

Bed Rails – Procedure for Safe and Effective Use

CLIN-0047-v7

Status: Approved

Document Type: Procedure

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1. Purpose

Following this procedure will help the Trust to:

- Ensure staff understand and follow the procedure for risk assessment of bed rails;
- Comply with National, Medicines and Healthcare Related Products Agency (MHRA) and Local Guidance.
- Reduce harm to patients caused by falling from beds or becoming trapped in bed rails;
- Support patients and staff to make individual decisions around the risks of using and not using bed rails.

Bed rails are used in healthcare to prevent occupants falling out of bed and injuring themselves. Patients in hospital may be at risk of falling from bed for many reasons including poor mobility, dementia or delirium, visual impairment, and the effects of their treatment or medication.

2. Related Documents

[Medical Devices Policy](#)

[Policy for Consent to Examination or Treatment](#)

[Decontamination of Equipment Procedure](#)

3. Scope

3.1. Who this procedure applies to

- This procedure applies to all staff caring for patients in Inpatient areas of Tees, Esk and Wear Valleys NHS Foundation Trust (the Trust).
- Employees of the Trust who work in the community where bed rails are supplied via home loans services, e.g. Medequip or Teesside Community Equipment Stores, should follow the relevant local protocol for using this equipment.

3.2. Roles and responsibilities

Role	Responsibility
Manager	<ul style="list-style-type: none"> Ensuring all staff are aware of and follow this procedure and are aware of their own roles and responsibilities to ensure safe practice.
Modern Matrons	<ul style="list-style-type: none"> Ensuring this procedure is implemented.
Ward Managers	<ul style="list-style-type: none"> Following the procedure and ensuring staff are trained.
Inpatient and Community Employees	<ul style="list-style-type: none"> Nursing staff to undertake assessment for the use of bed rails. Ensure bed rails are used safely and effectively in line with Trust policy and Local Community Policy e.g. TCES+IOTS or Medequip
Back Care Advisor	<ul style="list-style-type: none"> Provide advice for the safe moving and handling of patients where bed rails are used.
Occupational Therapist	<ul style="list-style-type: none"> Provide advice on the safe use of bedrails.

4. Procedure

4.1. Risk assessment

Bed rails should only be used to reduce the risk of a patient accidentally:

- ✓ slipping;
- ✓ sliding;
- ✓ falling or rolling out of a bed. Bed rails used for this purpose are not a form of restraint. Restraint is defined as ‘the intentional restriction of a person’s voluntary movement or behaviour.’



Bed rails:

- ✗ will not prevent a patient leaving their bed and falling elsewhere;
- ✗ are not intended as a moving and handling aid.

A baseline assessment of the patient’s ability to maintain a safe environment should be made and documented immediately on admission to the clinical area. This should be reviewed as indicated in the patients care plan after 2 weeks or if the patient condition changes. An individual risk assessment (see Appendix 1) must be completed prior to bed rail usage with any patient.



Bed rails should not usually be used:

- if the patient is agile enough and/or confused enough, to climb over them;

- if the patient would be independently mobile if the bedrails were not in place.

Bed rails should be considered:

- if the patient is being transported on their bed;
- in areas where patients are recovering from anaesthetic or sedation and are under constant observation (ECT suites).
- Patients who experience severe anxiety may request bed rails to make them feel safe.

Some clinical conditions can mean that clients are at greater risk of injury or entrapment – for example those with:

- acute or chronic confusion showing signs of agitation or challenging behaviours. They are unaware of the risks and limitations imposed by their disabilities;
- involuntary movements or muscle spasms;
- epilepsy;
- micro- or hydrocephalus presenting a particular risk of entrapment;
- sensory impairment who may not be aware of trapped limbs;
- learning disabilities affecting their ability to understand safety issues;
- communication difficulties; unable to understand safety issues or alert others when in danger.

Bed rails should be used if the benefits outweigh the risks.



The risk assessment is intended to highlight the potential risks but does not replace clinical reasoning or judgment. The decision to provide or not provide remains that of the clinician after careful consideration of the risks and benefits to the patient and wherever possible a multidisciplinary approach should be taken.

The behaviour of individual patients can never be completely predicted, and the Trust will be supportive when decisions are made by frontline staff in accordance with this procedure.

4.2. Fitting Bed Rails

The correct fitting of a bed rail is essential to avoid accidents and injuries to patients. Two members of staff must fit bed rails and complete the bed rail fitting checklist (Appendix 3) before the patient occupies the bed to ensure safety. If the bed rails are not fitted by trust staff for example, delivery people, staff must still ensure they are fitted correctly and safe to use.

