



General Safety Regulations for X-Ray Cabinets

1. Only individuals authorized on the permit may operate the machine. All authorized users must receive instruction on the unit's safe operation from the Authorized Person(s) responsible for the unit and demonstrate an understanding of the operation of the machine before starting unsupervised work.
2. An operational fail-safe light shall be visible to the operator indicating when x-rays are being produced.
3. Use interlocks, barriers or administrative controls to ensure no one can gain access to the primary beam or high scatter radiation areas.
4. Use a calibrated GM survey meter to verify shielding effectiveness and monitor radiation levels.
5. Whole body and finger ring dosimetry is required for all personnel working with cabinet units.
6. Safety interlocks should not be used to deactivate the x-ray beam, except in emergencies and when testing the interlock system.
7. Do not override the safety interlock unless there is an approved written procedure.
8. Make sure the machine is OFF before changing samples or the primary tube safety shutter is closed and verify there is no active beam present; always check the current and voltage meters and/or use a survey meter to detect x-rays.
9. Do not modify the built-in shielding. If modifications must be made, contact the RSO for approval to restart instrument. Individuals may not operate an x-ray cabinet in a manner inconsistent with SOPs and safe operating standards.
10. Secure unused ports, if any, to prevent accidental exposures.
11. Secure cabinet units through a unit key control or room lock.
12. Maintain an operating log that includes date, operator, beam voltage and current, and time on and off (or total exposure time) for each unit use.
13. Notify the RSO immediately if there is a concern for or any abnormal personnel radiation exposure. If there are any questions or concerns about the functioning of an x-ray cabinet, it must be taken out of service immediately and reported to the PI or Authorized Person(s) responsible for the unit.

14. All x-ray units must be registered with EHS and CDPH prior to arrival. Contact EHS prior to any acquisition, transfer, relocation, or disposal of x-ray units so that the CDPH registration can be updated.
15. Contact the RSO for information regarding radiation safety or radiation survey instrumentation.

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