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# Taking care of your skin

A guide for you after spinal cord injury

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Spinal Cord Injury  
Rehabilitation Program

This booklet has been written by the health care providers who provide care to people who have a spinal cord injury or illness. At the time of this printing the information was accurate to the best of our knowledge. The information may change due to the rapid changes in health care. It is not intended to replace medical/health advice from your health care providers.

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## How is skin affected by a spinal cord injury?

When you have a spinal cord injury with partial or complete paralysis, you may:

1. Lose some or all of your feeling for touch (sensation) below the level of your injury.
2. Lose some or all of your ability to move and so you will not be able to move or get pressure off your skin when you sit or lie down.

Nerves in the skin give you information about the world around you, such as temperature, touch and position. If you cannot feel, you will not get warning signals such as pain and heat. These signals usually help you avoid injury. If you cannot feel and you cannot move, you may get into a lot of trouble from sitting or lying in one position for too long. Too much pressure on one spot for too long can cause skin to break open. This is called a pressure sore.

Your skin is the largest organ of your body. It weighs 6 to 9 pounds, and covers 18 square feet. Your skin protects organs inside your body and prevents loss of too much body fluid. Your skin also helps to control your body temperature by shivering and sweating.

If you do not have enough sensation or feeling to provide warning signals, you will need other methods to keep your skin safe. These methods are described in the next few pages.

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Keeping your skin healthy keeps you healthy. This booklet will help you learn how to care for your skin so it stays healthy.

## **Keeping your skin healthy**

Skin care needs to be done every day to keep you healthy and to prevent problems. If you do notice an open area, let your nurse know. You will need to have proper treatment as soon as possible.

Healthy skin is:

1. Intact - has no sores, scrapes, bruises, burns or rashes.
2. Kept soft with natural oils.
3. Well fed by a good blood supply.

Your skin will be healthy if you:

1. Eat and drink a well balanced diet.
  2. Keep your skin clean and dry.
  3. Check your skin daily for injury.
  4. Relieve pressure often.
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## **Eat and drink**

Your skin, like you, needs a well balanced diet and enough fluid to stay healthy. Please keep within the fluid guidelines for your bladder. Protein, iron and vitamins are a must for healthy skin. Please see the booklet on Healthy eating for more information.

## **Keep clean**

You must keep your skin clean and dry. Skin which is often left wet from sweat, urine or stool is more likely to break down. Shower or bathe and shampoo daily or as necessary to keep clean.

Follow your planned bowel and bladder routine and this will help prevent leakage and keep your skin clean and dry. If leakage does occur, change your clothes at once and wash and dry the area.

Keeping your skin clean and dry will help prevent open areas.

## **Check your skin**

Look at your skin often to find any skin changes. Check for changes such as red areas and scrapes. A pressure sore can appear as a very small area on the skin, but the size of the area on the skin may not show the damage under the skin. Catching skin problems early is important. This can prevent them from becoming bigger.

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Skin checks should be done twice a day, morning and night. Use a long-handled mirror to check your entire body. Pay special attention to bony areas. Do not forget to check the skin between your toes and around your toenails. If you are unable to check your own skin, ask a helper, friend or family member, to check your skin for you.

### **When checking your skin look for:**

- colour - pale, flushed, discoloured or reddened areas that do not return to normal colour in 20 minutes
- temperature - warm to touch but not hot
- moisture - too dry or too damp
- swollen or hard spots
- unclean areas
- scars or open areas
- rashes or blisters



Pay special attention to skin over bony areas, and to any area where your skin has been damaged before and has healed. Scar tissue is weaker than normal skin and can break open again easily.

**Note:** If you have dark skin and cannot see redness caused by pressure, feel for increased warmth of skin over the suspect areas with the back of your hand.



- ✓ Pay special attention to the groin area, look for rashes or sores, which can be caused by tight clothing or leakage of urine or stool. Men who wear condoms for urine drainage should check their penis every day. If you have catheter tubing, check for areas where the tubing may rub or press.

## **Pressure relief**

Prolonged pressure to an area will cut off the circulation of blood to the skin by squeezing the blood vessels shut. If there is no blood supply for a period of time, the skin will start to die. This happens very quickly over bony areas. It is very important to relieve pressure often over bony areas. See page 9 for more details.

## **How to prevent skin damage**

### **Dangers around you, bumps and injuries to the skin**

If you cannot feel, you must pay attention to the possible dangers around you.

