

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: <i>Develop and Maintain Plans, Procedures, Programs, and Systems</i>	
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
Res.C1c 1.3	Obtain demographic/health-related data to plan for the types of medications, durable medical equipment, or consumable medical supplies that may need to be provided during an event (including supplies needed for populations requiring functional or medical care)
Res.C1c 1.1.1	In coordination with the appropriate agencies, develop processes for ensuring the distribution of medical supplies to shelters
Res.C1c 1.4	Establish procedures for billing and reimbursement of the medication/equipment/supplies that are dispensed

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
Plans address storage of supplies (e.g. secure, climate controlled).\	Yes/No
Medical treatment facilities and State, county and local governments have coordinated with medical distributors to develop preplanned worst-case scenario orders that reflect differing needs for various possible scenarios (chemical, biological attacks, natural disaster)	Yes/No
Frequency with which pre-plan worst-case scenario orders are reviewed and updated	Every 6 months
Processes for obtaining and distributing medication, DME, and/or CMS address what medication/equipment/supplies should be stockpiled versus obtained just in time	Yes/No
Processes for obtaining and distributing medication, DME, and/or CMS address sources of medication/equipment/supplies (e.g., vendors, medical facilities, strategic stockpiles)	Yes/No
Processes for obtaining and distributing medication, DME, and/or CMS address staging locations and distribution sites	Yes/No
Processes for obtaining and distributing medication, DME, and/or CMS address transport of medication/equipment/supplies to staging locations and distribution sites	Yes/No
Processes for obtaining and distributing medication, DME, and/or CMS address re-supply of medication/equipment/supplies	Yes/No
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 for assuring physical security of medical materiel in transport and distribution are in place	Yes/No
Distributors' plans and logistical systems to identify potential sources of excess in their supply chains that might be diverted to higher need locations are in place	Yes/No
Manufacturers memoranda of understanding (MOUs) to determine collective inventory accessibility and to ramp up manufacturing capability as needed are in place	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	Every 3 months
Increased inventory levels of critical items are maintained by medical suppliers, 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 memoranda of understanding (MOUs), contracts or established supply depots, to effective pharmaceuticals (including medical gases) and medical material in accordance with forecasted needs	Yes/No

Plans address unused resources and disposal of waste materials generated by medical supplies warehousing operations.	Yes/No
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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
Frequency with which NIMS-compliant courses are held to train emergency coordinators on plans and procedures		Every 12 months
Frequency with which NIMS-compliant exercise is conducted to ensure that plans and procedures are understood and executable		Every 12 months

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 and stockpile levels of 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 3.2.8	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 Center for Disease Control for return of unused Federal assets	
Performance Measures		Metric
Time in which Strategic National Stockpile (SNS) is requested following medical surveillance indication of requirement		Within 6 hours from indication

Activity: <i>Activate Medical Supplies Management and Distribution</i>		
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 in which Federal medical assets warehouse are activated and fully staffed		Within 6 hours from approved request
Time in which local supplies arrive at warehouse (to be used until Federal/State assets arrive)		Within 2 hours from request
Percent of medical supplies and pharmaceuticals that are properly maintained and arrived in undamaged, serviceable condition and within the expiration date indicated on each container (bottle, case, vial, etc.)		100%
Time in which backfill of medical support packages from Strategic National Stockpile (SNS) is initiated		Within 36 hours

Activity: <i>Establish Security</i>		
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 locations that require increased security within the warehouse (such as controlled substance storage areas)	
Res.C1c 5.2.2	Establish security checkpoints in vicinity of medical supplies warehouse and at staging areas	

Performance Measures	Metric
Percent of appropriate security (e.g. U.S. Marshals, state police, county sheriff, city police) and credentialing provided at all steps of transportation of pharmaceuticals and supplies	100%

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
Rec.C1c 6.6	Distribute medical supplies to Points of Distribution (POD), health facilities, and shelters
Performance Measures	Metric
Time in which medical resources/SNS at warehouse arrive at points of distribution (PODs)	Within 12 hours from arrival at warehouse
Time in which additional medical assets are delivered to POD or other health facility	Within 36 hours from approval of request for re-supply

