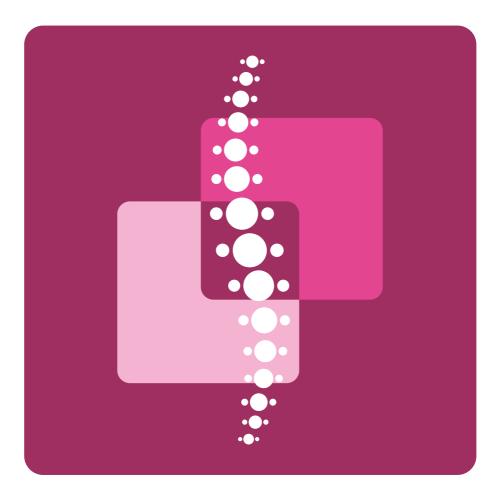


An tOspidéal Náisiúnta Athshlánúcháin

Skin Care After Spinal Cord Injury

Booklet 4



Skin care after Spinal Cord Injury

This is one of a series of booklets developed by the Spinal Cord System of Care (SCSC) Team at the NRH.

COPYRIGHT © 2023 National Rehabilitation Hospital. All Rights Reserved. This publication may not be reproduced or transmitted by any means without the prior written permission of the NRH.

Contents

Our Skin	4
The Structure of the Skin	5
Skin after Spinal Cord Injury	6
Skin Problems after Spinal Cord Injury	7
What are Pressure Injuries?	8
Where on the Body do Pressure Injuries Happen?	12
Why am I at Risk of a Pressure Injury after SCI?	14
Prevention is the Key	15
Skin Inspection	15
Support Surface	17
Keep Moving	19
Incontinence	22
Nutrition	22
Other Skin Care Tips	25
What Should I do if I see Signs of a Pressure Injury?	27
Common Terms	28
Frequently Asked Questions	29

Our Skin

The skin is the largest organ in the body. Skin has three main functions:

1. Protection

The skin protects internal organs such as the liver, kidneys, bones and muscles from injury. The skin also provides a barrier against infection and the harmful rays of the sun.

2. Temperature Control

The skin helps to control body temperature. When you are warm, your blood vessels open up as they move towards the surface of your skin. Sweating then helps you to cool down. When you are cold, the body shivers and the blood vessels in the skin get narrow to keep you warm.

3. Sensation

The nerves in the skin send messages up the spinal cord to the brain so you can feel pain, touch, pressure and temperature.



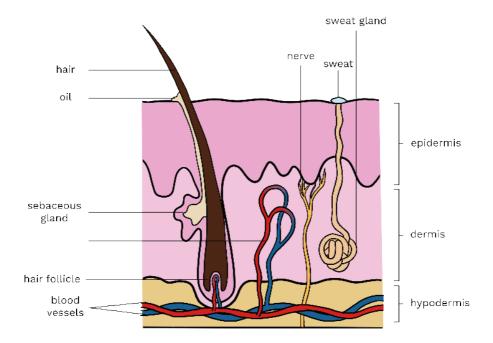
The Structure of the Skin

The skin is made up of three layers: the epidermis, the dermis and the hypodermis.

The **epidermis** is the outer layer of skin that protects the body from infections. It is thicker on the palms of the hands and the soles of the feet.

The **dermis** is the inner layer that contains blood vessels, nerves, hair roots and sweat glands.

The **hypodermis** is mostly fat. It protects the body from cold and helps with shock absorption. Blood flow to the skin keeps it alive and healthy.



Skin after Spinal Cord Injury

After a spinal cord injury, the skin will still protect the body and provide a barrier against infections but there may be important changes including:

- A loss of sensation: Depending on the level of injury, your skin will have less ability to feel pressure, pain or discomfort. A complete spinal cord injury will block many, if not all, of the messages between the brain and the skin below the level of your injury. An incomplete spinal cord injury means there will be some blockage of sensation. When there is no feeling, you will not get warning signals to tell you when you have hurt yourself, for example, when you get a bruise, cut or burn.
- Changes in body temperature control: After a spinal cord injury, sweating and blood flow below the level of your injury may change. This may affect your ability to control your body temperature.



Skin Problems after Spinal Cord Injury

The most serious skin problem after SCI is a pressure injury.

A pressure injury is an area of damage to the skin and the tissue below it. It is caused when something presses, slides or rubs against it. In very serious cases, the muscle and bone can also be damaged. Pressure injuries were once called pressure sores, pressure ulcers or bed sores.

How does pressure cause harm?

Before SCI, feelings of pressure, pain and discomfort caused you to move and change position very often.

