During times of disaster, hospitals play an integral role as the community safety net, providing essential medical care that must be available often times within a moment’s notice. Strategic planning and ongoing training are necessary to identifying, dispatching and mobilizing critical material and human resources. The health care supply chain professional is a vital component of any hospital emergency response team and the hospital incident command center. Efficiency in emergency supply chain management means allocating adequate resources to achieve the greatest aggregate benefit for as many people as possible.

The supply chain leader acts as an expert in resource allocation, including supplies and services needed during incidents such as a natural disaster, pandemic or public health incident, act of terrorism or mass casualty, and manages the supply lines to meet a surge in demand without disruption. Interdepartmental coordination, supplier and distributor management, and engagement with local and/or regional organizations are essential to managing the incident successfully.

AHRMM is committed to providing the necessary resources to help all health care providers and suppliers prepare for a disaster or emergency. The following two important checklists are available to you help prepare for and use during an emergency or disaster.

The “Prior to the Disaster/Emergency: Supply Chain Management Leading Practices and Ideas” is a more comprehensive list of items to consider as the department develops their emergency plan. This checklist comprises some of the most widely used ideas and resources needed to prepare the supply chain department and the health care organization for the unexpected.

The “During the Disaster/Emergency: Supply Chain Management Leading Practices and Ideas” is intended for the health care supply chain department to keep at their fingertips during the disaster. From critical staffing and logistics alternatives to supplies and cascading incidents, this list can help ensure the most crucial steps are taken during a disaster or emergency.

The “After the Disaster/Emergency: Supply Chain Management Leading Practices and Ideas” is a list of items to consider as the organization recovers from the disaster. Many items need attention, such as inventory issue transactions, unexpected costs, and language translators.

AHRMM members worked closely with the Centers for Disease Control to develop [The Supply Chain Disaster Preparedness Manual](http://www.ahrmm.org/resources/tools/supply-chain-disaster-preparedness-manual-11018.docx), a free publication for use in the development of a disaster/emergency preparedness plan. We encourage you to review the manual and the information contained in this resource guide, and perform your own research to prepare your individual organization for the unknown.

Crisis often brings out the best in people, and the health care community is no different. The objective is to minimize disruption to patient care while sharing precious resources without knowing when supplies will be replenished.

There is no script for catastrophic incidents such as mass casualty, or incidents where little to no notice is given. Possibly the most important lesson is that not only is a back-up plan essential, but having a back-up to the back-up plan will inevitably reinforce your organization’s ability to respond quickly while maintaining exceptional clinical care.

Advance preparation increases resilience and may reduce second and third level cascading incidents**.** Advance planning takes an enormous amount of work conducted by dedicated teams of people who communicate year-round**.** Outside agencies and entities will be your partners during emergencies and crucial to any successful plan**.** There must be constant communication between them and your facility’s core team**.**

#### Below is a general list of best practices and ideas intended to assist *as you develop* your disaster and emergency plans. This list is not exhaustive and you are strongly encouraged to use the resources listed on the last page to conduct your own research.

#### Engage with administration and other departments on the development/revision of the Hospital Incident Command System (HICS)

#### Conduct a hazard vulnerability analysis (HVA) to prioritize risks based on probability and likely impact

#### Develop a strong supply chain emergency preparedness plan, specific for each institution and site

#### Regularly update your plan – we learn from our own experiences and the experiences of others

#### Print multiple hard copies of all lists – paper will not be affected by power outages

#### Conduct ongoing exercises and drills, including scenarios where all patients are coming to one hospital

#### In-House Logistics:

#### Obtain clear direction from governmental agencies regarding products required and the level of response

#### Develop a logistics strategy to prevent the limited resources from being wasted in the chaos of a disaster/emergency

#### Staffing:

#### Educate staff on department plans; reinforce need for personal emergency preparations

#### Develop a staff call tree to identify staff available to work during or after an emergency

#### Develop staff rotations of two 12-hour shifts and for the immediate days after the incident

#### Identify transportation availability for staff

#### Supplies:

#### High priority supplies: pharmaceuticals, fuel, food, water, waste disposal, scrubs, linens and other high usage items, non-perishable food supplies, cots and/or air mattresses