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 Receipt, Storage and Staging site (RSS), and unused pharmaceuticals and durable items from mass prophylaxis sites
Res.C1c 7.2	Distribute unused but open medical resources within the local health system according to local policies and plans
Performance Measures	Metric
Percent of unused medical assets recovered	100%

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

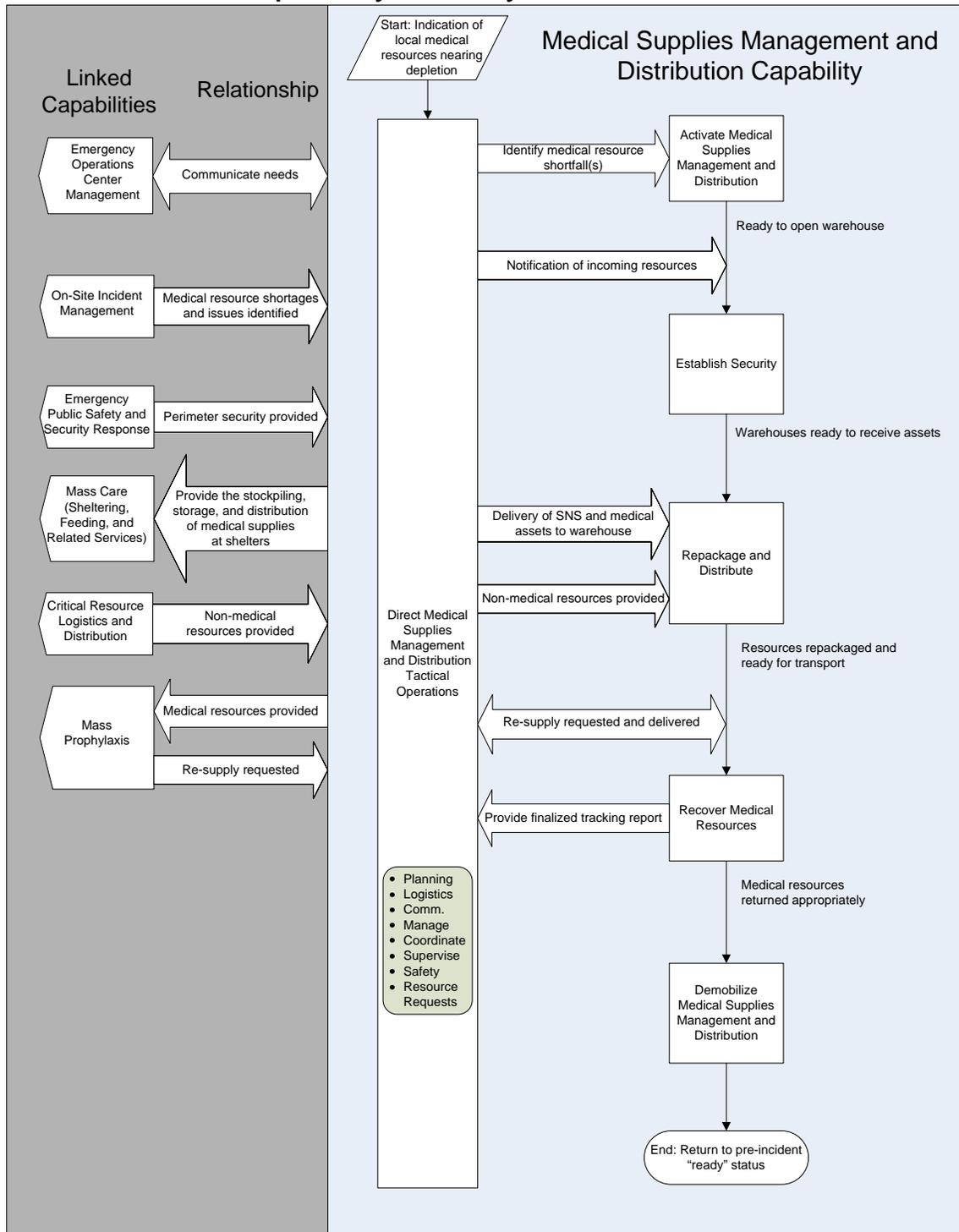
Res.C1c 8.1	Execute plan to reduce medical supplies warehouse operations as distribution needs ease
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Res.C1c 8.2	Dispose of waste materials generated by medical supplies warehousing operations
Performance Measures	Metric
Percent of medical waste materials disposed of in accordance with applicable State laws and regulations	100%

