

SOME BASIC PRECAUTIONS WHEN HELPING PEOPLE WITH MOBILITY IMPAIRMENTS

Good intentions are not enough when you are trying to help people who have a mobility impairment which makes walking slow, difficult, or impossible.

First, they may be able to move better on their own without help from others. For example, someone using a crutch or cane might be able to go down stairways surprisingly well. One arm is used to grasp the handrail while the other is used for the crutch or cane. You can help by not interfering with this person's movement. Offering to carry the extra crutch might also help. If the stair is crowded, you can also act as a buffer between the person using the walking aid and the other people on the stairway.

Devices are available which can allow you to assist others down stairs without lifting, carrying or dragging.

If your help involves lifting, transferring, carrying or dragging, you will want to be especially careful. You do not want to hurt yourself or the person being assisted.

Lifting or pulling improperly can injure your back. To prevent injury to yourself:

- Do not lift with your back flexed or bent.
- Do not twist; pivot your feet instead.
- Keep the weight you are lifting or carrying close to your body.

To prevent injury to people being lifted and carried:

- Ask them how they want to be assisted. For example, people using a wheelchair are trained in transferring techniques. Depending on their upper-body capabilities, they may be able to do much of the work themselves; they will tell you.
- Avoid putting excessive pressure on people's legs, arms, and chest. Such high pressure might cause spasms, pain, and restricted breathing. For example, carrying someone slung over your shoulders is similar, in effect, to having someone sitting on his or her chest.
- Be aware that some devices are not designed to be carried. For example, if a wheelchair must be carried, hold onto the parts that are solidly attached. (You will find specific advice on this further on in this section.)
- Practice helping especially if you are a "buddy" being relied upon to assist someone in an emergency.

TECHNIQUES WITH ONE PERSON CARRYING ANOTHER

No single technique is well suited to all situations, but carrying may be necessary for either evacuation or transfer to an evacuation device. The heavier the weight of the person being carried, the more difficult it is to do the carrying.

Cradle Lift

This method is preferred if the person being carried has little or no arm strength. It is also preferred if the person being carried is less than half your weight. It becomes more risky as the weight of the carried person approaches your own.

Pack Strap

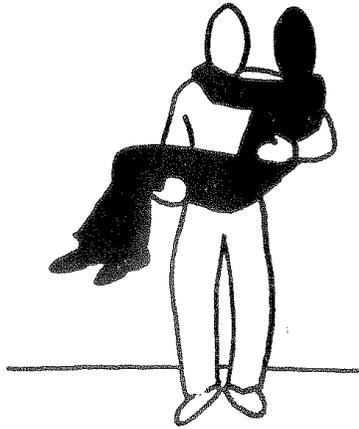
This allows you to maintain a broad-based support during the lift. You can carry someone without twisting, and if your balance is upset, you are in a good position to regain stability. If you are shorter than the person being carried, you will have to lean forward. This puts greater pressure on the chest of the person being carried, and breathing might be restricted. Leg spasms may occur due to the hanging or extension of the person's legs.

Piggy Back

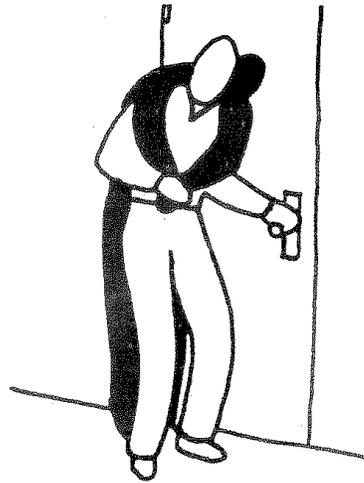
This method is only suitable if the person you are carrying has sufficient arm strength to hold on. There is little restriction to the person's breathing. Also it allows you to have a good base of support.

It is best to position the person's legs before you start the lift. Crouching on a step below a stairway landing will make this easier to do. This will also give you a more effective lift because your knees are less bent.

