Appendix B: Explanation of Fact Sheet Data Points

The data points that appear in the national and individual fact sheets are included below with an explanation of their significance.

Public Health Emergency Preparedness Investments

CDC has identified 15 public health preparedness capabilities as the basis for state and local public health preparedness. Each of the public health capabilities identifies priority resource elements that contribute to routine public health activities and essential public health services, as well as preparedness and response functions. CDC prioritized these into two tiers, with an emphasis on those that provide a strong basic foundation for public health preparedness (Tier 1). PHEP awardees are encouraged to develop the Tier 1 capabilities prior to significantly investing in Tier 2 public health preparedness capabilities. The 15 public health preparedness capabilities are noted below (grouped in their corresponding domains):[8]

Biosurveillance

- Public Health Laboratory Testing (Tier 1)
- Public Health Surveillance and Epidemiological Investigation (Tier 1)

Community Resilience

- Community Preparedness (Tier 1)
- Community Recovery (Tier 2)

Countermeasures and Mitigation

- Medical Countermeasure Dispensing (Tier 1)
- Medical Materiel Management and Distribution (Tier 1)
- Non-Pharmaceutical Interventions (Tier 2)
- Responder Safety and Health (Tier 2)

Incident Management

- Emergency Operations Coordination (Tier 1)

Information Management

- Emergency Public Information and Warning (Tier 1)
- Information Sharing (Tier 1)

Surge Management

- Fatality Management (Tier 2)
- Mass Care (Tier 2)
- Medical Surge (Tier 2)
- Volunteer Management (Tier 2)

The fact sheets present information on the public health preparedness capabilities in which awardees are making their largest reported Public Health Emergency Preparedness (PHEP) cooperative agreement investments. Note that these investments include federal PHEP funds only and do not include any additional funds that may be invested in state and local preparedness activities.

[8] For more information about the public health preparedness capabilities, visit http://www.cdc.gov/phpr/capabilities/index.htm.

Biological Laboratory Testing Performance Indicators: LRN-B

The public health laboratory testing capability is the ability to conduct rapid detection, characterization, confirmatory testing, data reporting, investigative support, and laboratory networking to address actual or potential exposure to all hazards. Because the information provided by these laboratories is essential for response to public health threats, these resources play a critical role in emergency response planning and activities.

CDC manages the Laboratory Response Network (LRN), a group of local, state, federal, and international laboratories. CDC funds a subset of LRN laboratories through the PHEP cooperative agreement. The funding is provided to the U.S. states and four localities (Chicago, Los Angeles County, New York City, and Washington, D.C.), enabling these public health laboratories to establish and maintain the capability to respond to biological threats and emerging infectious disease events. (The laboratory located in Chicago is operated by the state of Illinois.) The LRN is not limited to laboratories that receive PHEP funding. Other laboratories that participate include state and locally funded public health laboratories as well as federal, military, international, agricultural, veterinary, food, and environmental testing laboratories. LRN provides a critical laboratory infrastructure to detect, characterize, and communicate about eminent threats to public health, decreasing the time needed to begin the response to an intentional act or naturally occurring outbreak.

Number of LRN-B labs

LRN biological (LRN-B) laboratories are designated as national, reference, or sentinel laboratories. National laboratories, including those at CDC, have the most advanced capabilities and are responsible for specialized strain characterizations and bioforensics. Reference laboratories, primarily local, county, and state public health laboratories, perform tests to detect and confirm the presence of a threat agent. Sentinel laboratories are commercial, private, and hospital-based laboratories that test clinical specimens to either rule out suspicion of a biological threat agent or determine whether to ship to reference or national laboratories for further testing.

The fact sheets present the total number of LRN national and reference laboratories supported by the LRN program office at CDC that have selected to test for one or more biological threat agents. For some states and localities, the total number of reference laboratories consists exclusively of public health laboratories, as this is the only type of laboratory that is a part of the LRN for these states. In contrast, other states and localities have both public health and other types of laboratories (federal, military, agricultural, veterinary, food, and environmental testing laboratories) that are a part of the LRN. These other laboratories may not participate in the state's preparedness mission but may be involved in the overall federal preparedness mission. For these states and localities, both public health and other laboratories are included in the total. The fact sheets exclude the number of sentinel laboratories in each state.