Linked Capabilities

Linked Capability	Relationship
Emergency Operations Center Management	Medical Supplies Management 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.
Emergency Public Safety and Security Response	Emergency Public Safety and Security Response provides perimeter security for Medical Supplies and Management, including transport, warehouse, and distribution site security.
Mass Care (Sheltering, Feeding, and Related Services)	Medical Supplies Management provides the stockpiling, storage, and distribution of medication, durable medical equipment, and consumable medical supplies that may be needed at general population shelters and functional and medical support shelters.
Critical Resource Logistics and Distribution	Critical Resource Logistics and Distribution provides non-medical resources to Medical Supplies Management
Mass Prophylaxis	Following a re-supply request from Mass Prophylaxis, Medical Supplies Management provides the request medical resources.

Capability Activity Process Flow



Resource Element Description

Resource 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, e.g., Pharmaceuticals Management Group, Medical Supplies Management Group, Laboratory Supplies Management Group
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. Store and maintain medical materiel required for all hazards response.
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
State Pharmaceutical and Supply Stockpiles	
Local Pharmaceutical and Supply Stockpiles	
SNS Technical Advisory Response Unit (TARU)	The Health and Human Services 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. Staff associated with the Strategic National Stockpile that can coordinate delivery and distribution of stockpile assets with State and local officials
Receipt, Staging, and Storage (RSS) site, staff, and equipment	The warehouse (minimum 12,000 square feet, loading dock, temperature/humidity control, emergency electrical power, secure area for controlled substances) 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. RSS includes: 1) staff necessary to activate and manage RSS and 2) Material Handling Equipment and Supplies and an inventory management system required to efficiently run receipt, staging, and storage site
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. Team includes: 1) staff necessary to activate, set up and manage warehouse and inventory and 2) 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 Staging Area	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 National Response Plan (NRP) Emergency Support Function #1 (ESF#1); coordinates critical resource transportation needs between Federal, State, local and private agencies and organizations

Resource Elements	Components and Description
Security personnel	Provides 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
All –Hazards Core Supply Formulary	<p>Basic supplies needed for each adult casualty in any type of disaster scenario. Supplies may include:</p> <ul style="list-style-type: none"> • Instruments/ Equipment (BP Cuffs, Disposable; BP Manometer; Batteries- AA, AAA, D, C, 1 gross per incident; Artificial Resuscitator Bag, 10% child, 5% infant). • Sharps: NDL/ Syringes (10cc Needleless Syringes; 60cc Needleless Syringes; 3cc 23 G1” Safety Syringes; 3cc 23 G1 1/2” Safety Syringes TB Syringes; Insulin Syringes; Blunt Plastic Cannula; Lever Lock Cannula; 18G 11/2” Safety Needles; 20G 11/2” Safety Needles; Sharps Container; 20G IV Start Catheter; 18G Start Catheter; Winged Infusion Set 23GA &25GA). • Irrigation Solutions (Normal Saline Irrigation Solution- 2000cc; Sterile Water Irrigation Solution- 2000 cc). • IV Access/ Supplies (IV Start Kits; Micro Drip Tubing; Adult Drip Tubing; Blood Admin. Tubing; Disposable IV Pressure Bag; Metri Set Tubing; Arterial Line Tubing). • IV Solutions (LR 1000cc; NS 1000cc; Central Vein Catheter Kit; Multi Lumen Central Catheter Kit; Long Arm Board; Short Arm Board; Stopcock). • Linen (Disposable Sheets; Disposable Pillows; Disposable Pillow Covers). • Hand Hygiene (Providine/Iodine Scrub Brushes; PCMX Scrub Brushes- 1 box per 100 casualties). • Patient Personal Care Supplies (Bath Basin; Emesis Basin; Facial Tissues; Bedpan; Urinal; Belonging Bag; Regular Soap; Mouth Care Supplies). • Miscellaneous (Sterile Lubricant; Alcohol Wipes; PVP Wipes; Tongue Depressors; 5 in 1 Connectors; Garbage Liners; Blood Glucose Testing Supplies; Waterproof Markers; Body Bag- 25 per 100 casualties; Blank Labels/ Tags; Individual Bottled Drinking Water).
All Hazards Pediatric Supply Formulary	<p>Basic supplies needed for each pediatric casualty in any type of disaster scenario. Supplies may include:</p> <ul style="list-style-type: none"> • Instruments/ Equipment (Disposable BP Cuffs- Neonatal, Infant, Child, Small Adult; Artificial Resuscitator Bag Masks- Ped, Infant). • Patient Personal Care Supplies (Bath Basin, Cotton Swabs; Facial Tissues; Diapers; Pacifier; Belonging Bag; Cotton Balls). • Respiratory System Supplies (Nasal Airways; Oral Airways; Oxygen Cannulas; Oxygen Masks). • ER/Trauma/Surgical Supplies (Scalpel #11; Sutures-to be ordered individually, by box; General Instruments Tray; Facial Suture Tray; Chest Drainage System; Buretol Tubing-60 drops; Thoracostomy Tray; Chest Tubes- 8, 10, 12, 24, 32; Thoracic Catheter with Tubing and Container; Sterile Towels; Sterile Sheets; Small Sterile Basins; Electrodes; Monitoring Electrodes). • Dressings (Bandage Scissors; 2X2 Dressings; 4X4 Dressings; Adhesive IV Dressing; 4” Bandage Rolls; 1” Paper Tape; Adhesive Bandages).

