

## Continuing Education Requirements for Operators of X-ray Equipment in Medical Dental Facilities

The Department of Environmental Protection's (DEP) Bureau of Radiation Protection (BRP) prepared this fact sheet to help registrants understand the regulations in 25 Pa. Code Section 221.11 (Registrant Responsibilities) and to promote awareness of the importance of continuing education with respect to radiation safety. This regulation applies to all individuals (dentists, hygienists, assistants, and technologists) who operate X-ray equipment. The registrant shall ensure that initial instruction and continuing education training have been conducted in the topics listed in Chapter 221, Appendix A, Determination of Competence. Appendix A is included on the reverse side of this fact sheet.

### Continuing Education

Once initially instructed, the operator is required to have continuing education training in the key areas of radiation safety, biological effects of radiation, quality assurance, and quality control to ensure continuing competence. The operation of X-ray systems in dental facilities is considered a low-risk procedure. All operators of dental X-ray equipment must demonstrate continuing education every four years to satisfy the requirement in 25 Pa. Code Section 221.11. If an operator of X-ray equipment is already required to take continuing education courses for maintenance of a license or certification, the course may be applied toward BRP's requirement as long as the radiation safety topics are addressed. *NOTE: BRP's continuing education requirement is not related to an operator's license or certification and does not affect that process. Some courses may satisfy BRP's requirement, but not necessarily satisfy the Department of State's or a board's certification requirement. Check with the appropriate organization for verification.*

### List of Resources

A list of resources can be found on BRP's webpage at <https://www.dep.pa.gov/Business/RadiationProtection/RadiationControl/X-rayMachineProgram/Pages/ContinuingEd.aspx>. The list is not all inclusive nor does it imply any solicitation or endorsement by BRP of any one resource. Additional resources may be added in the future. Periodic review of the list for updated information is recommended. Courses can be taken online, in the classroom, or through in-service training. The course content must address the radiation safety topics in Appendix A to be acceptable.

A refresher course in radiation safety for all individuals who operate medical X-ray equipment, other than accelerators, can be found at [www.dep.pa.gov](http://www.dep.pa.gov).

### Documentation

The registrant must retain training documents at the facility for each operator of X-ray equipment. The documents will be reviewed for completion and to verify competence during a regularly scheduled BRP routine inspection.

## APPENDIX A DETERMINATION OF COMPETENCE

The registrant shall ensure that individuals who operate diagnostic X-ray equipment have received training on the subjects listed in this appendix. The individual shall be trained and competent in the general operation of the X-ray equipment, and in the following subject areas, as applicable to the procedures performed and the specific equipment utilized:

- (1) Basic properties of radiation
- (2) Units of measurement
- (3) Sources of radiation exposure
- (4) Methods of radiation protection
- (5) Biological effects of radiation exposure
- (6) X-ray equipment
- (7) Image recording and processing
- (8) Patient exposure and positioning
- (9) Procedures
- (10) Quality assurance
- (11) Regulations

**For further assistance, contact the DEP Regional Office applicable to the facility location as shown below:**

Region	Phone	Region Headquarters	Counties Served
East	484-250-5950	2 East Main St. Norristown, PA 19401	Bucks, Chester, Delaware, Montgomery, Philadelphia, Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming
Central	717-705-4700	909 Elmerton Ave. Harrisburg, PA 17110	Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York, Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and Union
West	412-442-4000	400 Waterfront Drive Pittsburgh, PA 15222-4745	Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland, Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, and Warren

### References

Pennsylvania Code Title 25 Regulations, [www.pacodeandbulletin.gov](http://www.pacodeandbulletin.gov).

For more information, visit [www.dep.pa.gov](http://www.dep.pa.gov) or call BRP at 717-787-3720.