**44:03:01:08.06.  Equipment standards for dental X ray systems.** All dental X ray systems must meet the specifications in 21 C.F.R. §§ 1020.30 and 1020.31, in effect on April 1, 2022. In addition, a dental X ray system must meet the following standards:

(1)  Any deviation of a measured technique factor from an indicated value for kilovoltage peak (kVp) may not exceed any limit specified for that system by its manufacturer or, in the absence of any manufacturer's specifications, the deviation may not exceed ten percent of the indicated value for kVp;

(2)  The exposure switch must be located so the operator can stand at least six feet from the useful beam. If sufficient shielding is provided to protect the operator from stray radiation, the exposure switch may be located closer;

(3)  Any dental X ray equipment must operate with a kilovoltage of sixty kVp or higher;

(4)  Any dental X ray machine must be maintained within manufacturer's specifications and recommendations;

(5)  Any hand-held intraoral X ray equipment must be equipped with a backscatter shield of not less than 0.25 millimeter lead equivalent and 15.2 centimeters in diameter, positioned as close as practicable to the distal end of the position indication device; and

(6)  Any hand-held device must be secured from unauthorized removal or use.

When operating a hand-held intraoral dental radiographic unit, operators shall wear a 0.25 millimeter lead equivalent apron, unless otherwise authorized by the department or a qualified physicist.

**Source:** 26 SDR 96, effective January 23, 2000; 50 SDR 41, effective October 11, 2023.

**General Authority:** SDCL 34-21-4.1, 34-21-15.

**Law Implemented:** SDCL 34-21-4.1, 34-21-15.