Resource Elements	Components and Description
	<ul style="list-style-type: none"> • Linen (Disposable Sheets; Disposable Pillows; Disposable Pillow Covers). • Muscle/ Skeletal Supplies (Limb Restraints). • GI System Supplies (Anti-Reflux Valve- 10, 12, 14; Feeding Tubes- 5,8). • Sharps: NDL/ Syringes (Bulb Syringes; Safety Syringes- 21, 25; Filter Needles; Catheter Tip Syringe 60cc; Sharps Container; Luer Lock Syringes- 20cc, 60cc; Syringes- 1, 3, 5, 10cc). • IV Access/ Supplies (IV Start Kits; Stopcock; T-Connector; IV Start Catheter- 18, 20, 22, 24; Arm Boards- Infant, Child; Blood Administration Tubing; IV Filters-.22 micron, 1.2 micron; Syringe Pump Tubing; Micro Drip Tubing). • IV Solutions (Glucose Water; NS 10cc; NS 1000cc). • Irrigation Solutions (Normal Saline Irrigation Solution- 2000cc; Sterile Water Irrigation Solution- 2000 cc). • Miscellaneous (Sterile Lubricant; Alcohol Wipes; Alcohol Swab Sticks; Tongue Blades; Heel Warmers; Tape Measure; Body Bag; Disposable Linen Savers; Safety Pins; Povidone Iodine Swab Sticks; Povidone Iodine Wipes; Hydrogen Peroxide; Individual Bottled Drinking Water).
Chemical Disaster Supply Formulary	<p>Supplies needed to supplement the Core or Pediatric Formulary for chemical disasters. Supplies may include:</p> <ul style="list-style-type: none"> • Respiratory System Supplies (ABG Kits; Nasal Airways- 6.5, 7.0, 7.5, 8.0- 1 box per 100; Oral Airways-3, 4, 6-1 box per 100; Oxygen Cannulas; Oxygen Masks; Yankauer Suction Tips; Connecting Tubing; Suction Kit/Cup 14FX22). • GU System Supplies (Urine Multi-Stix; Foley Catheter Trays; Urometers). • Irrigation Solution (Sterile Water Irrigation Solution 3000cc). • Miscellaneous (Disposable Sheet; Balanced Salt Solution).
Biological Disaster Supply Formulary	<p>Supplies needed to supplement the Core or Pediatric Formulary for biological disasters. Supplies may include:</p> <ul style="list-style-type: none"> • GU System Supplies (Urine Multi-Stix; Foley Catheter Trays; Urometers). • Miscellaneous (50 Micron Mask; Stomach Tube).
Radiological Disaster Supply Formulary	<p>Supplies needed to supplement the Core or Pediatric Formulary for radiological disasters. Supplies may include:</p> <ul style="list-style-type: none"> • GU System Supplies (Urine Multi-Stix; Foley Catheter Trays; Urometers). • Irrigation Solution (Sterile Water Irrigation Solution 3000cc). • Miscellaneous (Disposable Sheet; Balanced Salt Solution).
Nuclear Disaster Supply Formulary	<p>Supplies needed to supplement the Core or Pediatric Formulary for nuclear disasters. Supplies may include:</p> <ul style="list-style-type: none"> • GU System Supplies (Urine Multi-Stix; Foley Catheter Trays; Urometers). • Irrigation Solution (Sterile Water Irrigation Solution 3000cc). • Miscellaneous (Disposable Sheet; Balanced Salt Solution).
Explosive Disaster Supply Formulary	<p>Supplies needed to supplement the Core or Pediatric Formulary for explosive disasters. Supplies may include:</p>

