Mobility Aid Encyclopedia

This guide was made by Tumblr user "moltenvisionportal" for the purpose of helping others understand how different mobility aids work.

DISCLAIMER: I am not a doctor. I can not diagnose you with anything or prescribe you anything. I fully encourage that you speak with a doctor before beginning use of any mobility aid. I am, however, aware that this is not always an option. If you choose to use a mobility aid without consulting a professional, I am not responsible for any injury that may occur.

General Info

This guide will go over the most commonly known aids and explain what they are made for, and how to use them efficiently. There will be different sections per aid and I will provide links to purchase these items. I do not gain anything from the links I provide, they are simply a tool for price checking and finding more information on specific brands or aids. I also do not have an endless amount of money to test mobility aids, something being listed in this guide does not mean that I have tried it and recommend it. Feel free to message me if you would like actual recommendations. I do not like to support amazon, but I will provide those links regardless due to things like fast shipping and competitive pricing. I have no way of knowing where each reader may live. I am in the US so most of my knowledge and links will reflect that. I will do my best to provide alternative links if asked.

The reason this guide exists is because I have seen many people online asking about which mobility aid would suit them best. It is important to remember that using an aid improperly or using the wrong aid for your symptoms, can cause irreparable damage. Please be cautious, and speak with a doctor, physical therapist, or occupational therapist if at all possible.

Some major cities and towns have mobility aid closets that allow you to "rent" an aid for free for a certain period of time. This will allow you to get a feel for how an aid suits you and practice with it before spending money on it.

Canes

Canes are meant to be used when you experience mild balance issues, or weakness on one side of your body. The top of a cane's handle should reach the crease of your wrist. (Most shoes will make you a different height, so if you plan to use the aid inside and outside, remember to adjust the height.) You should hold it on the opposite side of whatever hurts. If your left leg is the one causing you trouble, hold the cane in your right hand and move it in conjunction with your left leg. It is meant to take a small amount of pressure off the leg that causes more trouble. Canes are not recommended when you have severe balance issues or pain and fatigue on both sides of your body. A cane may not be right for you if you have weak wrists or other issues in your upper body that will be agitated by offloading your lower body weight onto it.

Here is a video demonstrating how to adjust and walk with a cane: https://www.youtube.com/watch?v=RNJvJJlbkcg

Canes can be a straight stick or a folding type. Folding canes are great if you have frequently varying symptoms and have a bag large enough to carry it. Folding canes are sometimes wobbly if made cheaply, but there are plenty of folding canes that are just as sturdy as their traditional counterparts.

There are different types of cane handles. This choice is mainly up to preference and what the individual user finds the most comfortable.

Here is a website that explains the differences in cane handles: https://www.alexorthopedic.com/Choosing-the-Right-Cane-Handle-Style_ep_51-1. html

There are also different options for the bottom of a cane.

The standard cane has a singular rubber tip on the bottom.

There are also quad style canes with four feet that are able to stand up by themselves. These are better for balance, but they are heavier and may be more difficult to use.

Cane Maintenance

Unfortunately no mobility aid is without maintenance. Always clean any of your aids regularly. Make sure to regularly check the ferrule (the rubber tip) on the bottom of your cane for signs of wear. Ferrules are relatively cheap to replace and can be found at most drug stores and online. Check the handle as most materials will wear down over time.

Purchasing a Cane

Canes can often be found in drug stores and in big box stores like Walmart. They are relatively cheap. I have found canes for as little as \$8 and some for as much as \$50 or more. You can also purchase a cane online if you need something specific such as a petite height cane or a cane with a higher weight limit, or even if you just want more color options.