Proportion of LRN-B proficiency tests passed

The LRN evaluates laboratory capabilities through proficiency testing. LRN-B reference and/or national biological laboratories must demonstrate the ability to receive, test, and report on one or more suspected biological agents from unknown samples. Proficiency test results are presented in the fact sheets as the proportion of proficiency tests passed to the total number of proficiency tests participated in by LRN-B reference and/or national laboratories each year.

If a laboratory is unable to successfully test for an agent within a specified period of time and submit results, then the laboratory will not pass the proficiency test. If a laboratory fails a proficiency test, it is required to go through remediation proficiency testing to ensure that any problems are corrected. If a laboratory does not pass remediation testing, then it can no longer perform testing in the LRN-B for that specific agent. In states and localities with public health and other types of LRN-B laboratories (federal, military, agricultural, veterinary, food, and environmental testing laboratories) participating in proficiency testing, all proficiency test results are presented. The results include first-round proficiency tests only; follow-up remediation tests are not included in the totals.

Due to decreases in LRN program funding the number of proficiency tests offered to the laboratories has decreased since 2012. The reduced number of proficiency tests participated in and passed by LRN-B laboratories does not reflect decreased laboratory performance. If a laboratory did not participate in proficiency testing, the result is "Did not participate." Laboratories may not have participated in proficiency testing due to not having the ability to test for the specific agents or being down for scheduled maintenance during the unannounced proficiency test.

Biological Laboratory Testing Performance Indicators: PulseNet

CDC coordinates the PulseNet Network, which consists of local, state, and federal public health and food regulatory agency laboratories. PulseNet plays a vital role in monitoring and investigating foodborne illness outbreaks, strengthening national efforts to combat infectious disease outbreaks.

- Number of PulseNet labs
- Percentage of *E.coli*-positive tests analyzed and uploaded into PulseNet national database within 4 working days
- Percentage of *Listeria*-positive tests analyzed and uploaded into PulseNet national database within 4 working days

States and select localities must be able to detect and determine the extent and scope of potential outbreaks and to minimize their impacts. The intent of these performance indicators is to determine if a laboratory can rapidly receive, identify, and report disease-causing bacteria within 4 working days of receiving the samples. Laboratories in the PulseNet network use CDC's pulsed-field gel electrophoresis (PFGE) protocols to rapidly identify specific strains of *Escherichia coli* O157:H7 (*E. coli*) and *Listeria monocytogenes* (*L. monocytogenes*). *L. monocytogenes* is referred to as "*Listeria*" in the fact sheets. The percentages in the report are limited to human isolates. For all samples on

which a state or locality performs tests, the target for this indicator is to submit 90% of tests to the PulseNet national databases within 4 working days. This timeframe allows states, Washington, D.C., New York City, and Los Angeles County to demonstrate their ability to analyze samples and submit results in a timely manner to the PulseNet database.

If a state or locality did not receive samples or did not perform testing, "N/A" is listed in the fact sheets for the percentage of "tests analyzed and uploaded into PulseNet national database within 4 working days." The laboratory located in Chicago is operated by the state of Illinois. Therefore, no data for these indicators are presented in the Chicago fact sheet.

Chemical Laboratory Testing Performance Indicators

CDC funds, through the PHEP cooperative agreement, the U.S. states, four localities, and eight insular areas to establish and maintain LRN chemical (LRN-C) public health laboratories. LRN-C laboratories have capabilities for identifying and rapidly responding if the public is exposed to chemical agents.

Number of LRN-C labs

There are three levels of LRN-C labs. The number of LRN-C labs is limited to those directly funded by the PHEP cooperative agreement (for example, state public health lab).

