

South Dakota State Board of Dentistry

Board Meeting Agenda

10:00 a.m. Friday January 10, 2020

Kneip Building, Board Room C – 700 Governors Drive Pierre, SD

- 1) **Call to Order**
- 2) **Open Forum:** 5 minutes for the public to address the Board
- 3) **Approval of Minutes:** October 18, 2019 meeting and public hearing, November 19, 2019 meeting
- 4) **Adoption of Agenda**
- 5) **Financial Report**
- 6) **Office Update**
- 7) **Executive Session - SDCL 1-25-2(3) and (4)**
- 8) **License Applications**
- 9) **Old Business:**
 - a. **Whitepaper on the Effective Management of Acute Pain:** The Board will discuss updates.
- 10) **New Business:**
 - a. **Administrative Rule Project:** The Board will discuss the project to update ARSD 20:43:07 (Radiography).
 - b. **Teledentistry Regulations:** The Board will discuss current regulations pertaining to teledentistry.
 - c. **Hospital Dentistry:** Per the request of the SDDA, the Board will discuss dental services provided via contract to hospitals.
 - d. **Honorarium:** The Board will discuss the honorarium application received from the SDDA and SDDHA.
- 11) **2021 Meeting Date:** The Board will set the meeting date for January of 2021.
- 12) **Announcements:** Next Meetings – June 26, 2020 and October 23, 2020.
- 13) **Adjourn**

SD State Board of Dentistry
Board Meeting
Kneip Building Conference Room
Friday, October 18, 2019

President Dr. Tara Schaack called the meeting to order at 10:36 am Central.

Board Members Present in Person: Dr. Tara Schaack, Dr. Harold Doerr, Dr. Amber Determan, Dr. Scott Van Dam, Dr. Nick Renemans, Zona Hornstra and Molly Fulton.

Board Staff Present: Matthew Templar, Shelly Munson, Brittany Novotny, and Lisa Harsma.

Others Present: Andrew Wiltsch, Paul Knecht, Suzanne Luken, Dr. Rick Fuchs, Dr. Michelle Hofer, and Maria Piacentino.

Others Present via Telephone: Dr. Orin Ellwein, Mark East and Mishaux Ramirez.

Schaack called for public testimony during the open forum. Knecht noted CRNA regulatory changes, the SD Oral Health Coalition's work on teledentistry, and questions about the current practices for hospital dentistry.

Motion to approve the meeting minutes of June 21, 2019 and August 27, 2019 by Renemans. Second by Fulton. Motion carried.

Motion to adopt the agenda by Hornstra. Second by Van Dam. Motion carried.

Motion to approve the financial statements by Hornstra. Second by Determan. Motion carried.

Novotny provided an office update.

Motion to move into Executive Session pursuant to SDCL 1-25-2(3) and 1-25-2 (4) by Doerr. Second by Hornstra. Motion carried. The board went into Executive Session at 11:05 am.

Motion to move out of Executive Session by Hornstra. Second by Van Dam. Motion carried. The board moved out of Executive Session at 12:20 pm.

Motion to approve the Agreed Disposition for complaint 25.1617 by Determan. Second by Doerr. Motion carried.

Motion to dismiss complaints 1.1920 through 6.1920 by Doerr. Second by Hornstra. Motion carried.

Motion to approve a contract with Dr. Kevin Horner to serve as an orthodontic expert by Renemans. Second by Doerr. Motion carried.

Motion to approve the dentist applications of Junho Choi, Tara Elizabeth Palmer, Richard Brady Perdue, Jaicee Anne Post, Kevin Donald Ripp, Sierra Rae Schafer and Taylor Armando Velasquez by Doerr. Second by Determan. Motion carried.

Motion to approve the dental hygienist applications of Erica JoLynn Carrels, Kelly Jordyn Grimm, Samantha Rose Hasbargen, Dawne Nicole Risse and Lauren Marie Schumacher by Hornstra. Second by Doerr. Motion carried.

Motion to approve the dentist credential verification applications of Kristina Keturka Harvan and Daniel P. Reardon by Doerr. Second by Hornstra. Motion carried.

Motion to approve the dental hygienist credential verification applications of Jeremy Justin Jones, Jodi Kay Sigler, and Mary Watroba-Laroche by Hornstra. Second by Renemans. Motion carried.

Motion to approve the collaborative supervision applications of Darleen Bothwell, Dawne Risse and Marissa Schelske by Hornstra. Second by Renemans. Motion carried.

Novotny and Van Dam discussed the Anesthesia Credentials Committee (ACC) recommendations that were presented at the prior board meeting. Motion to approve the anesthesia, sedation and monitor courses, as presented, per ARSD 20:43:09:10 and 20:43:09:04 by Van Dam. Second by Hornstra. Motion carried.

The Board reviewed the proposed ACC rotation of terms. Motion to appoint Dr. John Bridges to replace Dr. Bruce Wintle on the ACC by Doerr. Second by Zona. Motion carried. Motion to appoint Dr. Carl Kimbler to replace Dr. Dennis Miller on the ACC by Van Dam. Second by Renemans. Motion carried.

Maria Piacentino with the Health Professionals Assistance Program provided an annual overview of the program.

Mark East with the SD State Medical Association presented on the “Whitepaper on the Effective Management of Acute Pain” noting there were changes to the current draft that would be finalized this calendar year. The Board provided feedback.

Motion to approve, per ARSD 20:43:03:01(4), the components of the patient based dental clinical competency exams administered by CRDTS, CDCA, CITA, SRTA and WREB that meet the requirements outlined in proposed ARSD 20:43:03:02, as presented, upon the effective date of the proposed rules by Detterman. Second by Doerr. Motion carried.

Motion to approve, per ARSD 20:43:03:08(4) the components of the patient based dental hygiene clinical competency exams administered by CRDTS, CDCA, CITA, SRTA and WREB that meet the requirements outlined in ARSD 20:43:03:09, as presented, upon the effective date of the proposed rules by Determan. Second by Doerr.

The Board discussed administrative rules project.

Motion to approve up to 50 hours of clinical continuing education per five year CE cycle for investigative services provided by Board investigators by Renemans. Second by Hornstra. Motion carried.

Mishaux Ramirez from the Accelerated Dental Assisting Academy presented information on the Accelerated Dental Assisting Academy's radiography course. Motion to approve the Accelerated Dental Assisting Academy radiography course per ARSD 20:43:07:06, as presented, by Van Dam. Second by Determan. Motion carried.

Motion to approve the mobile unit authorization process per ARSD 20:43:04:07, as presented, by Doerr. Second by Renemans. Motion carried.

Motion to appoint a Dental Approving Board Member who would be vested with authority to approve dental applications and permits, mobile dental units and state exam equivalency requests, with assistance from Board staff, by Doerr. Second by Van Dam. Schaack, Doerr, Van Dam, Renemans, Hornstra, and Fulton in aye. Determan voted nay. Motion carried. The Board noted that any application deemed complex would come before the full board for review.

Motion to appoint a Dental Hygiene Approving Board Member who would be vested with authority to approve dental hygiene applications and permits and state exam equivalency requests, with assistance from Board staff, by Hornstra. Second by Van Dam. Motion carried. The Board noted that any application deemed complex would come before the full board for review.

Motion to appoint Doerr as the Dental Approving Board Member by Fulton. Second by Hornstra. Motion carried.

Motion to appoint Hornstra as the Dental Hygiene Approving Board Member by Determan. Second by Renemans. Motion carried.

Motion to approve the 2020 speaker honorarium application, as presented, by Doerr. Second by Hornstra. Motion carried.

The Board announced the following meeting dates: January 10, 2020, June 26, 2020 and October 23, 2020.

Motion to adjourn by Fulton. Second by Van Dam. Motion carried. The meeting was adjourned at 2:55pm.

Zona Hornstra, Secretary

South Dakota State Board of Dentistry
Minutes of Public Hearing
October 18, 2019

Dr. Schaack called the public hearing to order at 10:13 a.m. on Friday, October 18, 2019, in conference room 3, Kneip Building, 700 Governors Drive, Pierre, South Dakota and noted that this was time and place for the Public Hearing on the proposed rules of the South Dakota State Board of Dentistry numbered § 20:43:03:01; 20:43:03:02; 20:43:03:09; 20:43:04:06; 20:43:08:01; 20:43:08:02; 20:43:08:02.01; 20:43:08:03; 20:43:08:04; 20:43:08:05; 20:43:08:06; 20:43:08:07; 20:43:08:08; 20:43:08:09; 20:43:08:09.01; 20:43:08:10; and 20:43:08:11 adopted under the authority of SDCL 36-6A-14, 36-6A-33, 36-6A-41, 36-6A-42, 36-6A-44, 36-6A-44.2, 36-6A-50, and 36-6A-55.

Dr. Schaack noted that statements made during the hearing were being recorded in the minutes and due notice of this public hearing was published in three South Dakota newspapers and was made to interested parties in advance of the hearing. Dr. Schaack noted that the proposed rules had been edited for compliance with the requirements for form, style and legality as recommended by the South Dakota Legislative Research Council pursuant to SDCL 1-26.

Hearing Officer: Dr. Tara Schaack, Board President.

Members of the Board in attendance: Dr. Harold Doerr, Dr. Scott Van Dam, Dr. Nick Renemans, Dr. Amber Determan, Zona Hornstra and Molly Fulton.

Board staff in attendance: Brittany Novotny and Lisa Harsma.

Legal Counsel in attendance: Shelly Munson and Matthew Templar.

Others in attendance: Andrew Wiltsch, American Association of Orthodontists (AAO); Suzanne Luken, South Dakota Dental Hygienists Association (SDDHA); Paul Knecht, South Dakota Dental Association (SDDA); Dr. Rick Fuchs (SDDA); and Dr. Michelle Hofer (SDDA).

