



Training

- All x-ray equipment operators must complete a two part training:
 1. Part I: X-Ray Safety Training Part 1 is an online course located at <http://ehs.yale.edu/training/x-ray-generating-equipment-safety-training>.
 2. Part II: Is a “How to” training provided by the PI or unit supervisor.
- Area frequenters (not involved in x-ray activities) must be made aware of x-ray use in that space.



Dosimetry

- Wear your badge whenever using x-rays equipment.
- Wear your badge at the collar outside of any lead apron.
- Store badge 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 your equipment when not in use.
- Always secure keys when x-ray unit is not in use.
- Do not post passwords nearby x-ray control computers and do not leave any keys with your equipment.
- Only trained authorized users should have access to the unit keys.



XRD and XRF Setup

- DO NOT attempt to handle, manipulate or adjust any object (sample, sample holder, collimator, etc.) which is in the direct beam path while the beam is on.
- Never place your hands or other body parts in the x-ray beam.
- For computer controlled runs, check and ensure that the runs are complete before making any adjustments.



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.



Termination of Use

- Contact EHS prior to 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.



Emergency Procedures

- If you have, or think you have, placed any body part in the path of the primary beam, if there is a suspicion of an x-ray exposure or for any other x-ray related emergency, call the EHS emergency line at 203-785-3555. This line is staffed 24 hours per day, seven days per week.

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

Traits of a Positive Safety Culture

Experience has shown that certain personal and organizational traits are present in a positive safety culture. A trait, in this case, is a pattern of thinking, feeling and behaving that emphasizes safety, particularly in goal conflict situations (e.g., production, schedule and the cost of the effort versus safety).

The following are traits of a positive safety culture:

1. Leadership Safety Values and Actions

Leaders demonstrate a commitment to safety in their decisions and behaviors.

2. Problem Identification and Resolution

Issues potentially impacting safety are promptly identified, fully evaluated and promptly addressed and corrected commensurate with their significance.

3. Personal Accountability

All individuals take personal responsibility for safety.

4. Work Processes

The process of planning and controlling work activities is implemented so that safety is maintained.

5. Continuous Learning

Opportunities to learn about ways to ensure safety are sought and implemented.

6. Environment for Raising Concerns

A safety conscious work environment is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment, or discrimination.

7. Effective Safety Communication

Communications maintain a focus on safety.

8. Respectful Work Environment

Trust and respect permeate the organization.

9. Questioning Attitude

Individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action.

Source: United States Nuclear Regulatory Commission.