

WAC 246-225A-020 General requirements and administrative controls. The registrant is responsible for directing the operation of the X-ray system and assuring the provisions of chapter 246-222 WAC (Radiation protection—Worker rights) are met. In addition, the registrant shall:

(1) Verify that any operator of the X-ray equipment is trained and able to show that he or she can correctly and safely operate the X-ray equipment used by the registrant. The department may determine compliance by observation, interview, or testing in these subject areas:

(a) Knowledge of the X-ray system controls and their function;

(b) Knowledge of radiation safety and shielding methods for both operators and patients;

(c) Proper image processing.

(2) Post a technique chart at each X-ray system's control panel that specifies the following information for the examinations being performed by that system:

(a) Patient's teeth, jaw, or head anatomy versus technique factors to be used;

(b) If applicable, settings for automatic exposure devices; and

(c) The type and size of screen-film combination or other imaging system to be used.

(3) Require that all individuals, other than the patient being examined:

(a) Be positioned so that no part of the body, including the extremities, will be struck by the useful beam;

(b) Be protected from stray radiation by wearing protective aprons or by being positioned behind protective barriers of not less than 0.25 millimeters lead equivalent; and

(c) Not be present in the room during the X-ray exposure, except:

(i) As described in subsection (4)(b) of this section; or

(ii) When a hand-held, portable, or mobile X-ray system is used.

(4) Use mechanical holding devices when a patient, film, or image receptor needs to be supported during an X-ray exposure when the technique permits.

(a) An individual may not be allowed to routinely hold a patient, film, or image receptor; and

(b) Holding a patient, film, or image receptor must only be allowed in very unusual and rare situations. In these cases the patient's name, the date, and the name of the person holding the patient must be recorded in writing and maintained by the registrant for at least five years.

(5) Comply with the occupational exposure limits and the requirements for the determination of prior occupational dose stated under WAC 246-221-020 (Determination of prior occupational dose) for all individuals associated with the operation of the registrant's X-ray system. In addition, when protective clothing or devices are worn on portions of the body and a dosimeter is required, at least one dosimeter must be used and documented as follows:

(a) When an apron is worn, the dosimeter must be worn at the collar outside the apron;

(b) The dose to the whole body based on the maximum dose attributed to the most critical organ must be recorded on the reports required under WAC 246-221-230 (Records important to radiation safety). If more than one dosimeter is worn, each dose must be identified with the area where the dosimeter was worn on the body.

(6) Require personnel dosimetry of an operator when:

(a) Mobile, portable, or hand-held X-ray systems are used, i.e., when X-ray exposure buttons or X-ray exposure button cords are used that allow the operator to stand in an unprotected area during exposures; and

(b) Measurements by the department show ten percent of the exposure limits as specified under WAC 246-221-010 (Occupational dose limits for adults) are exceeded.

(7) Use only X-ray equipment, and the accessories used in connection with making X-rays, that meet the requirements of this chapter.

(8) Not allow anyone in the dental office to operate X-ray equipment for diagnostic purposes when the X-ray equipment:

(a) Does not meet the provisions of this chapter; or

(b) Is malfunctioning or threatens the health or safety of a patient, dental employee, or the public.

(9) Not allow patients to be exposed to the useful X-ray beam except for healing arts purposes. Only a licensed practitioner may authorize an exposure to the useful beam. Deliberate exposure of an individual for the following purposes is prohibited:

(a) Training, demonstration, or other purposes unless there are also healing arts requirements and proper prescription provided; or

(b) Except for exposure required under medicare provisions, any exposure for which the sole purpose is satisfying a third party's prerequisite for reimbursement under any health care plan.

(10) Submit shielding specifications designed by a qualified expert as defined in chapter 246-220 WAC and floor plans to the department for review if the registrant proposes to use ring-detector type CT or medical X-ray systems for dental imaging. The submittal must:

(a) Meet the requirements of WAC 246-225A-050; and

(b) Be based on the criteria and methods found in National Council on Radiation Protection and Measurements (NCRP) report #147, *Structural Shielding Design for Medical X-Ray Imaging Facilities*, issued November 19, 2004.

[Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 11-19-013, § 246-225A-020, filed 9/7/11, effective 10/8/11; WSR 08-14-074, § 246-225A-020, filed 6/26/08, effective 7/27/08.]