



X-RAY DIFFRACTION UNITS GENERAL SAFETY GUIDELINES

1. Equipment must be labeled with signs bearing Radiation Symbol and a label posted adjacent to x-ray tube housing - **CAUTION HIGH INTENSITY X-RAY BEAM**

A warning light with the x-ray symbol shall light only when the x-ray tube is activated.
2. Only trained/authorized personnel approved by the Radiation Safety Office shall operate the Equipment.
3. Routine Operation of equipment that would require an individual to expose any part of his/her body to the primary beam is prohibited.
4. Written Emergency procedures pertaining to Radiation Safety shall be posted in a conspicuous location near the equipment.
5. Operator shall be in immediate attendance when equipment is in operation except when area is locked to prevent unauthorized entry.
6. Equipment must be secured as to be inoperable by unauthorized persons when not in use.
7. Temporary alteration to safety devices such as bypassing interlocks or removing shielding is prohibited during normal operation of equipment. During temporary alteration of safety devices the status must be specified in writing and posted near the x ray unit.
8. Record must contain date alteration was made, type of alteration, length of time equipment remained in the altered condition, and signature of individual who restored the unit.
9. Interlocks shall not be used to deactivate the equipment except in an emergency or during testing the interlocks system.
10. Radiation Scatter Surveys must be performed following any change in the initial arrangements or during alignment procedures if the procedures require the presence of the primary x-ray beam.
11. Only trained personnel permitted to install, repair, or make modifications to equipment.
12. Interlocks, shutters, and warning lights tests shall be conducted quarterly, and records must be maintained by the department.
13. Any kind of accidental physical injury or radiation exposure must be reported to Radiation Safety Office immediately. Staff should report to Employee Health immediately for evaluation.



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14. Any location changes, acquisition of new equipment, disposal or transfer must be approved by the Radiation Safety Office.
15. A copy of Georgia State X-Ray Regulations is available at the Radiation Safety Office.