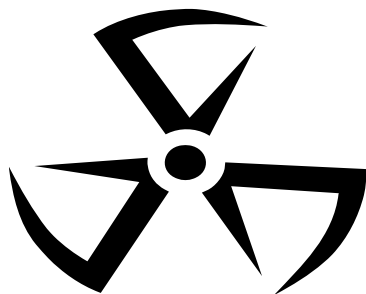


EH&S Fast Facts

LIMITING YOUR EXPOSURE TO RADIATION



External Radiation Exposure involves exposure to x-rays, gamma rays, and higher energy beta particles.

Internal Radiation Exposure involves radioactivity deposited within the body through absorption, inhalation, or ingestion.

External Radiation Exposure

- Design the activity to minimize exposure **time** in the radiation field
- Radiation intensity falls quickly with **distance**, so maintain the maximum possible distance from the source at all times
- Use lead **shielding** for x-rays and gamma rays
- When **shielding** beta particles, use plexiglass, **not lead**
 1. Beta particles that strike lead produce x-rays
 2. Plexiglass approximately one-quarter inch thick will effectively stop beta particles

Internal Radiation Exposure

- To prevent absorption:
 1. Wear a lab coat, disposable gloves, pants/ long skirt, and covered shoes (no sandals) while working with open sources of radioactivity
 2. Change gloves frequently, monitor work area, wash your hands, and remove lab coat when leaving the laboratory
 3. Do not assume co-workers have not contaminated the lab - routinely check yourself with a survey meter
- To prevent inhalation:
 1. Work in a fume hood when using millicurie amounts of open sources of radioactivity
- To prevent ingestion:
 1. Don't smoke, eat, or drink in the lab
 2. Don't store your food in refrigerators or freezers designated for chemical or radioactive storage

Visit www.ehs.ucr.edu for additional information or call EH&S at 827-5528 if you have any questions.