

# MEDICAL-SURGICAL SUPPLY FORMULARY BY DISASTER SCENARIO

Presented by the Association for Healthcare Resource & Materials Management (AHRMM), the Health Industry Distributors Association (HIDA), and the Health Industry Group Purchasing Association (HIGPA).

## BACKGROUND

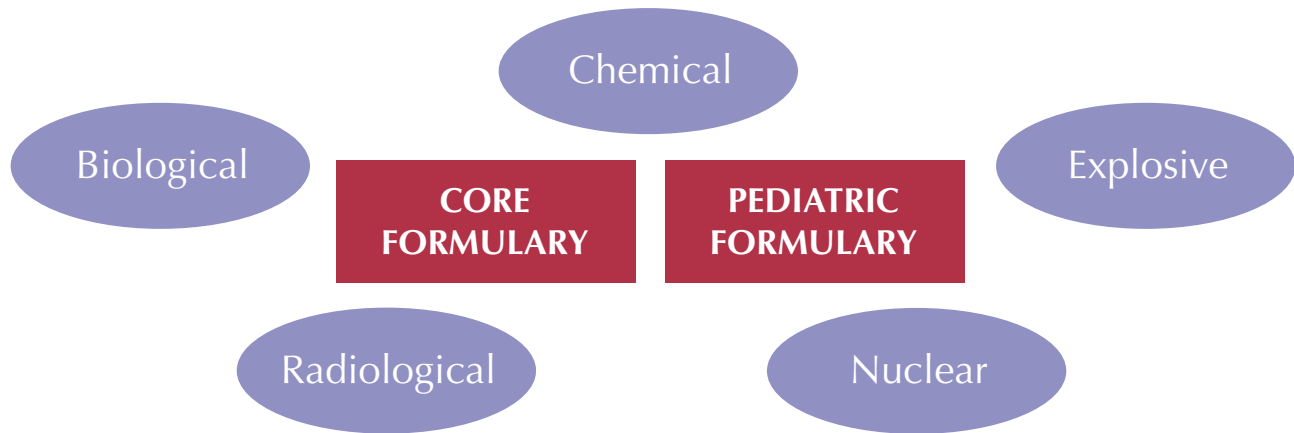
The following is a proposed starting point for planning and coordinating medical/surgical supplies for hospitals throughout the United States during a large scale CBRNE (Chemical, Biological, Radiological, Nuclear, and Explosive) or Natural disaster. These supply formularies were created based on feedback and input from multiple hospitals and healthcare systems and have been reviewed by AHRMM members, their clinical representatives, and members of HIDA. The lists are intended only as starting points for preparedness efforts and should be modified to fit each hospital according to its individual needs and feedback from its clinicians.

“Large scale” refers to events that will produce casualties beyond that which can be planned for by a single hospital. By definition, the event will not impact a single facility but will affect communities and regions. These events will require planning beyond the individual hospital and will include all segments of supply and

points of care in a region. Hospitals must be self-reliant until Federal aid arrives, within 24–72 hours after Federal Emergency Management Agency (FEMA) has been contacted and the event has been declared a Federal disaster.

## MEDICAL/SURGICAL SUPPLY FORMULARIES

Under this plan, medical/surgical supplies are separated into seven formularies and a staff formulary. It is important to note that these formularies are for medical/surgical supplies and do not include products for Radiology or Pharmacy. The Core Formulary has the basic supplies needed for each adult casualty in any type of disaster scenario. The Pediatrics Formulary includes the basic supplies needed for each pediatric casualty regardless of type of disaster. The remaining five specialty formularies are supplemental to the Core or Pediatric Formulary and include only the supplies specific to each type of disaster listed in the diagram below. In addition to patient formularies, the Staff Formulary contains the supplies needed for each hospital staff person.



## CONSIDERATIONS FOR MATERIALS MANAGEMENT PROFESSIONALS

### Hospital's Internal Supply Chain

Included in each hospital's plan should be the ability to redirect supplies already within the hospital's supply chain to the areas first impacted. Step one for Materials Management is to examine the hospital's internal supply chain. With clinical experts, the hospital units/departments should be identified that might be closed in the event of a large-scale disaster.

