

MEDICAL SUPPLIES MANAGEMENT AND DISTRIBUTION

Capability Definition

Medical Supplies Management and Distribution is the capability to procure and maintain pharmaceuticals and medical materials prior to an incident and to transport, distribute, and track these materials during an incident.

Outcome

Critical medical supplies and equipment are appropriately secured, managed, distributed, and restocked in a timeframe appropriate to the incident.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs):

- ESF #1: Transportation
- ESF #2: Communications
- ESF #5: Emergency Management
- ESF #7: Resource Support
- ESF #8: Public Health and Medical Services
- ESF #13: Public Safety and Security
- ESF #14: Long-Term Community Recovery and Mitigation
- ESF #15: External Affairs

Preparedness Tasks and Measures/Metrics

Activity: Develop and Maintain Plans, Procedures, Programs and Systems	
Critical Tasks	
Res.C1c 1.2	Develop plans for establishing staging areas for internal and external medical response personnel, equipment, and supplies
Res.C1c 1.2.3	Establish strategies for transporting materials through restricted areas, quarantine lines, law enforcement checkpoints, and so forth that are agreed upon by all affected parties
Preparedness Measures	Metrics
Emergency public health and medical material distribution plans are in place	Yes/No
Hazard-specific response plan identifies and prioritizes resource needs	Yes/No
Plans for the procurement, rotation and maintenance of Federal, State, local stockpiled assets or private/commercial inventories are implemented	Yes/No
Medical treatment facilities and State, county and local governments have coordinated with	Yes/No

Activity: Develop and Maintain Plans, Procedures, Programs and Systems	
medical distributors to develop preplanned worst-case scenario orders that reflect differing needs for various possible scenarios (chemical, biological attacks, natural disaster)	
Frequency with which pre-plan worst-case scenario orders are reviewed and updated	Semiannually
Medical treatment facilities and State, county and local government plans reflect input from local and regional sources of potential medical supplies and pharmaceuticals to lower dependency on federal assets	Yes/No
Plans are in place for assuring physical security of medical materiel in transport and distribution	Yes/No
Distributors' plans and logistical systems are in place to identify potential sources of excess in their supply chains that might be diverted to higher need locations	Yes/No
Manufacturers have MOUs in place to determine collective inventory accessibility and to ramp up manufacturing capability as needed	Yes/No
Frequency with which the Federal Government receives updates from distributors and manufacturers on the status of critical items that would prove necessary in a large scale incident with the focus on likely shortage and bottleneck situations	Quarterly
Increased inventory levels of critical items are maintained by medical supplies, equipment, and pharmaceutical manufacturers and distributors working in conjunction with the government	Yes/No
Stockpile includes supplies and pharmaceuticals for special populations (i.e. pediatrics and geriatrics)	Yes/No
Jurisdiction has identified locally available sources of critical medical supplies to use prior to arrival of external (State/Federal) resources	Yes/No
Jurisdiction has acquired and established access, through MOUs, contracts or established supply depots, to effective pharmaceuticals (including medical gases) and medical material in accordance with forecasted needs	Yes/No

Activity: Develop and Maintain Training and Exercise Programs
Critical Tasks

Res.C1c 2.1.1	Provide training on various types and models of medical supplies likely to be used in an emergency situation through government grants and industry-sponsored workshops	
Res.C1c 2.2.1	Establish and regularly exercise plans for transporting medical material assets at the Federal, State, local, and private/commercial levels with specific focus on their transfer between various levels or organizations	
Preparedness Measures		Metric
NIMS-compliant courses are held to train emergency coordinators on plans and procedures		Annually
NIMS-compliant exercise is conducted to ensure that plans and procedures are understood and executable		Annually

