

Public Health Emergency Preparedness Cooperative Agreement
Budget Period 11 (2011-2012)

Medical Countermeasure Distribution and Dispensing
Composite Measure Guide

July 2011

Centers for Disease Control and Prevention
Office of Public Health Preparedness and Response
Division of Strategic National Stockpile

Table of Contents

Introduction	4
PHEP Cooperative Agreement 2011-2016	4
Medical Countermeasure Distribution and Dispensing Composite Measure	6
Computing an Annual MCMDD Composite Measure Score	7
CDC PHEP Cooperative Agreement Requirements and MCMDD Scoring	9
Technical Assistance Review	9
Applicable Jurisdictions	9
CDC PHEP Cooperative Agreement Requirements	10
Technical Assistance Review and MCMDD Composite Scoring	10
Operational-based Drills	11
Applicable Jurisdictions	11
CDC PHEP Cooperative Agreement Requirements	11
Data Submission and Drill Tools	11
Operational Drills and MCMDD Composite Scoring	12
Points of Dispensing Standards	13
Applicable Jurisdictions	13
CDC PHEP Cooperative Agreement Requirements	13
Data Submission	14
Data Elements for POD Standards	14
POD Standards and MCMDD Composite Scoring	15
Medical Countermeasure Distribution Standards	15
Applicable Jurisdictions	16
CDC PHEP Cooperative Agreement Requirements	16
Data Submission	16
Data Elements	16
Distribution Standards and MCMDD Composite Scoring	17
Medical Countermeasure Distribution Full-Scale Exercise	18
Applicable jurisdictions	18
CDC PHEP Cooperative Agreement Requirements	18
Data Elements, Performance Measures and Associated Target Metrics	19

Medical Countermeasure Distribution Exercise and MCMDD Composite Scoring	19
Medical Countermeasure Dispensing Full-Scale Exercise.....	20
Applicable jurisdictions	20
CDC PHEP Cooperative Agreement Requirements	20
Data Elements, Performance Measures and Associated Target Metrics	21
Medical Countermeasure Dispensing Exercise and MCMDD Composite Scoring	22
Summary	22
APPENDIX.....	23
Table 1: Summary of Point of Dispensing Standards	23
Table 2: Summary of Medical Countermeasure Distribution Standards	24

Introduction

The development of capabilities to rapidly distribute and dispense medical countermeasures to large populations in response to emergency remains a national priority. The bioterrorist attack of 2001, Hurricane Katrina and the H1N1 pandemic posed significant challenges to our public health infrastructure and exposed significant gaps in multi-sector coordination and response¹. In efforts to improve capacity to mitigate public health disasters and to define the current capabilities to do so, the federal government extends a wealth of financial and technical resources to state, local and territorial health departments. Despite progresses in critical areas of emergency response planning, quantifying the gains in preparedness is difficult and standard systems to validate current capabilities of public health preparedness programs are not available.

This guide is intended to serve as a supplement to the 2011-2016 PHEP Cooperative Agreement guidance and focus on the 2011-2012 (budget period 11) medical countermeasure distribution and dispensing requirements. This guidance aims to provide PHEP awardee program staff with the listing of preparedness activities and tools, the associated performance measures and data metrics and their application to the MCMDD Composite Score. Improving the understanding of the framework and scope of the MCMDD Composite Score will assist PEHP awardee areas in developing or communicating the need for realistic and thoughtful work plans to achieve the goals of demonstration of *Medical Materiel Management and Distribution* and *Medical Countermeasure Dispensing* capabilities². Specific questions regarding medical countermeasure distribution and dispensing capabilities and PHEP requirements should be directed to your state Strategic National Stockpile (SNS) coordinator, Division of Strategic National Stockpile (DSNS) program services consultant or the Division of State and Local Readiness project officer, as appropriate.

PHEP Cooperative Agreement 2011-2016

With the announcement of the new PHEP cooperative agreement funding opportunity, the Centers for Disease Control and Prevention (CDC) defined a capability-based approach to building public health preparedness standards. The development of the 15 public health preparedness capability standards and their alignment with the National Health Security Strategy³, the Department of Homeland Security's Target Capability List⁴ (TCL) and the 10 essential public health services underscores the importance of public health systems in advancing the national preparedness goals. Using a performance-based strategy, the CDC expects awardees to achieve measureable advancements and demonstrations of progress toward meeting these 15 public health capabilities over the life cycle of the 2011-2016 PHEP cooperative agreement. As part of the process of capability demonstration, PHEP awardees must meet a number of annual requirements and achieve Pandemic and All-Hazards Preparedness Act (PAHPA) benchmarks.

¹ Congressional Research Service: The Public Health and Medical Response to Disasters: Federal Authority and Funding <http://www.fas.org/sgp/crs/misc/RL33579.pdf>

² Public Health Preparedness Capabilities, http://www.cdc.gov/phpr/capabilities/Capabilities_March_2011.pdf

³ National Health Security Strategy of the United States, <http://www.phe.gov/preparedness/planning/authority/nhss/strategy/documents/nhss-final.pdf>

⁴ US DHS Target capabilities List, <http://www.fema.gov/pdf/government/training/tcl.pdf>

The Public Health Service (PHS) Act (Section 319C-1), as amended through PAHPA⁵, mandated the establishment of objective standards and evidence-based benchmarks as a means to measure the performance, progress and impact of federally funded programs. Accordingly, PHEP cooperative agreement awardees failing to meet the identified benchmarks are subject to withholding of federal program funds. Included in the list of national priorities and PAHPA benchmarks guiding the activities of the 2011-2012 PHEP performance period is the capability to receive, stage, store, distribute, and dispense medical countermeasures during a public health emergency. As a natural outgrowth of program advancement, CDC has refined and expanded the use of independent preparedness measures into a collective composite measure for demonstration of preparedness activities and capability demonstration.

The MCMDD Composite Measure is one of the four PAHPA benchmarks identified for the 2011-2012 performance period (budget period 11). A MCMDD threshold score is identified for states, directly funded localities, U.S. territories and freely associated states and serves as a minimal demonstration of performance and compliance with the PHEP requirements. The 2011-2012 MCMDD Composite Measure score benchmarks were established to align with the annual requirements and thresholds identified in the BP10 Extension PHEP cooperative agreement. Although the 2011-2016 PHEP cooperative agreement no longer specifies minimum thresholds for state and local TAR performance, the MCMDD composite benchmark assumes continued or sustained levels of TAR performance during the new PHEP cycle. With the goal of helping advance capabilities to achieve the 15 public health preparedness standards over the five year PHEP cycle, the MCMDD Composite Measure benchmark will increase with each successive PHEP performance period. The minimum acceptable MCMDD Composite Measure scores identified for PHEP awardees during the PHEP 2011-2012 and 2012-2013 PHEP performance periods are identified below.

