Spasticity is a condition in which muscles become stiff or rigid. The muscles resist being stretched, which limits movement. Spasticity can develop in any muscle in the body. It is most common in the arms, fingers and legs.

**Why Is It Important to Get Help?**

Spasticity develops slowly over weeks or months. It ranges from slight muscle stiffness to muscle shortening. When the muscles shorten, the joints can “freeze” into position. This is a painful condition called a contracture. Contractures prevent normal movement and interfere with doing daily tasks. Properly positioning spastic limbs helps prevent contractures.

**Symptoms of spasticity include:**

- Stiffness or tightness of muscles and joints
- Painful muscle spasms or cramping of muscles
- Involuntary (uncontrollable) jerking motions
- Exaggerated deep-tendon reflexes (knee-jerk reflex)
- Abnormal position of the arm; tight fist, bent elbow and arm pressed against the chest
- Abnormal position of the legs; crossing the legs as the tips of scissors would close (scissoring)

**What Do You Need to Know?**

Spasticity is out of your loved one’s control. Things that trigger spasticity or make it worse are:

- Pain (pressure sores)
- Infections (bladder, toenail, ear)
- Cold temperatures
- Constipation
- Fatigue or stress
**What Treatments Should You Discuss with Your Healthcare Team?**

Your loved one’s needs determine the type of treatment. Often, treatment involves a mix of therapy and medicine. The goals are to relieve symptoms, reduce pain and improve movement.

**Physical exercise and stretching** – This will help loosen stiff muscles. A physical therapist works with your loved one. Often, this includes full range of motion exercises several times a week. Gentle stretching of tight muscles may be needed. The physical therapist may suggest constraint-induced movement therapy (CIMT). CIMT involves restricting movement in the unaffected arm to force the use of the affected arm. The American Stroke Association Web site has more information on CIMT. You can find the link in the “More Resources” section at the end of this fact sheet.

**Braces and splints** – These assistive devices hold the muscles in a more normal position. This helps to prevent contractures and improve comfort.

**Oral medicines** – There are medicines to treat the effects of spasticity. Some work to temporarily block nerve impulses. Others work to relax the muscles. Talk to your healthcare team about medicines for your loved one.

**Injections of a medicine** – Medicines, such as Botox®,* help to block nerve activity. This loosens the muscles. Intrathecal baclofen therapy (ITB) is used to treat severe spasticity. A surgically placed pump delivers baclofen* into the spinal fluid. Baclofen is a medicine that relaxes the muscles.

**Surgery** – This is often the last choice for treating severe, chronic spasticity. It involves operating on the bones, muscles or nerves. Surgery works to block pain and restore some movement.

**Helpful Tips**

**Encourage your loved one to remain active** – Exercise and stretching can help ease symptoms and maintain movement. Reinforce using the affected arm as much as possible for daily tasks.

**Properly position spastic limbs to prevent contractures** – Proper positioning can keep affected limbs from becoming fixed into a set position. The physical therapist can teach you proper positioning.

**Watch for skin breakdown** – Spasticity in the fingers can cause the nails to tear into the skin. Spastic limbs may rub against each other. Check the skin regularly for any redness or sores. A good time to do this is during bath time. Talk to your healthcare team about any concerns.

For more information on stroke caregiving, visit the RESCUE home page:  
http://www.rorc.research.va.gov/rescue
**Listen and be supportive** – Spasticity can be mentally and physically stressful. Allow your loved one to express his or her feelings.

**Remember**

- Spasticity develops slowly over weeks or months. Tell your healthcare team if your loved one shows signs of spasticity.
- Check the skin regularly for skin breakdown. Talk to your healthcare team about any concerns.
- Talk to the physical therapist about how to properly position spastic limbs to prevent contractures.

**More Resources**

The following resources contain internet links. The location of internet pages can change. Therefore the links provided may not always work. For the most current version of this list, go to [http://www.rorc.research.va.gov/rescue/resources](http://www.rorc.research.va.gov/rescue/resources). This page will be updated frequently.

**Link Disclaimer**: Links to information and Web sites outside of the Department of Veterans Affairs do not indicate an endorsement of products or services offered by the sites. In addition, these sites may have privacy and security policies that are inconsistent with those of VA.

**American Stroke Association**
Web: [http://www.strokeassociation.org](http://www.strokeassociation.org)
Phone: 1-888-478-7653

The American Stroke Association has information about stroke-related physical problems. Read about the following topics:

- Constraint-Induced Movement Therapy (CIMT)  
- Spasticity  

**Exploring Spasticity**
Web: [http://www.exploringspasticity.com](http://www.exploringspasticity.com)

Exploring Spasticity is an on-line community for people affected by spasticity. It provides information on spasticity along with various treatments and resources.

For more information on stroke caregiving, visit the RESCUE home page: [http://www.rorc.research.va.gov/rescue](http://www.rorc.research.va.gov/rescue)
My HealthVet (MHV)
Web:  http://www.myhealth.va.gov

My HealthVet (MHV) provides trusted information on stroke and other health conditions. It also provides resources for stroke caregivers and tools to track your loved one’s health.

Also visit the Caregiver Assistance Center on the My HealthVet Web site. This section provides more information on caregiving.

- Go to: http://www.myhealth.va.gov
- Click on the button that says “Enter Here”
- Click on “Research Health” on the top bar, then “Healthy Living Centers”
- Click on “Caregiver Assistance”


These materials were created for the project:
Web-Based Informational Materials for Caregivers of Veterans Post-Stroke
Project Number SDP 06-327 funded by VA HSR&D Quality Enhancement Research Initiative (QUERI)

*Brand names and types of medicines are provided as examples only. Their inclusion does not mean that these products are endorsed by VA or any other Government agency. Also, if a particular brand name is not mentioned, this does not mean or imply that the product is unsatisfactory.

For more information on stroke caregiving, visit the RESCUE home page: http://www.rorc.research.va.gov/rescue