4.3. Consent

Decisions about bed rails need to be made in the same way as decisions about other aspects of treatment and care as outlined in [Policy for Consent to Examination or Treatment](#)

4.4. Record Keeping

- Record the decision to use or not use bed rails for an inpatient on PARIS or other service specific electronic systems.
- Complete the Trust's bed rails risk assessment tool for each patient and place a copy in the patient's clinical record. Document the rationale to use or not to use bed rails with reference to the risk assessment form. Record any discussions with the patient and carers.
- Document the decision to use bed rails on the patient's intervention plan or care plan and update regularly.
- Record any subsequent reviews, reassessments, discussions and changes in the patients' clinical condition.
- Record the reasons for discontinuing bed rail use following reassessment.

4.5. Ongoing assessment and review



Decisions about bed rails need to be reviewed and changed. **If either bed, mattress, bed occupant or bed rail changes, an immediate reassessment is needed.** Even stable patients in rehabilitation or mental health settings can have rapidly changing needs when physical illness intervenes. Therefore nursing staff should review decisions about bed rails whenever a patient's condition or wishes change, but as a minimum reviewed every 24 hours.

In community settings, home carers should contact the relevant community team if any changes need a review.

4.6. Using bed rails on children's beds

Most bed rails are for use only with adults and adolescents. Suitability of the bed rail for the individual child or small adult **must always** be risk assessed, as bar spacing and other gaps (e.g. between the bed base and mattress/rails) may need to be reduced.



There are no published standards on bed rails for children. MHRA 2012 Guidance recommends that all gaps between the rail bars should be a maximum of 60mm.



When purchasing or making assessments of bed rails for children, seek guidance on suitable rails from the manufacturers and assess their compatibility with the size of the individual and the specific circumstances of use.

A risk assessment must be carried out involving the parent(s)/carer(s) of the child to determine what the child usually sleeps in and what will provide a safe environment for the child. If a cot is used, the cot sides are permanently fixed, and must be used when the child is asleep, or unattended by an adult. The assessment must consider the mobility of the child, and whether they will be likely to climb over the cot sides.

If a child usually sleeps in a bed, the assessment, with the parent(s)/carer(s), should determine whether bed rails are needed to keep the child safe.

4.7. Specialist beds/cot beds

Specialist beds and cot beds can be used for children and adults. These beds can be made-to-measure for the needs of each individual. All beds must be used as per the manufacturer's instructions and a full risk assessment completed before use to comply with MHRA and BS EN60601-2 Standards.

Effectuated decontamination of bed rails and bed bumpers must occur for specialised cleaning refer to Appendix 2 in the Decontamination of Equipment Procedure.

4.8. Using third party bed rails safely e.g. non-integral

Third party bedrails:

- ✓ are not specific to any particular bed model; they are intended to fit a wide range of domestic, divan or metal framed beds from different suppliers;
- ✓ must be assessed for each use to ensure suitability for use with the bed and meeting the dimensions outlined in Appendix 4;
- ✓ should be fixed in matching pairs to the correct sides of the bed and as per manufacturers' instructions.



For all types of bed rail, staff should refer to the MHRA advice for guidance. Web Links are given in [Section 9 - References](#)



Before and during use, all bed rails must be inspected for any signs of damage, faults or cracks. Any defective bed rails must be quarantined and either reported for repair or condemned (as appropriate). Defective bed rails must **NOT** be used and should be disposed of immediately in line with the Trust Medical Devices Policy.

4.9. Using integral bed rails safely

Integral bed rails are those that are incorporated in the bed design and supplied with it or offered as an optional accessory e.g. electric profiling bed. Beds that have integral bed rails must be used as per manufacturers' instructions. Split bed rails must be used with both parts of the bed rail in the upright position.

Bock beds have integral bed rails. When these bed rails are fully elevated and the bed rails locked, they provide a non-collapsible rail. Deaths from non-collapsible rails are a patient safety 'never event'.



All units that use Bock beds must complete a full risk assessment on each patient which may indicate the removal of these bed rails for certain patients.

4.10. Using electric profiling beds safely

Electric profiling beds must be used as per the manufacturer's instructions. Take extra care with profiling beds to ensure there is no possibility of entrapment once the bed is adjusted to a differing profile from horizontal, as potential entrapment hazards can be created in different configurations.

All instructions for the use of hired beds must be handed over to the nurse in charge on arrival.

4.11. Using pressure-relieving mattresses and overlays safely



Staff must consider the combined height of the mattress plus overlay as this increases the overall height. This may allow the patient to roll over the top of the bed rail. The need for extended height bed rails must be assessed for use in this situation.



The hazard of entrapment between the mattress and the bed rails may be exacerbated due to the easily compressed nature of the mattress. A risk assessment must be carried out.

When using a Bariatric bed that requires a pressure-relieving mattress, ensure this is a Bariatric pressure-relieving mattress.

4.12. Bed rail bumpers

Bed rail bumpers, padded accessories or enveloping covers are primarily used to prevent impact injuries. They can also reduce the potential for entrapment when securely fitted to the bed or rail according to the instructions for use. All accessories must be risk assessed to ensure they are fit for purpose. For example mesh bumpers may cause friction burns and breathable materials may need to be considered if there is a risk of asphyxiation. The use of bed rail bumpers is included in the risk assessment.