PHEP Awardees	MCMDD Composite Measure PAHPA Benchmarks	
	2011-2012 (BP 11)	2012-2013 ⁶
50 states	43	52
Directly funded localities; City of Chicago, Los Angeles County, District of Columbia, New York City	46	57
U.S. territories and freely associated states American Samoa, Guam, U.S. Virgin Islands, Northern Mariana Islands, Puerto Rico, Federated States of Micronesia, Republic of the Marshall Islands, Republic of Palau	25	36

⁵ Pandemic and All Hazards Preparedness Act, <http://www.phe.gov/preparedness/legal/pahpa/pages/default.aspx>

⁶ Anticipated MCMDD Composite benchmarks for the 2012-2013 PHEP performance period.

Medical Countermeasure Distribution and Dispensing Composite Measure

CDC uses a range of targeted technical assistance tools and guidance to support advancements in public health capabilities to receive, stage, store, distribute and dispense medical countermeasures in response to an emergency. By using existing countermeasure distribution and dispensing capability indicators and tools as component parts of a collective measure, the MCMDD composite provides a standard framework for all PHEP awardees and a more inclusive view and record of preparedness activities performed in the PHEP-funded areas throughout the 5-year PHEP cycle.

A MCMDD composite score will be calculated for each state, directly funded locality, U.S. territory and freely associated state during each PHEP performance period. MCMDD composite computations for the 50 U.S. states will include all of the Cities Readiness Initiative (CRI) local planning jurisdictions within the PHEP awardees' boundaries, including any directly funded local jurisdictions. Preparedness activities and contributions from CRI jurisdictions in multi-state CRI metropolitan statistical areas (MSAs) will only contribute to the MCMDD composite score for the governing state.

Each PHEP awardee's annual MCMDD Composite Measure score will be based on the record of performance and results from the following preparedness indicators and tools.

- TAR (*annual requirement beginning 2011-2012*)
- Performance of DSNS operational drills (*annual requirement beginning 2011-2012*)
- Documentation of compliance with programmatic standards (*annual requirement beginning 2012-2013*)
 - Point of dispensing (POD) standards
 - Medical countermeasure distribution standards
- Full-scale exercises (FSE)⁷
 - Medical countermeasure distribution (*one FSE during the 2011-2016 5-year PHEP cycle*)
 - Medical Countermeasure dispensing (*one FSE during the 2011-2016 5-year PHEP cycle*)

With the exception of the annual requirements identified in annual PHEP guidance announcements, awardees have considerable flexibility in the order or degree in which they demonstrate planning and operational capability to meet the PAHPA MCMDD composite threshold each year. PHEP awardees may perform and submit all of the indicated composite data each year if they choose, and each year the MCMDD composite will compute from a total of all submitted documentation. Credit for performance of the indicated FSE will be awarded in the year that it was performed and submitted, and the score carried forward for the remaining periods of the five-year PHEP cycle. Each PHEP awardee can achieve a maximum MCMDD composite score of 100 for each performance period. At the close of each PHEP

⁷ FSE demonstration is optional for U.S. territories and freely associated states during the 2011-2016 PHEP cycle. Scores for FSEs will credit in the year performed and submitted and maintained for the remaining life of the 5-year PHEP cycle.

cooperative agreement performance period, awardees will be provided with a report detailing the overall MCMDD Composite Score and each component activity for each reporting jurisdiction in the PHEP funded area.

Computing an Annual MCMDD Composite Measure Score

Responding to an emergency will require coordinated capabilities; strength in one category is unlikely to compensate for deficiencies in the other. As diagramed in Figure 1., the MCMDD Composite Measure reports on a 0 to 100 point scale and derives from an aggregate average of the results from planning (B1 and C1) and operational (B2 and C2) activities/documentation within the *Distribution* (B) and *Dispensing* (C) functions.

In order to calculate the MCMDD composite measure for directly funded localities and U.S. territories and freely associated states:

1. Calculate the total award for the *Distribution* and *Dispensing* planning (B1 and C1) and operational (B2 and C2) components.
2. Compute the average of the *Distribution* planning and operations scores (B1 and B2) and then average of the *Dispensing* planning and operations scores (C1 and C2).
3. Take the average of the resulting scores for the *Distribution* (B) and *Dispensing* (C) functions to derive a MCMDD Composite Measure (A) for the directly funded localities, U.S. territories and freely associated states.

In order to calculate the MCMDD composite measure for each of the 50 states:

1. Calculate the total award for the *Distribution* and *Dispensing* planning (B1 and C1) and operational (B2 and C2) components.
2. Compute the average of the planning and operations scores (B1 and B2) for the state *Distribution* function
3. Compute the average of the planning and operations scores (C1 and C2) for the *Dispensing* function for each local planning jurisdiction within the CRI.
4. Calculate the overall average of all *Dispensing* function scores.
5. Average the final scores for the state *Distribution* (B) and local *Dispensing* (C) to derive a MCMDD Composite Measure (A) for the state PHEP awardee.

Special note for state PHEP awardees: Due to the fact that the responsibilities for countermeasure dispensing within the CRI areas falls to local jurisdictional public health and these CRI populations are covered by single or multiple jurisdictional plans within the CRI, the computation for the *Dispensing* component for a state PHEP awardee is calculated from an average of all dispensing indicators from all jurisdictions within the CRI-funded area.

