

DECONTAMINATION: Health Care Information

Victims of chemical exposures may arrive to the hospital with chemical agent on their skin, hair and clothing. Decontamination involves the removal of the chemical agent from the patient in order to decrease the toxicity to the patient and to decrease the contamination of health care workers and other patients.

Triage: If overwhelmed with many patients, those patients who have severe symptoms or have liquid or particles on their skin should be decontaminated first. The second group to be decontaminated should be those patients who have mild symptoms. Patients with no symptoms and no liquid exposure will most likely not need decontamination. Asymptomatic patients may be allowed to remove any outer garments that have been exposed and can be decontaminated after all symptomatic/exposed patients have completed their decontamination.

Decontamination: The first step to decontamination is to remove ALL of the patient's clothing and jewelry. The clothing should be placed into a plastic bag and stored outside of the hospital in the open air, if possible. The removal of clothes is the most effective form of decontamination.

The second step to decontamination is the cleaning of the skin and dilution of the chemical. This can be performed in a decontamination tent, if available, or in the hospital shower. The patient should **shower with soap (if available) and water for about 3 minutes or until all visible particles or chemical are removed.** The patient should dry with a towel, be given a gown and re-enter the ED. The towel should be bagged and stored with the clothing.

In some instances, it is necessary to decontaminate an **unconscious patient**. In this case, 1 to 2 hospital personnel should wear splash-proof personal protective equipment (PPE). If available, Level "C" PPE is ideal. This is generally a thick, impermeable gown with a hood, mask and either supplied air or an appropriate filter. The patient's clothing should be removed and stored as above. The patient should be showered with water for 2 to 3 minutes. Cleansing with a towel or sponge is only necessary where there is visible liquid or particles. Scrubbing with brushes, etc., should be avoided.

Protective Equipment: Personnel who handle clothing or handle contaminated patients should wear splash-proof and inhalational personal protective equipment (impermeable gown, hood, boots and filtered air respirator). Personnel who treat patients after they have been decontaminated should wear splash-proof PPE (surgical gown, boots, surgical mask) that are consistent with universal precautions.