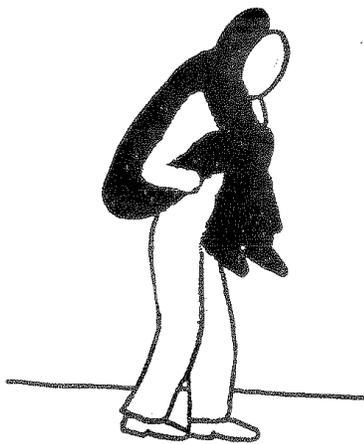
TECHNIQUES WITH ONE PERSON CARRYING ANOTHER



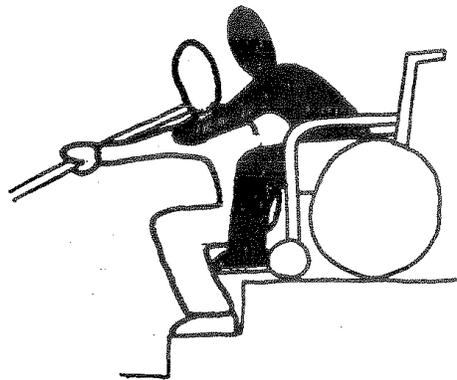
Cradle Lift



Pack Strap



Piggy Back



Piggy Back Lift on Stairs

The Piggy Back Lift on Stairs has been included for information only; it is NOT an effective means of transportation.

TWO-PERSON TECHNIQUES

Having two people doing the carrying somewhat reduces the load you will have to carry. But there is the added complication of having to coordinate your movements with those of the second person. This will be difficult especially on stairs.

Carrying by Extremities (Fore-and-aft Carry)

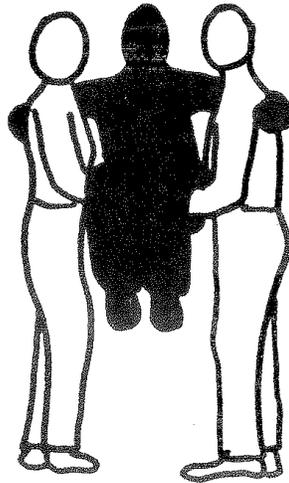
If you are the rear person, you will be lifting with your arms under the person's armpits and around his/her chest. During the lift, you will bend or flex either your legs or your back. Bending your back is risky.

Both you and the other person carrying will have difficulty avoiding each other's feet as you walk. On stairs your side-to-side body sway is more accentuated because of the extra load and slower speed. This sway will be transmitted to the other person. Maintaining your balance and stepping safely will be difficult.

Two-person Chair (Side-by-side Carry)

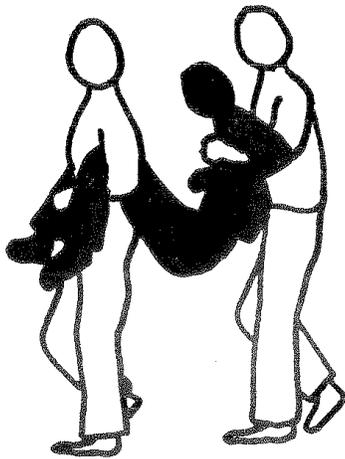
As with the other two-person carries, the advantage of a shared load is offset by the awkwardness of walking together. This method is even more awkward on stairs, which need to be wider than is generally the case. The need to create a sling or chair by linking your hands together underneath the person being carried will be awkward and tiring. Various devices, including ordinary wood chairs, have been used with varying success to overcome this difficulty.