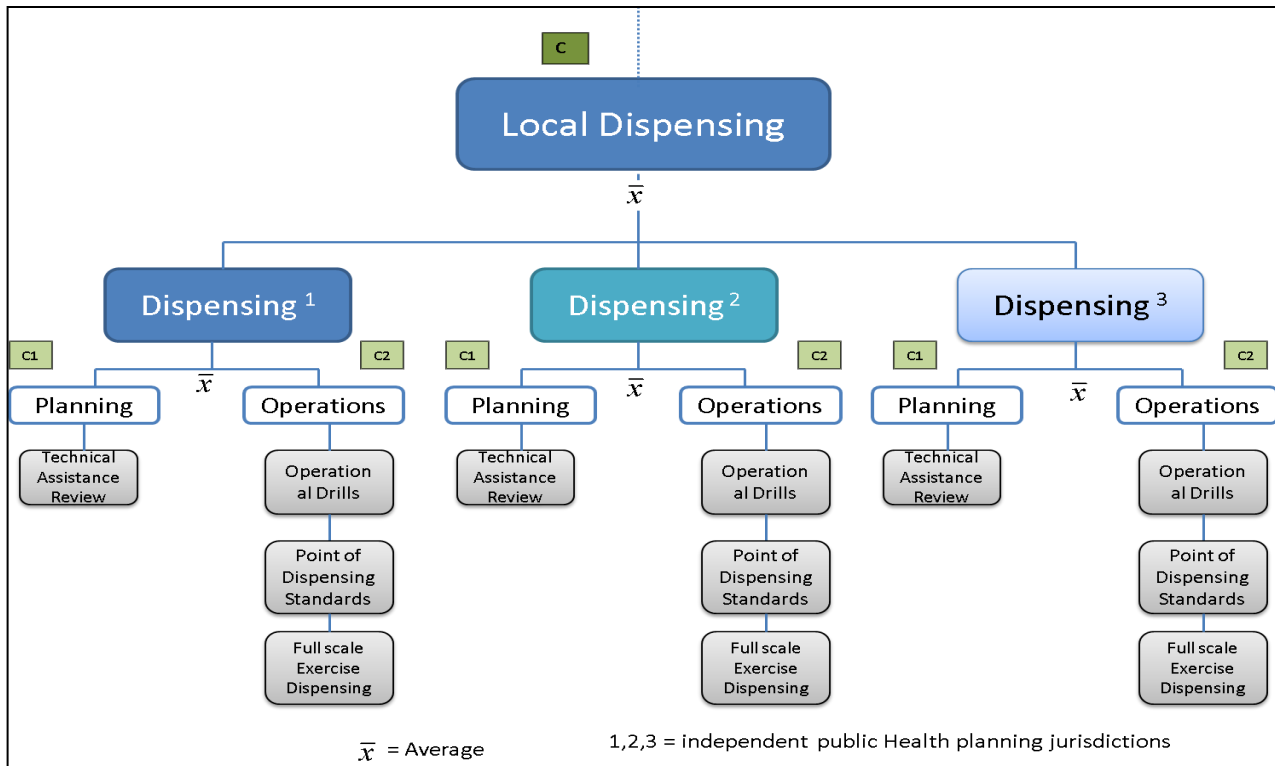


Figure 2 : Organization of local dispensing functional component of the state MCMDD composite score from independent CRI planning jurisdictions

CDC PHEP Cooperative Agreement Requirements⁸ and MCMDD Scoring

Technical Assistance Review

The TAR is a measurement tool of preparedness planning used by the DSNS to determine a project area’s capacity to receive, stage, store, distribute and dispense critical medical countermeasures. The results of TAR performance is recorded on a 0 to 100 point scale.

The three related but distinct TAR tools (state, local and island) allow for targeted assessment of medical countermeasure distribution and dispensing planning capabilities in each of the PHEP-funded areas.

Applicable Jurisdictions

- 50 states
- Each local planning jurisdiction within the 72 CRI MSA areas
- 4 directly funded localities: City of Chicago, Los Angeles County, District of Columbia, New York City

⁸ Publication Notice 6-13-2011 CDC-RFA-TP11-1101: Public Health Emergency Cooperative Agreement published on Grants.gov at www.grant.gov.

- 8 U.S. territories and freely associated states: American Samoa, Guam, U.S. Virgin Islands, Northern Mariana Islands, Puerto Rico, Federated States of Micronesia, Republic of the Marshall Islands, Republic of Palau

CDC PHEP Cooperative Agreement Requirements

The TAR is required to be performed annually in all PHEP cooperative agreement awardee areas and within each Cities Readiness Initiative local planning jurisdictions. To demonstrate current capacity and advancements in emergency response capabilities during budget period 11, public health departments must submit all required TAR documentation through their assigned DSNS program services consultant no later than July 15, 2012.

The 50 states and CRI MSA areas

DSNS is responsible for reviewing each of the 50 states and 25% of the local planning jurisdictions in each state's CRI jurisdiction(s). The state awardee is responsible for reviewing the remaining 75% of the local planning jurisdictions in each CRI. All state TARs are to be performed using the DSNS state TAR assessment tools, and all CRI local planning jurisdiction TARs are to be performed using the DSNS local TAR tool. The 75% of local TARs conducted by the state are submitted using the DSNS automated TAR score sheets and TAR assessment report.⁹ Both must be provided to the DSNS program services consultant on or before the indicated deadline.

Directly funded localities

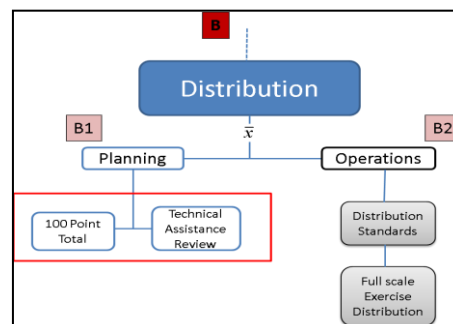
DSNS is responsible for performing annual reviews of all directly funded localities. DSNS must conduct a local TAR on all directly funded localities during budget period 11 on or before July 15, 2012. The results of TARs performed by DSNS staff will continue to be recorded for each of the functional areas and reported through narrative and numerical score using established local TAR tools and forms.

The eight U.S. territories and freely associated states

DSNS is responsible for performing annual reviews of all territories and freely associated states. DSNS must conduct a TAR for the U.S. territories and freely associated states during budget period 11 on or before July 15, 2012. The results of TARs performed by DSNS staff will continue to be recorded for each of the functional areas and communicated through narrative and numerical score using established island or state TAR tools and forms.

Technical Assistance Review and MCMDD Composite Scoring

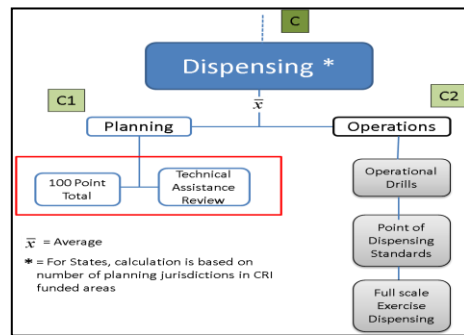
The TAR tools serves as proxy indicators for preparedness planning for the medical countermeasure distribution and dispensing functions. The TAR contributes a maximum of 50% weight to the individual



⁹ A report of the results for assessment of each of the local/planning jurisdictions in the 72 CRI areas must accompany the submission of the DSNS automated TAR score sheet. Though there is no specified format for the narrative report of assessment of local jurisdictions, the TAR submission should include documentation of the identified strengths and areas for improvement and recommendations, as appropriate for the jurisdiction under review.

Distribution (B1) or *Dispensing (C1)* functional indicators within the MCMDD Composite Measure calculation. In the cases of assessment of the directly funded localities and the U.S. territories and freely

associated states, where countermeasure receipt, distribution and dispensing fall under single public health department responsibility, a single TAR performance score serves as an indicator for both distribution and dispensing planning (B1 and C1). In contrast and as a result of division of responsibilities for delivery of public health services, the state’s TAR is assigned as the proxy indicator of the *Distribution* planning indicator (B1) and the local TAR score serves as the proxy indicator for *Dispensing* planning (C1) within the construct of the MCMDD Composite Measure.



