

## **SECTION 11.11**

### **CODE ORANGE: HAZARDOUS MATERIAL SPILL, EXPOSURE & DECONTAMINATION**

#### **PROCEDURES TO BE FOLLOWED IN THE EVENT A HAZARDOUS MATERIAL INCIDENT OCCURS AT LOMA LINDA UNIVERSITY ADVENTIST HEALTH SCIENCES CENTER**

##### **PREPARATION**

###### **Education & Training**

1. Staff are educated to the LLUAHSC Hazard Communication program in the following venues:
  - New Employee Orientation
  - Annual BLUE Book competency
2. Environmental Health & Safety (EH&S) staff that respond to these events are required to be OSHA HAZWOPER 40-hour certified initially and receive annual 8-hour refresher training.

###### **Policies**

3. LLUMC Operating Policy T-9, "Hazardous Materials & Wastes Management" defines a hazardous material and outlines steps to take in the event of a spill or exposure. This policy is covered in the educational venues listed above.

##### **MITIGATION**

###### **Preventive Considerations**

1. Departments and patient care areas using flammable materials (e.g., alcohol based hand gels, solvents, compressed oxygen) are restricted to the allowable quantities stored based on the Uniform Fire Code and square footage of the area.
  - Surveys of these areas are conducted to determine compliance.
2. Bulk flammable materials storage is located in secured areas (e.g., oxygen storage tank, flammable storage room) with restricted access.
3. According to the LLUMC Operating Policy T-9 , staff are required to do the following:
  - Replace hazardous materials with non-hazardous substitutions, as feasible.
  - Order minimal quantities of hazardous materials.
  - Follow proper handling and storage procedures.
  - Verify that containers are appropriately labeled.
  - Contain wastes in appropriately labeled containers.
  - Use appropriate personal protective equipment (PPE) when handling a hazardous material.
  - Not to mix incompatible hazardous materials.

## RESPONSE

### Supervisor Responsibilities

The supervisor or department head shall initiate and complete procedures to ensure proper decontamination and necessary treatment of any exposed person(s), as well as reporting of the incident.

### Spill Procedure

1. *Identify The Material(s)*
  - Use the container label or interview the victim to determine to what material(s) the person has been exposed.
  - If the label is absent or illegible, consider the material to be an unknown and evacuate the work area.
  - Review the MSDS to determine what exposure hazards the material(s) represents to the victim or to responding personnel.
2. *Confine or Contain the Spill*
  - Without trying to stop the release, contain the release from a safe distance.
  - Keep it from spreading and prevent exposures.
3. *Evacuate Affected Areas, if Necessary*
  - If the spill is creating a hazardous environment, evacuate the work area.
  - After all employees have left the area, close the door to the room where the spill occurred.
  - Post a sign to alert employees not to enter this area.
4. *Call Security Control Center*
  - Tell the officer that you have a hazardous material release or spill and give the following information:
    - o Location of the spill (building and room number).
    - o Material(s) involved in the spill. If you do not know this information, state that this is an unknown material.
    - o Quantity of material spilled.
    - o Other pertinent information.
  - Security Control Center will page EH&S and give the information to the responding person.
  - For spills or releases involving select agents, Security Control Center will also notify the RO (or ARO).
  - The Security Department may be required to assist in controlling access to the area.
  - EH&S will respond and clean up the spilled material using appropriate PPE.

### Exposure Procedure

1. *Identify The Material(s)*
  - Use the container label or interview the victim to determine to what material(s) the person has been exposed.

- If the label is absent or illegible, consider the material to be an unknown and evacuate the work area.
  - Review the MSDS to determine what exposure hazards the material(s) represents to the victim or to responding personnel.
2. *Decontaminate, if Indicated*
- If the exposure involves a corrosive material, as indicated by the container label, or otherwise poses an external skin hazard to the victim, decontaminate immediately.
  - See Decontamination Procedure below.
3. *Evacuate Affected Areas, if Necessary*
- If the spill is creating a hazardous environment, evacuate the work area.
  - After all employees have left the area, close the door to the room where the spill occurred.
  - Post a sign to alert employees not to enter this area.
4. *Call Security Control Center*
- If the exposure involves a spill, tell the officer that you have a hazardous material release or spill and give the following information:
    - o Location of the spill (building and room number).
    - o Material(s) involved in the spill. If you do not know this information, state that this is an unknown material.
    - o Quantity of material spilled.
    - o Other pertinent information.
  - Security Control Center will page EH&S and give the information to the responding person.
  - For spills or releases involving select agents, Security Control Center will also notify the Responsible Officer (RO) or Assistant Responsible Officer (ARO).
  - The Security Department may be required to assist in controlling access to the area.
  - EH&S will respond and clean up the spilled material using appropriate PPE.
5. *Medical Evaluation*
- Those exposed to a hazardous material shall complete the following process:
    - o Fill out the required forms with your supervisor.
      - ☒ Employee's Claim for Workers' Compensation Benefits, Form DWC-1
      - ☒ Report of Accident/Illness, Form 20-0032-A
    - o Take the completed forms and report to the Occupational Health Center (OHC) or Emergency Department (after hours) for

medical evaluation.

- A report will be taken and forwarded to Risk Management/EH&S for follow-up.
- If regulatory agencies (e.g., Cal-OSHA) need to be notified, EH&S will make that contact and notification.

**Decontamination  
Procedure**

1. Don personal protective equipment.
2. Remove all of the victim's clothing and personal belongings (e.g., jewelry, wallet, glasses) and place in a Patient Belongings bag.
  - Keep in the **Dirty Zone**;
  - EH&S personnel will dispose of these items.
3. Flush each victim for a *minimum of 15 minutes* with warm, running water.
  - Assist the patient, if unable to scrub, and remove contamination using water and a mild soap.
4. Place patient on a clean gurney or wheelchair.
5. Keep contaminated linens and equipment in the **Dirty Zone**.
6. When the patient is transferred to the **Transition Zone**, give them a gown and blankets.
7. No personal protective equipment can leave the **Transition Zone**.
8. Only personnel without personal protective equipment can escort the patient into the ED through the **Clean Zone**.

**RECOVERY**

1. After all patients have been decontaminated, EH&S personnel will dispose of contaminated items, including:
  - Patient clothing and belongings
  - Personal protective equipment used by staff
  - Contaminated linens
  - Contaminated rinse water
2. All reusable equipment shall be decontaminated prior to storing.
3. Documentation of the event shall be maintained by EH&S.