Bumpers that can move or be compressed introduce entrapment risks.

4.13. Procurement

New beds, bed rails or mattresses can introduce a new risk if they are not fully compatible with existing stock. To reduce the risk, all purchase orders from Trust premises for beds, bed rails or mattresses will be emailed by the supplies department to the Medical Devices team for authorisation. All orders should provide supporting evidence to justify the reason for purchase.

4.14. Incident Reporting



All accidents and injuries involving the use of bed rails are an untoward incident and must be reported immediately.

You must:

- Raise a Datix incident;
- Document the incident on the patient's PARIS record or other service specific electronic system;
- Inform the Patient Safety and Risk Team of all incidents involving bed rails for investigation;
- Report any serious untoward incident due to the use of bed rails to the MHRA;
- Remove all defective equipment from service immediately and quarantine.
- Keep the defective equipment and do not dispose until after any investigation can be undertaken.

5. Definitions

Term	Definition
Integral (split rail)	These types are incorporated into a profiling hospital bed design. These are commonly provided within a hospital setting
Straight rail design	Attaches to profiling beds
Third party	These types are not specific to any particular bed model. They are intended to fit a range of domestic divan or metal framed beds from different suppliers. Sometimes these types may be called Trombone Rails.
Bumpers	These are padded covers that fit over the bed safety rails. Their function is to reduce the risk of injuries caused by limbs or head striking the metal rail
Extended Height Bed Rails	Either an extra height rail or an extender bar can be fitted to a compatible rail

6. How this procedure will be implemented

- This policy will be published on the Trust's intranet and external website.
- Line managers will disseminate this policy to all Trust employees through a line management briefing.

7. How the implementation of this procedure will be monitored

A bed rail audit will be carried out in all inpatient areas that use bed rails to monitor compliance with this policy.

Results will be discussed at the Medical Devices Group.

8. References

- MHRA Device Bulletin DB2006(06) (2006) *The Safe Use of Bed Rails* 2013: <https://www.gov.uk/government/publications/bed-rails-management-and-safe-use>
- MHRA Device Alert 2007/009 (2007) *Beds Rails and Grab Handles* www.mhra.gov.uk
- NPSA Safer practice notice *Using Bed Rails Safely and Effectively* www.npsa.nhs.uk
- NPSA resources to support implementation of safer practice notice *Using Bed Rails Safely and Effectively* www.npsa.nhs.uk
- NPSA (2007) Slips, Trips and Falls in hospitals www.npsa.nhs.uk
- NICE (2004) Falls: the assessment and prevention of falls in Older People.

9. Document control

Date of approval:	05 December 2017	
Next review date:	05 December 2021	
This document replaces:	CLIN/0047/V4.5 Using Bed Rails Safely and Effectively	
Lead:	Name	Title
	Louis Bell	Senior Back Care Advisor
Members of working party:	Name	Title
	Emma Rolfe	Lead IPC Senior Nurse
	Alison Bullock Amanda Ebdon	
This document has been agreed and accepted by: (Director)	Name	Title
	Elizabeth Moody	Director of Nursing & Governance
This document was approved by:	Name of committee/group	Date
	Medical Devices Committee	05 December 2017
An equality analysis was completed on this document on:	25 August 2017	

Change record

Version	Date	Amendment details	Status
6	05 Dec 2017		Published
6	Oct 2020	Review date extended to 05 June 2021	Published
6	06 July 2021	Review date extended to 05 Dec 2021	Published

Equality Analysis Screening Form

Please note; The Equality Analysis Policy and Equality Analysis Guidance can be found on InTouch on the policies page

Name of Service area, Directorate/Department i.e. substance misuse, corporate, finance etc.	Medical Devices Committee			
Name of responsible person and job title	Louis Bell, Senior Back Care Advisor			
Name of working party, to include any other individuals, agencies or groups involved in this analysis	Louis Bell, Amanda Ebdon, Allison Bullock and the Medical Devices Committee			
Policy (document/service) name	CLIN/0047/v Using Bed Rails Safely and Effectively Procedure			
Is the area being assessed a;	Policy/Strategy	√	Service/Business plan	Project
	Procedure/Guidance			Code of practice
	Other – Please state			
Geographical area	Trustwide			
Aims and objectives	To set standards in practice to ensure the delivery of patient care is carried out safely and effectively by trust staff.			
Start date of Equality Analysis Screening (This is the date you are asked to write or review the document/service etc.)	25 th April 2017			
End date of Equality Analysis Screening (This is when you have completed the analysis and it is ready to go to EMT to be approved)	25 th April 2017			

You must contact the EDHR team as soon as possible where you identify a negative impact. Please ring Sarah Jay on 0191 3336267/3542