Here are some links to different canes:

Standard black offset handle cane: Amazon Link

600 lb (272 kg) weight limit cane: Amazon link

Collapsible cane with many pattern options: <u>Amazon Link</u>

Quad base cane: Amazon link

Fancy cane: Cool Crutches link

Another fancy cane: NeoWalk link

Walkers and Rollators

The terms walker and rollator are often used interchangeably but they are different devices. Both are a support that you walk with, but walkers have ferrules or sliders on the bottom, and rollators have wheels. (Some types of walkers have 2 wheels in the front and none in the back. Rollators will always have one wheel on each leg.) Both are an option for when you experience fatigue, weakness, and pain in both legs instead of just one. Rollators usually have a place for you to sit and rest. While it may be tempting, please do not use a rollator as a wheelchair unless it is specifically designed for dual use. Regular rollators are built differently and are much more likely to tip over and result in injury.

Walkers and rollators are more devices that may cause pain in the upper extremities due to the transferring of lower body weight. Rollators are also usually not recommended if you have severe balance issues as the wheels may make it easier for the device to slip out from under you and cause falls.

Walkers and rollators are sized similarly to canes. Adjust the device until the handles are approximately the height of your wrist joint, and walk with the device in front of you.

There is another option for people who cannot put much pressure on their wrists. Gutter-arm rollators (or upright rollators) distribute the weight through your forearms and allow for a more upright posture than traditional rollators. To size an upright rollator, raise your forearm until it makes a 90 degree angle with your upper arm. From there, your forearm should rest on the platform of the walker.

Here are some videos on using walkers and rollators.

Two-wheeled walker: https://www.youtube.com/watch?v=_UKG7LloXDQ

Rollator: https://www.youtube.com/watch?v=PE63pKn4xfQ

Walker and Rollator Maintenance

Any moving parts should be checked often and lubricated. The entire device will need to be cleaned often. Wheels will need to be replaced when signs of wear appear. If your walker or rollator has breaks, ensure that they are working.

Purchasing a Walker or Rollator

Both of these devices can often be found at drug stores and sometimes a limited supply will be available at big box stores. I have seen many more options available online. These aids are significantly more costly than canes and can range from thirty dollars to several hundred or more depending on lots of factors.

Here are some links to different walkers and rollators:

Two wheeled walker: Amazon link

Rollator: **Amazon link**

500 lb (226 kg) weight limit walker: Amazon link

Upright walker: <u>Amazon link</u>

Fancy walker (US store): by ACRE link

2 in 1rollator and transport chair: Amazon link

Fancy 2 in 1 rollator and transport chair: Rollz Motion link

Crutches

There are several different types of crutches. Most people in the US are most familiar with "underarm" crutches. They are typically prescribed for a short-term injury and are not recommended for long-term use. Other types of crutches include open cuff, closed cuff, and platform crutches. These 3 are typically safer for long-term use.

Crutches are best used when you need a larger amount of weight shifted off your legs, have mild/moderate issues with balance, and/or get fatigued quickly. They provide more support than a cane because you will be assisted on both sides. They require more coordination than something like a walker or rollator.

Crutches will cause strain on your upper body, but where the strain is applied depends on the type of crutch selected. Closed cuff crutches will strain the wrist the most while platform crutches put strain mostly through the shoulders.

This chart (made by tumblr user "weirdstrangeandawful") shows how different crutch types have advantages and disadvantages.

	Open cuff lofstrand	Closed cuff lofstrand	Platform	
Stability	least		most	
Upper limb strength+control required	most		least	
				*if a user does not have the physical ability to use open
Wrist strain		most	least*	cuff lofstrand crutches, strain will be more likely
Natural gait	most		least	
Ease on stairs/ramps	most		least	
				*this depends on the design but more restricted
Risk in a fall	least		most*	movement typically = higher risk
Risk of abrasion injury/bruising with				
normal use	least		most*	*especially if additional straps are required
Tactile sensory friendliness	most		least	*especially if additional straps are required
Ease of putting down/picking up	most		least*	*especially if additional straps are required
				*unsecured open cuff lofstrand crutches will fall if let go
				so reach is technically zero but platform crutches allow
				little movement of the arm except some of the wrist
Reach when using		most	least*	which doesn't allow opening doors for example
Weight	least*		most	*can be comparable to closed cuff lofstrand crutches
Cost	least*		most	*can be comparable to closed cuff lofstrand crutches

Source (with screenreader friendly text) <u>Tumblr</u>

If you are the owner of said blog and would like your resource removed, please message me.

