

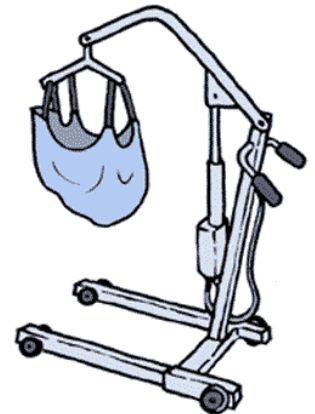


Disability Services

Information Sheet

Hoists

Hoists are used to transfer a person from one surface to another. They are designed to reduce the need to manually lift a person who is unable to stand and transfer independently. The different types of hoists include mobile hoists, stand-up hoists, ceiling/overhead hoists, fixed wall or floor mounted hoists, and bath hoists.



Points to consider when selecting a hoist

- ▶ What transfer is required and its purpose
- ▶ The physical and cognitive abilities of the attendants and the person being lifted
- ▶ The user's weight, which should not exceed the load capacity stated by the supplier for both the hoist and the sling
- ▶ The environment the hoist is to be used in, including adequate circulation space, width of doorways, manoeuvring around furniture and the floor surface. An in-home trial is advisable
- ▶ Availability of maintenance support, replacement parts and repairs.

Most hoists will allow the legs to be opened wider, enabling the hoist to be moved around furniture and closer to the person being lifted. It also provides greater stability by widening the hoist's base of support. Compact hoists are being manufactured that are shorter in overall length which enables them to be manoeuvred in the more confined spaces of private homes.

Larger diameter castors can make the hoist easier to push over most floor surfaces but they raise the height of the base. A low base height (measured from the floor to the highest point on the top of the base) may enable the hoist legs to fit under low furniture.

Being able to raise the boom and sling to an adequate height is particularly relevant for taller users, especially for hoists designed for walk training. The lower the boom will reach, the easier it is for the attendant to apply the sling or stretcher to a person on the floor.

Mobile hoists

Mobile hoists can lift a person from the floor, a seat, or a lying position (for example on a bed) to another seated or lying position. Some varieties of mobile hoists can be used to lift someone in and out of a bath or car while others can be easily dismantled and transported in car or van.

Raising or lowering the boom of the hoist is generally electrically operated (mains or battery powered). Some older style hoists may have used hydraulic (hydraulic pump) or mechanical (winding handle) operation, but this requires an increased manual effort to operate.

Electric hoists feature a hand controller and require less physical effort for the attendants to operate. They have batteries that require charging and will need to be replaced after a period of time. The means of opening or closing hoist legs varies between different models, including, electrically operated via the hand control, a manual foot pedal or a manual hand lever.

Some mobile and stand-up hoists have a commode seat or transport seat as an attachment option. It is not recommended that any mobile hoist be used to transport a user for any distance, say, from one room to another. It is safer and easier to transfer the user to a mobile shower chair or other mobility device.

Stand-up hoists

Stand-up hoists (or standing hoists) are a time efficient alternative to conventional mobile hoists when transferring a person from one seated position to another. They can also improve access to lower limb clothing for toileting and dressing, because the sling that is generally used with a stand-up hoist has no leg straps.

The use of stand-up hoists is restricted: they cannot be used to lift a person from the floor or from a lying position and the user must be able to partially weight bear and maintain a reasonably symmetrical posture while being lifted. This is important to consider when prescribing a hoist for a person with a degenerative condition.

Users are supported in a semi-standing position via an underarm torso sling, weight bearing footplate and knee pad. The user should be able to reach and hold the handgrips. The sling sits under the arms and does not support the upper trunk, shoulders or head, so the user needs adequate head and upper trunk control. Users with shoulder or knee problems may find the hoist unsuitable due to the increased pressure of the slings under the arms and knees braced against the knee pad.

Ceiling/overhead track hoists

Ceiling (overhead) hoists perform similar types of lifts as a mobile hoist but require less floor space, storage or transfer room. They are generally attached to the ceiling or a free-standing frame (for short-term use or where there is questionable ceiling strength). The user is lifted in a sling or stretcher that runs along an overhead tracking system that can run through single or multiple rooms. Tracking can be installed in a bathroom to enable transfers into the bath or onto a toilet. Specific slings can be used for walk (gait) training.

Overhead hoists with a two-way system have a powered lifting and lowering action but require the attendant to manually move the user along the track. A four-way system has powered lifting and lowering and a powered traversing action (for moving along the track). A remote control device enables some users to operate the controls independently.

Overhead hoists reduce the physical effort on an attendant when compared with pushing a loaded mobile hoist. However, they can be an expensive system and their use is limited to the location of the tracking.

