

Skin Care

The skin is your body's largest organ. It protects you from infection and injury and controls body temperature and fluid loss. The skin also stores nutrients and provides the sensations of hot and cold, touch and pain. Good nutrition and good blood flow is needed for healthy skin.

Before your injury, you unconsciously changed your body position frequently. Now, because of your loss of sensation and paralysis, you must make a conscious effort to change your position. If you don't change your body position, your skin is squeezed between your bones and another surface such as a chair or bed. This decreases circulation and can eventually lead to a pressure sore.



Because you do not have sensation below the level of your injury, you will need to frequently relieve pressure from bony areas and create a safe environment. Check carefully for anything that may cause pressure. Here are some safety tips:

- Check inside your shoes for objects that may have fallen into them
- Always wear shoes to protect your feet
- Buy shoes one full size larger than usual because your feet tend to swell
- Avoid wearing tight fitting jeans because the seams on the sides and back often cause pressure
- Be careful that you aren't sitting on foreign objects and position yourself so you aren't lying on buttons, zippers, snaps, or external catheter tubing
- Check to make sure that your sheets and clothes aren't wrinkled underneath you. It is best to sleep nude or with just a pajama top

Remember: open areas on the skin can come from falls or burns so always:

- Lock your wheelchair before you transfer
- Use cup holders or lap trays to carry hot liquids
- Check the water temperature before getting into the shower
- Never smoke in bed

Techniques which can be used to relieve pressure on your skin are frequent turning, repositioning and bridging.



When in bed, you will need to turn about every two hours, more often if your skin shows signs of redness, less often if it doesn't. Three hours is usually the maximum time anyone can remain lying on his back or side. Most people can sleep on their stomachs (prone) for as long as eight hours.

Learning to use pillows to position yourself properly will make you more comfortable and help prevent skin problems. For example, when lying on your side, keep the pressure off the lower leg by positioning it either in front of or behind your body and support it on a pillow. Positioning the upper

leg behind the body puts less pressure on the hip. If you develop a red area, you may still be able to turn onto that side. This is done by bridging. Pillows or blanket rolls are placed above and below the red area so that no pressure is placed directly on it.

When you're lying on your back (what's called the supine position), be sure to use pillows to keep your heels off the bed. Always remember that while in bed you must turn, position, and bridge.

When you are sitting you must make a conscious effort to do weight shifts or change your position at least one minute out of every 15 minutes. This can be done through wheelchair push-ups, leaning side-to-side, or by leaning forward. If you have very high quadriplegia you will need help to shift your weight or you can buy a reclining wheelchair equipped with chin or head control devices. The important thing to remember is to develop a routine, check its effectiveness, and stick to it.

At first, you will build sitting tolerance slowly. This allows us to check how your skin is responding to pressure on your buttocks. On the first day, sit for 15 minutes three to four times a day. Each day increase your sitting time by 15 minutes until you are sitting for four hours. Always remember to check your skin after sitting. *Never* sit on red skin.

Another way to keep your skin healthy is to cushion bony areas. Use an egg crate mattress and a wheelchair cushion. We frequently recommend the Jay cushion because it is a firm, molded seat that gives you good support with a gel insert that molds to your body. It's easy to clean and comes with a cloth cover.

Whether in bed or sitting, everyone has a different tolerance for skin pressure. Until you learn how well you tolerate pressure, you will need to inspect your skin every time you turn in bed, and again when you return to bed from your wheelchair. Use your paramirror to carefully inspect the pressure points. As your skin increases its tolerance, you will only need to check your skin in the morning and evening.



You must also check your skin after wearing new shoes or devices, such as splints and clamshells. The presence of a red area indicates that the device needs to be adjusted.

Good nutrition is important both in preventing pressure sores and healing them if one is already present. If you do get a pressure sore, you will need extra protein, calories, and vitamins A and C to heal. Being over- or underweight also makes it more likely that your skin will break down. Being underweight doesn't give you enough padding between your bones and skin and being overweight makes it more difficult for you to change position.

