



Radiation Safety Basics

This information is only applicable to certain OHSU buildings and operations, and each area may be slightly different. There are many types of radiation. Some we can feel such as light and heat, while others, such as x-rays, can only be detected using special instruments. **Ionizing radiation** is the focus of this Safety Focus.

Clinical Application - X-rays and radionuclides are used in medicine and dentistry to detect and treat diseases. Fluoroscopy devices guide physicians during special procedures.

Research Application - Radionuclides are used in research as tracers for certain molecules, chemicals, or cellular activities. It allows us to see the destination or process that is of interest. Examples include studies of metabolism of a drug, activities of enzymes, and concentrations of compounds in body fluids.

Recognition - Areas or laboratories where radiation is used will display the trefoil Radiation symbol (pictured above). Be aware of areas that display this symbol. Employees who work with or around radiation are trained in its use and safety.

Protection - To minimize radiation exposure:

1. Minimize your time spent near high energy radiation sources;
2. Maximize the distance between sources and you. Radiation intensity decreases greatly with distance; and
3. Shield yourself from sources, using lead, Lucite, or other materials appropriate for your source. Wear protective clothing, when appropriate.

Pregnant? - An embryo/fetus is more sensitive to radiation than an adult, particularly during the first few months of growth. Therefore, special guidelines have been developed to protect the unborn child. Information regarding prenatal radiation exposure is available from Environmental Health and Radiation Safety.

Radioactive Material Spill?

- Contact Environmental Health and Radiation Safety (503 494-7795) if you have questions about how to clean a spill. **After hours spills may be reported to 4-4444.**
- Control access to the area and warn others. Do not leave the area until the spill is cleaned up.
- If the spill has come in contact your skin, immediately wash with soap and water. Removed soiled clothing.