Crutches are sized the same as canes. The handle of closed and open cuff crutches should reach the crease of the wrist. To size platform crutches, hold your forearm up so that your elbow is bent to a 90 degree angle, your crutches are at the right height when your forearm rests on the platform.

Here are some videos showing different crutch gaits. It is normal to use different gaits for different symptoms or activities. Practice several and see what works best for you.

I have included videos by other disabled individuals because every resource I found online from a professional was for temporary injury and weight removal off of one foot. Crutches can be used for more than when you have a broken leg, here's some lovely videos by people in our own community.

Video by a chronically ill person: Youtube

Short-form video by Lylo: <u>TikTok</u>

If you have made either one of these videos and would like your resource removed, please message me.

Crutch Maintenance

Regularly clean your crutches. Check the ferrules often for signs of wear and replace as needed. Ferrules can be found online or in drug stores. The handle to your crutches may wear down over time and start to creak or feel wobbly after much use, at this point it is recommended to replace your crutches entirely.

Personal Recommendation

Ferrules need replacing fairly often, but it is worth it to invest in nice ones. If you live in an area where it snows, check out ice tips for your crutches. Crutches are slippery in general and you are likely to fall if your crutch tips are wet. I highly recommend Thomas Fetterman's rain crutch tips. Fetterman Crutch Website

He offers a variety of different tips and other accessories and while I have heard they are all fantastic, I only have personal experience with the rain tips, which have saved me from falling on several occasions.

Purchasing Crutches

Long-term use crutches are not typically available in stores in the US. You can find a wide array online. Crutches have a lot of factors that can vary in price. I have seen crutches for as little as \$30 and some that are several hundred dollars.

Here are some links to different crutches

Open cuff crutches: Amazon Link

Closed cuff crutches: Amazon Link

500 lb (226 kg) weight limit closed cuff: Amazon Link

If you need crutches with a higher weight limit, check the size of the cuffs. Most companies do not produce a wide enough cuff to properly accommodate larger forearms.

3-Angle adjustable platform crutch: Amazon Link

Patterned closed cuff crutches: Cool Crutches

Well-known brand with all different options of crutches: Walk Easy

Popular platform crutches: <u>Smart Crutch</u>

Wheelchairs and Scooters

I want to preface this section by saying that I will *not* be including certain types of wheelchairs in this part of the guide. If you are someone who needs certain seating or a tilt-in-space wheelchair, I am not knowledgeable enough to include information about those things here. It is also incredibly likely that someone who requires that amount of support will not need this guide as its intended audience is people who are ambulatory to some extent and do not have access to medical care.

Wheelchairs have many different uses. The most commonly portrayed reason to use a wheelchair is paralysis, but that is actually the minority of wheelchair users as a whole. Popular reasons for using a wheelchair include pain, muscle weakness, severe balance and coordination issues, and extreme fatigue. Some wheelchair users only use their wheelchair for long distances or events, (such as going to a theme park, aquarium, or other event where you will be expected to walk and stand for multiple hours at a time.)

While manual wheelchairs are the most commonly seen, they are not for everyone. If your disability impacts your upper body, or if you have weak arm muscles, you may not be able to push yourself and should opt for a different kind of wheelchair.

There are several different types of wheelchairs available.

- Transport wheelchair
- Standard manual wheelchair (hospital wheelchair)
- Custom manual wheelchair
- Flectric wheelchair

It is worth noting that the hospital wheelchair is not safe for self-propelling. These wheelchairs will be marked with an asterisk (*) in the purchasing section. Choosing to self-propel in a chair such as these can cause irreversible damage to your upper body. Please be safe and have someone push you if possible.

If you intend to self propel and can not afford a custom wheelchair, it is advised to check sites such as Ebay for used custom wheelchairs that are close to the size you need. These will be more expensive than standard manual wheelchairs but they will be safer and more comfortable for long-term use.

