<p>The following information should be collected in support of the performance measure:</p> <p>Questions 1 through 7 refer to awardee-level investigation activities only (i.e., no data from LHDs reporting on outbreaks in the pre-selected sample of counties should be included in these responses).</p> <ol style="list-style-type: none"> 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 investigation (irrespective of whether LHD is in reporting sample)
 - 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 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 a LHD; this may include supporting CDC or another state)
4. 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 extent feasible, how this impacted awardee’s ability to investigate outbreaks. (e.g., numbers or types of outbreaks not investigated, etc.) [text box]
 - 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. [text box]
 - Other – specify [text box]
5. Does the awardee health department have in place processes, procedures, etc., for review of its EIs of infectious disease outbreaks for the purposes of program improvement? [Y/N]
6. What type(s) of processes, procedures, etc., does the awardee health department have in place for review of its EIs of infectious disease outbreaks for the purposes of program improvement? [Check all that apply]
- Periodic or annual reviews
 - Episodic reviews or hotwashes
 - After-action reports
 - No procedure in place
 - Other – specify [text box]

**The following questions (7-12) refer to the LHDs reporting data from the pre-selected sample of counties. Specifically, these questions concern outbreak investigations led by health departments within this sample, without any support from the awardee or federal agencies.

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7. The total number of infectious disease outbreaks occurring within the sample of pre-selected counties.
 8. The total number of infectious disease outbreak investigations **led by LHDs reporting on outbreaks in the pre-selected sample of counties** [denominator for local metric]
 9. The total number of infectious disease outbreak investigations for which a report was generated (LHD must have **led** the investigation) [numerator for local metric]
 10. What were the key factors that accounted for **not** investigating infectious disease outbreaks among the sample of LHDs reporting data for this performance measure? [Check 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. [text box]
 - Other – Specify [text box]
 11. Total number of LHDs reporting data for this measure.
 12. Please identify the total number of LHDs (from the reporting sample) that has a process, procedure, etc., in place for review of EIs 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, etc.

Additional Guidance

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. In addition, the EI performance measures refer to outbreaks of (usually) reportable diseases **as defined and operationalized by the health department**; the EI performance measures are **not** limited to the six selected diseases identified for the SURV performance measures.

Investigation: For the purpose of these performance measures, initial investigative activity of a more preliminary or exploratory character 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 **do** 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.

Sample of LHDs: [See Reporting Requirements]

Table 1.24. EI – Outbreak Reports with Minimal Elements

EI – Outbreak Reports with Minimal Elements	Percentage of infectious disease outbreak investigation reports that contain all minimal elements
Annual	
Measurement Specifications	Numerator: Number of infectious disease outbreak investigation reports containing all minimal elements Denominator: Number of infectious disease outbreak reports generated
Intent	<p>The immediate intent of this measure is to capture the ability of awardees and LHDs to document EIs of infectious disease outbreaks with complete reports (i.e., reports that contain a set of minimal elements).</p> <p>The broader programmatic aim of this measure is to improve the quality of EIs 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.</p>
Reporting Criteria	<p>Reporting for this performance measure is REQUIRED for all awardees. This performance measure requires self-reported data.</p> <p>Awardees are required to report summary data generated from real infectious disease outbreak investigations and investigation reports only (i.e., not drills or exercises).</p> <p>Draft investigation reports are acceptable for inclusion in the numerator for this measure under select circumstances, including:</p> <ul style="list-style-type: none"> ▪ 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 <p>Awardees should calculate the numerator and denominator for this performance measure:</p> <ul style="list-style-type: none"> ▪ At the awardee level and ▪ By reporting LHDs (aggregated) <p>Awardees may be asked to provide information on counties or LHDs reporting data for this measure.</p>
Reported Data Elements	<p>The following information should be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. The total number of infectious disease outbreak investigations for which a report was generated <ol style="list-style-type: none"> a. in which the awardee led the investigation [denominator for awardee metric] b. in which the awardee supported any LHD investigation and contributed to writing the investigation report (irrespective of whether LHD is in

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- reporting sample)
- c. in which the awardee supported **any other type** of joint investigation and contributed to writing the investigation report (i.e., not supporting a LHD; this may include CDC or another state)
2. Total number of infectious disease outbreak reports containing **all** minimal elements
 - a. in which the awardee **led** the investigation [numerator for awardee metric]
 - b. in which the awardee **supported** any LHD investigation and contributed to writing the investigation report (irrespective of whether the LHD is in reporting sample)
 - c. in which the awardee supported **any other type** of joint investigation and contributed to writing the investigation report (i.e., not supporting a 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 [Check all that apply]
 - Context/background
 - Initiation of investigation
 - Investigation methods
 - Investigation findings/results
 - Discussion and/or conclusions
 - Recommendations
 - Key investigators and/or report authors
 - 3a. Briefly explain why this element(s) was most frequently missing.
[text box]

The following questions refer to the group of LHDs reporting data for this performance measure. Specifically, these questions concern outbreak investigations, led by an LHD, in counties from the pre-selected sample, **without** any support from the awardee or federal agencies.

4. The total number of infectious disease outbreak investigations for which a **report was generated** (LHD 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. [Check all that apply]
 - Context/background
 - Initiation of investigation
 - Investigation methods
 - Investigation findings/results
 - Discussion and/or conclusions
 - Recommendations
 - Key investigators and/or report authors
 - 6a. Briefly explain why this element(s) was most frequently missing.
[text box]
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**Additional
Guidance**

Infectious disease outbreak reporting: [See Additional Guidance in Table 5. EI – Outbreak Investigation Reports] **Please note**: HIV, STDs, and tuberculosis are **not** included in this definition. In addition, the EI performance measures refer to outbreaks of (usually) reportable diseases **as defined and operationalized by the health department**; the EI performance measures are **not** limited to the six selected diseases identified for the SURV performance measures.

Minimal Elements: [See Key Definitions 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.

Sample of LHDs: [See Reporting Requirements]

Table 1.25. EI – Exposure Investigation Reports

EI – Exposure Investigation Reports	Percentage of EIs of acute environmental exposures that generate reports
Annual	
Measurement Specifications	Numerator: Number of EI reports of acute environmental exposures generated Denominator: Number of EIs of acute environmental exposures
Intent	<p>The immediate intent of this measure is to capture awardees’ ability to document epidemiological investigations of the human health impacts of acute environmental exposures of public health significance. For awardee health departments that do not conduct these investigations, the intent is to ensure the awardee is aware of these exposures, investigations, and investigation reports to be able to act upon, learn from, or refer to them as appropriate.</p> <p>The broader programmatic aim of this measure is to improve the ability of health departments to conduct epidemiological investigations of acute environmental exposures by appropriately documenting and reporting on investigation activities and findings.</p>
Reporting Criteria	<p>Reporting for this performance measure is REQUIRED for all awardees. This performance measure requires self-reported data.</p> <p>Awardees are required to report summary data generated from real EIs of acute environmental exposure and investigation reports only (i.e., not drills or exercises).</p> <p>Draft investigation reports are acceptable for inclusion in the numerator for this measure under select circumstances, including:</p> <ul style="list-style-type: none"> ▪ 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 <p>Awardees should calculate the numerator and denominator for this performance measure at the awardee level only. Submission of LHD data is not required for this performance measure.</p> <p>Awardees that do not conduct EIs of acute environmental exposures of public health significance are expected to have access to information from other jurisdictional partners pertaining to these investigations and the reports generated from them for the purpose of reporting for this performance measure.</p> <p>Awardees that do not conduct EIs of acute environmental exposures of public health significance are not required to provide information for Reported Data Elements #6 or #7.</p>
Reported Data Elements	<p>The following information should be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Is the awardee health department responsible for conducting EIs of acute

environmental exposure incidents of public health significance, in either a lead or a supporting role?

[Y / N] – If YES, proceed to #2. If NO, please answer Questions 1a. through 1e. in reference to your jurisdiction before continuing to #2.

- a. Which agency (or agencies) outside the health department is responsible for conducting epidemiological investigations of acute environmental exposures? [text box]
 - b. Is the awardee health department typically notified of epidemiological investigations of acute environmental exposures conducted by that agency? [Y / N]
 - c. Does the awardee health department typically receive investigation reports documenting epidemiological investigations of acute environmental exposures conducted by that agency? [Y / N]
 - d. What barriers, if any, does the awardee health department face in being notified of acute environmental exposure incidents of public health significance, epidemiological investigations of these exposures, and/or receiving investigation reports from that agency? [text box]
 - e. What steps, if any, has the awardee health department taken to address these barriers? [text box]
2. Total number of acute environmental exposure incidents of public health significance that occurred in the awardees' jurisdiction.
 3. Total number of EIs of acute environmental exposures in which
 - a. the awardee **led** the investigation – solely or as part of a joint investigation [denominator]
 - b. the awardee **supported** another agency's investigation [Proceed to #4, below]
 - c. **Another agency** conducted the EI(s) of an acute environmental exposures, but reported the investigation to the awardee (for awardees with **no role** in these investigations)
 4. If the awardee assumes a supporting role in the epidemiological investigation of acute environmental exposure(s), please identify the types of organizations that the awardee health department supports. [Check all that apply]
 - LHD
 - State environmental health agency
 - State occupational safety and health agency
 - State department of natural resources
 - State law enforcement agency
 - Hazardous materials agency
 - Other – specify [text box]
 5. Total number of investigations for which **a report was generated** in which
 - a. the **awardee led** the investigation – solely or as part of a joint investigation (numerator)
 - b. the **awardee supported** another agency's investigation and contributed to writing the investigation report
 - c. **another agency** conducted the epidemiological investigation(s) of an acute environmental exposures, but reported the investigation to the awardee (for awardees with **no role** in these investigations)
 6. (**Note:** applies only to awardees with a lead or supporting epidemiological
-

investigation role for acute environmental exposures) Rank the key factors that account for the awardee health department **not** conducting epidemiological investigations of acute environmental exposures (this question refers exclusively to acute environmental exposures for which it is the general policy and/or usual practice of the awardee to investigate). [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)
 - Major or unexpected shifts in priorities due to emergent events, changes in mission or organization, etc.
 - Other – specify [text box]
7. What type(s) of processes, procedures, etc., does the awardee health department have in place for review of its epidemiological investigations of acute environmental exposures for the purposes of program improvement? [check all that apply]
- Periodic or annual reviews
 - Episodic reviews or hotwashes
 - After-action reports
 - No procedure in place
 - Other – specify [text box]

**Additional
Guidance**

Food-borne outbreaks: Food-borne outbreaks should **not** be reported in this performance measure; these should be reported in the EI- Outbreak Investigation Reports performance measure.

Investigation: [See Additional Guidance in Table 1.25. Outbreak Investigation Reports]

Special Notes regarding the performance measures EI – exposure reports:

Table 1.26 outlines illustrative inclusion and exclusion criteria for determining which environmental exposures to include for the epidemiological investigation performance measures. **Meeting any one criterion is sufficient for inclusion/exclusion.** For incidents that are judged to meet both inclusion and exclusion criteria, inclusion will be at the discretion of the awardee.

Table 1.26: Inclusion and Exclusion Criteria for Acute Environmental Exposures

Inclusion criteria	Exclusion criteria
<p>Incidents that directly impact human health immediately or with a short latency period (< 1 week) in which the signs and symptoms of acute toxicity are present or anticipated. These could include respiratory (e.g., constricted airway, shortness of breath), dermatological (e.g., itching, burning, redness of the skin), gastrointestinal (e.g., nausea, vomiting), and neurologic (e.g., disorientation, seizures) effects.</p> <p>Incidents in which two or more persons are ill with signs/symptoms of acute toxicity, are exposed, or a combination of both.</p> <p>Examples could include:</p> <ul style="list-style-type: none"> ▪ Organophosphate exposures ▪ Substantial heavy metal exposure, such as children playing with mercury <p>Any poisoning that is considered nonmedicinal, unintentional, or to be of unknown etiology.</p>	<p>Exposures, including sustained or repeated low-level exposures, that result in diseases and conditions with long latencies such as:</p> <ul style="list-style-type: none"> ▪ Cancers ▪ Disorders of organ systems, or ▪ Long-term neurological, behavioral and/or developmental disabilities. (e.g., reports of abnormal blood levels of lead).
<p>Incidents necessitating contact tracing, such as for secondary exposures or for tracking the movement or spread of toxic substances away from the incident site. Examples include:</p> <ul style="list-style-type: none"> ▪ Persons exposed to pesticides in the field having residual amounts in their clothing, leading to exposure and illness to EMS and emergency department healthcare workers. ▪ A person with traces of mercury driving his vehicle back to his home resulting in the contamination of both vehicle and domicile. 	<p>Incidents related to occupational hazards involving only those in the workplace setting.² This can include incidents that occurred at a non-occupational setting (e.g. a hazardous waste spill on a public road) with either no direct impact on human health or impact only to persons directly working with the hazardous materials (e.g. workers).</p>
<p>Acute exposure incidents that lead to the activation of the public health agency’s department operations center (DOC) or the jurisdiction’s emergency operations center (EOC), the formation of a task force, or the assignment of personnel to another agency’s DOC or EOC.</p>	<p>Incidents that fall under the purview or jurisdiction of another state and/or federal agency for which the public health agency has no definable role.</p>
<p>Incidents that are suspected or proven to be intentional, malicious, or criminal.¹</p>	<p>Exposures or injuries related to light, noise or transfers of energy other than radiation.</p>
<p>Any large-scale or disaster incident in which public health agencies have a defined or prominent role in</p>	<p>Ongoing incidents with a low level of exposure. These can include issues surrounding air quality</p>

Inclusion criteria	Exclusion criteria
<p>the response. Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ▪ Conflagrations ▪ Explosions leading to the release of hazardous or toxic substances ▪ “Natural disasters” including but not limited to hurricanes, earthquakes, tornadoes, etc. 	<p>and concerns about water quality such as taste and odor problems, presence of low levels of contaminants that can be chemical (e.g. nitrates), microbiological (e.g. coliforms), or biotoxic (e.g., decaying harmful algae), etc.</p>
<p>Any incident involving an acute illness or disease state that has either the significance or interest to the public health agency to initiate an investigation. The presumed cause(s) can be either identified substances known to have adverse health effects or unknown substances yet to be identified and linked to that incident.</p>	<p>Incidents for which an investigation is deemed neither warranted nor appropriate, or for which site visits are made only to assess a setting for regulatory violations, gaps in proper procedures, or for mitigation or educational purposes.</p>
	<p>Clusters of chronic diseases or exacerbated medical conditions (e.g., cancer or asthma, respectively).</p>

¹ A notable exception includes incidents involving the transport or delivery of an alleged biological agent or toxin (white powder) which are deemed **noncredible** (hoax). If such an incident occurs and noncredibility **cannot** be established (e.g., a false-positive preliminary test), leading to the initiation of a public health response, then such incidents should be included. An example of the latter is the evacuation of the New York governor’s Manhattan offices in October 2001 due to a positive preliminary test for anthrax.

² Possible exception: incidents in an occupational setting that are large or widespread enough to affect populations outside the work setting.

