



CRCPD's Suggested State Regulations for Control of Radiation SSRCR

AAPM 48th Annual Meeting
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Orlando, FL

John P Winston, Healing Arts Council Chair
Conference of Radiation Control Program Directors
Pennsylvania Bureau of Radiation Protection

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CRCPD's Suggested State Regulations

<http://www.crcpd.org/publications.asp>

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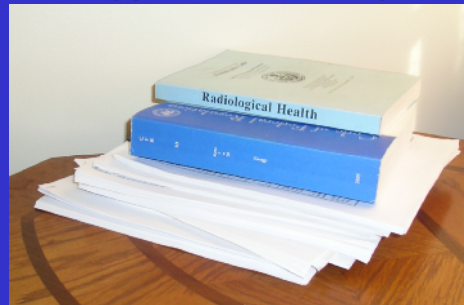
CRCPD's Suggested State Regulations

- Part A General Provisions (Published Mar03)
- Part B Registration of Machines (Dec95)
- Part C Licensing of Radioactive Material (Jan91)**
- Part D Standards for Protection vs. Radiation (Mar03)**
- Part E Industrial Radiography (Feb99)
- Part F X-Ray in Healing Arts (Dec01)

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CRCPD's Suggested State Regulations



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CRCPD's Suggested State Regulations

- Part G RAM in Healing Arts (Mar03)
- Part H Analytical X-Ray (Jan91)
- Part I Particle Accelerators (Jan 91)
- Part J Reports to Workers; Inspections (Mar03)
- Part M Land Disposal of RAM Waste (Jan91)
- Part N TENORM (Apr04)

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CRCPD's Suggested State Regulations

- Part O Decommissioning (Aug00)
- Part P Response to RAM Emergencies (Aug01)
- Part Q Irradiators (May05)
- Part S Financial Assurance (Jan05)
- Part T Transportation of RAM (Feb99)
- Part W Wireline Service Ops (Jan91)
- Part X Therapeutic Radiation Machines (Feb05)

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CRCPD's Suggested State Regulations

SR - Emerging Issues Committee

Cindy Cardwell (TX), Chairperson

- Recommends that the Chairs of SR – A, D, and C, at the very least be brought together to discuss the upcoming changes to rules that will be required due to the EAct and other NRC initiatives such as increased security controls and national source tracking rules.

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CRCPD's Suggested State Regulations

Keeping Pace...

A Working Group may have access to pre-decisional NRC rulemaking and guidance documents.

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CRCPD's Suggested State Regulations

SSR's Bracketed Language

- Language that is optional for state regulators.
- Committee felt it useful enough to suggest as a possible approach.
- Also used for language that may not apply to all states.
- Everything else has met full federal concurrence through our process, and may even be required by federal rules.

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CRCPD's Part G: RAM in Healing Arts

Members:

Pamela Bishop (OK), Chairperson
 Bob Gallagher (MA)
 Debbie Gilley (FL)
 James Jarvis (CO)

AAPM Resource Individual:

Lynne Fairbent

Last revised: March 2003

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CRCPD's Part G: RAM in Healing Arts

"Authorized Medical Physicist"

Minimum education and training requirements provided in 10CFR35.

- Identified as an authorized medical physicist on a specific medical use license or equiv. issued by Agency, NRC, AS, or Licensing State, or
- Identified as an authorized medical physicist on a permit issued by Agency, NRC, AS or LS specific medical use license of broad scope that is authorized to permit the use of RAM.

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CRCPD's Part G: RAM in Healing Arts

[Examples of Bracketed Language]

- G.18.g: Radiation Safety Committee
- G.21.c: Authorized User Supervision
- G.28.a: Training and Technical Requirements for Nuclear Medicine Technologists and Radiation Therapists
- G.31: Quality Control of Diagnostic Equipment

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CRCPD's Part G: RAM in Healing Arts

[Examples of Bracketed Language]

- G.32.c: Dose calibrator quality control
- G.33.d: Survey instrument check
- G.34.a: Determination of Doses
- G.38: Using vial shields
- G.39.b Surveying storage areas

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CRCPD's Part G: RAM in Healing Arts

[Examples of Bracketed Language]

- G.40.f: Release of Individuals Containing Radioactive Drugs or Implants
- G.104: Records of training

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CRCPD's Part G: RAM in Healing Arts



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CRCPD's Part G: RAM in Healing Arts

[Examples of Bracketed Language]

- G.40.f: Release of Individuals Containing Radioactive Drugs or Implants
- G.104: Records of training

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CRCPD's Part C: Licensing of RAM

Members:

Monica Perez (TX), Chairperson
 Cynthia Becker (FL)
 Johnny Graves (TN)
 Trudy Hill (NE)

- Last revised: 1991

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CRCPD's Part C: Licensing of RAM

- Draft submitted to CRCPD Office of the Executive Director for formatting in Spring 2006. Formatting complete.
- Draft and Rationale expected to be submitted to peer review August 2006.