Fixed wall or floor-mounted hoists

There are a range of hoists that are mounted against the wall or fixed to the floor.

Pool and bath hoists

Pool hoists are designed to lower and lift a person in and out of a pool and may be hydraulic, mechanical or battery powered. The person may be lifted in a sling, chair or stretcher. Pool hoists are either ceiling (overhead), fixed to the floor or socket mounted, allowing the hoist to be removed, leaving the poolside clear of obstruction.

Bath hoists are used to lower and raise a person into and out of a bath. They can be battery powered, hydraulic or mechanically operated. They may be mobile, fixed to the floor or fit inside the bath.

Both hoists are available in models with controls that may be attendant operated or (if battery powered) operated independently by the user.

Slings

The specific slings recommended for each brand of hoist should be used. Hoists that use slings with clip on ('keyhole') attachments cannot use slings with loop attachments, and vice versa. There are slings designed for a variety of purposes. These include toileting slings, full body slings, general purpose slings, walking slings and amputee slings. Slings are made from a variety of materials including polyester mesh that allows water to drain through and dry easily, polyester/nylon, canvas, and artificial sheepskin. Please see the *Slings* information sheet for further information.

Safety

As a safety feature, most hoists have an emergency stop button. Hoists should also have an emergency lower mechanism which allows the user to be safely lowered if the battery charge is insufficient to operate the handset. Some hoists also have a manual override that allows the attendant to lower the user gradually in the event of an actuator or electrical failure, where the other emergency lower mechanism will not work.

Many hoists also have the safety feature that when the boom encounters resistance on lowering, the boom will cease to lower. Care should be taken to raise the boom before the resistance is removed to ensure that the boom does not rapidly drop.

Multi-purpose hoists

Some hoists combine the roles of two hoists. For instance there is a hoist that can double as both a mobile and stand-up hoist by removing or adding certain components. Some stand-up hoists and mobile hoists can also be used for walk (gait) training.

Features

Some hoists can accommodate different shaped spreader bars to incorporate stretchers, a Jordan frame or weigh scales. Optional weigh scale attachments enable the user to be weighed, whilst being lifted in the hoist. This simplifies the process of weighing a person who cannot independently weight bear.

Contacting the Independent Living Centre

For further information or to make an appointment to visit the display please contact the Independent Living Centre. The Independent Living Centre offers free advice on equipment and techniques to help you with everyday tasks.

Independent Living Centre
11 Blacks Road
Gilles Plains SA 5086

Phone: 1300 885 886 (SA & NT callers only) or 8266 5260

Fax: 8266 5263

Email: ilcsa@dfc.sa.gov.au

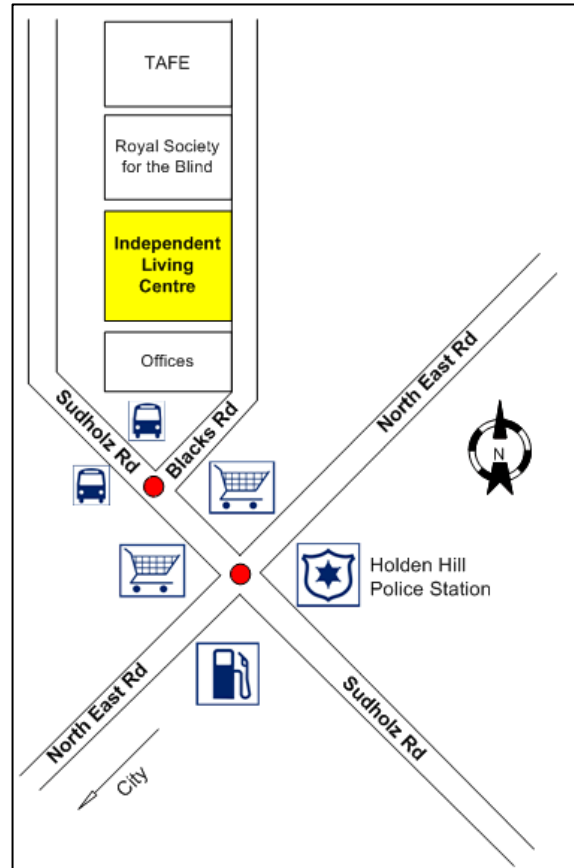
Website: www.sa.gov.au/disability/ilc

Accessible off street parking is available.

Bus routes:

From the city T500/T501 or
207/208 to Stop 28 Sudholz Road

Timetable information: 8210 1000



Hoist picture used with permission from Novita Children's Services
(www.novita.org.au)

Copies of this publication are available from the Disability Information Service

Tel: 1300 786 117 Email: disabilityinfo@dfc.sa.gov.au Website: www.sa.gov.au/disability Version: July 2011



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