Operational-based Drills

Operational-based drills are critical components to a jurisdiction’s Homeland Security Exercise and Evaluation Program (HSEEP) and serve as integral tools and building blocks that allow for controlled and systematic advancement of operational-based competencies.

Applicable Jurisdictions

- Each local planning jurisdiction within the 72 CRI MSA
- 4 directly funded localities
- 8 U.S. territories and freely associated states

CDC PHEP Cooperative Agreement Requirements

A minimum of three different drills (not the same drill performed three times) must be conducted by each of the local planning jurisdiction within the 72 CRI MSAs, the four directly funded localities and the eight U.S. territories and freely associated states during each budget period of the 2011-2016 PHEP cooperative agreement cycle. The three drills are to be chosen from the palette of the eight drills currently described and listed below¹⁰.

Data Submission and Drill Tools

Performance measures, taken from the Department of Homeland Security TCL¹¹, define the data scope and data request for the DSNS drills in budget period 11. All drill data and supplemental HSEEP after-action reports and improvement plans, as indicated for the Decision Making Tool and RSS/RDS Supply Chain Management Game, must be submitted to the DSNS Web-based Data Collection System¹² no later than July 15, 2012.

¹⁰ As described and available through the DSNS Extranet website; www.bt.cdc.gov/stockpile/extranet

¹¹ Target Capability List <http://www.fema.gov/pdf/government/training/tcl.pdf>

¹² <http://OPHPRsurveys.cdc.gov/mriWeb/mriWeb.dll?l.Project=MENU> ; password required.

Drill Tool	Performance Measures:
Staff notification, acknowledgement and assembly	<ul style="list-style-type: none"> • Total number of staff included in the emergency notification • Time required to distribute notification to emergency response staff • Number of staff acknowledging the public health emergency notification • Time for last staff member to acknowledge receipt of emergency notification • Number of staff acknowledging ability to assembly (notional or actual) at a given response location within the target time specified in the emergency notification
Site activation: notification, acknowledgement and assembly	<ul style="list-style-type: none"> • Total number of sites included in the public health emergency notification for activation by facility category • Time required to complete notification of indicated operational site staff category • Number of sites/site contacts acknowledging receipt of emergency notification • Time for last acknowledgement of receipt of emergency notification • Number of sites acknowledging ability to assemble and ready site (notional or actual) for operations at a given target time specified in the emergency notification
Facility Setup	<ul style="list-style-type: none"> • Time that each facility was set up and readied for staff and operational use
Pick List Generation	<ul style="list-style-type: none"> • Number of total PODs in the jurisdiction • Total time to generate pick lists for initial delivery of medical countermeasure to a complete subset of identified categories of receiving sites in the local jurisdiction • Time to generate pick lists for a representative sample of local receiving sites.
Dispensing Throughput	<ul style="list-style-type: none"> • Throughput per hour: number of clients processed during measurement period
Public Health Decision Making Tool	<ul style="list-style-type: none"> • No performance measure or metric identified; submission tool must be accompanied by an after action report
RSS/RDS Supply Chain Management Game	<ul style="list-style-type: none"> • No performance measure or metric identified; Submission tool must be accompanied by an after action report

Operational Drills and MCMDD Composite Scoring

Each unique drill tool submission (up to the maximum three) from each applicable jurisdiction will receive award credit of up to a maximum 16.67 points; 8.33 points will be awarded for drill submission and 8.33 points will be awarded if a complete set of drill metrics are provided and the drill meets intent

of the exercise¹³. A range of score award is possible up to a maximum of 50 total points (3 drills times 16.67 points~50). The drill score is credited to the operational section (C2) of the *Dispensing* function indicator (C) for the jurisdiction and MCMDD being calculated. Drill submission contributes a maximum total of 25% to the *Dispensing* function indicator (C) score.

Points of Dispensing Standards

In the course of the development of federal, state and local plans to address the demands of a large scale biological agent threat, such as anthrax, public health departments must increase capacity to identify sufficient resources and staff registries to provide prophylaxis to 100% of their population within 48 hours of the decision to deploy the Strategic National Stockpile. Effective response to time critical (biological threats) and non-time critical (influenza) public health responses requires that public health decision-makers and operational command staff have access to critical information including the number, location, staff requirements and throughput for all POD locations.

In 2006, the Department of Health and Human Services (HHS) sponsored the development of a series of objective standards¹⁴ to guide planners in developing effective strategies for identifying, securing and, operated PODs in sufficient numbers to mitigate public health disease impact.

Using empirical data, computer modeling and experience from experts in the field, a set of minimum standards for PODs was developed that addresses 1) the number and location of PODs 2) internal POD operations 3) POD staffing and 4) POD security. Though the POD standards were developed using operational considerations associated with a large-scale aerosolized anthrax threat, the processes, assessments and infrastructure needs can be broadly applied across other public health response events and activations.

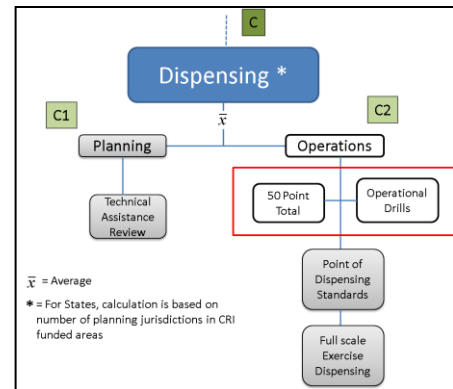
Applicable Jurisdictions

- Each local planning jurisdiction within the 72 CRI MSA
- 4 directly funded localities
- 8 U.S. territories and freely associated states

CDC PHEP Cooperative Agreement Requirements

All applicable jurisdictions will submit documentation of compliance with the POD standards on an annual basis beginning with the 2012-2013 PHEP performance period. Submission of POD standard data is not an annual requirement for the 2011-2012 PHEP performance period.

Demonstration of compliance with the POD standards is based on submission of operational-based data that define each POD site location in the applicable local planning jurisdictions, directly funded localities, U.S. territories and freely associated states.



¹³ New Tools for Assessing State and Local Capabilities for Countermeasure Delivery http://www.rand.org/pubs/technical_reports/TR665.html

¹⁴ Point of Dispensing Standards; <https://www.orau.gov/snsnet/resources/PandemicInfluenza/SummaryPointDispensingStandards.pdf>

Data Submission

The data required to support the POD standards indicator are expected to be readily available, in whole or in part, as existing Microsoft Excel or Microsoft Word-based electronic files that are available to support operation center activations and mission taskings. Jurisdictions may submit these files independently or in conjunction with DSNS-provided template spreadsheets to meet the data submission requirements. A template Excel-based spreadsheet file will be available on the SNS Extranet and Sharepoint sites for use.

