CHEMICAL ATTACK – NERVE AGENT

SCENARIO

The Universal Adversary terrorist group uses a spray device to release Sarin into the ventilation systems of three large commercial office buildings in a metropolitan area. Within a few minutes, the people within the buildings suddenly develop a runny nose, watery eyes, runny nose, coughing and chest tightness. Several people also report blurred vision, and drooling and sweating. On certain floors, there are people also experiencing severe muscle twitching, confusion and nausea and vomiting. Many have died.

People are self evacuating the building and there are numerous fall and crush injuries. EMS has initiated triage outside of the buildings, and are performing victim decontamination on the victims. Some of the victims continue to develop additional symptoms, even after triage and decontamination. HazMat officials tentatively identify the cause as a nerve agent, based on symptoms and EMS request nerve agent antidotes to be dispatched to the scenes in large quantities. Chemical and environmental monitoring by local HazMat teams is in progress, and soon confirms Sarin as the causative agent.

Your hospital is within 5 miles of the commercial office buildings. You have been notified by local EMS of the incident. Many of the victims are able to self evacuate and drive to your hospital for immediate treatment. Most of these people have mild or no symptoms upon arrival at the hospital. EMS also begins transporting the most critical victims to your facility with a short ETA. It is unknown if the victims have been fully decontaminated.
### Does your Emergency Management Plan Address the following issues?

#### Mitigation & Preparedness

1. Does your hospital have a procedure to obtain incident and chemical specific details from local officials immediately after the incident and regularly throughout the response?

2. Does your hospital have a plan to provide designated personal protective equipment (PPE), including respirators, and training to affected staff and work locations?

3. Does your hospital have a procedure for individually controlling HVAC and return air for impacted areas?

4. Does your hospital have procedures to notify appropriate internal and external experts, including security, Emergency Department, safety, decontamination teams, respiratory, critical care, burn specialists, infection control, and engineering/facilities?

5. Does your hospital have a chemical decontamination plan that can be immediately activated and receive victims? Does your plan include provisions for gross decontamination of the victims until full decontamination can be conducted?

6. Does your hospital have a process to ensure medically qualified and test-fitted personnel are available and assigned to use PPE and provide patient decontamination?

7. Does your hospital have a contingency plan for being a secondary site for a chemical agent release?

8. Does your hospital have procedures for securing the facility and for limiting hospital access to designated secure screening points for staff and visitors entering the facility?

9. Does your hospital have a surge capacity plan and pre-defined triggers for activation?

10. Does your hospital have procedures to monitor the health status of staff participating in decontamination and who may be exposed to first arriving contaminated patients?

11. Does your hospital have a plan to interface with local and federal law enforcement agencies in a terrorism event?

12. Does your hospital identify criteria and procedures to modify family visitation policy during the incident?

13. Does your hospital have a plan to address mental health support needs for staff, patients, and their families?

#### Response & Recovery

1. Does your emergency management/operations plan address how your hospital receives timely and pertinent incident information from field incident command (e.g., chemical information, decontamination provided/recommendations, etc.)?

2. Does your hospital have a procedure to notify field incident command of hospital decontamination location, and ingress and egress routes for EMS?

