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Hospital Assessment and Recovery Guide

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About This Hospital Assessment and Recovery Guide

This guide is designed to help organize the initial assessment of a hospital upon return after an evacuation/closure due to an emergency event. The specific assessments are meant to be conducted by hospital staff to assess the level and locations of damage sustained by the hospital, and provide information that will be needed to create the full recovery plan. This guide will be particularly useful for assessing a hospital that has sustained significant or widespread damage.

Each hospital—and every emergency event causing an evacuation—will have unique circumstances. The purpose of this guide is to help organize the initial assessment of the hospital; it is not intended to be a complete “reoccupation” or recovery plan.

This guide assumes that before these assessments begin, the structural soundness of the buildings has been established and the buildings have been deemed safe for human presence (i.e., no chemical, biological, or radiological contamination; no dangerous cracks in supporting walls). Other issues that could pose safety hazards for the assessment teams must also be addressed before a full hospital assessment can take place. For example, the hospital oxygen system and natural gas feeds should be turned off in case there are leaks in those systems. (Please note: emergency events resulting in community wide radiological or chemical contamination are beyond the scope of this guide.)

How to Use This Hospital Assessment and Recovery Guide

This guide can be used to:

- Assess and document the specific damage that occurred in the hospital due to the emergency incident and the subsequent evacuation and vacancy.
- Identify necessary repairs.
- Identify and document equipment and supplies that must be repaired or replaced.
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Hospital Assessment Teams

Ideally, each assessment team will be comprised of staff persons who worked at the hospital prior to its evacuation. These people will be most familiar with the specifics of the hospital, such as the usual location and inventory of equipment and supplies and, therefore, will be best able to conduct thorough assessments. Established relationships with vendors may also be helpful; vendors can be included on the teams for specific purposes (for example, checking/recalibrating sophisticated medical equipment) and if the hospital does not retain staff with all of the needed expertise to conduct these assessments (for example, to fully inspect the medical gases system).

Administration (ADMIN)

The ADMIN team should include the senior administrators responsible for making decisions about when (and if) the hospital should reopen, as well as managers who work in the main administrative offices (e.g., human resources, billing, accounting, purchasing).

The ADMIN team will be responsible for coordinating the hospital assessments and assessment teams. After the hospital has been deemed safe for human occupation, the ADMIN team will conduct a preliminary, high-level assessment of the entire hospital (external and internal). Based on the degree of damage observed, the ADMIN team will determine the assessment strategy for the entire hospital: when each team will conduct their assessments and in what order, which assessments can occur simultaneously, and whether assessments are needed for every area of the hospital or not. The ADMIN team will determine who should serve as the leader of each of the other teams and then will let those team leaders build their own specialized teams.

After all of the individual assessments have been completed, the ADMIN team will work with the leaders from each team to make an overall assessment of the level of damage, determine how long it will take to reopen the hospital, and create a full recovery plan.

The ADMIN team will also assess the administrative offices throughout the hospital and will work with the MATERIALS team to inventory administrative supplies and equipment, and with the IT/COMM team to identify damaged administrative computer systems that require repair. If outside inspections will be needed (e.g., city/county, State, accrediting organizations), this team will determine when the hospital is ready for these inspections and will organize their sequencing.

Facilities (FACILITIES)

The FACILITIES team should include engineers and other staff responsible for maintaining the hospital building and systems, such as heating/ventilation/air conditioning and refrigeration (HVAC-R), medical gases, plumbing, and electrical systems. The FACILITIES team will tour the entire hospital (external and internal),

paying particular attention to the area (usually the basement) housing the main hospital utilities and environmental control systems. The FACILITIES team will assess any negative and positive pressure rooms, rooms with high efficiency particulate air (HEPA) filters, and internal decontamination units, to assure that all are functioning properly. The FACILITIES team will also assess other specialized ventilation systems throughout the hospital, including those located in laboratories.

Security and Fire Safety (SAFETY)

The SAFETY team should include hospital security and fire safety experts. The SAFETY team will assess the entire hospital (external and internal) to identify potential security and safety issues, and determine how to return to proper security and fire safety standards and monitoring throughout the hospital.