1. Who does the Policy, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan benefit?					
Trust staff and patients					
2. Will the Policy, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan impact negatively on any of the protected characteristic groups below?					
Race (including Gypsy and Traveller)	Yes/No No	Disability (includes physical, learning, mental health, sensory and medical disabilities)	Yes/No No	Gender (Men, women and gender neutral etc.)	Yes/No No
Gender reassignment (Transgender and gender identity)	Yes/No No	Sexual Orientation (Lesbian, Gay, Bisexual and Heterosexual etc.)	Yes/No No	Age (includes, young people, older people – people of all ages)	Yes/No No
Religion or Belief (includes faith groups, atheism and philosophical belief's)	Yes/No No	Pregnancy and Maternity (includes pregnancy, women who are breastfeeding and women on maternity leave)	Yes/No No	Marriage and Civil Partnership (includes opposite and same sex couples who are married or civil partners)	Yes/No No
<p>Yes – Please describe anticipated negative impact/s</p> <p>No – Please describe positive impacts/s - No barriers to access or implementing this policy</p>					

3. Have you considered other sources of information such as; legislation, codes of practice, best practice, nice guidelines, CQC reports or feedback etc.? If 'No', why not?	Yes			
Sources of Information may include: <ul style="list-style-type: none"> • Feedback from equality bodies, Care Quality Commission, Equality and Human Rights Commission, etc. • Investigation findings • Trust Strategic Direction • Data collection/analysis • National Guidance/Reports 	<ul style="list-style-type: none"> • Staff grievances • Media • Community Consultation/Consultation Groups • Internal Consultation • Research • Other (Please state below) 			
4. Have you engaged or consulted with service users, carers, staff and other stakeholders including people from the following protected groups?: Race, Disability, Gender, Gender reassignment (Trans), Sexual Orientation (LGB), Religion or Belief, Age, Pregnancy and Maternity or Marriage and Civil Partnership				
Yes – Please describe the engagement and involvement that has taken place				
We have consulted with a range of Trust staff with knowledge of bed rails and their use				

No – Please describe future plans that you may have to engage and involve people from different groups

5. As part of this equality analysis have any training needs/service needs been identified?

No	Please describe the identified training needs/service needs below Not relevant to this procedure
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A training need has been identified for;

Trust staff	Yes/No No	Service users	Yes/No No	Contractors or other outside agencies	Yes/No No
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Make sure that you have checked the information and that you are comfortable that additional evidence can provided if you are required to do so

The completed EA has been signed off by: You the Policy owner/manager: Type name: Louis Bell	Date: 25/8/17
--	---------------

Your reporting (line) manager: Type name: Angela Ridley	Date: 25/8/17
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If you need further advice or information on equality analysis, the EDHR team host surgeries to support you in this process, to book on and find out more please call: 0191 3336267/3046

APPENDIX 1

Risk Assessment Tool for Provision of Bed Safety Rails

This assessment tool is an aid to assist your clinical judgement in making decisions about the safe and appropriate use of bed rails. It is not a prescriptive scoring system.

NHS No _____

Client Name _____ DOB _____ Height _____ Weight _____

Ward/Unit _____ NHS No _____

Assessor Name _____ Title _____ Date _____

RISK ASSESSMENT CHECKLIST	Risk		Comments
	Y	N	
Existing Equipment			
Have alternative measures been considered? e.g. Using a mattress on the floor, High- low beds, Telecare devices, Posey wedges, Non metal bed rails			
Does the client have a wooden slatted based or metal framed (non-hospital type) bed			Bed rails not suitable
Does the client have a divan? Consider length, width and height			See dimensions guide
What mattress is on the bed? Foam, sprung or pressure relieving?			
What is the overall height of the mattress(s)?			
Social Situation	Y	N	Comments
Will the client be left in bed for prolonged periods of time during the day or night?			
Will the rails be in use day and night?			

Assessment Checklist – The Client	Y	N	Comments
Has the client fallen out of bed and why?			
Why is client trying to get out of bed?			
Did the client and/or their carer request the Bed rails and why?			
Do they have a medical condition that affects their sleeping position?			
What is the client's preferred sleeping position?			
Can the client transfer into and out of the bed during the day and night?			
Does the client need to get out of bed during the day and night?			
Would the client be able to raise and lower the bed rails independently?			
Is the client confused or agitated or present with challenging behaviour?			
Is the clients head or body small enough to pass through and become trapped in the bed rails or any gap between the mattress and the rail, headboard or footboard?			See dimensions guide
Does the client suffer from involuntary movement or seizures that may lead to limb strike?			Do bumpers reduce risk of injury?
Will the client attempt to climb over the bed rails or out of the bottom of the bed?			If yes do not issue
Does the client understand why and how to safely use the bed rails?			