Transport Wheelchair

These chairs are designed for someone else to push you in. There are no big wheels in the back for self-propelling. This is a great option for people who don't have the strength to push themselves and know they will never be unattended. This chair can be used solo only if you intend to foot-propel. These chairs are foldable and usually fairly easy to take in and out of your car.

Standard Manual Wheelchair

These chairs are designed for someone else to push you. There are big wheels in the back to propel yourself with, but doing so on a regular basis can cause injury. You may be able to foot-propel with this type of chair. These chairs are very heavy and may be difficult to take in and out of your vehicle.

Custom Wheelchair

This is the only type of manual wheelchair that is safe for regular self-propelling. This chair will be custom fit to your measurements and can be pushed using the larger wheels in the back or by someone else if you choose to include push handles on your chair. These chairs are typically very expensive and sometimes can only be accessed by medical insurance. These chairs are often significantly lighter than standard manual wheelchairs. There are different folding and rigid options, but all of them break down to an extent for travel.

There are also semi-custom wheelchairs where you can modify a small number of things for a more comfortable fit, and they typically have a more ergonomic and safe to push design.

Electric Wheelchair

These wheelchairs are made for people who can not push themselves. These chairs are often moved via a joystick or other controller that is attached to an armrest of the chair. These wheelchairs are heavier than most due to the electrical components. If you need an electric wheelchair, make sure you or someone you live with is able to take it in and out of your car.

Wheelchair Maintenance

This guide by <u>Permobil</u> includes relevant manual wheelchair maintenance and terminology. Most bicycle shops are able to do tire repairs for manual wheelchairs.

This guide by <u>Permobil</u> includes electric wheelchair maintenance tips.

Purchasing a Wheelchair

Drug stores and big box stores may have a limited selection of transport wheelchairs and standard manual wheelchairs. Any other type of wheelchair must be purchased either online or with a prescription and the assistance of a healthcare professional. Pricing for wheelchairs varies, but be prepared to spend anywhere from \$100 to several thousand dollars depending on your needs.

Before you purchase a wheelchair, make sure you know what size you need. Most standard wheelchairs come in different seat widths.

Custom and semi-custom wheelchairs will have more calculations to figure out. See a wheelchair specialist to get properly measured if possible. Here is a video by wheelchair company Hands On Concepts on how to measure for your custom wheelchair. <u>Youtube</u>

The above video assumes that you are already in a wheelchair that fits you. Some measurements may have to be guessed or estimated if you are purchasing your first custom chair alone. Incorrect measurements may cause injury, use your judgement.

Here are some links to different wheelchairs:

<u>Transport</u> wheelchair: <u>Amazon Link</u>

500lb (226 kg) weight limit transport chair: Amazon Link

*Standard wheelchair with 3 seat width options: Amazon Link

*Lightweight (20 lbs) <u>standard</u> wheelchair: <u>Amazon Link</u>

*500lb (226 kg) weight limit standard wheelchair: Amazon Link

Semi-custom wheelchair (largest seat width 18 inches): Karman Healthcare

Semi-custom wheelchair (only 2 sizes, largest 18 inches): Reckless Wheelchairs

Very adjustable <u>custom</u> wheelchair (largest seat width unknown): <u>Hands On</u> <u>Concepts</u>

Affordable custom wheelchair (largest seat width 20 inches): Not a Wheelchair

650lb (294 kg) weight limit <u>custom</u> wheelchair (seat width 22-30 inches): <u>Quickie Wheelchairs</u>

Electric wheelchair: Amazon Link

400lb (181kg) weight limit electric wheelchair: Amazon Link

Popular <u>electric</u> wheelchair: <u>Whill</u>

There are also companies such as <u>SpinLife</u> that offer many name brand custom wheelchairs and electric wheelchairs. If you choose to order from this company, please do plenty of research on the specific models of chairs you are looking at. Ask tumblr, search reddit, get opinions from other wheelchair users. And please make sure your measurements are accurate, you often can not return custom wheelchairs and you could end up stuck with something that causes more pain than it helps.