The BIOMED team will determine what equipment has been destroyed, what is undamaged, what is damaged but salvageable/repairable, and what needs to be recalibrated by the team or by vendors. The team will determine how long it will take or for damaged equipment to be repaired.

Medical (MEDICAL)

The MEDICAL team should include physicians, nurse managers, and other clinical staff who are intimately familiar with each patient care area of the hospital, inpatient and outpatient. Sub-teams with expertise in the following areas should make up the MEDICAL team:

- Inpatient care (floors/units)
- Emergency department
- ICUs (NICU, PICU, etc.)
- Operating rooms and post-operative/post-anesthesia care
- Radiology/nuclear medicine
- Respiratory therapy
- Outpatient care (including specialized clinics such as outpatient surgery, dialysis, chemotherapy, physical therapy, etc.)

The services provided by every hospital are different. If the hospital has other specialty units, such as a burn unit or a transplant unit, sub-teams with expertise in these areas should also conduct assessments and can use this guide to assist with their assessments. The MEDICAL team should first assess all patient care areas together, looking for common deficiencies and damage, and then pe

The ANCILLARY sub-teams will assess and inventory equipment and supplies in their area, and work with the other teams and vendors to have all equipment and computer

General

- First:** Before assessments begin, ensure that buildings have been deemed safe by the proper authorities (i.e., buildings tested for structural integrity and, if necessary, cleared of any biological, chemical, radiological, or contagious agent contamination). Also ensure that FACILITIES team has turned off the main natural gas and oxygen feeds until these systems have been inspected for leaks.
- Before cleanup crews and non-medical staff return to the hospital, ensure that all paper medical records (if used) were secured or destroyed prior to evacuation—including those left on patient floors/units. If not, contain all records to protect personal health information. Notes:

Identify a leader for each assessment team, then let these team leaders determine who should serve on the team with them.

Community

A number of community-level issues will need to be considered before the hospital can reopen:

- Y / N** Are basic municipal services such as fire, law enforcement, and trash collection operational?
- Y / N** Is communications infrastructure such as telephone (land and cellular) systems and Internet access functional?
 - If not, determine whether the hospital can replace key infrastructure (e.g., by operating an EMS radio repeater station).

Y / N

Administrative Offices

In collaboration with the MATERIALS team, inventory administrative office equipment and supplies (fax machines, copy machines, desktop computers, microwaves, refrigerators, etc.). Create lists of equipment to be repaired and replaced, and needed supplies.

Determine if any laptops or other systems that contain confidential employee information are missing.
Notes:

Work with the IT/COMM team to test functioning of administrative computer systems (e.g., payroll), communications systems (e.g., the internal telephone system), and electronic security measures such as user IDs and passwords.

Determine if vendors are needed to restore/repair/replace any administrative computer systems or equipment (e.g., Xerox machines). If yes, names of vendors:

Estimated time to get administrative offices up and running again:

Other

Condition of any hospital-owned vehicles:

Other administrative issues/concerns:

Building Exterior

Condition of equipment on the roof (e.g., AC units, electrical boxes, water storage units):

Condition of utility connections (i.e., are any visible power or phone lines down?):

**Natural Gas and Electrical
Systems and Generators**

Steam and Water Supply

If the hospital has an onsite steam plant, check for damage and functionality.
(Note: If the steam system is also used to operate an electricity dynamo, take the dynamo offline, bring back the steam system, and then restart the dynamo.) Notes:

If water was off, check plumbing grid for leaks prior to turning water back on.
(Note: If there is any risk of water contamination, water will need to be tested prior to reopening. Coordinate with BUILDING team to ensure that all faucets are in off position before water is returned.)
Notes:

Check water pressure. Notes:

Other observations related to the steam and water supply:

Estimated time to make necessary repairs to steam and water supply systems:

Environmental Control Systems and Refrigeration (HVAC- R)

Condition and functionality of heating system:

*(Note: If there was flooding or other damage, boiler will need to be re-commissioned by the vendor.)
Name of vendor:*

Condition and functionality of air conditioning system:

(Note: If there was flooding, water loss to cooling towers, or other damage, chiller will need to be re-commissioned.) Name of vendor.

