



GENERAL RULES FOR RADIOACTIVE MATERIAL

MODULE 8



OKLAHOMA STATE UNIVERSITY
CENTER FOR HEALTH SCIENCES

GENERAL RULES

Eating, drinking, smoking, storage of food or eating utensils, or the application of cosmetics are **not permitted** in laboratories or rooms where radioactive materials are used or stored.



GENERAL RULES CONT.

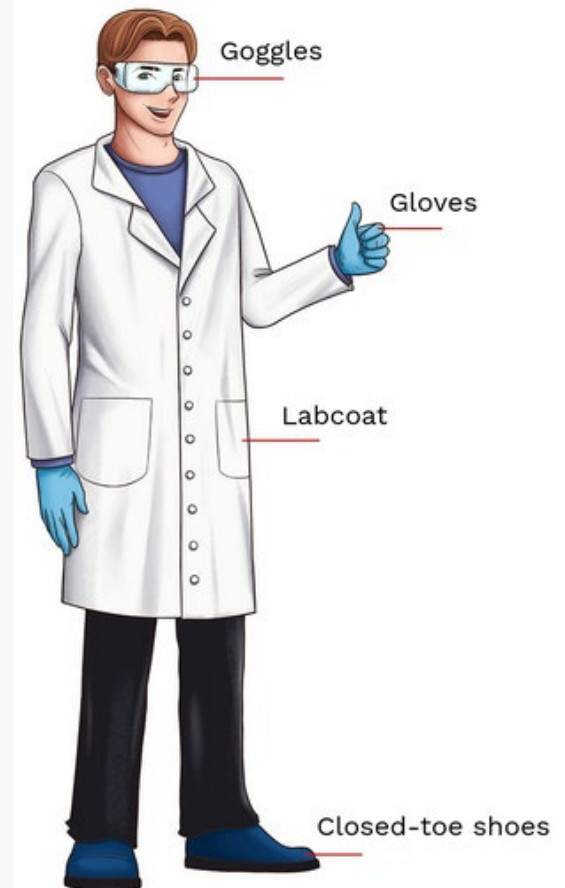
Personnel monitoring devices (TLD badge, pocket dosimeter, finger badge, wrist badge) prescribed for the area **must** be worn.



GENERAL RULES CONTINUED

Appropriate protective clothing such as gloves, laboratory coat, coveralls, respirator, shoe covers, etc. that are prescribed for the area must be worn.

It is helpful to post all required PPE (per lab) on the door signage.





OFFICE OF
RESEARCH
OSU Center for Health Sciences

PLEASE WEAR PROPER LAB ATTIRE

For your safety!



NOT PROPER

Lab Attire

NO PPE

Short Sleeves
(With no Lab
Coat)

No Gloves

Shorts

Open Toed Shoes



PROPER Lab Attire

Proper PPE
(Including Lab
Coat, Gloves, and
Goggles)

Long Pants

Closed Toed
Shoes



GENERAL RULES CONT.

Pipetting by mouth in areas where radioactive materials are used is forbidden.

Do not work alone with hazardous materials; implement the Buddy System.



GENERAL RULES CONT.

Any injury, no matter how slight, involving radioactive materials must be reported so that appropriate action may be taken.

For all incidents involving employees, follow Occupation Health's reporting process:

1. Notify supervisor of injury.
2. Email CHSSTUDHEALTH@okstate.edu or call 918-281-2755
3. Occupational Health Nurse will reply with guidance.

For all incidents involving students or visitors, follow Occupation Health's reporting process: Refer to the link to report incidents or injuries on OSU Property or with State Vehicles: [OSU Incident Portal](#).

****If it is an emergency, go to the ER.**

GENERAL RULES CONT.

Proper containment
(absorbent paper, trays,
secondary liquid containers)
required for the operations
must be in place.









GENERAL RULES CONT.

Fume hoods are to be used for all operations that potentially involve release of airborne materials, including gases, volatile compounds, dusts, and aerosols (minimum air flow shall be 85 fpm).



GENERAL RULES CONT.

Prescribed radiation detection equipment and calibrated survey instruments must be available and in good working order.



BEFORE USING A SURVEY METER


1. If you are not sure how to use the meter, review instructions before using the meter.
2. Ensure the meter was calibrated within the last year.
3. Always check to make sure the meter responds to radiation.
4. Always check to make sure that the batteries are not discharged.

GENERAL RULES CONT.

Radioactive materials must be **stored and shielded** in the manner prescribed for the area and **secured to restrict** unauthorized persons from using or removing the material.



SECURITY IS MAINTAINED IF

- The Laboratory is being Occupied
- The Laboratory is Locked when Unoccupied 
- All Radioactive Materials are Securely Locked in a respective Cabinet, Refrigerator or Freezer
- Quantities Present are Equal to or Less than the Exempt Quantity

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TABLE OF EXEMPT QUANTITIES

ISOTOPE	MICROCURI
H-3	100
C-14	100
P-32	10
P-33	10

TABLE OF EXEMPT QUANTITIES CONT.

ISOTOPE	MICROCURIES
S-35	100
CA-45	10
CR-51	1,000
I-125	1

GENERAL RULES CONT.

All containers, boxes, holders containing radioactive materials must be clearly labeled “**Radioactive Material**”.

They must also have the radionuclide, quantity, and date, and initials of the responsible person.



GENERAL RULES CONT.

All cabinets, refrigerators, and freezers which contain radioactive materials must be clearly labeled.



GENERAL RULES CONT.

All entrances *must* be properly labeled with signs appropriate to the hazard & posted with the names and telephone numbers of individuals to be contacted in emergencies.



WASTE CONTAINERS

**Not This,
But**



WASTE CONTAINERS



THIS!

