# Manual for Bed Rails

During this module you will be asked some questions to simply provoke thought and test your current knowledge please have a note pad or supervision workbook to hand to make notes. Your performance will only be measured on the answers you select when completing the knowledge test at the end of the module.

Contents

**Learning Outcomes**

- Knowing the main types of bed rails and reasons for using them
- Understanding the priorities of health and safety in the use of bed rails
- Appreciating the importance of client consent, choice and capacity
- Understanding the potential risks and hazards of using bed rails
- Understanding and describing the principles of risk assessment in reducing risks and hazards
- Being aware of the selection, safe fitting, and care of the person with bed rails.

**Complementary manuals available**

- Falls Response, Falls Prevention, Assisting and Moving Individuals, Health and Safety,
- Mental Capacity Act 2005, Safeguarding Adults at Risk

***Disclaimer: This manual must only be used in conjunction with the guidance of the HSE 2011***

# Chapter One

***Health Care and Necessity of Bed Rails***

It is well recognized that falling out of bed may cause injury to the fallen person. A single fall can result in soft tissue damage, fractures, discomfort, pain, increased dependency and immobility. A fall from bed can even be life threatening to the person. To assist in preventing these injuries, specially designed equipment such as bed rails can be fitted to the sides of beds. Bed rails are found within many care environments, including nursing and residential homes

While using bed rails help in reducing the likelihood of people falling out of bed, their use is not without risk. Any decision to apply bed rails must only be made after completion of a comprehensive person-centred risk assessment. Any risk assessment should ideally include the views and consent of the person and if appropriate the opinions of family members and care providers.

***Why and when using bed rails?***

Vulnerable people may be at risk from falling out of bed for many reasons. This includes poor mobility, illness, dementia or delirium, visual impairment and those who have altered awareness due to their treatment or medication.

The prescribing, selecting and fitting of bed rails needs considerable care to ensure that people are not placed at risk. The decision to use bed rails is often a difficult one for care workers due to the unpredictable nature of some people.

The use of bed rails should not be based solely on the person's medical condition; age etc. there should be a continuing process of assessment / re-assessment and the implementation of policy and procedure.

***Probable reasoning for using bed rails***

Person has a visual impairment
History of falls from a bed
Poor mobility
Fluctuating confusion or agitation
Dementia
Lack of understanding (person unaware of their own safety needs in bed)
Drowsiness due to treatment or medication
Person is fearful of being in bed without one (their request) being moved or transported on the bed or trolley to another area.

***Probable reasoning for not using bed rails***

- No assessed risk of fall from bed
- Climbing over bed rails

- Risk of entrapment
- Height of mattress/overlay as this would increase the height of bed
- Person's request for non-use
- No risk assessment performed
- Type of bed used
- Repetitive or involuntary movements

**Special consideration needs to be given with certain conditions such as cerebral palsy, emaciated people or people with very small or large heads or with communication problems**

Only through assessment is it possible to weigh up the balance between the risks and benefits in using them. People must be treated with respect and dignity.

***Responsibility and duty of care***

Under a professional's duty of care it is both the legal and professional responsibility of all health workers to ensure they have a good understanding of the skills and knowledge necessary to use bed rails properly. This includes the assessment, fitting and continuing surveillance of bed rails.

The aim of this manual is to develop your awareness of how to use bed rails safely and effectively using the latest British and European standards and current evidence-based practice. It will describe factors that will need to be taken into account in making the decision to use bed rails as well as exploring potential hazards, the risk assessment process and how bed rails should be fitted correctly.

***Bed rails functions***

For the purpose of this manual the term bed rails will be used, although it's an umbrella term for other names that are often used, such as bed side-rails, cot sides, safety sides and bed guards. The term cot side can be confusing and is disliked by many people as it is regarded as a **derogatory** term which can be infantilising.

Bed rails are designed as rigid structures. They are be hinged or pivoted safety bars attached to or forming part of the bed frame and are used in such a way that they can be very successful in preventing vulnerable people accidentally slipping, sliding, falling or rolling out of bed and injuring themselves (MHRA 2012).

They can be folded down when personal care is needed or when the person wishes to get in and out of bed. Having this flexibility also allows for the changing of bed linen, cleaning of the bed or replacing the bed mattress.

***Medical devices***

As bed rails are regarded as medical devices, they are classified by the Medical Devices Regulations (MDR) (2002).

***The consequences if one falls from bed rails***

There have been a number of reported incidents and fatalities involving bed rails that have led to injury or death. The National Patient Safety Agency (NPSA 2007) show that in England and Wales, over a single year there were 44.000 reports of people in NHS hospitals falling out of bed.

Tragically, this resulted in eleven deaths and around 90 people suffering from broken bones, although most falls from beds resulted in no harm or minor injuries like scrapes and bruises.

The NPSA (in its safer practice notice 17 NPSA 2007) recommends the use of bed rails as people who fall from bed without them are significantly more likely to be badly harmed and suffer injuries to the head and neck.

***Bed rail classification and design***

Bed rails can be classified and designed into the following basic types:

**Integral bed rails**

These are incorporated into the bed design and supplied with it or are offered as an optional accessory by the bed manufacturer, to be fitted later as required.

