

<b>TITLE: MANUAL HANDLING SAFETY</b>	
<b>Guideline Number: LS1466</b>	<b>Issue Date: 3 / October / 2007</b>
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**PURPOSE:**

To provide guidelines on manual handling safety.

*Manual handling means more than just lifting or carrying something. The term 'manual handling' is used to describe a range of activities including lifting, lowering, pushing, pulling, carrying, moving, holding or restraining an object, animal or person. It also covers activities that require the use of force or effort, such as pulling an IRB start cord.*

*Up to one-third of all work injuries in Australia occur during manual handling. Most of the reported accidents involving manual handling tasks cause back injury although hands, arms and feet are also vulnerable. Sometimes the person injured never fully recovers or requires a long period of rehabilitation before they are able to work again.*

*Many manual handling injuries build up over a period rather than being caused by a single handling incident. These injuries occur wherever people are at work — on farms and building sites, in factories, offices, warehouses, hospitals, banks, laboratories, while making deliveries, and on beaches!*

*Risk of manual handling injuries can arise when tasks are poorly designed or where handling involves awkward or constrained postures. These conditions can make it difficult for a person to use good handling techniques.*

*Some examples of actions that may cause manual handling injuries are:*

- *Carrying a patient out of the water on soft sand or uneven and slippery rocks;*
- *Sitting with a poor posture for a long period of time in a surveillance chair; and*
- *Moving and carrying IRBs and motors, often up steep slopes.*

**SCOPE:**

This Guideline applies to the following:

- All government authorities and agencies and those organisations responsible for the management and operation of coastal environments; and
- Those organisations experienced in public safety and responsible for the provision of public safety services.

For example:

- Coastal/marine park authorities and managers
- Lifesaving service providers
- Lifeguards and lifeguard supervisors

This Guideline applies to coastal environments, including ocean coastline and saltwater waterways that open to the oceans surrounding Australia.

## **GUIDELINE DESCRIPTION:**

### **1.0 Risk management approach to manual handling**

- 1.1 The national standard for manual handling requires that all tasks in the workplace that involve manual handling are identified, and that the risk or likelihood of injury is assessed. Where there is a risk of injury, suitable 'control measures' should be introduced.
- 1.2 Control measures should be suitable and practical. They might include:
  - a. redesigning the task, where something needs moving;
  - b. providing mechanical handling devices such as hoists or trolleys;
  - c. safe work procedures, such as team lifting; or
  - d. specific training for particular handling tasks.

### **2.0 Who is responsible for controlling the risks?**

- 2.1 All lifeguards have a responsibility for promoting a safe working environment.
- 2.2 Manual handling risks should be discussed in the club/working environment with the supervisor/club captain/club safety officer and/or chief instructor to determine the best way of eliminating or reducing the risk of injury.

### **3.0 Best practice measures**

**NOTE:** These guidelines are to be followed as best practice measures. It should be highlighted that there is no such thing as a completely 'safe' manual handling.

- 3.1 Wherever there is a possibility of exposure to risks from the manual handling of loads, ensure that, if that risk cannot be avoided, a competent person carries out a suitable and sufficient assessment of all such manual handling operations to be undertaken by them.
- 3.2 Never attempt to lift or carry any heavy loads alone, especially patients or survivors.
- 3.3 Cooperate when assessments are undertaken and attend any training that is arranged.
- 3.4 YOUR RESPONSIBILITIES
  - a. Promote a safe working environment.
  - b. Follow the systems of work listed below that are laid down for your safety.
  - c. Make proper use of equipment provided for your safety.
  - d. Cooperate on all health and safety matters.
  - e. Consult your supervisor and/or club captain if you identify dangerous handling activities.
  - f. Take care to ensure that your activities do not put others at risk.
  - g. Avoid manual handling where possible — i.e. can you take the treatment to the casualty and not vice versa?
- 3.5 WAYS OF REDUCING THE RISK OF INJURY
  - a. Reduce the amount of twisting and stooping.
  - b. Avoid lifting from floor level or above shoulder height.

- c. Where possible, reduce the carrying distances.
- d. Avoid repetitive handling.
- e. Vary the work, allowing one group of muscles to relax while another is used.
- f. Where possible, make the load lighter or less bulky.
- g. Adjust your grip to find the load easier to grasp, more stable and less damaging to hold.
- h. Remove obstructions to free your movement.
- i. Where possible, avoid steps and steep ramps.

#### 4.0 **Maximum loads**

4.1 Weights over 55 kg are not to be lifted without mechanical or team assistance.

4.2 Members under the age of 18 years must not lift, lower or carry more than 16 kg without mechanical or team assistance, and specific training.

#### 5.0 **Good handling techniques**

##### 5.1 Stop and think

Plan the lift. Where is the load to be placed? Use appropriate handling aids if possible. Do you need help with the load? Remove obstructions such as discarded wrapping materials or debris on the beach. For a long lift such as floor to shoulder height, consider resting the load midway on a table or bench to change grip.

##### 5.2 Position your feet

Feet apart, giving a balanced and stable base for lifting (unsuitable footwear might make this difficult). Leading leg as far forward as comfortable and, if possible, pointing in the direction you intend to go.

