

FRONT RANGE NURSE AIDE TRAINING PROGRAM

GENERAL GUIDELINES FOR WHEELCHAIR OPERATION & SAFETY

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Wheelchair Etiquette

- Never lean or hang on a person's wheelchair - it is an important part of the wheelchair owner's personal space.
- Never simply assume that a wheelchair user needs your assistance. Always ask the person whether they would like assistance before you help them.
- Be aware of a wheelchair user's limits and capabilities; don't be afraid to ask questions to find out about this if necessary. Wheelchair users often appreciate the opportunity to explain the nature of their disability or illness rather than having assumptions made about them.
- Keep in mind that most wheelchair users have a physical disability and not an intellectual one. Even if their speech or appearance is affected, their mind and their hearing may function extremely well.
- Always speak directly to the person in the wheelchair rather than speaking only to others nearby. Not speaking directly to the wheelchair user may appear as though you are intentionally ignoring them. If you are having a conversation with someone in a wheelchair, consider sitting or kneeling down to put yourself on the same level.
- Keep in mind that sympathetic stares, comments or touches may be viewed by the wheelchair user as demeaning. Never assume that using a wheelchair is a tragedy.
- If someone in a wheelchair has to transfer onto a chair, toilet, car or bed, NEVER move the wheelchair out of his or her reach.
- If the user of a wheelchair should ask for directions, include information about distance, traffic patterns, weather conditions and possible physical obstacles. These all affect a wheelchair users traveling ability.
- Always watch young children closely when they are near a wheelchair and make certain they do not play with the brakes, footrests or any controls. Little hands and fingers can easily get pinched or injured by such controls or by the wheel spokes.
- Do not discourage children from asking questions about a wheelchair and explain to them that a wheelchair is a tool and not a toy. Open communication assists in overcoming any fear or misleading attitudes towards people with disabilities.
- He should always use good body posture for his own safety and keep his back straight and bend knees slightly when tipping the wheelchair or moving over curbs.
- Do not place heavy loads on the back of a manual wheelchair as it could make the wheelchair tip over backwards.

- Never unexpectedly tip a wheelchair backwards while the user is in it. This could cause momentary panic and the user or the assistant could get injured. Most of all, it may damage the “trust” between the wheelchair user and the assistant.

When Providing Assistance

- An effective assistant is one that is “trusted” by the wheelchair user. Building and maintaining this trust is very important.
- First and foremost: always let the wheelchair user know what you are going to do before you do it; inform them before you make any sudden movements.
- Again . . . never unexpectedly tip a wheelchair backwards while the user is in it. This could cause momentary panic and the user or the assistant could get injured. Most of all, it may damage the “trust” between the wheelchair user and the assistant.
- When assisting a person into or out of a wheelchair, face them and explain how you intend to assist before initiating any actions. If possible, use a gait belt to assist with the lift or lowering.
- If moving the wheelchair user to or from a bed or chair, plan ahead and make certain the wheelchair is in the best position to minimize the intended move.
- Check to make certain that the brakes are set and locked and the footrests are out-of-the-way before the wheelchair user gets in or out of the wheelchair. Keep in mind that certain floor surfaces can be very slippery, even when the brakes are set and working fine. A wheelchair can still slide on a slippery surface.
- Make certain that the wheelchair user is wearing “non-skid” slippers or shoes.
- When assisting a frail or arthritic elderly person into or out of a wheelchair, it is best to use two assistants. Keep in mind that both their bones and their skin are very fragile and can be easily damaged or bruised. Make all movements gentle and smooth without any abrupt jolts or movements.
- Once the user is seated in the wheelchair, make certain the footrests are lowered and secured with the users feet in place before releasing the brakes and moving the wheelchair.
- Check to see if a seat-belt is installed and use it if present.
- Continually check to make certain that loose objects, clothing, lap covers and blankets are away from the wheel spokes.
- Once in, most wheelchair users prefer to operate and set the brakes themselves; however, the assistant should always monitor the safe use of the brakes and take action when it is necessary.
- If the wheelchair user intends to operate (turn) the wheels themselves, gloves are advisable.