**Adjustable or profiling beds** feature integral bed rails and are designed in a straight rail format. Some of these beds will have a single piece rail along each side of the bed; these require care in use because when the profile of the bed is adjusted upwards entrapment hazards can be created, which are not present when the bed is in the horizontal position.

Some specialised beds have split bed rails fitted. These beds can have two pairs of bed rails fitted, one pair at the head end and one pair at the foot end.

**Care giver's role**

You as a care worker need to closely monitor people in these types of beds because the space between the head and foot end rails varies according to the profile adjustment, therefore causing entrapment hazards e.g. space for the person's head or body to be trapped in between the bed rail and mattress may be created when the bed is adjusted. As the integral design meets current legislation in acceptable gaps and dimensions when fitted, they should be the preferred method of choice when deciding which bed rail type to fit.

**Third party bed rails**

These are not specific to any particular bed model as they are intended to fit a wide range of domestic, divan or metal frame beds from different suppliers. This type of bed rails are detachable and can be fixed to different beds.

***Some bed rails issues we should consider***

While bed rails can be successful in preventing many falls, their fitting needs careful consideration and detailed on-going assessment.

- If the person is likely to fall from the bed, are bed rails the appropriate solution?
- Is the person at risk of injury due the fitting of bed rails?
- Does the client's physical size and behavior present a risk?
- Any use of a bed rail must be based on a fully documented risk assessment on every individual.
- This risk assessment will be used to determine the need for the bed rail.
- A monitoring assessment and a check of the condition of the bed rails should also be performed every time they are used.
- Where the use of bed rails is uncommon you should always seek advice from other members of the health care team who have particular expertise and training in their use.
- Bed rails **MUST NOT** be regarded as moving & handling equipment.
- Equipment such as bed grab handles, bed sticks or bed levers are pieces of equipment designed to assist a person either transferring in and out of bed or helping them move whilst in bed. They are not designed to prevent a person falling from their bed and they should not be used as bed rails (MHRA 2012).
- Any individuals who need equipment fitting to their bed for the purpose of aiding moving and handling, e.g. bed grab rails, must be referred to occupational therapy or physiotherapy for assessment.
- Most bed rails are designed to be fitted for use of adults.
- The MHRA (2012) maintains that a risk assessment should always be carried out on the suitability of the rail for an individual child, as the bar spacing and other dimensions will need to be reduced.

# Chapter Two

***Health and Safety Laws***

As a care worker, maintaining the health and safety of people in your care is crucially important. The legislation or laws relating to health and safety within care work are complex but there is a need for you to have an understanding of these laws in order to protect people from injury or ill health.

In addition, it is important to remember, that these laws are not just there to protect the people you support, or visitors but for your health and safety as well as your colleagues.

**Note: The Health and Safety Executive (HSE) is the UK's national regulator for workplace health and safety. It works closely with specialist groups such as the MHRA to ensure safety is paramount within the workplace.**

**It provides information, advice and training. It helps to produce codes of practice and regulation, plays a vital role in inspection, investigation and enforcement of health and safety laws and regulations.**

**The HSE has published guidance on the safe use of bed rails (SIM 07/2012/06). For more information on health and safety matters go to www.hse.gov.uk**

Two important pieces of legislation which influence the correct use of bed rails and place legal duties on both employers and employees are:

- The Health and Safety at Work Act (1974) (HSWA)
- The Management of the Health and Safety at Work Regulations 1999 (MHSWR)

In accordance with the HSWA employers need to ensure that reasonably practicable measures are in place to avoid exposing people to risks which may affect their health and safety.

Also, under this act employees such as care workers must take reasonable care for the health and safety of themselves and others, and co-operate with their employer on health and safety matters

The MHSWR require employers to undertake suitable assessments of the risks to the health and safety of those within its responsibility such as you and the people you support. This would include the use of a formalized bed rail risk assessment tool or form to identify any potential risks or any hazards in the use of bed rails.

In practical terms within your workplace, your manager may ask you to undertake a bed rails risk assessment with the help of your colleagues.

Any fitting and use of bed rails should always comply with the Provision and Use of Work Equipment Regulations 1998 (PUWER) as well as guidance produced by MHRA, NPSA and the Health and Safety Executive (HSE).

Before your manager asks you to complete this assessment, they must make sure that you and your colleagues have received appropriate training in selecting, fitting, monitoring and checking bed rails.

You have a duty of care to comply with the policies and procedures where you work. If however you are unsure or concerned about any aspect of bed rails you have a responsibility to inform your supervisor or manager as soon as you can.

### *Significant Health and Safety Legislation (on Bed Rails)*

- Health and Safety at Work Act (HSWA) (1974)
- The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (R.I.D.D.O.R) (1995)
- The Management of Health and Safety at Work Regulations (MHSWR) (1999)
- The Provision and Use of Work Equipment Regulations (PUWER) (1998)

### *Accident Reporting*

Despite all best efforts, unfortunate accidents can happen within the workplace. Under the Reporting of Injuries, Diseases, and Dangerous Occurrences Regulations (R.I.D.D.O.R) (1995) there is a requirement for employers to swiftly report to the appropriate authority's specific accidents, near misses and incidents of ill health.