Table 1.27. EI – Exposure Reports with Minimal Elements

EI – Exposure Reports with Minimal Elements	Percentage of EI Reports of acute environmental exposures that contain all Minimal Elements
Annual	
Measurement Specifications	<p>Numerator: Number of EI reports of acute environmental exposures containing all minimal elements</p> <p>Denominator: Number of EI reports of acute environmental exposures generated</p>
Intent	<p>The primary intent of this measure is to capture awardees’ ability to document epidemiological investigations of acute environmental exposures of public health significance with complete reports (i.e., reports that contain a complete set of minimal elements). For awardee health departments that do not conduct these epidemiological investigations, the intent is to ensure the awardee is aware of these acute environmental exposures, investigations and investigation reports in order to be able to act upon, learn from or refer to them as appropriate.</p> <p>The broader programmatic aim of this measure is to improve the quality of epidemiological investigation reports by ensuring that awardee health departments appropriately characterize and investigate the incident, document results and recommendations, and share these data as appropriate with decision makers.</p>
Reporting Criteria	<p>Reporting for this performance measure is REQUIRED for all awardees, EXCEPT FOR:</p> <ul style="list-style-type: none"> ▪ Awardee health departments that are not responsible for conducting EIs of the human health impact(s) of acute environmental exposures of public health significance <p>This performance measure requires self-reported data.</p> <p>Awardees are required to report summary data generated from real EIs of acute environmental exposures and investigation reports only (i.e., not drills or exercises).</p> <p>Draft investigation reports are acceptable for inclusion in the numerator for this measure under select circumstances, including:</p> <ul style="list-style-type: none"> ▪ 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 <p>Awardees should calculate the numerator and denominator for this performance measure at the awardee level only. Submission of LHD data is not required for this performance measure.</p>
Reported Data Elements	<p>The following information will be collected in support of the performance measure:</p>

-
1. Is the awardee health department responsible, in either a lead or supporting role, for conducting EIs of the human health impact(s) of acute environmental exposures of public health significance?
[Y / N] If YES, proceed to question #2. If NO, all following data elements are optional.
 2. The total number of EIs of acute environmental exposures for which **a report was generated** in which
 - a. the awardee **led** the investigation – solely or as part of a joint investigation [denominator]
 - b. the awardee **supported** another agency’s investigation
 - c. **Another agency** conducted the EI(s) of an acute environmental exposures, but reported the investigation to the awardee (for awardees with **no role** in these investigations) [optional reporting]
 3. Total number of EI reports of acute environmental exposures containing **all minimal elements** in which
 - a. the awardee **led** the investigation [numerator]
 - b. the awardee **supported** another agency’s investigation and contributed to writing the investigation report
 - c. **Another agency** conducted the EI(s) of an acute environmental exposures, but reported the investigation to the awardee (for awardees with **no role** in these investigations) [optional reporting]
 4. For the reports identified above that do **not** contain all of the minimal elements, please identify the minimal elements that were most frequently missing. [check all that apply]
 - Context/background
 - Initiation of investigation
 - Investigation methods
 - Investigation findings/results
 - Discussion and/or conclusions
 - Recommendations
 - Key investigators and/or report authors

4a. Briefly explain why this element(s) was most frequently missing.
[text box]

**Additional
Guidance**

Food-borne outbreaks: Food-borne outbreaks should **not** be reported in this performance measure; these should be reported in the EI- Outbreak Reports with Minimal Elements performance measure.

Minimal Elements: [See Key Definitions 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, below (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.

**DOMAIN TWO:
COMMUNITY RESILIENCE**

The Community Preparedness Capability Performance Measures

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.”¹³

The directive also identifies community resilience as one of the “four most critical components of public health and medical preparedness” (in addition to biosurveillance, countermeasure distribution, and mass casualty care). In addition to this directive, the National Health Security Strategy (NHSS), released in 2009, indicates that community resilience relies upon the ability of public health, healthcare, and emergency response systems to meet the needs of communities in preventing or mitigating the effects of an outbreak, incident, or disaster.¹⁴

Capability Definition

CDC’s National Standards document defines community preparedness as “the ability of communities to prepare for, withstand, and recover—in both the short and long terms—from public health incidents. By engaging and coordinating with emergency management, health care organizations (private and community-based), mental/behavioral health providers, community and faith-based partners, state, local, and territorial public health’s role in community preparedness is to do the following:

- Support the development of public health, medical, and mental/behavioral health systems that support recovery
- Participate in awareness training with community and faith-based partners on how to prevent, respond to, and recover from public health incidents
- Promote awareness of and access to medical and mental/behavioral health¹⁵ resources that help protect the community’s health and address the functional needs (i.e., communication, medical care, independence, supervision, transportation) of at-risk individuals
- Engage public and private organizations in preparedness activities that represent the functional needs of at-risk individuals as well as the cultural and socio-economic, demographic components of the community
- Identify those populations that may be at higher risk for adverse health outcomes
- Receive and/or integrate the health needs of populations who have been displaced due to incidents that have occurred in their own or distant communities (e.g., improvised nuclear device or hurricane) ”¹⁶

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

¹³ The White House. (October 18, 2007). *Homeland Security Presidential Directive 21* (news release). Accessible at: <http://www.whitehouse.gov/news/releases/2007/10/20071018-10.html>.

¹⁴ Office of the Assistant Secretary for Preparedness and Response (ASPR). U.S. Department of Health & Human Services. *National Health Security Strategy of the United States of America 2009*. Accessible at: <http://www.phe.gov/Preparedness/planning/authority/nhss/Pages/default.aspx>.

¹⁵ Within the *National Standards* document, the term “Mental/Behavioral Health” is used as an overarching term to encompass behavioral, psychosocial, substance abuse and psychological health.

¹⁶ CDC (2011)

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

Reporting Requirements

Reporting on the community preparedness performance measures is REQUIRED for all awardees.

The community preparedness performance measures require self-reported data.

Data collected for the community preparedness measures must fall within PHEP BP11: August 10, 2011, through August 9, 2012.

Table 2.1 below illustrates how the performance measures align with the defined community preparedness capability, its associated functions, and denotes whether the measure is for the purpose of program accountability or program improvement.

Table 2.1. Community Preparedness Functions and Associated Performance Measures

Capability	Function	Performance Measure(s)	Purpose of Performance Measures
Community Preparedness	Determine risks to the health of the jurisdiction	Engagement in determining risk	Program accountability
	Build community partnerships to support health preparedness	Identification of key organizations	Program accountability
		Engagement in recovery planning	Program accountability
	Coordinate training or guidance to ensure community engagement in preparedness efforts	Engagement in public health emergency preparedness	Program improvement

Local Health Departments – County Sampling Strategy

For most awardees, the CP performance measures require data collection from LHDs located in a pre-selected sample of counties. Awardees are provided this pre-selected sample in a separate document. LHDs serving these counties are expected to provide performance measure data to the awardee. In counties in which more than one LHD provides services, the largest LHD is expected to provide performance measure data to the awardee. In states with no LHDs, measurement occurs at the awardee level. Please see the Sampling Strategy section (Appendix B) of the guidance for more information.

Detailed Description and Purpose of the CP Performance Measures

The four CP performance measures draw upon current literature in the field.^{17,18,19,20}

¹⁷ Gurwitch, R. H., Pfefferbaum, B., Montgomery, J. M., Klomp, R. W., & Reissman, D. B. (2007). *Building community resilience for children and families*. Oklahoma City: Terrorism and Disaster Center at the University of Oklahoma Health Sciences Center.

¹⁸ Norris, F. H., Stevens, S. P. Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (Published online December 2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*. 41, 127–150.

The first measure. The identification of key organizations is the first step toward building and maintaining a robust network. Organizations that have access or provide services to the community are able to leverage their resources to help the community prepare for, respond to, and recover from a public health emergency. Vulnerable populations (e.g., the poor, disabled, immigrant communities, etc.) are often less successful in mobilizing economic resources and support despite being at greater risk for injury and death following an incident. LHDs must thus ensure that they identify key organizations that have access and provide services to these vulnerable populations. CP 1 is a program accountability measure to assess LHD identification of key organizations across all 11 community sectors. The intent of this measure is for LHDs to identify those key organizations with which they intend to work directly, or with which they may collaborate through an intermediary agency (e.g., local emergency management).

The second measure focuses on community sector representation in determining the hazards, vulnerabilities, and risks to local public health, medical, and/or mental/behavioral health systems. Identification of these hazards, vulnerabilities, and risks should serve as the foundation for developing local preparedness, response, and recovery plans. Participation in this process also helps to ensure that the key organizations acknowledge the identified hazards, vulnerabilities, and risks, which thus bolsters their commitment to preparedness and recovery efforts. **This measure does not require LHDs or their community sector partners to conduct a new jurisdictional hazards and vulnerabilities assessment (HVA)**, although this would certainly meet the measure's intent. Rather, the measure's intent involves the *use* of HVA data (regardless of who conducted the assessment). CP 2 is a program accountability measure.

The third measure assesses engagement with key organizations, as identified by LHDs in CP 1, in specific and significant public health emergency preparedness activities including development of emergency operations and response plans, jurisdictional exercises, and competency-based trainings. Key organizations increase their capacity to prepare for and mitigate the effects of a major incident through their engagement in these activities. Additionally, it helps to ensure that key organizations understand their roles and responsibilities for responding to and recovering from an incident. CP 3 is a program improvement measure to track the depth of LHD engagement in public health emergency preparedness activities with identified key organizations over time.

The fourth preparedness measure focuses on LHD engagement with these same key organizations in developing a community recovery plan related to the restoration and recovery of public health, medical, and/or mental/behavioral health systems and services. Communities must take deliberate steps to plan for recovering from a major incident to build resilience. The participation of key organizations in developing and/or reviewing a community recovery plan builds a better understanding of roles and responsibilities and steps to take toward rebuilding the community following a public health emergency. Key organizations can also make sure that the plan accounts for the needs of vulnerable populations. CP 4 is a program accountability measure.

Definition of Key Terms Related to CP Capability

Following is a list of terms and definitions that appear throughout the community preparedness performance measures. These terms, when they appear in the performance measure tables, are underlined. Please apply the following definitions when interpreting the guidelines for data collection and reporting on the community preparedness performance measures.

¹⁹ Pfefferbaum, R. L., Reissman, D. B., Pfefferbaum, B., Wyche, K. F., Norris, F. H., & Klomp, R. W. (2008). Factors in the development of community resilience to disasters. In M. Blumenfield & R. J. Ursano (Eds.) *Intervention and resilience after mass trauma*. (chap. 2, pp. 49–68). New York: Cambridge University Press.

²⁰ Schoch-Spana, M., Franco, C., Nuzzo, J. B., & Usenza, C. on behalf of the Working Group on Community Engagement in Health Emergency Preparedness (2007). Community engagement: Leadership toll for catastrophic events. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 5(1): 8-25.

Community sectors:²¹ For the purposes of these performance measures, this refers to segments of a community within which different types of organizations operate. These organizations reach and/or provide a variety of critical services to members of the public, including vulnerable populations (e.g., the elderly; pregnant women; children and infants; individuals with chronic diseases and/or other acute medical conditions; individuals with a reduced ability to hear, speak, understand, remember; individuals who are disabled mentally and/or physically).

The 11 sectors of interest, as specified in the National Standards²² are listed below. Suggested “leaders” for LHDs to engage are additionally identified. Please note that the definitions and examples within each sector are not all-inclusive. Additionally, key organization membership in one category does not preclude membership in another (i.e. they are not mutually exclusive).

1. Businesses: For-profit organizations that engage in commerce. Examples include businesses that are actively involved in and are committed to improving their communities, as well as businesses with a significant presence or footprint in the community (e.g., large employers, key suppliers of goods, etc.). This sector also includes utility services such as electricity, water, and sanitation if they are for-profit organizations. Leaders engaged from this sector should be influential within their own organizations and communities.
2. Community leadership: Leaders in policy-making and decision-making, including elected officials (e.g., mayor, members of city councils, members of school boards), leaders of non-governmental organizations (e.g., American Red Cross, United Way, Salvation Army), and other community organizations (e.g., U.S. National Council on Disability, Lion’s Club, Rotary Club, Kiwanis Club, and the Junior League). This sector also includes leaders or representatives of tribal groups.
3. Cultural and faith-based groups and organizations: Organizations that represent the various religious and cultural traditions of a community. Leaders of such cultural and faith-based groups and organizations may be directors of cultural centers, elected officials of cultural and faith-based groups (e.g., president of a congregation), and leaders of interfaith councils or similar entities (e.g., National Interfaith Alliance).
4. Education and childcare settings: Public and private educational organizations including universities and colleges, school systems, individual schools, institutions serving children with special needs, Head Start programs, and private childcare facilities for young children. Leaders from these organizations make decisions and set policy, such as university and college officials, school superintendents, principals, facility directors, and parent advocates.
5. 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

²¹ Definitions of community sectors, including many of the examples, are adapted from Gurwitch et al. (2007)

²² CDC (2011)

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.

6. Health care: Organizations including private facilities, public hospitals and outpatient clinics, university/academic medical schools and programs, healthcare coalitions, Department of Veterans' Affairs (VA) hospitals and clinics, Indian Health Services facilities, community health centers, non-profit healthcare providers, and private practice settings. Leaders from this sector may include health care professionals, especially those experienced in trauma or disaster relief work; physicians, nurses, pharmacists, and senior-level health care administrators who have taken an active or leadership role in other health/public health campaigns; health care professionals who hold leadership positions in their professional society (e.g. state and/or local chapters of the American Academy of Pediatrics, the American College of Physicians, and other professional societies); and health care administrators who promote the work of building community resilience.
7. Housing and sheltering: Organizations that offer and/or provide references or referrals for temporary residence to individuals who are without permanent housing (e.g., state-level housing/shelter departments, homeless shelters, nonprofit housing providers, tribal housing authorities, American Red Cross, etc.). This sector may also include residential facilities for the elderly (e.g., nursing homes and assisted living centers), special needs individuals, and other vulnerable populations (e.g., domestic violence shelters, recovery or "halfway" homes for substance abusers, etc.). Leaders in this sector may include senior-level administrators, executive directors, and other directors and managers.
8. Media: Organizations representing information channels and outlets such as print, radio, television, and the Internet. This sector also includes local means of communication (e.g., local and tribal newsletters and related publications, social networking sites, and listservs). Leadership of these organization include representatives with whom the community is familiar and to whom residents turn for important and accurate information.
9. 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, 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.
10. Social services: Organizations providing a range of services to vulnerable populations. Services may include, but not be limited to, medication assistance, assistance with accessing medical care and technology, transportation to needed services, nutrition/food assistance, and case management services. This sector also includes child welfare organizations and non-residential agencies, such as referral agencies and entities that serve individuals with developmental disabilities. Examples of these types of agencies include local nonprofit and faith-based social service providers (e.g. Meals on Wheels, Catholic Charities, The Salvation Army), state or local level departments of social services, VA, State Councils on Developmental Disabilities, and other related governmental and nongovernmental organizations that serve vulnerable populations. Leaders in this sector may include senior-level administrators, center officers in charge, executive directors, and other directors and managers.
11. Senior services: This sector may include nongovernmental service providers such as nursing homes, assisted living facilities, adult daycare programs targeting primarily seniors, offices of the AARP, and other nongovernmental organizations that have a focus on serving the aging. Additional governmental organizations may include entities such as any state government level office or department (e.g., State Office of Aging or its equivalent) as well as local area agencies

on aging that administer various titles under the Federal Older Americans Act of 1965 and its amendments. Such offices may also administer a variety of state-funded programs, which serve the aging, particularly those with the greatest economic or social need, such as low-income minority elderly. Leaders in this sector may include senior-level administrators, executive directors and other directors and managers.

Hazard and vulnerabilities assessment (HVA): An appraisal of hazards, vulnerabilities, and risks. For additional information regarding HVA, refer to the National Standards document, or for an example, refer to the UCLA Center for Public Health and Disaster Hazard Risk Assessment Instrument²³

Incident: Any natural or manmade occurrence that negatively affects or can potentially negatively affect public health. The incident does *not* need to be a declared emergency.

Key organization: An entity, group, agency, club, business, or professional association, as well as an individual service provider that the LHD deems critical in terms of one or more of the following criteria.

- The entity is expected to provide health and human services (e.g., food, shelter/housing, social services, mental/behavioral) 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).
- The entity is or would be an essential primary partner in a jurisdictional disaster or public health emergency response in terms of resource sharing, provision of goods or services, surge capacity, representation in the Incident Management Structure (e.g., the emergency operations center) or other type of formal integration into a LHD's response to a public health emergency.

