

WHEELCHAIR SAFETY AND MAINTENANCE GUIDELINES AND CHECKLIST

READ THE OPERATING MANUAL FOR YOUR WHEELCHAIR AND OBSERVE ALL PRECAUTIONS. MAKE SURE THAT YOUR WHEELCHAIR PROVIDER COMPLETES A THOROUGH TRAINING SPECIFIC TO YOUR NEW WHEELCHAIR ON SAFETY AND MAINTENANCE ISSUES AND CONCERNS.

1. Regular Maintenance is very important. Keep the wheelchair in good repair and you will prevent many accidents and malfunctions.
2. Always lock the brakes before getting in and out of the wheelchair. On power wheelchairs, always turn the power off before transferring. This can prevent someone from bumping the joystick and it saves battery juice.
3. Don't pull backward on doors or other objects when sitting in a manual wheelchair. A door could suddenly release and you could tip over backwards.
4. Lift the footplates up before getting in or out of the chair.
5. If you have a wheelchair with removable arm or leg rests, make sure they are secure by lifting the arms and gently trying to swing the leg rest away from the chair. Do this before each use.
6. Avoid putting heavy loads on the back of a wheelchair. This could cause the chair to tip over backwards.
7. Don't remove the anti-tip wheels or bars on any wheelchair. This should prevent the chair from tipping backwards.
8. Keep loose objects or lap cover away from the wheel spokes.
9. Don't let children play with your wheelchair. They should be instructed to never touch your wheelchair or the controls. Don't let them ride on the battery cases or on the footrest; these will break if you do.
10. Use a flag if you ride in the streets. Use headlights and flashing taillights if you ride in the streets at night. Pick bright colored wheelchairs.
11. Avoid going up or down steep inclines or slopes. You might lose control and tip your chair over.
12. Beware of caster flutter. This is the side to side motion of the caster which usually happens at high speeds. If the casters flutter, replace them immediately.

13. Have the programming of your power wheelchair set so that it does not go faster than you can handle, especially in reverse.
14. Avoid riding in the rain. Wheelchairs are not waterproof and it is not safe. Controls get wet on power chairs and wheels lose traction on wet ground.
15. Just be careful and think of ways to prevent problems before they occur. Plan ahead for emergencies such as brake failure, tipping backward or the power wheelchair moving by itself.

For further information refer to **Maintaining your wheelchair.**

Adaptive Equipment Checklist

Provider Name: _____

Individual Name: _____

Date: _____ DMH #: _____

Equipment Checked by: _____

Please check all that apply:

MANUAL WHEELCHAIR:

Make of chair: _____

Model of chair: _____

When chair was purchased: _____

Chair provider and #: _____

Weight bearing limit for chair (lbs): _____

- _____ Wheel locks engage tires properly
- _____ Footrests present and in working order
- _____ Upholstery in good condition
- _____ Attaching hardware present and working
- _____ Seatbelt/restraining straps in good condition and being used properly
- _____ Wheels in good condition
- _____ Casters in good condition
- _____ Frame in good condition
- _____ Handgrips present
- _____ Handgrips firmly attach to chair
- _____ Chair folds properly
- _____ Seat rail guides present
- _____ Seat rail guides are working properly
- _____ Removable arms come off for transfer
- _____ Evaluating leg rests lock in place when raised
- _____ Handrails attach securely to wheels
- _____ Handrails are free from loose chrome or rough areas
- _____ Chair has attachments to keep it from tipping
- _____ Keep tires inflated at proper pressure (see stamp on tire or read manual)
- _____ Pop off wheels lock securely in place on chair
- _____ Replace worn tires properly
- _____ Wheelchair is clean and in good condition

POWER CHAIRS (additional information)

Age and type of battery _____

- _____ Call caps are present
- _____ Battery connections are free from corrosion
- _____ Keep track of battery charge indicator so battery is fully charged (charge battery when gage is at half or according to manufacturers recommendations)