Performance Tasks and Measures/Metrics

Activity: Direct Medical Supplies Management and Distribution Tactical Operations		
Definition: In response to a need for medical assets, provide overall management and coordination for Medical Supplies Management and Distribution.		
Critical Tasks		
Res.C1c 3.1	Provide medical supply management and distribution support to incident response operations according to Incident Management Team (IMT) assignments in the incident action plan (IAP).	
Res.C1c 3.2.1	Request Strategic National Stockpile assets from Centers for Disease Control	
Res.C1c 3.2.3	Coordinate and obtain external resources for sustained operations of medical supplies management and distribution	
Res.C1c 3.4	Maintain communications with transportation vendors during distribution of medical supplies	
Res.C1c 3.2.4	Coordinate acquisition of private source medical supplies	
Res.C1c 3.2.5	Coordinate with medical surge operations and the American Association of Blood Banks (AABB) Task Force to identify supply levels at the supporting medical facilities for the incident	
Res.C1c 3.3	Monitor supply usage by health facilities, mass prophylaxis sites, and other critical care venues	
Res.C1c 3.2.7	Ensure the timely provision of medical supplies to shelters and mass care and medical facilities	
Res.C1c 3.2.7	Provide personnel for shelters and mass care and medical facilities	
Res.C1c 3.2.6	Monitor stockpiles levels of medical supplies maintained by private sources	
Res.C1c 3.3.1	Process and manage requests for additional medical supply personnel or equipment	
Res.C1c 3.2	Provide logistics support for medical supplies management and distribution	
Res.C1c 3.5	Provide for financial management and reimbursement of medical supplies	
Res.C1c 3.5.1	Coordinate with CDC for return of unused federal assets	
Performance Measures		Metric
Time to request Strategic National Stockpile (SNS) following medical surveillance indication		6 hours from indication

Activity: *Activate Medical Supplies Management and Distribution*

Definition: Upon identification of medical resource shortfalls and/or SNS deployment, activate warehousing operations.

Critical Tasks

Res.C1c 4.1	Establish medical supplies warehouse management structure
Res.C1c 4.2	Activate warehousing operations for receipt of medical assets
Res.C1c 4.3	Identify needed transportation assets for medical supplies
Res.C1c 4.4	Identify Technical Advisory Response Unit (TARU) team resource needs
Res.C1c 4.5	Provide and coordinate the use of emergency power generation services at medical supply warehouse locations

Performance Measures

Metric

Time from approved request for Federal medical assets to activation and full staffing of warehouse	6 hours from request
Time for request of local supplies to arrival at warehouse (to be used until Federal/State assets arrive)	2 hours from request
Medical supplies and pharmaceuticals were properly maintained and arrived in undamaged, serviceable condition and within the expiration date indicated on each container (bottle, case, vial, etc.)	Yes/No
Time to begin backfill of medical support packages from Strategic National Stockpile (SNS)	Within 36 hours

Activity: *Establish Security*

Definition: Upon activation of warehouse, activate Medical Supplies Management and Distribution Security Plan.

Critical Tasks

Res.C1c 5.3.1	Execute plan for credentialing medical supplies personnel
Res.C1c 5.2.1	Ensure security meets medical assets at point of entry into State
Res.C1c 5.3.2	Identify areas requiring increased security within the medical supplies warehouse
Res.C1c 5.2.2	Establish security checkpoints in vicinity of medical supplies warehouse and at staging areas

Performance Measures

Metric

Security and credentialing is provided at all steps of transportation of pharmaceuticals and supplies	Yes/No
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Activity: *Repackage and Distribute*

Definition: After delivery of medical assets to warehouse facility, repackage pharmaceuticals and other assets and distribute to Points Of Distribution (PODs) and other health facilities.

Critical Tasks		
Res.C1c 6.2	Assemble medical supplies warehouse teams (receiving, order management, picking, packaging, quality control, and shipping)	
Res.C1c 6.3	Inventory medical supplies warehouse resource levels	
Res.C1c 6.4	Provide quality control/quality assurance for requested medical assets prior to shipping	
Res.C1c 6.5	Track re-supply requests for medical supplies	
Performance Measures		Metric
Time from arrival of medical resources/SNS at warehouse to arrival at points of distribution (PODs)		12 hours from arrival
Time from approval of request for re-supply to the delivery of additional medical assets to PODs		12-36 hours from approval

Activity: *Recover Medical Resources*

Definition: As warehousing activities diminish, activate plan to recover unused medical resources.

Critical Tasks		
Res.C1c 7.1	Ensure recovery of unused (unopened) pharmaceuticals from mass prophylaxis sites	
Res.C1c 7.2	Provide unused but open medical resources to appropriate medical facility	
Performance Measures		Metric
Unused medical assets are recovered		Yes/No

Activity: *Demobilize Medical Supplies Management and Distribution*

Definition: Inventory, reorganize, and reconstitute stockpiles to return to pre-incident levels, and release personnel from Medical Supplies Management and Distribution duties