**R.I.D.D.O.R** requires managers to report the following:

- Accidental deaths
- Injuries resulting in absence from work over seven days
- Members of the public needing hospital treatment immediately (this would include people you support)
- Any type of injury / dangerous occurrence or disease specified by law

Where there are significant incidents or near misses involving bed rails, the cause should be investigated and the correct actions to prevent further accidents or near misses happening put in place.

This will provide an opportunity for all the staff to use the experience as a learning opportunity. As a care worker you have an important role in the accurate recording and reporting of any incidents that you have been involved in while using bed rails.

A prompt response by you and the information you give would enable your manager to take the necessary action to hopefully remedy the situation.

Where a person is injured, relatives and significant others should be informed.

In addition to R.I.D.D.O.R requirements as bed rails are classified as medical devices the MHRA should be notified via their adverse incident centre in the event of a serious bed rail incident as they may want to conduct an investigation.

***Care Quality Commission (CQC)***

As a care worker you may have experienced your work place being inspected by the Care Quality Commission (CQC).

Under the Health and Social Care Act (2008) their role is to ensure that care providers are providing good care by meeting essential standards or outcomes of quality and safety. It is the responsibility of care providers to provide evidence that demonstrates compliance in meeting these outcomes.

For example, **Outcome 10** stipulates that people should be safe from harm, including the use of unsafe or unsuitable equipment. Therefore, managers must ensure the overall safety, availability and suitability of equipment.

The CQC also requires managers to notify them of incidents such as injuries arising from the use of bed rails.

# Chapter Three

***Willingness, Choice and Capability***

While bed rails can be successful in reducing falls from beds, they are not appropriate for everyone and the decision to use bed rails should be made in the same way as any other decisions regarding care or treatment.

Bed rails must be fitted for the right reasons and care staff must not be tempted to use them for their own purposes. All people should have a documented bed risk assessment of their needs which includes maintaining a safe environment.

**Note: Bed rails should only be used as a last resort after a full risk assessment and all alternative methods have been considered.**

In some situations, bed rails may be used by care staff as a method of `containing' or `managing' a person. It can be interpreted that this is being done in the best interests of the health and safety of the person. This practice may be used particularly in situations where the person is left for periods without observation or regular checking.

Without a rigorous risk assessment being performed the use of bed rails could be considered as a significant form of restraint as it is clearly understood that every person who is not subject to legal detention has the right to be free from the use of unauthorized force to restrict their movement (Molasiotis 1995).

Bed rails should not be used in place of supervision due to issues of short staffing.

Confused and agitated people who are mobile can be very difficult to manage and may need to be watched continuously. If this level of supervision is not able to be achieved, then other alternatives must be considered. This could include:

- A low bed if possible
- A crash mattress to be place on the floor

Bed rails are not designed or intended to be used to;

- Limit the freedom of the person by preventing them for leaving their beds voluntarily

- Restrain people who may have unpredictable erratic, repetitive or violent movements

Applying a restraint to anyone, whatever their mental or physical condition, may be seen as a denial of this basic human right and there is evidence that the use of bed rails, or other barriers to restrict movement, can cause serious injury and even death (NPSA 2007).

Apart from the potential for physical harm, using bed rails to restrain someone will fundamentally affect their rights of empowerment and choice. In adults at risk this is abuse and the inappropriate use of bed rails will become a significant safeguarding issue. Care

staff have a duty of care to prevent abuse occurring and where there is evidence of poor safeguarding practices they must report their concerns immediately.

Care staff who do this are protected under the Public Interest Disclosure Act (1998) and managers must take direct actions to ensure the practice is investigated and stopped.

Under the Human Rights Act (2000) and the Mental Capacity Act (MCA) (2005) individuals have a fundamental legal and ethical right to determine what happens to them and where possible will be involved in all stages of their care.

This includes making the decision whether or not to have bed rails. In order that the person makes an informed decision, you will need to give them sufficient information about the benefits and risks of having bed rails.

Care staff must make sure that any decision taken by the person is not made under duress either from those caring for them or from family or friends. As care staff any inappropriate use of bed rails may be interpreted as a form of abuse, which can result in civil or criminal prosecution.

Based on key principles, the Mental Capacity Act (2005) (MCA) was designed to protect the rights of adults at risk who might otherwise be prevented from making their own choices and decision.

***Purposes and objects of the Mental Capacity Act (2005)***

- To maintain individual independence
- Individuals are treated fairly without prejudice or discrimination
- To assume all individuals are competent to make decisions
- To give individuals every opportunity to make own decisions
- To act in the `best interests of the individual when required
- To care for the individual in the least restrictive way

The overriding principle of the MCA is that all adults must be assumed to have the capacity to make decisions and take actions for themselves unless after being provided with appropriate support and information it can be shown that they do not.

