GUIDE TO WALKING AIDS: CANES, CRUTCHES, AND WALKERS

The U.S. Census Bureau estimates that over 12% of Americans aged 15 years and older have difficulty walking and that almost 5% use crutches or a cane or walker to assist them with walking (Brault, 2012). Further, among American seniors, over 16% use a cane and over 11% use walkers (Reidel, 2015).

There are many assistive technology (AT) aids on the market today to assist you with walking. The most common are canes, crutches, walkers, and rollators. This guide provides you with an overview and examples of these aids.

**Canes**

**Standard Walking Cane**

A standard walking cane consists of a wooden or metal shaft with a handle at one end that you can grip with one hand, and a tip at the other end that touches the ground. The handle can be straight, flat, curved, or offset. The grip on the handle can be smooth or have finger holds. A cane with an offset handle has a shaft that curves at one end, resembling the top of a question mark. Some standard walking canes have height-adjustable shafts and are also foldable—usually into four interlocking sections—for storage and transport when not in use.

The tip may be made of the same material as the shaft, or it may be made of metal or rubber. For some standard canes, a special tip may be added for additional traction or stability. For example, three- and four-pronged tips provide slightly more stability and allow the cane to stand upright when not in use. The HurryCane is an example of a
standard folding cane equipped with a tripod (or three-pronged) tip that pivots as you walk.

**Quad Cane**
Quad canes are canes with four ("quad") small legs attached to a metal platform at the bottom of its shaft. They are designed to provide more stability than standard canes. Quad canes typically have an offset handle with a rubber grip and a height-adjustable shaft.

**Combination Cane and Seat**
If you have difficulty standing for more than a few minutes at a time, you may ask your health care professional about a cane combined with a folding seat. These lightweight canes have one or two legs when used as a cane for walking support, and when folded out to a seat have three or four legs to support the weight of the individual when resting. They fold out easily into a chair with either a metal seat on three legs or a canvas seat on four legs, such as the Deluxe Portable Four-Leg Cane with Sling Comfort Seat. The height of the legs is usually adjustable.

**Crutches**
Axillary crutches, used singly or in a pair, extend to the floor and are designed to bear your weight under your arms. They feature a grip for your hands and have rubber tips at the ends for traction with the ground. Axillary crutches, such as the Millennial Crutch, are useful if an injury or surgery prevents you from putting weight on your leg or foot (Sears, 2016). Millennial In-Motion Pro Crutches are an alternative to standard axillary crutches. They are designed to improve proper posture and relieve stress on your hands and wrists. They have a large underarm cradle, an ergonomic grip, and a spring-assisted tip with a shock-absorbing power assist feature.
Forearm Crutches
Forearm or elbow crutches, also called Lofstrand or Canadian crutches, are designed to bear your weight on your forearms rather than your underarms. They also have a grip for your hand. While some have a small cuff on the top near the handle that allows the crutches to be secured to your forearms (e.g., Adjustable Forearm Crutches), others have elbow holders to rest your arm in instead of cuffs (e.g., FDI Elbow Crutches). Forearm crutches extend to the floor and their ends have a rubber tip for traction.

Knee Crutches
Knee crutches, designed to bear weight on your knees, are for lower leg, ankle, and foot injuries or disabilities. There are a number of different designs. For example, the Easy Crutch has a standard adjustable axillary crutch extending from the underarm to the ground with an attached second leg with a curved platform at knee level, on which you can rest your leg with knee bent. There is also a handle on the outside of the crutch to hold onto for stability. You only have to use the crutch on the weakened side, leaving your other hand free. Another example is the iWalk Free Hands-Free Crutch, which is a short, adjustable, axillary-type crutch extending from the top of your leg to the ground. It has a platform to support your bent knee and a beam centered under the platform extending to the ground. Straps and clips are available to put around your thigh and knee to keep your leg secure.

Wheeled Knee Walkers Crutch
Wheeled knee walkers, such as the Spry Knee Cruzer Elite, allow you to propel yourself with one leg, while you rest the other on a wheeled platform for support. These trolley, or scooter-like devices typically feature handlebars with a hand-brake and padded platform. Use the platform to rest your knee that requires support, and use the handlebar and hand-brake to assist you with maintaining stability, steering, slowing, or stopping.

Walkers
Walkers, also called walking frames, provide more stability than a cane if you have a balance or gait disability. Most walkers are comprised of a foldable metal frame that has two U-shaped sides that curve into two adjustable legs extending to the floor. Each side has hand grips or handles. The frame is reinforced with sidebars and is joined in the front with one or more crossbars, forming a three-sided frame. It stands about the same height as a cane.
Walkers without Wheels
Walkers without wheels, such as the Adjustable Aluminum Folding Walker (Model 4090), have a rubber tip on the bottom of each of the four legs. To walk, you stand inside the frame, grasp the handles on each side, lift the walker, place it down a few inches in front of you, and then you step forward.