POD standard data submitted for credit to the MCMDD Composite Measure calculation for budget period 11 (2011-2012) must be submitted and received by DSNS through email at SNS_PPB@cdc.gov on or before July 15, 2012.

Data Elements for POD Standards

The following data elements should be provided for **each** identified POD location in the local/planning jurisdiction.

	DATA ELEMENT	DESCRIPTION
1	POD identifier	Name and location: address, GIS, etc.
2	Strategy used to identify/assign POD site	Identify strategy used to identify POD sites to support population: zip code, geography, population density, etc.
3	Type of POD operation	Identify the type of POD; i.e. Drive thru, traditional walk-thru, closed POD, other, etc.
4	Dispensing protocol	Medical or non-medical model
5	Population served	Population that the POD location is anticipated to serve based on the strategy or process used for identification/assignment. For example, the population served by a closed POD will be known whereas the population of an open or general use POD will be dependent on strategy for assignment, such as zip code, geographic boundaries, population density, etc.
5a	Population who will visit the POD	Population who will likely visit this POD site. This will depend, in part, on whether the jurisdiction plans to use a head-of-household (multiple-regimen) dispensing plan. This may be referred to as the "demand estimate".
6	Required POD throughput to meet the 48-hour goal	Throughput is determined by taking the number of population who will go to each POD, from # 5a (demand estimate) and dividing it by 24 hours or the number of hours determined remaining from 36 after local and/or state transportation time to POD. (The estimate of 24 hours comes from the 48-hour CRI goal, minus 12 hours from CDC to warehouse, minus 12 hours for process breakdown and transport from warehouse to PODs. (see calculation in POD Standard 3.1)

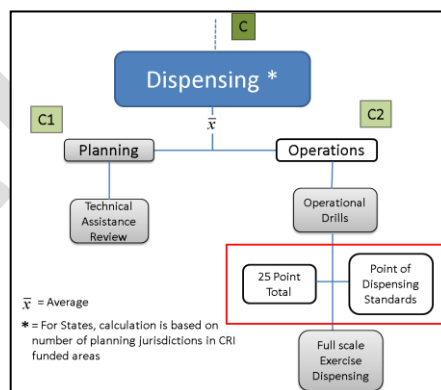
7	Estimated POD throughput per hour	Throughput identified for each non-closed POD based on exercise, drill, modeling, or other
8	Method used to derive throughput estimate	Identify the method or operational basis for generating this estimate (exercise, drill, modeling program, or other). For modeling methods, indicate name of modeling program.
9	Number of shifts per 24 hours	Specify the number of hours for each of operational shift (per 24 hours) to support 48-hour dispensing response. Typically 8 or 12.
10	Total number of staff required	Indicate the total number of staff needed to operate one shift of the POD. Include all functional staff.
10a	Number of security staff required	Number of security staff to operate one operational shift at the identified POD
10b	Number of licensed medical personnel required	Number of licensed medical staff to operate one operational shift at the identified POD
10c	Number of non-medical staff required	Number of non-medical staff to operate one operational shift at the identified POD

POD Standards and MCMDD Composite Scoring

Beginning with the 2012-2013 PHEP performance period, submission of POD standard documentation will become an annual requirement.

A jurisdiction may submit, but is not required to submit, POD standards documentation during BP11. All submissions received in BP 11 will be reviewed and credited toward the PHEP awardees MCMDD composite score, as appropriate.

Each submission will be reviewed and credit provided at a rate of 2.5 points per question set (including sub-question) for a total maximum credit of 25. The POD standard points gained for each applicable jurisdiction will be credited to the operational section (C2) of the *Dispensing* function indicator (C). POD standards documentation contributes a maximum total of 12.5% to the *Dispensing* function indicator (C) measurement.



Special Note for State Awardees: In most case of MCMDD computation in PHEP-funded states, the responsibility for dispensing countermeasures to the CRI population falls on multiple, independent local public health planning jurisdictions. The computation of the *Dispensing* function score (C) for state PHEP awardees is unique from the other category of PHEP-funded areas and requires a computed average of all local planning jurisdictional dispensing indicators prior to roll-up to an overall *Dispensing* function score and final MCMDD Composite Measure (Figure 2).

Medical Countermeasure Distribution Standards

With specific interest in strengthening national public health capabilities for distribution of medical countermeasures under emergency response conditions, the federal government solicited development of minimal standards for medical countermeasure distribution processes. The standards embody

minimum capacities and capabilities necessary to minimize stress on the distribution infrastructure (warehousing, storage and transportation) due to high demand or high consequence public health response threats.

Applicable Jurisdictions

- 50 states
- 4 directly funded localities
- 8 U.S. territories and freely associated states

CDC PHEP Cooperative Agreement Requirements

All applicable jurisdictions will submit documentation of compliance with the medical countermeasure distribution standards on an annual basis beginning with the 2012-2013 PHEP performance period.

Demonstration of compliance with the distribution standards is based on submission of operational-based data that define the distribution network and processes in the states, directly funded localities, U.S. territories and freely associated states.

Data Submission

The data required to support the distribution standards indicator are expected to be readily available, in whole or in part, as existing Microsoft Excel or Microsoft Word-based electronic files that are available to support operation center activations and mission taskings. Jurisdictions may submit these files independently or in conjunction with DSNS-provided template spreadsheets to meet the data submission requirements. A template Excel-based spreadsheet file will be available on the SNS Extranet and Sharepoint sites for use.

Distribution standard documentation must be submitted through email to DSNS at SNS_PPB@cdc.gov on or before July 15, 2012.

Data Elements

Each applicable jurisdiction will submit the following data elements as demonstration of advances to meet compliance with the medical countermeasure distribution standards.

