Control of Visitors, Minors, Children and Infants in Radiation Laboratories

Required of departments and services where ionizing radiation is used or encountered.

Unsupervised volunteers and visitors can create a risk for injury and additional liability on the University. Federal regulations state that "every reasonable effort shall be made by the user to maintain radiation exposures as low as reasonably achievable" (ALARA). California State University, Fullerton (CSUF) is committed to the ALARA philosophy.

In uncontrolled areas to which access is normally allowed, radiation levels are usually no higher than the general public encounters from naturally occurring background radiation (approximately 300 mrem/year from terrestrial and cosmic sources). Occasionally, however, radioactive material or radiation-producing equipment may be in use in these areas, which could expose individuals to some radiation.

All areas containing radioactive materials, or creating a measurable radiation level are clearly identified by various signs and labels.

Temporary Workers

Though laboratory personnel are not expected to receive measurable radiation exposure, as a precaution, all persons must meet with the principal investigator prior to starting any work or activity in radiation areas. The Radiation Safety Officer or delegate will provide temporary worker safety training and/or monitoring equipment as appropriate.

Visitors

Visitations to laboratories must be under the direct supervision of an authorized faculty or staff member or part of a formally organized guided tour, or supervised education program.

To protect the visitor and reduce the risk to the University, the following radiation safety parameters for visitors to laboratories should be followed at a minimum.

Applicable to all visitors regardless of age:

- The host must have full knowledge of all potential hazards and how to implement an emergency plan for the area.
- The host assumes full responsibility for the safety of each visitor.
- The host assures that all safety training pertinent to the laboratory is given to the visitor.
- The host must ensure that no other laboratories or operations in the area pose a threat or risk to the visitors' safety.
• All safety requirements apply.
• All visitors must wear the appropriate personal protective equipment or clothing including, at a minimum, but not limited to, ANSI approved eye protection and gloves as dictated by the activities in the lab.
• Shoes (of material suitable for the environment) that do not entirely cover the foot are not allowed.
• Visitors must have long hair tied back, no strings other materials dangling from clothing, and no outerwear in labs (bulky coats can knock things over).
• Each visitor must be accounted for and accompanied during the entire visit.
• The visitor(s) will touch nothing in the lab that is not pertinent to the visit.
• Ensure no equipment with unguarded moving parts or unprotected chemical reactions are active in the lab.
• No spilled, uncovered or unprotected chemicals are in the area.
• No unshielded or otherwise unprotected radioactive materials are in the area.
• All hazardous material is protected in such a manner that poses no hazard.
• Visitors to a lab where animal research is taking place, but not having contact with animals, must comply with all applicable rules and procedures.
• The visitor(s) will thoroughly wash hands, and other exposed skin upon leaving the area.
• Children of University students, faculty, or staff members are not authorized to be in laboratories on either an attended or an unattended childcare basis.

Minors

Because of the legislation regarding exposure limits to minors (10CFR20, subpart C.1207), the access of minors into radiation areas must be restricted. Signed parental/guardian consent forms and liability waivers are required for all visitors under 18, and must be obtained from the Office of Risk Management prior to the visit. **No access into such areas shall be allowed for infants and small children.** Older school-aged children may be allowed to tour these areas under special circumstances with direct supervision of an authorized faculty or staff member.

Additional minimal requirements for minors visiting labs are:

• The host ensures that the presence of minors in a research laboratory has a clearly defined educational purpose.
• Visitors under 18 should not be allowed in laboratories where select agents or explosives are used.

Minors conducting or assisting in research in any laboratory where radiation could be present must receive the same standard Radiation Safety Training as required by all persons working with radioactive material or radiation-producing equipment.

**Revised:** 12/2011, 12/2018, 02/2022