TWO-PERSON TECHNIQUES

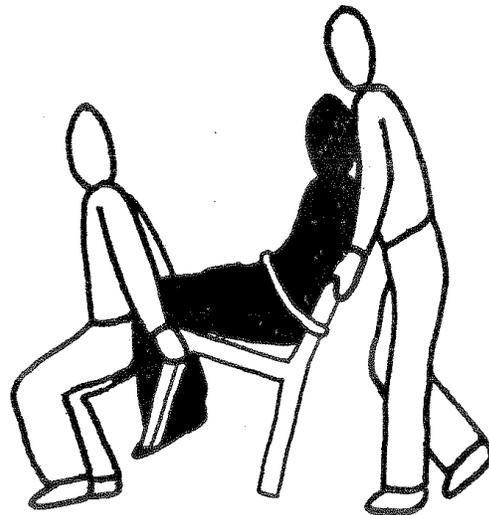


Two-person Chair
(Side-by-Side Carry)

The techniques below have been included for information only; they are NOT effective means of transportation.



Carrying by Extremities



Carrying Ordinary Chair

Use of Chairs and Carrying Devices

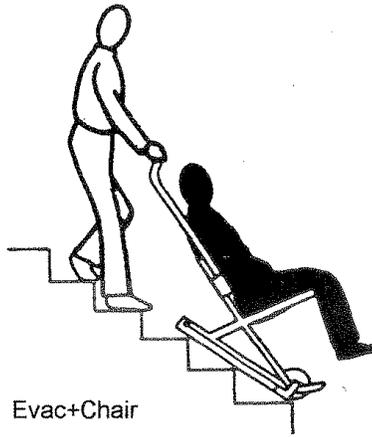
Ordinary chairs are not designed for carrying people. Lifting one with a person on it is very awkward and risky. There are not good handholds. On stairs the chair legs will tend to strike the steps. The main benefits are that the carried person is seated, and the chair can be set down if you want to stop for a rest.

Various versions of a sedan-chair type of evacuation chair are marketed to overcome some of the difficulties. The sedan chair, generally used with the carried person facing to the rear, imposes a heavier load on the front carrier when used on stairs.

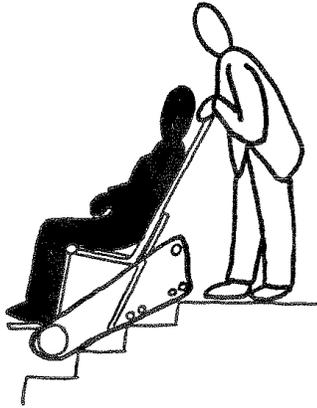
A "Carry Chair" - simply a folding seat and back with braces serving as side carrying handles - can be used as a carrying device or as a transfer device. It is especially easy to use if the person normally sits in it while using the wheelchair. You and one other person then simply lift by the side handles and walk away from the wheelchair.

A sling-type carrying device called the "Scoop Transporter" even has shoulder straps that allow you to use your hands for other activities (like opening doors). It is primarily marketed for use outdoors.

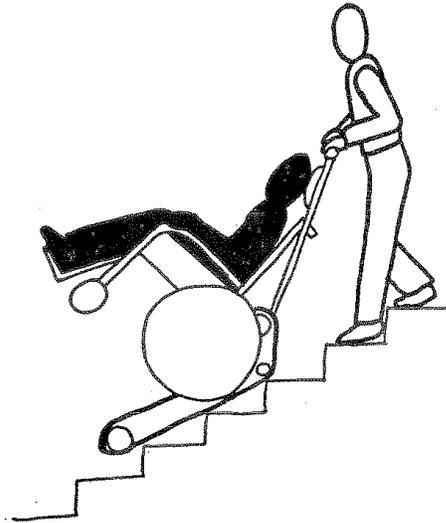
STAIR DESCENT DEVICES



Evac+Chair



Evacu-Trac



Stair-Trac

Wheelchair Roll or Carry

This is a lot more difficult than it appears. Even ordinary or standard wheelchairs are complex devices. Powered electric wheelchairs will present additional challenges. There are only a few places where you can grab onto a strong fixed element to lift and carry the standard wheelchair occupied by its user. (People in wheelchairs generally prefer to stay in them during their evacuation; the wheelchair is vitally important for their normal mobility.) You should not grab removable or moving parts such as armrests, footrests or wheels. Even the grips on the rear push handles may slide off.