Distribution Standard		Required Data Element
1	Sufficient Primary and Backup Warehouse Storage Capacity	Identify each primary and backup storage warehouse that would be used to receive, stage or store federal assets, including the CDC 12-hour Push Package, managed inventory or pro-rata allocation of pandemic influenza medical supplies
For each warehouse identified in 1, provide the following information:		

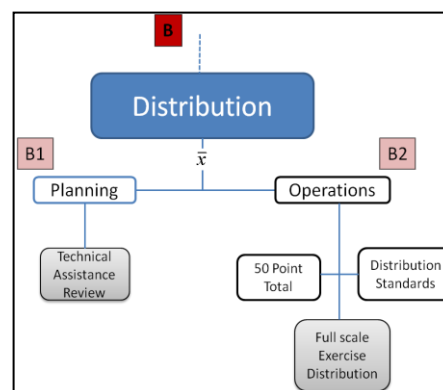
2	Estimate of Warehouse Throughput Time	Time (minus transportation) to process material through each identified warehouse, including the tasks of unloading, inventory control, picking, quality assurance, and loading.
2a	Method Used to Derive Throughput Estimate	Identify the method or operational basis for generating throughput estimate (exercise, drill, commercial real world or list other).
3	Cold-chain Storage Capacity ¹⁵	Identify type, temperature and source of available temperature control storage and transport.
3a	Cold-chain Storage Temperature Monitoring	Identify the type and availability of temperature and humidity monitoring device in place, as appropriate.
4	Sufficient Trucks and Drivers for Sustainable 24-hour Operations.	Number of trucks and drivers that will be required to operate in order to meet the initial 12-hour delivery timeline as well as for subsequent support of re-supply routes for these dispensing sites
5	Capacity to Transport to Dispensing Sites in 12 Hours.	Time to complete deliveries of an initial supply of countermeasures to all RDNs or PODs in the distribution network, as appropriate
5a	Method Used to Derive Delivery Estimate (Data Element #5)	Identify the method or operational basis for generating throughput estimate (exercise, drill, commercial real world or list other).

Distribution Standards and MCMDD Composite Scoring

Beginning with the 2012-2013 PHEP performance period, submission of distribution standard documentation will become an annual requirement.

A jurisdiction may submit, but is not required to submit, distribution standards documentation during BP11. All submissions received in BP 11 will be reviewed and credited toward the PHEP awardees MCMDD composite score, as appropriate.

Each submission will be reviewed and award credit of 10 points provided for each indicated data elements. A range of score is possible up to a maximum of 50 total points per PHEP awardee. The distribution standard score is credited to the operational section (B2) of the *Distribution*



¹⁵ U.S. Pharmacopeia Good Storage and Shipping Practices, http://www.pharmacopeia.cn/v29240/usp29nf24s0_c1079.html

function indicator **(B)** for the PHEP awardee MCMDD composite being calculated. Distribution standards contribute a maximum total of 25% to the *Distribution* function indicator **(B)** score.

Medical Countermeasure Distribution Full-Scale Exercise

Full-scale emergency response exercises are critical components that serve as culminating events in the emergency preparedness planning life cycle. The medical countermeasure distribution exercise is intended to provide jurisdictions with the opportunity to customize demonstration of operational capabilities associated with distribution of medical countermeasures during a high demand/high consequence public health emergency. Jurisdictions should design their exercise activities to include critical warehousing and distribution related activities and capture defined metrics for the TCL performance measures. Jurisdictions are encouraged to partner with their CRI local planning jurisdictions to develop a coordinated end-to-end demonstration of medical countermeasure distribution and dispensing competency.

Applicable jurisdictions

- 50 states
 - 4 directly funded localities
 - 8 U.S. territories and freely associated state*
- *Exercise is optional

CDC PHEP Cooperative Agreement Requirements

Each of the 50 states and four directly funded localities must perform one FSE within the five-year PHEP project period that tests and validates the medical countermeasures distribution plan. Results and documentation of medical countermeasure distribution and dispensing FSE(s) must be developed in accordance with HSEEP standards and can be performed during any one of the five budget periods of the new PHEP cooperative agreement. U.S. territories and freely associated states may perform this exercise as an optional submission for contribution to their overall MCMDD composite score. PHEP awardees are encouraged to coordinate with existing partner agencies to leverage efforts and resources to fulfill these common interests. The scope of the full-scale dispensing exercise must evaluate the PHEP awardees medical countermeasure distribution plan and provide assessment and reporting of performance data metrics for the targeted activities identified.

In order to receive the full award for exercise credit, the jurisdiction must meet the following requirements:

- 1) Plan and implement exercise operations in accordance with HSEEP principles and standards
- 2) Have a current multi-year exercise plan in place and posted to the NEXS or the DSLR¹⁶ LLIS website location
- 3) Submit HSEEP-compliant exercise planning and evaluation documents¹⁷ to include:
 - a. Mid-term Planning Conference
 - b. The Master Scenario Events List
 - c. Exercise Evaluation Guide
 - d. After-action Report and Improvement Plan

¹⁶ Division of State and Local Readiness

¹⁷ HSEEP https://hseep.dhs.gov/pages/1001_About.aspx

- 4) Submit performance metrics (observed data) for the indicated performance measures¹⁸ below:

Data Elements, Performance Measures and Associated Target Metrics

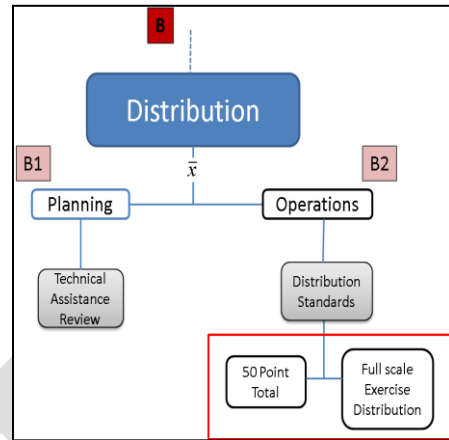
	Performance Measures	Target Metric
1	Time in which the state emergency operations center(EOC) is fully staffed <ul style="list-style-type: none"> • <i>Report time in hours/minutes</i> 	Within 2 hours from activation
2	Time in which Strategic National Stockpile (SNS) / state resources is/are requested following medical surveillance indication of need for request	Within 6 hours from indication
3	Total number of receipt, stage and store (RSS) sites, distribution and security staff activated and needed to operationalize the RSS	Incident dependent
4	Number of RSS sites, distribution and security staff acknowledging ability to assembly within the target time specified	Within 6 hours from approved request
5	Time in which all RSS sites and regional distribution sites (RDS) (if applicable)are made available for use <ul style="list-style-type: none"> • <i>Identify the type and number of terminal receiving sites (RDS, PODs or hospitals, etc.) activated to meet incident needs; RDS information may be notional</i> 	Within 6 hours from approved request
6	Number of RSS, RDS, POD, hospital, etc., locations activated to meet incident needs <ul style="list-style-type: none"> • <i>Identify the type and number of terminal receiving sites (RDS, PODs or hospitals, etc.) identified in scope of exercise</i> 	Incident dependent
7	Time to offload countermeasure assets at the RSS site after receipt	Not established
8	Time to enter and update inventory files to inventory management system <ul style="list-style-type: none"> • <i>CDC test pipe-delimited file may be request for use</i> 	Not established
9	Time to generate pick lists for all identified receiving locations identified in incident <ul style="list-style-type: none"> • <i>Specify number and time to generate pick lists generated for activated receiving sites</i> 	Not established
10	Number and load capacity of transportation assets mobilized to meet incident needs	Incident dependent
11	Time in which medical resources/SNS assets arrive at identified receiving sites; RDS, PODs, hospitals, etc. <ul style="list-style-type: none"> • <i>Depending on the scope of exercise and resource restriction, data metric can be determined from modeling studies. Distribution modeling output report should be provided.</i> 	Within 12 hours from arrival at warehouse

Medical Countermeasure Distribution Exercise and MCMDD Composite Scoring

¹⁸ Target Capability List <http://www.fema.gov/pdf/government/training/tcl.pdf>

A full-scale medical countermeasure distribution exercise is required to be performed in any one year of the five year PHEP 2011-2016 cycle. Jurisdictions should submit the indicated documents and data metrics in the year that the exercise was performed.