Key organizations are often characterized as:

- Having a significant footprint or service area in a community (e.g., hospitals, TV/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 distributors (businesses); low-income or publicly funded housing organizations; shelters]
- Serving hard-to-reach, vulnerable, or at-risk populations (e.g., multi-service community-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)
- Providers of narrow or unique, but critical, services to the community (e.g., media outlets, hospitals)

It is the specific intent of the CP performance measures that LHDs identify only those key organizations that they plan to engage in a significant public health emergency preparedness, response, or recovery context including, but not limited to, review of hazards, vulnerability, and risk data or other preparedness activities. It is not the intent of these measures to have LHDs identify (and subsequently engage with) all community organizations within their respective jurisdictions. Aspects to consider when collaborating with key organizations include the following:

²³ University of California, Los Angeles Center for Public Health and Disaster: *Hazard Risk Assessment Instrument Workbook*. Accessible at: <http://www.cphd.ucla.edu/hrai.html>.

- Key organizations do not need to be physically located in the LHD's area, but must be willing and able to engage in planning for and providing services to that area in the event of a public health emergency.
- Total numbers of key organizations are less important than the quality of organizations; a large key organization that is a leader within its sector or the community may suffice to represent that entire sector, whereas in other communities there may be several organizations, even dozens or more in large cities and in counties, deemed by the LHD to be key and an appropriate target for engagement in a public health emergency preparedness or response activity
- Key organizations may represent more than one sector. For example, the local chapter of the American Red Cross may represent both the housing and sheltering and social services sectors.
- Representatives of the key organizations should be leaders and hold influence within their own organizations and within the sectors that they represent. They should also be in a position to commit their organization and/or its resources to community preparedness and recovery efforts.

In local jurisdictions in which the emergency management agency is the primary liaison with community organizations and sectors, LHDs are encouraged to partner with emergency management to meet the intent of all four community preparedness performance measures.

Median: A statistical term used to identify a number that, in a sample of numbers arranged from highest value to lowest (or lowest to highest), divides the higher half of that array of numbers from the lower half (i.e. the midpoint). If there is an odd number of items in the sample, the middle number is the median. If there is an even number of items, the median is the mean or average of the two middle numbers. The following examples illustrate how to calculate the median for odd and even numbers of sampled health departments.

n = the number of sampled LHDs

- If the number of sampled LHDs is **odd**, the median value would be the **(n+1)/2** number in the dataset.

For example, seven LHDs (n=7) each report the total number of community sectors they engaged during the BP. After sorting the set, the numbers would be listed as:

2 6 8 **9** 9 10 11

- Using the above formula, the median would be the middle value, that is:
[(7+1)/2 = 4th value]
- The 4th value is 9; therefore, the median = 9 community sectors engaged.

- If the number of sampled LHDs is **even**, the median value would be the **mean (i.e., average) of the two values at n/2 and [(n/2) + 1]**.

For example, 12 LHDs (n=12) each report the total number of community sectors they engaged during the BP. After sorting the set is, the numbers would be listed as:

3 5 5 6 7 7 8 9 9 10 11 11

- Using the above formula for even, the median would be the mean of the 6th and 7th values
[¹²/2 = 6th value, (¹²/2) + 1 = 7th value].
- The 6th value = 7 and the 7th value = 8.
- The arithmetic mean of the two values is calculated: (7 + 8)/2 = 7.5.
 Therefore the median = 7.5 community sectors engaged.

The median is not the same as the mean (or average) of the same sample of numbers, although the median and the mean can be the same or close to the same. The advantage of using a median value is that it is less influenced by extreme values (e.g. outliers) than the arithmetic mean calculated from the same sample.

Public health, medical, and mental/behavioral health: One or more systems of public and private agencies, and their associated programs, that function to provide services to ensure the overall physical and mental well-being of the community-at-large.

- **Public health** is concerned with the health of the community as a whole. The Institute of Medicine defines a public health system as executing the core functions of public health agencies at all levels of government: assessment, policy development, and assurance²⁴. The mission of public health is to “fulfill society's interest in assuring conditions in which people can be healthy.” The three core public health functions are:
 1. The assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities;
 2. The formulation of public policies designed to solve identified local and national health problems and priorities;
 3. To assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services, and evaluation of the effectiveness of that care.²⁵
- **Medical** or health care is the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in humans. Health care is delivered by practitioners in medicine, chiropractic, dentistry, nursing, pharmacy, allied health, and other relevant areas of care. It refers to the work done in providing primary care, secondary care, and tertiary care, as well as in public health.²⁶
- **Mental/behavioral health** refers to “a broad array of activities directly or indirectly related to the mental well-being. It is related to the promotion of well-being, the prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders.”²⁷ In the National Standards, this is an overarching term used to encompass behavioral, psychosocial, substance abuse, and psychological health.²⁸

²⁴ Institute of Medicine (1988). *The Future of Public Health*. Washington, DC: National Academy Press.

²⁵ Public Health (n.d.). In *MedTerms Dictionary*. Accessible at: <http://www.medterms.com/script/main/art.asp?articlekey=5120>.

²⁶ “Medicine” (n.d.). Accessible at: http://en.wikipedia.org/wiki/Health_care

²⁷ WHO (n.d.). World Health Organization (n.d.). *Health Systems*. Retrieved July 8, 2011 from the WHO Web site: http://www.who.int/topics/health_systems/en/

²⁸ CDC (2011)

Table 2.2. CP – Identification of Key Organizations

<p>CP – Identification of key organizations Annual</p>	<p><u>Median number of community sectors in which LHDs identified key organizations to participate in public health, medical, and/or mental/behavioral health-related emergency preparedness efforts.</u></p>
<p>Measurement Specifications</p>	<p>When the numbers of community sectors engaged by each participating LHD are arranged from highest to lowest [maximum is 11, minimum is zero], the median is the midpoint number where half of the LHDs engaged a number of sectors at or above the midpoint and the other half of the LHDs engaged a number of sectors at or below it.</p>
<p>Intent</p>	<p>This process measure demonstrates awardee accountability in relation to <u>LHDs</u> identifying and prioritizing key organizations (across all 11 <u>community sectors</u> as identified in CDC’s National Standards document) with which they wish to engage in emergency preparedness efforts related to <u>public health, medical and/or mental/behavioral health</u>. These sectors encompass a range of constituents and services and should provide services to the general public as well as vulnerable populations within the community in order to prepare for and recover from an incident or disaster.</p> <p>The intent of this measure is for awardee health departments to capture data on the identification and prioritization of those organizations deemed, by <u>LHDs</u>, to be critically important (i.e., key) for inclusion and/or engagement in public health, medical and/or mental/behavioral emergency preparedness, response, and recovery efforts.</p>
<p>Reporting Criteria</p>	<p>Reporting on this performance measure is REQUIRED.</p> <p>All PHEP awardees are required to report.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within PHEP BP11: August 10, 2011, through August 9, 2012.</p> <p>For most awardees, this performance measure requires data collection from LHDs. Please see the sampling strategy section of the guidance for more information.</p>
<p>Reported Data Elements</p>	<ol style="list-style-type: none"> 1. Number of LHDs reporting from the pre-selected sample 2. Total number of <u>key organizations</u>, across all 11 community sectors, identified by <u>LHDs</u>. 3. Number of <u>key organizations</u>, by <u>community sector</u>, identified by <u>LHDs</u>. 4. Number of <u>key organizations</u> that represent multiple <u>community sectors</u>. 5. What additional <u>key organizations</u> did LHDs identify that do not fit within any of the 11 specified <u>community sectors</u>? <ol style="list-style-type: none"> a. Briefly describe the type of <u>key organizations</u> and the populations they serve. 6. Briefly describe the successes cited by <u>LHDs</u> in terms of identifying <u>key organizations</u>. 7. Briefly describe any barriers or challenges cited by <u>LHDs</u> in terms of identifying <u>key organizations</u>.

**Additional
Guidance**

Identified key organizations. In identifying key organizations, the following should be considered:

- Key organizations should have significant reach within the local community. The make-up of organizations within a community sector should have access to or provide services to one or more vulnerable populations.
- Key organizations may provide services for more than one community sector. Thus, the organization may represent or be counted for multiple sectors.

The intent of this measure is that LHDs identify only those key organizations that they believe are critical in providing services to at-risk populations, or acting as critical response partners, in a significant public health emergency. It is not the intent of this measure to have LHDs identify (and subsequently engage with) all community organizations within their jurisdictions. LHDs should reassess their list of key organizations annually.

Table 2.3. CP - Community Engagement in Risk Identification

<p>CP - Community engagement in risk identification Annual</p>	<p><u>Median number of community sectors that LHDs engaged in using hazards and vulnerabilities assessment (HVA) data to determine local hazards, vulnerabilities, and risks that may impact public health, medical, and/or mental/behavioral health systems and services.</u></p>
<p>Measurement Specifications</p>	<p>When the numbers of community sectors that each LHD engaged to determine local hazards, vulnerabilities, and risks are arranged from highest to lowest [maximum is 11, minimum is zero], the median is the midpoint number where half of the LHDs engaged a number of sectors at or above the midpoint and the other half of the LHDs engaged a number of sectors at or below it.</p>
<p>Intent</p>	<p>This is a process measure demonstrating awardee accountability by ensuring that LHDs engage key organizations, across all 11 sectors (as identified in CDC’s National Standards document) in using HVA data to determine local hazards, vulnerabilities, and risks that may impact public health, medical, and/or mental/behavioral health systems and services. A community’s understanding and acknowledgement of the identified hazards, vulnerabilities, and risks is critical to developing appropriate preparedness, response, and recovery plans. Engaging key organizations in these processes ensures their commitment and involvement in implementing these plans.</p> <p>The intent of this measure is for awardee health departments to capture information about LHD engagement of key organizations in identifying <u>hazards, vulnerabilities, and risks</u> that may impact local <u>public health, medical, and/or mental/behavioral health</u> systems and services. Awardee health departments should encourage and support LHDs to leverage findings, as applicable, from HVAs undertaken by themselves or other entities (e.g., local, state, or federal emergency management). Irrespective of which agency led the HVA, the findings must be discussed in relation to their potential impact on public health, medical, and/or mental/behavioral health systems and services. This helps to ensure that the community preparedness and recovery plan appropriately addresses the mitigation of risk and the restoration of these systems and services in as feasible a manner as possible.</p>
<p>Reporting Criteria</p>	<p>Reporting on this performance measure is REQUIRED.</p> <p>All PHEP awardees are required to report.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within PHEP BP11: August 10, 2011, through August 9, 2012.</p> <p>For most awardees, this performance measure requires data collection from LHDs. Please see the sampling strategy section of the guidance for more information.</p>

Reported Data Elements

1. Number of LHDs reporting from the pre-selected sample
2. Total number of key organizations, across all 11 community sectors, engaged in determining the local hazards, vulnerabilities, and risks that may impact public health, medical, and/or mental/behavioral health systems and services.
3. Number of key organizations, by community sector, engaged in determining the local hazards, vulnerabilities, and risks that may impact public health, medical and/or mental/behavioral health systems and services.
4. Range of community sectors engaged by the sample of LHDs reporting data for this measure.
5. Number of LHDs that engaged all 11 community sectors in using HVA data to determine local hazards, vulnerabilities, and risks that may impact public health, medical, and/or mental/behavioral health systems and services.
6. Type of HVA data that LHDs used to determine local hazards, vulnerabilities, and risks that may impact public health, medical, and/or mental/behavioral health systems and services.
 - a. Number of LHDs that conducted their own local HVA.
 - b. Number of LHDs that reviewed HVA data conducted by the state health department.
 - c. Number of LHDs that reviewed HVA data conducted by the local, state, or federal emergency management agency;
 - d. Number of LHDs that reviewed HVA data from more than one source/agency (e.g. local emergency management and the state health department)
7. Briefly describe successes cited by LHDs in terms of engaging key organizations in using HVA data to determine local hazards, vulnerabilities, and risks.
8. Briefly describe any barriers or challenges cited by LHDs in terms of engaging key organizations in using HVA data to determine local hazards, vulnerabilities, and risks.

Additional Guidance

This measure should only include those individuals and organizations (e.g., agency, club, business, or professional association) deemed sufficiently representative of a sector, and essential in providing input and feedback related to local hazards, vulnerabilities, and risks that may impact public health, medical and/or mental/behavioral health systems and services.

LHDs may either conduct their own HVA or review HVA data collected by other agencies (e.g., the state public health agency, state or local emergency management agency, and FEMA). Additionally, during a BP in which an HVA is not conducted for the local jurisdiction, the LHD should review the hazards, vulnerabilities, and risks previously identified (e.g., in a prior BP) to determine if they are still relevant, and update their local community preparedness and recovery plans as needed.

Engaged in using HVA data to determine local hazards, vulnerabilities, and risks. Key organizations, representing all 11 community sectors, should provide verbal or written input to the LHD for determining the hazards, vulnerabilities, and risks relevant to public health, medical, and/or mental/behavioral health systems and services within their local jurisdiction. LHDs may engage their key organizations in a variety of ways depending on the source of the HVA data.

- If the LHD conducted its own local HVA, this may involve (but is not limited to) the following:

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- Providing information or input during the risk assessment process via meetings, interviews, or surveys.
 - Participating, as a member of a strategic advisory council (SAC), local emergency planning committee (LEPC), community consortia, or planning body to design a risk assessment, review risk assessment data, and/or identify hazards, vulnerabilities, and risks.
 - Participation in reviewing and discussing risk assessment data to identify hazards, vulnerabilities, and risks at in-person meetings, by phone, or via the Web or e-mail.
 - Voting to identify risks (or in support of identified risks); voting is sponsored by the local public health agency, SAC, community consortia, or planning body, and may occur at in-person meetings, or by paper, phone, Web, or e-mail.
 - Reviewing and acknowledging agreement with the identified hazards, vulnerabilities, and risks.

 - If the LHD reviewed HVA data conducted by one or more agency (e.g., state health department; local, state or federal emergency management agency), this may involve (but is not limited to) the following:
 - Participating, as a member of a SAC, LEPC, community consortium, or other type of planning body to secure and/or review risk assessment data and/or to identify hazards, vulnerabilities, and risks.
 - Providing information or input that informs the review of previously identified hazards, vulnerabilities, and risks for the current BP.
 - Participation in reviewing and discussing current or previously collected HVA data to identify hazards, vulnerabilities, and risks via in-person meetings, paper, phone, the Web or e-mail.
 - Voting to identify risks (or in support of identified risks)—currently or as identified in a previous BP. Voting is sponsored by the LHD, SAC, community consortia, or planning body, and may occur at in-person meetings, or by hard copy or electronic survey.
 - Reviewing and acknowledging agreement with the identified hazards, vulnerabilities, and risks (current or previously identified/reprioritized) for the BP.

This measure is meant to capture meaningful, bona fide participation by community sector representatives. Marginal or non-meaningful participation shall not count toward this performance measure. This measure excludes individuals that do not participate or those who participate marginally in a manner that is not meaningful, as well as those who do not provide explicit input or feedback on risks to public health, medical and/or mental/behavioral health systems or services (e.g., members of the media who show up to observe for the sole purpose of reporting).