WHEELCHAIR LIFTS:

- _____ Always back the wheelchair onto the lift
- _____ Get as close to the back of the lift as possible
- _____ Do not stand on lift with wheelchair while lift is in motion
- _____ Lock brakes on a manual wheelchair
- _____ Turn off power on an electric wheelchair
- _____ Hit unfold/deploy to lower the lift all the way to the ground
- _____ Keep wheels of wheelchair off front lip or flap of lift
- _____ Back wheelchair into van and position it facing forward – **to comply with the law, wheelchairs must face forward**
- _____ Move straps on floor where needed
- _____ Position back straps first above axle on back of chair – **do not crisscross straps**
- _____ Position front straps – best place is above the foot rest
- _____ Attach safety restraint lap belt across person and wheelchair – **to comply with the law, safety restraint lap belt must be used, even though wheelchair has a lap belt**
- _____ Do a final check of all straps and safety restraints

WALKERS:

Size of walker _____

- _____ Non skid tip in each leg of walker
- _____ All latches work in folding walker
- _____ All latches and buttons lock and work properly on height adjustments
- _____ Handgrips are firmly attached
- _____ Walker is clean and in good condition

Maintaining Your Wheelchair

Your wheelchair allows you to be mobile and active. If your equipment breaks down, it can be an inconvenience, a hardship, and may even put you in danger. You can help keep your chair operating and maintained by being knowledgeable about your wheelchair, taking care of problems before they put you out of commission, and having a handy list of providers that you can rely on for repairs, parts, and maintenance.

Take charge of the care of your own wheelchair.

As the owner and operator of your wheelchair, you will usually be the first person to notice when your chair is not functioning properly. You may not be able to perform the basic daily and weekly cleaning and upkeep yourself, but you can set up a routine that can be followed by your caregivers, family members or others to monitor your chair for problems. To keep your equipment running smoothly you will need to take care of minor problems, as well as having your service dealer take care of major repairs.

Know your equipment and be organized.

The process of maintaining your wheelchair begins on the day that your new chair is delivered. Read your warranty and talk with your service provider about maintaining your wheelchair. You will be better able to handle problems as they arise if you have the following information and tools available and close at hand:

- **Owner's manual** – This book contains valuable information about your wheelchair. It describes how to care for your equipment, items that are covered under warranty and the tools that you will need for simple maintenance. Keep your owner's manual in a safe place and refer to it often for guidance.
 - **Set of Tools** - Assemble and store a set of tools that you will need to have on hand for maintenance and emergencies. The following items can be attached to your chair in a pouch or box: Phillips and flat head screw driver, Allen wrench set, crescent wrench, spoke wrench, and a tire repair kit.
- WisTech is administered by the Wisconsin Department of Health and Family Services, Division of Disability and Elder Services. Funding for WisTech is provided through the federal Assistive Technology Act of 1998. It is a project of the National Institute for Disability and Rehabilitation Research (NIDRR), U.S. Department of Education under P.L. 105-394. WisTech provides information to people with disabilities, their families, service providers and other members of the community to assist in selecting, funding, installing and using assistive technology.

