

E. Personnel Monitors

1. Radiation workers who are authorized to manipulate radioisotopes that emit high-energy betas, gamma rays, or x-rays will be issued [dosimetry device](#)(s). These devices are designed to measure your radiation exposure. The RSO, with the approval of the RSC, may permit exceptions or may initiate additional requirements to this policy.
2. Radiation workers who are authorized to manipulate 10 mCi or more of P-32, and workers who perform iodinations will be issued a thermoluminescent dosimeter (TLD) ring badge.
3. Ring badges will be issued to other radiation workers (such as those who belong to X-ray programs) on a case-by-case basis. Risk will be the determining factor for issuance of these badges.
4. RSS personnel will change all dosimetry devices on a quarterly basis (with the exception of a few radiation programs and fetal monitoring badges, which are changed on a monthly basis). Dosimetry devices should be kept attached to the lab coat or in the general vicinity of the radiation worker's personal laboratory space, **away** from any radiation sources.
5. It is asked that the location of dosimetry devices be consistent to assist RSS in locating the devices when needed, and to help reduce the number of "lost" devices.
6. A Radiation Dosimetry Report from our dosimeter provider will be sent to the radiation program's PI or RAS each quarter. All "badged" radiation workers have access to their personnel exposure information listed on these reports. The results from a dosimetry badge report become a part of a person's permanent record reflecting lifetime exposure.
7. An Annual Dosimetry Monitoring Report will be made to all "badged" workers in March/April of each year. This report provides permanent to date exposures (in Rem) and personal information used to identify each worker and will be available from the Radiation Safety Office by personal request. For general information regarding these reports please click on the following link:

[Annual Dosimetry Report Information](#)

8. RSS will notify the radiation worker when an exposure above 130 mrem is reported. An investigation of possible causes will be pursued to determine how to prevent future exposures and to determine whether the reported exposure is valid.
9. Review of NCI-Frederick radiation exposure monitoring results for the past 20 years indicates that occupational radiation exposures nearing regulatory limits are not likely. In fact, most occupational radiation exposures received by radiation workers at NCI-Frederick are below the minimum detection capabilities of the exposure monitoring devices currently in use.