Written Testimony: Dr. Schaack entered into the record the following letters that were received prior to the hearing:

- A. South Dakota Dental Association – Letter of Support
- B. Western Dakota Tech – Letter of Support
- C. Lake Area Technical Institute – Letter of Support
- D. Central Regional Dental Testing Service, Inc. (CRDTS) – Letter of Support
- E. The Commission on Dental Competency Assessments (CDCA) – Letter of Support
- F. Council of Interstate Testing Agencies (CITA) – Letter of Support
- G. Southern Regional Testing Agency, Inc. (SRTA) – Letter of Support
- H. Western Regional Examining Board (WREB) – Letter of Support

Oral Testimony: Dr. Schaack took Oral Testimony. Oral Testimony was presented by the following:

- 20:43:08:02: Andrew Wiltsch (AAO) noted potential confusion with the language “prior knowledge of” and “authorized the performance” on lines 20 – 22 of page 6.
 - o The Board closely reviewed the language cited by Mr. Wiltsch. The Board explained that this language would allow a supervising dentist to authorize the performance of a duty specifically outlined in subsection (1) through (11), if the supervising dentist is not on site. The Board noted that this section of ARSD 20:43:08:02 was incorporated based on feedback received from orthodontists and had been reviewed extensively with stakeholders. The Board explained that the language “prior knowledge of” and “authorized the performance” was included based upon a recommendation from stakeholders and was modeled after regulation in Minnesota.
- 20:43:08:02: Andrew Wiltsch (AAO) noted concern with lines 20-22 of page 6 relative to the statutory authority.
 - o The Board closely reviewed the statutory authority cited in ARSD 20:43:08:02. The Board explained the review process completed by the Legislative Research Council (LRC), noting that LRC reviews the statutory authority for each rule proposed to ensure rule making authority (General Authority) and that the statute identifies the policy intended to be implemented (Law Implemented). The Board noted that the LRC had completed a review of the proposed rules and all LRC recommendations had been incorporated into the rules being considered.
 - o The Board also asked general counsel to review the statutory authority. Shelly Munson, general counsel for the Board, reviewed the statutory authority and confirmed that in her professional opinion the Board had statutory authority to promulgate ARSD 20:43:08:02, including lines 20-22 of page 6, and that the rule does not conflict with existing statute.
 - o Mr. Wiltsch noted he was not licensed to practice law in South Dakota and thanked the Board for that information.

Dr. Schaack closed testimony and opened the public hearing to Board discussion and/or action.

The Board reviewed the proposed rules. The Board reviewed all written and oral testimony received.

- The Board closely reviewed the testimony from Mr. Wiltsch again, along with ARSD 20:43:08:02 and the statutory authority.
- The Board identified that lines 20-23 on page 6 and lines 1-11 on page 7 were based on feedback received during stakeholder discussions held over the course of the last year, which included orthodontists as well as the South Dakota Society of Orthodontists – a constituent of the AAO.
- The Board reviewed the eight letters of support received in advance of the hearing, noting the widespread support for the proposed rules.
- The Board noted the rules had now been reviewed at three public board meetings and feedback from many stakeholders had been incorporated pursuant to discussions held over the course of the last year.

Determan moved that the South Dakota State Board of Dentistry approve the adoption of amended rules § 20:43:03:01; 20:43:03:02; 20:43:03:09; 20:43:04:06; 20:43:08:01; 20:43:08:02; 20:43:08:02.01; 20:43:08:03; 20:43:08:04; 20:43:08:05; 20:43:08:06; 20:43:08:07; 20:43:08:08; 20:43:08:09; 20:43:08:09.01; 20:43:08:10; and 20:43:08:11 including the LRC edits for compliance with the requirements for form, style and legality. Second by Doerr. Motion carried.

There being no further business, the public hearing was adjourned at 10:30 a.m.

Zona Hornstra
Secretary

SD State Board of Dentistry
Board Meeting
Teleconference
Tuesday November 19, 2019

President Schaack called the meeting to order at 6:32pm Central.

Board Members Present via Telephone: Dr. Tara Schaack, Dr. Harold Doerr, Dr. Nick Renemans, Dr. Amber Determan, Dr. Scott Van Dam, and Zona Hornstra.

Board Staff Present via Telephone: Shelley Munson, Matthew Templar, Brittany Novotny and Lisa Harsma.

Others Present via Telephone: None

Schaack called for public testimony during the open forum. There was no public testimony.

Motion to move into Executive Session pursuant to SDCL 1-25-2 (3) and (4) by Hornstra. Second by Doerr. Determan, Doerr, Hornstra, Renemans, Schaack and Van Dam vote aye. Motion carried. The board went into Executive Session at 6:33pm.

Motion to move out of Executive Session by Van Dam. Second by Determan. Determan, Doerr, Hornstra, Renemans, Schaack and Van Dam vote aye. Motion carried. The board moved out of Executive Session at 6:54pm.

Motion to approve a contract with Dr. Jay Crossland to serve as an expert and to vest authority with the Board President to approve expert contracts, as needed, by Determan. Second by Doerr. Determan, Doerr, Hornstra, Renemans, Schaack and Van Dam vote aye. Motion carried.

Motion to adjourn by Hornstra. Second by Determan. Determan, Doerr, Hornstra, Renemans, Schaack and Van Dam vote aye. Motion carried. The meeting was adjourned at 6:55pm.

Zona Hornstra, Secretary

Remaining Authority by Object/Subobject

Expenditures current through 11/30/2019 01:21:04 PM

HEALTH -- Summary

FY 2020 Version -- AS -- Budgeted and Informational

FY Remaining: 58.4%

09202 Board of Dentistry - Info		Operating	Expenditures	Encumbrances	Commitments	Remaining	PCT AVL
Subobject							
EMPLOYEE SALARIES							
5101030	Board & Comm Mbrs Fees	7,010	1,140	0	0	5,870	83.7
Subtotal		7,010	1,140	0	0	5,870	83.7
EMPLOYEE BENEFITS							
5102010	Oasi-employer's Share	542	87	0	0	455	83.9
Subtotal		542	87	0	0	455	83.9
51 Personal Services							
Subtotal		7,552	1,227	0	0	6,325	83.8
TRAVEL							
5203030	Auto-priv (in-st.) H/rte	1,500	234	0	0	1,266	84.4
5203070	Air-charter-in State	22,000	6,351	0	0	15,649	71.1
5203100	Lodging/in-state	1,266	0	0	0	1,266	100.0
5203130	Non-employ. Travel-in St.	2,500	0	0	0	2,500	100.0
5203140	Meals/taxable/in-state	305	0	0	0	305	100.0
5203150	Non-taxable Meals/in-st	200	0	0	0	200	100.0
5203260	Air-comm-out-of-state	1,000	0	0	0	1,000	100.0
5203330	Non-employ Travel-out-st.	3,000	0	0	0	3,000	100.0
Subtotal		31,771	6,585	0	0	25,186	79.3
CONTRACTUAL SERVICES							
5204010	Subscriptions	300	0	0	0	300	100.0
5204020	Dues & Membership Fees	5,000	3,310	0	0	1,690	33.8
5204050	Computer Consultant	32,400	6,000	25,500	0	900	2.8
5204060	Ed & Training Consultant	3,307	0	0	0	3,307	100.0
5204080	Legal Consultant	30,000	3,388	10,000	0	16,612	55.4
5204090	Management Consultant	252,603	108,665	141,761	0	2,177	0.9
5204100	Medical Consultant	25,000	19,588	74,104	0	-68,692	0.0
5204130	Other Consulting	7,000	1,778	98,720	0	-93,498	0.0
5204160	Workshop Registration Fee	2,000	0	0	0	2,000	100.0
5204181	Computer Services-state	316	0	0	0	316	100.0
5204190	Computer Services-private	500	0	0	0	500	100.0
5204200	Central Services	3,115	2,247	0	0	868	27.9
5204203	Central Services	203	0	0	0	203	100.0
5204204	Central Services	1,211	215	0	0	996	82.2
5204207	Central Services	1,016	134	0	0	882	86.8
5204360	Advertising-newspaper	400	168	0	0	232	58.0

Remaining Authority by Object/Subobject

Expenditures current through 11/30/2019 01:21:04 PM

HEALTH -- Summary

FY 2020 Version -- AS -- Budgeted and Informational

FY Remaining: 58.4%

09202 Board of Dentistry - Info							PCT
Subobject	Operating	Expenditures	Encumbrances	Commitments	Remaining	AVL	
5204480 Microfilm & Photography	500	0	0	0	500	100.0	
5204510 Rents-other	725	75	0	0	650	89.7	
5204530 Telecommunications Svcs	4,000	1,483	0	0	2,517	62.9	
5204550 Garbage & Sewer	0	7	0	0	-7	0.0	
5204590 Ins Premiums & Surety Bds	1,500	0	0	0	1,500	100.0	
5204960 Other Contractual Service	12,000	837	0	0	11,163	93.0	
Subtotal	383,096	147,895	350,085	0	-114,884	0.0	
SUPPLIES & MATERIALS							
5205020 Office Supplies	1,100	96	0	0	1,004	91.3	
5205310 Printing-state	1,000	119	0	0	881	88.1	
5205320 Printing-commercial	1,600	320	0	0	1,280	80.0	
5205350 Postage	4,500	1,541	0	0	2,959	65.8	
5205390 Food Stuffs	500	0	0	0	500	100.0	
Subtotal	8,700	2,076	0	0	6,624	76.1	
GRANTS AND SUBSIDIES							
5206070 Grants To Non-profit Org	7,500	0	0	0	7,500	100.0	
Subtotal	7,500	0	0	0	7,500	100.0	
OTHER							
5208010 Other	500	0	0	0	500	100.0	
Subtotal	500	0	0	0	500	100.0	
52 Operating Subtotal	431,567	156,556	350,085	0	-75,074	0.0	
Total	439,119	157,783	350,085	0	-68,749	0.0	

BA1409R1

STATE OF SOUTH DAKOTA
CASH CENTER BALANCES
AS OF: 11/30/2019

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AGENCY: 09 HEALTH
BUDGET UNIT: 09202 BOARD OF DENTISTRY

COMPANY	CENTER	ACCOUNT	BALANCE	DR/CR	CENTER DESCRIPTION
6503	092000061807	1140000	582,133.48	DR	BOARD OF DENTISTRY
COMPANY/SOURCE TOTAL 6503 618			582,133.48	DR *	
COMP/BUDG UNIT TOTAL 6503 09202			582,133.48	DR **	
BUDGET UNIT TOTAL 09202			582,133.48	DR ***	

