Radiation Safety Matters-2021/2022



Contamination Surveys

- Personal surveys and surveys of the radiation work area must be performed during and after every
 use of radioactive material.
- Always notify EHS of any personal contamination. Use the EHS Emergency Line: 203-785-3555.
- Laboratory surveys are required to be performed at regular frequencies, typically monthly. Help your lab to meet this responsibility.



Face Masks

- Surgical type masks must be worn in the lab during the COVID-19 pandemic.
- Do not touch your mask with gloved hands. This can lead to the spread of radioactive contamination.
- Survey your face mask during personal surveys.
- Only wear your lab face mask while in the lab. Remove and dispose before going home.



Safety Culture

The Nuclear Regulatory Commission expects individuals and organizations to establish and maintain a positive safety culture. Do your part:

- Take responsibility for safety
- Talk about safety
- Plan for safety
- Look out for others
- Model safety



Isotope Fact Sheets

- Know the properties of any radionuclide you handle (i.e. decay mode, decay energy, half-life).
- Isotope fact sheets for many commonly used radioisotopes at Yale are available at https://ehs.yale.edu/radiation-tools-resources.



Radioactive Material Shipments

- Order radioactive materials through Workday. EHS will review and approve these orders.
- Survey incoming shipments following your lab's protocol. Find an example protocol at https://ehs.yale.edu/sites/default/files/files/radioactive-material-use-log.pdf.
- Store newly received stock vials securely.



Security

- Store all radioactive materials securely.
- Keep lab doors locked when vacant.
- Pay attention to unknown persons in and around your lab.
- Report suspicious behavior.



EHS Integrator

- EHS Integrator is a web portal designed for your use to make safety recordkeeping easy.
- In EHS Integrator, you can edit your PI profile, submit and update registrations, resolve surveys, request waste pickups and maintain your inventory lists. Contact your Safety Advisor for assistance.

Please see reverse side for personal radiation dosimetry tips.

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Personal Radiation Dosimetry

Personal radiation dosimetry is worn by users of radioactive materials and x-ray equipment operators. Individuals assigned personal dosimetry must wear their dosimeters when working with radiation to track and monitor external radiation exposures and ensure that exposures are being kept As Low As Reasonably Achievable (ALARA).

Current Whole-Body dosimeter style







Whole-Body dosimeter style beginning in Q1 of 2022

Extremity Dosimeter

Dosimeters are a passive device used to measure radiation exposure. They do not offer active protection from radiation. Dosimeters provide the legal dose of record for each assigned user. Once a dosimeter is assigned, it must be tracked, and a dose assigned. Therefore, it is crucial that all assigned dosimeters are returned in a timely manner after their wear period ends. Please see below for important information on wear periods, dosimetry delivery from EHS, return of old dosimetry to EHS and requesting a new personal dosimeter.

	Dosimetry Wear Periods	Most dosimetry is distributed on a quarterly frequency, on the first working day of the new quarter. The normal quarterly wear period schedule is shown below: • Wear period 1 (Q1): January 1st to March 31st • Wear period 2 (Q2): April 1st to June 30th • Wear period 3 (Q3): July 1st to September 30th • Wear period 4 (Q4): October 1st to December 31st. Some dosimetry is assigned on a monthly wear period. Monthly dosimeters are distributed on the first working day of each month. The end date of the wear period shown on the dosimeter does not mean the dosimeter no longer functions after that date. However, dosimeters should only be worn beyond the wear period end-date until the proper exchange for new dosimetry has occurred.
⊗ <0	Delivery of Dosimeters by EHS	On the first working day of the new wear period, dosimeters are sent by EHS through campus mail to departmental mailrooms - not directly to individual labs. If you cannot locate your new dosimeter, please check with your departmental administrator who collects the mail or in your designated mailroom prior to contacting EHS.
0,8	Return of Dosimetry to EHS	Once you have received dosimetry for the new wear period, it is important to send back to EHS the old dosimetry from the previous wear period to allow for timely processing. Timely processing of dosimetry is critical to catching above ALARA level exposures (≥ 100 mrem whole-body, or ≥ 1000 mrem extremity). All dosimetry issued, even unused dosimeters, must be returned to EHS. To return: 1. Collect old dosimeters and place them in the return bag that is provided in the new bag of dosimeters. This should be done the same day that you receive the new dosimeters (or close to this as possible) so that processing times are not delayed; 2. Drop off the return bag at a campus mailroom to be returned to EHS by campus mail; OR drop off in person at 135 College Street, Suite 100 during normal business hours (8:30 am−5:00 pm, Monday−Friday).
	Requesting a Dosimeter from EHS	Dosimetry may be obtained following completion of the required radiation safety training programs and by submitting a Radiation Monitoring Service Form & Guidelines: https://ehs.yale.edu/sites/default/files/files/radiation-service-monitoring.pdf