Therefore, it is vital that care workers ensure that reasonable steps are taken to maintain the independence of the person and respect their rights to make their own decisions about their care. Even if the decision is regarded by others as an unwise one (Mental Capacity Act (2005)

Any decisions concerning the use of bed rails should be regularly reviewed, updated and reassessed according to any alterations in the individual's health condition or changes in their choices.

These changes must always be accurately documented in the person's care notes and mental capacity assessment form and should be communicated to the rest of the care team and family members where appropriate.

***Capacity Assessment***

Independence must be promoted wherever possible. Individuals should be encouraged to decide whether or not to have bed rails if they have capacity to make that decision.
Having capacity is the ability to understand and weigh up the risks and benefits of bed rails once these have been carefully explained to them.

Care workers must use effective communication skills so that they can learn about a person's likes, dislikes, wishes and normal behaviour. You have a valuable role in discussing the benefits and risks of bed rails with the person using both verbal and non-verbal communication strategies, these conversations can also include relatives.

Though this dialogue is obviously crucial in ensuring care is delivered using a person-centred approach, care staff will need to be aware that family members can often have differing expectations as to the use of bed rails.

Relatives may view the fitting of bed rails as a necessity for maintaining the safety of their family member, not fully understanding the potential risks of bed rails and that the use of them may not be the appropriate option for their relative at that stage.

This requires you to have a sensitive and compassionate approach as every effort must be made to involve the family in the decision-making process and for care staff to explain the policy and guidance on bed rails in simple terms without the use of medical jargon.

Although involving the family is good practice, relatives and care staff cannot make absolute decisions for adults except in certain circumstances where they hold what is known as lasting power of attorney extending to healthcare decisions under the Mental Capacity Act 2005.

When a person lacks capacity, the use of bed rails should be discussed with and explained to the relative or carer. Ideally agreement to use bed rails should be obtained at this stage.

If the person lacks capacity, staff have a duty of care and must decide if bed rails are in their best interests.

**Note: You must be aware that people who lack capacity could be at greater risk from falling from using bed rails than the alternatives.**

Most decisions about the use of bed rails can be regarded as a balance between competing risks.

When deciding to use bed rails, the aim must be to achieve a balance between minimising the risk of harm to or by the person and seeking to maintain their dignity and personal freedom while promoting empowerment and enabling freedom of choice.

In unison with the bed rail risk assessment, it may be necessary to undertake a review under the Deprivation of Liberty Safeguards (DoLS).

These are safeguards that need to be put in place if it is considered that a person's liberty may be affected by using bed rails. If it is judged that this may occur, then your manager will need to perform an assessment and seek authorisation from the relevant authorities.

Further information on the deprivation of liberty safeguards can be found at www.dh.gov.uk/health/2012/09/dolsfactsheet

# Chapter Four

***Possible dangers and risks of bed rails***

Bed rails when used correctly and safely will prevent people falling out of bed.

They are not intended to be used for:

- Limiting the freedom of movement of a person
- Restraining a person
- Equipment for moving and handling such as grab handles

The decision-making process surrounding the use of bed rails can be complex and requires a thorough person-centred risk assessment undertaken by a competent person.

They can be used in combination with an overall falls' prevention programme, however people who may be at risk of falling while mobilizing may not necessarily be at risk of falling from their bed and vice versa so any decision to use bed rails must be on an individualised basis.

Prior to using bed rails care workers must consider the following points:

- Bed rails are not suitable for all people
- Their use must be individually risk assessed and re-assessed as changes dictate
- Using them is not without potential risks and hazards
- Safety is paramount in all circumstances
- Correct selection, fitting, maintenance and regular review are crucial

Contrary to the objective of preventing falls from beds, in some situations rather than preventing injury to the person, bed rails have been responsible for causing them.

There have been a number of incidents and accidents involving bed rails over the years both in the private health sector and the NHS. Some of which have tragically resulted in the death of the person.

These have been well documented and have highlighted the need for all care staff to be aware of the risks and hazards associated with the use of bed rails and importantly how to use them correctly and safely.

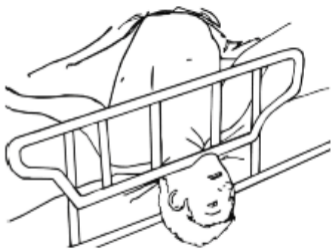
**Note: Accident data from R.I.D.D.O.R reveal that from 2001 to 2009 there were 21 bed related deaths as well as numerous injuries connected with the use of bed rails**

***The risks of entrapment***

The most serious hazard of using bed rails is what is known as entrapment. This can be a potentially fatal consequence of having unacceptable and dangerous gaps between the bed rails and mattress and can result in the person suffocating to death.

It happens when a person's head gets trapped between the bed rails or the bars and the mattress. The person's neck can also become lodged between the end of the bed rail and the headboard. Suffocation can also be caused when a person slips through the space between the sides of the mattress and the bed rail.

The integral type of bed has been shown to be involved in far fewer incidents than the third-party type; therefore these are the preferred option for safety reasons.



If bed rails are being used in the course of a work activity, it is absolutely clear that it's the responsibility of the employer to ensure that they are safe to use.
The HSE advocate strong penalties should it be proved that failings of bed rails are the cause of injury.

