

Radioactive Material Spill Procedure

Estimate the amount of radioactivity spilled. Initiate a major or minor spill procedure based on the table below. Spills above these millicurie amounts are considered major, below are considered minor.

Isotope	Activity* (mCi)
I-125, I-131, Co-60, C-14, P-32	1
In-111, I-123, Co-58, Fe-59, Yb-169, Se-75, Au-198, Sr-85, H-3, Cr-51	10
Tc-99m, , Co-57, Ga-67, Hg-197, Tl-201	100

* Spill guidelines taken from *A Guide for the Preparation of Radioactive Material License Applications for Medical Programs*, Radiation Health Branch, Frankfort, KY (2005)

Minor Spills of Liquids and Solids

1. Notify persons in the area that a spill has occurred.
2. Prevent the spread of contamination by covering the spill with absorbent paper.
3. Clean up the spill using disposable gloves and absorbent paper. Carefully fold the absorbent paper with the clean side out and place 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 the area with a low-range radiation detector survey meter. Check the area around the spill. Also check your hands, clothing and shoes for contamination.
5. Report incident to the Radiation Safety Officer (RSO).
6. The RSO will follow up on the cleanup of the spill and will complete the Radioactive Spill Report.

Major Spills of Liquids and Solids

1. Clear the area. Notify persons not involved in the spill to vacate the room.
2. Prevent the spread of contamination by covering the spill with absorbent paper, 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, but only if it can be done without further contamination or a significant increase in radiation exposure.
4. Close the room and lock or otherwise secure the area to prevent entry.
5. Notify the Radiation Safety Officer immediately.
6. Decontaminate personnel by removing contaminated clothing and flushing contaminated skin with lukewarm water and then washing 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.
7. The RSO will supervise the cleanup of the spill and will complete the Radioactive Spill Report.

RADIATION SAFETY CONTACT INFORMATION

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