Bed Rail Death

**Problem**

- **Patient Safety** Impact: Strangulation, death
- **Patient Services** Impact: Trapped in bed rail
- **Property, Equip, Mtls** Impact: Inappropriate use of bed rails?
- **Labor, Time** Impact: Review of bed rail deaths

**Impact to the Goals**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Impacted</th>
</tr>
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**Basic Cause Map**

Bed rails are used to protect patients - to prevent falling out of bed and assist them in getting out of bed. However, some bed rails can result in patients, especially those who are ill, getting trapped and injured, or killed.

- **Patient mental state**
  - Illness, dementia, Alzheimers, etc.
  - Evidence: Nearly half of adults who die in bed rail accidents have medical problems.

- **Bed rail, mattress not compatible**
  - AND/or
  - Gap between mattress, bed rail
  - AND
  - Design of bed rail

- **Prevent patients from rolling out of bed**
  - AND
  - Assist patients in getting out of bed

- **Inappropriate use of bed rails?**
  - Evidence: Declining use in hospitals and nursing homes as awareness of
  - AND
  - FDA did not require safety labels/recall bed rails
  - Evidence: Adopted voluntary guidelines with safety warning in

- **FDA did not require safety labels/recall bed rails**
  - AND
  - Industry resistance/legal concerns
  - AND
  - Political support for less regulation

**More Detailed Cause Map**

- **Different manufacturers**
  - AND
  - Insufficient standards
  - Evidence: ASTM standards voluntary

- **Bed rails not always included in cause of death**
  - AND
  - Bed rails not reported as cause of injury

- **Problem not well known?**
  - AND
  - Insufficient regulation of bed rails?

- **Purchased by non-medical personnel**
  - Evidence: 61% of deaths occurred at home

- **Outside of mandate of CPSC**
  - AND
  - Consumer Product Safety Commission

- **Considered bed rails medical devices**
  - Products may be marketed without medical claims

**Solutions**

- Possible Solutions: Creation of task force
  - Unclear responsibility for bed rail regulation

- Possible Solutions: FDA study of bed rail deaths, injuries
  - Evidence: 61% of deaths occurred at home

- Possible Solutions: FDA did not require safety labels/recall bed rails
  - Evidence: Adopted voluntary guidelines with safety warning in

**Cause Mapping** is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

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“We need a national task force dedicated to addressing any regulatory gaps and protecting these vulnerable patients from preventable bedrail injuries.”
- Representative Edward J. Markey

Although bed rails are estimated to have killed about 150 - and injured more than 36,000 - adults since 2003, responsibility for regulation of these devices is still unclear.

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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