Level 1 laboratories are national surge capacity laboratories that maintain the capabilities of Level 2 and Level 3 laboratories, can test for an expanded number of agents using highly automated analysis methods, maintain an adequate supply of materials to analyze 1,000 patient samples for each method, and can operate 24/7 for an extended period of time.

Level 2 laboratories maintain the capabilities of Level 3 laboratories, have, or are in the process of obtaining, the capability to test for a limited panel of toxic chemical agents, and stock materials and supplies for the analysis of at least 500 patient samples for each qualified analysis method.

Level 3 laboratories work with hospitals, poison control centers, and first responders within their jurisdictions to maintain competency in clinical specimen collection, storage, and shipment to more advanced LRN-C laboratories for testing.

The fact sheets present the number of LRN-C labs by level.

Proportion of core chemical agent detection methods demonstrated by Level 1 and/or Level 2 labs

Analytical testing using LRN methods can help determine the scope of an incident, identify who does/does not need long-term treatment, assist with non-emergency medical guidance, and help law enforcement officials determine the origin of the agent. Level 1 and Level 2 laboratories undergo proficiency testing to demonstrate that they can use these methods to (1) rapidly detect

and accurately measure chemical agents that can cause severe health effects and (2) report patient results consistent with Clinical Laboratory Improvement Amendments (CLIA) quality assurance requirements. To be fully qualified for a method both characterization and a successful proficiency testing challenge are required.

In 2012, CDC identified nine core methods for detecting and measuring chemical agents and conducted testing to determine LRN-C labs' proficiency in these methods. There were nine core methods in 2011 and eight core methods in 2010. The core methods are significant as they use technical fundamentals that provide the foundation of chemical analysis capabilities. The fact sheets present final proficiency testing results as the proportion of these core methods successfully demonstrated by the laboratories in each state or locality to the total number of core methods identified by CDC. However, it should be noted that the states and localities with Level 1 and Level 2 laboratories that are not proficient in all core methods may have completed extensive work in the two steps that precede proficiency testing: training and validation in the core methods.

Number of additional chemical agent detection methods demonstrated by Level 1 and/or Level 2 labs

In addition to proficiency in core methods, certain LRN-C laboratories demonstrate proficiency in additional methods. These methods build upon the foundation established by the core methods - providing modifications to core techniques - which allows laboratories to test for additional agents, thereby expanding their testing capabilities. Level 1 laboratories are required to gain proficiency in these additional methods; Level 2 labs may choose to pursue additional methods but availability may be limited based on network need and individual laboratory capability.

From 2011 to 2013, CDC identified four additional methods for Level 1 laboratories and up to three additional methods for Level 2 laboratories. A successful demonstration of these methods during testing indicates ongoing proficiency. The figures presented in the fact sheets represent the number of additional methods for which Level 1 and Level 2 laboratories in the state or locality demonstrated proficiency. However, it should be noted that while laboratories may not have demonstrated proficiency in these additional methods, they may have trained and undergone validation for additional methods, which are steps that precede proficiency testing.

Result of LRN exercise to collect, package, and ship samples

This exercise evaluates LRN-C labs' ability to collect relevant samples for clinical chemical analysis and ship those samples in compliance with International Air Transport Association regulations. At least one laboratory located in each PHEP-funded state or locality should participate and pass. For states or localities with multiple laboratories, all results are reported.

The fact sheets reflect the outcome of the exercise. If the awardee passed the drill, the result is "Passed." If the awardee failed the drill, the result is "Did not pass." For states or localities with multiple laboratories, the results are listed by lab level.

Proportion of agents correctly identified and quantified from unknown samples during unannounced proficiency testing

This LRN-C emergency response pop proficiency test (PopPT) exercise tests Level 1 and Level 2 laboratories' emergency response capabilities focusing on a laboratory's ability to detect, identify, and quantify unknown agents. This exercise also tests the laboratory's emergency contact process and its ability to report results. Laboratories participating in the PopPT exercise are called the day before the exercise, are sent a minimum of 10 unknown samples, and must test these samples within a certain number of hours (depending on the methods needed).