Table 2.4. CP – Engagement in Public Health Emergency Preparedness

CP – Engagement in public health emergency preparedness Annual	
Proportion of <u>key organizations</u> that <u>LHDs engaged</u> in a <u>significant public health emergency preparedness activity</u>	
Measurement Specifications	<p>Numerator: Number of <u>key organizations</u> that <u>LHDs engaged</u> in one or more of the following <u>significant public health emergency preparedness activities</u>:</p> <ul style="list-style-type: none"> • Development of <u>key organizations’</u> emergency operations or response plans related to <u>public health, medical, and/or mental/behavioral health</u> • Exercises containing objectives or challenges (e.g. injects) related to <u>public health, medical, and/or mental/behavioral health</u>. • Competency-based training related to <u>public health, medical, and/or mental/behavioral health</u> emergency preparedness and response <p>Denominator: Total number of <u>key organizations</u> identified by <u>LHDs</u> (as specified in data element 2 for CP 1)</p>
Intent	<p>This process measure is intended, over time, to demonstrate program improvement at the local level by assessing the depth of <u>key organizations</u> (across the 11 community sectors identified in the National Standards document) <u>engaged</u> by <u>LHDs</u> in <u>significant emergency preparedness activities</u> related to <u>public health, medical, and/or mental/behavioral health</u>.</p> <p>The intent of this measure is for awardee health departments to capture information about <u>LHDs’</u> involvement with their <u>key organizations</u> in meaningful activities that build their overall capacity to plan for and/ or respond to incidents that impact their <u>public health, medical, and/or mental/behavioral health</u> systems and services. These activities help the <u>LHD</u> and <u>key organizations</u> think through the ways in which they can restore the infrastructure and services as quickly as possible and identify potential gaps in their existing plans. These activities also help to ensure that <u>key organizations</u> understand their roles and responsibilities as well as protocols and procedures for responding to and recovering from an incident.</p>
Reporting Criteria	<p>Reporting on this performance measure is REQUIRED.</p> <p>All PHEP awardees are required to report.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within BP11: August 10, 2011, through August 9, 2012.</p> <p>For most awardees, this performance measure requires data collection from LHDs. Please see the sampling strategy section of the guidance for more information.</p>
Reported Data Elements	<ol style="list-style-type: none"> 1. Number of <u>LHDs</u> reporting from the pre-selected sample. 2. Total number of <u>key organizations</u>, across all 11 <u>community sectors</u>, that LHDs engaged in at least one <u>significant emergency preparedness activity related to</u>

public health, medical, and/or mental/behavioral health.

3. Number of key organizations, by community sector, that participated in more than one significant preparedness activity related to public health, medical, and/or mental/behavioral health.
 4. Range of community sectors that participated in a significant preparedness activity related to public health, medical, and/or mental/behavioral health, across reporting LHD jurisdictions
 5. Number of LHDs for which all 11 community sectors participated in a significant preparedness activity related to public health, medical, and/or mental/behavioral health.
 6. Briefly describe successes cited by LHDs in terms of engaging key organizations in significant preparedness activity related to public health, medical, and/or mental/behavioral health.
 7. Briefly describe any barriers or challenges cited by LHDs in terms of engaging key organizations in significant preparedness activity related to public health, medical, and/or mental/behavioral health.
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**Additional
Guidance**

Significant public health emergency preparedness activities. Endeavors that provide key organizations with the capacity to plan for and/or respond to an incident. For this performance measure, these activities are defined as:

- a. Development of key organizations' emergency operations or response plans related to public health, medical, and/or mental/behavioral health
- b. Exercises containing objectives or challenges (e.g. injects) related to public health, medical, and/or mental/behavioral health.
- c. Competency-based training related to public health, medical, and/or mental/behavioral health emergency preparedness and response

Emergency operations and response plans: 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.

Exercises: An instrument to train for, assess, practice, and improve performance in prevention, protection, response, and recovery capabilities in a risk-free environment. Exercises can be used for testing and validating policies, plans, procedures, training, equipment, and interagency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; identifying gaps in resources; improving individual performance; and identifying opportunities for improvement. Additional information on exercise types is available from the Homeland Security Exercise and Evaluation Program²⁹ at <https://hseep.dhs.gov/support/VolumeI.pdf>

- **Discussion-based exercises** familiarize participants with current plans, policies, agreements, and procedures, or may be used to develop new plans, policies, agreements, and procedures. Types of discussion-based exercises include:
 - **Seminar:** A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., a seminar to review a new evacuation standard operating procedure).
 - **Workshop:** A workshop resembles a seminar but is employed to build specific products, such as a draft plan or policy (e.g., a training and exercise plan workshop is used to develop a multi-year training and exercise plan).
 - **Tabletop exercise (TTX):** A tabletop exercise involves key personnel discussing simulated scenarios in an informal setting. TTXs can be used to assess plans, policies, and procedures.
 - **Operations-based exercises** validate plans, policies, agreements, and procedures; clarifies roles and responsibilities; and identifies resource gaps in an operational environment. Types of operations-based exercises include:
 - **Drill:** A drill is a coordinated, supervised activity usually employed to test a single specific operation or function within a single entity (e.g., a fire department conducts a decontamination drill).

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- **Functional exercise (FE):** A functional exercise examines and/or validates the coordination, command, and control between various multi-agency
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²⁹Department of Homeland Security (DHS) (n.d.). *Homeland Security Exercise and Evaluation Program*. Accessible at : https://hseep.dhs.gov/pages/1001_Gloss.aspx

coordination centers (e.g., emergency operation center, joint field office, etc.). A functional exercise does not involve any boots on the ground (i.e., first responders or emergency officials responding to an incident in real time).

- **Full-Scale exercises (FSE):** A full-scale exercise is a multiagency, multijurisdictional, multidiscipline exercise involving functional (e.g., joint field office, emergency operation centers, etc.) and boots on the ground response (e.g., firefighters decontaminating mock victims).³⁰

Competency-based training entails the provision of standardized instructions/guidance related to disaster prevention, preparedness, response, and recovery role(s) in accordance with established national, state, and local health security and public health policies, laws, and systems. Examples of competency-based training programs include, but are not limited to, National Incident Management System (NIMS)³¹ and related training, Hospital Incident Command System (HICS) training³², the National Disaster Life Support Program³³; the American Academy of Pediatrics disaster medicine curriculum³⁴; and national and state Voluntary Organizations Active in Disaster planning documents.³⁵ Additional information on competency-based training is available through the Preparedness and Emergency Response Learning Centers from CDC³⁶ Information on the Public Health Preparedness and Response Core Competency Model is available through the Association of Schools of Public Health³⁷

³⁰ DHS (2011)

³¹ Department of Homeland Security. (n.d.). *NIMS Training*. Accessible at: <http://www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm>

³² Hospital Incident Command System. *Center for HICS Education and Training*. Accessible at: <http://www.hicscenter.org/index.php>

³³ American Medical Association (AMA). (2003). *National Disaster Life Support™ Program*. Accessible at: <http://www.ama-assn.org/ama/pub/physician-resources/public-health/center-public-health-preparedness-disaster-response/national-disaster-life-support.page>

³⁴ American Academy of Pediatrics (AAP). (2008). *Pediatric Education in Disasters Manual: A Course of the "Helping the Children" Program*. Accessible at: <http://www.aap.org/disasters/peds.cfm>

³⁵ National Voluntary Organizations Active in Disaster (NOVAD). (n.d.). Accessible at: <http://www.nvoad.org/resource-library/documents>

³⁶ CDC. (n.d.). *Preparedness and Emergency Response Learning Centers*. Accessible at: <http://www.cdc.gov/phpr/perlc.htm>

³⁷ Association of Schools of Public Health (ASPH) & CDC. (December 2010). *Public Health Preparedness & Response Core Competency Model, v.1.0*. Accessible at: <http://www.asph.org/userfiles/PreparednessCompetencyModelWorkforce-Version1.0.pdf>

Table 2.5. CP – Engagement in Recovery Planning

CP – Engagement in recovery planning	<u>Median number of community sectors that LHDs engaged in developing and/or reviewing a community recovery plan related to the restoration and recovery of public health, medical, and/or mental/behavioral health systems and services.</u>
Measurement Specifications	When the numbers of <u>community sectors</u> that each <u>LHD engaged in developing and/or reviewing their community recovery plan</u> are arranged from highest to lowest [maximum is 11, minimum is zero], the median is the midpoint number where half of the LHDs engaged a number of sectors at or above the midpoint and the other half of the LHDs engaged a number of sectors at or below it.
Intent	<p>The purpose of this process measure is to demonstrate program accountability of cross-sector community engagement by LHDs in disaster recovery planning related to the restoration and recovery of <u>public health, medical, and/or mental/behavioral health</u> systems and services.</p> <p>The intent of this measure is for awardee health departments to capture information about LHDs engagement of community sector representatives in recovery planning for the restoration of services, providers, facilities, and infrastructure related to <u>public health, medical, and mental/behavioral health</u> systems. Additionally, this provides a mechanism to track improvements in these efforts over time. Building and maintaining community resilience requires deliberate action to plan for recovery from a major incident or disaster. The participation of <u>key organizations in developing and/or reviewing a community recovery plan</u> builds a better understanding of roles and responsibilities as well as steps to take toward rebuilding the community following an incident impacting <u>public health, medical and/or mental/behavioral health</u> systems and services.</p>
Reporting Criteria	<p>Reporting on this performance measure is REQUIRED.</p> <p>All PHEP awardees are required to report.</p> <p>This performance measure requires self-reported data.</p> <p>Data collected for this measure must fall within PHEP BP11: August 10, 2011, through August 9, 2012.</p> <p>For most awardees, this performance measure requires data collection from LHDs. Please see the sampling strategy section of the guidance for more information.</p>
Reported Data Elements	<ol style="list-style-type: none"> 1. Number of LHDs reporting from the pre-selected sample. 2. Total number of <u>key organizations</u>, across the 11 <u>community sectors</u>, that LHDs <u>engaged in developing and/or reviewing a community recovery plan</u> related to the restoration and recovery of <u>public health, medical, and/or mental/behavioral health</u> systems and services.

Reported Data Elements

3. Number of key organizations, by the 11 community sectors, that that LHDs engaged in developing and/or reviewing a community recovery plan related to the restoration and recovery of public health, medical, and/or mental/behavioral health systems and services.
4. Range of community sectors that were engaged in developing and/or reviewing a community recovery plan.
5. Number of LHDs for which all 11 community sectors were engaged in developing and/or reviewing a community recovery plan.
6. Briefly describe successes cited by LHDs in terms of engaging key organizations in developing and/or reviewing a community recovery plan.
7. Briefly describe any barriers or challenges cited by LHDs in terms of engaging key organizations in developing and/or reviewing a community recovery plan.

Additional Guidance

Community recovery plan. A written, all-hazards or hazard-specific plan that documents objectives, actions, and other information to assist key community public and private sector entities during the recovery phase of a disaster or (typically) major incident of public health significance. For the purpose of this performance measure, the plan should include the roles and responsibilities of the LHD and key organizations in restoring public health, medical, and/or mental/behavioral health systems and services.

The review of a community recovery plan should occur annually (if the plan was previously developed).

Engaged in developing and/or reviewing a community recovery plan. Key organizations, across all 11 community sectors should be involved in developing and/or revisiting the LHD's (or local emergency management agency's) community recovery plan. Engagement in this activity may occur in various ways, including, but not limited to:

- Providing information or input to the LHD for the development or review of the community recovery plan.
- Participating, as a member of a strategic advisory council (SAC), local emergency planning committee (LEPC), community consortia, or planning body to develop, review, and/or update the community recovery plan.
- Participation in reviewing and discussing the community recovery plan at in-person meetings, by paper, phone, or via the Web or e-mail.
- Voting in support of a community recovery plan; voting is sponsored by the local public health agency, SAC, community consortia, or planning body, and may occur at in-person meetings, by paper or phone, or via the Web or e-mail.
- Reviewing and acknowledging agreement with a community recovery plan.

This measure is meant to capture meaningful, bona fide participation by community sector representatives. Marginal or non-meaningful participation does not count toward this performance measure. This measure excludes individuals that do not participate or those who participate marginally in a manner that is not meaningful, as well as those who do not provide explicit input or feedback on risks to public health, medical and/or mental/behavioral health systems or services (e.g., members of the media who show up to observe for the sole purpose of reporting).

DOMAIN THREE:
COUNTERMEASURES and MITIGATION

The Medical Materiel Management and Distribution and the Medical Countermeasure Dispensing Capabilities

Summary and Description of the Composite Performance Measure

The Medical Countermeasure Distribution and Dispensing (MCMDD) composite measure is a collective measure of the performance and capability to receive, stage, store, distribute and dispense medical countermeasures. This measure reflects contributions from established preparedness activities and serves a demonstration of the Medical Materiel Management and Distribution and Medical Countermeasure Dispensing capability standards.

A MCMDD composite score will be calculated annually for each state, directly funded locality, U.S. territory and freely associated state awardee during each PHEP performance period. MCMDD composite computations for the 50 awardee states will include all of the Cities Readiness Initiative (CRI) local/planning jurisdictions within the PHEP awardees' boundary, including the directly funded local jurisdiction. Preparedness activities and contributions from CRI jurisdictions in multistate CRI Metropolitan Statistical Areas (MSAs) will contribute to the MCMDD composite score **only** for the governing state. The MCMDD composite measure is calculated by the Division of Strategic National Stockpile (DSNS) within the Office of Public Health Preparedness and Response (OPHPR) at CDC.

Each MCMDD composite measure score will be calculated based on performance data collected from the following preparedness activities:

- Technical Assistance Review
- DSNS operational drills (annual requirement beginning 2011-2012)
- Compliance with programmatic standards (annual requirement beginning 2012-2013)
 - Points of dispensing standards
 - Medical countermeasure distribution standards
- Full-scale exercises (FSE)
 - Medical countermeasure distribution (one state-level FSE required during the 2011-2016 PHEP cycle)
 - Medical countermeasure dispensing (one CRI-level FSE during the 2011-2016 PHEP cycle)

Additional Information

Detailed guidance related to the specific performance measures and data collection requirements for each awardee state, directly funded locality, U.S. territory and freely associated state awardee is provided in the PHEP Cooperative Agreement Budget Period 11 (2011-2012): Medical Countermeasure Distribution and Dispensing Composite Measure Guide. The composite measure guide can be accessed and downloaded from the SNS Extranet site (www.bt.cdc.gov/stockpile/extranet) and the SNS SharePoint site (www.orau.gov/sns).

**DOMAIN FOUR:
INCIDENT MANAGEMENT**

Emergency Operations Coordination Capability Performance Measures

Introduction

Emergency Operations Coordination (EOC) is a capability required to direct and coordinate the implementation of other public health preparedness capabilities, and is therefore critical to public health emergency preparedness and response. As part of the Incident Management (IM) concept, EOC 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 Definition

CDC's National Standards document describes the EOC capability as follows:

[EOC] is the ability to direct and support an event or incident with public health or medical implications by establishing a standardized, scalable system of oversight, organization, and supervision consistent with jurisdictional standards and practices and with the National Incident Management System (NIMS).

NIMS provides the basis for the Incident Command System (ICS).

Definition of Key Terms Related to the EOC capability

Below is a list of terms and definitions that appear throughout the EOC capability performance measures. These terms, when they appear in the performance measure tables, are underlined. Please apply the following definitions when interpreting the guidelines for data collection and reporting on the EOC performance measures.

Acknowledgement: Notified staff confirms receipt of notification to designated official. Examples of acknowledgement methods include email, Health Alert Network (HAN), or cell phone.

Acknowledgement methods may differ from notification methods used.

Acting in an assisting role: During some exercises or incidents, more than one agency may be required to respond. When 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 (or territory or Freely Associated State of the Pacific) emergency management agency (EM or EMA), and the awardee had responsibility for drafting either its own After Action Report (AAR) and Improvement Plan (IP) on the public-health related aspects of the exercise 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: When the public health agency assumes primary responsibility for managing the response and 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): The main product of the evaluation and improvement planning process, consisting of two components. The AAR captures observations of an exercise and makes recommendations for post-exercise improvements. The IP identifies specific corrective actions, assigns them to responsible parties, and establishes targets 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). The AAR and IP are the units that define a single exercise, regardless of how many political jurisdictions were involved in the exercise.

Clearance: The process (whether formal or informal) that the public health agency uses to approve and finalize AAR 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 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.

Department Operations Center (DOC): An emergency operations center specific to a single department or agency. The focus is on internal agency incident management and response. A DOC is often linked to and, in most cases, physically represented in a combined agency EOC by authorized agent(s) for the department or agency (NIMS, Aug 2007).

Designated official: Any individual in the health department who has the authority to take the necessary action (e.g., decide to activate incident management roles).

