

Sample Hospital

Patient Decontamination Program

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Policy # DCN_POL1.DOC

Date:

Purpose: To ensure that all personnel involved with information, handling incidents or emergencies involving hazardous material exposure follow proper protocol or procedure to protect victims and other hospital personnel from spread of contamination.

Procedure: Pre-hospital Care: Emergency medical services personnel who have received extensive training in hazardous material victims will start appropriate gross decontamination process and be able to identify type of hazardous material.

STAFF MEMBERS MUST REMEMBER THAT VICTIMS NEED TO BE DECONTAMINATED BEFORE ANY TREATMENT IS GIVEN, EXCEPT IN EXTREME CIRCUMSTANCES AS DETERMINED BY THE EMERGENCY DEPARTMENT PHYSICIAN.

Hospital Care:

1. Gather as much information as possible prior to patients arrival.
These include:
 - a. Chemical name
 - b. Physical State (solid, liquid, gas)
 - c. Flammable properties
 - d. Note any physical properties (vapor density, specific gravity, solubility, chemical reactivity.)
 - e. Routes of entry.
 - f. Duration of exposure.
 - g. Signs and symptoms (that victim may show).
 - h. Number of victims
 - i. Nature of injury
 - J. Decontamination of victim.
 - k. Estimation of victims exposure to radiation (how many rads)
2. Setting Up Emergency Department
 - a. Notify staff, security, maintenance, nursing supervisor, safety officer and radiation safety officer, if applicable.
 - b. Victim or victims need to be placed in holding rooms for decontamination.
 - c. Remove all unnecessary equipment and supplies.
 - d. Line ambulance entrance, hallway and holding rooms floor with plastic sheeting (Sheeting provided in rolls on Haz Mat cart). Tape plastic to floor if necessary to prevent moving around if liquid contaminant.
 - e. Tape off area (to limit access of personnel and prevent contamination) around pool area outside E.D. and hallway from ambulance entrance to just past holding room.
 - f. Set up decon pool outside on loading dock if gross decontamination needed. (Make sure to notify maintenance to provide water source).
 - g. Set up decon bath on stretcher to be utilized by victim.
 - h. Gown staff in PPE (personnel protective equipment) and approved mask for high efficiency particulate respirator, recommended by ATSDR. (provided on Haz Mat cart).
 - i. Gather information regarding Hazardous Material, this information may be found by:
 1. Calling poison control - 1-800-962-1253.
 2. Label markings - placed by the manufacturer.
 3. MSDS - Material Safety Data Sheet - if available.
 4. ATSDR (Agency for Toxic Substances) 1-404-639-0615.
 5. ChemTrec - 1-800-424-9300.
 6. Incident commander
 7. State MSDS Sheets in Blue Notebook in Nurses Station.
 8. Radiation
 - a. NRC - Nuclear Regulatory Commission

