

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

The Bureau of Radiation Protection (BRP) has prepared this fact sheet to explain the Technical Guidance document titled “Medical X-ray Procedures Operator Training Guide” (document number 291-4200-001). The intent of the guidance is 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. The guidance document applies to all individuals (dentists, hygienists, assistants, 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 an operator is initially and adequately instructed, it is necessary 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. Thus, all operators of dental x-ray equipment must demonstrate either two contact hours or four Continuing Education Units (CEUs) every four years to satisfy the requirement. If an operator of x-ray equipment is already required to take continuing education courses for maintenance of a license or certification, the course hours or units may be applied toward BRP’s requirement as long as the radiation safety topics are addressed. *NOTE: BRP’s continuing education requirement is not relative 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 or a board certification requirement. Check with the appropriate organization for verification.*

List of Resources

The Technical Guidance Document includes a supplemental page of resources, and an additional list of resources can be found on BRP’s Web page at www.depweb.state.pa.us . 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. Numerous courses are available on-line, in the classroom, or through in-service training, and may be acceptable provided they address the **Radiation Safety** topics.

Documentation

The registrant shall 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 the next 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 your facility location as shown in the chart below:

Region	Phone	Region Headquarters	Counties Served
East	484-250-5950	2 East Main Street Norristown, PA 19401	Bucks, Chester, Delaware, Montgomery, Philadelphia, Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming
Central	717-705-4700	909 Elmerton Avenue 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, 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, Warren

References

Pennsylvania Code Title 25 Regulations, www.pacode.com

Medical X-ray Procedures Operator Training Guide, #291-4200-001, September 1, 2009

For more information, visit www.depweb.state.pa.us, keyword: Radiation, or call the Bureau of Radiation Protection at 717-787-3720.