Resource Elements	Components and Description
	<ul style="list-style-type: none"> • GU System Supplies (Urine Multi-Stix; Foley Catheter Trays; Urometers). • ER/Trauma/Surgical Supplies (Scalpel Blade Holer-#3, #4; Scalpel Blades- #10, #11, #15, #20; Disposable Safety Scalpel #15; Suture Sets; Silk & Gut Sutures- ordered in bulk by facility; Thoracostomy Tray; Peritoneal Lavage Tray; Chest Tubes- 12, 24, 28, 36; Chest Drainage Tube with Container; Sterile Towels; Sterile Sheets; Large Sterile Basin; Small Sterile Basin; Trocar Chest Tube; Skin Stapler; Electrodes; Tracheotomy Kit). • Dressings (Bandage Scissors; Impregnated Dressing; 3” Dressing; ABD Pads; 4X4 Dressing; Self Adhering Dressing; 4X4 Sponges; 4” Bandage Rolls; 3” Elastic Bandage; 4” Elastic Bandage; 6” Elastic Bandage; Sterile Cotton Applicators; 2” Porous First Aid Tape; 3” Porous First Aid Tape; Adhesive Bandages; 1” Paper Tape). • GI System Supplies (Piston Irrigation Sets; Gastric Lavage Kits; Anti-Reflux Valve- 8, 12, 18). • Irrigation Solutions (Normal Saline Irrigation Solution- 2000cc; Sterile Water Irrigation Solution- 2000 cc). • Muscle/Skeletal Supplies (Medium Slings; Large Slings; Small Cervical Collars; Universal Cervical Collars: Knee Immobilizers; Wrist Restraints; Restraint Belts; OCL Splints Plaster; Plaster Impregnated Gauze Roll 4”).
Staff Supply Formulary	<p>Supplies needed for each hospital person in a disaster. Supplies may include:</p> <ul style="list-style-type: none"> • Hand Hygiene (Personal Hand Foam Sanitizer). • Protective Gear (Sterile Gloves- all sizes- 1 box per 100 casualties; Exam Gloves, Medium- 1 box per 25 casualties; Latex Free Gloves Medium- 1 box per 25 casualties; Fluid Resistant Gowns; Masks; Goggles; Shields; Balanced Salt Solution for Eye Wash; Isolation Gown- 4 per staff member; Fluid Resistant Gowns- 1 per staff member; hair Cover; Liquid Scrub Soap; Individual Bottled Drinking Water).