In some cases, failure to sufficiently demonstrate appreciation of the risks and dangers of bed rails by employees of care establishments have resulted in the HSE taking strong enforcement actions under health and safety legislation.

**Note: In 2011, two separate care home owners were prosecuted and received large fines ranging from £ 65,000 to £70,000 following entrapment fatalities involving bed rails. Sadly, these were entirely preventable deaths and were due to people being allowed to become trapped in between the bed rail and the mattress leading to their suffocation.**

In both cases, these failures in the duty of care were attributed to:

- Poor staff training
- Lack of risk assessments and risk management systems in place
- Poor or unsuitable equipment
- Inadequate monitoring and maintenance

The key elements of the safe use of bed rails are to ensure they are used:

1. For the right person
2. For the right bed
3. In the right way

Whilst entrapment is the most dangerous threat to the life of the person, there are other potential risks associated with the use of bed rails that you will have to be aware of. While not an exhaustive list these risks can be grouped into person and equipment related risks.

***Individual risks***

- Falls from bed
- Entrapment/Injury
- Anxiety

**Cause:**

- People climbing over / around the bed rails and falling from a greater height, especially in those who are agile enough, confused / agitated to climb over or have communication difficulties.
- People being able to unlatch shake or push away the bed rails, especially in those with cognitive difficulties such as dementia or learning disabilities.
- People with small heads could get these trapped in between the bar spaces if not assessed correctly.
- People with uncontrolled involuntary movements such as those with cerebral palsy, Parkinson's disease could injure themselves by hitting the bed rail or trapping their limbs in between the bed rails. Padded covers called bumpers can be used to prevent this type of injury. Bumpers must be air-permeable.
- Fear of confinement may increase the risk of the person trying to get out.

**Bed rails are not suitable in these situations so alternative options must be considered.**

***Equipment Risks***

- Gaps between bed rails
- Ineffective height of bed rails
- Poor fitting/ adjustment of bed rails
- Poorly maintained equipment
- Poor design

**Causes**

- Bed rails are designed to be fitted in strict accordance with specific dimensions of height, length and bar spacing. Failure to fit bed rails in line with the manufacturer's instructions can result in gaps between bed / mattress and bed rails leading to potential entrapment
- A mattress overlay being placed on top of an existing mattress will increase its overall height. This will make the bed rails ineffective in preventing the person rolling out over the top of them. Extra height bed rails must be used in these situations
- Failure to ensure that bed rails are fitted correctly and adjusted accurately will produce gaps creating the risk of entrapment. Bed rails must always be locked securely when in the upright position.
- Use of a light/air pressure relieving mattresses will fail to keep certain types of divan bed rails in position. This can potentially lead to tipping over of the mattress and the person.
- Entrapment risk gaps can be caused if broken, or loose bed rail fixings/brackets are applied. All mechanical failure must be reported. Faulty bed rails must **NEVER** be used
- Equipment must be regularly checked and serviced by a competent person. A maintenance programme must be in place when bed rails are being used.
- Over-sized spacing between the bed rails could result in entrapment.

# Chapter Five

***Risk Assessment***

Prior to setting up a bed rail, a risk assessment must be carried out to determine if bed rails are needed to protect the person from falling out of bed and it is safe to do so. Using bed rails without a risk assessment will be considered as unacceptable and as the case below shows can lead to possible fatal consequences.

**Note: In 2007 a large health care group was fined £175,000 for the death of a resident. The severely disabled resident suffocated after being trapped in between the bed rails and the mattress. This was because of the failure of the company to ensure a risk assessment had been undertaken.**

In order to have an overall baseline for using bed rails a risk assessment must be completed, signed and dated within 24 hours of any new admission to a care home.

This assessment must be re -evaluated with any change in the person's condition, or if there has been any incident relating to bed rail safety as this may require additions or removal of bed rails. The person undertaking this assessment must balance the risks posed by their use against the benefits for the individual.

***Risk assessment techniques***

To help the person undertaking the assessment, there are a variety of bed rails assessment tools available which will pose a series of risk balance questions to provide evidence of the decision-making process.

Risk balance tools are helpful in giving an indication whether risk factors suggest the need for bed rails. They can be used as a quick filter for determining further actions/ assessments or possible alternatives to the use of bed rails.

A traffic light system can be used to help the decision-making process or a series of initial questions.
The risk assessment will need to identify if bed rails are a solution to a person's problem or could the fitting of bed rails become the problem itself? The assessment will need to consider if the bed rail height is appropriate and does the person's physical condition or behaviour increase the risk of entrapment.

