

MICHIGAN DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

Guidelines for Use of Bed Rails in Long Term Care Facilities

March 1, 2001

These Guidelines have been developed pursuant to Public Act 437 of 2000, which addresses the use of bed rails in long term care facilities. These Guidelines are effective on April 1, 2001, and will remain in effect until permanent guidelines under Act 437 are adopted. The resident's safety must be considered at all times.

I. Acceptable Bed Rail Devices

The Department will accept a bed rail which was designed and sold for use in health care facilities if:

- A. The distance between the slats (the horizontal or vertical supports between the perimeter of the rail itself) of the bed rail is small enough to prevent the resident's head from becoming accidentally entrapped between the slats. A gap no more than 4.5 inches will be accepted unless the resident assessment indicates that a smaller gap is necessary to prevent entrapment given the size of the resident. Bed rail protective barriers that do not obstruct the resident's view from the bed (such as netting or clear padding) will be accepted as a means to close off open spaces in excess of the maximum space between slats. Padded bed rail covers which obstruct the resident's view may be used as part of a care plan for residents who are prone to seizures or who are extremely agitated. The covers should be soft enough to prevent trauma, but rigid enough to prevent a resident from becoming entrapped.
- B. The bed rail is mechanically sound, firmly attached to the bed, and with latches in good working order.

II. Properly Fitted Mattresses and Initial Bed Rail Installation

- A. Since the size of each resident varies, a long term care facility must document that the equipment chosen was assessed in relation to the specific resident for whom it is used to avoid the possibility of serious injury or death from entrapment or slipping through gaps created by body weight, body size, or bed, rail, and mattress configurations. The maximum acceptable gap for the resident must be recorded in the medical record at the time the bed rail is installed for that resident.
- B. In an occupied bed, the space between bed rail and mattress and between mattress and head or footboard can be no greater than 2.5 inches on any side.

If the medical record indicates a smaller gap is required, the Department will require the long term care facility to comply with the smaller measurement.

- C. Foam edges are acceptable to reduce gaps if they meet fire safety standards and are not worn or otherwise rendered ineffective.
- D. The long term care facility may consider placing Velcro or other anti-skid material between the mattress and mattress deck to reduce mattress movement.
- E. In a flat bed with a bed rail up, another potential source of entrapment exists at the triangular space at the head of the bed formed by the meeting of the bed rail, headboard, and mattress. A space of no more than 4.5 inches may exist at this triangle. The long term care facility must document their assessment of this space and indicate the safety measures to be implemented to prevent entrapment of the resident for whom the bed rail is installed.
- F. The space between two half rails may be a potential source of entrapment. The long term care facility must document in the care plan the rationale for use of two half rails, in lieu of a full bed rail, for the individual resident.
- G. The long term care facility must provide education and training for nursing and other direct care staff regarding the following:
 - 1.) bed rail use assessment and evaluation;
 - 2.) bed and bed rail safety;
 - 3.) risks and benefits of bed rail use; and
 - 4.) alternatives to bed rail use.

III. Proper Maintenance of Bed Rails

When bed rails are used, the long term care facility must document that it has monitored and maintained the mattress and bed rails as follows:

- A. On each of the first 5 days following initial use, the resident, bed frame, bed rails, and mattress must be monitored by each shift to document proper fit of and to assure that the maximum distance between components for that resident, as recorded in the medical record, is not exceeded. The monitoring must assure that the resident's weight, movement, or bed position is not creating gaps that could potentially entrap the resident's head or other body parts. If gaps in excess of the maximums acceptable for that resident are being created, the record must document corrective actions taken.
- B. After the first 5 days following installation or initial use of a bed rail, as part of the quarterly care plan review, the long term care facility must check positioning of the mattress in relation to the bed and rails when the resident is in bed to assure

that the maximum distance between components for that resident, as recorded in the medical record, is not exceeded.

- C. At least every 60 days after the first 5 days following installation or initial use of a bed rail, the long term care facility must document that it has:

- 1.) physically inspected each bed frame, bed rail, and mattress for damage or wear which may be creating gaps between the mattress and head or footboards in excess of the maximum distance allowed between components for that resident as recorded in the medical record;
- 2.) physically inspected each bed frame, bed rail, and mattress for damage or wear which may be creating gaps between the mattress and rail in excess of the maximum distance allowed between components for that resident, as recorded in the medical record;
- 3.) assured that the mattress continues to be firmly affixed to the bed frame, if applicable, to avoid shifting;
- 4.) assured the rails remain mechanically sound, firmly attached, and with latches in good working order.

- D. The long term care facility must use a maintenance log to document all safety checks and monitoring related to the maintenance of bed rails, frames, and mattresses.

- E. The long term care facility must provide education and training for maintenance and environmental services staff related to:

- 1.) installation;
- 2.) maintenance; and
- 3.) functional safety checks.

IV. Other Hazards Created by Improperly Positioned Bed Rails, Mattresses, and Beds

The following other hazards related to improperly positioned bed rails, mattresses, or beds have been identified. The Department recommends the long term care facility consider these items during facility-generated assessments and inspections:

- A. Although bed frames, bed rails, and mattresses are used as an integrated whole, they are sometimes purchased as separate components. Bed frames last longer than mattresses, and bed rails may be added to beds that were not designed for them.
- B. Long term care facilities should be alert to replacement mattresses and bed rails with dimensions different than the original equipment supplied or specified by the bed frame manufacturer.

- C. Variation in bed rail design and thickness and/or the density of the mattress may increase the potential for entrapment injuries.
- D. Use of air mattresses or additional foam mattress may create the potential for entrapment.
- E. Increased risk of serious injury or death also occurs when the resident's size and/or weight are inappropriate to the bed's capacity or dimensions.