

Patient information

Positioning for managing spasticity

What is spasticity?

Spasticity can be defined as a tightening or stiffness of the muscle due to increased muscle tone, and is often made worse when muscles are quickly stretched or moved. It can also greatly increase fatigue however exercise, properly done, is vital in managing spasticity.

The following tips may prove helpful:

- ✓ Avoid positions that make your spasticity worse.
- ✓ Daily stretching of muscles to their full length will help to manage the tightness of spasticity and allow for optimal movement.
- ✓ Keep in mind that moving a spastic muscle to a new position may result in an increase in spasticity. If this happens, allow a few minutes for the muscles to relax.
- ✓ When exercising, try to keep your head straight (not tilted to one side).
- ✓ If you are using a spasticity-reducing drug, time exercise to begin approximately one hour after taking the medication.
- ✓ Your anti-spastic drug dose should be checked frequently, as spasticity changes.
- ✓ Sudden changes in spasticity may occur in the presence of infections, skin sores, or even tight shoes or clothing.

Positions seen with spasticity and ways to decrease spasticity

Keep in mind that you want to refrain from active exercises that accentuate a position associated with any spasticity you experience. For example, if you have extensor spasticity, refrain from doing the active exercises that straighten the hip and knee to the extent that it sets off the spasticity.

It is important to remember that the positions in this section are designed to decrease your spasticity. If they do not, consult your physician or physical therapist.

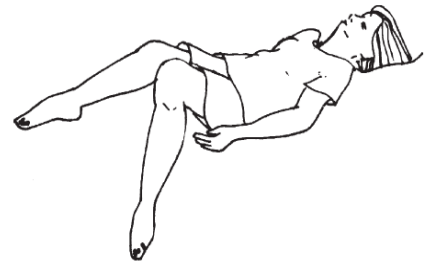
Spasticity positions

These are positions that the body tends to move towards when spasticity is dominant.

- **Flexor spasticity**

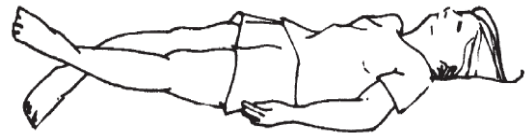
The hips and knees are maintained in a bent position with hips turned inward.

Less frequently, hips and knees are turned outward. Knees are bent in a flexed position and feet tend to point in a downward direction.



- **Extensor spasticity**

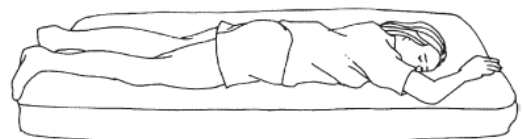
The hips and knees are maintained in a straightened position and the legs are very close together or crossed over, with the feet in a downward position.



Positioning your body to reduce spasticity

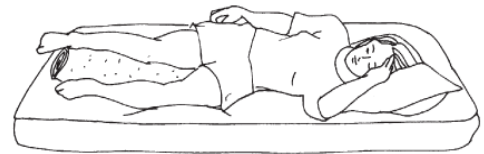
- **Lying on your stomach (prone position)**

This is an excellent position to try if you have spastic hip and knee flexors. Remember, give yourself a few minutes to allow your hip muscles to relax in this new position. If able, let toes and foot hang over the edge of the bed to allow a neutral ankle position. As your hips relax, so will your calf muscles.



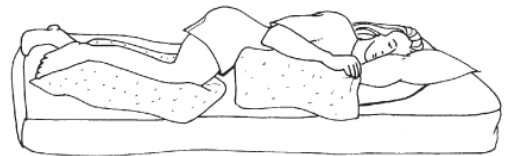
- **Lying face up or in 3/4 position**

If your knees tend to roll inward, try placing a rolled pillow or towel between your knees. Again, allow time for your legs to accommodate and relax into the new position for a few minutes. Pillows under the knees only reinforce the knee flexion and should be avoided.



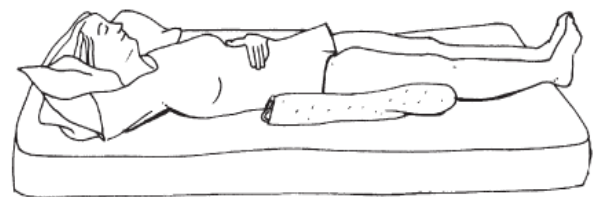
- **Lying on your side (side-lying)**

This is an excellent position if your hips and knees are prone to extensor spasticity. On your side, bend the knee of your top leg and let the knee of your bottom leg be straight. You can also put a rolled pillow or towel between your legs.



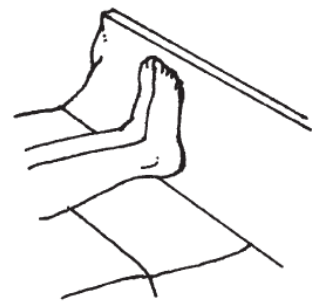
Correcting hip turn out

If your hips and knees assume a “frog like” position due to spasticity, try lying on your back. Place the end of a pillow, or a large beach towel, under your upper thigh (hip to knee). Roll the towel or pillow so that your hips and knees align themselves. Knees should be pointed toward the ceiling.



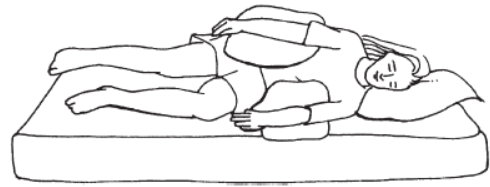
Correcting foot turn down

If your ankles and feet turn in a downward position, try to position your ankles and feet in a neutral position, with your toes pointed up toward the ceiling. The easiest way to achieve this is to place your feet against a padded footboard. If your bed does not have a footboard, bracing or other orthotic measures may be needed.



Correcting bent elbows

If your elbows tend to bend and your arms remain close to your body, try lying down with your arms out alongside your body, on pillows, and your hands positioned palms down.



Some precautions

- Wear clothing that doesn't restrict movement.
- Be sure the room temperature is comfortably cool. Consider a fan, air conditioner, or open window. If you are especially heat-sensitive, consider a cool shower or a 10-minute soak in a cool tub before exercising: start with lukewarm water, slowly adding cooler water until the water feels like a cool swimming pool. Or experiment with cooling headbands, vests, or neck wraps.
- Don't force any movement that causes pain or increases spasticity. Some feeling of stretch is fine; pain, numbness or tingling are not. If pain occurs, stop. If discomfort occurs, cut back to a motion that's easier.
- Go slowly. All movements should be done evenly, allowing the muscles time to respond to the stretch by relaxing. Moving quickly can increase spasticity or stiffness. Hold each stretch for 30 – 40 seconds at the comfortable far end of your range. It may help to count out loud or use a timer. Then gently return to the starting position.
- Progress as tolerated while always listening to your body and remember, your body will vary from day to day. The idea is to increase the range of pain-free motion therefore it is important to distinguish between pain and the feeling of stretch. Stretch is okay, pain is not.
- Remember to breathe evenly and relax the face throughout each movement. There is a tendency to grimace or hold the breath during an unusual movement.
- Avoid overexertion: include rest periods and sip cool water to prevent overheating or dehydration.
- Experiment with times of day. Some people find early morning best, some find it helpful to break exercise sessions into two parts: one in the morning and the other in the afternoon or evening.