The fact sheets present the results of the PopPT exercise as the proportion of the total number of agents detected by Level 1 and/or Level 2 labs to the total number of unknown samples in the exercise. If one exercise occurred during the year, the fact sheets present the results of that exercise. If more than one exercise occurred during the year, the fact sheets present the combined results of all of the exercises that occurred.

To participate in a PopPT exercise, the laboratory must have attained a "Qualified" status for the method(s). To attain "Qualified" status, a laboratory must have completed training and a validation exercise and passed at least one scheduled PT exercise. To maintain this qualified status, a laboratory must pass two out of three Proficiency Tests per year. Level 2 laboratories that have not attained "Qualified" status are listed in the fact sheet as "Not eligible." Level 2 laboratories that were eligible to take part in the exercise but were unable to participate and had a reason for not participating approved by CDC are listed as "Did not participate." Level 3 laboratories are listed in the fact sheets as "N/A."

Emergency Operations Coordination Performance Indicators

The emergency operations coordination (EOC) capability is essential to direct and coordinate the implementation of other public health preparedness capabilities during a public health emergency. This capability 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. The EOC capability 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).

Number of minutes for public health staff with incident management lead roles to report for immediate duty

This performance indicator demonstrates the ability to immediately assemble public health staff with incident management lead roles to ensure a timely response to an incident. Specifically, this indicator captures an agency's ability to assemble key decision-makers who are responsible for leading and managing a response. In 2011 and 2012, this indicator was slightly modified to

specify "lead" incident management roles. The response time was determined from the time that a designated official began notifying staff to report for immediate duty to cover activated incident management lead roles to the time that the last staff person notified to cover an activated incident management lead role reported for immediate duty. This exercise must have occurred during a drill, a functional exercise, a full-scale exercise, or a real incident. In addition, the staff assembly must have been unannounced and immediate.

For 2011 and 2012, the ability to assemble staff covering activated public health agency incident management lead roles in a timely manner was a Department of Health and Human Services Priority Goal. The performance target of 60 minutes or less was established for states only. "No reportable time" is listed in the fact sheets for states that did not provide verifiable documentation that supported meeting the intent of the performance measure. For 2013, the performance target of 60 minutes does not apply; however, state data reflect the quickest reported time. For the localities and insular areas, the Priority Goal target of 60 minutes or less does not apply. Therefore, their data may not reflect the quickest time but instead may reflect a more complex or comprehensive incident. If an awardee did not submit data for this indicator, a dash is listed in the fact sheet.

Prepared an after-action report and improvement plan following a real incident or simulated response

This performance indicator demonstrates the awardees' ability to analyze real or simulated response actions, describe needed improvements, and prepare a plan for making improvements within an acceptable timeframe. The after-action report (AAR) and improvement plan (IP) must have been drafted as a result of an exercise (tabletop exercise, drill, functional exercise, or full-scale exercise) or real incident.

"Yes" is listed in the fact sheets for awardees that completed a draft AAR and IP as a result of an exercise or real incident. If the awardee did not have an exercise or real incident that resulted in the completion of a draft AAR and IP, the result is "No." If an awardee did not submit data for this indicator, a dash is listed in the fact sheet.

Administrative Preparedness

The 2009 H1N1 influenza pandemic highlighted the need to establish efficient and effective methods for distributing emergency response funds from the federal government to state and local health departments where a majority of response activities are managed. This pandemic resulted in the public health preparedness community examining administrative preparedness barriers more closely. Administrative preparedness is the process of ensuring that fiscal and administrative authorities and practices that govern funding, procurement, contracting, hiring, and legal capabilities necessary to mitigate, respond, and recover from public health threats and emergencies can be accelerated, modified, streamlined, and accountably managed. The goal of administrative preparedness is advance planning to remove administrative barriers that prevent

timely distribution and utilization of funds during a public health emergency for the purpose for which they are intended, that being to save lives, reduce morbidity and minimize disruption of the public health and medical system. These processes, a subset of which are found below, include emergency procurement, contracting, and hiring processes and define how they differ from normal operations. If an awardee did not submit data for these data points or were not applicable, a dash is listed in the fact sheet.