Division / group assignment list: Provides a description of the specific actions that assigned personnel will be taking in support of the overall incident objectives. This list is based on the organizational structure of the Operations Section for the operational period and is documented using Form ICS 204 or equivalent. Further information and guidance on incident objectives is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf (NIMS, December 2008).

Drill: 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.

Federal agencies: Includes all federal governmental agencies.

Full-scale exercise (FSE): A multi-agency, multi-jurisdictional activity involving actual deployment of resources in a coordinated response as if a real 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 single or multi-agency activity designed to evaluate capabilities and multiple functions using a simulated response. An FE is typically used to: evaluate the management of Emergency Operations Centers (aka DOCs), command posts, and headquarters; and assess the adequacy of response plans and resources. Characteristics of an FE include simulated deployment of resources and personnel, rapid problem solving, and a highly stressful environment. FEs are considered operations-based exercises

Hazard risk analysis: Communicates safety and health issues for emergency responders for a given incident / event by the Safety Officer and identifies mitigation measures to address those issues (NIMS, 2008). Detailed information is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf.

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

Incident: Any natural or manmade occurrence that negatively affects or can potentially negatively affect public health. The incident does not need to be a declared emergency.

Incident Action Plan (IAP): A plan containing general objectives reflecting the overall response strategy for managing an incident. It may include identification of operational resources and assignments, as well as attachments that provide direction and important information for management

of the incident during one or more operational periods (NIMS, 2008). Additional information and guidance is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf.

Incident Action Plan Approved: The Incident Commander has signed and dated (including the time) the IAP.

Incident management lead roles: Refers to the Command Staff (Incident Commander, Public Information Officer, Safety Officer, Liaison Officer) required to support the command function in an incident and 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. Not all lead roles may be activated for a given response.

As stated by NIMS (December 2008):

“Incident management, by distinction, includes directing specific incident operations; acquiring, coordinating and delivering resources to incident sites; and sharing information about the incident with the public Overall management includes Command Staff assignments required to support the command function The General Staff is responsible for the functional aspects of the incident command structure.”

Note: The level of complexity of an incident will direct the activation of certain IM lead roles. In certain scenarios, IM staff may cover more than one role at a time. IM lead roles include personnel **required to manage** the incident such as:

Incident commander (IC) – has overall IM responsibility including developing incident objectives on which subsequent incident action planning will be based, approve the IAP, and all requests pertaining to ordering and releasing incident resources.

Public information officer (PIO) – responsible for communicating with the media, public and other agencies with incident-related information needs.

Safety officer – monitors operations and advises the IC on all matters relating to operational safety, including the health and safety of public health responders.

Liaison officer – designated point of contact for representatives of other governmental agencies, nongovernmental organizations and private organizations to provide input on their agency’s policies, resource availability, and other incident-related topics.

Additional command staff – Depending on the nature and location(s) of the incident or specific requirements established by IC, additional command staff positions may be necessary. For example, a medical advisor may be required to provide advice and recommendations to the IC about medical and mental health services, mass casualty, acute care, vector control, epidemiology, or mass prophylaxis considerations.

Operations section chief – Responsibilities include the direct management of all tactical activities.

Planning section chief – Responsible for the collection, evaluation and dissemination of incident situation information and intelligence to the IM personnel.

Logistics section chief – Responsible for all service support requirements needed to facilitate an effective and efficient response including, but not limited to, providing facilities, transportation, supplies, and equipment.

Finance / administration section chief – Established when the IM activities require on-scene or incident-specific finance and other administrative support services. Some of the functions and responsibilities include recording personnel time, maintaining vendor contracts, administering compensation and claims, and conducting an overall cost analysis for the incident.

It is possible that an agency may use different titles for equivalent lead roles (e.g., Chief Science Officer). Detailed description about the responsibilities for each of these roles is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf (NIMS, December 2008).

Incident objectives: Statements of guidance and direction necessary for the selection of appropriate strategy, and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives. Incident objectives are the first page of an IAP (ICS Form 202 or equivalent documentation). Further information and guidance on incident objectives is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf (NIMS, 2008).

Incident type: These characterize the complexity of an incident. For reporting purposes, please choose one of the incident types defined below that best describes the exercise/incident being reported. This applies even if an awardee agency uses a different incident complexity scale.

- **Type 4** incidents are characterized as follows:
 - Command staff and general staff lead functions are activated only if needed;
 - Several resources (e.g., task force or strike team) are required to mitigate the incident;
 - Usually limited to one operational period in the control phase;
 - Agency administrator may have briefings, and ensure the complexity analysis and delegation of authority are updated; and
 - The role of the agency administrator/official includes completing the operational plans, including objectives and priorities.
- **Type 3** incidents are characterized as follows:
 - Some or all of the Command and General staff lead positions may be activated, as well as Division/Group Supervisor and/or Unit Leader level positions;
 - An Incident Management Team (IMT) or incident command organization manages initial action incidents with a significant number of resources; and
 - The incident may extend into multiple operational periods.
- **Type 2** incidents are characterized as follows:
 - May require the response of resources out of area, including regional and/or national resources to effectively manage the operations and command and general staffing;
 - Most or all of the Command and General Staff positions are filled;
 - Many of the functional units are needed and staffed;
 - The incident is expected to go into multiple operational periods; and
 - The designated official is responsible for the incident complexity analysis, administrator briefings, and written delegation of authority.
- **Type 1** incidents are the most complex and are characterized as follows:
 - Requires national resources to safely and effectively manage and operate;
 - All of the Command and General staff lead positions are activated;
 - Branches need to be established;
 - The designated official is responsible for the incident complexity analysis, administrator briefings, and written delegation of authority;
 - Use of resource advisors at the incident base is recommended; and
 - There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions.

For counting purposes, a Type 5 incident should not be included since it does not require a written IAP and usually has only one operational period. Additional information on incident types is available from the Federal Emergency Management Agency (FEMA) at <http://www.training.fema.gov/EMIWeb/IS/ICSResource/assets/IncidentTypes.pdf>

Local agencies: Includes all local governmental agencies (e.g., city/county).

Operational period: The established time scheduled for executing a given set of operation actions, as specified in the IAP. Operational periods can be of various lengths, although usually they last 12-24 hours. The responsibility for establishing the length of time for each operational period rests with Incident Command for each agency. (NIMS, 2008) Additional information and guidance is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf

Note: If data are being reported for an exercise, the second operational period may be simulated.

Organization assignment list: Provides a full accounting of incident management and supervisory staff during a given operational period and is a component of the IAP. This list is typically the second page of the IAP using ICS Form 203 or equivalent documentation. Further information and guidance on the organization assignment list is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf (NIMS, 2008).

Pre-identified staff: These are staff selected in advance of an incident through to fill the incident management roles adequate to a given response. Contact information for public health staff members with incident management roles is maintained on an up-to-date list.

Private sector partners: Non-governmental agencies run by private individuals or groups, usually as a means of enterprise for profit, and is not controlled by the state (e.g., businesses, hospitals, media, universities, volunteer health professionals).

Production of IAP: Documentation that the written IAP is completed and approved before the second operational period, including date and time of approval. For the purposes of this measure, the IAP is comprised of the following components: ICS Form 202 – “Incident Objectives”, ICS Form 203 – “Organization Assignment List” and ICS Form 204 – “Division / Group Assignment List”, or equivalent documentation.

Public sector partners: Departments, agencies and other entities controlled by national, state or provincial, and local governments. These can include non-public health agencies such as agricultural agency, education, emergency management, Emergency Medical Services (EMS), environmental agency, fire department, HHS Indian Health Services, law enforcement, National Guard, etc..

Staff Assembly: Can occur at a physical location (e.g., DOC), virtual location (e.g., web-based interface such as Web EOC, conference call), or combination of both.

State agencies: Includes all state governmental agencies.

Tabletop Exercise (TTX): TTXs 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 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.

Tribal agencies: Includes all tribal governmental agencies.

Outside of normal business hours: Those hours not included during which most business is conducted (other than working hours).

Unannounced: Without advanced warning or notice.

Voluntary sector partners: Non-profit, non-governmental agencies formed to serve some public or mutual benefit. These partners usually fall into one of five categories: foundations, charities, religious organizations, professional or trade organizations, and social welfare organizations (e.g., American Red Cross, community foundations, American Medical Association, churches).

[Link to the Department of Homeland Security's Target Capabilities List \(TCL\)](#)

This public health preparedness capability is aligned with three capabilities identified in the TCL:

- Onsite incident management
- Emergency operations center management
- Planning

Process Map

The process map (Figure 4.1) was developed by the IM Measurement Subgroup to capture and illustrate the critical programmatic activities required to implement the EOC capability. While this map is displayed in a linear fashion, several of the activities are depicted as ongoing and/or iterative processes. In addition, the map is organized to demonstrate the scalability and dynamic nature of this preparedness capability.

Figure 4.1. Incident Management Process Map

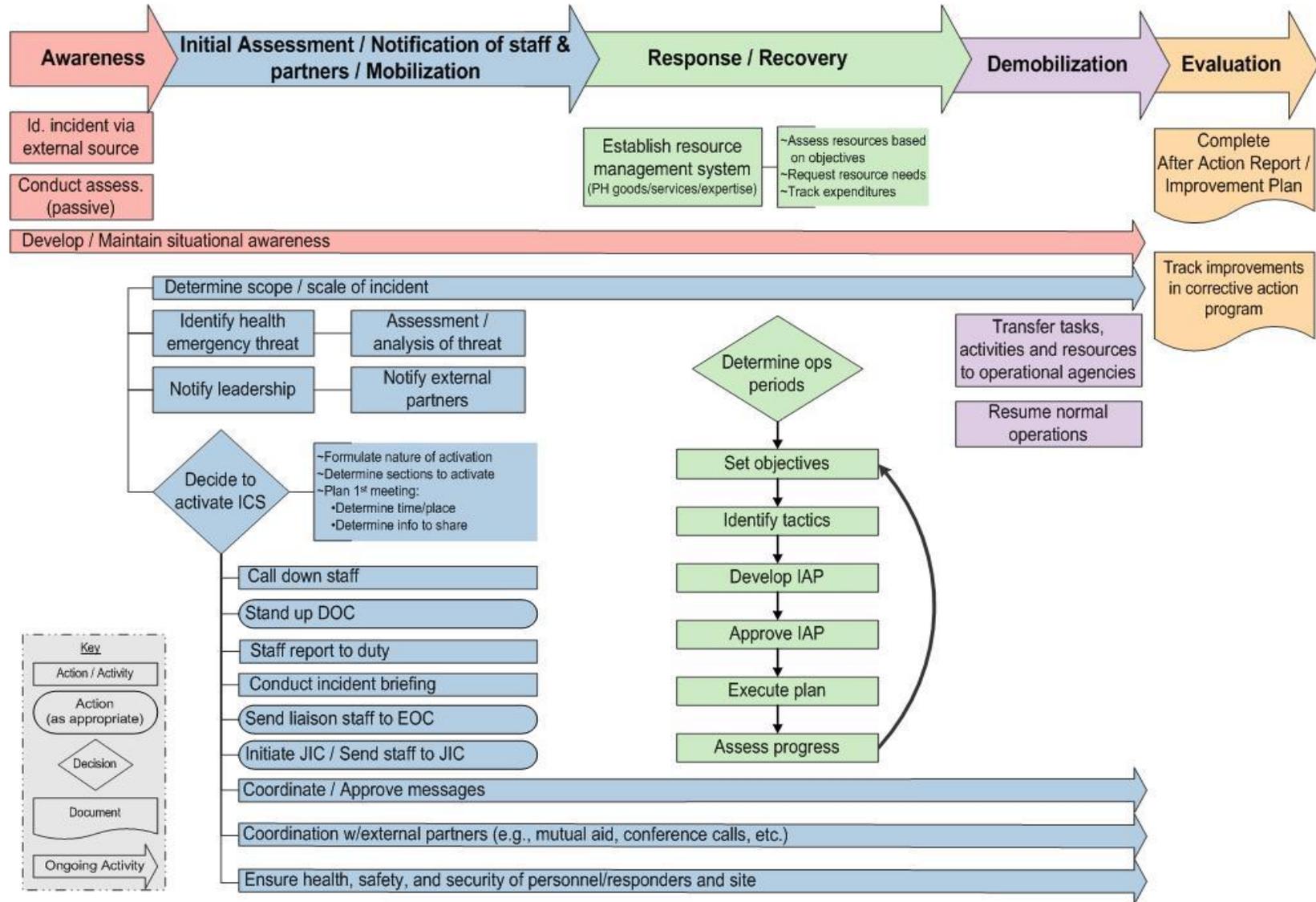


Table 4.1. EOC – Staff Assembly

EOC - Staff Assembly Annual	Time for <u>pre-identified staff covering activated public health agency incident management lead roles</u> (or equivalent) to report for <u>immediate duty</u>
Measurement Specifications	<p>Start time: Date and time that a <u>designated official</u> began notifying staff to report for <u>immediate duty</u> to cover activated <u>incident management lead roles</u>.</p> <p>Stop time: Date and time that the last staff person notified to cover an activated <u>incident management lead role</u> reported for <u>immediate duty</u>.</p>
Intent	<p>To ensure a timely and effective response to an <u>incident</u>, awardees must demonstrate the capability to immediately assemble public health staff with senior <u>incident management lead roles</u>.</p> <p>This performance measure links to EOC Function 2: Activate public health emergency operations.</p>
Reporting Criteria	<p>Reporting on this performance measure is REQUIRED for all awardees.</p> <p>This performance measure requires self-reported data.</p> <p>The required data collected must fall within BP11 (August 10, 2011 – August 9, 2012)</p> <p>Awardees may report data from multiple exercises and / or real <u>incidents</u>. However, awardees are required to report data from their health department on their one best demonstration of a <u>staff assembly</u> that occurred during BP11. The demonstration must have occurred during one of the following:</p> <ul style="list-style-type: none"> ▪ <u>Drill</u> ▪ <u>FE</u> ▪ <u>FSE</u> ▪ Real <u>incident</u> <p><u>Staff assembly</u> must be both <u>unannounced</u> and <u>immediate</u>.</p>
Reported Data Elements	<p>The following information will be collected in support of the performance measure:</p> <ol style="list-style-type: none"> 1. Total number of operations-based exercises (<u>drill</u>, <u>FE</u> or <u>FSE</u> only) testing <u>staff assembly</u> conducted between 08/10/2011 and 08/09/2011 <ol style="list-style-type: none"> 1a. Number of operations-based exercises testing <u>unannounced</u> and <u>immediate staff assembly</u>; 2. Total number of real <u>incidents</u> involving <u>staff assembly</u> that occurred between 08/10/2011 to 08/09/2012 <ol style="list-style-type: none"> 2a. Number of real <u>incidents</u> involving <u>unannounced</u> and <u>immediate staff assembly</u> <p>For each <u>unannounced</u> and <u>immediate staff assembly</u> being reported:</p> <ol style="list-style-type: none"> 3. Was the staff assembly part of a <u>drill</u>, <u>FE</u>, <u>FSE</u> or real <u>incident</u>? [select one] 4. If reporting data from a real <u>incident</u>: What was the <u>incident type</u>: [select one] <ul style="list-style-type: none"> ▪ Type 4 ▪ Type 3 ▪ Type 2 ▪ Type 1

-
5. Was the staff assembly unannounced? [Yes / No]
 6. Did the staff assembly occur outside of normal business hours? [Yes / No]
 7. Notification method(s) used: (select all that apply)
 - Cell phone
 - Email outside of rapid notification system
 - Rapid notification system (e.g. Health Alert Network)
 - Land-line telephone
 - Pager
 - Satellite communication system
 - Other - specify
 8. Acknowledgement method(s) used by staff: (select all that apply)
 - Cell phone
 - Email outside of rapid notification system
 - Rapid notification system (e.g. HAN)
 - Land-line telephone
 - Pager
 - Satellite communication system
 - Other - specify
 9. Was the staff assembly immediate? [Yes / No]
 10. Type of real incident or event/incident upon which exercise scenario was based (check all that apply)
 - Biological outbreak / exposure – specify type (e.g., measles, anthrax, etc.)
 - Chemical exposure – specify type
 - Infrastructure (e.g., power grid failure)
 - Mass casualty scenario
 - Mutual aid incident
 - Natural disaster – specify type (e.g., hurricane, tornado, ice storm)
 - Nuclear incident
 - Planned event
 - Radiological incident
 - Strategic National Stockpile exercise/response
 - Transportation disaster
 - Other – specify [text box]
 11. Was staff assembly virtual, physical, or a combination? [select one]
 12. Was the DOC activated? [Yes / No]
 13. IM lead roles (or equivalent lead roles) activated at the time of initial notification: (select all that apply)
 - Incident Commander
 - Public Information Officer
 - Safety Officer
 - Liaison Officer
 - Operations Section Chief
 - Planning Section Chief
 - Logistics Section Chief
 - Finance / Administration Section Chief
 - Additional Lead Roles - Specify
 14. Number of staff notified to cover activated IM lead roles (must be greater than zero)
 15. Start time (see measurement specifications above)
 16. Date and time that the last staff person needed to cover an activated IM lead role acknowledged notification.

