

4731.4467 REMOTE AFTERLOADER UNITS, TELETHERAPY UNITS, AND GAMMA STEREOTACTIC RADIOSURGERY UNITS; SAFETY PRECAUTIONS.

A. This part applies to remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units.

B. A licensee must control access to the treatment room by a door at each entrance.

C. A licensee must equip each entrance to the treatment room with an electrical interlock system that:

(1) prevents the operator from initiating the treatment cycle unless each treatment room entrance door is closed;

(2) causes the source to be shielded when an entrance door is opened; and

(3) prevents the source from being exposed following an interlock interruption until all treatment room entrance doors are closed and the source on-off control is reset at the console.

D. A licensee must require any individual entering the treatment room to ensure, through the use of appropriate radiation monitors, that radiation levels have returned to ambient levels.

E. Except for low-dose remote afterloader units, a licensee must construct or equip each treatment room with viewing and intercom systems to permit continuous observation of the patient or human research subject from the treatment console during irradiation.

F. For licensed activities where sources are placed within the patient's or human research subject's body, a licensee must only conduct treatments that allow for expeditious removal of a decoupled or jammed source.

G. A licensee must:

(1) for medium dose-rate and pulsed dose-rate remote afterloader units, require:

(a) an authorized medical physicist and either an authorized user or a physician, under the supervision of an authorized user, who has been trained in the operation and emergency response for the unit, to be physically present during the initiation of all patient treatments involving the unit; and

(b) an authorized medical physicist and either an authorized user or an individual, under the supervision of an authorized user, who has been trained to remove the source applicator in the event of an emergency involving the unit, to be immediately available during continuation of all patient treatments involving the unit;

(2) for high dose-rate remote afterloader units, require:

(a) an authorized user and an authorized medical physicist to be physically present during the initiation of all patient treatments involving the unit; and

(b) an authorized medical physicist and either an authorized user or a physician, under the supervision of an authorized user, who has been trained in the operation and emergency response for the unit, to be physically present during continuation of all patient treatments involving the unit;

(3) for gamma stereotactic radiosurgery units, require an authorized user and an authorized medical physicist to be physically present throughout all patient treatments involving the unit; and

(4) notify the radiation safety officer or the officer's designee and an authorized user as soon as possible if the patient or human research subject has a medical emergency or dies.

H. A licensee must have applicable emergency response equipment available near each treatment room to respond to a source:

(1) remaining in the unshielded position; or

(2) lodged within the patient following completion of the treatment.

Statutory Authority: *MS s 144.1202; 144.1203*

History: *29 SR 755*

Published Electronically: *March 12, 2009*