Each set of documentation submitted will be reviewed and award credit to the PHEP awardee's MCMDD composite score. Jurisdiction will receive 5 points for submission of the indicated HSEEP exercise support documentation and 4.1 points for each of the indicated performance metrics provided for a maximum credit of 50. The distribution exercise cumulative points will be credited to the operational section (B2) of the *Distribution* function indicator (B).



Medical Countermeasure Dispensing Full-Scale Exercise

Full-scale emergency response exercises are critical components serve as culminating events in the emergency preparedness planning life cycle. The medical countermeasure dispensing exercise is intended to provide jurisdictions with the opportunity to customize demonstration of operational capabilities associated with distribution of medical countermeasures during a high demand/high consequence public health emergency. Response to public health emergencies within CRI jurisdiction is particularly challenging and will generally require substantial coordination between multiple government jurisdictions.

Applicable jurisdictions

- 72 CRI MSAs; each local planning jurisdiction within the 72 CRI areas
 - 4 directly funded localities
 - 8 U.S. territories and freely associated states*
- *Exercise is optional

CDC PHEP Cooperative Agreement Requirements

Each of the 72 CRI MSAs must perform one FSE within the five-year PHEP project period that tests and validates medical countermeasures dispensing plans. Results and documentation of the FSE must be developed in accordance with HSEEP standards and can be performed during any one of the five budget periods of the new PHEP cooperative agreement.

Each CRI MSA (including the four directly funded cities) dispensing exercise must include all pertinent jurisdictional leadership and emergency support function leads, planning and operational staff, and all applicable personnel. Local planning jurisdiction staff participation must be demonstrated throughout the exercise planning cycle. Exercise planning and after-action reports should be submitted as a single report of the jurisdiction's exercise activities and should clearly identify all participating jurisdictions. CRI MSA planners are encouraged to work with other emergency response agencies or hospital preparedness programs to develop or leverage existing activities to meet the PHEP deliverables and achieve common preparedness goals.

In order to receive the full award for exercise credit, the jurisdiction must meet the following requirements:

- 1) Plan and implement exercise development in accordance with HSEEP principles and standards
- 2) Include participation from representative staff from all the local planning jurisdiction identified in the CRI MSA exercise planning and development cycle
- 3) Submit exercise planning and evaluation documents¹⁹ to include:
 - a. Mid-Term Planning Conference
 - b. The Master Scenario Events List
 - c. Exercise Evaluation Guides
 - d. After-action Report and Improvement Plan
- 4) Submit relevant performance metrics (observed data) for select performance measures²⁰ indicated below.

Data Elements, Performance Measures and Associated Target Metrics

	Performance Measures ²¹	Target Metric
1	Time in which the local EOC is fully staffed <ul style="list-style-type: none"> • <i>Report time in hours and minutes for each EOC activated</i> 	Within 2 hours from activation
2	Percent of public health personnel who arrive safely within target timeframe to perform capability	100%
3	Percent of volunteer staff acknowledging ability to assembly at a given response location within the target time specified in the emergency notification	Dependent on assigned function
4	Time in which public is provided with accurate and consistent information messages regarding POD locations	Within 4 hours from POD opening
5	Percent of sufficient, competent personnel available to staff dispensing centers or vaccination clinics, as set forth in SNS plans and state/local plans	100%
6	Time for all first-shift staff to be at the POD and ready	3 hours from notification
7	Time for all POD equipment and operational supplies to be in place	4 hours from notification
8	Percent of security forces designated in the POD-specific plan who report for duty	100%
9	Time in which clinical staff and volunteers become available at triage station	Within 4 hours from decision to activate site
10	Percent of PODs able to process patients at the rate (persons per hour) specified in SNS plans and state/local plans <ul style="list-style-type: none"> • <i>Calculate the throughput for POD sites activate to meet the incident (exercise) needs</i> 	100%

¹⁹ Document templates available through HSEEP Toolkit; https://hseep.dhs.gov/pages/1001_Toolk.aspx

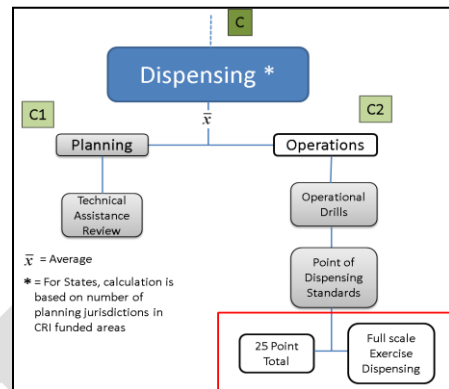
²⁰ Target Capability List <http://www.fema.gov/pdf/government/training/tcl.pdf>

²¹ Target Capability List <http://www.fema.gov/pdf/government/training/tcl.pdf>

Medical Countermeasure Dispensing Exercise and MCMDD Composite Scoring

A full-scale medical countermeasure dispensing exercise is required to be performed in any one year of the five year PHEP 2011-2016 cycle. CRI MSA jurisdictions should submit the indicated documents and data metrics in the year that the exercise was performed.

Each set of documentation submitted will be reviewed and award credit to the PHEP awardee's MCMDD composite score. Jurisdiction will receive 5 points for submission of the indicated HSEEP exercise support documentation and 2 points for each of the indicated performance metrics provided for a maximum total of 25. The distribution exercise score will be credited to the operational section (C2) of the *Dispensing* function indicator (C).



Special Note for state awardees: In most cases of MCMDD computation in PHEP funded states the responsibility for dispensing countermeasures to the CRI population falls on multiple, independent local public health planning jurisdictions. The computation of the *Dispensing* function score (C) for state PHEP awardees is unique from the other category of PHEP-funded areas and requires a computed average of all local planning jurisdictional dispensing indicators prior to roll-up to an overall *Dispensing* function score and final MCMDD Composite Measure score (Figure 2).

Summary

In previous years, DSNS has reported individually on state and/or local indicators using state and local TAR scores. While this was effective strategy to build up governmental sectors, it did little to support and strengthen intrastate planning. To improve preparedness throughout the nation, DSNS has determined a more accurate preparedness and response indicator for successful performance would be to link the functions and capabilities of dependent governmental sectors in the form of a composite measure.

