

UNIVERSITY OF CALIFORNIA, BERKELEY
RADIOISOTOPE SAFETY & EMERGENCY PROCEDURES

EMERGENCIES:

- In case of serious injury, call 911 to obtain first aid, ambulance, etc. Treat severe injuries without regard to radioactive contamination. Notify Office of Environment, Health & Safety, Radiation Safety (RS) as soon as possible if there is possible radioactive contamination or radiation exposure. Call 642-3073 during business hours; during other hours, call 911 if using a campus phone or 642-3333 if using a cell phone.
- Notify RS as soon as possible in case of area or personnel contamination or suspected accidental exposure to radiation.
- In case of airborne radioactive radioactivity or an incident resulting in a high radiation field, evacuate the affected areas, lock and post the doors, call and wait for RS.
- In case of personnel contamination, remove contaminated clothing, wash skin contamination with soap and lukewarm (not hot) water. Do not use abrasives or solvents. Restrict movements, call RS, and stay in the area until RS arrives.
- Do not attempt extensive decontamination of floors or other areas without RS assistance. Contain spills by covering, marking and isolating the area. Check and remove, or cover, shoes as necessary to prevent the spread of contamination.

PROCUREMENT:

- Obtain and possess radioisotopes only as described by your Radiation Use Authorization (RUA).
- Use the Radiation Safety Information System (RSIS) to obtain RS authorization before each receipt (purchase, transfer, gift, etc.) of radioisotopes.
- Use RSIS to obtain RS authorization before each transfer of radioactive material on or off campus.

LABORATORY USE:

- Follow the specific precautions that appear on your (posted) RUA.
- Log your receipt, use, transfer, and disposal of radioisotopes using RSIS.
- Wear disposable gloves, lab coat, and safety glasses at all times when working with unsealed radioisotopes.
- Wear the radiation dosimeter(s) specified by your RUA during radioisotope work; store appropriately when not in use.
- Insure radiation detection equipment required by your RUA is on-hand, calibrated, and operable when handling radioisotopes. Monitor radioactive material use areas after each use.
- Survey yourself, your work area, and your handling tools frequently when working with unsealed radioisotopes; assure all items used around unsealed radioisotopes are clean before removing them from work area.
- Survey lab coats and other PPE following each use. Assure these items have no radioactive contamination before permitting them to leave lab (e.g. for laundering or other service); **document these surveys**.
- Cover radioisotope work surfaces with absorbent paper with an impervious backing. Change when worn or contaminated. Confine the work to as small an area as possible and delineate/label it clearly.
- Label all radioisotope containers and potentially contaminated items with a "Caution Radioactive Material" sticker.
- Use shielding specified by RUA; use tongs or other tools to handle items if contact radiation level exceeds 20 millirem per hour.
- Perform and document area surveys (self-surveys) as specified by your RUA.
- Do not eat, drink, or apply cosmetics in labs where unsealed radioisotopes are used or stored (see details in campus policy at: <http://campuspol.chance.berkeley.edu/policies/foodinlabs.pdf>). Smoking is not allowed in campus buildings.
- Never store food or drink in refrigerators, freezers, or areas where unsealed radioisotopes are used or stored.
- Never mouth pipette while in an unsealed radioisotope use area.
- Contact RS for an RUA revision in advance of making changes in personnel, rooms, or in the nature of work.
- Maintain good housekeeping. Do not allow clutter to accumulate in radioisotope work areas. See information at: <http://ehs.berkeley.edu/pubs/factsheets/70clutter.pdf>

WASTE DISPOSAL:

- Refer to Section K of the Radiation Safety Logbook (<http://ehs.berkeley.edu/hazmat/sectionk.pdf>) for specific instructions on disposal of the various forms of radioactive waste. Call EH&S at 642-3073 or use the Radiation Safety Information System (RSIS) to arrange for a radioactive waste pickup.