You will want to familiarize yourself with the various parts of at least the standard wheelchair and practice rolling or carrying it down stairs before you may have to do it in an emergency. Practice first with an unoccupied wheelchair.

When moved on stairs, the wheelchair should be tipped back. This will help keep its occupant from falling out and make it easier to carry.

For the roll, with the larger rear wheels rolling on the step edges, you will find that the handles are too low if you are the back carrier. You need the help of one or two people at the front of the wheelchair.

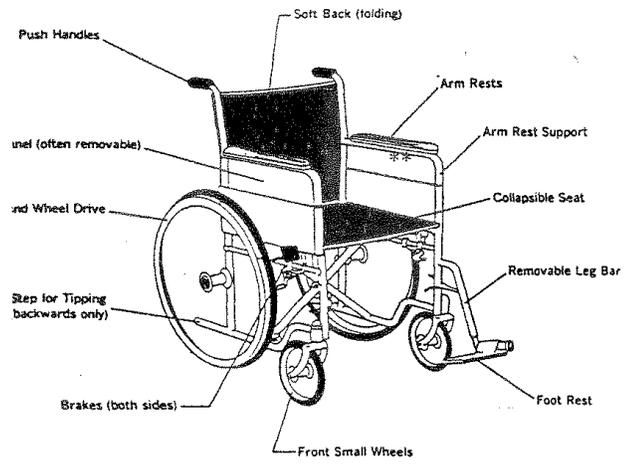
At the front you will have to hold the wheelchair frame behind the footrests just above the smaller front wheels. Unless you have a second person helping you at the front, you will likely end up facing the chair and backing down the stair gingerly. But, with two people at the front, you will find yourself bumping into the sides of the stairway.

Getting a secure, comfortable grip at the front of the wheelchair will be difficult. Simple devices, called "Evacu-straps," can be used. They have a locking hook which can be quickly hooked around the frame. Attached to the hook is a fabric strap which goes through your hand and around your wrist. With this device you can do a safer and more comfortable wheelchair carry.

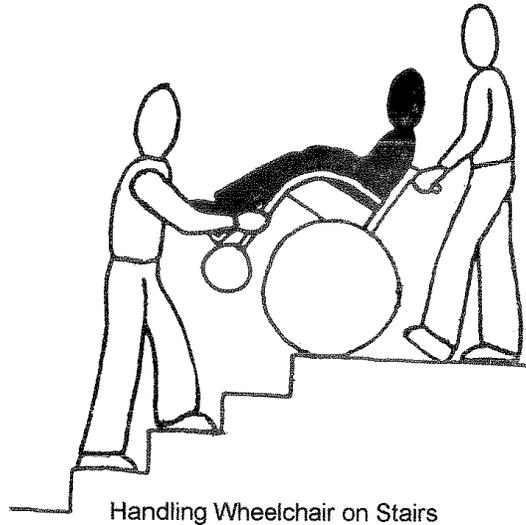
Transferring from a Wheelchair to an Evacuation Device

Talk to the person being transferred about the best way to do it. Often s/he can help. If s/he has little or no lower limb strength, you will have to lift his/her entire weight. Have the wheelchair parked - with its brakes applied - close to and at an angle to the other device. Face the person. Place your feet between his/her legs. Place your hands under his/her arms and lift to a standing position.

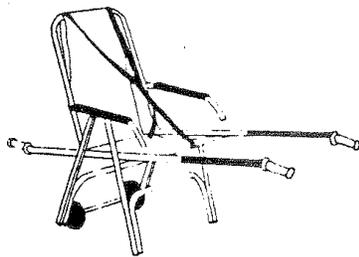
Pivot your feet to line up with the device onto which s/he will be seated. If s/he must (and can) hold onto to you, have him/her hold your waist or shoulders, not your neck. A transfer belt around the person's waist will ease the transfer. This will reduce the likelihood of flexing or bending your back.



