

# Radiation Spill

**Minor Spill:** A minor spill is the release of **1 microcuries or less** of radioactive material that results in contamination of the immediate work area.

- **Notify personnel in the area that a spill has occurred.**
- **Contact Radiation Safety.**
- **Prevent the spread of contamination.**
  1. Restrict access to the any potentially contaminated locations in the spill area.
  2. Survey the area and affected personnel to determine the extent of the contamination.
  3. Cover liquid spills with absorbent material such as absorbent bench paper.
- **Decontaminate the affected area.**
  1. Clean the area from the outside-in to minimize the spread of contamination and frequently surveying the cleaned area
  2. Dispose of contaminated materials in the appropriate radioactive waste container.
  3. Survey the area to ensure that the contamination has been reduced to background levels.
- **Radiation Safety Personnel will conduct a survey to confirm all contamination has been removed.**

**Personal Contamination:** Contamination of the skin, eye or other part of the body. Personal contamination may be a result of a spill, but may also occur incidental to work with radioactive materials.

- **Identify location(s) and magnitude of contamination.**
- **Call Radiation Safety Immediately for assistance!**
- **Contaminated Wound / Injury**
  1. If injury is serious, administer first aid and seek medical attention. See PERSONAL INJURY tab for more information.
  2. If wound is minor in nature, administer first aid and gently clean wound with mild soap and water.
  3. Report all personal contamination to Research Safety Affair and Occupational Health as soon as practical.
- **Skin Contamination**
  1. Wash the affected area with mild soap and water and rinse for at least 15 minutes.
  2. *Do not abrade the skin by scrubbing the area. If you have reached this point, wait for further assistance from Radiation Safety!*
  3. Assess the effectiveness of decontamination with both a survey meter and a wipe test. (Wipe test only for H-3).
  4. Repeat if necessary.
- **Eye Contamination**
  1. Flush with an eye wash for a minimum of 15 minutes.
  2. Assess the effectiveness of decontamination with a survey meter, if applicable.
  3. Repeat if necessary.
- **Contaminated Clothing or personal items**
  - Move to a noncontaminated area of the lab.
  - Don Clean gloves
  - Carefully remove contaminated items of clothing preventing the spread of contamination to other areas of the body
  - Bag contaminated clothing for collection by Radiation Safety

**Major Spill:** A major spill is the release of **greater than 1 microcurie** of radioactive material that results in contamination.

- **Notify personnel in the area that a spill has occurred.**
- **Call Radiation Safety Immediately for Assistance!**
- **Prevent the spread of contamination.**
  1. Restrict access to the area.
  2. Survey the area and affected personnel to determine the extent of the contamination.
  3. If personal contamination is discovered, follow procedures outlined under *Personal Contamination* above.
- Cover liquid spills with absorbent material such as absorbent bench paper.
- **Radiation Safety staff will respond to assist with decontamination and waste disposal.**

**Additional Site-specific Information:** Spill Kit Location (absorbent, plastic bags, gloves, shoe covers, Dawn Powerwash spray (or equivalent), paper towels): \_\_\_\_\_

**Radiation Safety Contact Information:** Business Hours (901) 448-6114  
email: [radsafety@uthsc.edu](mailto:radsafety@uthsc.edu)

Off-Hours (Campus Police) (901) 448-4444

**Authorized User Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_