



### Operator Requirements and Reducing Exposures

- Only a properly credentialed individual may operate an x-ray machine for human use. Studies must be performed on the order of a physician or authorized provider.
- Operators of x-ray equipment must either stand behind a lead barrier, or wear a lead apron during x-ray exposures. Maximize the distance from the x-ray tube and patient during x-ray exposures. Never direct the x-ray tube toward the operator or the control booth during exposures.
- Pay attention to postings and lighted signs and heed warnings.



### Dose Reduction

- Perform a visual check of any lead aprons or other shields worn before every use.
- Holding patients should be rare. When necessary, wear lead gloves in addition to a lead apron.
- Always strive to reduce patient doses while optimizing image quality. See reverse for more info.
- Avoid unnecessary scans and use the lowest optimal radiation dose for necessary studies  
[www.imagegently.org](http://www.imagegently.org)



### Dosimetry

- To request dosimetry badges, please visit:  
<https://ehs.yale.edu/sites/default/files/files/radiation-service-monitoring.pdf>
- Wear your badge whenever using x-ray equipment. Wear badge at the collar outside of any lead apron.
- Store badge on site and away from radiation when not being used.
- Never share badges or intentionally expose badges to radiation.
- Return badges in a timely manner at the end of the wear period.



### Security

- Turn off x-ray equipment when not in use. Always secure keys when x-ray unit is not in use.
- Do not post passwords near x-ray control panels and do not leave keys with equipment.
- Only trained and authorized users should have access to the unit keys.



### Unit Malfunction

- If the x-ray unit appears to malfunction, remove it from service immediately.
- Contact your supervisor and the service representative as soon as possible.
- Make certain other users are aware that the unit is out of service and notify Radiation Safety at the EHS main line 203-785-3550.



### New Use or Termination of Use

- Contact EHS prior to purchase, relocation, transfer, donation or disposal of an x-ray unit to ensure all work is handled correctly and in accordance with Connecticut Department of Energy and Environmental Protection regulations. Ionel Hau is the EHS contact for X-ray Safety matters - [Ionel.Hau@Yale.edu](mailto:Ionel.Hau@Yale.edu)



### Emergency Procedures

- Contact the Yale Health Radiologist for any x-ray equipment related emergencies.
- Call the EHS emergency line at (203)785-3555 for assistance with any x-ray related emergency.

**Questions or concerns? Contact Radiation Safety at 203-785-3550.**

## Landauer is Yale University's New Radiation Dosimetry Vendor

Please see below for important information on the new dosimeters:

1. The new dosimeters come with a clip that the dosimeter snaps into. **DO NOT RETURN THIS CLIP.** The clip is re-used from quarter to quarter. Simply remove the dosimeter to be exchanged and send back. Then, snap the new dosimeter into the clip. It is important that the plastic tab is removed to properly install the dosimeter in the holder.



2. Badges are delivered to the departmental office, not directly to your lab. If you do not receive your badge, check first with your department administrator, or check your departmental mailbox.
3. To add, alter or cancel a dosimeter, or to ask a question regarding radiation dosimetry, please reach out to [dosimetry@yale.edu](mailto:dosimetry@yale.edu).

Please watch a [short video](#) summarizing the EHS Dosimetry Program, which includes a tutorial on how to assemble the Landauer OSL dosimeter and holder.