#### **Avoid burns from:**

- unprotected pipes or radiators
  - hot water bottles, heating pads, electric blankets
  - hot liquid spills such as coffee, especially hot drinks held between legs
  - sitting too close to fires
  - cigarettes
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**Be careful to:**

- check the temperature of water in shower or bath
- when riding in a car, be sure to wear shoes and make sure your body is not in contact with the car heater.

If you should burn yourself, remove your clothing as soon as possible. Apply ice or cold water to the area. Contact your doctor.

**Friction and skin do not mix**

You need to prevent friction on skin. Friction on skin is caused by rubbing of skin on a hard surface without protective clothing or by spasms. To prevent friction, lift yourself during transfers or use a sliding board with towel or clothing on to prevent friction. **Do not drag.** Avoid hitting your bottom on the wheelchair during your transfer.

**Clothing, braces, splints**

Do not wear clothing with heavy seams such as blue jeans. Check your feet often when breaking in new shoes. Never tie the laces tightly. Do not wear tight fitting socks. Avoid shoes that are too small or do not breathe as they may cause ingrown toe nails. Shoes that are too big may cause increased friction if you have a lot of spasms. Check the areas of skin under splints or braces after removing them.

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## **Take care of your equipment**

- Make sure air or liquid filled wheelchair cushions and mattresses are inflated properly.
- Check that other types of cushions and mattresses are in good condition.
- Check to make sure splints fit correctly.

## **If you feel sick**

If you feel sick and are losing fluid through sweating, vomiting and/or diarrhea you need to replace these fluids. When you are sick your skin is at risk for easy breakdown. To keep your skin healthy you need to:

- drink more
- bathe more often, and
- if possible, eat a high protein diet.

Call your doctor if you are not sure what to do if you are feeling sick and/or have a fever.

## **Sunburn and frostbite**

Avoid extremes in temperature. In winter, when outside, be sure to wear warm clothing, including mitts and boots. In summer, wear lightweight clothing. When sunbathing, wear a protective hat and use sunscreen with at least a UV factor of 15. Check exposed skin regularly.

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## **Pressure or bed sores**

Without good skin care, a number of problems can happen. One of the biggest problems is pressure or bed sores. Pressure sores are always caused by too much pressure. Tiny blood vessels in the skin over bony areas are squeezed shut, stopping the blood flow or circulation to the skin. Without good circulation, the skin begins to die very quickly.

When you sit in a wheelchair, most of the pressure is against your buttocks. Sitting without getting pressure sores is called sitting tolerance. Sitting tolerance is built up slowly and depends upon many things such as:

- Type of wheelchair cushion.
- Your ability to change position in your chair.
- Your body build-amount of natural padding.

## **How to increase your skin tolerance**

Your skin tolerance will be increased gradually, by slowly increasing the amount of time you spend in any one position either sitting or lying.

Your nurse will work closely with you as you increase your sitting time.

We often recommend increasing your sitting time by about 20 to 30 minutes every 3 to 5 days. Keep in mind that skin tolerance is different for each person. As you increase your time, your nurse will check your skin to make sure that no redness develops.

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**As you increase your time, remember, if you have a pressure sore:**

- ✓ Always increase the time spent in one position slowly and right after check the effect on your skin.
- ✓ If you have a pressure sore, ask your nurse to check if a sore is healed well enough before sitting.
- ✓ If you have a newly healed pressure sore, start with very short sitting times and slowly increase the time period.
- ✓ If possible, learn to use a mirror to check your skin daily.

**How to relieve pressure in a wheelchair**

- ✓ Do wheelchair pushups if you can.
- ✓ If not, then lean from side to side. To relieve pressure move one hip at a time. Hook your arm around the chair handle to maintain balance.
- ✓ If you have a recliner wheelchair, have someone lower the back down all the way regularly. You may be able to do this yourself in a power chair.
- ✓ Wheel up to a bed and rest your head on it.
- ✓ You can prevent sores by sitting in a good position and by lifting or shifting your body weight for 30 seconds every 15 minutes.

Your physiotherapist will help you learn the best method to relieve pressure while in your wheelchair. Please see the booklet on **Movement and Exercise.**

**When you travel, take your cushion with you!**

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## **How to lie in bed to relieve pressure**

You will have a turning schedule at night based on your skin tolerance. Stick to it. If you are able to lie on your stomach, you may be able to stay in that position most of the night. The amount of time you can spend on your back and sides will be less, about 2 to 4 hours.