3. Does your hospital have a procedure to secure the decontamination area?
**CHEMICAL ATTACK – NERVE AGENT**

**INCIDENT PLANNING GUIDE**

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<td>Does your hospital provide training on chemical detection/monitoring equipment use and maintain ready state of equipment, if available?</td>
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<td>5.</td>
<td>Does your hospital have procedures to monitor the health status of staff who participated in decontamination activities?</td>
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<td>6.</td>
<td>Does your hospital have a procedure to provide agent information to decontamination team, all treatment areas, security, and Hospital Command Center?</td>
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<td>7.</td>
<td>Does your hospital have a process to contain or divert water run off collection and disposal in conjunction with local Environmental Protection Agency and local water authority, and appropriately notify authorities when decontamination is activated?</td>
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<td>8.</td>
<td>Does your hospital have a procedure to notify local EOC of operational status?</td>
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<td>9.</td>
<td>Does your hospital have a procedure to receive on status of other area hospitals?</td>
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<td>10.</td>
<td>Does your hospital have a procedure to consult with resident experts/Poison Control Center for assessment and treatment guidelines?</td>
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<td>11.</td>
<td>Does your plan address the possibility that perpetrator is among the injured?</td>
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<td>17.</td>
<td>Does your plan address evidence preservation measures and issues regarding return of patient belongings with HazMat/police?</td>
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<td>18.</td>
<td>Does your hospital have a procedure to provide scheduled family briefings and provide for a family assistance center?</td>
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<td>19.</td>
<td>Does your hospital have a process to modify family visitation policy?</td>
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<td>20.</td>
<td>Does your hospital have a process to establish Media Conference area, a procedure to provide scheduled media briefings in conjunction with local EOC/JIC, and a plan to work with local EOC to address risk communication issues for the public?</td>
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<tr>
<td>21.</td>
<td>Does your hospital have a process to address fatality issues in conjunction with law enforcement and medical examiner/coroner?</td>
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<td>22.</td>
<td>Does your hospital have a procedure to provide scheduled family briefings and provide for a family assistance center?</td>
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<td>23.</td>
<td>Does your hospital have a process to address bio-waste disposal?</td>
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<td>24.</td>
<td>Does your hospital have a procedure to clean up decontamination area and other “contaminated” areas and reopen them for normal operations?</td>
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25. Does your hospital have a fatality management plan that addresses:

- Integration with local/state medical examiner/coroner?
- Mass fatalities?
- Management of contaminated decedents?
- Family notification procedures?
- Mental health support for family and staff?
- Documentation?

26. Does your hospital have procedures and for reporting and documenting staff exposures and injuries?
CHEMICAL ATTACK – NERVE AGENT

INCIDENT RESPONSE GUIDE

Mission: To effectively and efficiently identify, triage, isolate, and treat patients who have been exposed to a nerve agent.

Directions

☐ Read this entire response guide and review incident management team chart

☐ Use this response guide as a checklist to ensure all tasks are addressed and completed

Objectives

☐ Identify, triage, isolate, and treat contaminated/exposed patients

☐ Safely admit a large number of contaminated/exposed patients while protecting your staff and facility

☐ Accurately track patients through the healthcare system

☐ Assure safety and security of the facility

Immediate Actions (Operational Period 0-2 Hours)

COMMAND

(Incident Commander):

☐ Activate the Medical/Technical Specialist – Chemical to assess the incident

☐ Activate Command Staff and Section Chiefs

☐ Activate decontamination and surge capacity plans

(Liaison Officer):

☐ Communicate with local emergency management and other external agencies (e.g., health department) to identify the chemical agent

☐ Communicate with EMS/public health to determine the possible number of patients

(PIO):

☐ Monitor media outlets for updates

(Safety Officer):

☐ Activate decontamination plan and ensure personal protection of staff, issue PPE

☐ Conduct ongoing analysis of existing response practices for health and safety issues related to staff, patients, and facility, and implement corrective actions to address
**CHEMICAL ATTACK – NERVE AGENT**

**INCIDENT RESPONSE GUIDE**

**OPERATIONS**

- Notify the ED of possible numbers of incoming patients
  - Implement decontamination procedures
  - Deliver antidotes to decontamination area and Emergency Department
  - Prepare special patient antidote dose amounts (e.g., pediatric, geriatric)
  - Ensure rapid triage of potentially contaminated patients, non-symptomatic patients, media, family members, etc.
  - Protect environment/facility from contamination
  - Isolate HVAC system in treatment areas, if possible
  - Ensure medical monitoring of personnel participating in decontamination activities
  - Secure the facility to prevent patients from entering the facility except through designated route(s)

**PLANNING**

- Implement patient, materiel, personnel and bed tracking
- Establish operational periods and develop the Incident Action Plan

**LOGISTICS**

- Inventory medications and supplies (e.g., antidotes, ventilators, blood products, burn supplies, etc.), and bed availability
- Determine medication, equipment, supply, and personnel needs and implement procedure to request and receive and allocate external resources into the hospital response
- Provide mental health support for patients/family/staff/command personnel
- Manage Labor Pool and solicited and unsolicited volunteers
- Prepare for receipt, distribution and tracking of external pharmaceutical resources from local, regional, state and federal resources
### Intermediate (Operational Period 2-12 Hours)

#### COMMAND

(Incident Commander):