BA0225R5 11/30/2019

STATE OF SOUTH DAKOTA
REVENUE SUMMARY BY BUDGET UNIT
FOR PERIOD ENDING: 11/30/2019

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AGENCY 09 HEALTH
BUDGET UNIT 09202 BOARD OF DENTISTRY

CENTER	COMP	ACCOUNT	DESCRIPTION	CURRENT MONTH	YEAR-TO-DATE	
092020061807	6503	4293422	ADA EXPAND FUNC NIT RENEW	.00	840.00	
092020061807	6503	4293505	CORPORATE NEW LICENSE	100.00	800.00	
092020061807	6503	4293510	CORPORATE RENEWAL	.00	1,000.00	
092020061807	6503	4293600	TEMP LICENSE	100.00	850.00	
092020061807	6503	4293850	COLLABORATIVE SUPERVISION	.00	80.00	
ACCT:	4293		BUSINESS & OCCUP LICENSING (NON-GOVERNMENTAL)	2,915.00	41,940.00	*
ACCT:	42		LICENSES, PERMITS & FEES	2,915.00	41,940.00	**
092020061807	6503	4595000	VERIFICATION LETTERS	75.00	575.00	
092020061807	6503	4595800	LIST OF PRACTITIONERS	900.00	3,300.00	
ACCT:	4595			975.00	3,875.00	*
ACCT:	45		CHARGES FOR SALES & SERVICES	975.00	3,875.00	**
092020061807	6503	4920045	NONOPERATING REVENUES	.00	12,475.24	
ACCT:	4920		NONOPERATING REVENUE	.00	12,475.24	*
ACCT:	49		OTHER REVENUE	.00	12,475.24	**
CNTR:	092020061807			3,890.00	58,290.24	***
CNTR:	092020061			3,890.00	58,290.24	****
CNTR:	0920200			3,890.00	58,290.24	*****
COMP:	6503			3,890.00	58,290.24	*****
B UNIT:	09202			3,890.00	58,290.24	*****

1 **CHAPTER 20:43:07**

2 **DENTAL RADIOGRAPHY**

3 Section

4 20:43:07:01 Definition of terms.

5 20:43:07:02 ~~Minimum eligibility requirements~~ Repealed.

6 20:43:07:03 ~~Training requirements~~ Repealed.

7 20:43:07:04 Repealed.

8 20:43:07:05 Qualification by endorsement – Dental radiographers.

9 20:43:07:06 ~~Approval of~~ Dental radiography training programs – Application.

10 20:43:07:07 Application for registration – Dental radiographers.

11 20:43:07:08 ~~Examination and proficiency evaluation~~ Repealed.

12 20:43:07:09 Fee for certificate of registration -- Renewal.

13 20:43:07:10 Continuing education requirements -- Dental radiographers.

14 20:43:07:11 License ~~registration~~ – Department of Health.

15 20:43:07:12 Prohibited use of radiation.

16 20:43:07:13 ~~General safety provisions to protect persons from radiation exposures~~ Repealed.

17 20:43:07:14 ~~Requirements of x-ray film processing and darkroom~~ Repealed.

18 **20:43:07:01. Definition of terms.** Terms used in this chapter mean:

19 (1) "Dental radiography;" means the application of X-radiation to human teeth and
20 supporting structures for diagnostic purposes only;

21 ~~—— (2) "Approved program or course of study," didactic and clinical training that meets the~~
22 ~~requirements specified in § 20:43:07:03;~~

1 ~~—— (3) "Clinical experience," direct and personal participation of a student in radiographic~~
2 ~~procedures incident to patient diagnosis;~~

3 ~~—— (4) "Student," a person enrolled in or participating in an approved program or course of~~
4 ~~study.~~

5 **Source:** 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective
6 July 1, 1986.

7 **General Authority:** SDCL 36-6A-14, ~~36-6A-21.~~

8 **Law Implemented:** SDCL 36-6A-14, ~~36-6A-21.~~

9 **20:43:07:02. Minimum eligibility requirements.** ~~The minimum requirements for a~~
10 ~~dental radiographer are graduation from high school or its equivalent and attainment of eighteen~~
11 ~~years of age.~~ Repealed.

12 **Source:** 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective
13 July 1, 1986; 19 SDR 32, effective September 6, 1992.

14 ~~—— **General Authority:** SDCL 36-6A-14.~~

15 ~~—— **Law Implemented:** SDCL 36-6A-14.~~

16 **20:43:07:03. Training requirements.** ~~An applicant for registration as a dental~~
17 ~~radiographer must have successfully completed a 16-hour board approved program or course of~~
18 ~~study within six months of application in dental radiography which includes the following~~
19 ~~training:~~

20 ~~—— (1) Practice in placement techniques and exposing radiographs on a training manikin;~~

21 ~~—— (2) Fundamentals of radiation safety: characteristics of radiation, unit of radiation~~
22 ~~measurement, hazards of exposure to radiation, levels of radiation from source, and methods of~~
23 ~~controlling radiation dose;~~

~~—— (3) Familiarization with equipment: identification of controls, function of each control, how each control affects the radiographic image, and the requirements for and use of a technique chart;~~

~~—— (4) Film processing: film speed as it relates to patient exposure, film processing with automatic processors, manual film processing, factors affecting film processing quality, and identification of common errors in processing;~~

~~—— (5) Anatomy and positioning relative to scope of practice to include patient preparation and correct method for performing procedures and identification of common technique errors; and~~

~~—— (6) Familiarization with federal and state regulations pertaining to services offered~~
Repealed.

Source: 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective July 1, 1986; 26 SDR 37, effective September 20, 1999.

~~—— **General Authority:** SDCL 36-6A-14, 36-6A-21.~~

~~—— **Law Implemented:** SDCL 36-6A-14, 36-6A-21.~~

20:43:07:04. Exemptions to training requirements. Repealed.

Source: 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective July 1, 1986; repealed, 26 SDR 37, effective September 20, 1999.

20:43:07:05. Qualification by endorsement – Dental radiographers. A person who has a current certificate in dental radiography issued by another state, jurisdiction, agency, or recognized professional registry may, upon presentation of the certificate to the board, be considered to meet the requirements of §20:43:07:08 provided that the board finds that the standards and procedures for qualification in the state, jurisdiction, agency, or recognized

professional registry which issued the certificate are equivalent to the standards in this chapter.
has been legally practicing dental radiography in a state within the three years prior to
application must submit to the board the following:

- (1) A completed application form and an application fee of \$40;
- (2) A copy of the applicant's birth certificate or equivalent documentation;
- (3) Verification that applicant successfully completed a course that included at least sixteen-
hours of training in the areas outlined in 20:43:07:06; and
- (4) One of the following:
 - a. If currently registered as a dental radiographer, verification of the registration
number and status of the registration from the board of dentistry in each state in
which the applicant is or has been registered to practice as a dental radiographer;
or
 - b. If not currently registered as a dental radiographer, verification that the applicant
has legally practiced dental radiography for a period of time during the three
years preceding application and written documentation from a dentist that has
employed or supervised the applicant attesting to the current clinical proficiency
of the applicant to practice dental radiography may be required.

The board may issue a registration to practice as a dental radiographer if an applicant meets
the requirements in this section.

Source: 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective
July 1, 1986.

General Authority: SDCL 36-6A-14, ~~36-6A-21~~ 36-6A-50(11).

Law Implemented: SDCL 36-6A-14(4)(6)(7), ~~36-6A-21~~.

1 **20:43:07:06. ~~Approval of~~ Dental radiography training programs -- Application. A**

2 The board may approve a dental radiography program of learning~~may be approved by the board~~
3 leading to a dental radiographer certificate of competency if the program meets the following
4 requirements:

5 (1) It constitutes an organized program of learning which contributes to the proficiency
6 and skills of an individual operating radiation emitting equipment or otherwise engaged in dental
7 radiography;

8 (2) It is conducted by individuals who are qualified by special education, training, and
9 experience to conduct the program in dental radiography; and

10 (3) It ~~meets the requirements in § 20:43:07:03.~~ includes at least sixteen hours of training
11 in the areas outlined in ARSD 44:03:01:14.02 plus practice in placement techniques, exposing
12 radiographs, and identification of common technique errors.

13 Application for approval of a program of learning shall be made to the board.

14 **Source:** 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective
15 July 1, 1986.

16 **General Authority:** SDCL 36-6A-14,~~36-6A-21.~~

17 **Law Implemented:** SDCL 36-6A-14~~(4)(7), 36-6A-21.~~

18 **20:43:07:07. Application for registration – Dental radiographers.** ~~Each person~~
19 ~~desiring to engage in dental radiography except a licensed dentist or dental hygienist shall apply~~
20 ~~for registration to the board prior to engaging in dental radiography. The application shall be~~
21 ~~made on a form furnished by the board and shall be filled out completely. The application shall~~
22 ~~contain a statement that the requirements of this chapter of rules have been read and understood~~

1 ~~by the applicant and shall document the training, experience, and education that qualify the~~
2 ~~applicant to engage in dental radiography.~~

3 An applicant for a registration to practice as a dental radiographer must submit to the board the
4 following:

5 (1) A completed application form and an application fee of \$40;

6 (2) A copy of the applicant's birth certificate or equivalent documentation;

7 (3) Proof of one of the following within the thirteen months prior to application:

8 a. Successful completion of a dental radiography course taken through an
9 American Dental Association Commission on Dental Accreditation
10 accredited dental assisting, dental hygiene, or dental program. If the
11 radiography course is taken as part of an ongoing dental assisting program,
12 the thirteen months may begin to run after completion of the dental assisting
13 program;

14 b. Passage of the Radiation Health and Safety Examination administered by the
15 Dental Assisting National Board, Inc. (DANB);

16 c. Successful completion of a program approved pursuant to § 20:43:07:06; or

17 d. Certification as a Certified Dental Assistant through DANB; and

18 (4) If applicable, verification of the registration number and status of the registration
19 from the board of dentistry in each state in which the applicant is or has been
20 registered to practice as a dental radiography.

21 The board may issue a registration to practice as a dental radiographer if an applicant meets
22 the requirements in this section.

Source: 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective July 1, 1986; 18 SDR 132, effective February 17, 1992.

General Authority: SDCL 36-6A-14, 36-6A-50(11).

Law Implemented: SDCL 36-6A-14(4) (6) (7), 36-6a-50(11).