- If riding in the streets, use a flag; if riding at night, use headlights and flashing taillights. Both the wheelchair user and the assistant should wear clothing that is bright and highly visible.
- If assisting a wheelchair user to go up and over a single step or curb, it is best to go up forwards with the wheelchair user facing the step. Tip the chair back and balance the weight on the rear wheels; gently place the front wheels on top of the step or curb; push steadily and firmly until the large wheels ride up; move forward away from the step and then ensure that all four wheels are safely on the flat surface.
- If assisting a wheelchair user to go up a series of steps, it is best to go up backwards. Reverse the wheelchair so the back is nearest the steps; tip the chair back and balance the weight on the rear wheels; pull steadily upwards; keep moving upwards step-by-step until there is sufficient room to put all four wheels safely on the ground.
- If assisting a wheelchair user to go down a step or series of steps, it is best to go down backwards. Reverse the wheelchair so the back is nearest the edge of the top step; slowly lower the rear wheels down to the next step while keeping the front wheels firmly on the ground; it is important that the assistant also be aware of their own foot placement; keep moving downwards step-by-step until the wheelchair is safely at the bottom on level ground.
- If assisting a wheelchair user to move up a ramp that has a low angle, proceed with the wheelchair facing forward. However, if assisting a wheelchair user to move up a ramp that has a steep angle, it is best to go up backwards (if you proceed forwards, you may find the front wheels lifting off the surface because of the distribution of weight in the wheelchair).
- Do not encourage the wheelchair occupant to lean forward while in the wheelchair any further than the length of the armrests. When leaning forward, always ensure that the wheel casters are pointing forward to provide maximum stability.
- Do not encourage the wheelchair occupant to pull doors open while in the wheelchair. Sudden, aggressive pulls may tip the wheelchair backwards.
- When folding an unoccupied wheelchair, first remove any personal possessions, seat or backrest accessory cushions. Now lift, fold and secure the footrests; stand to one side of the wheelchair and then begin folding by lifting the seat from the front and the back. It may help to slightly tilt the wheelchair to one side while performing the seat lift and fold.
- When unfolding an unoccupied wheelchair, first lean the wheelchair to one side against your body while holding the push handle that is nearest to you. Now reach across and grasp the armrest that is furthest from you and begin to push down and out. Completely expand the wheel chair and then position it where needed; lock and secure the brakes before the user enters.
- When putting a wheelchair into a car, first remove any personal possessions, seat or backrest accessory cushions. Now lift and remove the footrests; lift and remove the armrests if necessary; remove the wheels if they are quick-release type. Now stand to one side of the wheelchair and then begin folding by lifting the seat from the front and the back. It may help to slightly tilt the wheelchair to one side while performing the seat lift and fold. Once folded, grasp both sides of the wheelchair frame, bend your knees and lean the wheelchair toward you while beginning to lift. Straighten your legs as you continue lifting and raise the opposite side of the wheelchair high enough off the ground to load into the vehicle. Remember to use your leg muscles and not your back.

The Wheelchair User

- When sitting in a manual wheelchair, be careful when pulling doors open as sudden, aggressive pulls may tip the wheelchair backwards.
- Do not put heavy loads on the back of a manual wheelchair as it may make the wheelchair tip over backwards.
- Keep loose objects or lap covers away from wheel spokes.
- Do not lean forward out of the wheelchair any further than the length of the armrests. When leaning forward, always ensure that the wheel casters are pointing forward to provide maximum stability.
- Do not try to pick up objects from the floor by reaching down between your knees.
- Do not shift your weight toward the direction you are reaching as the wheelchair may tip over.
- Do not attempt to lean over the top of the back upholstery as this may cause the wheelchair to tip over.
- Do not attempt to ride over curbs or obstacles.
- Beware of caster flutter, which is the rapid side to side motion of the front caster wheels. This usually happens at higher speeds when going downhill and it can readily throw you forward out of the chair. If your casters flutter, get them fixed.
- Do not use an escalator to move between floors without assistance.
- Do not attempt to move up or down an incline with water, ice or oil film on it. Avoid riding in the rain. Wheels lose traction when wet (especially urethane tires) and may behave erratically. Also beware of soft, sticky asphalt on hot summer days, especially where cracks and potholes may have been repaired.
- Do not move across, go up, or go down ramps or slopes greater than a 9-degree angle.
- Always use the brakes and always lock the brakes before getting in and out of the wheelchair.
- Lift the footrests UP before getting in or out of the chair.