#### Meet with each department to review supplies needed; order supplies

#### Identify preferred and acceptable alternative products and medications

#### Collaborate with clinical, distribution, and supplier stakeholders to identify and approve

#### Supply Replenishment:

#### Vendor emergency contact list with alternative contact numbers

#### Print multiple hard copies (paper is not affect by power outages)

#### Identify the capabilities of external stakeholders

#### Identify how often and through what means organizations can effectively receive material

#### Identify how to get supplies if critical transportation infrastructure is destroyed or inaccessible

#### Position supplies prior to road closures in planned incidents, if possible

#### Clarify supply chain staff responsibilities related to resource allocation

#### Consider your GPO as a part of your first response team and use their network of manufacturers and distributors

#### Alternate Suppliers and Supply Routes:

#### Develop primary & alternate supply routes

#### Develop list of alternate sources of supply

#### If alternate suppliers are out of your area determine how you will communicate and advise them of your situation

#### Equipment:

#### Identify list of specialized and back-up equipment that may be required

#### Determine who and how items will be maintained throughout the crisis

#### Fuel:

#### Determine need for regular and diesel fuel (and storage space) to support your vehicles

#### Keep diesel fuel and propane tanks topped off at all times

#### Identify alternate fuel sources in case fuel pumps fail or become contaminated

#### Ensure generator can power operations for up to seven days

#### Storage/Warehousing:

#### Ensure adequate clean, dry and secure space is available for supplies

#### Waste containers should handle at least 7 days’ accumulation of biomedical and regular waste

#### Cascading Incidents:

#### Consider what potential “cascading” incidents can occur as a result of another catastrophic incident, what the results of those incidents may be, and how that fits into your plan

#### Flooding due to levies collapsing

#### Fires, electrical casualties due to downed power lines

#### Road closures, car accidents due to debris or other barrier(s)

#### Water/power outages

#### Damage to hospital infrastructure

#### Unexpected costs (utilities, supplies, etc.)

#### Be aware of the hospital’s state prior to a disaster/emergency:

#### Keep a documented inventory of the resources and assets the organization has on site that may be needed during an emergency (TJC Standards EM.01.01.01, EP 8)

#### These supplies must be accessible while on site without travel to a warehouse off site

#### Determine where materiel is needed most

#### Determine what supplies will be needed in the future

#### Are supplies available in another adjoining department room, or in a cabinet within the same room?

#### Maintain contact list(s) to obtain assistance from inter-agency enablers external to organization:

#### Local, state, and federal disaster resources

#### Community health care coalition

#### Clarify the decision points at which a message of non-continuance must be communicated to leadership in compliance of The Joint Commission Standards

#### Language translators for families looking for loved ones in the first 24-48hours post event

#### Community leaders of populations affected by the disaster event (ex: the 2016 Pulse nightclub incident occurred on a Latin/LGBTQ themed night)

#### Know the organization’s Day to Day Resource Utilization:

#### Inventory (in-house & storage)

#### Average Daily Census (quarterly)

#### Consumption Rate (quarterly average)

#### Sustainability (hourly utilization)

#### Gap Analysis (difference of actual vs. needed)

#### Consumption Adjustment (modify usage)

#### Below is a brief checklist of general items to address *during a disaster/emergency* and is intended to assist as you implement your disaster/emergency plan. This list is not exhaustive and you are strongly encouraged to use the resources listed on the last page to conduct your own research.