20:43:07:08. Examination and proficiency evaluation. ~~An applicant for registration as a dental radiographer must pass a written examination administered by the board or the Dental Assisting National Board or any substantially similar test approved by the board.~~
~~— An applicant must complete the hands on film placement and exposure as specified in § 20:43:07:03(1) Repealed.~~

Source: 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective July 1, 1986; 18 SDR 132, effective February 17, 1992; 26 SDR 37, effective September 20, 1999.

~~— **General Authority:** SDCL 36-6A-14.~~

~~— **Law Implemented:** SDCL 36-6A-14, 36-6A-21.~~

20:43:07:09. Fee for certificate of registration -- Renewal. ~~When an applicant successfully passes the examination, the board shall issue a certificate of registration upon payment of a fee of \$40 for initial registration. By July 1 of each year a dental radiographer shall submit a renewal fee of \$20. The registrant shall display the registration in the office.~~

Source: 11 SDR 73, effective November 27, 1984; 12 SDR 151, 12 SDR 155, effective July 1, 1986; 38 SDR 172, effective April 25, 2012.

General Authority: SDCL 36-6A-14(6), 36-6A-50(10) and (16).

Law Implemented: SDCL 36-6A-14(6), 36-6A-50(10) and (16).

1 **20:43:07:10. Continuing education requirements -- Dental radiographers.** A dental
2 radiographer shall complete at least five hours of board approved continuing education in dental
3 radiography in each five-year licensure cycle. One hour of continuing education may be earned
4 for each hour of attendance at a board approved continuing education course. The board's
5 continuing education guidelines shall be reviewed annually.

6 **Source:** 26 SDR 37, effective September 20, 1999; 32 SDR 188, effective May 15, 2006;
7 45 SDR 35, effective September 19, 2018.

8 **General Authority:** SDCL 36-6A-14(1)(7), 36-6A-55.

9 **Law Implemented:** SDCL 36-6A-14(1)(7)(11), 36-6A-55.

10 **20:43:07:11. License registration – Department of Health.** An annual license granted
11 by the Department of Health is required to house dental radiographic machines in a dental office.
12 ~~The location, number, and type of machine shall be reported on forms supplied by the~~
13 ~~Department of Health. The licensee shall notify the Department of Health in writing within 30~~
14 ~~days after any change in the location or other information about radiography machines, devices,~~
15 ~~or other radiation sources.~~

16 **Source:** 26 SDR 37, effective September 20, 1999.

17 **General Authority:** SDCL 36-6A-14.

18 **Law Implemented:** SDCL 36-6A-14(1).

19 **Cross Reference:** Radiation Control, Chapter 43:03:01.

20 **20:43:07:12. Prohibited use of radiation.** Only ~~persons who are certified in a person~~
21 ~~registered to practice as a dental radiography radiographer or are licensed to practice as a dentist~~
22 ~~dentist or dental hygienists shall operate~~ dental hygienist may perform dental radiography
23 ~~machines. The following precautions shall be taken:~~

1 ~~——(1) No person may be exposed to the useful~~ an ionizing radiation beam except for dental
2 diagnostic purposes and only if exposure has been authorized by ~~a licensed~~ the supervising
3 dentist. ~~No person may be exposed to the useful beam for non-healing arts training, instruction,~~
4 ~~or demonstration;~~ Individuals operating a dental radiographic machine must follow all safety
5 instructions provided by the manufacture of the radiographic machine.

6 ~~——(2) Dental intraoral radiography with kilovoltage less than 60kVp may not be used;~~

7 ~~——(3) The exposure switch shall be arranged so that operator can stand at least 6 feet from~~
8 ~~the useful beam unless sufficient shielding is provided to protect the operator from stray~~
9 ~~radiation;~~

10 ~~——(4) The target to skin distance shall be at seven inches and the machine may not have a~~
11 ~~pointed cone.~~

12 **Source:** 26 SDR 37, effective September 20, 1999.

13 **General Authority:** SDCL 36-6A-14.

14 **Law Implemented:** SDCL 36-6A-14(1)(7), 36-6A-31(5).

15 **20:43:07:13. General safety provisions to protect persons from radiation exposures.**

16 ~~The following safety provisions shall be followed to protect persons from radiation exposures:~~

17 ~~——(1) Any person operating an x-ray machine must be instructed in the proper procedures~~
18 ~~for patient and operator safety and shall be competent in the safe use of the equipment~~
19 ~~commensurate with the size, scope, and nature of the service. Any such person shall be instructed~~
20 ~~and demonstrate competence in subjects outlined in § 20:43:07:03;~~

21 ~~——(2) A manual must be provided in the vicinity of the control panel of each machine that~~
22 ~~specifies the routine views for all procedures done with each machine; and~~

1 ~~—— (3) The patient's record shall contain the type of radiographic examination, date the~~
2 ~~examination was performed, and the identity of the machine operator Repealed.~~

3 **Source:** 26 SDR 37, effective September 20, 1999.

4 ~~**General Authority:** SDCL 36-6A-14.~~

5 ~~—— **Law Implemented:** SDCL 36-6A-14.~~

6 **20:43:07:14. Requirements of x-ray film processing and darkroom.** ~~A dental office~~
7 ~~using radiographic x-ray machines shall have available suitable equipment for handling and~~
8 ~~processing radiographic film in accordance with the manufacturer's directions Repealed.~~

9 **Source:** 26 SDR 37, effective September 20, 1999.

10 ~~**General Authority:** SDCL 36-6A-14.~~

11 ~~—— **Law Implemented:** SDCL 36-6A-14.~~

DEPARTMENT OF HEALTH ADMINISTRATIVE RULES

CHAPTER 44:03:01

RADIATION CONTROL

Section

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44:03:01:16 Loss or theft of radioactive material.

44:03:01:17 Amendment, suspension, or revocation of license.

44:03:01:01. Definitions. Terms defined by SDCL 34-21-2 have the same meaning when used in this chapter. In addition, the terms used in this chapter mean:

- (1) "Added filtration," any filtration that is in addition to the inherent filtration;
- (2) "Aluminum equivalent," the thickness of type 1100 aluminum alloy affording the same attenuation, under specified conditions, as the material in question;
- (3) "Assembler," any person engaged in the business of assembling, replacing, or installing one or more components into an X ray system or subsystem. The term includes the owner of an X ray system or the owner's employee or agent who assembles components into an X ray system that is subsequently used to provide professional or commercial services;
- (4) "Automatic exposure control (AEC)," a device that automatically controls one or more technique factors in order to obtain at a preselected location a required quantity of radiation. The term includes devices such as phototimes and ion chambers;
- (5) "C-arm X ray system," and X ray system where the image receptor and X ray tube housing assembly are connected by a common mechanical support system in order to maintain a desired spatial relationship and which is designed to allow a change in the projection of the beam through the patient without a change in the position of the patient;
- (6) "Certified components," components of X ray systems that are subject to regulations by the Food and Drug Administration under the Radiation Control for Health and Safety Act of 1968, Pub. L. No. 90-602;
- (7) "Certified system," any X ray system that has one or more certified components;
- (8) "Computed tomography" or "CT," the production of a tomogram by the acquisition and computer processing of X ray transmission data;
- (9) "Control panel," that part of the X ray control upon which are mounted the switches, knobs, push buttons, and other hardware necessary for manually setting the technique factors;
- (10) "Cooling curve," the graphical relationship between heat units stored and cooling time;
- (11) "CRT," cathode ray tube in which cathode rays are used to produce an image on a fluorescent screen;

(12) "Dead-man switch," a switch so constructed that a circuit closing contact can be maintained only by continuous pressure on the switch by the operator;

(13) "Department," the Department of Health;

(14) "Diagnostic X ray system," an X ray system designed for irradiation of any part of the human or animal body for the purpose of diagnosis or visualization;

(15) "Diagnostic X ray imaging system," an assemblage of components for the generation, emission, and reception of X ray and the transformation, storage, and visual display of the resultant X ray image;

(16) "Dose," a quantity of radiation exposure to the whole anatomy or any portion of the human or animal body;

(17) "Exposure survey," an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radiation. When appropriate, such an evaluation includes a physical survey of materials and equipment and measurements of levels of radiation or concentration of radioactive material present;

(18) "Fluoroscopy imaging assembly," a subsystem in which X ray photons produce a visible image. The term includes the image receptor such as the image intensifier, spot-film device, electrical interlocks, if any, and structural material providing linkage between the image receptor and diagnostic source assembly;

(19) "Gonad shield," a protective barrier for the testes or ovaries;

(20) Half-value layer," the thickness of specified material that attenuates the beam of radiation to an extent such that the exposure rate is reduced by one-half. For the purpose of this definition, the contribution of all scattered radiation, other than any which might be present initially in the beam concerned, is deemed to be excluded;

(21) "Health arts," those professional disciplines authorized by the laws of South Dakota (SDCL chapter 36-2) to use X ray or radioactive material in the diagnosis or treatment of human or animal disease;

(22) "Heat unit," a unit of energy equal to the product of the peak kilovoltage, milliamps, and seconds, i.e. kVp x mA x second;

(23) "Image intensifier," a device, installed in its housing, that instantaneously converts an X ray pattern into a corresponding light image of higher intensity;

(24) "Image receptor," any device, such as a fluorescent screen or radiographic film, that transforms incident X ray photons either into a visible image or into another form that can be made into a visible image by further transformations;

(25) "Inherent filtration," the filtration of the useful beam provided by the permanently installed components of the tube housing assembly;

(26) "kVp," the maximum value in kilovolts of the potential difference of an X ray generator;

(27) "Lead equivalent," the thickness of lead affording the same attenuation as the material in question;

(28) "Leakage radiation," any radiation coming from within the source housing except for the useful beam and radiation produced when the exposure switch or timer is not activated;

(29) "Licensed practitioner of the healing arts," health professionals for diagnostic or healing treatment of human and animal maladies licensed by the state of South Dakota (SDCL chapter 36-2) for the lawful practice of medicine;

(30) "Light field," that area of the intersection of the light beam from the beam-limiting device and one of the set of planes parallel to and including the plane of the image receptor, whose perimeter is the locus of points at which the illumination is one-fourth of the maximum in the intersection;

(31) "mA," milliamperes;

(32) "mAs," milliamperes second;

(33) "Patient," an individual or animal subjected to healing arts examination, diagnosis, or treatment;

(34) "Peak tube potential," the maximum value of the potential difference across the X ray tube during an exposure;