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CRCPD's Part C: Licensing of RAM

- Primarily worked on bringing compatibility items up-to-date with current NRC regulations.
- Streamlined the Part by removing some sections and making them separate chapters (e.g., financial assurance, decommissioning)
- Need to add standards for increased control and tracking, as well as compatibility with Energy Act.

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CRCPD's Part D: Radiation Protection

Members:

Shawn Seeley (ME), Chairperson
Robert Greger (CA)
Mike Snee (OH)

Last revised: March 2003

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CRCPD's Part D: Radiation Protection

D.1201.c: Occupational Dose from Fluoroscopic Equipment

» Webster Calculation

D.1301: Dose Limits for the Public

- 1 millisievert (0.1 rem) in a year
- Retrofit shall not be required for locations within facilities where only radiation-producing machines existed prior to [the effective date of these regulations] and met the previous requirements of 5 mSv per year.

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CRCPD's Part D: Radiation Protection

D.1503: Location of Personal Monitoring Devices

- When Pb apron is worn, at the collar (outside apron)
- When monitoring dose to embryo/fetus of declared pregnant worker, at waist under any apron
- When monitoring lens dose, at collar or an unshielded location closer to the eye
- When monitoring extremity dose, at the extremity likely to receive the highest exposure, and oriented to measure the highest dose.

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CRCPD's Part D: Radiation Protection

D.1903: Exceptions to Posting Requirements

- Diagnostic X-ray Rooms
- Teletherapy Rooms
 - If access to room is controlled, and personnel in attendance take necessary precautions to prevent inadvertent exposure of workers, other patients, and members of the public in excess of limits.

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CRCPD's Part X: Medical Therapy

Members:

Kim Wiebeck (AR), Chairperson
 Bill Dundulis (RI)
 Latischa Hanson (TX)
 Robert Owen (SC)

AAPM Resource Individuals:

Melissa Martin
 Jatinder Palta

Last revised: February 2005

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CRCPD's Part X: Medical Therapy

Currently drafting SSR's for electronic brachytherapy

- Concluded that this technology should be used in radiation oncology centers by individuals trained in the use of HDR and requirements should be similar to sealed source HDR brachytherapy
- Drawing from 10 CFR 35
- Should be available for comment in Fall 2006

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CRCPD's Part X: Medical Therapy

Sec. X.3.c: Training for External Beam Radiation Therapy Authorized Users

Sec. X.3.d: Training for Radiation Therapy Physicists

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CRCPD's Part X: Medical Therapy

[Examples of Bracketed Language]

- Sec. X.3.e: Qualifications of Operators
 - Shall be ARRT Registered Radiation Therapy Technologists, or
 - shall submit evidence of satisfactorily completing a radiation therapy technologist training program that complies with the requirements of the Joint Review Committee on Education in Radiologic Technology.

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CRCPD's Part X: Medical Therapy

[Examples of Bracketed Language]

- Sec. X.3.e. continued.
 - Names and training of all personnel currently operating a therapeutic radiation machine shall be kept on file at the facility.
 - Information on former operators shall be retained for a period of at least 2 years beyond the last date they were authorized to operate the machine at the facility.

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CRCPD's Part X: Medical Therapy

Sec. X.7.u: Periodic Quality Assurance Checks

- At intervals not to exceed those specified in "Comprehensive QA for Radiation Oncology: AAPM Report No. 46," prepared by AAPM Radiation Therapy Committee Task Group 40.

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CRCPD's Part F: X-ray in Healing Arts

Members:

Russell Takata (HI), Chairperson
 Herman Gaines (MS)
 Brad Grinstead (AL)
 Catherine Fontaine (TX)

AAPM Resource Individual:

Keith Strauss

Last revised: December 2001

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CRCPD's Part F: X-ray in Healing Arts

Currently under revision to include:

- The new FDA performance standards published June 10, 2005.
- Hand-held dental x-ray equipment.

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CRCPD's Part F: X-ray in Healing Arts

- F.3.a.ix: Procedures and auxiliary equipment
- F.3.a.xiii: Patient Log
- F.3.b: Film processing and practices
- F.5.I.v: Cumulative Fluoroscopic Exposure Time

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CRCPD's Part F: X-ray in Healing Arts

F.14: Mammography
– pages F42 – F75

F.15: Bone Densitometry

Appendix C: Exemptions from Shielding for Certain
Fluoroscopic Procedures

Appendix D: Focal Spot Tolerance Limit

Appendix E: Minimum HVL for 20, 25, 30 kV

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CRCPD & AAPM

- Information Exchange
- Cooperative Efforts
- Training

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CRCPD's Suggested State Regulations

**Thank
You**

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