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 addresses which complicates or prohibits shipment of DEA scheduled drugs (controlled substances). Planning for alternatives should be initiated.
- During large scale contaminating event (CBNRE), 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		Continuous open dialogue to determine the current requirements	3 management groups
Strategic National Stockpile (including vendor managed inventory)		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
Strategic National Stockpile Technical Advisory Response Unit (TARU)			1 Technical Advisory Response Unit per State/municipality receiving stockpile assets directly from stockpile
State Staging Area (Receipt, Staging, and Storage Site, RSS)		2 receipt, staging, and storage sites per State	Minimum of 2 receipt, staging, and storage sites per State
Interagency warehouse		Establish warehouse sites as necessary based on volume of donated goods	1 warehouse minimum, based on incident need

Resource Organization	Estimated Capacity	Scenario Requirement Values	Quantity of Resources Needed
Transportation vehicles and personnel		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		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

Target Capability Preparedness Level

Resource Element Unit	Type of Element	Number of Units	Unit Measure (number per x)	Lead	Capability Activity supported by Element
National Medical Equipment and Supplies Stockpile	Equipment	1		Federal	Repackage and Distribute
State Pharmaceutical and Supply Stockpiles	Equipment			State	Repackage and Distribute
Local Pharmaceutical and Supply Stockpiles	Equipment	20% increase	Increase over usual supply at local medical treatment facilities	Local	Repackage and Distribute
SNS Technical Advisory Response Unit (TARU)	Federal Resource Organization	1	Per State/municipality receiving stockpile assets directly from stockpile	Federal	Establish Security Repackage and Distribute
Receipt, Staging, and Storage (RSS) site, staff, and equipment	Resource Organization	2	Minimum per State & territory	State	Repackage and Distribute Establish Security
Interagency warehouse	Non-NIMS Resource Organization	1	Per incident	Local	Repackage and Distribute Establish Security
National Tracking System	Network	1	Nationally, including jurisdictional components	Federal	Direct Tactical Operations Recover Resources

Resource Element Unit	Type of Element	Number of Units	Unit Measure (number per x)	Lead	Capability Activity supported by Element
Federal Staging Area	Resource Organization		Not pre-established	Federal	Repackage and Distribute Establish Security
Transportation Vehicles and Personnel	Vehicle		Depends on incident need	Federal/ State/ Local	Repackage and Distribute Recover Resources
Transportation Coordinator	Personnel	1	per EOC	Federal/ State/ Local	Repackage and Distribute Recover Resources

References

1. Homeland Security Presidential Directive/HSPD-8: National Preparedness. The White House, Office of the Press Secretary. December 2003. <http://www.whitehouse.gov/news/releases/2003/12/20031217-6.html>.
2. *National Response Plan*. U.S. Department of Homeland Security. December 2004
3. *National Incident Management System*. U.S. Department of Homeland Security. March 2004. www.dhs.gov/interweb/assetlibrary/NIMS-90-web.pdf.
4. Sector Specific Plan for the Healthcare and Public Health Sector. U.S. Department of Health and Human Services. June 2005.
5. Modular Emergency Medical System: Concept of Operations for the Acute Care Center. U.S. Army Soldier and Biological Chemical Command, Biological Weapons Improved Response Program. Maryland. May 2003.
6. *Resource Typing Definitions-I: First 60 Resources*. National Mutual Aid and Resource Management Initiative. U.S. Department of Homeland Security, Federal Emergency Management Agency. January 2004. www.fema.gov/pdf/preparedness/initial_60_rtd.pdf.
7. Strategic National Stockpile. Centers for Disease Control and Prevention. January 2005. www.bt.cdc.gov/stockpile.
8. Mass Antibiotic Dispensing-Managing Volunteer Staffing. Centers for Disease Control and Prevention. December 2004. www.phppo.cdc.gov/PHTN/webcast/antibiotic2/default.asp.
9. Mass Antibiotic Dispensing: A Primer. Centers for Disease Control and Prevention. June 2004. www.phppo.cdc.gov/phtn/antibiotic/default.asp.
10. National Disaster Medical System. U.S. Department of Homeland Security. 2004. www.ndms.dhhs.gov/.
11. DHS, Office for Domestic Preparedness, Major Metropolitan Response System (MMRS) Program. <http://fema.mmrs.gov>.
12. "Medical-Surgical Supply Formulary by Disaster Scenario" Presented by the Association for Healthcare Resource & Material Management, the Health Industry Distributors Association, and the Health Industry Group Purchasing Association.