(35) "Personnel monitoring," the use of film badges, pocket chambers, or other devices worn or carried on individuals for the monitoring of personnel exposures to radiation;

(36) "Positive beam limitation," the automatic or semi-automatic adjustment of an X ray beam to the size of the selected image receptor, whereby exposures cannot be made without such adjustment;

(37) "Protective apron," an apron made of radiation absorbing materials used to reduce radiation exposure;

(38) "Protective glove," a glove made of radiation absorbing material used to reduce radiation exposure;

(39) "Qualified expert," an individual who possess the knowledge, training, and experience to measure ionizing radiation, to evaluate safety techniques, and to advise regarding radiation protection needs including health physicists;

(40) "Qualified instructor," an individual who possess the knowledge, training, and experience in the field of radiation to teach fundamentals of radiation safety, equipment operation, film processing, emergency procedures, personnel dosimetry, anatomy and physiology, and radiographic positioning;

(41) "Rad," the special unit of absorbed dose. One rad is equal to an absorbed dose of 100 erg per gram or 0.01 joule per kilogram;

(42) "Radiation hazard," a condition under which a person might receive radiation in excess of the maximum permissible dose;

(43) "Rem," the special unit of any of the quantities expressed as dose equivalent. The dose equivalent in rem is equal to the absorbed dose in rad;

(44) "Scattered radiation," radiation that, during passage through matter, has been deviated in direction;

(45) "Services," may include calibration of radiation-producing machines or instruments, radiation protection surveys, shielding design, radiological health consultations, and personnel dosimetry;

(46) "Shielding," a protective barrier used to reduce radiation exposure to the required degree. For the purpose of this term, a primary protective barrier is the material, excluding filters, placed in the useful beam and a secondary protective barrier is the material that attenuates stray radiation;

(47) "Source-image receptor distance" or "SID," the distance from the source to the center of the input surface of the image receptor;

(48) "Spot film," a radiograph that is made during a fluoroscopic examination to permanently record conditions that exist during that fluoroscopic procedure;

(49) "Spot-film device," a device intended to transport or position, or both, a radiographic image receptor between the X ray source and fluoroscopic image receptor. The term includes a device intended to hold a cassette over the input end of an image intensifier for the purpose of making a radiograph;

(50) "Stray radiation," the sum of leakage and scattered radiation;

(51) "Target," the point at which an X ray is produced;

(52) "Technique factors," the following conditions of operation:

(a) For capacitor energy storage equipment, peak tube potential in kV and quantity of charge in mAs;

(b) For field emission equipment rated for pulsed operation, peak tube potential in kV, and number of X ray pulses;

(c) For CT X ray systems designed for pulsed operation, peak tube potential in kV, scan time in seconds, and either tube current in mA, X ray pulse width in seconds, and the number of X ray pulses per scan, or the product of tube current, X ray pulse width, and the number of X ray pulses in mAs;

(d) For CT X ray systems not designed for pulsed operation, peak tube potential in kV, and either tube current in mA and scan time in seconds, or the product of tube current and exposure time in mAs and the scan time if the scan time and exposure time are equivalent; and

(e) For all other equipment, peak tube potential in kV, and either tube current in mA and exposure time in seconds, or the product of tube current and exposure time in mAs;

(53) "Tube," an X ray tube;

(54) "Variable-aperture beam-limiting device," a beam-limiting device that has capacity for stepless adjustment of the X ray field size at a given SID;

(55) "X ray exposure control," a device, switch, button, or other similar by which an operator initiates or terminates, or both, the radiation exposure. The term may include such associated equipment as timers and back-up timers;

(56) "X ray equipment," an X ray system, subsystem, or component of the system;

(57) "X ray field," that area of the intersection of the useful beam and any one of the set of planes parallel to and including the plane of the image receptor, whose perimeter is the locus of points at which the exposure rate is one-fourth of the maximum in the intersection;

(58) "X ray system," an assemblage of components for the controlled production of X rays. The term includes minimally an X ray high-voltage generator, an X ray control, a tube housing assembly, a beam-limiting device, and the necessary supporting structures. Any additional component, which functions with the system, is considered an integral part of the system; and

(59) "X ray tube," any electron tube which is designed for the conversion of electrical energy into X ray energy.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-11, 34-21-18.

44:03:01:02. Licensing of radiation-producing devices and materials. Licensing of radiation sources or materials is required for the production, transport, transfer, receipt, acquisition, possession, use, storage, or disposal of radiation sources or materials used in the healing arts. Licensing shall be accomplished using procedures and forms required by the department.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-11, 34-21-12, 34-21-18, 34-21-20.

44:03:01:03. Transferred to § 44:03:01:06.01.

44:03:01:04. Application for license. Each person having a radiation source, a radiation device, or a radioactive material facility shall apply for licensure with the department within 30 days after the installation of the equipment or purchase of material. The license shall be obtained before the equipment is operated. The application for license shall be completed on forms furnished by the department and shall contain all the information required by the form and accompanying instructions. A copy of the current United States Nuclear Regulatory Commission license must accompany the application if applying for a radioactive material license.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-11, 34-21-18.

44:03:01:05. Renewal of registration. Repealed.

Source: SL 1975, ch 16, § 1; repealed, 6 SDR 93, effective July 1, 1980.

44:03:01:06. Annual license renewal. The licensee shall notify the department in writing within 30 days after any change which makes the location or other information on machines, devices, or other radiation sources no longer accurate. The license shall be renewed annually during the month of January on forms supplied by the department.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-22.

44:03:01:06.01. Exemption from radiation licensing. Electronic equipment that produces radiation incidental to its operation for other purposes is exempt from licensing if the radiation dose equivalent rate averaged over an area of ten square centimeters does not exceed 0.5 millirem per hour at five centimeters from any accessible surface of the equipment. Domestic television receivers and CRTs are exempt from the licensing requirement.

Source: SL 1975, ch 16, § 1; transferred from § 44:03:01:03, 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-20.

44:03:01:06.02 Annual license fee. Repealed.

Source: 31 SDR 62, effective November 7, 2004; repealed, 35 SDR 305, effective July 1, 2009.

44:03:01:07. Out-of-state registrable items. Repealed.

Source: SL 1975, ch 16, § 1; repealed, 6 SDR 93, effective July 1, 1980.

44:03:01:07.01. Licensing of radiation producing devices for temporary use. Before any radiation machine is brought into the state for any temporary use, the person proposing to bring such machine into the state shall give written notice to the department at least ten working days before such machine is to be used in the state. A license is required and the person shall comply with the provisions of this chapter. The notice shall include:

- (1) The type of radiation machine;
- (2) The nature, duration, and scope of use; and
- (3) The exact location or locations where the radiation machine is to be used.

Source: 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-20.

44:03:01:08. Prohibited uses of radiation. No person may be exposed to diagnostic or therapeutic radiation except for healing arts purposes and only if the exposure has been authorized by a licensed practitioner of the healing arts. No person may be exposed to the useful beam for non-healing arts training, instruction, or demonstration, or other purposes. The following radiation producing equipment may not be used and the following specified procedures may not be performed:

- (1) Fluoroscopic devices for fitting shoes;
- (2) Photofluorographic equipment;
- (3) Dental fluoroscopic imaging assemblies;
- (4) Hand-held radiographic or fluoroscopic imaging devices, except for intra-oral radiographic imaging devices;
- (5) The use of fluoroscopy for positioning a patient for general radiographic imaging, except for radiation therapy simulators;
- (6) The use of fluoroscopy and c-arm fluoroscopes by a person other than a licensed practitioner of the healing arts unless under the supervision of a licensed practitioner of the healing arts;

(7) The use of direct exposure X ray film (without intensifying screens) for routine diagnostic procedures other than intraoral dental radiography, therapeutic portal imaging, and industrial radiography;

(8) Nonimage intensified fluoroscopic X ray equipment; or

(9) The use of X ray equipment for mammography unless specifically designed by the manufacturer for the imaging of the breast.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000; 35 SDR 47, effective September 8, 2008.

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

Law Implemented: SDCL 34-21-4.1, 34-21-23.

44:03:01:08.01. Equipment standards. Repealed.

Source: SL 1975, ch 16, § 1; transferred from § 44:03:01:13, 6 SDR 93, effective July 1, 1980; repealed, 26 SDR 96, effective January 23, 2000.

44:03:01:08.02. Equipment standards for medical diagnostic X ray machines. The standards for any medical diagnostic X ray machine are as follows:

(1) The control panel containing the main power switch shall bear the warning statement, legible and accessible to view: "WARNING: This X ray unit may be dangerous to patient and operator unless safe exposure factors and operating instructions are observed.";

(2) If the machine contains a battery-powered X ray generator, a visual means shall be provided on the control panel to indicate if the battery is in a state of charge adequate for proper operation;

(3) Any leakage radiation from the diagnostic source assembly measured at a distance of one meter in any direction from the source may not exceed 100 milliroentgens in one hour;

(4) The filtration or beam quality is considered adequate if the total filtration in the beam is not less than the following table:

Operating Voltage vs. Total Filtration Required	
(Total filtration = inherent plus added)	
Operating Voltage	
(Peak kilovolt) (kVp)	(Millimeters aluminum equivalent)
Below 50	0.5 millimeters
50 -- 70	1.5 millimeters
Above 70	2.5 millimeters

(5) A variable, positive beam limitation with rectangular area and a light-defining device shall be provided for all fixed X ray machines. The X ray beam dimensions may not exceed the size of film used by greater than two percent of SID on any side. The machine shall include a means to align the center of the X ray field with respect to the center of the image receptor to within two percent of the SID. If a light localizer is used to define the X ray field, it shall provide an average illumination of not less than 160 lux (15.0 foot-candles) at 100 centimeters or at the maximum SID, whichever is less. The average illumination shall be based upon measurements made in the approximate center of each quadrant of the light field. Exempt is any X ray machine that is designed with all parameters fixed, including alignment, source-to-distance, and technique factors;

(6) The machine shall include a device to terminate the exposure after a preset time. The accuracy of such a device shall be within five percent of the time set for machines manufactured on or after August 1, 1974, and within ten percent of the time set for machines manufactured before August 1, 1974;

(7) Any deviation of a measured technique factor from an indicated value of 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;