Check thermostats throughout hospital. Notes:

Check central control panel. Notes:

Estimated time to make necessary repairs to heating and cooling systems:

Clear intake air/vent locations throughout the hospital from debris and damage. Notes:

Environmental Control Systems and

Medical Gas System

Test integrity of medical gas system; check pressure and gas mix; check for leaks. Notes:

(Note: Excessive heat during hospital closure could have caused compressor to overheat and shut down medical gas system.)

Test functioning of pressure monitoring system. Notes:

Clean medical gas lines as needed.

Test functionality of medical gas outlets in all applicable patient care areas, including the emergency department, ICUs, operating suites (inpatient and outpatient), post-anesthesia recovery rooms, and patient rooms. (Also test medical gas outlets in areas with “contingency” or “swing” beds where medical gas may not currently be in use.) Notes:

Have vendor recertify oxygen/medical gas system (if necessary). Name of vendor:

Test functionality of medical vacuum and suction systems. Notes:

Other observations related to the medical gas system:

Estimated time to make needed repairs and have medical gas system recertified (if necessary):

(Note: If recertification will be delayed or major repairs are needed, work with FACILITIES and ADMIN teams to determine if portable gases can be used in the meantime.)

Building Exterior

Signs of illegal/forced entry or vandalism:

Test automatic doors to ensure they close and lock properly and that external access systems (e.g., ID

Building Interior

Signs of vandalism or theft throughout the hospital (*carefully check all sensitive security areas such as safe, pharmacy, automatic drug dispensing devices, laboratories with chain-of-custody specimens, areas with tissue storage in locked refrigerators/freezers [e.g., fertility clinic], etc.*):

Building Interior (continued)

Check condition and functionality of fire alarm system:

(Note: System may need to be inspected and recertified by fire marshal prior to reopening.)

If there was high humidity, smoke/heat detectors may have been damaged; UPS batteries may need to be replaced.

Ensure that manual (wall) alarm boxes within the hospital are all connected and functional. Notes:

Ensure that system is capable of issuing automatic outputs (e.g., visual and audible alarms, elevator recall, HVAC shut down). Notes:

Ensure that automatic communication to municipal fire department or central alarm station is functional; conduct any necessary drills required for recertification. Notes:

Check condition and functionality of fire suppression system:

If water was off, it may be necessary to 'bleed' air out of the sprinkler system.

Check condition and location of fire extinguishers and hoses. Notes:

Test functionality of all specialized fire suppression systems, such as those in operating rooms, laboratories, and hospital kitchen(s). Notes:

Other observations regarding interior security/fire safety:

Estimated time to make necessary interior security/fire safety related repairs:

General

Note: Do not dispose of unsalvageable equipment. Everything must be inventoried and evaluated for insurance purposes.

- First:** Unplug all computers and sensitive equipment to prevent damage due to power testing and power surges. Find out from FACILITIES when electrical systems will be fully functional.

Test functionality of:

Onsite servers (containing employee or patient data). Notes:

Internal and external phone system/phone and fax switches. Notes:

Emergency radios. Notes:

Other external communication systems (including Internet, connection to EMR vendors, electronic billing, etc.). Notes:

Internal hospital paging system. Notes:

Employee ID access to IT/Communications (test login/access from computers in all hospital areas). Notes:

Update employee ID access systems (i.e., staff who have not returned should not have active IDs in the system).

Restore data from offsite backup (if any).

Estimated time to get hospital-wide IT and communications systems up and running:

Administrative Offices

Ancillary Service Areas

Support Service Areas

Work with SUPPORT teams to inventory all missing or damaged laptop/desktop computers, printers, scanners, etc., from all support service areas. Notes:

Test functionality of data connections, wiring, and fiber optics. Notes:

Test functionality of wireless data connections. Notes:

Note: Do not dispose of unsalvageable equipment. Everything must be inventoried and evaluated for insurance purposes.