Beginning with the new PHEP cooperative agreement program announcement for the 2011-2016 performance periods, DSNS has developed a composite measure for reporting medical countermeasure distribution and dispensing capacity and capabilities. The MCMDD Composite Measure has been developed to serve as a collective indicator of preparedness and operational capability of states, directly funded localities, CRI planning jurisdictions, U.S. territories and freely associated states.

The results of individual performance activities measured within the MCMDD Composite Measure can be viewed from within the context of the composite measure calculation to better serve federal and state preparedness leaders by defining the gaps and gains achieved individual public health planning areas.

APPENDIX

Table 1: Summary of Point of Dispensing Standards

NUMBER AND LOCATION OF PODS	
1.1	The jurisdiction shall estimate the number of people who will likely come to PODs to pick up medication along with their geographic distribution.
1.2	The number of PODs shall be greater than or equal to (a) the number of persons needing to receive prophylaxis at PODs divided by (b) per POD throughput multiplied by 24 hours (48 hours minus 12 hours for initial CDC delivery to warehouse and 12 hours to get materiel from warehouse to PODs).
1.3	All POD locations shall meet relevant SNS site guidelines and security criteria.
INTERNAL POD OPERATIONS	
2.1	Jurisdictions shall have at least one viable and exercised rapid dispensing protocol that addresses the following minimal functions: (a) directing clients through the POD, (b) deciding which medication to dispense, (c) dispensing medication, and (d) disseminating information about the medication.
2.2	Jurisdictions shall ensure that legal and liability barriers to rapid dispensing are identified, assessed, prioritized, and communicated to those with the authority to address such issues. Such issues include standards of care, licensing, documentation of care, civil liability for volunteers, compensation for health department staff, rules governing the switch between dispensing protocols, and appropriation of property needed for dispensing medications.
2.3	Jurisdictions shall have viable and exercised procedures for selecting an appropriate dispensing protocol (e.g., medical model vs. rapid dispensing).
POD STAFFING	
3.1	Jurisdictions shall estimate the number of individuals who are likely to visit each POD location and determine the required hourly throughput at each POD.
3.2	Using a combination of exercises and/or computer models, jurisdictions shall determine and verify the number of staff required to administer prophylaxis to the population identified pursuant to Standard 1.1.
3.3	Jurisdictions shall recruit sufficient command staff and provide plans for recruiting and training of spontaneous unaffiliated volunteers in sufficient numbers to operate all the planned PODs in the jurisdiction at the levels of throughput required to meet the CRI timeline.
3.4	Jurisdictions shall assess the availability of the command staff on their call-down rosters on a quarterly basis via a no-notice call-down drill.
POD SECURITY	
4.1	Site security assessments shall be conducted on every POD location in coordination with the agency (ies) responsible for security functions at the PODs.
4.2	The agency (ies) responsible for security functions at PODs shall be consulted on the security aspects of the overall mass prophylaxis plan.
4.3	Law enforcement in the form of sworn uniformed officers shall maintain a physical presence at each POD location. This requirement may be waived with a written attestation from the parties responsible for POD security. The attestation shall include evidence that compliance with the standard as written is infeasible and that alternate measures designed to ensure adequate security are in place at each POD site.

Table 2: Summary of Medical Countermeasure Distribution Standards²²

DISTRIBUTION STANDARDS	
	System-Wide
1.1	Operational communications capability: awardees shall develop a plan for operational (tactical) communications and demonstrate this capability via periodic exercises.
	Warehouses
2.1	Adequate number of trained warehouse staff: RSS and warehouse plans shall include a sufficient number of trained staff to address the functions of warehouse management, unloading, storing, inventory control, picking, quality assurance, and loading on a continuous 24-hour basis.
2.2	Accurate Estimation of Warehouse Throughput Time: Awardees shall estimate, via exercises or modeling, the time required to process material through each planned warehouse (from the RSS down to regional or local distribution hub), including the tasks of unloading, inventory control, storage, picking, quality assurance, and loading.
2.3	Sufficient Primary and Backup Storage Capacity: Awardees shall maintain enough primary and backup storage space to accommodate for a period of six months or longer material resources that may be distributed by the federal government and include considerations for the DSNS 12-hour Push Package, managed inventory and a pro-rata allocation of pandemic influenza medical supplies.
2.4	Scalability of Warehouse Plans and Operational Capabilities: Awardees shall document the scalability of warehouse plans and associated operational capabilities.
2.5	Cold-Chain Storage Capacity: Awardees shall maintain the capacity to meet cold-chain storage requirements.
2.6	Plans for Distribution of DEA-Controlled Countermeasures: Awardees shall develop plans for the distribution of DEA-controlled countermeasures.
	Inventory Management
3.1	Capable Inventory Management System: Awardees shall develop and maintain a capable and robust inventory management system to support SNS distribution activities.
3.2	Capability to Conduct Effective Inventory Management: Awardees shall demonstrate, via periodic exercise, the ability to use the IMS to conduct effective and sustained inventory management.
	Transport
4.1	Capacity to Transport to Dispensing Sites in 12 Hours: Awardees shall demonstrate, via exercises and/or modeling, the ability to transport countermeasures from the RSS site to dispensing sites within 12 hours. (Note: 12 hour timeline taken from Target Capabilities List, 2007, p. 469).
4.2	Sufficient Trucks and Drivers for Sustainable 24-Hour Operations: Awardees shall provide sufficient drivers to enable sustainable 24-hour transport operations.
4.3	Sufficient Backup Trucks: Awardees shall provide sufficient backup trucks to allow for sustainable 24-hour operations.

²² Excerpted (with minor modifications) from the draft report entitled: *Recommended Infrastructure Standards for Mass Antibiotic Dispensing*. Nelson, E. Chan, A. Chandra, et al., RAND Corporation. Refer to technical report or summary guide to POD Standards for more detailed information.

DISTRIBUTION STANDARDS	
4.4	Plans for Mobile Repair and Response Units: Awardees shall plan for the provision of mobile repair and response units.
4.5	Ability to Load and Unload at Warehouses and Dispensing Sites: Awardees shall document their ability to load material at the RSS site, to unload and load material at any intermediate warehouses, and to unload material at dispensing sites.
Security	
5.1	Documented Security Requirements: Awardees shall assess security risks associated with warehouse and transport operations and develop security plans to mitigate the identified risks. These tasks shall be conducted, with the support of designated public health emergency preparedness officials, by those individuals and organizations charged with the responsibility for asset and facility security during distribution activities.
5.2	Flexible, Adaptive Security Response: Awardees shall develop security plans that allow for flexible, adaptive security response.
5.3	Capability to Meet Security Requirements: Awardees shall demonstrate, via exercise, the ability to execute the security plans.

DRAFT