Good hygiene keeps your skin clean and dry. Remember, skin that is too moist from sweat, bowel or bladder accidents can breakdown. Stool and urine are very irritating to the skin so be sure to clean up accidents as soon as possible. Skin which is too dry can crack and breakdown. Apply lotion to skin that is too dry.

What happens if my skin is red?

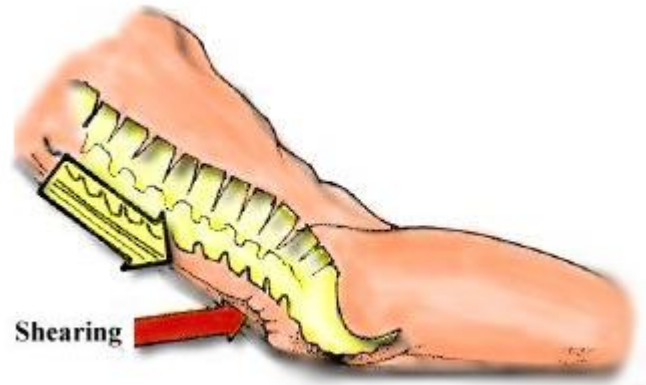
First, **STAY OFF OF IT** until the redness fades. A red area is the first sign of skin breakdown leading to a pressure sore. If you remove pressure from the skin the red area will begin to fade.



Constant pressure is the main cause of red skin, but other factors contribute to skin breakdown. Excessive moisture from wet clothes or sheets caused by sweating, bowel, or bladder accidents can make your skin soft and moist, allowing the skin to tear easily. Friction from either sliding down in bed or leg spasms can irritate and scrape the surface of your skin. A poor diet can contribute to pressure formation by not supplying the skin with the food it needs. Poorly fitted clothes, splints, wheelchairs, or braces can lead to red areas.

Skin damage can also be caused by shearing. Shearing occurs when skin slides over muscle and bone causing friction, abrasion, and a decrease in circulation. This is why your sacrum (tailbone) becomes much redder when sitting in bed than it does when sitting straight up in your wheelchair. Having someone pull you up by your pants can also cause shearing. This can be prevented by leaning forward while someone else places their hands under your buttocks (ischiums) and lifts and moves you back in your chair.

Evaluate the cause of your red area, review your skin care principles and change your care to prevent red areas in the future.



Pressure Sores

If a red area develops, take it very seriously and don't let it go on to the next stage.

First, the skin will begin to blister or break open. If you continue to put pressure on it, the open area will become bigger and deeper. A scab may form and you might think it is healing. Hiding under this scab, however, is a deep sore which may involve muscle and bone. This sore can become infected and take months to heal.



What should you do? First, **stay off of it!** Have it evaluated by your doctor and follow his recommended treatment. If it is superficial he may recommend Duoderm. If it is deeper he may recommend cleaning it with half strength peroxide and normal saline, followed by a normal saline wet to dry dressing three times a day. Don't be alarmed if it bleeds slightly, because this indicates a good blood supply. After the pressure sore is healed you will need to rebuild your sitting tolerance.

A pressure sore is one of the most depressing complications a spinal cord injured person can face. It is depressing because you must stay in bed until the sore is healed, and this can take several months. You may lose precious time in rehabilitation, time on a job, time with friends and family, or time to

play sports. Not only are you out of the mainstream of life, life itself may be jeopardized. Deep pressure sores can get infected and make you very ill. And, because you are in bed you become a good candidate for other complications of immobility, like deep vein thrombosis, respiratory infections, or contractures of your joints. **This is why we stress prevention!**

Pressure sores can be prevented by taking good care of your skin.

Basic Skin Care

- Create a safe environment
- Relieve pressure
- Cushion bony areas
- Inspect your skin
- Good nutrition
- Good hygiene



Basic skin care seems uncomplicated but it takes effort to make it a routine part of your life. Healthy skin improves your attractiveness and physical appearance, but it doesn't stop there. It helps you maintain a good quality of life, reduces the chances for infection, and allows you to work, go to school, have fun, or play sports. Don't let a pressure sore happen to you!