- First:** Unplug all medical equipment to protect against possible power surges when power is restored and power testing occurs. Coordinate with FACILITIES around power restoration.

Work with the MEDICAL team to return and reconfigure medical equipment that was moved or disconnected during the emergency event. Notes:

Identify any medical equipment that is missing. Alert MATERIALS team so they can have these returned or replaced.

Test functionality of all medical equipment throughout the hospital, and make needed repairs (except for equipment that is not normally maintained by biomedical engineering such as the MRI scanner, laboratory instruments, physical therapy equipment, cell savers, apheresis instruments). Notes:

Determine what equipment is damaged beyond repair and will need to be replaced. Work with

Test functionality of autoclaves and sterilization equipment. (Note: *Prior to testing autoclaves, ensure that they have been properly cleared of any biomedical contamination that may have been left behind during the evacuation.*) Notes:

Inventory existing usable cables and lines for connecting monitors and equipment to patients (such as spo2 probes); work with MATERIALS team to reorder needed items. Notes:

Other observations regarding medical equipment:

Estimated time to get medical equipment inspected and repaired:

General

Note: Do not dispose of unsalvageable equipment. Everything must be inventoried and evaluated for insurance purposes.

Work with ADMIN team and medical records/medical informatics to assure that all protected health

Inpatient Care (continued)

Work with FACILITIES team to ensure that all gas and suction lines are working correctly. Notes:

Work with MATERIALS team create list of missing non-medical equipment (beds, commodes, televisions, phones, computers, etc.) and needed supplies, and create a resupply list. Notes:

Other observations regarding inpatient care areas:

Estimated time to get inpatient care areas fully up and running:

Intensive Care Units

Work with the BIOMED team to identify missing or damaged medical equipment in intensive care units including: point of care testing machines, smart pumps, blood gas machine, ventilators, bronchoscopes, echocardiogram machines, ultrasound machines, cardiac tear testing machines, etc.

Alert MATERIALS team about equipment that was sent with patients when they were evacuated. Notes:

Assist BIOMED team to return and reconfigure medical equipment that was moved or disconnected during the emergency event. Notes:

Work with BIOMED teams and vendors to ensure that any specialized medical equipment and systems are functioning correctly.

Work with MATERIALS team to inventory supplies and create a resupply list.

Work with IT/COMM to identify missing or damaged computers or communications equipment. Notes:

Work with IT/COMM and vendors to ensure that any specialized computer and communications systems for intensive care units are functioning correctly. This includes unit computers and telephones/intercoms, etc. Notes:

Work with FACILITIES team to ensure that all gas and suction lines are working correctly. Notes:

Other observations regarding intensive care areas:

Estimated time to get ICUs fully up and running:

Emergency Department

Work with the BIOMED team to identify missing or damaged medical equipment in ED including: portable monitors, portable x-ray machines, ventilators, bronchoscopes, etc.

Alert MATERIALS team about equipment that was sent with patients when they were evacuated. Notes:

Assist BIOMED team to return and reconfigure medical equipment that was moved or disconnected during the emergency event. Notes:

Work with BIOMED teams and vendors to ensure that any specialized medical equipment and systems are functioning correctly. Notes:

Work with IT/COMM to identify missing or damaged computers or communications equipment. Notes:

Work with IT/COMM and vendors to ensure that any specialized computer and communications systems for ED are functioning correctly. This includes unit computers and telephones/intercoms, etc. Notes:

Work with FACILITIES team to test decontamination units to determine if working properly. Notes:

Work with FACILITIES team to ensure that all gas and suction lines are working correctly. Notes:

Work with SAFETY team to test exterior doors/locks. Notes:

Work with BUILDING team to check ambulance bays, signage, and lighting. Notes:

Work with MATERIALS team to inventory supplies and create a resupply list.

Other observations regarding ED:

Estimated time to get ED fully up and running:

Operating Rooms/Post-op/PACU
Inpatient and outpatient

Work with the BIOMED team to identify missing or damaged medical equipment in OR and post-anesthesia recovery units, including portable monitors, portable x-ray machines, ventilators, bronchoscopes, etc.