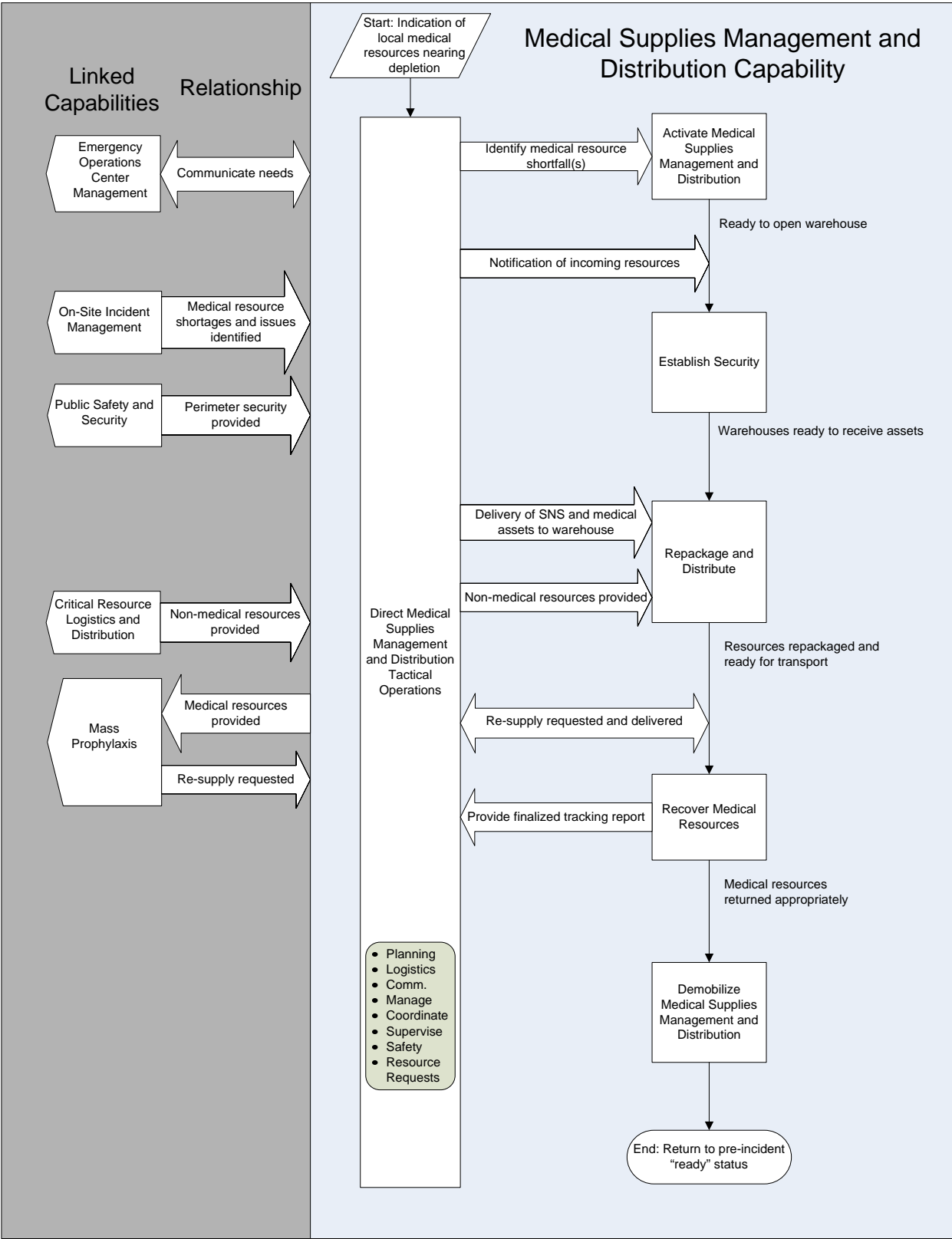
Critical Tasks		
Res.C1c 8.1	Execute plan to reduce medical supplies warehouse operations as distribution needs ease	
Res.C1c 8.2	Dispose of waste materials generated by medical supplies warehousing operations	
Performance Measures		Metric
Medical waste materials are properly disposed of		Yes/No

Linked Capabilities

Linked Capability	Relationship
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Emergency Operations Center Management	Medical Supplies Management capability and the Emergency Operations Center communicate operational and resource needs to one another.
On-Site Incident Management	On-Site Incident Management identifies medical resource shortages and issues and communicates this to Medical Supplies Management.
Public Safety and Security Response	Public Safety and Security Response provides perimeter security for the Medical Supplies and Management capability, including transport, warehouse, and distribution site security.
Critical Resource Logistics and Distribution	Critical Resource Logistics and Distribution provides non-medical resources to the Medical Supplies Management capability.
Mass Prophylaxis	Following a re-supply request from Mass Prophylaxis, Medical Supplies Management and Distribution capability provides the request medical resources.