In addition, the care worker must be able to determine if the bed rails are fitted correctly or is it a potential health and safety risk.
The MHRA (2011) has produced a safe use of bed rails poster which can be downloaded at www.mhra.gov.uk

| | |
|---|---|
| People who are unconscious or completely immobile | Bed rails to be used |
| People who request bedrails or use bedrails at home | Bed rails to be used |
| People may be unconscious, drowsy, have visual difficulties | Bed rails may be used with care |
| People who **are not likely** to attempt to get out of bed alone | Bed rails may be used with care |
| People who **are likely** to attempt to get out of bed alone | Bed rails not to be used |
| People who are independently mobile | Bed rails not to be used |

| ***The risk of Not using bedrails*** | ***The risk of Using bed rails*** |
|---|---|
| **How likely is it that the client will fall out of the bed if bed rails are not in place?**<br><br>People may be more likely to slip, roll, slide or fall out of bed if they have mobility or eyesight problems or are confused or drowsy.<br><br>**How likely is it that the person would be injured in a fall from the bed?**<br><br>Injury from falls from bed may be more likely and more serious for people who are elderly or very ill.<br><br>**Will the person feel anxious if the bed rails are not in place?**<br><br>Some people may be fearful even though their actual risk of falling out of bed is low. | **Would bed rails prevent the person from being independent?**<br><br>Yes / No<br><br>**Might the person climb over the bed rails?**<br><br>An injury's severity can be increased if the person climbs over a bedrail and falls from a greater height.<br><br>**Could the person injure themselves on the bed rails?**<br><br>Bed rails can cause injury if the person knocks themselves on them or traps their legs or arms between them.<br><br>**Could using bedrails cause the person distress?**<br><br>Bedrails may cause distress to some people who feel trapped by them |
| Bed rails **are recommended** if the risks above are greater than the risks on the right column | Bed rail use is **not** recommended if the risks above are greater than the risks on the left column. |

A person-centred bed rails risk assessment should consider the following needs:

- Person's physical needs
- Social/Intellectual needs
- Environment/Equipment needs
- Person's psychological needs

To assist you with a person bed rail assessment a standard assessment form can be used. This form should be kept in the individual care plan as evidence to justify your decisions and actions. Although not an exhaustive list, the form below gives you an example of what should be used on a bed rails risk assessment form.

| Risk Assessment form for the use of bed rails | Circle | Comments |
|---|---|---|
| Is the person at risk of falling from the bed (Risk factors include age, mobility, uncontrolled movements, history of falls, dementia, physical condition (cerebral palsy) | Yes / No | |
| Is the bed rail the most appropriate solution? | Yes / No | |
| Is there any risk from entrapment or injury? | Yes / No | |
| Is the person agitated or confused? | Yes / No | |
| Does the person need to get out of bed during the night? | | |
| Is the mattress in good condition? | Yes / No | |
| What is the height, length and type of bed rails & mattress | | |
| Has the person requested bed rails? Are they able to free trapped limbs, mobile in bed, fully orientated | Yes / No | |
| What type of cover is required? | Yes / No | |
| Is the use of bed rails likely to cause distress? | Yes / No | |
| Are the bed rails suitable for the bed to which they will be attached | Yes / No | |

By using the risk assessment tools just have a think about and try to decide if bed rails should be fitted in the following example.

***Case study:***

Jim, 79, is a new admission to a care home for assessment and respite care. He suffers from dementia, has poor eyesight, and has fallen twice while walking in town. His sister who he lives with has found him on the floor by his bed on occasion, she thinks he had rolled over and fallen out of his bed. Jim has no idea how he got there.

At night Jim was found to be confused and restless, wanting to get out of bed saying that he needed to get ready for work. Jim's sister thinks for his own safety it would be a good idea for him to have bed rails in place. Jim finds it too difficult to decide.

***What would your decision be?***

***Documentation***

Accurate documentation of a bed rails risk assessment is crucial in ensuring the decisions surrounding their use are correctly evidenced. The risk assessment must be:

- Written and held in the individual's care records so it can be accessed by all the members of the multidisciplinary team.
- Used to complete an individualised care plan. This care plan should detail activities of how the bed rails are to be used or not.
- Reviewed and evaluated at least every month or as changes require.

Further information on bed rail risk assessment documentation and health care records can be obtained from www.standexsystems.co.uk

## Chapter Six

### *Choosing, fitting and using bed rails*

Once a risk assessment has been completed and an informed decision has been made to use bed rails on a person's bed the next stage is to ensure safe and correct selection and the fitting of the bed rail. Inappropriate, incorrect, or poorly maintained bed rails can cause gaps which do not prevent people slipping underneath, through or past the bed rail. These gaps are extremely dangerous as they can lead to entrapment.

A bed rail must be chosen that is suitable for use in combination with:

- Individual
- Mattress
- Bed

Bed rails that are not in matched pairs, have missing parts or are in poor condition must not be used and must be reported.

Bed rails must always be fitted in accordance with strict guidelines and standards and always used according to the instructions of the manufacturers. These British and European standards set the dimensions required for bed rail design and fitting. The current standards are set by BS EN 6061-2-52:2010.

### *Choosing*

There are a variety of beds, mattresses and different types of bed rails available.

It's important to make sure that they are compatible with each other and are suitable for the needs of the person.

### *Available beds*

- Divan
- Wooden bed frame
- Metal bed frame
- Hospital bed/adjustable/profiling

Entrapment gaps must be avoided at all times; therefore bed rails must meet all current regulations for their dimensions and spacing between acceptable gaps and it is essential that bed rails are fitted correctly to an appropriate bed mattress and base allowing safe use.