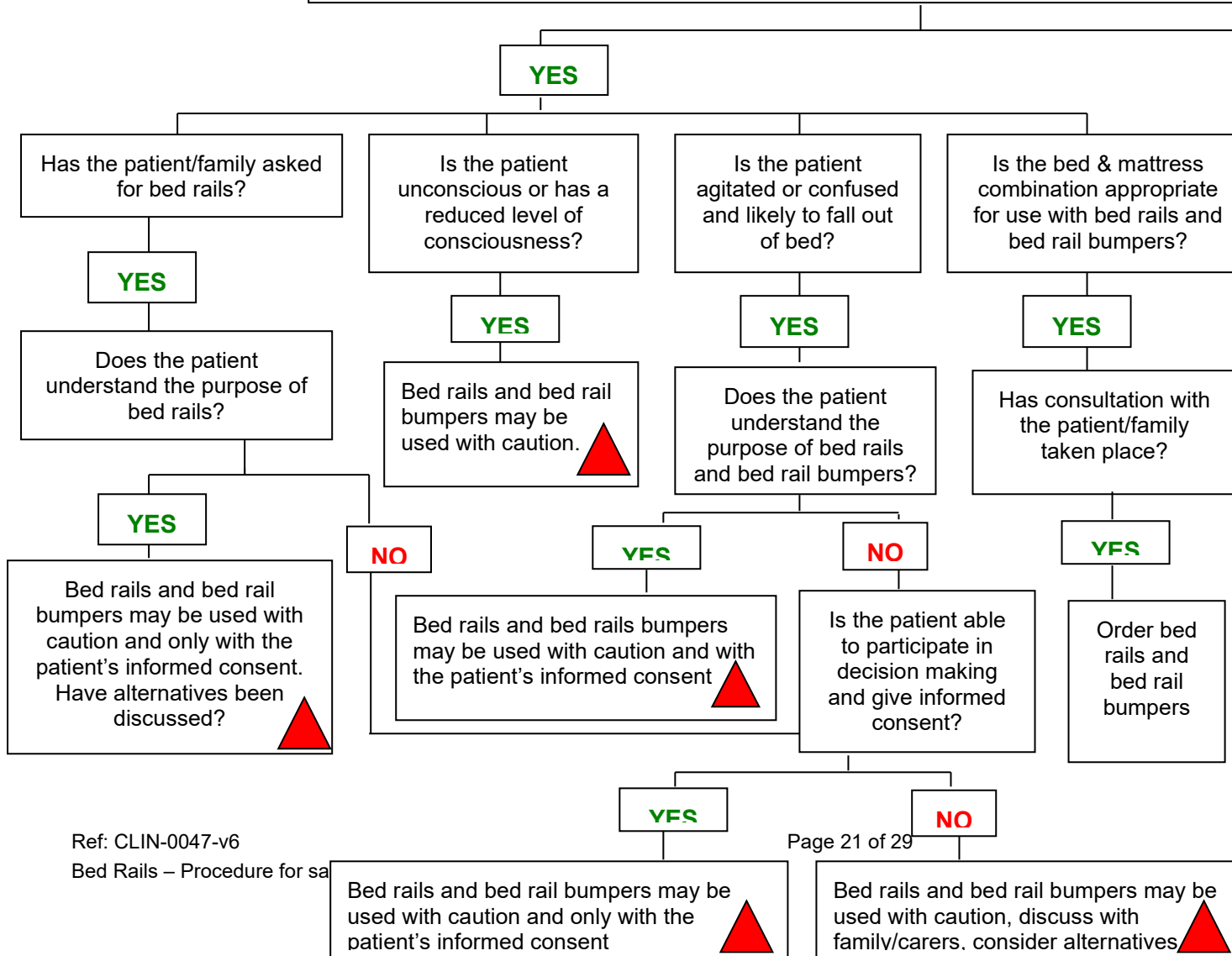
Assessment Checklist – The Environment	Y	N	Comments
Does the client use a mattress variator?			Do not use bed safety rails with a mattress variator
Does the client use a pillow lifter?			? Risk of falling over rails when raised into a sitting position
Does the client have other equipment that may interfere with access to and operation of the bed rails e.g. IV lines, catheters, wheelchairs, hoists?			
Is there clear access to both sides of the bed?			Create access
Assessment Checklist – The Carer	Y	N	Comments
Can the carer follow instructions and demonstrate the ability to safely raise and lower the rails and remove/attach bumpers?			
Does the carer understand the importance of and be able to take responsibility for monitoring the bed rails			
Other Comments			

OUTCOME OF ASSESSMENT	Y	N	Comments
Have alternatives to bed safety rails been considered?	<input type="checkbox"/>	<input type="checkbox"/>	Hi-lo bed, hip protectors
Does the Assessment indicate the use of bed safety rails and bumpers?	<input type="checkbox"/>	<input type="checkbox"/>	
Is the client aware of their responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>	
Other Comments			
Signature of assessor			
.....			

