

Radiation Safety Emergency Procedures

WHO TO CALL

In the event of an emergency involving a radiation source, contact:

1. During normal working hours, the Radiation Safety Program - **934-4751**
2. During off-duty hours and on holidays, UAB Paging - **934-3411**
3. Ask to have the Director-On-Call, the Radiation Safety Officer, or the Assistant Radiation Safety Officer paged

LOSS OF SOURCE

In the event of a lost source, notify all personnel in the area and contact the Radiation Safety Program 934-4751.

MINOR SPILLS

1. **NOTIFY:** All persons in the area in which the spill occurred.
2. **PREVENT THE SPREAD:** Cover the spill with absorbent paper.
3. **CLEAN UP:** Use disposable plastic gloves and, if available, remote handling tongs. Carefully fold the absorbent paper and pad. Insert into a plastic bag and dispose in the radioactive waste container. Include all other contaminated materials such as plastic gloves.
4. **SURVEY:** With a GM survey meter, check the area around the spill, hands, clothing and shoes for contamination.
5. **REPORT:** Report the incident to the Radiation Safety Program.

MAJOR SPILLS

1. **CLEAR THE AREA:** Notify all persons not involved in the spill to vacate the room.
2. **PREVENT THE SPREAD:** Cover the spill with absorbent pads; do not attempt to clean up.
3. **CONFINE:** the movement of all personnel potentially contaminated to prevent the spread. Prevent entry into area.
4. **SHIELD THE SOURCE:** If possible, the spill should be shielded but only if it can be done without further contamination or without significantly increasing your radiation exposure. Quickly withdraw to a safe distance.

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5. **VENTILATION SYSTEM:** Switch off all fans, air conditioners and hoods and close air vents and hood sashes. In some locations, maintenance will have to be called to turn off the air conditioners.
6. **CLOSE THE ROOM:** Leave the room and lock all doors leading to it to prevent entry and to further prevent the spread of contamination beyond the confines of the immediate room.
7. **CALL FOR HELP:** Notify the Radiation Safety Program immediately.
8. **PERSONNEL DECONTAMINATION:** Contaminated clothing should be removed and stored for further evaluation by the Radiation Safety Officer or his designate. If the spill is on the skin, flush thoroughly and then wash with mild soap and lukewarm water.

ACCIDENTS

Involving Radioactive Dusts, Mists, Fumes, Organic Vapors and Gases

1. Notify all other persons to vacate the room immediately.
2. Hold breath and close escape valves, switch off air circulating devices, etc., if time permits.
3. Vacate the room.
4. Notify the Radiation Safety Program at once.
5. Ascertain that all doors giving access to the room are closed, lock if possible, and post conspicuous warnings or guards to prevent accidental opening of doors.
6. Report at once all known or suspected inhalations of radioactive materials.

Involving Injuries to Personnel and a Radiation Hazard

1. Protect human life. At the present time, there is no radioactive source at UAB that should prevent one from retrieving an injured person from a dangerous situation. If there is a probability of airborne radionuclides, use something to cover the mouth and nose while retrieving an injured person.
2. Call the UAB Emergency Room, the UAB Police, and then call the Radiation Safety Program at once.

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3. Contaminated clothing should be removed and stored for further evaluation by the Radiation Safety Officer or his designate. Check the survey meter before use to be sure it is working properly and is not contaminated.
4. Wash minor wounds immediately under running water while spreading the edges of the wound.
5. Report all radiation accidents involving personnel (wounds, overexposures, ingestion, inhalation) to the Radiation Safety Officer or his designate as soon as possible.
6. Protect property. The risk involved will depend on the amount of damage that may occur, and the individual may have to make an immediate appraisal of the situation.
7. Prevent the spread of contamination beyond the confines of the immediate room, area, or building by:
 - a. Turning off all fans and air conditioners and closing air vents.
 - b. Turning off all hoods and closing the hood sashes. Maintenance personnel may have to be called.
 - c. Restricting the movement of all persons suspected of being contaminated and preventing entry into the area.
 - d. Closing and locking all doors leading to the scene of the accident. Post conspicuous warnings or guards to prevent accidental opening of doors.
8. Decontamination of the area shall be supervised by the Radiation Safety officer or his designate.
9. Complete all necessary [HRM On-The-Job Report Forms](#).