# Bed Rail Use and Bed Inspection

Training for Health Care Workers





## **Objectives**

- Understand the regulations that guide bed rail use
- Identify the FDA's seven zones of potential entrapment
- Identify risks and benefits of bed rail use
- Identify components of bed system inspection
- Identify components of resident risk assessment





#### Introduction

- The nursing home Requirements of Participation (RoP) are the regulations that set minimum standards for nursing homes.
- The RoP were rewritten in October 2016.
- The changes in regulations go into effect over the next three years, in phases.
- There were changes made to the regulations for bed rails and inspections of bed frames, mattresses and bed rails.





## **Overview of the Regulation**

The facility must attempt to use appropriate alternatives prior to installing a side or bed rail. If a bed or side rail is used, the facility must ensure correct installation, use, and maintenance of bed rails, including but not limited to the following elements.

- (1) Assess the resident for risk of entrapment from bed rails prior to installation
- (2) Review the risks and benefits of bed rails with the resident or resident representative and obtain informed consent prior to installation.
- (3) Ensure that the beds dimensions are appropriate for the resident's size and weight.





## Overview of the Regulation

- Follow the manufacturers recommendations and specifications for installing and maintaining bed rails.
- Conduct Regular inspection of all bed frames, mattresses, and bed rails, if any, as part of a regular maintenance program to identify areas of possible entrapment.
- When bed rails and mattresses are used and purchased separately from the bed frame, the facility must ensure that the bed rails, mattress, and bed frame are compatible.







#### **Definitions**

Assistance Device or Assistive Device refers to "Any item (e.g., fixtures such as handrails, grab bars, and devices/equipment such as transfer lifts, canes, and wheelchairs, etc.) that is used by, or in the care of a resident to promote, supplement, or enhance the resident's function and/or safety. "

Bed/Side Rails" refers to "A physical device attached to the resident's bed intended to enable turning or repositioning"







## **Background**

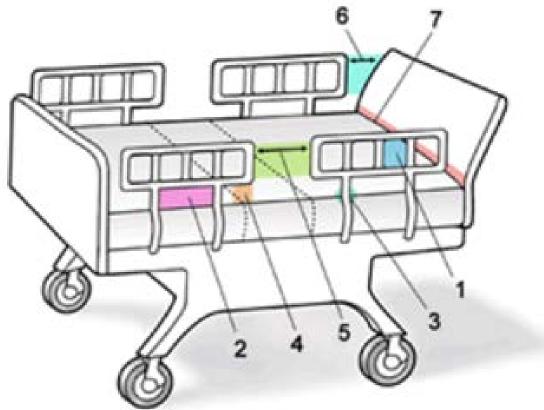
- In 2006 the Food and Drug Administration (FDA) issued a safety alert regarding potential hazards with hospital beds and hospital bed accessories.
- Some bed systems carry a risk of:
  - Severe injury
  - Strangulation
  - Asphyxiation
  - Serious injury
  - Death







## FDA 7 Zones of Entrapment



http://www.fda.gov/RegulatoryInformation/Guidances/ucm072662.htm#8



Source: US Food and Drug Administration Bed Syst4em Dimensional and Assessment Guidance



## **Potential Zones of Entrapment**

#### Space or gap must be less than 4 ¾ inches

- Within the rail
- Under the rail, between the rail supports
- Between the rail and mattress

#### Space or gap must be less than 2 1/4 inches

 Under the rail at the end of the rail, between the rail and the mattress







## Those at Most Risk of Entrapment



- Frail or elderly
- Conditions such as agitation, delirium, confusion, pain, uncontrolled body movements, hypoxia, fecal impaction, acute urinary retention
- Any other condition that may cause a person to move about the bed or try to exit from the bed
- Those with needs regarding toileting, positioning, and other basic care needs that may not be met timely





#### **Key Body Parts at Risk of Entrapment**



- Head
- Neck
- Chest





#### **Potential Benefits of Side Rails**

#### Enabler or repositioning aid which may:

- Potentially lead to reduced risk of pressure ulcers
- And reduced risk of complications of immobility and prolonged bed rest
- Aligning in the turning and repositioning within a bed allowing for greater independence







## **Potential Safety Risks**

- Entrapment most notable to the neck, head, chest and limbs
- Physical restraint
- Improper installation
- Inappropriate location or position of bed rail







## **Potential Regulatory Issues**

Devices may be deemed a physical restraint:

"Physical restraint is any manual, physical, or mechanical device, material, or equipment attached or adjacent to the resident's body that the resident cannot remove easily, which restricts freedom of movement or normal access to one's body"







## **Potential Regulatory Issues**

- Entrapment related injuries or even death
- Predisposition to falls or other safety hazards
- Potential Impact on Quality Measures:
  - Restraints
  - Falls
  - Injury
  - Pain

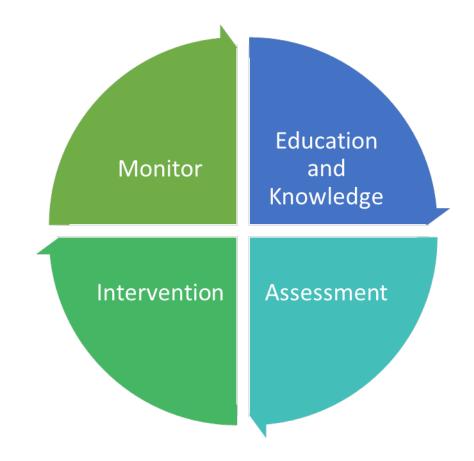






## **Facility Response**

- Knowledge
- Assessment
- Intervention
- Monitor



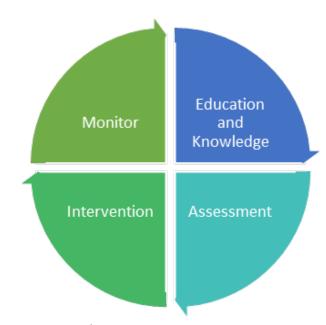




## **Assessing Resident Risk**

- Cognitive Status
- Functional Status
- Other Internal Risk Factors
- Procedure
  - Complete the risk assessment
  - Implement appropriate person-centered interventions
  - If bed rail used, obtain physician order
  - Provide staff and resident education on device
  - Update the care plan







#### **Bed Rail Assessment**

Insert picture of facility bed rail assessment





## **Process**

Evaluate resident, outcomes, attempt at least restrictive interventions



Complete an Assessment of medical and safety factors



Care Plan Person centered approach



Need for assistive device? Try less restrictive interventions



Evaluate mattress and bed for ongoing safety



Assess and address environmental factors





## **Bed Inspection**

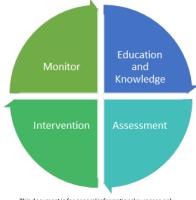
Insert picture of facility bed inspection log and process





#### Interventions to Reduce Risk

- Meet basic needs
- Use alternatives to bed rails for positioning
- Follow manufacturer guidelines regarding compatibility of mattresses, rails and accessories.
- Know seven zones of entrapment and audit for risk
- Staff, resident, and representative education







#### **Monitor for Effectiveness**

- Modify interventions when necessary
- Update the plan of care as needed
- Perform regular bed inspection audits
- Provide ongoing education
- Incorporate findings into the QAPI process as indicated



Knowledge

# THANK YOU FOR PARTICIPATING IN THIS EDUCATION SESSION!