Capability Activity Process Flow



Capability Element Description Details

Capability Elements	Components and Description
Stockpile Content Management Group	Experts in medicine and public health to determine what is required in the various stockpiles or needs to be supplemented in the existing supply chain
Strategic National Stockpile (including Vendor Managed Inventory)	12-hour Push Package of pharmaceuticals, antidotes, and medical supplies; may include follow-on vendor managed inventory (VMI) supplies
National Medical Equipment and Supplies Stockpile	Medical equipment and supplies necessary for a comprehensive all hazards response that are not currently accounted for in the Strategic National Stockpile at quantities determined by robust modeling tools and input from experts in the field
SNS Technical Advisory Response Unit (TARU)	The HHS Strategic National Stockpile program teams of emergency responders and logistics experts who arrive with the first shipment of the SNS to provide technical assistance related to receipts of medical material from SNS
Receipt, Staging, and Storage Site (RSS)	The warehouse (minimum 12,000 square feet, loading dock, climate controlled) from which the SNS materiel will be received and distributed. Includes staff for operations management, inventory control, distribution dispatch, and repackaging. Includes inventory management system and equipment
Interagency warehouse and team	Location to house critical resources as transferred from State, donated by non-governmental organizations (NGO) and public. Includes staff necessary to activate, set up and manage warehouse and inventory; includes inventory management equipment and systems required to efficiently run warehouse
National Tracking System	National system that captures and tracks resource availability -- includes locally managed tracking systems to feed into the larger system
Federal Mobilization Base Camp	Locations at incident site to receive Federal assets
Transportation vehicles and personnel	To move large amounts of critical resources (trucks, planes, boats, trains)
Transportation Coordinator	Per NRP ESF#1; coordinates critical resource transportation needs between Federal, State, local and private agencies and organizations
Security personnel	Provide required physical security to pharmaceuticals and medical supplies while stockpiled prior to an incident, in transit to and incident and while on site during an incident

Planning Assumptions

- For contagious and/or pandemic diseases (and possibly other scenarios), there will be limited or no implementation of cooperative agreements due to quarantine or actual or perceived contamination and/or widespread infection.
- Prior to dying, many people would use considerable healthcare resources because of their critical condition at admission.

- Existing medical devices (e.g., ventilators, respiratory equipment) will be inadequate. Manufacturers of large, expensive medical devices typically manufacture product on an “as needed” basis with a minimum of a 2–4 week lag time. Even surge production capacity is likely to be inadequate for short-term requirements.
- Surge capacities of pharmaceutical and medical product manufacturers and distributors will diminish compared with projected capabilities due to high absenteeism in all commercial sectors resulting from employees being directly affected by the scenario or choosing to stay home with families.
- Development of plans, procedures, and protocols for resource management in accordance with the National Incident Management System (NIMS) (Res.B.1.5) will be outlined within the Planning capability.
- Transport of medical supplies, pharmaceuticals, and laboratory supplies from federally controlled sources to the Federal mobilization base camp is the responsibility of the Federal Government.
- Transport of medical supplies, pharmaceuticals, and laboratory supplies from a Federal mobilization base camp to the State staging area is the responsibility of the State unless otherwise negotiated with the Federal Government.
- The originating entity is responsibly for transporting non-federally owned supplies to an interagency warehouse unless otherwise negotiated with Federal or State organizations.
- Any of the services, performance measures, or capabilities can and should be applied to the supply chain for laboratory testing materials as well. Although this does not necessarily fall directly under *medical* supplies, it is crucial that the diagnostic supplies to support medical functions are not forgotten or ignored.
- The capability to keep track of potential shortages of critical drugs during a large-scale event already exists within the Food and Drug Administration’s Center for Drug Evaluation and Research. This program can serve as a viable model for beginning such a program with medical supply distributors and manufacturers. This process absolutely must be initiated as soon as possible with the government providing necessary assurances to maintain commercial confidentiality. Destruction of physical structures over large areas will result in structures without permanent address which complicates or prohibits shipment of DEA scheduled drugs (controlled substances). Planning for alternatives should be initiated.
- During large scale contaminating event (rad/nuc, chem., bio), provisions need to be made for transition of large volume of medical supplies into warm/hot zones without losing use of vehicles to contamination.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

