

**The University of Chicago Office of Radiation Safety**  
**Emergency Procedure**

**HOW TO REACH RADIATION SAFETY OFFICE STAFF**

Normal Working Hours (M-F, 8:30 am to 5:00 pm)

Call **2-6299** and report that a radioactive spill or radiation incident has occurred.

After Hours, Weekends, Holidays

Call University Police at **2-8181** and report that a radioactive spill or radiation incident has occurred and to please contact Radiation Safety personnel.

**LOSS, THEFT, OR DAMAGE OF SOURCES OF RADIOACTIVE MATERIAL**

Any loss, theft, or damage to any source of radioactive material (radioactive waste, stock vial solutions, sealed sources, etc.) or any other accident involving radioactive material **must** be reported promptly to the individual responsible for the use of the radioactive material and to the Office of Radiation Safety.

**SPILL PROCEDURE**

Minor Spill

A minor spill is one that can be readily cleaned without spreading the spill. It involves small volumes, small areas, low activity of radioactive material, no volatile materials, and involves no internal radiation hazard to personnel.

Major Spill

A major spill involves large volumes, large areas, high activity of radioactive material, volatile materials, contamination of body or clothing, or contamination that has spread or occurred outside the lab or designated area of use.

**In the event of a minor spill:**

- 1) Notify all persons in the room immediately that a spill has occurred.
- 2) Cover the spill with absorbent material.
- 3) Restrict movement into the area.
- 4) Don two pair of disposable gloves and proceed decontaminating the spill area.
- 5) Insert all clean-up material (i.e. absorbent paper, paper towels, scrub brushes, etc.) into a plastic bag and dispose of contaminated material in the radioactive waste container.
- 6) With a GM survey instrument, survey spill area, hands and clothing for contamination. For alpha and low-energy beta emitters, conduct wipe test at the spill area.
- 7) Permit no one to resume work in the immediate area of the spill until the contamination has been cleaned.

Revised 11/07

**In the event of a major spill:**

- 1) Follow steps 1 - 4 for a minor spill (listed to the left.)
- 2) Notify authorized user and Office of Radiation Safety immediately.
- 3) Confine all personnel potentially contaminated to an isolated area in or near lab.
- 4) Monitor all persons involved in the spill.
- 5) Decontaminate personnel by washing the affected area immediately with soap and water or a decontaminating agent effective for the chemical involved. If the contamination is localized to small area of the skin, the contamination should be masked off and the affected areas cleaned with cotton applicators dipped in soap or suitable decontamination agents. Care should be taken not to scratch or erode the epidermal skin layer.
- 6) If life threatening injuries are present, the individual should be given immediate life-saving first aid and transported to a hospital. Notification regarding possible contamination of the patient should be communicated to the hospital.
- 7) All clothing suspected of being contaminated should be removed and isolated for monitoring.
- 8) Proceed in decontaminating the spill area.
- 9) Continue with steps 5 - 7 for minor spill.