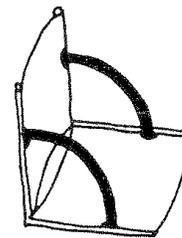
Key Parts of a Standard Wheelchair



Handling Wheelchair on Stairs



Sedan-Chair Evacuation Chair



Carry Chair

Sliding and Dragging Techniques

The following techniques will be especially useful where you are dealing with people who are bed-ridden, sedated or unconscious. The availability of blankets plus smooth floor and stair surfaces makes institutions and some residential situations more likely places where these are practical as well as beneficial techniques.

Transfer or Removal from a Bed using a Slide Technique

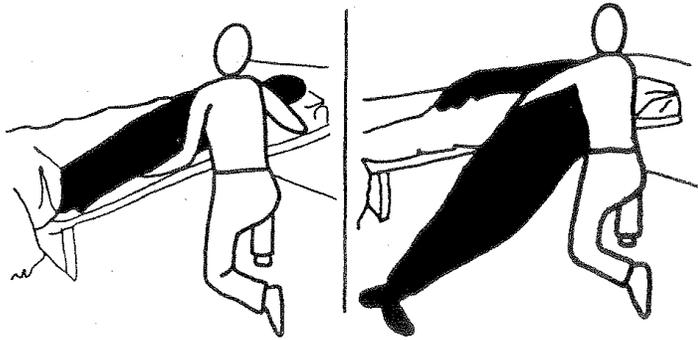
This technique allows you easily to remove another person of any weight from a bed to permit dragging on a blanket to a safe area. Gravity does most of the work.

1. Position a blanket on the floor with one edge extending a few inches under the bed.
2. Face the person and slide your arms with hands palms up under his/her neck and knees, easing the person to the side of the bed until one shoulder is slightly off the edge.
3. Drop onto the knee closer to the foot of the bed, keeping the other knee up and flexed to protect the person's head.
4. Leaning against the person's shoulder and the bed with his/her buttocks close to the edge of the bed, ease the ankles, knees and buttocks off the bed. Then the rest of the body will start to slide. Use your body and knee to protect his/her slide. Once the person starts to slide, do not try to stop the procedure. However, you can slow the slide by leaning against the person's shoulder.

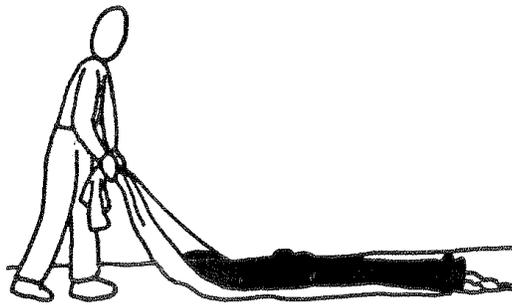
Blanket Drags and Shirt Drags

Wrapping the blanket around the person's chest is more useful on stairs. A variation of this is the shirt drag which is done by pulling on the person's shirt. Alternatively, you can extend your arms under the rescuee's arms and across his/her chest.

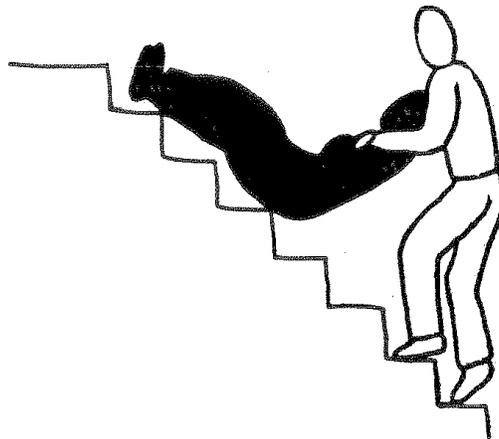
SLIDING AND DRAGGING TECHNIQUES



Two of the Steps in Slide Transfer from a Bed



Blanket Drag Across the Floor



Blanket Drag Down the Stairs