Resource Organization	Estimated Capacity	Scenario Requirement Values	Quantity of Resources Needed
Stockpile Content Management Group	Experts in medicine and public health to determine what is required in the various stockpiles or needs to be supplemented in the existing supply chain	3 management groups with continuous open dialogue to determine the current requirements	Pharmaceuticals Management Group Medical Supplies Management Group Laboratory Supplies Management Group

Resource Organization	Estimated Capacity	Scenario Requirement Values	Quantity of Resources Needed
Strategic National Stockpile (including vendor managed inventory)	Store and maintain medical materiel required for all hazards response	Response capability will leverage both Federal stockpiles and commercial capabilities.	Resource quantities needed must be determined by robust modeling tools to estimate stockpiles requirements based on the national planning scenarios and anticipated resultant patients/populations
SNS Technical Advisory Response Unit (TARU)	Staff associated with the Strategic National Stockpile that can coordinate delivery and distribution of stockpile assets with state and local officials		1 TARU per State/municipality receiving stockpile assets directly from stockpile
State Staging Area (Receipt, Staging, and Storage Site (RSS))	12,000 sq ft, temperature/humidity control, emergency electrical power, secure area for controlled substances	2 RSS per State	Minimum of 2 RSS sites per State
RSS personnel	Staff necessary to activate and manage RSS		
RSS equipment	Material Handling Equipment and Supplies; and an Inventory management system required to efficiently run RSS		
Interagency warehouse	House critical resources, donated by non-governmental organizations (NGO) and public prior to transfer to State	Establish warehouse sites as necessary based on volume of donated goods	1 warehouse minimum, based on incident need
Warehouse personnel	Staff necessary to activate, set up and manage warehouse and inventory		
Warehouse equipment	Inventory management equipment and systems required to efficiently run warehouse		

Resource Organization	Estimated Capacity	Scenario Requirement Values	Quantity of Resources Needed
Transportation vehicles and personnel	Ability to move large amounts of critical resources (trucks, planes, boats, trains).	Climate controlled and non-climate controlled transport capacity for all pharmaceuticals, and medical and laboratory diagnostic supplies	Volume capacity of vehicle multiplied by amount of resource needed
Transportation Coordinator	Coordinates critical resource transportation needs between Federal, State, local and private agencies and organizations	Scenario will require resources from all over to help support the incident, therefore coordinator will need to have overarching capability to monitor and troubleshoot movement of resources	1 to sit in Emergency Operation Center (EOC) / can be component Emergency Support Function (ESF) #1
Security personnel	Provide required physical security to pharmaceuticals and medical supplies while stockpiled prior to an incident, in transit to and incident and while on site during an incident		

Approaches for Large-Scale Events

None are specified.

National Targets and Assigned Levels

Responsible	Element Resource Unit	Type of Element	Number of Units	Unit Measure (number per x)	Capability Activity supported by Element
Federal	SNS TARU	Federal Resource Organization	12	1 TARU per SNS push pack	Establish Security Repackage and Distribute
Federal	National Medical Equipment and Supplies Stockpile	Equipment	1		Develop and Maintain Plans, Procedures, Programs and Systems Repackage and Distribute

Responsible	Element Resource Unit	Type of Element	Number of Units	Unit Measure (number per x)	Capability Activity supported by Element
State	State Pharmaceutical and Supply Stockpiles	Equipment			Develop and Maintain Plans, Procedures, Programs and Systems Repackage and Distribute
Local	Local Pharmaceutical and Supply Stockpiles	Equipment	20% increase	Increase over usual supply at local medical treatment facilities	Develop and Maintain Plans, Procedures, Programs and Systems Repackage and Distribute
Federal	National Tracking System	Network	1	Nationally, including jurisdictional components	Direct Tactical Operations Recover Resources
Federal/ State/ Local	Transportation Coordinator	Personnel	1	per EOC	Repackage and Distribute Recover Resources
Federal/ State/ Local	Transportation Vehicles	Vehicle		Depends on incident need	Repackage and Distribute Recover Resources
Federal/ State/ Local	Transportation Personnel (drivers, pilots...)	Personnel		Depends on incident need	Repackage and Distribute Recover Resources
Federal	Federal Staging Area	Resource Organization		Not pre-established	Repackage and Distribute Establish Security
State	RSS	Resource Organization	2	Minimum per State & territory	Repackage and Distribute Establish Security
Local	Interagency warehouse	Non-NIMS Resource Organization	1	Per incident	Repackage and Distribute Establish Security

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