Checks & Maintenance

Tire Pressure: Check to make certain that the tires are inflated to the correct pressure.

Brakes/Wheel Locks: Check the brake locks on a regular basis because they might become loose over time. This could jeopardize the safety of the wheelchair user. Always check the brakes when the tires are fully inflated to the correct pressure. The brake locks should operate easily. If not, the pivots may need lubrication. The pivots need to be tight enough that the brake lock stays in place when released. If not, the brake lock will drag against the tire,

resulting in wear and wasted effort. Good brakes are needed when a user is transferring to and from a wheelchair. If the brakes are not working well and the grip on the floor is not good enough, the chair might move causing the user to lose balance and fall!

Seating: Check that the seat cushion is not bottoming out. The air level in inflatable cushions needs to be checked frequently. Gel cushions need to be massaged periodically to keep the gel from settling into hard lumps. Check cushion covers, especially on air cushions since air cushions will not work without a proper cover. Check sling seats and backs for tears and sags.

Foot Rests: Check that the footrests are not bent and are at the proper height. Also check that the footrests latches hold securely.

Arm Rests: If the wheelchair has removable arms rests, make sure they are secure before use by lifting up on the arms

Leg Rests: If a wheelchair has removable leg rests, make sure they are secure before use by gently trying to swing the leg rest out away from the chair. When adjusting the leg rest, SUPPORT the wheelchair frame while lowering or raising the leg rest.

Rear Wheels/Wheel Spokes: Check for loose and broken spokes. Check that rear wheels spin freely without any wobble. Check quick release axle pins. They should release easily. The axle pins should be adjusted so that they are slightly loose when in place to ensure that the locking mechanism is fully engaged. Always check that the wheel is locked firmly in place after mounting a wheel.

Front Casters Wheels: Check that the caster wheels spin freely. If not, the problem may be due to debris caught in the bearing. The wheel usually must be removed to clean the bearing. Check for noises coming from the bearing; a good bearing should be silent. Check that the stem bearing axle is perpendicular to the floor. If not, the caster will have difficulty turning. Also make certain that the stem caps are in place because they keep water and dirt out. Check to make certain that the forks are not bent.

Anti-Tip Wheels: Never remove the anti-tip wheels on a wheelchair (not all wheel chairs have them).

Glide Test: Find a smooth level floor and then push the chair and let it glide. It should go a long way in a straight line. If not, the bearings may be bad or the wheels and casters may be out of alignment. Listen for noisy bearings. If the rear wheels are cambered with a connecting axle, the axle may need to be adjusted so that the wheels are parallel. Otherwise the wheels will have excessive friction.

AND DID YOU KNOW. . .

In 530 B.C., the Greeks created a wheeled bed that was probably used for moving a prominent sick or disabled person. We know that the Chinese were placing wheels on chairs by A.D. 525, and by the 3rd Century, the Chinese had created a wheelbarrow-like apparatus to carry disabled persons. In A.D. 1595, the first dedicated wheelchair was invented for King Philip II of Spain. It was a true wheeled chair equipped with footrests. In A.D. 1655, a 22-year-old paraplegic built one of the very first self-propelled wheelchairs, followed by Englishman, John Dawson in 1783, who built the first commercial wheelchair. In 1932, engineer, Harry Jennings, built the first folding wheelchair out of tubular steel that was similar to what you may see today. Built for a paraplegic friend named Herbert Everest, the two men then founded a company called Everest & Jennings which dominated the wheelchair market for many years. Eventually, an antitrust suit was brought against the company by the US Department of Justice who charged the company with rigging wheelchair prices. The case was later settled out of court.