



Safety and Risk Management

Emergency Procedures

Minor Spills of Liquids and Solids

(Less than 1 mCi and less than 5 milliliters of liquid confined to a small space)

1. NOTIFY: Notify persons in the area that a spill has occurred.
2. PREVENT THE SPREAD OF CONTAMINATION: Cover the spill with absorbent paper.
3. ABSORB LIQUID: Wear disposable gloves and use absorbent paper. Carefully fold the absorbent paper with the clean side out and place it in a plastic bag for transfer to a radioactive waste container. Also put contaminated gloves and any other contaminated disposable material in the bag.
4. SURVEY: With a G.M. survey meter, check the area around the spill. Also check your hands, clothing and shoes for contamination. For spills involving ³H, or other low efficiency beta emitters which cannot be detected with a survey meter, perform a wipe survey of the area and personnel to detect removable contamination. The wipe test is performed by rubbing a surface with a piece of filter paper, parafilm or a commercially prepared wipe material, using slight pressure. Each wipe should cover an area of about 100 square centimeters.
5. DECONTAMINATE: Clean the area with a soap solution. Perform a wipe survey to check for removable contamination. Continue decontamination efforts until wipe surveys show less than 200 cpm removable contamination.
6. REPORT: Report the incident to the Radiation Safety Section.

Major Spills of Liquids and Solids

(Greater than 1 mCi and 5 milliliters of liquid, or a smaller volume spread over a large area)

1. CLEAR THE AREA: Notify all persons not involved in the spill to vacate the room.
2. PREVENT THE SPREAD OF CONTAMINATION: Cover the spill with absorbent pads, but do not attempt to clean it up. To prevent the spread of contamination, limit the movement of all personnel who may be contaminated.
3. SHIELD THE SOURCE: If possible, the spill should be shielded, but only if it can be done without further contamination or significant increase in radiation exposure.
4. CLOSE THE ROOM: Leave the room and lock or otherwise secure the area to prevent entry.
5. CALL FOR HELP: Notify the Radiation Safety Section immediately.
6. PERSONNEL DECONTAMINATION: Remove contaminated clothing and flush contaminated skin with lukewarm water and then wash with mild soap. If contamination remains, induce perspiration by covering the area with plastic. Then wash the affected area again to remove any contamination that was released by the perspiration.

Radiation Safety Section: 804-828-9131
Emergency and After Hours: 804-828-9834