



ADMINISTRATIVE RULES OF MONTANA



37.14.1106 TELETHERAPY

- (1) The equipment used in teletherapy shall be as follows:
 - (a) The housing shall be so constructed that, at 1 meter from the source, the maximum exposure rate does not exceed 10 milliroentgens per hour when the beam control mechanism is in the "off" position. The average exposure rate measured at a representative number of points about the housing, each 1 meter from the source, shall not exceed 2 milliroentgens per hour.
 - (b) For teletherapy equipment installed after the effective date of this chapter, the leakage radiation measured at 1 meter from the source when the beam control mechanism is in the "on" position shall not exceed 0.1% of the useful beam exposure rate.
 - (c) Adjustable or removable beam-defining diaphragms shall allow transmission of not more than 5% of the useful beam.
 - (d) The beam control mechanism shall be of a positive design capable of acting in any orientation of the housing for which it is designed to be used. In addition to an automatic closing device, the mechanism shall be designed so that it can be manually returned to the "off" position with a minimum risk of exposure.
 - (e) The closing device shall be so designed as to return automatically to the "off" position in the event of any breakdown or interruption of the activating force and shall stay in the "off" position until activated from the control panel.
 - (f) When any door to the treatment room is opened, the beam control mechanism shall automatically and rapidly restore the unit to the "off" position and cause it to remain there until the unit is reactivated from the control panel.
 - (g) There shall be at the housing and at the control panel a warning device that plainly indicates whether the beam is "on" or "off".
 - (h) The equipment shall be provided with a locking device to prevent unauthorized use.
 - (i) The control panel shall be provided with a timer that automatically terminates the exposure after a preset time.
 - (j) Provision shall be made to permit continuous observation of patients during irradiation.
- (2) No individual shall be in the treatment room during irradiation unless that individual is the patient. Mechanical restraining or supporting devices shall be used for positioning the patient, if necessary.
- (3) Teletherapy sources shall be tested for leakage and contamination in accordance with the procedures described in ARM 37.14.1105(2) . Tests of leakage may be made by wiping accessible

surfaces of the housing port or collimator while the source is in the "off" position and measuring these wipes for transferred contamination.

Authorizing statute(s): Sec. 75-3-201 and 75-3-202, MCA

Implementing statute(s): Sec. 75-3-201 and 75-3-202, MCA

History: NEW, 1980 MAR p. 1069, Eff. 3/28/80; TRANS, from DHES, 1996 MAR p. 433; TRANS, from DEQ, 2000 MAR p. 189.