

General Rules for Safe Use of Radioactive Material

Lab Coats

Wear laboratory coats or other protective clothing at all times in areas where dispersible radioactive material is used.

Gloves

Wear disposable gloves at all times while handling dispersible radioactive materials.

Hand Monitoring

Monitor hands and clothing for contamination after each procedure or before leaving the immediate area.

Shielding

Always use syringe shields for routine preparation of patient doses and administration to patients, except in circumstances, such as pediatric cases, when their use would compromise the patient's well-being. In these cases, use other protective methods such as remote delivery of the dose (e.g., through use of a butterfly valve).

Eating and Drinking

Do not eat, drink, smoke, chew, or apply cosmetics in any area where radioactive material is stored or used. Do not store food, drink, or personal effects with radioactive material (e.g., in refrigerator).

Dose Assay

Assay each patient dose in the dose calibrator prior to administration. Do not use any dose which differs from the prescribed dose by more than 20 percent unless authorized by the physician. **Note:** Unit doses of beta-emitting or alpha-emitting radionuclides which have been assayed by the nuclear pharmacy within 12 hours prior to actual administration need only a copy of that pharmacy assay unless license conditions require otherwise.

For therapeutic doses, also check the patient's name, the radionuclide, the chemical form, and the activity versus the Written Directive order written by the physician who prescribes the procedure.

Dosimeters

Wear personnel monitoring devices (film badge, TLD, OSL, etc.) at all times while in areas where radioactive materials are used or stored. These devices should be worn at chest or waist level. Personnel monitoring devices when not being worn to monitor occupational exposure must be stored in a designated low-background area, as must the controls for such devices.

Wear extremity dosimetry during elution of generator, and preparation, assay, and injection of radiopharmaceuticals or when handling sealed sources.

Radioactive Waste

Dispose of radioactive waste only in specially designated drains or properly shielded and labeled receptacles.

Surveys

Survey nuclear medicine work area for contamination after each procedure or at the end of the day. Decontaminate as necessary. Document all results.

Labeling

Confine radioactive solutions in covered containers plainly identified and labeled with name of compound, radionuclide, date, activity, and radiation level, as applicable.

Transportation

Always transport radioactive material in shielded and labelled containers.