#### Contact critical staff by implementing the staff call tree to identify staff available to work

#### Logistics:

#### Contact the medical/surgical distributor or pharmacy wholesaler, if necessary (not manufacturer)

#### Early warning of weather incident: contact primary vendors as early as possible (4-7 days – anticipate delays to fill supply pipeline); many suppliers will stop deliveries prior to a storm and may not be able to supply immediately after

#### Contact delivery alternatives – night or weekend deliveries

#### Determine when your vehicles or supplier vehicles will need to be off the road

#### Determine Just-in-time (JIT) supply replenishment activities (situation-appropriate)

#### Expect medical/other requests from emergency medical services, shelters, nursing homes, residential facilities, etc., before/during/after storm

#### Supplies – based on the nature of the incident:

#### Organize high priority/usage supplies, i.e. pharma, fuel, food, water, waste disposal, scrubs, linens, etc.

#### Pull approved and alternative: a) products and b) medications lists

#### Determine and ready the specialized equipment needs

#### Consider your group purchasing organization (GPO) as a part of your first response team

#### Determine and ready the agreed-upon supplies needed for the rooms for family of victims

#### Anticipate cascading incidents that occur as a result of another catastrophic incident

#### Contact collaborative outside agencies and community groups, such as health care coalitions, emergency management committees:

#### Pull the lists of local, state and federal disaster resources

#### Language translators for families looking for loved ones in the first 24-48hours post event

#### Community leaders of populations affected by the disaster event (ex: the 2016 Pulse nightclub incident occurred on a Latin/LGBTQ themed night)

#### Deliver timely supply chain updates to phone operators

Below is a checklist that comprises some of the most widely used ideas and resources needed to equip the supply chain department for navigating the *post disaster landscape*. This list is not exhaustive and you are strongly encouraged to use the resources listed on the last page to conduct your own research.

Returning to normal operation

#### Review inventory supply needs for future events- critical lows and stock outs

#### Collect inventory issue transactions and purchase order receipts if you have to revert to a paper system

#### Review process for FEMA records and reimbursements

Institutional considerations

#### City involvement to ensure road access to hospital is clear (media could be present for two weeks)

#### Patient privacy protection (family/friends, media)

#### Timely supply chain updates to phone operators

#### Team member counseling

#### Post security impact – access entry points for all visitors, vendors, team members; additional badge/check-ins to ensure safety

#### Review/revise budget due to unexpected costs (overtime for staff, attention to family)

#### Language translators for families looking for loved ones in the first 24-48hours post event

#### Community leaders of populations affected by the disaster event (ex: the 2016 Pulse nightclub incident occurred on a Latin/LGBTQ themed night)

#### Distribute donations: gifts, food, blood, etc.

Review the effectiveness of and update emergency policies and procedures

#### Previous training and Monthly Trauma Alert Drills

#### Command Center structure

#### Logistics process

#### Communication plan

#### Surge capacity plan:

#### Emergency care admission needs

#### In-patient admission needs

#### Staffing plan – sufficient resources available (before, during and after teams)

#### Supplies

#### Biomed equipment

#### Meet with/survey critical units to discuss feedback

#### What went well

#### Lessons learned

#### Emergency Management Resources-General References. The Joint Commission. 2/16/18. <https://www.jointcommission.org/emergency_management_resources_-_general_references/>

#### Emergency Management Standards Supporting Collaboration Planning. 2016. The Joint Commission. 2/16/18. <https://www.jointcommission.org/assets/1/6/EM_Stds_Collaboration_2016.pdf>

#### Hospital Disaster Preparedness Self-Assessment Tool. 2013. American College of Emergency Physicians. 2/16/18. <https://www.acep.org/clinical---practice-management/hospital-disaster-preparedness-self-assessment-tool>.

#### M. Schiller. (2017). Disaster Preparedness: Implications to Supply Chain and the Continuum of Care. AHRMM. 12/71/18. <http://www.ahrmm.org/knowledge-center/resources/tool/disaster-preparedness-implications-to-supply-chain-and-the-continuum-of-care>.

#### S. Cantrell. Planning for Pandemonium. Healthcare Purchasing News. July 2018. Vol 42. No7. 2/16/18. <https://www.hpnonline.com/pdf-issues/1807-HPN.pdf>

#### Supply Chain Disaster Preparedness Manual. 2017. U.S. Department of Health and Human Services Centers for Disease Control. 2/16/18. <http://www.ahrmm.org/resources/tools/supply-chain-disaster-preparedness-manual-11018.docx>.