Radiation Safety Training

A.L.A.R.A.
As Low As Reasonably Achievable

ALARA may be considered a method for managing radiation exposures and releases. This approach weighs technical, economic, practical, and regulatory issues in determining its value. It is not a limit but rather a practice.

Individuals often work with radioactive materials and/or radiation every day. Complacency is often a problem because the work may become routine and the individual may begin to think that accidents and elevated exposures don’t happen. To help prevent unnecessary exposure, a person must constantly remember when they are working with radioactive material/radiation to limit his/her exposure. Some points to remember include:

1. Complete all necessary radiation safety training (i.e., orientation, course, etc.) to assure that you are knowledgeable in all aspects of radiation safety (e.g., contamination control, direct radiation exposure, etc.)

2. Perform “dry runs” (i.e., without radioactivity) of any new procedures you will be doing. This will prevent unnecessary exposure while working out the details of your new procedure.

3. Always wear protective clothing (e.g., lab coats, gloves, etc.) and use protective equipment (e.g., shields), as warranted, when working with radioactive material.

4. For high energy beta or gamma radiation, maintain a reasonable distance if it is not necessary for you to be up next to the source. By simply doubling your distance from a gamma source, you can decrease your exposure by a factor of four!

5. Use a Geiger counter to check areas where high energy beta or gamma radioactive material is used or stored. Any source of radiation greater than 2 mR/hr must be shielded to meet this limit. If the source of radiation is due to contamination, any area with a measurement above background should be cleaned until background is achieved. If you are unable to fully decontaminate an area, contact Radiation Safety for further instruction.

6. After handling radioactivity, make sure to survey your hands and body with a Geiger counter, provided the radioactive material is detectable with this instrument.

7. Make sure radioactive waste boxes are conveniently located, yet stored away from high traffic or frequently occupied areas (e.g., next to a desk, in a doorway, etc.)

8. Keep stock vials in original shipping containers. Once you have dispensed your material from the vial, return it to the storage area as soon as possible.

9. Keep the exposure of those around you in mind while you are working with radioactivity.