Implemented all or part of administrative preparedness plan

CDC has developed standards and requirements for administrative and fiscal processes, which state and local health departments have now incorporated into their incident action plans. PHEP awardees must develop administrative preparedness plans to effectively receive, obligate, and account for PHEP funds.

Received legal authority to spend emergency funds

PHEP awardees are also required to establish procedures for efficient allocation of emergency funds to local health departments as well as reporting and monitoring methods to ensure accountability.

Reduced legal conflicts to implementing emergency use authorizations (EUAs)

PHEP awardees develop waivers or similar legal processes to minimize the potential conflicts between emergency use authorizations (EUA) and state-based pharmaceutical, prescribing, labeling, and other drug-related laws.

Technical Assistance Review (TAR) Scores

CDC's Strategic National Stockpile (SNS) is a repository of antibiotics, chemical antidotes, antitoxins, vaccines, antiviral drugs, and other life-saving medical supplies that are placed in strategic locations around the nation. These assets are designed to supplement and resupply state and local public health agencies in the event of a large-scale public health emergency. All U.S. states, 72 Cities Readiness Initiative (CRI) metropolitan statistical areas (MSA) (including the 4 directly funded localities), and the 8 insular areas funded by the PHEP cooperative agreement have plans for receiving, staging, storing, distributing, and dispensing medical assets from CDC's SNS. CDC conducts annual technical assistance reviews (TARs) to assess these plans to ensure continued readiness.

Areas of assessment for the TAR focus on key elements that are regarded as either critical or important planning steps within a variety of functions. The 13 functions are the following:

Developing a Plan with SNS Elements. A comprehensive, written plan is essential to facilitate the receipt, distribution, and dispensing of SNS assets quickly and efficiently. This plan should be incorporated as part of a state's comprehensive emergency operations plan.

Management of SNS. The way a state, region, or community manages its response to a public health emergency is considered a program management and command-and-control function. Command-and-control is how political leadership, emergency management, public health, law enforcement, and other groups coordinate their response to an emergency.

Requesting SNS. The decision to deploy SNS assets will be a collaborative effort among local, state, and federal officials. It will start at a local level when officials identify a potential or actual situation they believe has the potential to threaten the health of their community. SNS assets are requested from CDC by the affected state's governor (or the governor's designee).

Communications Plan (Tactical). The availability of robust and redundant communication systems is critical to coordinating response functions during an emergency. Effective and timely communications between emergency response staffs, operation centers, receiving sites, points of dispensing, and hospitals will be needed to meet and resolve the demands of a mass distribution and dispensing emergency. The choice of communication support devices (e.g. two-way radios, satellite telephones) and support of technologies (e.g. non-telephone based internet, e-mail and web-based communication systems, broad notification systems) used to tether state, regional, and local networks will be key elements in meeting the need for timely flow of assets to distribution points, dispensing centers, and health care facilities.

Public Information and Communication. During an emergency where medical countermeasure assets are to be dispensed to the public, effective and timely public health communications are needed to ensure the public is informed and guided to appropriate locations to receive them. The development and dissemination of effective messages, methods, and materials to inform, educate, and mobilize the public will be critical to the success of a mass dispensing effort.

Security. The security of the medical countermeasures and safety of staff involved in the receipt, distribution, and dispensing operations is essential. The arrival and transport of scarce resources will be newsworthy and may draw attention from persons unwilling to wait for the organized dispensing of prophylactic or treatment medicines. The development of a comprehensive security plan through coordination with law enforcement is essential to maintaining control and order during this period.