Alert MATERIALS team about equipment that was sent with patients when they were evacuated. Notes:

Assist BIOMED team to return and reconfigure medical equipment that was moved or disconnected during the emergency event. Notes:

Work with BIOMED and vendors to ensure that any specialized electronic equipment and systems for ORs are functioning correctly, including:

- electronic monitors
- anesthesia and heart-bypass machines
- surgical equipment, including surgical microscopes
- surgical video systems and equipment (scopes, cameras, displays)
- audio-recording systems
- lights and equipment booms
- in-suite pathology and radiology

Nuclear Medicine and Radiology
Inpatient and outpatient

Inventory areas throughout hospital that contain radioactive materials, especially radiation emission sources, to assure that none are missing. If there are any signs of vandalism or theft, or if any radioactive materials are missing, alert the SAFETY team immediately. Notes:

Have vendors inspect and repair/recalibrate/recertify equipment (e.g., CT scanner, PET scanner, x-ray machines) prior to use, if necessary.

If there was structural damage (in cases of earthquake or explosion) conduct 360° integrity test of lead lined rooms that contain radioactive equipment, material/solutions, or emission sources.

If hospital experienced extreme cold, check for cracks in sodium iodine crystals in handheld detectors.

If hospital experienced extreme heat, check for damage in crystal drone heads.

Work with the BIOMED team to identify missing or damaged medical equipment.

Work with BIOMED teams and vendors to ensure that any specialized medical equipment and systems are functioning correctly, including digital recording equipment. List of equipment and names of vendors:

Work with IT/COMM to identify missing or damaged computers or communications equipment. Notes:

Work with MATERIALS team to inventory supplies and create a resupply list.

If film radiography is used, ensure that stored films are undamaged and light boxes are functional.

Other observations regarding nuclear medicine and radiology areas:

Estimated time to get nuclear medicine and radiology up and running

Adult Respiratory Therapy
Inpatient and outpatient

Conduct an inventory of all ventilators and other medical equipment used in respiratory therapy (check things that may have been damaged or stolen, or may have gone with patients when they were evacuated).

Contact vendors as soon as possible to alert them if new ventilators will be needed. Name of vendors:

Work with MATERIALS team to determine if ventilators were sent out with patients when evacuating and,

Outpatient Care Areas

This section refers to all outpatient care areas not already mentioned in this guide, including: clinics, urgent care, endoscopy, ob/gyn, chemotherapy, physical/occupational/speech therapies, etc.

Work with BIOMED team to identify missing or damaged medical equipment in outpatient care areas.

Work with BIOMED teams and vendors to ensure that any specialized medical equipment and systems are functioning correctly. Name of vendors:

Work with MATERIALS team to inventory supplies and create a resupply list.

Work with IT/COMM to identify missing or damaged computers or communications equipment. Notes:

Work with IT/COMM team and vendors to check that any specialized computer and communications systems for outpatient care are functioning correctly. Notes:

Other observations related to outpatient care:

Estimated time to get outpatient care areas up and running again:

Outpatient Dialysis/Apheresis

In addition to general outpatient care area assessment as outlined above:

Check that water lines for dialysis/apheresis machines are clear and tested for contaminants. Notes:

Have vendors check functioning of dialysis/apheresis machines. Names of vendors:

Estimated time to get outpatient dialysis/apheresis running again:

General

Note: Do not dispose of unsalvageable equipment. Everything must be inventoried and evaluated for

Pharmacy (continued)

Condition of sterile water and sterile products:

Work with MATERIALS team to inventory supplies and create a resupply list.

Other observations regarding pharmacy:

Estimated time to get pharmacy fully up and running again:

Morgue

Advanced diagnostic Technologies
(Non-Radiation Emitting – MRI/Ultrasound)

Signs of damage/vandalism/theft/pests:

Test all equipment, and work with program/system vendors to repair, recalibrate, and recertify equipment as needed. Names of vendors:

Work with IT/COMM to identify missing or damaged computers or communications equipment. Notes:

Check that any specialized computer and communications systems are functioning correctly. Work with IT/COMM team and/or program/system vendors to make needed repairs. Names of vendors:

Have vendors check if the structures around and beneath major technology installations were damaged (e.g., the floor beneath the MRI unit) or if major equipment must be replaced determine if additional building reconstruction is needed before installation.