Walkers with Wheels
Walkers with wheels are similar to the four-legged walker described above, but they typically come with wheels on the front two legs. The wheels may be available as an accessory or an attachment to a standard walker. To move forward, stand inside the frame, grasp the handles, and push the walker forward; you do not have to lift the frame of the walker with wheels.

Hemi-walkers
Hemi-walkers, such as the Adjustable Aluminum Side (Hemi) Folding Walker (Model 4060), designed for those who cannot use a standard walker with both hands, but can only grasp the walker with one hand due to one-sided weakness from a stroke or similar condition. Like a standard walker, the hemi-walker also has two U-shaped pieces, each curving into two adjustable legs that extend to the floor to provide four-legged support with rubber tips for traction. Hemi-walkers may have hand grips or handles at two levels. They also have similar reinforced frames with sidebars and crossbars, but instead of forming a three-sided frame, hemi-walkers have a one-sided frame. To walk, grasp the handle with your hand, lift the walker forward to the side—similar to how you would move a cane—and take a step forward.

Walker with Extra Hand Grips for Rising
The Walker Junior Folding Seated CLOSEOUT Pilot without wheels has a frame that is a cross between a standard walker and a rollator (see description below). The U-shaped, adjustable, four-legged, three-sided frame is topped with an additional set of hand grips. The lower set of hand grips attached to the U-shaped legs can help you get up from a seated position, providing you with additional stability while requiring less arm strength to rise. A second set of hand grips at the same height as standard walkers and canes is used for walking.
Rollators

Four-Wheeled Rollator
Rollators, also called rolling walkers, provide walking assistance if you have sufficient balance but need additional stability. Four-wheeled rollators have a metal frame with four shafts that extend to the ground with wheels on each shaft. They may resemble a standard walker frame, or have A-shaped sides with crossbars connecting the shafts on each side (e.g., Medline Freedom 11-Pound Rollator), or have shafts that extend to crossbars that connect to wheels for a more compact design (e.g., Triumph Mobility Escape Rollator). Their bicycle-style hand controls are part of the hand grips or handles and lock the wheels when squeezed. The height of the handles, which is adjustable, is the same as a walker or cane. Rollators typically have crossbars in the front that support a seat, and a padded bar that connects the handles to serve as a back rest when seated. This allows you to rest while you are out, or if you need to sit while you wait. Some rollators—such as the Carex Ultra Ride Rollator Transport Chair—also feature attachable footrests so you can use it as a transport wheelchair with someone pushing you while you are seated.

Three-Wheeled Rollator
Three-wheeled rollators, such as the Winnie Go Lite 3-Wheeled Rollator, provide walking assistance in a smaller design than four-wheeled ones. Typically, the frame is comprised of two shafts that are connected to crossbars in a tricycle-style configuration. Like the four-wheeled rollator, there are hand controls attached to the hand grips or handles. There may also be a small storage bag and other convenience accessories. Three-wheeled rollators do not have seats, so it may not be as helpful as a four-wheeled rollator if you need to rest frequently when walking. Moreover, it may feel less stable to you since it has only three wheels instead of four (Maloney, 2016). However, it may be a good option for you if you need something more lightweight with greater maneuverability than a four-wheeled rollator.

For More Information
Contact us at AbleData for information on these and other AT aids to assist you with walking. Wheelchairs, power chairs, or mobility scooters may also be an option for you if you can only walk short distances. You can learn more about wheelchairs in AbleData’s Guide to Wheeled Mobility: Manual Wheelchairs, Power Chairs, and Mobility Scooters.
Additional Resources

- American Physical Therapy Association: [Walking Aids](#) and [Physical Therapists Can Properly Assess & Fit Walking Aids to Prevent Injuries](#)
- Arthritis Foundation: [How to Choose the Right Cane](#)
- Baylor Scott & White Health: [Walkers and Canes](#)
- CerebralPalsy.org: [Walkers, Standers and Canes](#)
- The Department for Communities and Social Inclusion, Government of South Australia: [Walking Aids: Using and Measuring](#)
- MassGeneral: [How to Use a Walker and Crutch following Total Knee Replacement](#)
- National Multiple Sclerosis Society: [How to Choose the Mobility Device that is Right for You](#)
- Parkinson's Disease Foundation: [Fall Prevention in Parkinson's Disease](#)
- Washington University Orthopedics: [Crutch Use Instructions](#)

References


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