***Mattress Measurement***

Before fitting bed rails the mattress dimensions must be taken. These include length, width and height. If the mattress is not the right size, the bed rails may not fit properly and create entrapment gaps.

***Types of mattress***

- Standard
- Standard mattress with overlay
- Air mattress
- Lightweight foam mattress

If a standard mattress is replaced with a foam or air mattress on a divan bed, the whole bed rails assembly, including the mattress and person can tip off the bed when the person rolls against the bed rail. This occurs because the weight of a standard traditional divan mattress is relied on to hold the bed rail system securely in place.

The hazard of entrapment between the side face of the mattress and the bed rails can be caused due to the soft, easily compressible nature of the mattress edge. If an air mattress is going to be used then further advice must be sought from the supplier.

If bed rails are needed, then headboards and footboards should be in place as without these entrapment gaps could be created. Due to their differing dimensions beds with ornamental posts should also be avoided as they too could create an entrapment hazard.

A split bed rail (one pair at the head end and one pair at the foot end) also requires care when being used. The space between the head and foot end rails may vary according to the bed profile adjustment. In some designs entrapment risks may be created when the bed is adjusted to a profile other than flat. Advice should be sought from the bed manufacturers if there are any concerns.

The practice of using only one side of a pair of third party bed rails when the other side is against a wall should be avoided as this can cause the single rail to become insecure and move creating entrapment gaps. For stability there should always be one on each side of the bed.
If beds are being moved, the bed rails should not be used as handholds when moving them. This could cause the bedrails to become insecure or move the mattress out of position. If the bed has been moved, then the system should be checked again.

***Decontaminating***

Bed rails should be cleaned in between use or if contaminated with blood and body fluids in line with local infection control policy. Bed rails need to be easy to clean, ideally using detergent and water solution or detergent wipes. Once decontaminated they should be stored safely and hygienically when not in use.

***Fitting safely***

The correct fitting of bed rails is essential if risks and potential accidents are to be prevented. The fitting of bed rails is not rocket science but needs to be carried out with due diligence according to current British standards, manufacturer's instructions and consistent with good practice guidelines.

The fitting of bed rails should normally be undertaken by those who are trained and competent in doing so. The following checklist should be used for the assessment of bed rail safety.

***Checklist for bed rails fitting***

| | | |
|---|---|---|
| Are the bed rails fitted in accordance with manufacturer's instructions and the British and European Standard (BS EN 6061-2-52:2010) | Yes | No |
| Is the bed secure? Are the mounting clamps that hold the bed rail in place correctly positioned? Do the bed rails feel secure when raised? | Yes | No |
| If using a profiling bed are the bed rails suitable for the profiling mechanism of the bed? | Yes | No |
| There is no gap between the lower bar of the bed rails and the top of the mattress that could cause entrapment | Yes | No |
| If the mattress compresses easily at the edge, there is no risk of entrapment | Yes | No |
| Is there a gap between the bed rail and the side of the mattress that will allow the person's head or body to pass through? | Yes | No |
| Is there a gap at the end of the bed and headboard/foot of the bed which will cause entrapment? | Yes | No |
| Does the height of a mattress mean an extra high bed rail is needed? | Yes | No |
| Is the weight of the mattress enough to keep the bed in place? | Yes | No |
| Equipment is in good condition, e.g. no sharp edges, rust, or broken fittings? Is there a maintenance schedule in place? Do the bed rails lower and raise with ease? | Yes | No |
| Are bumpers fitted correctly to reduce the risk of entrapment? | Yes | No |
| Do staff know how to use bed rails correctly? | Yes | No |

***Maintenance***

Frequently incidents with bed rails can be caused by lack of maintenance. Therefore, they should be regularly maintained in accordance with the manufacturer's recommendations and local policy. Equipment should be routinely checked for wear and tear. Through regular use, the lowering and raising device of bed rails can become loose or stiff. These problems need to be reported and made safe promptly.