Work with MATERIALS team to inventory supplies and create a resupply list.

Other observations regarding advanced diagnostic technologies:

Estimated time to get advanced diagnostic technologies up and running:

Blood Bank and Tissue Bank

- First:** If any samples were left behind that may pose a biohazard, ensure that areas have been properly decontaminated.

Signs of damage/vandalism/theft/pests:

Determine if blood and biologicals left in freezers/refrigerators were maintained at safe temperatures and if they were exposed to flood water or other contamination. Notes:

Test low temp freezers (-65 degrees C) and ensure that liquid oxygen flow is functional.

Test backup power supply and temperature recording monitors of all applicable equipment.

Inventory equipment to identify missing or damaged items, and identify needed repairs/replacements.

Test all equipment, and work with program/system vendors to repair, recalibrate, and recertify equipment as needed. Name of vendors:

Work with IT/COMM to identify missing or damaged computers or communications equipment. Notes:

Check that any specialized computer and communications systems are functioning correctly. Work with

**Blood Bank and Tissue Bank
(continued)**

Determine additional repairs/replacements needed prior to recertification. Notes:

Alert Medical Records/Medical Informatics if any laptops or other systems that contain confidential patient or employee information are missing (e.g., lab results, research subject databases).

Work with MATERIALS team to inventory supplies and create a resupply list.

Other observations regarding blood and tissue banks:

Estimated time to get blood bank and tissue bank up and running:

Medical Records/Medical Informatics

Determine if any laptops or other systems that contain confidential patient information are missing (e.g., research subject databases).

Test functionality of EMR, electronic patient registry, admissions, CPOE, pharmacy systems, and all other online hospital systems. (This may include checking separate, or non-integrated, systems in the emergency department, clinical labs, or other patient care areas). Test all interfaces between EMR and other systems (e.g., lab, pharmacy). Notes:

If offsite or vendor backup was used, restore databases. Names of vendors:

Research Laboratories

- First:** If any samples were left behind that may pose a biohazard, ensure that areas are properly decontaminated. Also, check that research animals that were euthanized prior to evacuation were properly disposed of. Check on the condition of any animals left behind alive. Notes:

Determine if samples or biologicals left in freezers/refrigerators were maintained at safe temperatures and if they were exposed to flood water or other contamination. Notes:

Test low temp freezers (-65 degrees C), and ensure liquid oxygen flow is functional.

Test backup power supply and temperature recording monitors of all applicable equipment.

Determine if stored chemicals have been damaged or contaminated, and if they continue to be stored properly and according to accreditation/licensure requirements.

Test all equipment, and work with program/system vendors to repair, recalibrate, and recertify equipment. Names of vendors:

Work with IT/COMM to identify missing or damaged computers or communications equipment. Notes:

Test functionality of specialized computer and communications systems (work with IT/COMM team and/or program/system vendors to make needed repairs). Names of vendors:

Alert Medical Records/Medical Informatics if any laptops or other systems that contain confidential patient are missing (e.g., research subject databases).

Work with SAFETY team to inspect and test fire suppression system.

Work with MATERIALS team to inventory supplies and create a resupply list.

Other observations regarding research labs:

Estimated time to get research labs up and running:

General

Note: Do not dispose of unsalvageable equipment. Everything must be inventoried and evaluated for insurance purposes.

Use pre-existing order lists of products and supplies for each area to inventory supplies and create resupply lists.

Identify any equipment and/or supplies currently in storage that can be used to replace missing or damaged items. Notes:

Ensure that the environmental staff has the chemicals and cleaning supplies needed to begin clean up.