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- j. Radiation Safety Officer, notify of Radiation Contamination if unavailable notify Radiologist on call.
3. Procedure for Gross Decontamination
 - a. Bring victim into decon zone (loading dock that has been marked off).
 - b. Place victim with spine board in pool on plastic drums. Ambulatory patients can stand in pool.
 - c. Remove all clothing and jewelry and contaminants and place in plastic bag. (Don't forget to label bag with patient's name).
 - d. Sponge patient off with water and mild soap solution. (Providing that this is an appropriate method).
 - e. Clean wound first with sterile water (to prevent recontamination) then proceed head to toe.
 - f. Continue to reassess patient.
 - g. Bring victim into control zone - hallway then into one of the holding rooms.
 4. Procedure for Decontamination
 - a. Bring victim to control zone - hallway then into one of the holding rooms.
 - b. Place victim in decon pool that has been set up on stretcher.
 - c. If indicated, decontaminate further with mild soap solution. Clean wound first (to prevent recontamination) with sterile water. Then proceed head to toe in decontamination.
 - d. Continue to reassess.
 - e. Once patient decontaminated move to appropriate stretcher and if needed may pass patient over to clean area of E.D.
 - f. Ambulatory patients can be showered in Quiet Room before being seen.
 - g. If there are too many patients to be contained in Holding beds in patients can be moved from holding Rooms to other beds in acute care.
 - h. When many victims are expected Fast Track will be clean area to accept other patients who are not contaminated.
 - i. NO patients who are contaminated will go through Waiting Room, Triage, or Fast Track. These patients will all be detected to Ambulance Entrance by Security.
 - j. Radiation Accident - RSO Directs decontamination in conjunction with the Emergency Department physician.
 5. Radiation Special Considerations
 - a. If it is suspected that an object is a radioactive source that may have been inadvertently misplaced, take long forceps (do not use fingers) and move the unidentified object to the corner of the room farthest from personnel. Place the object in a lead shield if one is available.
 - b. Limit access to the area and call the Radiation Safety Officer immediately:
 - (1) Radiation Safety Office or Radiologist on call.
 - (2) Chief Technologist, Nuclear Medicine Department or,
 - (3) Certified Radiological Physicist
 - (4) Technical Director, Diagnostic Imaging Department.
 - (5) Operator to contact any of the above.
 - c. CBC and platelets need to be obtained immediately.
 - d. Contaminated open wounds:
 - (1) Wash with normal saline and monitor.
 - (2) If contamination persists, wash with 3% hydrogen peroxide, cover wound after.

- (3) To evaluate the possibility of internal contamination, cotton swab samples of the ear canals, nostrils, and mouth are advisable. The swabs should be placed in separate containers, labeled with patient's name, site sampled, and time of sample then set aside for further analysis. The entire patient shall be monitored front and back, to determine the areas of contamination. Following assessment of all contaminated areas, decontamination will be done in the following prioritized order:
 - (a) Contaminated open wounds.
 - (b) Contaminated eyes
 - (c) Contaminated nostrils or mouth.
 - (d) Contaminated ear canals.
 - (e) Contaminated intact skin.
 - (f) Contaminated hair.
 - e. Contaminated skin: same procedure as Haz. Mat. (water and soap)
 - f. Completion of a Radiation Emergency Notification Report.
 - g. In managing victims with radiation exposure, a means of estimating victim dose for subsequent medical treatment can be charted according to the radiation dose as follows:
 - (1) Doses of less than 50 rads total body exposure should require little treatment.
 - (2) Individuals who receive a dose of 100 rads may exhibit some clinical symptoms.
 - (3) Significant laboratory abnormalities show up with a dose of 200 rads.
 - (4) Fatalities may occur at the range of 200 rads.
 - (5) Fatalities usually occur at doses over 800-1000 rads.
 - h. Decontamination Team: Following treatment of the radiation accident victims, the decontamination team will exit in a way which would prevent any possible spread of contamination from the decontamination room to the rest of the facility. A physical boundary, called the clean line, will be used to contain the contaminated personnel and articles; strict control is maintained over entrance and exit from this area. The control will be maintained by the health physician or radiation monitor stationed on the "cleans side of the only entrance/exit through the clean line. There will be two monitoring teams; one outside and one inside the clean line. Each team will consist of one reader and one recorder. Each member will proceed to the clean line and exit by following the procedures listed:
 - (1) Remove outer gloves by rolling them off inside out.
 - (2) Remove all tape from cuffs, sleeves and openings.
 - (3) Remove outer garment by turning it inside out, place in container.
 - (4) Remove shirt.
 - (5) Remove head cover.
 - (6) Remove pants by turning them inside out.
 - (7) Remove shoe cover one at a time. Allow someone to monitor each foot prior to stepping over clean line.
 - (8) Remove inner gloves.
 - (9) Monitor hands and feet.
 - (10) Take a shower.
6. Use an end window Geiger tube survey meter and scan the victim's entire stretcher, and ambulance. Care should be taken to scan the victim and other areas carefully, with the meter on the lowest scale.
 7. If any radiation above background level is detected on equipment, the equipment must be decontaminated thoroughly (soap and water will be sufficient), prior to releasing for routine use.
 8. The Consulting Physicist or a designated alternate will verify absence of radioactive material before the area involved is released for routine use and will insure that the entire incident is documented.