(8) The coefficient of variation may not exceed 0.10 when all technique factors are held constant. This requirement is met if, when four exposures are made at identical technique factors, the value of the average exposure (E) is greater than or equal to five times the maximum exposure (E max) minus the minimum exposure (E min), i.e., $E \geq 5(E_{\text{max}} - E_{\text{min}})$;

(9) MA/mAs linearity requirements apply if the equipment is being operated on a power supply as specified by the manufacturer for any fixed X ray tube potential within the range of 40 percent to 100 percent of the maximum rated:

(a) For equipment having independent selection of X ray tube current (mA), the average ratios (X_1) exposure to the indicated milliamperere-seconds product, in units of coulombs per kilograms per milliamperere second (or milliroentgen per milliamperere-seconds), obtained at any two consecutive tube current settings may not differ by more than ten hundredths times their sum:

$$X_1 - X_2 < 0.10 (X_1 + X_2)$$

where X_1 and X_2 are the average values obtained by two mAs selector settings, or at two settings differing by no more than a factor of two where the mAs selector provides continuous selection;

(b) For equipment having a combined X ray tube current-exposure time product (mAs) selector, but not a separate tube current (mA) selector, the average ratios (X_1) of exposure to the indicated milliamperere-seconds product, in units of coulombs per kilogram per milliamperere second (or mR/mAs), obtained at any two consecutive mAs selector settings may not differ by more than ten hundredths times their sum:

$$X_1 - X_2 < 0.10 (X_1 + X_2)$$

where X_1 and X_2 are the average values obtained by two mAs selector settings, or at two settings differing by no more than a factor of two where the mAs selector provides continuous selection;

(10) If two or more radiographic tubes are controlled by one exposure switch, the tube that has been selected shall be clearly indicated prior to initiation of the exposure. This indication shall be on the X ray control panel and also at or near the tube housing assembly which has been selected;

(11) The tube housing assembly supports shall be adjusted so that the tube housing assembly remains stable during an exposure unless tube housing movement is a designed function of the X ray system;

(12) Any diagnostic X ray system and its associated components used on humans and certified pursuant to the Federal X Ray Equipment Performance Standard (21 C.F.R. Part 1020) as of January 1, 1998, shall be maintained in compliance with applicable requirements of that standard; and

(13) All position locking, holding, and centering devices on the machine shall function as intended by the manufacturer.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:08.03. Equipment standards for medical fluoroscopic X ray machines.
Fluoroscopic X ray equipment shall be image intensified and the standards are as follows:

(1) The filtration or beam quality is considered adequate if the total in the beam is not less than the table below:

Operating Voltage vs. Total Filtration Required (Total filtration = inherent plus added)	
Operating Voltage	
(Peak kilovolt) (kVp)	(Millimeters aluminum equivalent)
Below 50	0.5 millimeters
50 -- 70	1.5 millimeters
Above 70	2.5 millimeters

(2) A manually reset, cumulative timing device shall be used which must either indicate elapsed time by an audible signal or turn off the apparatus if the total exposure exceeds a predetermined limit in one or a series of exposures. The device shall have a maximum range of five minutes;

(3) Any exposure to the operator's eyes above the screen and to the operator's waist behind the leaded drapes may not exceed 50 milliroentgens per hour;

(4) For routine fluoroscopy, the tabletop exposure may not exceed:

(a) Ten roentgens per minute with automatic exposure rate control;

(b) Twenty roentgens per minute with optional high level control provided. A continuous signal audible to the operator shall indicate that the high level control is being employed; or

(c) Five roentgens per minute with fluoroscopic equipment without automatic exposure control;

(5) The fluoroscopic X ray field may not exceed the visible area of the image receptor by more than four percent of the SID; and

(6) A dead-man switch shall control the fluoroscopic device.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:08.04. Equipment standards for medical fluoroscopic spot film devices. Any medical fluoroscopic spot film device shall meet the following requirements:

(1) The device shall provide for the adjustment to the size of the spot film selected that is between the source and the patient. Such an adjustment shall be automatically accomplished except when the X ray field size is smaller than the selected portion of the film; and

(2) The center of the X ray field shall be aligned with the center of the selected portion of the film to within two percent of the SID.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:08.05. Periodic measurement of medical fluoroscopic spot film devices. Periodic measurement of the entrance radiation exposure rate shall be performed by a qualified expert for both typical and maximum values. Such measurements shall be made triennially or after any maintenance of the system which might affect the radiation exposure rate. Results of these measurements shall be posted where any operator may have ready access to such results while using the fluoroscope. Results of the measurements shall include the roentgen per minute, as well as the technique factors used to determine such results. The name of the person performing the measurements and the date the measurements were performed shall be included in the results.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:08.06. Equipment standards for dental X ray equipment. The standards for dental X ray equipment are as follows:

(1) The leakage radiation from the diagnostic source assembly measured at a distance of one meter in any direction from the source may not exceed 100 milliroentgens in one hour;

(2) The filtration or beam quality is considered adequate if the total in the beam is not less than the table below:

Operating Voltage vs. Total Filtration Required (Total filtration = inherent plus added)	
Operating Voltage	(Millimeters aluminum equivalent)
Below 70	1.5 millimeters
Above 70	2.5 millimeters

(3) Collimation of the beam shall be restricted to a maximum of three inches in diameter and may not have a pointed cone;

(4) Time accuracy shall be within five percent of the time set for any X ray equipment installed on or after August 1, 1974, and ten percent of time set for any equipment installed before August 1, 1974;

(5) Any deviation of a measured technique factor from an indicated value for 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;

(6) The exposure switch shall 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;

(7) The target to skin distance shall be at least seven inches;

(8) Any dental X ray equipment must operate with a kilovoltage of 60 kVp or higher;

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

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:08.07. Equipment standards for mobile X ray equipment. Mobile X ray equipment shall meet the standards of § 44:03:01:08.02 and as follows:

(1) The exposure switch shall 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; and

(2) Any mobile medical radiographic equipment shall have a spacer to limit the target-to-skin distance to at least 12 inches.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:08.08. Equipment standards for computed tomography systems. The standards for computed tomography systems are as follows:

(1) A visible signal must indicate when the X ray exposure has been terminated. The operator must be able to terminate the X ray exposure at any time during a scan or series of scans under CT X ray system control of greater than one-half second duration;

(2) For any single slice tomogram system, a means must be provided to permit visual determination of the tomographic plane or a reference plane offset from the tomographic plane. For any multiple slice tomogram system, a means must be provided to permit visual determination of the location of a reference plane. This reference plane can be offset from the location of the tomographic planes. If a device using a light source is used to satisfy this subdivision, the light source must provide illumination levels of not less than 160 lux (15.0 foot-candles) above the room ambient illumination level;

(3) The X ray control and gantry must visually indicate whenever X rays are produced and, if applicable, whether the shutter is open or closed. Any emergency button or switch must be clearly labeled as to its function. A means shall be provided to require operator initiation of each individual scan or series of scans;

(4) The CT X ray system shall be designed to indicate the CT conditions of operation to be used during a scan or a scan sequence prior to the initiation of a scan or a scan sequence. On equipment having any of these conditions of operation at fixed values, this requirement may be met by permanent markings. Indication of CT conditions of operation shall be visible from any position from which scan initiation is possible;

(5) The system shall perform in such a manner that the radiation produced adjacent to the tube housing assembly, including the tube port, during periods of time scans are not being performed does not exceed 100 milliroentgen in one hour;

(6) For CT X ray systems containing a gantry manufactured after September 3, 1985:

(a) The total error in the indicated location of the tomographic plane or reference plane may not exceed five millimeters;

(b) If the X ray production period is less than one-half second, the indication of X ray production shall be actuated for at least one-half second. Any indicator at or near the gantry shall be discernible from any point external to the patient opening where insertion of any part of the human body into the primary beam is possible; and

(c) The deviation of indicated scan increment versus actual increment may not exceed plus or minus one millimeter with any mass from 0 to 100 kilograms, inclusive, resting on the support device. The patient support device shall be incremented from a typical starting position to the maximum incremented distance or 30 centimeters, whichever is less, and then returned to the starting position. Measurement of actual versus indicated scan increments may be taken anywhere along this line travel;

(7) The system must provide for two-way oral communication between the patient and the operator at the control panel;

(8) Leaded windows, mirrors, closed-circuit television, or an equivalent shall be provided to permit continuous observation of the patient during irradiation and shall be so located that the operator can observe the patient from the control panel;

(9) If the primary viewing system is by electronic means, an alternate viewing system, which may be electronic, shall be available for use in the event of failure of the primary viewing system.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:08.09. Hand-held intra-oral radiographic imaging device reporting. If any hand-held intra-oral radiographic device is damaged or lost, licensee shall notify the department of the damage or loss within 48 hours. If a device is damaged, licensee shall take the device immediately out of service and may not return the device to service until the device is repaired and tested for proper operation. Licensee shall maintain documentation at the facility that the device has been repaired, tested, and is safe to be placed back in operation.

Source: 35 SDR 47, effective September 8, 2008.

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

Law Implemented: SDCL 34-21-4.1, 34-21-23.

44:03:01:09. Evaluation and correction of hazards. Subsequent to the evaluation of radiation hazards, the department may issue orders for correction of these hazards.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

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

44:03:01:10. General safety provisions to protect persons from radiation exposures.

