

## CONSENSUS STATEMENT ON EQUIPMENT AND FACILITY NEEDS FOR RESPONDING TO RADIOLOGICAL, NUCLEAR, AND CHEMICAL EVENTS

1. Hospitals should have plans for decontamination of patients outdoors who may present with radiological, nuclear, or chemical exposures.
  - Staff from multiple job categories (including physicians and other health care providers) should be trained in decontamination, so as not to deplete personnel resources from one category.
  - Training of staff regarding the decontamination plan should include drills utilizing the personal protective equipment and the decontamination equipment.
  - Hospitals should anticipate the need to provide for decontamination of multiple patients, both ambulatory and non-ambulatory. It should be noted that most patients presenting to emergency departments with radiological, nuclear, or chemical exposures are ambulatory and are therefore able to decontaminate themselves with appropriate instruction.
  
2. Hospitals should aim to have available appropriate personal protective equipment for staff that might come into contact with patients presenting with radiological, nuclear, or chemical exposures. In providing personal protective equipment, the following guidelines should be considered:<sup>\*</sup>
  - The provision of personal protective equipment should be coupled with training (including fit testing, where required by the equipment) provided to staff in accordance with all applicable regulatory requirements.
  - Hospitals should establish operational protocols regarding the use of personal protective equipment that include when personal protective equipment should be utilized and which hospital staff determines when it should be utilized.
  - Attire should include chemically-resistant splash suits, as well as chemically-resistant outer gloves, and boots.

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<sup>\*</sup>These guidelines are similar to OSHA's Level C (and in certain circumstances, Level B) protection. The personal protective equipment and facility equipment may, in some circumstances, be more or less than what is required in connection with exposure to a particular chemical. GNYHA recognizes that OSHA standards indicate that under certain circumstances (e.g., for unknown agents), Level B protection may be required. Therefore, hospitals may want to consider having some Level B protection available in addition to the personal protective equipment described in this consensus statement.

- The goal of the provision of face masks/respiratory equipment is for hospital staff to breathe safe air and, preferably, not to make breathing more difficult.
  - Positive pressure, fully facially-protective respirators are recommended and preferred.
  - Where positive pressure, fully facially-protective respirators are not available, full face industrial canister-style respirators may be utilized.
  - Military-style gas masks are not recommended.
3. Hospitals should have external shower facilities to provide for decontamination (washdown) of patients presenting with radiological, nuclear, or chemical exposures.
- Decontamination facilities may be fixed or portable. Facilities may choose to keep portable units assembled. However, if facilities are portable and remain unassembled, staff should be trained so that there is staff available on a 24-hour basis to assemble the units quickly.
  - A minimum of two to four staff members should be available to staff the decontamination facility at all times. The facility should be able to decontaminate a minimum of five to ten patients rapidly, presenting from a single chemical incident, utilizing a minimum of one decontamination shower. (Long waits for decontamination may pose patient management issues.)
  - The decontamination environment should be warm; therefore, hospitals should consider the use of warm water and a heat source for the air in the decontamination area.
  - The decontamination process should respect the privacy of the patients presenting. Hospitals should provide replacement clothing to patients (e.g., scrubs) after decontamination.
  - Hospitals should have processes in place for evidence collection and tracking personal belongings during and after decontamination.

(It should be noted that the equipment and facilities described above are suitable for decontamination of patients after radiological or nuclear exposures. In addition, hospitals may want to consider purchasing or having available Geiger counters and radiation exposure meters as part of the process of treating and decontaminating patients exposed to radiological or nuclear agents.)