

24-hour postural care

Why is it important to position someone affected by stroke or other neurological conditions?

After a stroke, or other neurological condition, there may be a number of reasons why it is difficult to maintain a good position in a chair or bed.

- The muscles may not be able to move at all (paralysis) or be weak
- There may also be less feeling or sensation on the affected side of the body
- The limbs may be held in a flexed or bent position for comfort or protection

As a result of these, you may be less aware that part of your body is out of alignment. This may make it difficult to sit in an upright position and you may tend to lean over to one side.

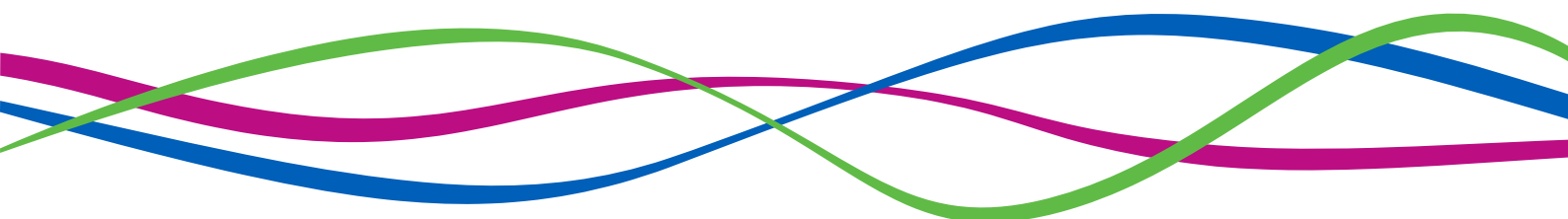
Poor positioning can lead to contractures developing because the muscles are held in a shortened position for a long period of time. Poor positioning can also lead to a number of other problems:-

Shoulder or back pain

Sitting in a slumped position can result in permanent changes to the back and shoulders, which can result in pain.

Difficulty swallowing or maintaining good nutrition and hydration. Good positioning is important during meal times, particularly if you have any swallowing difficulties and are on a diet recommended by the Speech Therapist. Sitting up during eating and drinking is important to ensure the food goes into the stomach and not into the chest, which could cause chest infections. It also aids digestion and helps to avoid constipation.

Reduced respiratory function. Positioning in a slumped, twisted or rounded position can make it more difficult to expand the chest wall to breathe fully. This can then lead to reduced levels of oxygen in the blood. Good positioning in an upright position is therefore essential for maintaining a healthy respiratory level.



Increased risk of developing pressure sores. Poor positioning means that more of the body's weight is concentrated on a smaller surface area, which can lead to the skin becoming sore or breaking down.

Poor sleep pattern. It can be difficult to get to sleep if you are not in a comfortable position when lying in bed.

Good positioning in lying and sitting can help prevent these problems developing in the future and help to maintain the normal range of passive movement in your muscles and joints.

What is a good seated position?

Ideally, when sitting on a chair your hips and knees should be at 90°, your back supported and weight equal through both buttocks. If you tend to lean over to one side, trunk support in the chair may be required or you may need a specialist chair that tilts back to maintain the body in a straight position.

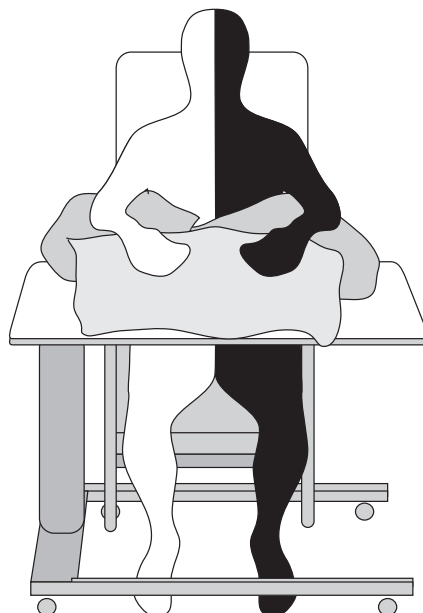
The chair should have adequate pressure relief to ensure you do not develop any sores. Your nurse or therapist should advise on the type of pressure care required.

The affected arm should be supported by a pillow with the arm in a straight position. Do not hold the affected arm in towards the body, as this can lead to the muscles around the elbow shortening. Alternatively, both arms can be supported by pillows in a forward position.

In some cases, you may need a specialist chair to support your body in a safe and comfortable position. Advice can be given by your therapist on the type of chair suitable for you to use.

It is important to sit out during the day. This will depend on your level of tiredness. If you are unable to sit out for more than a few hours, prioritise sitting out at meal times to help with swallowing and digestion.

Dark side of body is where weakness is occurring



Do

- Make sure you are sitting with your bottom right back in the centre of the chair
- Place feet flat on the floor or footrests
- Ensure knees are directly above the feet
- Support the arm with pillows
- Ensure the hips are central in the seat and in line with the shoulders
- Ensure the head is supported if unable to maintain an upright position
- Reposition as often as is required

Do not

- Sit with the spine twisted
- Sit in a slouched position
- Leave someone if they aren't in a good position. Reposition when needed

What is a good lying position?

You can vary your position in bed by alternating between lying on your back or side. It is easier to maintain a straight position when lying on your back. It is important to be supported by pillows in all positions, particularly on your side. If you are trying to maintain your position on your side because you aren't adequately supported, you will be working hard, and keeping the muscles tense, which can contribute to them tightening and shortening. When side lying it is important not to twist the body and rib cage, as this can lead to rotation and compression of the chest.

If contractures have already developed, a sleep system may be required to prevent the contractures developing further. This involves a number of pads which are placed within the bed, which provides support for the affected joints. This allows the body to relax into a straighter position, and prevents the muscles shortening any further.

An individual positioning plan should be designed to provide a timetable showing when you should be sitting out in a chair or correctly positioned in bed.

For more information see www.stroke4carers.org. Then choose video clips, then the 'moving and handling' section with options to 'positioning on a chair and bed'.



DO

- Ensure the patient is well supported with pillows
- Ensure the head is line with the trunk
- Ensure the chest is not twisted so the patient can breathe without restriction

What if contractures have already developed?

If lower limb contractures are starting to develop, a sleep system may need to be added to the care plan. However, the same principles of support apply and can often be achieved with supporting pillows until a full postural assessment can be completed by the therapist.

It is important to ensure that as much of the body is in contact with the bed as possible – this is called the base of support. The maximum base of support is achieved when the person is lying on their back in a symmetrical position. Any gaps between the bed and person can be filled with pillows to provide the maximum base of support

Photographs of leg positions supported with pillows (with tick boxes)

Patients often pull into a flexed position because this is more comfortable. It is important to achieve a comfortable, pain free, supported position in as straight a position as possible to prevent further contracture development

Achieving a maximal base of support helps relax the muscles, which in turn helps to bring the limbs into a straighter position. This also means that pressure is distributed evenly throughout the body and therefore the patient is less likely to develop pressure issues and skin breakdown.