

	MRAT 190	<b>Manual handling in building work</b>	<b>Applicable to:</b>	<b>See also:</b> 172 173 174 175
	<b>Process(es) covered:</b>	Moving bricks, blocks, lintels, large sheet materials such as plasterboard, plywood and MDF, long lengths of timber and dry bagged materials such as plaster or cement. <i>Note: for ease of reference, this sheet deliberately duplicates information that appears on other sheets.</i>		

### Control Measures

- Where possible, do not move heavy or awkward-shaped objects: use them *in situ*.
- Train students in safe lifting techniques and posture.
- Closely supervise students who are moving heavy or awkward-shaped objects and do not allow competitive situations to develop.
- Check the movement route is clear, with doors open, before moving heavy or awkward-shaped objects.
- Wear gloves and safety footwear if either seem sensible.
- Where the object needs to be moved, where possible they should be split into smaller loads, eg by sawing up a piece of timber or moving only a few bricks or blocks at a time.
- Where the object needs to be moved, as far as possible, use mechanical assistance such as sack trucks, pallet trolleys, barrows, simple hoists, chutes, etc. Avoid the need to carry heavy items, eg a hod of bricks up ladders.
- If mechanical assistance is not possible consider whether two people can share the lift or whether handles or similar lifting devices could be fitted.

### Immediate Remedial Measures:

*Note that back injuries often build up over a period of time and individuals may not realise damage has occurred.*

Back injury resulting in loss of control of, or sensation in, limbs	Keep the head, neck and spine aligned while supporting the casualty's head. Send for an ambulance.
Crushing injuries (casualty crushed for more than 15 minutes)	DO NOT RELEASE THE CASUALTY. Send for an ambulance, giving details of the incident. Comfort and reassure the casualty until help arrives.
Crushing injuries (casualty crushed for less than 15 minutes)	Release the casualty as quickly as possible. Control any external bleeding and cover wounds. Send for the first aider who will secure and support any suspected fractures, examine and observe the casualty for signs of shock and treat accordingly.
Impact injury	Rest the injured part; apply ice to reduce the bruising and pain; attention from a trained first aider is required.
Cuts	If cuts are minor, ie, of a sort which casualties would normally treat themselves then the wound should be washed clean and a small, sterilised dressing applied by the casualty.
Severe cuts	Apply pressure on or as close to the cut as possible, using fingers or a pad of cloth. Leave any embedded large bodies and press round them. Lower the casualty to the floor and raise the wound as high as possible. Protect yourself from contamination by blood. Call 111 and seek medical advice.

<b>Storage</b>	Store heavy or awkward-shaped objects to minimise the need for movement but also store securely, so that students can only move them with the teacher's knowledge.
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<b>Disposal</b>	
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## Risk Assessment

Musculoskeletal disorders (MSDs) can occur in many work situations and in the context of construction work in schools and colleges, can happen to students who may attempt to lift heavy objects incorrectly or which are beyond their capabilities. Heavy manual labour, awkward postures, manual materials handling, and previous or existing injury are all risk factors implicated in the development of MSDs and teaching and technician staff will also be prone to such harm

### Hazards:

Back injury	Moving, or attempting to move, heavy or awkward-shaped objects can result in damage to the spine, pulled and torn ligaments and tendons, muscle damage and trapped nerves.
Hernia	Bending forward when moving, or attempting to move, heavy or awkward-shaped objects can result in hernias (the protrusion of an internal organ through a gap in a wall of the cavity in which it is contained).
Trapping	
Tripping	Depositing, or dropping accidentally, heavy or awkward-shaped objects can result in limbs becoming trapped.
Cuts	Moving heavy or awkward-shaped objects can result in tripping. Sharp corners or edges on heavy or awkward-shaped objects can result in cuts.

### Risks:

Back injury	Almost half of reported manual handling injuries involve the back or spine. Poor posture is a major contributor. Young people, especially, may over-estimate their capabilities and may be less aware of safer handling techniques. There may be a tendency for bravado. Males and females have different capabilities.
Hernias	
Trapping	Trapping is more likely if people are carrying more than their comfortable load and muscle fatigue may contribute.
Tripping	It may be difficult to see the floor when carrying an awkward-shaped load. There may be a tendency to rush when carrying heavy or awkward-shaped loads.
Cuts	The obvious hazards of heavy or awkward-shaped loads may result in the hazards of sharp corners or edges being forgotten or ignored. The difficulty in carrying such loads may result in hands being moved whilst the load is being carried.

### Further Information:

- HSE publish the *Manual handling assessment chart* (MAC) tool, free at <http://www.hse.gov.uk/msd/mac/>. Detailed guidance will be found in *L23 Manual Handling: Guidance on Regulations*, HSE, 2004, HSE Books: ISBN 0-7176-2823-X. It can be downloaded free from <http://www.hse.gov.uk/pubns/books/l23.htm>.