APPENDIX 1

WHEN TO USE BED RAILS Decision making flowchart

IS THE PATIENT AT RISK FROM FALLING OUT OF BED?
If any hazard is apparent, the device should not be used



CONSIDER ACCEPTABLE ALTERNATIVES TO BED RAILS:

- Use of variable height bed
- Low beds
- Additional mattress on the floor
- Mesh or netting bed sides
- Alarm Systems

RISK ASSESSMENT SHOULD BE UNDERTAKEN

- Before ordering from
- Following delivery
- Every three months
- When significant condition/environment changes occur

SAFETY CHECKS PRIOR TO THE USE OF BED RAILS

- Risk of entrapment & damage to limbs
- Risk of patient climbing over the top
- Ensure the bed rail is compatible with bed frame and mattress depth
- Consider psychological effect or using bed rails
- The supports must be fixed at the head end of the bed, not the foot end
- Has the environment risk been reduced to AS SAFE as reasonably practicable?

COMPLETE RISK ASSESSMENT AND DOCUMENT

APPENDIX 2 - Bed Rail Fitting Checklist

FITTING CHECKLIST	Y	N	Comments
Are all parts present and in good condition?			
Are the spring clips fully engaged in the cross bars under the mattress?			
Does the rail move away from the side of the bed?			
Are there gaps that could cause entrapment?			
Is the top rail 220mm above the top of uncompressed mattress? If less than this an extended height rail is required.			
Does compressed mattress create a gap with risk of entrapment?			
Are bumpers air permeable and compatible with the bed safety rails?			
Is there a gap between the bumper and the mattress?			
Are all dimensions in accordance with safety standards as in Appendix 4?			
Are the bed safety rails compatible with the bed?			
Is the rail fitted correctly and securely in the up position?			
Has the client/carer been supplied with an Information booklet?			Date
When to Re-assess			
<ul style="list-style-type: none"> • If the bed or mattress is changed • If the clients medical or mental condition has changed • If the rail has been moved out of position 			
Date of Formal Review Assessment			
To be completed by:			

Appendix 3 – Approval checklist

To be completed by lead and attached to any document which guides practice when submitted to the appropriate committee/group for consideration and approval.

	Title of document being reviewed:	Yes/No/Unsure	Comments
1.	Title		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	Rationale		
	Are reasons for development of the document stated?	Yes	
3.	Development Process		
	Are people involved in the development identified?	Yes	
	Has relevant expertise has been sought/used?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
	Have any related documents or documents that are impacted by this change been identified and updated?	Yes	
4.	Content		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
	Are the statements clear and unambiguous?	Yes	
5.	Evidence Base		
	Is the type of evidence to support the document identified explicitly?	Yes	
	Are key references cited?	Yes	
	Are supporting documents referenced?	Yes	
6.	Training		
	Have training needs been considered?	No	
	Are training needs included in the document?	No	
7.	Implementation and monitoring		
	Does the document identify how it will be implemented and monitored?	Yes	

	Title of document being reviewed:	Yes/No/ Unsure	Comments
8.	Equality analysis		
	Has an equality analysis been completed for the document?	Yes	
	Have Equality and Diversity reviewed and approved the equality analysis?	Yes	
9.	Approval		
	Does the document identify which committee/group will approve it?	Yes	
Signature:			

APPENDIX 4

Comparison of dimensions in product standards

Description	Ref on diagrams (see below)	New combined standard	Notes
		BS EN 60601-2:2010	
Height of the top edge of the side rail above the mattress without compression	1	≥220mm ^a	^a Where a speciality mattress or mattress overlay is used and the side rail does not meet ≥ 220mm a risk assessment shall be performed to assure equivalent safety.
Gaps between elements within the perimeter of the side rail and between the side rail and mattress platform	2	< 120mm	
Gap between head board and end of side rail	3	<60mm ^c	^b Side elevation between head board and side rail ^c Most disadvantageous angle between head board and side rail
Gap between foot board and end of side rail	4	<60 or >318mm ^e	^d Side evaluation between foot board and side rail. ^e Most disadvantageous angle between foot board and side rail
Distance between open end of side rail(s) and mattress platform ^f	5	<60mm	^f The gap between the open end of the side rail and head board is not relevant to this ID
Gap between split side rails	6	<60 or >318mm ^h	^g when in flat position
			^h When in most disadvantageous position
Gap between side rail and mattress in 'plan' elevation	7	Perform test ⁱ	ⁱ 120mm aluminium cone is positioned between mattress and side rail to determine if gap is acceptable or not