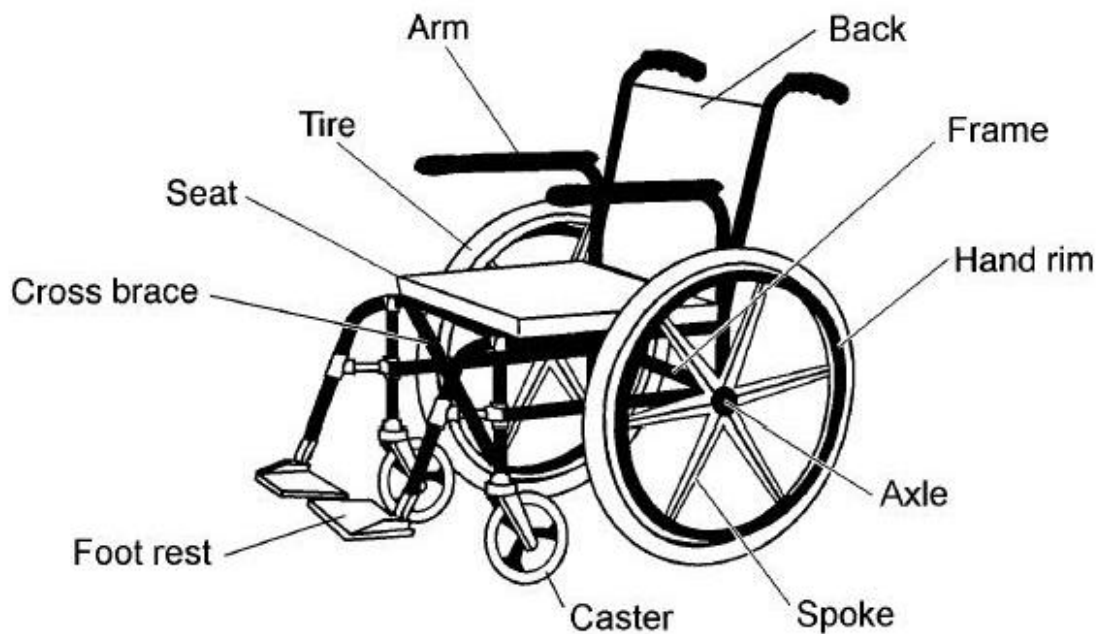
- **Information & Phone Numbers.** Prepare a card or notepad that lists important information and phone numbers for emergencies. This card can be laminated and concealed in the chair (to provide security for children or other vulnerable individuals). The information should contain the following at minimum:

- 🕒 Your name (and spouse, relative, other contact person) address, phone number;
- 🕒 Your doctor's name and phone number;
- 🕒 Wheelchair make, model and manufacturer's toll free number;
- 🕒 Name and number of the service dealer or local provider who services your chair;
- 🕒 Phone number of the public para-transit service or private s wheelchair transport service.

You can do certain maintenance tasks yourself.

Your service dealer performs more technical tasks.

With innovative design and features, today's wheelchairs present fewer potential problems; however, you still need to be aware of and monitor for common equipment failures. Regular maintenance can help extend the life of your chair and reduce the number and cost of repairs. Regular service includes keeping the



chair clean, checking tires for wear and air pressure, tightening screws, and monitoring for worn out cushions, pads, positioning equipment, and other parts. If you are unsure of performing a procedure or you encounter a problem, contact your service provider.

All Wheelchairs

Keeping your wheelchair clean will not only help keep you healthy and free of infections, but it will make it easier to identify equipment problems as they arise. To keep your wheelchair clean, you can wipe down the surfaces with a damp cloth. Use a mild detergent or a stronger cleaner for stains and sticky spots. Manufacturers often recommend using a car wax on the frame to make regular cleaning easier. Use a sharp tool or pick and carefully clean the wheel axle or caster bearing of any accumulation of hair, string, or other items that can interfere with the rotation of the wheels. Check the frame for any cracks or breaks in the metal. Any potential problems need to be reported to your wheelchair dealer for repairs. The upholstery also should be monitored for cracks or tears where the fabric folds or where there are screws through the fabric. Any problems related to fabric wear will need to be taken care of by the service dealer. If you rely on a seat cushion, check whether it is still providing the padding and support you need. Another regular activity is to check all nuts and bolts on the chair to verify that they are tightened (except for the crossbrace pin). If you need to replace any parts, be sure that you are using parts that match those that were supplied by the manufacturer and dealer. Check that all parts that fold, swivel, pivot, and are removable do so easily. For example, be sure that removable arm rests, foot rests, and braces, etc. are working properly. The crossbrace should fold easily without sticking. The center pin should move freely (this bolt is never tightened). Wheelchairs with reclining backs or tilt mechanisms should recline and return to upright without difficulty. Instead of using petroleum oil on your wheelchair, use an all-purpose silicone lube spray to lubricate the flex points on your chair. Your regular monitoring and maintenance can ensure that your wheelchair is operating safely. Your wheel lock needs to be checked to be sure that it engages and releases properly and does not rub against the tire. The lock needs to operate in such a way that it can be engaged and released without having to use excessive force. Also, the casters (front wheels) can present a safety hazard when they are worn out. Check your casters for cracks in the spokes that may eventually cause the caster to collapse.