Receipt, Stage, and Store (States and Insular Areas). The size, location, and characteristics of warehouse facilities used to receive, stage, and store medical countermeasures are important factors that will determine the effectiveness of an emergency response. CDC has established minimum criteria for sites designated to receive, stage, and store federal assets received from the SNS. The development of distribution strategies, site-specific plans, and the assignment and training of staff will determine the ability of jurisdictions to meet the demand for distribution of assets to local populations.

Regional/Local Distribution Site (Local). The size, location, and characteristics of warehouse facilities used to receive countermeasures from the state to distribute them to the identified local population are important factors that will determine the effectiveness of an emergency response. CDC has established minimum criteria for regional and/or local sites designated to receive and distribute federal assets received from the State. The development of distribution strategies, site-specific plans, and the assignment and training of staff will determine the ability of jurisdictions to meet the demand for distribution of assets to local populations.

Inventory Management. State and local jurisdictions must possess a robust inventory management system to monitor the receipt of medical countermeasures, track their distribution, and record dispensing during a public health emergency. SNS inventory must be properly apportioned and configured in the quantities necessary for points of dispensing and health care facilities to successfully respond in an emergency.

Repackaging. Repackaging of bulk medications for public dispensing remains an SNS function that may be needed in an emergency. In the past, a significant amount of planning and preparation was required to repackage bulk oral drugs contained in the SNS before dispensing them to the public. Much of that effort is no longer necessary since the majority of oral medicines in the SNS now come in prepackaged unit-of-use regimens. However, states may still have to repackage bulk items under some circumstances.

Distribution. The distribution function refers to the physical delivery of SNS assets from the receipt, stage, and store (RSS) facility to dispensing sites, treatment centers, and regional distribution sites. States are responsible for developing distribution networks that account for challenges and barriers unique to their areas. Clear communication between RSS and local and regional planners is paramount to a good distribution plan.

Medical Countermeasure Dispensing. The SNS dispensing function was originally designed with the focus of providing initial prophylaxis to 100% of the population within 48 hours (U.S. Department of Homeland Security's Target Capabilities List performance measure for mass dispensing). Dispensing planning, however, should be flexible and scalable so that the infrastructure built for meeting this capability can be used for any incident as part of an all hazards plan.

Hospitals and Treatment Centers Coordination. A large-scale emergency event can quickly overwhelm available resources at hospitals and other acute care providers. This function stresses the need for and measures the degree of coordination among public health, emergency management, and hospitals or alternative care sites to manage and respond to materiel needs at healthcare facilities.

Training and Exercise. This function serves to highlight and document the development of emergency response training and exercise and evaluation programs that are compliant with

guidelines set forth by the Homeland Security Exercise and Evaluation Program. Emergency response exercises are intrinsic to the transition of plans to operational response.

Technical Assistance Review (TAR) Scores – States

Using a scale from 0 to 100, a CDC state TAR score of 79 or higher in 2010-11 indicated that a state had an acceptable plan to receive, distribute, and dispense medical assets from the SNS. The acceptable threshold score has increased to 89 or higher for 2011-2012 and 2012-2013.

Technical Assistance Review (TAR) Scores – Insular Areas

The island technical assistance review includes the full 13 functional areas but has a streamlined and combined focus of receipt, distribution, and dispensing of countermeasures. Using a scale from 0 to 100, a CDC score of 60 or higher indicated that the awardee had an acceptable plan to receive, distribute, and dispense countermeasures.

Technical Assistance Review (TAR) Scores – CRI Metropolitan Statistical Areas

The Cities Readiness Initiative (CRI) focuses on enhancing preparedness in the nation's metropolitan statistical areas (MSAs), where more than half of the U.S. population resides. A CRI location is a MSA composed of multiple counties based on U.S. Census Bureau data. MSAs can consist of one or more jurisdictions (e.g., counties, cities, and municipalities) and can extend across state borders. CRI TARs are conducted annually in each MSA planning jurisdiction and those scores are then combined to compute an average score for the entire MSA. In its annual review, CDC assesses local CRI plans on 12 of the 13 functions listed above (no repackaging). Using a scale from 0 to 100, a CDC CRI TAR score of 69 or higher indicates that a local jurisdiction has an acceptable plan to receive, distribute, and dispense countermeasures. The four directly funded localities of Chicago, Los Angeles County, New York City, and Washington, D.C. are also included in this local criteria.