The licensee shall be responsible for directing the operation of any X ray system under the licensee's administrative control. The licensee or the licensee's agent shall provide that:

(1) No X ray system may be operated for diagnostic purpose unless the system meets the provisions of this chapter;

(2) Any person who is operating the X ray system is adequately instructed in the safe operating procedures and competent in the safe use of the equipment commensurate with the size, scope, and nature of the service. Any such person shall be instructed and demonstrate competence in subjects outlined in § 44:03:01:14.01;

(3) Procedures and auxiliary equipment designed to minimize patient and personnel exposure commensurate with the needed diagnostic information is utilized. The speed of film or screen and film combinations shall be the fastest speed consistent with the diagnostic objective of the examinations. The radiation exposure to the patient shall be the minimum exposure required to produce images of good diagnostic quality;

(4) A technique chart or manual is located in the vicinity of the control panel of each machine that specifies, for all diagnostic examinations performed with that system, the following information:

(a) The technique factors to be used that are specific to a patient's anatomical part, size, or age (for pediatrics), except for any system that has only automatic exposure controls;

(b) The type of film-screen combination to be used;

(c) The type of grid to be used, if any;

(d) The SID to be used, except for dental and all other fixed SID radiographic equipment;

(e) The type and placement of patient shielding to be used;

(f) The routine views for all procedures done with each machine; and

(g) For mammography, an indication of kVp/target/filter combination;

(5) A written operating and safety procedure must be available to each individual who operates radiation machines. These procedures shall include restrictions for the safe operation of each radiation machine. The operator shall be able to demonstrate familiarity with these procedures;

(6) Except for veterinary facilities, each facility maintains a record containing the patient's name, the type of examination, the date the examination was performed, and equipment operator;

(7) Except for patients who cannot be moved out of the room, only the staff, ancillary personnel or other persons required for the medical procedure shall be in the room during the radiographic exposure;

(8) Personnel monitoring of radiation exposures and records must be maintained by the licensee of the radiation source. Monitoring with dosimetry devices shall be required for all persons routinely exposed to radiation in their occupation. Dental and podiatry offices are exempt from this requirement. Exposures should not exceed 300 millirems per calendar quarter. Maximum occupation exposures shall not exceed the limits specified in the following table:

Rems per Calendar Quarter

Whole body; head and trunk; active		
blood-forming organs; lenses of eyes; gonads		3 3/4
Hands and forearms; feet and ankles		18 3/4
Skin of whole body		7 1/2

(9) Radiation sources shall be labeled and caution signs posted to provide a warning to all persons within the exposure area.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000; 31 SDR 62, effective November 7, 2004.

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

Law Implemented: SDCL 34-21-4.1, 34-21-25, 34-21-26.

44:03:01:10.01. Requirements for personal protective devices. Special personal protective devices shall be used to protect eyes, skin, bone, and certain organs from unnecessary radiation exposure when possible. These protective devices must be readily accessible and in good working condition.

A gonad shield of not less than 0.5 millimeters lead equivalent material must be used for human patients who have not passed the reproductive age during radiographic procedure in which the gonads are in the useful beam, unless the shield would interfere with the diagnostic procedure.

Protective equipment including aprons, gloves, and shields shall be checked annually for defects, such as holes, cracks, and tears to assure reliability and integrity. A record of this test shall be made and maintained. If such defect is found, equipment shall be replaced or removed from service until repaired;

Mechanical-holding devices shall be used when the technique permits. The individual holder shall be protected and no individual may be used routinely to hold film or patients. Written safety procedures shall indicate the requirements for selecting an individual to be a holder and the procedure the holder shall follow.

Source: 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-4.1, 34-21-15, 34-21-25.

44:03:01:10.02. Operator protection requirements. Operators of fixed medical radiographic units shall be within a shielded area large enough to provide protection from unattenuated scatter or stray radiation originating from the table or upright cassette holder.

Operators of dental radiographic units must comply with § 44:03:01:08.06.

A lead glass patient-viewing window, mirrors, closed circuit television, or an equivalent system must be available to permit the operator to continuously observe the patient during exposure. If a patient-viewing window is used, it must be a minimum of one square foot and must be located at least eighteen inches from the edge of the control booth for any new construction and any renovation, addition or change in space use of existing facilities. The exposure switch must be permanently mounted so that it cannot be conveniently operated outside the shielded area.

For mobile and portable X ray systems to be used less than one week in the same location, the control must be positioned so that the operator is at least six feet away from the tube housing and the patient during an exposure and is not exposed to greater than two millirems in any one hour.

For mobile and portable X ray systems to be used more than one week in the same location, the operator must be provided with a movable protective barrier at least 6.5 feet high, 30 inches wide, and a lead glass viewing window.

Source: 26 SDR 96, effective January 23, 2000; 32 SDR 128, effective January 30, 2006.

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

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

44:03:01:10.03. Reports of incidents involving radiation sources. Any radiation incident considered a potential hazard shall be reported to the department by the licensee within 24 hours by telephone or fax at the number shown on the license during normal business hours or the first workday following a holiday or weekend.

Source: 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-4.1, 34-21-15, 34-21-30.

44:03:01:10.04. Requirements of X ray film processing and darkroom. Each installation using a radiographic X ray system and using radiographic film shall have available suitable equipment for handling and processing radiographic film in accordance with the following:

(1) Any manual processing tank shall be constructed of mechanically rigid corrosion resistant material. The temperature of solutions in a tank shall be maintained within the range of 60 to 80 degrees Fahrenheit, inclusive. Film shall be developed in accordance with the time-temperature relationship recommended by the film manufacturer. A thermometer and timer shall be utilized to indicate the actual temperature of the developer and signal the passage of a preset time appropriate to the developing time required.

(2) Automatic processing of the film shall be in accordance with the time-temperature relationships recommended by the film and processor manufacturers. A control program to maintain the automatic processor operating parameters according to manufacturer's recommendations must be used;

(3) Film storage shall be provided and the film stored according to manufacturer's recommendations as to protection of radiation, heat, humidity, and storage position;

(4) Safelighting in the film processing-loading area shall be with the filter, bulb wattage, and distances recommended by the film manufacturer for film emulsion used by the facility. The safelighting shall prevent a pre-exposed film from increasing in density greater than 0.10 when exposed for two minutes with the safelights on;

(5) Pass boxes, if provided, shall be so constructed as to exclude light from the darkroom when cassettes are placed in or removed from the boxes, and shall incorporate adequate shielding from stray radiation to prevent exposure of undeveloped film.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:10.05. Quality assurance program requirements. The licensee shall have a written, on-going quality assurance program specific to the equipment and procedures that are performed in the facility to ensure consistent high-quality images with minimum patient exposure. The tests performed for quality control purposes shall be included in a log containing acceptability limits, results of tests, date, initials of operator or testing individual, and corrective action taken, if needed. Tests for film processing shall include temperature, chemical replacement, processor operating parameters, and darkroom fog, and be performed on a routine basis. Any quality control test done on diagnostic tubes shall be done annually and include SID accuracy, X ray and light field alignment, X ray and bucky alignment, and collimator dial accuracy. All dental intraoral, panoramic, tomography, and machines that have fixed SID and collimator are excluded from SID accuracy, X ray and light field alignment, X ray and bucky alignment, and collimator dial accuracy.

Source: 26 SDR 96, effective January 23, 2000.

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

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

44:03:01:11. Installation of radiation facilities or equipment. Repealed.

Source: SL 1975, ch 16, § 1; repealed, 6 SDR 93, effective July 1, 1980.

44:03:01:11.01. Shielding plan review prior to installation of radiation facilities or equipment. Prior to construction, the floor plans, shielding specifications, and equipment arrangement of any new installation or any modification of existing installations utilizing ionizing radiation machines shall be submitted to the department for review and approval. The plans shall show at a minimum the following:

(1) The normal location of the system's radiation port, the general direction of the useful beam, the location of any windows and doors or other openings, the location of the operator's booth, and the location of the control panel;

(2) The structural composition and thickness or lead equivalent of all walls, doors, partitions, floor, and ceiling of the room concerned;

(3) The dimensions of any room concerned;

(4) The type of occupancy of any adjacent areas inclusive of space above and below the room concerned. If there is an exterior wall, the plans must show distance to the closest area where it is likely that individuals may be present;

(5) The make and model of the equipment, the maximum technique factors, and the energy waveform (single phase, three phase, etc.); and

(6) The type of examinations or treatments which will be performed with the equipment and the anticipated workload of the system in mA-minutes per week.

The department may require the applicant to utilize the services of a health physicist to determine the shielding requirements prior to the plan review and approval. The approval of such plans may not preclude the requirement for additional modifications should a subsequent change of operating conditions create the possibility of an individual receiving a dose in excess of the limits.

Source: 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-4.1, 34-21-17.

44:03:01:11.02. Installation requirements of all radiation equipment. No person may make, sell, lease, transfer, lend, assemble, or install any radiation machine or any supplies used in connection with such a machine unless such supplies and equipment meet the requirements of this chapter when placed in operation.

Source: 26 SDR 96, effective January 23, 2000.

General Authority: SDCL 34-21-15.

Law Implemented: SDCL 34-21-4.1, 34-21-17.

44:03:01:11.03. Notification of installation of radiation equipment. Any assembler who installs radiation machines in this state shall report to the department within 15 days the following information:

- (1) The name and address of the persons who have received these machines;
- (2) The manufacturer, model, and serial number of each radiation machine and major components transferred;
- (3) The date of transfer of each radiation machine; and
- (4) The date of installation of each radiation machine.

In the case of diagnostic X ray systems which contain certified components, a copy of the assembler's report, Form FDA 2579 (6/95), prepared in compliance with requirements of the Federal Diagnostic X Ray Standard, 21 C.F.R. 1030.30(d), as of January 1, 1998, shall be submitted to the department within 15 days following completion of the assembly.

Source: 26 SDR 96, effective January 23, 2000.

General Authority: SDCL 34-21-15.

Law Implemented: SDCL 34-21-4.1, 34-21-17.

44:03:01:11.04. Licensee requirements after installation of radiation equipment. After completion of construction and installation of radiation equipment, the licensee shall maintain for inspection:

- (1) Model and serial number of all major components and user's manuals for those components;
- (2) Records of surveys, calibrations, maintenance, and modifications performed on the X ray systems;

(3) The maximum rated technique factors of each machine with tube rating and cooling curves charts; and

(4) Scale drawing of the room in which a stationary radiation machine system is located with such drawing indicating the use of areas adjacent to the room and an estimation of the extent of occupancy by an individual in such areas; the results of a survey for radiation levels present at the operator's position and at pertinent points outside the room; and the type and thickness of materials, or lead equivalency, in each protective barrier used in the room.

Source: 26 SDR 96, effective January 23, 2000.

General Authority: SDCL 34-1-17, 34-21-15.

Law Implemented: SDCL 34-21-4.1, 34-21-17.

44:03:01:11.05. Installation, maintenance, and operation of radiation equipment. Equipment shall be installed, maintained, and operated according to the manufacturer's specifications.

Source: 31 SDR 62, effective November 7, 2004.

General Authority: SDCL 34-1-17, 34-21-15.

Law Implemented: SDCL 34-21-4.1, 34-21-17.

44:03:01:12. X ray machine calibration exposure surveys, posted date, waivers. Repealed.

Source: SL 1975, ch 16, § 1; repealed, 6 SDR 93, effective July 1, 1980.