Diagram of side view of bed with split side rails

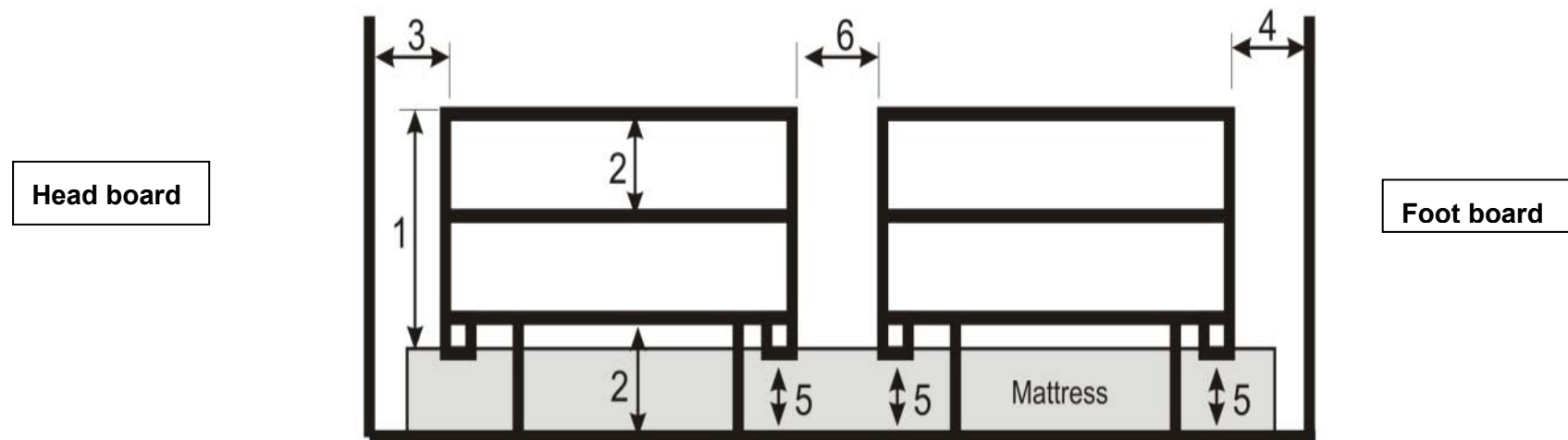


Diagram of side view of bed with cantilever side rails

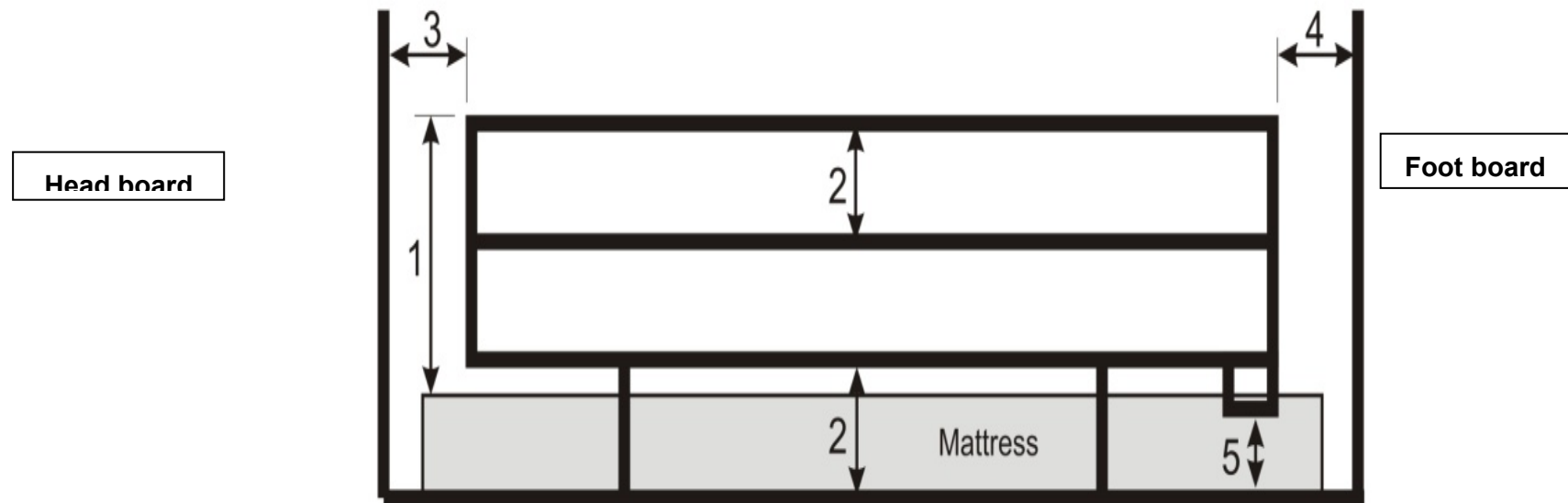
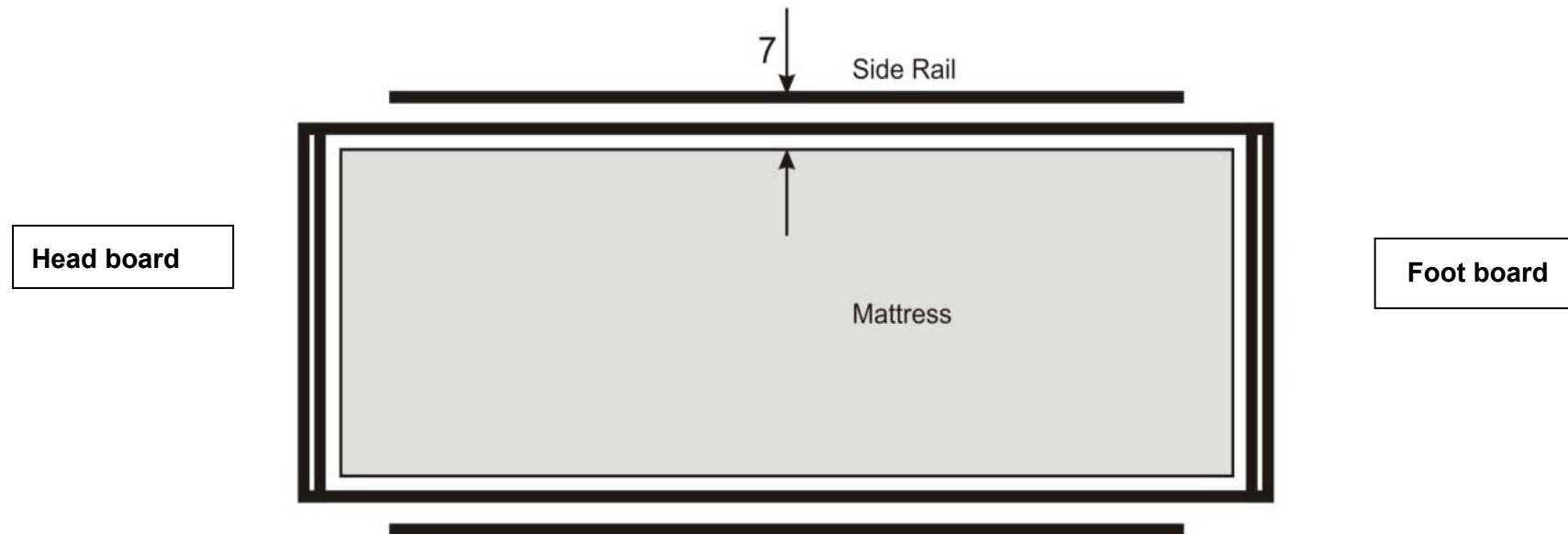