-
17. Number of staff who reported for duty to cover activated IM lead roles (must be greater than zero)
 18. Stop time (see measurement specifications above)
 19. Were all of the activated IM lead roles (see response to question # 10) covered by those staff who reported for duty (see response to question #14)?
 20. Does this exercise or incident represent the best demonstration of your agency's staff assembly capability? [Yes / No]
 21. Please select the reason why this exercise or incident was chosen as the best demonstration of a staff assembly (select the primary / most significant reason)
 - Context of the Public Health Response – Potential for substantial public health impact
 - Real Incident
 - Agency was acting in a lead role or an assisting role
 - Complexity of the demonstration / response – scale of the demonstration / response required staffing all or most of the IM lead roles
 - Multiple partners in a coordinated demonstration / response
 - Duration of the demonstration / response
 - Required the mobilization of resources outside of the affected area
 - Quickest time
 - Only example / demonstration available
 - Other – specify
 22. Was this your quickest time? [Yes / No]
-

**Additional
Guidance**

Performance measure Intent: This performance measure is designed to capture the awardees' ability to assemble the appropriate leadership staff, e.g. the key decision-makers, to cover all of the activated incident management lead roles needed to lead and manage the agency's response. It is **not** intended to measure an awardee's ability to assemble all of their staff nor of a deployment or strike team. In addition, this measure is **not** focused on the total number of staff that was assembled in comparison with the number of staff notified within a given time frame.

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 the command and general staff (i.e. Operations Section Chief, PIO, etc.). Not all lead roles may be activated for a given response; also it is possible that agencies will use different titles for equivalent roles. Awardees may **not** report notification or assembly of staff at other agencies, including LHDs.

To validate that the examples reported meet the requirements of this measure, CDC will analyze the data submitted to ensure the number of staff who reported for duty to cover activated incident management lead roles is equal to or greater than the number of staff required to fill the activated incident management lead roles at the time of the initial notification (see questions 14 and 16 above)

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.

Table 4.2. EOC – Priority Goal

EOC – Priority Goal (50 states only) Annual	Time for <u>pre-identified staff</u> covering activated public health agency <u>incident management lead roles</u> (or equivalent lead roles) to report for <u>immediate duty</u>. Performance Target: 60 minutes or less
Measurement Specifications	Start time: Date and time that a <u>designated official</u> began notifying staff to report for <u>immediate duty</u> to cover activated <u>incident management lead roles</u> . Stop time: Date and time that the last staff person notified to cover an activated incident management <u>lead role</u> reported for <u>immediate duty</u> .
Intent	To ensure a timely and effective response to an incident, awardees must demonstrate the capability to immediately assemble public health staff with <u>incident management lead roles</u> . In recognition that an effective response will not occur if the necessary staff are not available, the ability to assemble lead IM staff in order to initiate response actions in a timely manner has been deemed a top priority for the CDC and the Department of Health and Human Services (HHS), and has thereby been identified as a Priority Goal
Reporting Criteria	Reporting on this performance measure is REQUIRED for all 50 states. This performance measure requires self-reported data. Required data must be submitted in the BP11 mid-year progress report. Awardees may report data from multiple exercises and / or real incidents. However, awardees are required to report data from their health department on their one quickest demonstration of a <u>staff assembly</u> during BP11. The demonstration must have occurred during one of the following: <ul style="list-style-type: none"> ▪ <u>Drill</u> ▪ <u>Functional exercise</u> ▪ <u>Full-scale exercise</u> ▪ <u>Real incident</u> Staff assembly (Priority Goal) must be <u>unannounced</u> and <u>immediate</u> . The performance target for this measure is 60 minutes or less. If all demonstrations of this measure are more than 60 minutes, report the demonstration time closest to the target of 60 minutes.

Reported Data Elements

The following information will be collected in support of the performance measure:

For each demonstration of the staff assembly (Priority Goal) being reported:

1. Was the staff assembly part of a drill, FE, FSE, or real incident? (select one)
 2. If reporting data from a real incident: What was the incident type: (select one)
 - Type 4
 - Type 3
 - Type 2
 - Type 1
 3. Was the staff assembly unannounced? [Yes / No]
 4. Was the staff assembly immediate? [Yes / No]
 5. Type of real incident or event/incident upon which exercise scenario was based (select all that apply)
 - Biological outbreak / exposure – specify type (e.g., measles, anthrax, etc.)
 - Chemical exposure – specify type
 - Infrastructure (e.g., power grid failure)
 - Mass casualty scenario
 - Mutual aid incident
 - Natural disaster – specify type (e.g., hurricane, tornado, ice storm)
 - Nuclear incident
 - Planned event
 - Radiological incident
 - Strategic National Stockpile exercise/response
 - Transportation disaster
 - Other – specify [text box]
 6. Was staff assembly virtual, physical, or a combination? (select one)
 7. Was the DOC activated? [Yes / No]
 8. IM lead roles or their equivalent activated at the time of initial notification: (select all that apply)
 - IC
 - PIO
 - Safety Officer
 - Liaison Officer
 - Operations Section Chief
 - Planning Section Chief
 - Logistics Section Chief
 - Finance / Administration Section Chief
 - Additional Lead Roles: Specify
 9. Number of staff notified to cover activated IM lead roles (must be greater than zero)
 10. Start time (see measurement specifications above)
 11. Number of staff who reported for duty to cover activated IM lead roles (must be greater than zero)
 12. Stop time (see measurement specifications above)
 13. Were all of the activated IM lead roles (see response to question # 8) covered by those staff who reported for duty (see response to question #12)?
 14. Was this demonstration your agencies' quickest time for a staff assembly? [Yes / No]
-

**Additional
Guidance**

Incident management lead role: [see Additional Guidance section in Table 4.2 EOC – Staff Assembly]

Performance Measure Intent: [see Additional Guidance section in Table 4.2 EOC – Staff Assembly for general intent.] For the EOC - Priority Goal the target timeframe is 60 minutes or less.

The EOC - Priority Goal performance measure is similar to the EOC - Staff Assembly performance measure in that it captures data for the assembly of pre-identified staff required to fill the activated incident management lead roles at the time of the initial notification. However, the Priority Goal has a second critical component: to capture the assembly of the required staff **within 60 minutes**.

Please note: in the EOC – Priority Goal measurement specifications above, the stop time is defined as the time at which the **last** required staff person notified to report for immediate duty to cover an activated IM lead role is present.

Table 4.3. EOC – Incident Action Plan (IAP)

EOC – IAP	Production of the approved <u>Incident Action Plan (IAP)</u> before the start of the second <u>operational period</u>
Measurement Specifications	Was a written <u>IAP</u> approved before the start of the second <u>operational period</u> ? [Yes / No]
Intent	To ensure a timely and effective response, awardees must engage in sound, timely planning during the response to guide the incident management decision process. A critical component of this planning is the ability to produce an approved <u>IAP</u> for each <u>operational period</u> .
	Note: This is a binary measure where time is judged relative to the beginning of the second <u>operational period</u> . While it is recognized that the quality of an <u>IAP</u> is variable and dependent on many different attributes, the intent of this performance measure does not include the extent to which an <u>IAP</u> is adequate for a given response.
	This performance measure links to EOC Function 3: Develop incident response strategy.
Reporting Criteria	<p>Reporting on this performance measure is OPTIONAL for awardees.</p> <p>This performance measure requires self-reported data.</p> <p>The required data collected must fall within BP11 (August 10, 2011 – August 9, 2012)</p> <p>Awardees may report data from multiple exercises and / or real incidents. However, awardees are required to report data from their health department on their one best demonstration of a written <u>IAP</u> that occurred during the BP. The demonstration must have occurred during one of the following:</p> <ul style="list-style-type: none"> ▪ <u>Drill</u> ▪ <u>Functional Exercise</u> ▪ <u>Full-Scale Exercise</u> ▪ <u>Real Incident</u> <p>The exercise or real <u>incident</u> must include the following characteristics:</p> <ul style="list-style-type: none"> ▪ The exercise scenario or real incident continues over two or more <u>operational periods</u>; ▪ Command and General staff sections (not necessarily all) are activated; and ▪ The <u>IAP</u> is comprised of the following components: <ul style="list-style-type: none"> ○ ICS Form 202 -“Incident Objectives”; ○ ICS Form 203 - “Organization Assignment List”; ○ ICS Form 204 - “Assignment List”; and ○ ICS Form 215a - “Hazard Risk Analysis” or equivalent documentation.

Reported Data Elements

The following information will be collected in support of the performance measure:

1. Total number of operations-based exercises (drill, FE, or FSE only) conducted between 08/10/2011 and 08/09/2012 that extended two or more operational periods during which a written IAP was produced
 - 1a. Total number of operations-based exercises (drill, FE, or FSE only) during which a written IAP was produced before the second operational period
2. Total number of real incidents extending two or more operational periods during which a written IAP was produced during the BP
 - 2a. Total number of real incidents during which a written IAP was completed before the second operational period

For each written IAP being reported:

3. Did you have any operations-based exercises or real incidents resulting in the production of a written IAP? [Yes / No]
 4. Was a written IAP approved before the start of the second operational period? [Yes / No]
 5. Was the IAP produced during a drill, functional exercise, full-scale exercise, or real incident? (select one)
 6. What was the complexity of the simulated or real incident at the time that the IAP was written? (select one)
 - Type 4
 - Type 3
 - Type 2
 - Type 1
 7. Type of the real incident or event/incident upon which the exercise scenario was based (select all that apply)
 - Biological outbreak / exposure – specify type (e.g., measles, anthrax, etc.)
 - Chemical exposure – specify type
 - Infrastructure (e.g., power grid failure)
 - Mass casualty scenario
 - Mutual aid incident
 - Natural disaster – specify type (e.g., hurricane, tornado, ice storm)
 - Nuclear incident
 - Planned event
 - Radiological incident
 - Strategic National Stockpile exercise/response
 - Transportation disaster
 - Other – specify [text box]
 8. Number of federal and state agencies involved in the exercise or real incident. (Include your health department if awardee is a state agency)
 9. Number of local and tribal agencies involved in the exercise or real incident. (Include your health department if awardee is a directly-funded city)
 10. Did your agency act in a lead or assisting role? (select one)
 11. Did you partner with any other public, private or voluntary sector agencies during this exercise or real incident?

[Yes – Private Sector / Yes – Public Sector / Yes – Voluntary Sector / No]
(Can select No, or one or more Yes options);

11a. If responded Yes – Private Sector:
-

-
- What was the total number of Private Sector partners?
- 11b. If responded Yes – Public Sector:
What was the total number of Public Sector partners?
- 11c. If responded Yes – Voluntary Sector:
What was the total number of Voluntary Sector partners?
12. Did the IAP include “Incident Objectives” documented on ICS Form 202 or equivalent documentation? [Yes / No]
13. Did the IAP include an “Organization Assignment List” on ICS Form 203 or equivalent documentation? [Yes / No]
14. Did the IAP include an “Assignment List” on ICS Form 204 or equivalent documentation? [Yes / No]
15. Did the IAP include a “Hazard Risk Analysis”? [Yes / No]
16. IM lead roles (or equivalent) activated during the first operational period: (select all that apply)
- IC
 - PIO
 - Safety Officer
 - Liaison Officer
 - Operations Section Chief
 - Planning Section Chief
 - Logistics Section Chief
 - Finance / Administration Section Chief
 - Additional Lead Roles – Specify
17. Number of staff who covered activated IM lead roles during the first operational period. (must be greater than zero)
18. Does this exercise or incident represent the best demonstration of your agency’s capability to complete a written IAP? [Yes / No]
19. Please select the reason why this exercise or incident was chosen as the best demonstration of a written IAP (select the primary / most significant reason)
- Context of the Public Health Response – Potential for substantial public health impact
 - Real Incident
 - Agency was acting in a lead role
 - Complexity of the demonstration / response (incident type) – scale of the demonstration / response required staffing all or most IM lead roles
 - Multiple partners in a coordinated demonstration / response
 - Duration of the demonstration / response
 - Required the mobilization of resources outside of the affected area
 - Quickest time
 - Only example / demonstration available
 - Other – specify

**Additional
Guidance**

ICS forms: Descriptions and templates for the ICS Forms can be found in NIMS, available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf

Table 4.4. EOC – After Action Report and Improvement Plan (AAR and IP)

EOC – AAR and IP	Time to complete a draft of an <u>After Action Report (AAR)</u> and <u>Improvement Plan (IP)</u>
Annual	
Measurement Specifications	<p>Start time: Date exercise or public health emergency operations completed.</p> <p>Stop time: Date the draft <u>AAR and IP</u> were submitted for <u>clearance</u> within the public health agency.</p> <p>Note: For this performance measure, the exercise or response can have occurred either prior to or during the budget period (BP), however for this to count, the submission date must be within the BP.</p>
Intent	<p>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.</p> <p>This performance measure links to EOC Function 5: Demobilize and evaluate public health emergency operations.</p>
Reporting Criteria	<p>Reporting on this performance measure is REQUIRED for all awardees.</p> <p>This performance measure requires self-reported data.</p> <p>The required data collected must fall within BP11: August 10, 2011 – August 9, 2012 Awardees may report data from multiple exercises and / or real incidents. However, awardees are required to report data from their health department on their one best demonstration of an <u>AAR and IP</u> that were drafted during BP11. This <u>AAR and IP</u> must have been drafted as a result of one of the following:</p> <ul style="list-style-type: none"> ▪ <u>Tabletop exercise</u> ▪ <u>Drill</u> ▪ <u>Functional exercise</u> ▪ <u>Full-scale exercise</u> ▪ <u>Real incident</u> <p>The date of <u>AAR and IP</u> submitted for clearance must fall within BP11.</p>

Reported Data Elements

The following information will be collected in support of the performance measure:

1. Total number of exercises (TTX, drill, FE or FSE only) that resulted in the completion of a draft AAR and IP between 08/10/2011 and 08/09/2012
2. Total number of real incidents that resulted in the completion of a draft of an AAR and IP between 08/10/2011 and 08/09/2012

For each example of the completion of a draft AAR and IP being reported:

3. Was the AAR and IP the result of a TTX, drill, FE, FSE or real incident? (select one)
 4. If reporting data from a real incident: what was the incident type: (select one)
 - Type 4
 - Type 3
 - Type 2
 - Type 1
 5. Type of real incident or event/incident upon which exercise scenario was based (select all that apply)
 - Biological outbreak / exposure – specify type (e.g., measles, anthrax, etc.)
 - Chemical exposure – specify type
 - Infrastructure (e.g., power grid failure)
 - Mass casualty scenario
 - Mutual aid incident
 - Natural disaster – specify type (e.g., hurricane, tornado, ice storm)
 - Nuclear incident
 - Planned event
 - Radiological incident
 - Strategic National Stockpile exercise/response
 - Transportation disaster
 - Other – specify [text box]
 6. Number of federal and state agencies involved in the exercise or real incident. (Include your health department if awardee is a state agency)
 7. Number of local and tribal agencies involved in the exercise or real incident. (Include your health department if awardee is a directly-funded city)
 8. Did your agency act in a lead or an assisting role? (select one)
 9. Did you partner with any other public, private, or voluntary sector agencies during this exercise or real incident? [Yes – Private Sector / Yes – Public Sector/ Yes – Voluntary Sector / No] (Can select No, or one or more Yes options);
 - 9a. If responded Yes – Private Sector:
What was the total number of Private Sector partners?
 - 9b. If responded Yes – Public Sector:
What was the total number of Public Sector partners?
 - 9c. If responded Yes – Voluntary Sector:
What was the total number of Voluntary Sector partners?
 10. Start time (see measurement specifications above)
 11. Stop time (see measurement specifications above)
 12. Date AAR and IP were approved by the public health agency (MM/DD/YY)
 13. Does this exercise or incident represent the best demonstration of your agency's capability to complete an AAR and IP? [Yes / No]
 14. Please select the reason why this exercise or incident was chosen as the best
-

demonstration of the completion of an AAR and IP (select the primary / most significant reason)

- Context of the Public Health Response – Potential for substantial public health impact
- Real Incident
- Agency was the lead responder
- Complexity of the demonstration / response – Scale of the demonstration / response required staffing all or most of the incident management lead roles
- Multiple partners in a coordinated demonstration / response
- Duration of the demonstration / response
- Required the mobilization of resources outside of the affected area
- Quickest time
- Only example / demonstration available
- Other – specify

15. Was this your quickest time? [Yes / No]

**DOMAIN FIVE:
INFORMATION MANAGEMENT**

Emergency Public Information and Warning Performance Measure

Introduction

Emergency Public Information and Warning (EPIW), formally known as crisis and emergency risk communication, or CERC), is a term used by CDC to describe communications with the public during an emergency. EPIW is closely related to more 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 the message must be developed and disseminated impose much tighter time constraints than are generally faced for routine communications.