Materials Management should identify the supplies that might be diverted from these areas and routed to the first response areas. Also, stretchers from these areas should be identified, as many of the events will produce casualties beyond a single hospital's ability to provide available beds.



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## Working with Suppliers and Others

Materials Management must determine the amount of supplies to keep on hand until replenishment arrives. Each facility's disaster readiness team must investigate the best means for having quality supplies that are readily available. This determination is individual to each facility.

When working with suppliers, Materials Management should determine the length of time needed for delivery from the time of the first call. Additionally, the clinicians will need to determine the maximum number of casualties the hospital will be able to treat during this period of time. Based on the maximum number of casualties before suppliers' replenishments arrive and the amount of supplies that could be diverted from other areas of the hospital, Materials Management will be able to determine how much additional product must be kept on hand.

Essential to this plan is working with suppliers and establishing pre-event orders that can be activated with a single phone call or email. Each order will be specific to the individual hospital's needs by type of disaster using the supply formulary model. This preplanning also will help the suppliers maintain adequate inventory, which will assure that the pre-order can be delivered at any time with complete fill levels.

## Other Critical Components

Since disaster scenarios of this size will exceed the hospital's ability to support casualties, it demands a community response plan. Work with local agencies, including fire fighters, public health department, Civil Defense, any offices of Emergency Preparedness, and other members participating in the Metropolitan Medical Response System as well as with other hospitals and healthcare providers that service the community. Cooperative agreements should be drafted among all the hospitals and healthcare providers for mutual support.

A single source of communication should be identified for the entire community, and each hospital should use this source to request additional supplies and to coordinate the flow of supplies to the areas most in need. With the possibility that every hospital is placing demands on supply sources, this coordination is imperative to prevent chaos.

This plan should be practiced with the community and community agencies to identify where the plan might need to be revised or strengthened. It is essential that the preparedness plan(s) be in place and tested soon. The real danger is not to plan for the unthinkable.

# Disaster Supply Formularies

## CORE FORMULARY

### Instruments/Equipment

BP Cuffs, Disposable  
BP Manometer  
Batteries-AA, AAA, D, C,  
1 gross per incident  
Artificial Resuscitator Bag,  
10% child, 5% infant

### Sharps: ND/Syringes

10cc Needleless Syringes  
60cc Needleless Syringes  
3cc 23G1" Safety Syringes  
3cc 22G1 1/2" Safety Syringes  
TB Syringes  
Insulin Syringes  
Blunt Plastic Cannula  
Lever Lock Cannula  
18G 1 1/2" Safety Needles  
20G 1" Safety Needles  
Sharps Container  
20G IV Start Catheter  
18G IV Start Catheter  
Winged Infusion Set 23GA  
& 25GA

### Irrigation Solutions

Normal Saline Irrigation Solution  
2000cc  
Sterile Water Irrigation Solution  
2000cc

### 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

# PEDIATRIC FORMULARY

## 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)  
Thorastic 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

## 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 2000cc

## 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

### 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

### GU System Supplies

Urine Multi-Stix  
Foley Catheter Trays  
Urometers

### Miscellaneous

50 Micron Mask  
Stomach Tube

## RADIOLOGICAL

### GU System Supplies

Urine Multi-Stix  
Foley Catheter Trays  
Urometers

### Irrigation Solution

Sterile Water Irrigation Solution 3000cc

### Miscellaneous

Disposable Sheet  
Balanced Salt Solution

## NUCLEAR

### GU System Supplies

Urine Multi-Stix  
Foley Catheter Trays  
Urometers

### Irrigation Solution

Sterile Water Irrigation Solution 3000cc

### Miscellaneous

Disposable Sheet  
Balanced Salt Solution

## EXPLOSIVE

### GU System Supplies

Urine Multi-Stix  
Foley Catheter Trays w/ Bags  
Urometers

### ER/Trauma/Surgical Supplies

Scalpel Blade Holder (#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 Dressings

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 2000cc

### 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

### 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 200 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