- Ensure communications and decision making are coordinated with external agencies and healthcare facilities
- Direct implementation of surge capacity plan

(PIO):

- Manage media relations/public information /risk communication and integrate public relations activities with the Joint Information Center
- Establish a patient information center in conjunction with the Liaison Officer

(Safety Officer):

- Continue to monitor decontamination areas, staff and patient safety and use of personal protective equipment

#### OPERATIONS

- Ensure the victim decontamination is in compliance with established decontamination practices
- Implement procedures for patient valuables management, evidence collection and security
- Evaluate and update staff scheduling to accommodate decontamination team supplementation
- Implement family notification procedures in conjunction with family assistance center operations
- Ensure proper waste water and expendable materials disposal
- Continue patient management and facility monitoring activities

#### PLANNING

- Update and revise the Incident Action Plan and initiate demobilization assessment and processes.
- Continue patient, materiel, personnel and bed tracking

#### LOGISTICS

- Monitor the health status staff who participate in, supported or assisted in decontamination activities, provide appropriate medical care and follow up
- Facilitate procurement of supplies, equipment and medications for response and patient care
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<th>FINANCE/ADMINISTRATION</th>
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<td>❑ Continue tracking response costs and claims and report to the Incident Commander</td>
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**Extended (Operational Period Beyond 12 Hours)**

**COMMAND**

(Incident Commander):

❑ Continue regular briefing of Command staff/Section Chiefs. Address issues identified

/Public Information Officer):

❑ Continue patient information center, as necessary
❑ Coordinate efforts with local/state public health resources/JIC

(Liaison Officer):

❑ Continue to ensure integrated response with local EOC
❑ Continue to communicate personnel/equipment/supply needs to local EOC
❑ Continue to update local public health of any health problems/trends identified

(Safety Officer and Medical/Technical Specialist-Chemical):

❑ Continue to monitor decontamination operations and begin facility decontamination as appropriate
❑ Monitor patient and staff safety and appropriate use of PPE

**OPERATIONS**

❑ Facilitate law enforcement requests for patient/staff interviewing
❑ Manage ongoing patient care issues
❑ Maintain infrastructure support and services
❑ Continue security and facility decontamination and plan for return to normal services

**PLANNING**

❑ Review and update the Incident Action Plan and plan for demobilization and system recovery
❑ Ensure documentation is being completed by all Sections
❑ Continue patient, personnel, materiel and bed tracking
LOGISTICS

- Implement medical surveillance of response personnel
- Provide for staff food and water
- Ensure adequate supplies, equipment, personnel and facilities to support extended response operations

FINANCE/ADMINISTRATION

- Compile response costs and submit to the Incident Commander
- Track any claims/injuries and complete appropriate documentation, compile report

Demobilization/System Recovery

COMMAND

(In Incident Commander):

- Oversee and direct demobilization and system recovery operations

(Public Information Officer):

- Provide final briefings as needed to patients/visitors/staff/media, in cooperation with JIC

(Liaison Officer):

- Prepare a summary of the status of the hospital and disseminate to Command staff/Section Chiefs and to public health/EMS as appropriate

(Safety Officer):

- Oversee facility decontamination and declare facility safe to conduct normal operations

OPERATIONS

- Manage decontamination of the facility and restore patient care and facility to normal operations
PLANNING

- Finalize the Incident Action Plan and demobilization plan
- Compile a final report of the incident and hospital response and recovery operations
- Ensure appropriate archiving of incident documentation
- Write after-action report and corrective action plan to include the following:
  - Summary of actions taken
  - Summary of the incident
  - Actions that went well
  - Area for improvement
  - Recommendations for future response actions
  - Recommendations for corrective actions

LOGISTICS

- Provide for mental health support (acute and long term) for staff and patients, in collaboration with Operations Section’s Mental Health Unit Leader
- Provide for equipment and supply repair or replacement
- Provide ongoing support to injured staff or family of deceased staff

FINANCE/ ADMINISTRATION

- Submit final documentation to Incident Commander for approval and to external authorities for reimbursement or other assistance

Documents and Tools

- Hospital Emergency Operations Plan/Decontamination Protocol
- Hospital Mass Casualty Incident Protocol
- Patient Tracking Form
- Isolation Protocol
- Hazmat and terrorism/WMD annexes of local Emergency Operations Plan