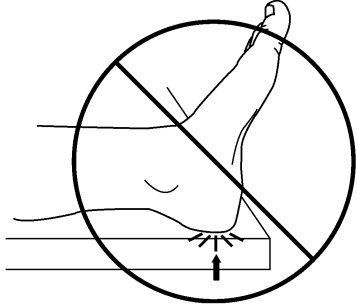
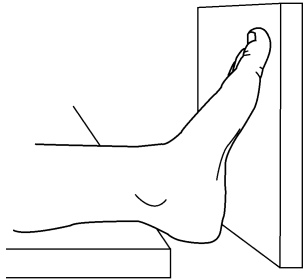
Correct position is just as important as changing position regularly. Keep your legs separated by pillows. If you have good skin tolerance, you may be able to spend the whole night on a sheepskin pad, special mattress or something similar, and not have to turn as often.

### **To relieve pressure correctly, you must:**

- ✓ Know when and how you should be positioned.
  - ✓ Have the right equipment, which may include heel protectors, sheepskin, foam blocks and wedges.
  - ✓ Have enough pillows to keep you in position.
  - ✓ Be able to change your position or have a helper who will assist you to turn.
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## How pressure affects blood circulation

**Incorrect Positioning of Foot:** Pressure on skin squeezes blood vessels and cuts off circulation. Unless pressure is relieved a pressure sore will develop.

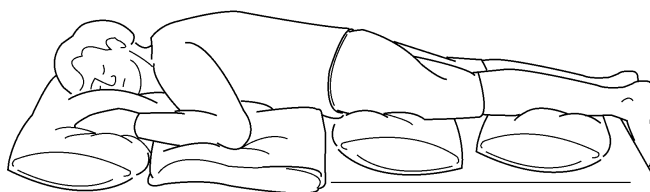
	<p><b>Incorrect Position</b></p> <p>Circulation cut off by pressure.</p>
	<p><b>Correct Position</b></p> <p>No pressure equals good blood circulation.</p>

## Lying on your stomach - Prone Lying

Pillows are put under shins, hips and chest. Check this position with your physiotherapist before you try it alone.

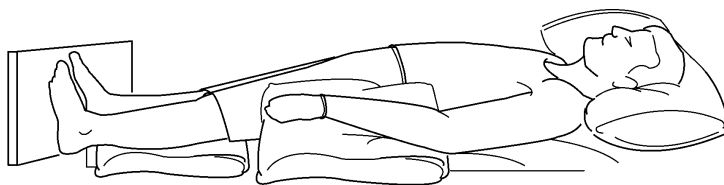
This relieves pressure on:

- knees and toes
- hip bones
- collar bones



## Lying on your back

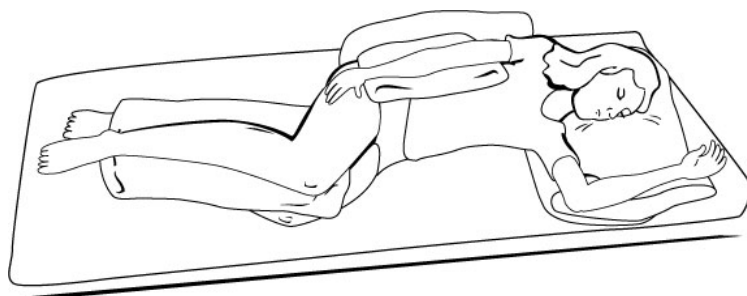
- heels should rest off mattress unless using a heel posey
- footboard may be used, with or without a pillow, to prevent footdrop
- hands may be raised on a pillow to prevent swelling
- pillow may also be placed under ankle suspending heel off mattress



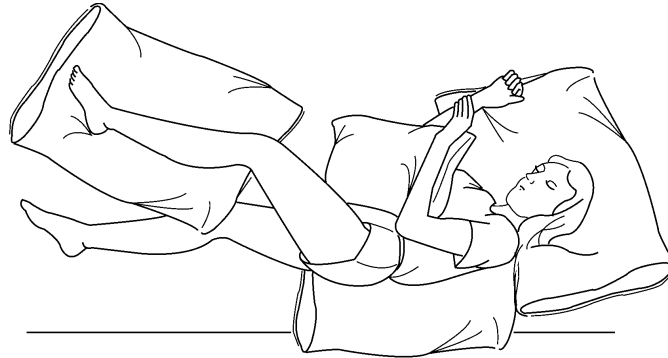


## Lying on your side

- legs are separated by a pillow and do not lie on top of each other
- heel poseys should be worn to protect ankles from pressure



### 30 degree oblique position



These pictures show some positions of lying in bed. Your nurse will work with you to figure out the best position for you.

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