

Comment Responses to Revision 2:

§219.3 Definitions for *Medical reportable event for radiation-producing diagnostic or interventional machines* – Use NCRP # 168 notification level of “3 Gy” rather than 2 Gy. The report refers to this level as the “Substantial Radiation Dose Level” for peak skin dose.

(i) **An unintended dose to the skin greater than 3 Gy (300 rads) to the same area for a procedure or series.**

§219.3 Definitions for *Medical reportable event for radiation-producing machine therapy* – I added “plan” and changed “differs” to “exceed” such as:

(i) An administration of a therapeutic radiation dose to the wrong individual **or using the wrong treatment modality/plan.**

(iv) A dose delivered to all or part of the intended site that exceeds more than 50% from the expected dose for a single fraction of a multi-fraction treatment plan.

Proposed subsection (v) was deleted because it’s addressed within the “treatment plan.”

§221.2 Added “ionizing” to the IORT definition.

Intraoperative radiation therapy (IORT)— A modality of therapy in which therapeutic levels of ionizing radiation are applied to a target area, such as a cancer tumor, while the area is exposed during surgery.

§221.11 Replaced “chart” with “Protocol information.”

[(c)](d) **[A chart]Protocol information**, which specifies the techniques for examinations performed with the system, shall be provided in the vicinity of each diagnostic X-ray system’s control panel. **[This chart]The protocol** shall include information pertinent to the particular examination, such as:

§221.35a Include some additions to the Fluoroscopic X-ray systems section:

- (a)** Fluoroscopic X-ray systems shall use an image intensifier **or direct-digital receptor** and, in addition to the requirements of §§ 221.1—221.34a, shall meet the requirements of §§ 221.36a—221.38a (relating to limitation of useful beam of fluoroscopic equipment; activation of fluoroscopic tube; and entrance exposure rate).
- (b)** **Fluoroscopic X-ray systems shall be equipped with a mechanism to monitor and record patient dose during fluoroscopic operations. Systems incapable of monitoring dose shall have guidelines in place addressing operator requirements, such as beam-on time restrictions and awareness of radiation protection procedures.**
- (c)** **All available metrics that describe the total radiation dose from interventional procedures shall be reported in the patient’s medical record.**
- (d)** **Interventional services shall have policies and processes to ensure that when a specific radiation dose threshold is exceeded, appropriate documentation and follow-up are provided.**