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 critical 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. For more information on EPIW, including training curricula and tools, go to <http://emergency.cdc.gov/cerc/index.asp>.

Capability Definition

CDC's National Standards document describes the EPIW capability as follows:

[EPIW] is the ability to develop, coordinate, and disseminate information, alerts, warnings, and notifications to the public and incident management responders.

Definition of Key Terms Related to the EPIW Capability

Below is a list of terms and definitions that appear throughout the EPIW performance measures. These terms, when they appear in the performance measure tables, are underlined. Please apply the following definitions when interpreting the guidelines for data collection and reporting on the EPIW performance measures.

Acting in an assisting role: During some exercises or incidents, more than one agency may be required to respond. When the public health agency is supporting another agency in the response and / or recovery to an incident, either simulated or real, but not responsible for the coordination of all responding agencies and resources, the public health agency is acting in an assisting role during the response.

Acting in a lead role: When the public health agency assumes primary responsibility for managing the response and 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. 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 risk communication message on the public-health related aspects of the scenario (lead role) or a portion of a broader risk communication message (assisting role), the public health agency can report either for this measure.

Designated official: Any individual in the public health agency who has the authority to take necessary action (e.g., approve a message). A designated official may be a Public Information Officer, an Incident Commander, or any other individual with such authority.

Dissemination partner: News media, commercial partners, community partners, or other organizations that partner with the public health agency to release crisis and emergency risk communication messages to the public.

Drill: 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.

Federal agencies: Includes all federal governmental agencies (e.g., CDC).

Full-scale exercise (FSE): A multi-agency, multi-jurisdictional activity involving actual deployment of resources in a coordinated response as if a real 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 single or multi-agency activity designed to evaluate capabilities and multiple functions using a simulated response. An FE is typically used to: evaluate the management of Emergency Operations Centers, command posts, and headquarters; and assess the adequacy of response plans and resources. Characteristics of an FE include simulated deployment of resources and personnel, rapid problem solving, and a highly stressful environment. FEs are considered operations-based exercises.

General population: The entire population within the jurisdiction, that is, all population subgroups.

Immediate Recipient: The immediate recipient refers to the first group(s) to receive a message approved within the health department prior to dissemination. For example, if an agency is required to receive clearance approval of a message from an authority outside of the public health department (e.g., governor's office) prior to dissemination, then the immediate recipient of the message would be "clearance or dissemination authority beyond the public health agency". However, if an agency releases a message approved for clearance by the health department to a news media outlet, then the immediate recipient is "Dissemination partner". Likewise, if an agency sends a message approved for clearance by the health department to an established call center or hotline for dissemination, then the immediate recipient is "Public information line".

Incident: Any natural or manmade occurrence that negatively affects or can potentially negatively affect public health. The incident does not need to be a declared emergency.

Incident type:

These characterize the complexity of an incident. For reporting purposes, please choose one of the incident types defined below that best describes the exercise/incident being reported. This applies even if an awardee agency uses a different incident complexity scale.

- **Type 4** incidents are characterized as follows:
 - Command staff and general staff functions are activated only if needed;
 - Several resources (e.g., task force or strike team) are required to mitigate the incident;
 - Usually limited to one operational period in the control phase;
 - Agency administrator may have briefings, and ensure the complexity analysis and delegation of authority are updated; and
 - The role of the agency administrator/official includes completing the operational plans, including objectives and priorities.
- **Type 3** incidents are characterized as follows:
 - Some or all of the Command and General staff positions may be activated, as well as Division/Group Supervisor and/or Unit Leader level positions;
 - An Incident Management Team (IMT) or incident command organization manages initial action incidents with a significant number of resources; and
 - The incident may extend into multiple operational periods.
- **Type 2** incidents are characterized as follows:
 - May require the response of resources out of area, including regional and/or national resources to effectively manage the operations and command and general staffing;
 - Most or all of the Command and General Staff positions are filled;
 - Many of the functional units are needed and staffed;
 - The incident is expected to go into multiple operational periods; and

- The designated official is responsible for the incident complexity analysis, administrator briefings, and written delegation of authority.
- **Type 1** incidents are the most complex and are characterized as follows:
 - Requires national resources to safely and effectively manage and operate;
 - All of the Command and General staff positions are activated;
 - Branches need to be established;
 - The designated official is responsible for the incident complexity analysis, administrator briefings, and written delegation of authority;
 - Use of resource advisors at the incident base is recommended; and
 - There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions.

For counting purposes, a Type 5 incident should not be included since it does not require a written IAP and usually has only one operational period. Additional information on incident types is available from the Federal Emergency Management Agency (FEMA) at <http://www.training.fema.gov/EMIWeb/IS/ICSResource/assets/IncidentTypes.pdf>

Issue: Within the context of this measure, “issue” refers to distributing the approved message for the public to either the dissemination partners, the next level of authority beyond the public health agency for approval or dissemination, or directly to the public.

Local agencies: Includes all local governmental agencies (e.g., city/county).

Method of delivery: The media type used to disseminate the message to the public, e.g. website posting, press release, public information line fact sheet. Data collection for this element includes the following categories:

- Print media release refers to any communication that is disseminated through printed material such as newspapers, magazines, direct mail, signs and billboards.
- Radio
- Spokesperson refers to any message delivered through an appearance on Television news release, at a conference, community meeting, or any other in-person appearance (whether delivered by health department personnel, spokesperson, or news anchor).
- Web release refers to any publication or posting of a message on a public website.
- Other captures any alternative delivery method.

Populations with Special Needs: Includes those groups of individuals with specific needs including, but not limited to, people with disabilities, people with serious mental illness, the non-English speaking, children, and the elderly.

Private sector partners: Non-governmental agencies run by private individuals or groups, usually as a means of enterprise for profit, and is not controlled by the state (e.g., businesses, hospitals, media, universities, volunteer health professionals).

Public sector partners: Agencies controlled by national, state or provincial, and local governments (e.g., agricultural agency, education, emergency management, Emergency Medical Services, environmental agency, fire department, Indian Health Services, law enforcement, National Guard).

State agencies: Includes all state governmental agencies.

Tribal agencies: Includes all tribal governmental agencies.

Voluntary sector partners: Non-profit, non-governmental agencies formed to serve some public or mutual benefit. These partners usually fall into one of five categories: foundations, charities, religious organizations, professional or trade organizations, and social welfare organizations (e.g., American Red Cross, community foundations, American Medical Association, churches).

[Link to the Department of Homeland Security’s Target Capabilities List \(TCL\).](#)

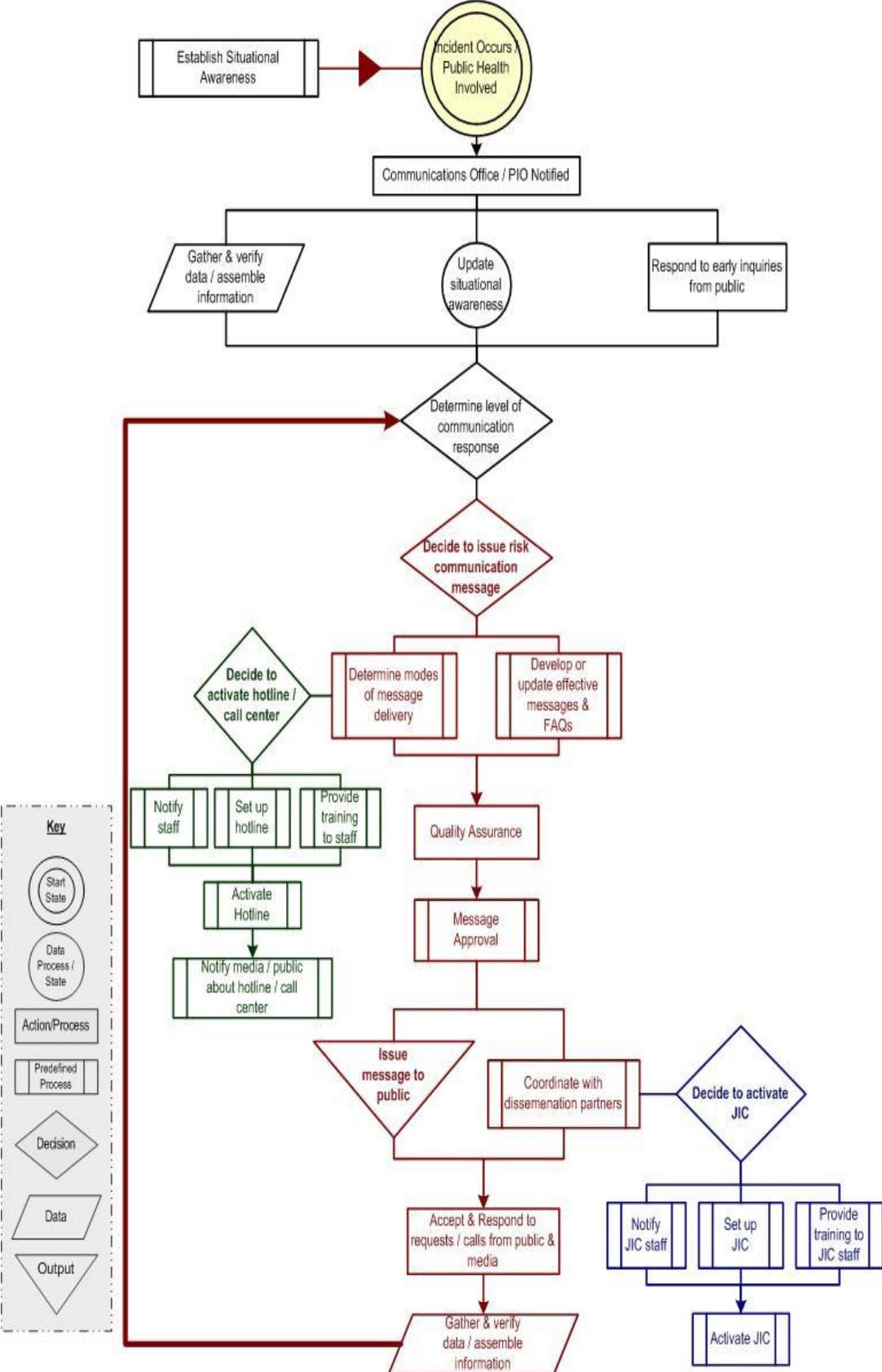
This PHEP capability draws upon a subset of the activities covered under the TCL:

- EPIW

Process Map

The process map (Figure 2) was developed by the CERC Measurement Subgroup to illustrate critical programmatic activities. While several activities (i.e., activate joint information center) are displayed on the map, it is recognized that not all health departments exert full control and / or authority over such activities. However, these activities are considered critical components to the process and are included accordingly.

Figure 5.1. Emergency Public Information and Warning



Emergency Public Information and Warning Performance Measure

Table 5.1. EPIW – Public Message Dissemination

EPIW - Public Message Dissemination	Time to issue a risk communication message for dissemination to the public
Measurement Specifications	<p>Start time: Date and time that a <u>designated official</u> requested that the first risk communication message be developed.</p> <p>Stop time: Date and time that a <u>designated official</u> approved the first risk communication message for dissemination.</p>
Intent	<p>To inform decision making by the public and reduce uncertainty before, during, and after a public health emergency, awardees must demonstrate the ability to develop, coordinate, and disseminate timely information to the public about the public health emergency.</p> <p>It is critical that a public health agency be able to disseminate the first risk communication message to the public during a public health emergency to ensure that the public is first made aware of the incident and necessary actions in a timely manner and from a credible source (see http://emergency.cdc.gov/cerc/pdf/CERC-SEPT02.pdf for additional information).</p> <p>This performance measure links to EPIW Function 5: Issue public information, alerts, warnings, and notifications.</p>
Reporting Criteria	<p>Reporting on this performance measure is OPTIONAL for awardees.</p> <p>This performance measure requires self-reported data.</p> <p>The required data collected must fall within BP11: August 10, 2011 – August 9, 2012. Awardees may report data from multiple exercises and / or real <u>incidents</u>. However, awardees are required to report data from their health department on their one best demonstration of the development and dissemination of a risk communication message that occurred during BP11. This demonstration must have occurred during one of the following:</p> <ul style="list-style-type: none"> ▪ <u>Drill</u> ▪ <u>FE</u> ▪ <u>FSE</u> ▪ Real <u>incident</u> <p>This performance measure pertains specifically to the first EPIW message disseminated in the context of an emergency. The focus is on the first measure because research has shown that the first message is critical as it sets the stage for comparison of all subsequent messages on a topic.</p>

Reported Data Elements

The following information will be collected in support of the performance measure:

1. Total number of operations-based exercises (drill, FE or FSE only) occurring between 08/10/2011 and 08/09/2012 that tested the process of risk communication message dissemination to the public
2. Total number of real incidents occurring between 08/10/2011 and 08/09/2012 that involved risk communication message dissemination to the public

For each example of the development of a risk communication message for dissemination to the public being reported:

3. Was the message dissemination part of a drill, FE, FSE or real incident? (select one)
 4. If reporting data from a real incident: What was the incident type when the first message was approved for dissemination: (select one)
 - Type 4
 - Type 3
 - Type 2
 - Type 1
 5. Type of real incident or event / incident upon which exercise scenario was based (select all that apply)
 - Biological outbreak / exposure – specify type (e.g., measles, anthrax, etc.)
 - Chemical exposure – specify type
 - Infrastructure (e.g., power grid failure)
 - Mass casualty scenario
 - Mutual aid incident
 - Natural disaster – specify type (e.g., hurricane, tornado, ice storm)
 - Nuclear incident
 - Planned event
 - Radiological incident
 - Strategic National Stockpile exercise/response
 - Transportation disaster
 - Other – specify [text box]
 6. Number of federal and state agencies involved in the exercise or real incident. (Include your health department if awardee is a state agency)
 7. Number of local or tribal agencies involved in the exercise or real incident. (Include your health department if awardee is a directly-funded city)
 8. Did your agency act in a lead or an assisting role? (select one)
 9. Did you partner with any other private, public, or voluntary sector agencies during this exercise or real incident?
[Yes – Private Sector / Yes – Public Sector / Yes – Voluntary Sector / No]
(Can select No, or one or more Yes options)
 - 9a. If responded Yes – Private Sector:
What was the total number of Private Sector partners?
 - 9b. If responded Yes – Public Sector:
What was the total number of Public Sector partners?
 - 9c. If responded Yes – Voluntary Sector:
What was the total number of Voluntary Sector partners?
 10. Was the message developed from a pre-drafted template? [Yes / No]
 11. Was the message written either at or below a 6th grade reading level? [Yes /
-

No / Not Assessed]

12. Who was the intended audience of the message? (General Population, Population(s) with special needs – specify)
13. In which language(s) was the message developed? (List all)
14. Who was the immediate recipient of the approved message? (select all that apply)
15. Start Time (see measurement specifications above)
16. Stop Time (see measurement specifications above)
17. If reporting data from a real incident: approximate date and time the message was disseminated to the public.
18. Does this exercise or incident represent the best demonstration of your agency's capability to develop an EPIW message? [Yes / No]
19. Please select the reason why this exercise or incident was chosen as the best demonstration of the development of a risk communication message for dissemination to the public (select the primary / most significant reason)
 - Context of the Public Health Response – Potential for substantial public health impact
 - Real Incident
 - Agency was the lead responder
 - Complexity of the demonstration / response – Scale of the demonstration / response required staffing all or most of the incident management lead roles
 - Multiple partners in a coordinated demonstration / response
 - Duration of the demonstration / response
 - Required the mobilization of resources outside of the affected area
 - Quickest time
 - Only example / demonstration available
 - Other – specify
20. Was this your quickest time? (Yes/No)

**Additional
Guidance**

First EPIW message: This measure pertains specifically to the first EPIW message released in the context of an emergency. The focus is on the first measure because research has shown that first message is critical as it sets the stage for comparison of all subsequent messages on a topic. (See <http://emergency.cdc.gov/cerc/pdf/CERC-SEPT02.pdf> for additional information).