CDC Resources Supporting Preparedness in States, Localities, and Insular Areas in 2012-2013

In addition to the activities listed above, CDC provides funding and technical assistance to help states, localities, and insular areas build public health preparedness and response capabilities. CDC provides funding to the U.S. states, four localities, and eight insular areas through the PHEP cooperative agreement. In addition to PHEP funding, CDC provides training and personnel to support awardee preparedness and response efforts.

CDC PHEP cooperative agreement funding provided

The fact sheets present the fiscal year 2012 funding CDC provided the awardee through the PHEP cooperative agreement. In addition to PHEP funding, CDC provides training and personnel to support awardee preparedness and response efforts.

CDC preparedness field staff

CDC provides preparedness support to states, localities, and territories through various field placement programs. The Epidemic Intelligence Service (EIS) program expands the epidemiology workforce through a two-year epidemiology training modeled on a traditional medical fellowship. EIS officers (epidemiologists) serve as a critical component of CDC's support of states during responses to routine public health incidents and large- scale national emergencies. Officers are assigned to CDC or to state and local health departments.

The mission of the Career Epidemiology Field Officer (CEFO) Program is to strengthen state, local, tribal, and territorial epidemiology capability for public health preparedness and response. CDC places experienced, full-time epidemiologists in state and local public health departments to enhance and build epidemiologic capacity for public health preparedness and response. (States and localities use PHEP funds to support CEFO positions.) CEFOs also serve as liaisons and consultants between CDC and public health departments as well as mentors for state and local public health department staff and EIS officers assigned to state or local health departments.

CDC's Public Health Associate Program (PHAP) and Public Health Prevention Service (PHPS) program places associates in states, tribal governments, localities, and insular areas for two years to receive hands-on, frontline experience. These field placements are designed to provide job experience and competency development for the associate as well as meet the needs of the host site. Some graduates of the PHAP program continue to work in their states once the 2-year training placement ends. CDC also employs public health advisors (PHA) who provide direct and onsite technical assistance to state and local health departments. Technical assistance ranges from program and/or grant management, strategic and emergency planning, exercise development and implementation, review of MCM readiness at state and local levels, training, and operational response during real-time incidents. The PHAs serve an integral role in providing onsite technical assistance to states to build preparedness and response readiness. The fact sheets present the total number of CDC-funded EIS officers, CEFOs, PHAPs, PHPS fellows, PHAP graduates, and PHAs working in preparedness assigned to each awardee.

CDC Emergency Management Program activities

The CDC Emergency Operations Center (EOC), managed by CDC's Division of Emergency Operations (DEO), functions as the command center for monitoring and coordinating CDC's emergency response to national and international public health threats. Both training exercises and real-event responses are managed by the EOC through the Emergency Management Program. Staffed around the clock and supported by DEO, the EOC organizes CDC subject matter experts in one location during an emergency response to centralize information exchange and to connect with response partners. The fact sheets present the number of Emergency Management Program Activities supporting awardees (activations, engagements, and exercises). Activations include a variety of activities such as initiating a preliminary assessment team, developing incident objectives and

an Incident Action Plan, activating the incident management structure and deploying personnel. Activations normally include opening the EOC. Engagements include any assistance in addressing a public health threat that is not expected to require activation. Exercises are simulated emergency situations which allow responders to practice and evaluate use of their emergency response plans.

Public health personnel who received CDC Strategic National Stockpile training

CDC's Division of the Strategic National Stockpile (DSNS) helps prepare state and local health departments to respond during an emergency when SNS assets are deployed. DSNS offers state and local planners trainings and exercises designed to prepare responders to manage SNS materials during an emergency. DSNS partners with state and local officials throughout the nation through trainings and exercises. The fact sheets present the number of public health personnel receiving SNS training for each awardee.