##### 5.3 Adopt a good posture

When lifting from a low level, bend the knees. Do NOT kneel or overflex the knees. Keep the back straight, maintaining its natural curve (tucking in the chin helps). Lean forward a little over the load if necessary to get a good grip. Keep the shoulders level and facing in the same direction as the hips.

##### 5.4 Get a firm grip

Try to keep the arms within the boundary formed by the legs. The best position and type of grip depends on the circumstances and individual preference, but must be secure. A hook grip is less tiring than keeping the fingers straight. If you need to vary the grip as the lift proceeds, do it as smoothly as possible.

##### 5.5 Keep close to the load

Keep the load as close to the trunk for as long as possible. Keep the heaviest side of the load next to the trunk. If a close approach to the load is not possible, slide it towards you before trying to lift.

##### 5.6 Don't jerk

Lift smoothly, raising the chin as the lift begins, keeping control of the head.

##### 5.7 Move the feet

Don't twist the trunk when turning to the side.

##### 5.8 Put down, then adjust

If precise positioning of the load is necessary, put it down first, and then slide it into the desired position.

See Appendix 1 for 'Table 1. Patrol equipment that presents a manual handling hazard' for information on equipment, weights and options for handling the equipment.

#### **DEFINITIONS:**

**Lifeguard** means 'an appropriately trained and qualified individual who volunteers or is employed at bathing beaches, pools, etc. to prevent drowning, provide injury prevention and response services, and to save people from drowning'.

**Lifesaving service** means 'an organised and structured service comprised of lifeguards and appropriate rescue and first aid equipment supported by a coordinated backup team'.

**Manual handling** means 'a range of activities including lifting, lowering, pushing, pulling, carrying, moving, holding or restraining an object, animal or person'.

**Occupational health and safety (OHS)** means 'the health and safety considerations of or relating to the activity or business for which one is trained'.

#### **REFERENCES:**

Australian Coastal Public Safety Guidelines

- LS1460: Occupational health and safety policy
- LS1461: Lifeguard occupational health and safety
- LS1462: Zero tolerance on alcohol and drugs
- LS1463: Sun safe practices
- LS1464: Selection and use of personal protective equipment (PPE)
- LS1465: Hazards and banning of smoking
- LS1467: Managing workplace stress
- LS1468: Rehabilitation from illness or injury

Guidelines for safe recreational water environments. Volume 1 – Coastal and fresh waters. World Health Organization, Geneva, 2003.

Lifeguard Service Operating Procedures Version 1, Surf Life Saving Queensland, February 2005.

Surf Life Saving Australia, 2003. Surf lifesaving training manual, 32nd edition. Elsevier Australia Pty Ltd.

#### **APPENDICES:**

Appendix 1. Patrol equipment that presents a manual handling hazard

## APPENDIX 1

### Patrol equipment that presents a manual handling hazard

EQUIPMENT	WEIGHT	DIMENSIONS OR OTHER ASPECTS	MANUAL HANDLING RISK	METHOD/OPTIONS FOR LIFT
First aid kit	Up to 10kg	Size of medium suitcase	Low-moderate	1 person lift
Signs (e.g. strong currents, blue bottles, patrol flag stands)	Up to 15kg	1.5m poles (wooden/metal pipe) Metal frame and panel base	Moderate	1-2 person lift and carry (< 50m on soft sand)
Patrol and surf craft area flags	Up to 80kg+	3.6m poles	Moderate	1-2 person lift and carry (< 50m on soft sand)
Patrol tent	Up to 15kg	Usually large bulky object	Moderate-high	Team lift – number of persons dependant upon weight/size
Airbag oxygen resuscitator	Up to 15kg	Oxygen cylinder with metal casing	Moderate	1 person lift (short distance < 10m on soft sand) or trolley
Rescue boards	Up to 15kg	Length approx 2.5m	Moderate	1-2 person lift and carry (< 50m on soft sand)
Fuel bladder	Up to 20kg	Triangular and flexible	Moderate	1 person lift
Patrol stands	Up to 15 kg	Awkward shape, metal construction	Moderate	1 person lift using carrying handles
IRB (Zodiac/Achilles – unladen)	80-90kg	Approximate dimensions:	High	4 person team lift/drag (short distance (<2.5m) to launch/recover
IRB (Zodiac/Achilles – laden with motor)	Up to 150kg without crew	1.8m (L) x 0.725 (W) – Internal	High	4 person drag (short distance <5m) 4-6 person team lift 4WD/ATV to tow
IRB (Gemini – laden with motor)	Up to 180kg without crew	3.75m (L) x 1.83m (W) - External	High	5 person team push (short distance <5m) 4WD/ATV to tow
IRB motor	50-60kg	Long awkward shape	High	2-3 person lift (short distance <5m) or preferably a trolley
RWC	Up to 320kg	Awkward shape, some sharp fixings evident on gunwales, very heavy	High	5 person team push (short distance <5m) 4WD/ATV to tow
Surveillance chair/tower	Variable	Wooden or metal construction, min of 2m high	High	4 person drag 4WD/ATV to tow