



Ohio Administrative Code

Rule 3701:1-58-59 Safety precautions for remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units.

Effective: August 15, 2005

- (A) A licensee shall control access to the treatment room by a door at each entrance.
- (B) A licensee shall equip each entrance to the treatment room with an electrical interlock system that will:
- (1) Prevent the operator from initiating the treatment cycle unless each treatment room entrance door is closed;
 - (2) Cause the source(s) to be shielded when an entrance door is opened; and
 - (3) Prevent the source(s) from being exposed following an interlock interruption until all treatment room entrance doors are closed and the source(s) on-off control is reset at the console.
- (C) A licensee shall require any individual entering the treatment room to assure, through the use of appropriate radiation monitors, that radiation levels have returned to ambient levels.
- (D) Except for low-dose remote afterloader units, a licensee shall construct or equip each treatment room with viewing and intercom systems to permit continuous observation of the patient or the human research subject from the treatment console during irradiation.
- (E) For licensed activities where sources are placed within the patient's or human research subject's body, a licensee shall only conduct treatments which allow for expeditious removal of a decoupled or jammed source.
- (F) In addition to the requirements specified in paragraphs (A) to (E) of this rule, a licensee shall:
- (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(s) 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.

(4) Notify the radiation safety officer, or his/her designee, and an authorized user as soon as possible if the patient or human research subject has a medical emergency or dies.

(G) A licensee shall 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.