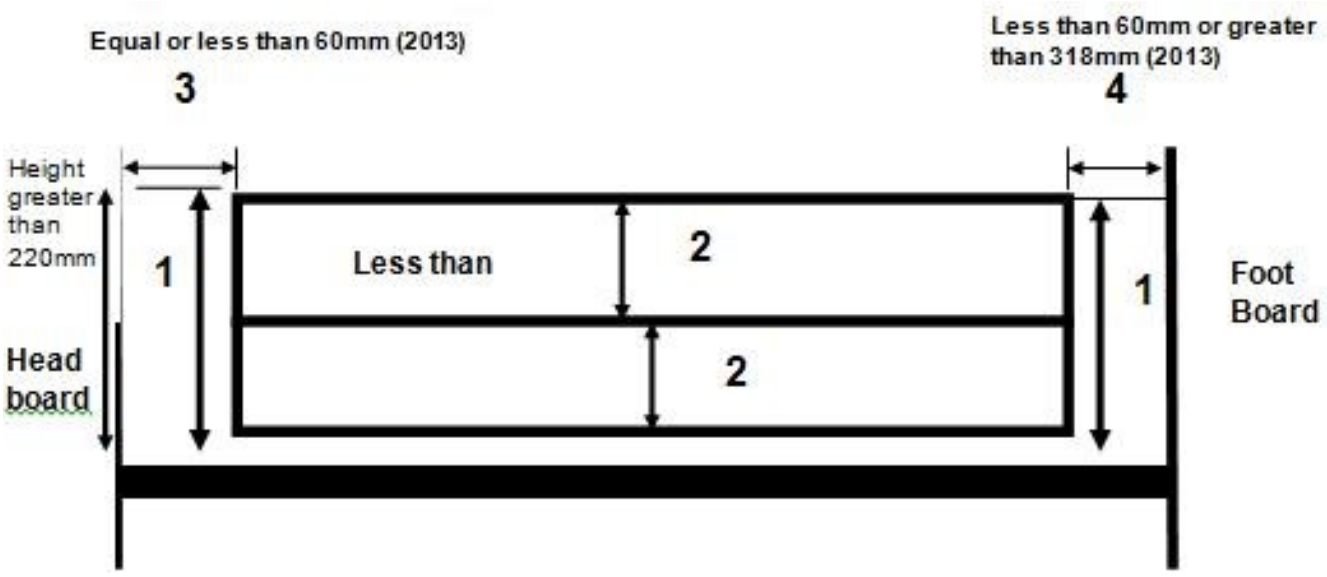
Under no circumstances should faulty bed rails be used. Bed rails found to be unsafe should not be left lying around in store rooms otherwise they could be unwittingly used again by staff having potentially disastrous consequences. These bed rails must be scrapped and completely disposed of.

To prevent bed rail accidents, especially caused through entrapment, bed rails must be designed and positioned in compliance with dimensions set out in British and European Standards (BS EN 6061-2-52:2010).

These refer to bar spacing measurements and acceptable gaps or distances between the bed rails, mattress and bed. These bed rails are only suitable for people over the age of 12. The positioning of bed rails in relationship to the bed and mattress are critical for the safety of the clients and they must be strictly adhered to (NAEP 2011)

***Significant distance maintenance***

These are some of the important recommended measurements and positioning for a bed as set by the British and European standards. These are:



| No | Dimensions | New combined standard from April 2013 |
|---|---|---|
| | | BS EN 60601-2-52:2010 |
| 1 | Height of the top of the bed rail above the mattress without compression and the bed in a flat position | Height should be greater than 220mm |
| 2 | Gaps between elements within the perimeter of the side rail and between the side rail and mattress platform. | This gap must be less than 120mm |
| 3 | Gap between head board and end of side rail | This gap must be equal or less than 60mm only |
| 4 | Distance between the end of the bed rail and the footboard | This gap must be less than 60mm or greater than 318mm |
| For full details of all bed rail dimensional requirements including detachable bedrails contact www.hse.co.uk | | |

Once bed rails are in place, the person needs frequent checking to ensure that they are safe and in a comfortable position. It is vital that they have access to the call bell system and can safely reach for drinks, their bedside locker, and any other personal belongings.

Care must be taken to ensure that anything such as bedclothes, urinary catheters, feeding tubes, cables or mattress covers do not get trapped in the bed rails. Anything trapped in the rails or hinges can prevent bed rails safely locking into place and will put the person at risk. This can lead to potential back injuries for care staff because the bed rail will not lift easily or smoothly.

Bed rails should be removed from the bed if not required and the rails should not be left in the `up' position unless it is clearly stated in the risk assessment and care plan.

If a person is in bed with the bed rails up, before any care is performed, the carers must always lower the bed rails. Leaning across the rails when they are in the upright position will put strain on the care worker's back and may cause injury.

***Bumpers***

Bed rail `bumpers made from soft foam can be used on upright bed rails. When attached correctly these act as padded cushions or enveloping covers and are suitable for preventing impact injuries. They are useful where a person has uncontrolled or unpredictable movements. However, their use should have been included in the risk assessment as they will not necessarily reduce the risk of entrapment and they should be air-permeable so that they don't present a suffocation risk.

Observing people with bed rails should not be treated as a separate issue but as an important part of general observation within your workplace. Regularly checking during the night is crucial when bed rails are in use. Ideally beds with bed rails should be kept at the lowest possible height just in case the person attempts to get out and falls although beds will need to be raised when giving direct care.

People receiving frequent interventions may be more comfortable if their bed is left raised, rather than constantly being raised and lowered. When lowering bed rails care staff must be careful not to trap their hands in between the gaps, this can happen particularly in the concertina type of bed rails.

***Bed rails alternatives***

If the bed rail dimensions cannot be safely achieved with the bed/bed rails, mattress combination, alternatives to bed rails should be considered.

These could include

- Tucked in sheets and blankets
- Bed with variable height used in the lowered position
- Extra low beds
- Soft cushions or 'fall out' mat on the floor to break a fall
- Use of alarm systems or pressure mats to detect that a person is trying to exit the bed.
- Placing a mattress on the floor. This does involve a consideration of moving and handling issues. Where a person is at ground level, a detailed risk assessment using hoisting equipment must be performed.
- Place the individual on special observations, such as one to one care.
- Bedside or positional wedges.

**References**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***Further Reading***


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