Power Wheelchairs

Power wheelchair users can monitor their equipment by ensuring that moving parts are free of entanglements from wires and cords. You can also check that all electrical connections are firmly in place and free of dirt and corrosion. If you loosen or remove any wires, be sure that you reconnect it in the right place. Most power chairs will have color-coded wiring to help prevent errors. An incorrect wiring connection can damage your chair and result in personal injury due to a serious burn. Your batteries will last longer and perform better if you are careful to keep them charged. Keep track of your battery charge indicator and plug in your charger when the gauge shows less than half a charge. Check with the

battery manufacturer for specific charging information. There are two types of batteries for wheelchairs: wet and gel. Wet batteries require adding distilled water about every two months. Wet batteries can be damaged permanently if the water level falls below the level of the battery plates. Adding water is often quite difficult, even for someone with training and no disability. The batteries are heavy and difficult to reach. So adding water is usually impossible for wheelchair users. We will be glad to do it for our clients, even though Medicare will not pay for this service. If you do it yourself, follow these precautions:

1. Use only distilled water. Tap water has minerals that will damage the battery.
2. Don't overfill the battery. If the outside of the battery is wet, the battery has been overfilled. Fill only to about 1/8 inch below the ring in the hole. Use a flashlight to see the level clearly. Overfilling the battery will result in leakage of battery acid, which will quickly ruin battery connections. The water level will rise as the battery is charged, so a weak battery with low water level should be filled less than normal.
3. Be careful not to short-circuit the battery terminal with any metal. The sparks can ignite the gas in the battery and cause an explosion. Don't smoke. Be careful not to get battery acid on skin and in your eyes – use gloves and eye protection.
4. Wipe up any spills and replace the caps tightly.

Gel batteries avoid many of the problems of wet batteries. They never need water. They eliminate corrosion problems. They are much easier to take on an airplane trip because airlines require wet batteries to be removed from the wheelchair and placed in a sealed container. The main disadvantage of gel batteries is that they have about 10 to 20% less capacity than comparable wet batteries. This is usually important only for users who travel long distances. They cost more and Medicare will not reimburse us for the full price, but this is not the user's problem. If you want to switch battery types, make sure that the battery charger is suitable for the type of battery. Many old chargers will not charge a gel battery properly. Most new chargers have a switch to select either type of battery.

Adaptive Equipment Training Log

Example

Staff's Name: _____ Date: _____

By initialing below I state that I have been properly instructed to use that individual's wheelchair, wheelchair accessories and/or walkers, or standing frames, standing frame accessories. I have also been properly instructed on how to correctly implement PT, OT programs and their individual plans.

Individual: _____

Piece of equipment

Wheelchair:

- _____ Wheelchair chest harness
- _____ Lab belt
- _____ Foot plates/straps
- _____ Seating system
- _____ Tilt in space
- _____ Brakes lock/unlock
- _____ Tray
- _____ Hoyer lift and sling
- _____ Transferring with 2 staff
- _____ Implementing range of motion
- _____ Implementing PT/OT

Standing Frame:

- _____ Chest harness
- _____ Lap belt
- _____ Foot plates/straps
- _____ Knee block
- _____ Hip guides
- _____ Lateral guides
- _____ Adjustable tray
- _____ Brakes lock/unlock
- _____ Helmet
- _____ Gait belt
- _____ Hand splints

Supervisor: _____ Date: _____

Staff's Signature: _____ Date: _____