

Security and Storage of Radioisotopes

Security

It is required by U.S. Nuclear Regulatory Commission law that security of radioactive materials must be in place at all times. Violations of this regulation are frequently cited at institutions utilizing radioactive materials, and place the license to use such materials in jeopardy. The Code of Federal Regulations, Title 10, Part 20.1801 and 20.1802, Storage and Control of Licensed Materials in Unrestricted Areas, reads:

- (a) **The licensee shall secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas.**
- (b) **The licensee shall control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage.**

This means that all locations where radioactive materials are present must be in constant attendance by the trained user, or otherwise locked or secured to prevent unauthorized removal or tampering.

Storage

Storage of radioactive materials shall be in secured or locked cabinets, refrigerators, freezers or waste areas, unless attended by the licensee. Radioactive materials shall be stored in sealed containers in such a way as to prevent accidental spillage or breakage, and to prevent release into the air. If the nuclide requires shielding, it shall be stored in shielded containers in order to prevent doses to personnel accessing the storage areas.

If the radioactive material has been stored in a freezer or ultra freezer, it is imperative that the material be thawed, opened and handled in a certified fume hood or biological safety cabinet. Aerosols from stored radioactive materials may cause contamination of adjacent areas and doses to personnel if not handled in the proper way after storage.

All radioactive materials, whether in storage, waste or use, must be labeled with the radioactive warning symbol, the words "Caution, Radioactive Materials", the isotope, the date and the amount of radioactivity in DPM or microcuries.

The ORCBS will store radioactive materials for principal investigators upon request. Contact a Health Physicist to arrange for storage of radioactive materials.