

Mobility After Stroke



Issues facing stroke survivors
and their families



Regaining Mobility

Moving around safely and easily is not something you may think about, until you have had a stroke. Each year more than 795,000 people in the United States suffer strokes. As a result, many of these survivors have paralysis and/or balance problems. Statistics show that 40 percent of all stroke survivors suffer serious falls within a year after their stroke. This brochure offers helpful tips about treatments, home adaptations and lifestyle changes that may increase your safety and ability to move around easier.



Understanding paralysis and spasticity

Paralysis is the inability of a muscle or group of muscles to move on their own. After a stroke, signals from the brain to the muscles often don't work right. This is due to stroke damage to the brain. This damage can cause an arm or leg to become paralyzed and/or to develop spasticity.

Spasticity is a condition where the muscles are tight and stiff and resist being stretched. It primarily affects the arms, fingers or legs. It can result in an arm being pressed against the chest, a stiff knee, a tight fist or a pointed foot that interferes with walking. It can also be accompanied by painful muscle spasms.

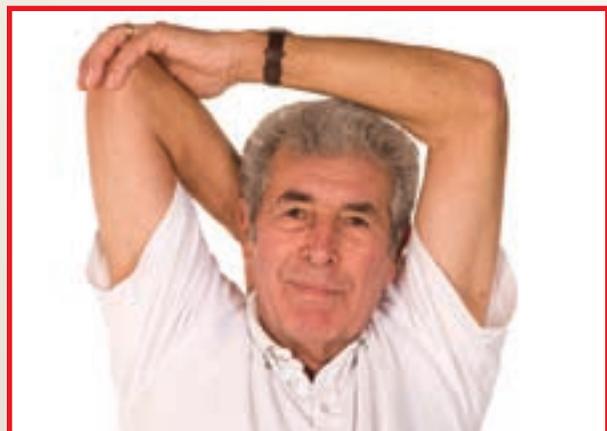
Treatment Options

Treatment for spasticity is often a mix of therapies and drugs. This approach is used to achieve the best results possible. It's important to note that all therapies and drugs have potential risks and side effects. Be sure to weigh the risks and side effects against the benefits. Ask your healthcare professional about the best treatment options for your needs.

Stretching

Spasticity treatment often includes:

- Full range-of-motion exercises at least three times a day
- Gentle stretching of tighter muscles
- Frequent repositioning of body parts



Oral medicines

There are many medicines that treat the general effects of spasticity, including tizanidine, baclofen, dantrolene sodium and benzodiazepines. Some of these medicines act directly on affected muscles, but others act on the central nervous system to decrease spasticity. Possible side effects include muscle weakness, drowsiness and fatigue.

These medications vary in strength, so it is important to talk with a healthcare professional to determine which medication may be right for you.



Treatment (cont.)

Injections

Nerve block injections block the chemicals that make muscles tight. These shots target only specific limbs or muscle groups affected by spasticity. This helps control side effects to other areas of the body. However, when side effects are present, they may include pain during injection, a burning/tingling sensation, swelling/soreness of the injected area and lack of energy.

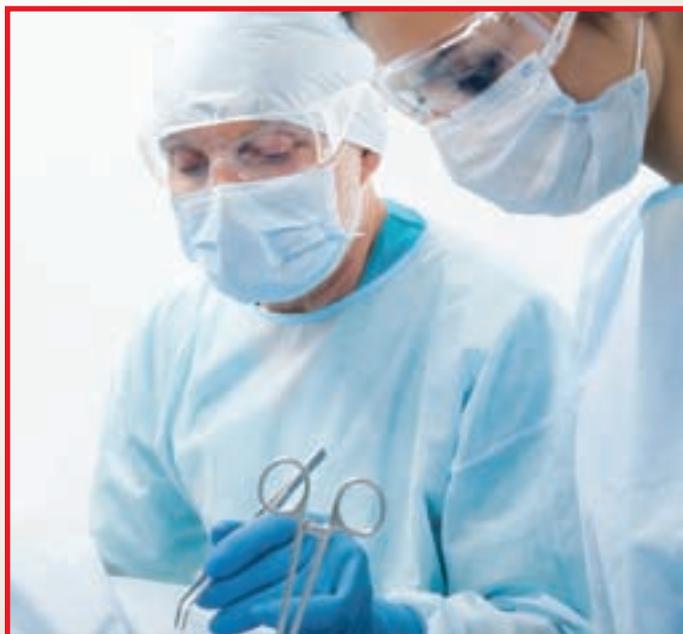
A single shot can be effective immediately or may take up to four weeks for symptom relief, depending on which particular injection was received. Treatment may need to be repeated as often as every three months.

Nerve block injections are not suitable for patients with full-body spasticity because the treatment is technically difficult. Treatments are ongoing to help with spasticity and are not a cure.

Surgery

Surgery is another option to treat spasticity. Surgery can be done on the brain or the muscles and joints. Surgery may block pain and restore some movement.

Not all treatments are suitable for everyone. Healthcare professionals will try to tailor spasticity treatments based on the extent of the problems, symptoms and lifestyle goals. Your healthcare professional will also help you understand how much medicine you need and any side effects.