Diagram of bed in plan view





Safe use of bed rails

Bed rails successfully prevent many falls, but their incorrect use has resulted in the deaths of bed occupants by asphyxiation through entrapment in gaps.

Risk assessment is key to ensure safe use. It should start with the bed occupant and include the combination of the proposed equipment, the bed and the mattress.

Issues to consider

- If the person is likely to fall from their bed, are bed rails an appropriate solution?
- Does the person's physical size or behaviour present a risk?
- Is the bed rail height appropriate for the bed occupant?
- Can the person's head, neck, chest or body become trapped between:
 - > the bars of the bed rails?
 - > other gaps created by the bed, rail, mattress and head/footboard combination?
- Is the bed rail fitted correctly – does it seem likely that it will move away from the side of the mattress or bed during use and so creating a hazard?
- Bed rails designed for adults should not be used for children.

If either the bed, mattress, bed rail or condition of the occupant changes then the risk assessment should be carried out again.

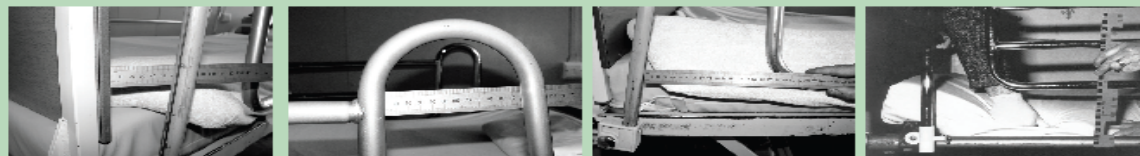
Our publication 'Safe use of bed rails' DB 2006(06) v2.0 has more detailed information and is available on our website www.mhra.gov.uk
Report problems with assistive technology products online, via the MHRA website www.mhra.gov.uk or by email: aic@mhra.gsi.gov.uk
For advice email dts@mhra.gsi.gov.uk

'Third party' bed rails, as photographed below, are not model specific and fit a wide range of beds. The principles set out below apply to all types of bed rails.

Design safety

Bed rails should be fitted so that the gap between their end and the headboard is less than 60mm.

All gaps between the rail bars for adults must be 120mm or less and for children 60mm or less.



Hazards

Most of the deaths caused by bed rails could have been avoided if thorough risk assessments of the bed occupant, the bed and the bed rail combination had been carried out.

MHRA investigations have also shown that many serious and fatal incidents with bed rails have been caused by a lack of maintenance.

Bed rails must be inspected on a regular basis to ensure they are in good condition.



Things to avoid

- Gaps that could cause head, neck or chest entrapment when the mattress is compressed or between the end of the bed rail and the headboard or footboard.
- Using bed rails which are not compatible with the bed base.
- Using insecure fittings that let the bed rail drop down or move away from the side of the bed.
- Using bed rails that have not been maintained regularly.
- Bed rails with parts missing.