Patient Care Areas

Inventory medical supplies in each patient care area to identify anything that should be discarded, can still be used, or needs to be ordered. Notes:

Inventory non-medical items not covered by the BIOMED team, such as televisions, remote controls, commodes, etc. Notes:

Condition of supplies in the sterile materials storage rooms:

Work with MEDICAL and BIOMED teams to determine what equipment was sent out with patients when evacuating (e.g., ventilators, portable monitors, beds, etc.) and where the equipment went. Contact those facilities to determine if equipment can/should be returned. Notes:

Work with BIOMED team to determine what medical equipment will need to be replaced. Contact Vendors immediately to alert them of potential order (consider prioritizing the largest equipment, or equipment that must be built to specifications, which will take longer to receive and/or install).
Names of vendors to contact:

Estimated time to resupply patient care areas:

Ancillary Service Areas

Ancillary Service Areas include: pharmacy, morgue, non-radiation emitting imaging technologies, medical records/medical informatics, blood bank/tissue bank, clinical laboratories, and research laboratories.

In ancillary service areas that are normally supported by materials management, inventory equipment and supplies, and create a resupply list. Notes:

Estimated time to resupply ancillary service areas:

Administrative Offices

Inventory office equipment and supplies, and create a resupply list. Notes:

Estimated time to resupply administrative offices:

Support Service Areas

Support Service Areas include: kitchen, linens/housekeeping, and patient transport.

Inventory existing usable goods, and create a resupply list. Notes:

Work with SUPPORT team to inventory wheelchairs, walkers, and gurneys throughout the hospital; determine if any were sent elsewhere with patients during the evacuation and can be retrieved, and if any need to be replaced. Notes:

Estimated time to resupply support service areas:

On-site Stockpiles

Check condition of storage or onsite stockpiles to determine level of damage to equipment and goods. Notes:

Check the condition and remaining supply of hospital emergency related supplies that may have been depleted during the evacuation (e.g., patient transport stretchers, respirators, ventilators). Notes:

Check supply of backup batteries for ventilators and other medical equipment. Notes:

Check condition of outdoor decontamination units. Notes:

Estimated time to resupply necessary onsite inventory:

Hospital Grounds

Building Exterior (continued)

Condition of building tunnels and pedestrian bridges:

Check that hospital accessibility areas are clear, undamaged, and ready for use.

Ambulance bays. Notes:

Automatic doors. Notes:

Fire escapes and other means of emergency egress. Notes:

Loading docks. Notes:

Helipad. Notes:

Other: _____. Notes:

Signs of pests or vermin (*record description and location*): Note: *Consider having an exterminator inspect the buildings and grounds even if there are no obvious signs of pests.*

Other observations about building exterior:

Estimated time to make necessary repairs to building exterior:

Building Interior (General)

- First:** If water was off, and anyone stayed behind or used building after evacuation, clear toilets of

Waste Management

Check that drains and waste lines are clear of debris and blockage. Notes:

If hospital has onsite waste treatment, check for damage and functionality. Notes:

Test functioning of hospital waste water pre-treatment and containment systems. Notes:

Check condition and functioning of storage and removal systems for medical and bio-hazardous waste. Notes:

Test any internal hospital decontamination units for to determine if they are functioning properly. Notes:

Check condition and functioning of storage, inventory, and disposal systems for radioactive source and waste, and pharmaceutical and chemical waste. Notes:

Estimated time to make necessary repairs to waste management and containment systems:

Kitchen/Nutritional Services

Dispose of any perishable food items that were not discarded prior to evacuation, including anything left behind in freezers or refrigerators (in case proper temperature control was not maintained during closure).

Work with vendors to inspect equipment (e.g., stoves/ovens, dishwashers, oven ventilation) to identify needed repairs/replacement. Names of vendors:

Work with FACILITIES team to inspect refrigerators and freezers and identify needed repairs.

Work with SAFETY team to inspect and test kitchen fire suppression system.

Inspect canned food, dry foods, and paper products to determine what is salvageable. Notes:

Inventory existing usable goods, and create a resupply list.

Other observations regarding the kitchen:

Estimated time to get kitchen up and running:

Note: If food services cannot be restored in time for hospital reopening, consider temporarily contracting with outside catering services.

Housekeeping/Linens

Appendix

Technical Expert Panel Members

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Louisiana Region 7 Hospital Preparedness
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