44:03:01:12.01. Radiation producing equipment calibration. The licensee shall provide that calibrations are performed on a diagnostic radiographic system if that system does not meet

the minimum performance criteria specified in §§ 44:03:01:08.02 to 44:03:01:08.07, inclusive, and if there is any change or replacement of components that could cause a change in the radiation output of that system.

The calibration may not exceed three months after any change or replacement of components that could cause a change in the radiation output. The calibration of the radiation output of the X ray system shall be performed by or under the direction of a qualified expert. Calibration of the radiation output of an X ray system shall be performed with a calibrated dosimetry system. Any X ray machine shall be calibrated at least every three years unless it meets the standards of this chapter. Any computed tomography system shall be calibrated or surveyed by a medical physicist on an annual basis.

Source: 26 SDR 96, effective January 23, 2000; 32 SDR 128, effective January 30, 2006.

General Authority: SDCL 34-1-17, 34-21-4.1, 34-21-15.

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

44:03:01:12.02. Surveys of radiation producing facilities and radiation equipment.

Any new radiation producing facility and any existing radiation producing facility shall have a survey made by a qualified expert or the department. The survey shall be done after any change in the facility or equipment that might cause a significant increase in radiation hazard. The licensee shall obtain a written report of the survey from a qualified expert. The licensee shall transmit a copy of the report to the department within 30 days of receipt of the report. The survey and report shall indicate all instances where the installation, in the opinion of the qualified expert or department, is in violation of the regulations.

Source: 26 SDR 96, effective January 23, 2000.

General Authority: SDCL 34-21-15.

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

44:03:01:13. Transferred to § 44:03:01:08.01(4).

44:03:01:14. X ray equipment to be operated by trained individuals. Repealed.

Source: SL 1975, ch 16, § 1; repealed, 6 SDR 93, effective July 1, 1980.

44:03:01:14.01. Operator requirements for X ray equipment. Any person who is certified or registered by the American Registry of Radiologic Technologists, by another state, or who has documented 40 hours of orientation and training in the operation of radiation producing equipment by a qualified instructor may operate any radiation producing device. For the purposes of complying with the provisions of electronic health records certification criteria established pursuant to 45 CFR 495.6 a radiologic technologist certified and registered by the American Registry of Radiologic Technologists or licensed by another state is considered to be a licensed health care professional. Dental radiographers shall have a minimum of 16 hours of training.

Source: 26 SDR 96, effective January 23, 2000; 31 SDR 62, effective November 7, 2004; 42 SDR 51, effective October 13, 2015.

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

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

Reference: 45 CFR 495.6, Federal Register, National Archives and Records Administration. Copies may be obtained free of charge at <https://www.federalregister.gov/select-citation/2014/05/23/42-CFR-495.6>.

44:03:01:14.02. Operator training requirements for diagnostic radiation equipment. A qualified instructor must do all training for operators of diagnostic radiation equipment. Documentation of the training must include the dates, instructor, and subjects covered. Continuing education credits would qualify as part of the training. The following are areas in which an individual must have documented training for the operation of X ray equipment:

(1) Fundamentals of radiation safety must cover characteristics of radiation, units of radiation measurement, hazards of exposure to radiation, levels of radiation from sources, and methods of controlling radiation dose;

(2) Familiarization with equipment must cover identification of controls, function of each control, how each control affects technique chart, and utilization of technique chart;

(3) Film processing must cover film speed as related to patient exposure, film processing with automatic processors, film processing manually, and factors affecting film processing quality;

(4) Anatomy and positioning relative to scope of practice, including patient preparation, and correct method for performing procedures; and

(5) The requirement of federal and state regulations pertinent to the services offered.

Source: 26 SDR 96, effective January 23, 2000.

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

Law Implemented: SDCL 34-21-4.1, 34-21-14.

44:03:01:14.03. Operator continuing education requirements. Any operator of a radiation producing device shall have five hours of documented continuing education over a three-year period containing information on radiation safety, equipment operation, film processing, emergency procedures, anatomy, positioning of film and body parts, orientation or training in new developed procedures, infection control, or rules pertinent to the services offered. Excluded from the five hours of continuing education are any licensed practitioner of the healing arts and any employee of a dental facility.

Source: 26 SDR 96, effective January 23, 2000; 31 SDR 62, effective November 7, 2004.

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

Law Implemented: SDCL 34-21-4.1, 34-21-14.

44:03:01:15. Disposal of radioactive materials. No licensee may dispose of any medical radioactive material without prior written approval of the department unless under license of the Nuclear Regulatory Commission. Data regarding the potential radium or other radiation hazard are required.

Source: SL 1975, ch 16, §1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

General Authority: SDCL 34-21-15.

Law Implemented: SDCL 34-21-31.

44:03:01:16. Loss or theft of radioactive material. Each licensee shall report by telephone fax, or electronic mail and followed up with a written report to the department the loss or theft of any source of radiation immediately after the occurrence becomes known.

Source: SL 1975, ch 16, § 1; 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

General Authority: SDCL 34-1-17, 34-21-15.

Law Implemented: SDCL 34-21-11.

44:03:01:17. Amendment, suspension, or revocation of license. Any amendment to a license shall be made by issuing a new license. Any suspension or revocation proceeding, in accordance with SDCL chapter 1-26, can be initiated only after exposure surveys are conducted by the department and a serious hazard to public health and safety is determined.

Source: 6 SDR 93, effective July 1, 1980; 26 SDR 96, effective January 23, 2000.

General Authority: SDCL 34-1-17, 34-21-15.

Law Implemented: SDCL 34-21-19.

Teledentistry Regulations (36-6A):

36-6A-1. Definitions. Terms used in this chapter mean:

(31) "Teledentistry," the practice of dentistry where the patient and the dentist are not in the same physical location, and which utilizes the exchange of clinical information and images over remote distances.

36-6A-49.3. Teledentistry services to patient located in state is practice of dentistry in state. Any person who, while located outside this state, practices dentistry through teledentistry and provides the dental services to a patient located in this state, is engaged in the practice of dentistry in this state.

36-6A-49.4. Teledentistry services to comply with chapter as if services provided in person. Any services provided by a licensee or registrant through teledentistry or electronic means shall comply with the provisions of this chapter as if the services were provided in person by a licensee or registrant.

36-6A-49.5. Chapter not applicable to dentist outside of state in consultation with in-state dentist. Nothing contained in this chapter may be construed to apply to any licensed person practicing dentistry outside of this state when in actual consultation with a dentist in this state.



South Dakota State Board of Dentistry
P.O. Box 1079, 1351 N. Harrison Ave. Pierre, SD 57501-1079
Ph: 605-224-1282 Fax: 1-888-425-3032

E-mail: contactus@sdboardofdentistry.com www.sdboardofdentistry.com

Application for Continuing Education Course Honorarium

Background

It is the policy of the Board to allocate resources, when available, to fund continuing education courses that further the mission of the Board.

Procedure

Application Deadline: December 9, 2019.
Applications received after this deadline will not be considered.

Submit Applications to: South Dakota State Board of Dentistry
PO Box 1079
Pierre, SD 57501
Or electronically to contactus@sdboardofdentistry.com

Fund Amount: The Board will fund up to \$7,500 in total during this request cycle.

Criteria for Consideration

- ✓ The sponsor organization must meet the applicable state contractor requirements.
- ✓ The course must further the mission of the Board.
- ✓ Preference will be given to courses that impact a large number of licensees or registrants and courses provided in partnership with other professional associations.
- ✓ Any funded course must be open to all dental professionals free of charge.

If an application is approved:

- ✓ The sponsor organization must be prepared to complete the state contract process.
- ✓ The sponsor organization must note in its promotional materials the following: *"The honorarium for this speaker is being funded by the South Dakota State Board of Dentistry. This course is open to all dental professionals free of charge. The content and opinions expressed during this course do not necessarily reflect the views of nor are they endorsed by the South Dakota State Board of Dentistry."*
- ✓ Following the course date, the sponsor organization must submit a brief report, including how many South Dakota licensees and/or registrants attended.

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Course Information

Title of Course: *Detailed course outline must be attached:*

"Treatment of the Medically Complex Dental Patient" & "The Oral-Systemic Health Connection"

Speaker(s): *Curriculum Vitae or Resume must be attached:*

Michael Glick, DMD

Date(s) of Course: May 15, 2020

Course Location: Sioux Falls, SD

Honorarium Amount requested: \$ 7,500

Applicant Information

Sponsor Organization Name:

South Dakota Dental Association

Sponsor Organization Contact:

Name: Brenda Goeden, Program Manager

Address: 804 N Euclid Ave, Ste 103, Pierre, SD 57501

Phone: 605-224-9133

Email: brenda.goeden@sddental.org

Partner Organization Name (if applicable):

South Dakota Dental Hygiene Association

Application Questions

Please type or print clearly; use additional paper if necessary.

1. Does the sponsor organization meet the requirements to serve as a state contractor?

☒ Yes

☐ No

2. Please list the course objectives:

"Complex Patient": Understand the role of dentists in overall health and well-being of their patients; How to interpret information suggesting underlying medical problems; and, Modify dental treatment based on patients' medical conditions.

"Oral-Systemic Health": Evaluate studies reporting on association between oral and systemic conditions; Understand the evidence of the association between oral infections and health; and, Inform patients about the association between oral infections and their health.

3. What is the target population?

Dentists, dental hygienists, dental assistants

4. What is the anticipated number of *South Dakota* licensees and/or registrants that will attend this course?

- a. Dentists: 150
- b. Dental Hygienists: 100
- c. Registered Dental Assistants: 150
- d. Radiographers: _____
- e. Other Dental Office Staff: _____

5. List other possible sources of financial support for this course:

N/a

Michael Glick, DMD, is a Professor of Oral Medicine and the Past Dean at the School of Dental Medicine, University of Buffalo. Dr. Glick has authored more than 200 journal publications, numerous book chapters and has co-edited several textbooks including, "Dental Management of Patients with HIV" and "Burket's Oral Medicine: Diagnosis and Treatment" (10th, 11th and 12th Eds.) He serves on several national and global committees, including Chairman of the Science Committee for FDI, the World Dental Federation. Dr. Glick has lectured throughout the United States and internationally. He is the Past-President of the American Board of Oral Medicine and serves as the Editor of *The Journal of the American Dental Association*.