Safety at Home

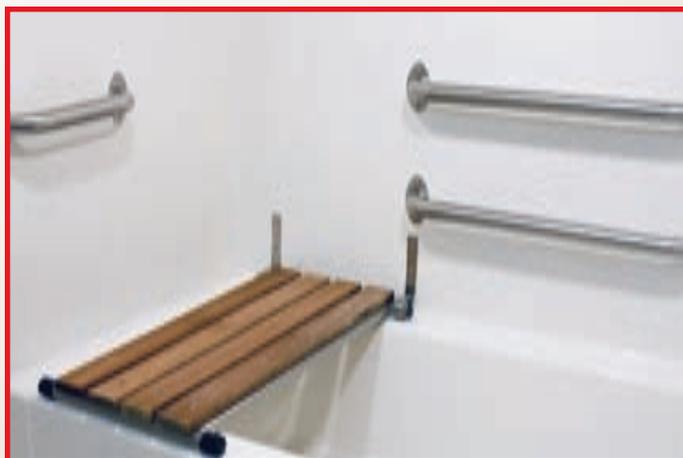
Managing life at home after a stroke may make some stroke survivors and their caregivers uneasy. But with some simple changes, fears can be overcome and recovery improved. These changes can make your home safe to move around in and allow you to regain some independence.

The following tips may help you avoid falling and injuring yourself at home:

- Clear paths to the kitchen, bedroom and bathroom
- Wear nonskid shoes and avoid slick surfaces
- Remove loose carpets and runners in hallways and stairwells, or fasten them with nonskid tape to improve traction
- Install handrails for support in going up and down stairs

Modifying your home with assistive devices, such as grab bars and ramps, may provide further safety and allow for easier movement around the home. These devices may be useful:

- Raised toilet seat
- Tub bench
- Handheld showerhead
- Plastic strips that adhere to the bottom of a tub or shower
- Long-handled brushes and washing mitts with pockets for soap
- Electric toothbrushes and razors



Movement Aids



Braces, canes, walkers and wheelchairs may also help stroke survivors gain strength and move about more freely. Be sure to use the braces or other devices exactly as recommended by a therapist.

Foot drop is a common problem during stroke recovery. This condition is caused by weak leg muscles that cause the ankle to drop down when lifting a leg to take a step. It may cause a person to trip and fall if the foot and ankle are not supported by a brace at all times.

The most common brace for this problem is an ankle-foot orthosis (AFO). The AFO is placed below the knee and supports the ankle and foot. This type of brace comes in many styles and can also be customized. Support adjustments on the AFO can also influence knee movement. Other variations and adjustments can be made to braces to fit specific needs. A physical therapist or orthotist can suggest the appropriate device. Understanding safety procedures and proper use of orthotics, including proper fit and maintenance, is essential.



Movement & Lifestyle

Lifestyle changes to diet and exercise should be tailored to meet a person's individual needs. Weak leg muscles, poor vision, dizziness and medicines may compromise balance and put people at higher risk for falls.

You can also prevent falls by:

- Remaining active
- Strengthening leg muscles and balance through weight training or tai chi classes
- Wearing flat, wide-toed shoes
- Eating calcium-rich foods and taking calcium supplements to increase bone strength if necessary
- Following your therapists' recommendations about limitations and walking needs
- Not relying on furniture for support while walking—use the assistive device prescribed by your therapist



- Recognizing that certain medicines may make you drowsy and taking precautions
- Limiting walking when distracted
- Never walking without prescribed aids such as braces or canes

Be on the safe side and don't take chances. Listen to the advice of healthcare professionals and experienced caregivers. Regaining independence requires patience.

Warning Signs of Stroke

Learn the many warning signs of a stroke. Act **FAST** and **CALL 9-1-1 IMMEDIATELY** at any sign of a stroke. Use **FAST** to remember warning signs:

F **FACE:** Ask the person to smile. Does one side of the face droop?



A **ARMS:** Ask the person to raise both arms. Does one arm drift downward?



S **SPEECH:** Ask the person to repeat a simple phrase. Is their speech slurred or strange?



T **TIME:** If you observe any of these signs, call 9-1-1 immediately.

NOTE THE TIME WHEN ANY SYMPTOMS FIRST APPEAR. If given within *three hours* of the first symptom, there is an FDA-approved clot-buster medication that may reduce long-term disability for the most common type of stroke.

LEARN ABOUT MORE SUDDEN SIGNS OF STROKE AT



www.stroke.org/symp

National Stroke Association's mission is to reduce the incidence and impact of stroke by developing compelling education and programs focused on prevention, treatment, rehabilitation and support for all impacted by stroke.

A stroke is a brain attack that occurs when a blood clot blocks an artery or a blood vessel breaks, interrupting blood flow to an area of the brain. Brain cells begin to die.

**CALL 9-1-1 IMMEDIATELY IF
YOU SEE ONE OR MORE SIGNS
OF A STROKE.**



1-800-STROKES
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All publications are reviewed by
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