**DOMAIN SIX:
SURGE MANAGEMENT**

Surge Management Capabilities

Currently, there are no performance measures for the four capabilities: Fatality Management, Mass Care, Medical Surge, and Volunteer Management.

APPENDICES

Appendix A. Alignment of Capabilities and Performance Measures and Required Reporting

Note: Only those capabilities and functions with associated CDC-defined performance measures are included in this table.

Capability / Function	Performance Measure	Annual	Applicable to						
			50 States	DC	LAC	NYC	CHI	Territories	
Community Preparedness									
Determine risks to the health of the jurisdiction	CP: Engagement in determining risk	X	X	X	X	X	X	X	X
Build community partnerships to support health preparedness	CP: Identification of key organizations CP: Engagement in recovery planning	X	X	X	X	X	X	X	X
Coordinate training or guidance to ensure community engagement in preparedness efforts	CP: Engagement in public health emergency preparedness	X	X	X	X	X	X	X	X
Emergency Operations Coordination									
Activate public health emergency operations	EOC: Staff Assembly	X	X	X	X	X	X	X	X
	EOC: Priority Goal	X	X						
Develop incident response strategy	EOC: IAP		X	X	X	X	X	X	X
Demobilize and evaluate public health emergency operations	EOC: AAR and IP	X	X	X	X	X	X	X	X
Emergency Public Information and Warning									
Issue public information, alerts, warnings, and notifications	EPIW: Public Message Dissemination		X	X	X	X	X	X	X
Medical Countermeasure Dispensing									
ALL FUNCTIONS	MCMDD Composite Measure (DSNS)	X	Refer to MCMDD Guidance*						
Medical Materiel Management and Distribution									
ALL FUNCTIONS	MCMDD Composite Measure (DSNS)	X	Refer to MCMDD Guidance						

Capability / Function	Performance Measure	Annual	Applicable to					
			50 States	DC	LAC	NYC	CHI	Territories
Public Health Laboratory Testing								
Manage laboratory activities	Lab [Bio]: Communication between awardee and sentinel clinical labs		X					
	Lab [Bio & Chem]: Laboratorian Reporting		X	X	X	X		
Perform sample management	Lab [Bio]: Sample quality - first responders	X	X					
	Lab [Bio]: Specimen quality - sentinel clinical labs	X	X					
	Lab [Chem]: Sample collection, packing and shipping (SCPaS)	X	Level 1, 2, and 3					
Conduct testing and analysis for routine and surge capacity	Lab [Bio]: Proficiency Testing	X	X	X	X	X		
	Lab [Chem]: Proficiency Testing - Additional Methods	X	Level 1 – Required; Level 2 - Optional					
	Lab [Chem]: Proficiency Testing - Core Methods	X	Level 1 and 2 labs are expected to participate					
	Lab [Chem]: PopPT	X	Level 1 and 2 labs only					
	Lab [Chem]: Surge Capacity Exercise	X	Level 1 labs only					
Support public health investigations	Emergency Contact Drill - CDC to Epi to Lab [Bio or Chem]	X	X	X	X	X		
	Emergency Contact Drill - CDC to Lab [Bio or Chem] to Epi	X	X	X	X	X		

Capability / Function	Performance Measure	Annual	Applicable to					
			50 States	DC	LAC	NYC	CHI	Territories
Report results	Lab [Bio & Chem]: Notification to Partners	X	X	X	X	X - BIO		
	Lab [Bio]: Notification Drill Associated with PT							
Public Health Surveillance and Epidemiological Investigation								
Conduct public health surveillance and detection	SURV: Disease Reporting	X	X	X		X		
Conduct public health and epidemiological investigation	EI: Exposure Investigation Reports	X	X	X	X	X	X	X
	EI: Exposure Reports with Minimal Elements	X	X	X	X	X	X	X
	EI: Outbreak Investigation Reports	X	X	X	X	X	X	X
	EI: Outbreak Reports with Minimal Elements	X	X	X	X	X	X	X
Recommend, monitor, and analyze mitigation actions	SURV: Disease Control	X	X	X		X		

X -The Division of State and Local Readiness will be collecting this data.

X – Bio -Only the biological lab needs to report this data

X – Chem – Only the chemical lab needs to report

* The Medical Countermeasure Distribution and Dispensing (MCMDD) Composite Measure Guide can be accessed and downloaded from the SNS Extranet site (www.bt.cdc.gov/stockpile/extranet) and the SNS SharePoint site (www.orau.gov/sns).

Appendix B. Sampling Strategy of Counties: Rationale and Methodology

Following is an overview of the sampling strategy for the Community Preparedness (CP) and Public Health Surveillance & Epidemiological Investigation (SURV – EI) performance measures.

To facilitate reporting of select performance measure data in Budget Period 11 (BP 11), CDC has selected a random, stratified sample of counties in each of the 50 states. Lists of these counties will be provided to state PHEP awardees, who will use those lists to determine how data are collected and reported for the CP and (SURV – EI) performance measures. For the CP measures, awardees are requested to collect data from the largest health department in each selected county. For the SURV – EI measures, awardees are requested to collect case, outbreak and exposure data from each selected county, irrespective of which local health department reports or has primary responsibility for the case. The following provides a brief rationale and methodology for CDC’s sampling strategy .

Rationale and Methodology for the Sampling Strategy

BP11 is the first period of performance in the new PHEP cooperative agreement requiring systematic collection of performance measure data at the local level. Balancing CDC’s need to assess performance in core public health areas such as surveillance and epidemiological investigations has been the imperative to keep reporting burden on local health departments (LHDs) – and awardees –manageable. Achieving this balance has been challenging. One guiding principle has been the notion of sampling. Sampling permits awardees to aggregate data from a select subset of reporting entities as opposed to all of them, thereby reducing the burden of aggregation and reporting on them. While awardees are *encouraged* to collect data from all their health departments, sampling ensures that they are not required to compile, aggregate, and report this volume of data to CDC. Sampling also benefits CDC by preventing the agency from having to analyze data from nearly 3,000 health departments.

In developing the sampling strategy, CDC weighed a number of options. Initially, CDC focused on sampling from the universe of LHDs, only to find that states with a high number of health departments would unduly shoulder significant burden in reporting performance measure data. Other challenges also appeared. The initial impulse to identify only those (limited number of) LHDs that received PHEP funds in areas such as CP or SURV - EI was countered by the notion that performance measures data for both those capabilities must be reported per the PHEP funding opportunity announcement. “Following the money,” while appropriate for accountability, ran counter to programmatic requirements that these measures be reported – for the most part by all awardees. A final, technical consideration was also at play, namely, the idea of a “representative sample” of LHDs, particularly if such a sample is to be drawn on a state-by-state basis. Although a complex, multistage, stratified sample would have allowed comparisons within and across states in terms of local capabilities as well as provided a national estimate, it was decided that this type of sample would be too burdensome on local, state, and federal agencies, and unrealistic as a first step toward collecting performance data from LHDs. Under such a scenario, a new sample of LHDs would have to be drawn **for each awardee** every single year of the PHEP grant cycle. This was determined by Division of State and Local Readiness (DSLRL) leadership to be too onerous for awardees.

Sampling Strategy – Details and Method

For the SURV - EI and the CP Performance Measures, the objective of the local sampling strategy is efficiency. The intent is to capture a population large enough to generate analyzable local data while minimizing the number of LHDs that would need to be in the sample. One additional objective is to include in the sample at least one health department that serves large, medium-large, medium-small, and small populations. Finally, to minimize burden and complexity, CDC’s intent was to generate a single sample for all performance measures that required using a sample of LHDs. While admittedly not truly representative of the local health agencies in a state, the approach outlined below should provide sufficient information on LHDs while minimizing the data collection burden.

CDC initially planned on using the National Association of County and City Health Officials’ (NACCHO) list of LHDs from which to draw a sample of LHDs. After discussions with NACCHO and significant internal deliberations, CDC decided to use **counties as the population unit** from which to select the local sample. Once the decision was made to use counties as the sampling frame, the task was

to create the most efficient sample given the parameters noted above. To do so, CDC devised the following methodology:

1. A medical officer reviewed the *MMWR Summary of Notifiable Diseases, United States, 2009* and, for every state, identified the reportable infectious diseases that typically **may** lead to an investigation and report.
2. For every state, CDC ranked the counties by population size, from largest to smallest.
3. CDC then calculated the proportion of a state's population residing in each county and applied that proportion to the total number of notifiable diseases (as modified by step 1 above) in each state, thus giving a very rough estimate of how many cases of notifiable diseases might occur in each county.³⁸
4. For every state, CDC then created quartiles from the population-ranked counties.
5. After experimenting with a number of population thresholds (i.e., the percent of the state's population that would need to be included in the sample to expect a reasonable number of reportable illnesses), it was decided that CDC would need to select enough counties to capture at least 25% of a state's population.³⁹
6. Starting with the quartile that contained the largest counties, CDC selected the first county in each quartile (i.e., the largest county in the quartile) until the population threshold of 25% or greater was met.
7. In some cases, the largest county exceeded 25% of a state's population. In such a case, a county from the remaining three quartiles was selected to ensure representation from all county sizes.
8. In this way, the 25% population threshold was obtained most efficiently, while maintaining representation from each quartile.
9. Generally, this process led to 8-12 counties being selected from each state.
10. As noted above, for the SURV - EI performance measures, it does not matter if one or more LHDs operate in the county. If that county is selected for the sample, the data are aggregated up with the other counties in the sample, irrespective of exactly which LHD had primary responsibility for a case.

CDC determined that this same sample of counties could be used for the CP performance measures as for the SURV - EI measures. There is, however, one important difference: because one county could have multiple LHDs the potential burden could be substantial, especially in counties with several LHDs. Therefore, if two or more health departments serve the same county, CDC asks that the awardee report CP performance measure data from only the **largest** LHD in that county. Conversely, if a regional entity covers the county that was selected, the awardee is asked to provide data on the CP performance measures for that regional entity.

Special Consideration for Certain Jurisdictions

Los Angeles County, Chicago, New York City and Washington, DC: CDC is not sampling within directly funded localities. For the SURV – EI performance measures, report all cases as described in the Performance Measure Guidance; for the CP performance measure, report all efforts to build partnerships as described in the Performance Measure Guidance.

U.S. territories and freely associated states: (American Samoa, Guam, U.S. Virgin Islands, Northern Mariana Islands, Puerto Rico, the Federated States of Micronesia, the Republic of the Marshall Islands, and Republic of Palau). For EI and CP performance measures, report data as described in the Performance Measure Guidance. SURV measures do not apply to these awardees.

Appendix C: Best Demonstration

³⁸ CDC recognizes that the assumption that cases are equally distributed across a state based on the size of the county is not realistic. However, this simplifying assumption was necessary to draw the sample as expeditiously as possible.

³⁹ For example, to capture 50% of the population would require approximately an increase of 150% of counties while yielding only 65% more cases. This population threshold was considered inefficient for all but two states (in those two states, the addition of one county yielded a significant increase in cases).

Best Demonstration of a Capability

For the EOC and EPIW performance measures, awardees are strongly encouraged to submit performance measure data on multiple exercises and real incidents that occur during BP11 (August 9, 2011, to August 10, 2012). However, awardees are **required** to submit performance measure data based on their one best demonstration of that capability. Awardees are requested to nominate their most comprehensive or challenging example of performing the capability, provided the methods meet the specifications and criteria outlined for the measure. To assist awardees in determining their best demonstration of the capability, CDC has identified the following decision-making elements:

- Scenario-based execution of tasks and activities within an emergency operations plan;
- Conducted with multiple partners at the local, state, regional, or national levels;
- Includes collaboration, cooperation, and interactive decision-making;
- Conducted under complex conditions such as high-stress and real-time constraints of an actual incident;
- Conducted during a comprehensive exercise or response that allows awardees to collect data on many if not all of the performance measures for a given capability; and
- May or may not be the quickest time demonstrated for the particular measure.

CDC recognizes the need for flexibility in identifying what is considered a best demonstration of the capability. The examples on the following page show how two hypothetical awardees were able to provide a best demonstration of reporting requirements as outlined the exhibit below.

Exhibit: Examples of Best Demonstration

Example 1:

- In November 2011, Awardee A conducted a mass-vaccine dispensing exercise that simulated a response to a pandemic influenza outbreak.
- The exercise was conducted in coordination with numerous local health departments.
- Given that the scenario for the incident was a pandemic flu outbreak, Awardee A used the exercise to test their ability to develop and approve a risk communication message to affected populations. Awardee A also simulated a second operational period and completed a written Incident Action Plan (IAP) for that ops period.
- Following the exercise, Awardee A drafted an After Action Report and Improvement Plan.
- Through this exercise, Awardee A met the requirements, and collected and reported data, for the Incident Management measures focusing on the IAP and AAR and IP, as well as the EPIW performance measure.
- Since the exercise was conducted during normal business hours and did not require unannounced staff notification or unannounced and immediate staff assembly, Awardee A was not able to report data from this exercise for the staff notification and staff assembly performance measures.

Example 2:

- In February 2012, Awardee B responded to a chemical spill on a highway that occurred during a busy holiday weekend.
- Awardee B notified and immediately assembled public health staff with IM functional responsibilities to respond to the incident.
- Response required coordination with other state agencies as well as hospitals and emergency medical services.
- Site monitoring for potentially harmful substances was initiated and required Awardee B to disseminate timely information to the public about potential risks.
- Due to the time required to clean and assess the site, the incident spanned multiple operational periods and therefore Awardee B developed a written IAP before the second operational period.
- Awardee B finalized an AAR and IP following the incident.
- Awardee B was able to capture required data elements during the incident and used them to report on all four EOC performance measures as well as the EPIW performance measure.