However, when you have no feeling below the level of your spinal cord injury, you will not feel pain and discomfort in the same way. Your brain does not get the signal that you need to move. It will not know that areas of your skin are not getting enough blood supply, are too cold or too hot, or are being bruised. Sitting or lying in the same position for a long time causes pressure in areas of your body, in particular on areas where your bones are closer to your skin.

This pressure means that tiny blood vessels cannot supply blood, oxygen and nutrients to that area. When there is no blood flow for a period of time, healthy skin cells start to get damaged and then die. This is the beginning of a pressure injury.

What are Pressure Injuries?

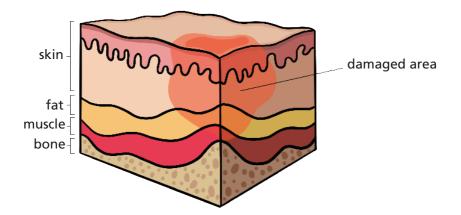
Classification

Pressure injuries are classified using an international system. They are described according to four stages of severity:

Stage 1

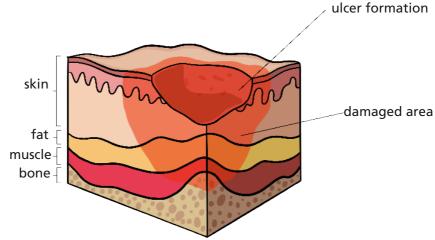
A stage 1 pressure injury is a mark on the skin without any broken skin. The skin remains discoloured and does not blanch after touching (see blanching test section on page 11). In people with white skin, the discolouration is usually red but in darker skinned people, the colour change is more difficult to see. In this situation, a change in temperature or firmness of the skin might give a clue that a pressure injury has developed.

Be aware of your normal skin colour so that you can easily see changes when they happen. If you see a change, it can be helpful to compare skin colour to the skin on a similar body part such as your other arm or leg.



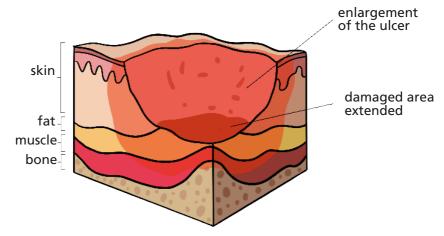
Stage 2

The skin will be broken in a stage 2 pressure injury and the dermis will be visible. It may also present as a blister.



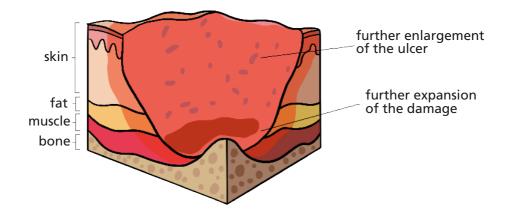
Stage 3

In a stage 3 injury, the damage is deeper and the fatty layer of skin (hypodermis) is affected. **Slough** (pronounced sluff yellow or creamy in colour) or damaged tissue may be seen and will need to be removed before healing can take place. **Eschar** (black in colour) or dead tissue may also be seen. Muscles and bone are not affected.



Stage 4

A stage 4 injury affects all layers of skin down to the muscle and bone. Slough or eschar may also be present.



Skin tolerance is the amount of time you can lie or sit in the same position without causing a stage 1 pressure injury. Skin tolerance is affected by personal factors such as age, skin-type, state of health and time since injury and by external factors such as type of wheelchair, cushion and mattress.

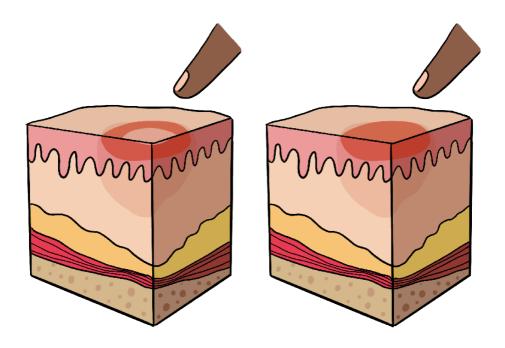


Blanching Test

If you see a red area on your skin, and if you think it might be a stage 1 pressure injury, use the blanching test

- Press a finger over the red area for 3 seconds
- Lift up your finger
- If the area blanches (turns pale) it is not a stage 1 pressure injury
- If it stays red, it is a stage 1 pressure injury

Remember: You can prevent the reddened or darkened area from becoming a pressure injury. You must keep all pressure *off* the area until the colour returns to normal.



blanchable

non-blanchable

Where on the Body do Pressure Injuries Happen?

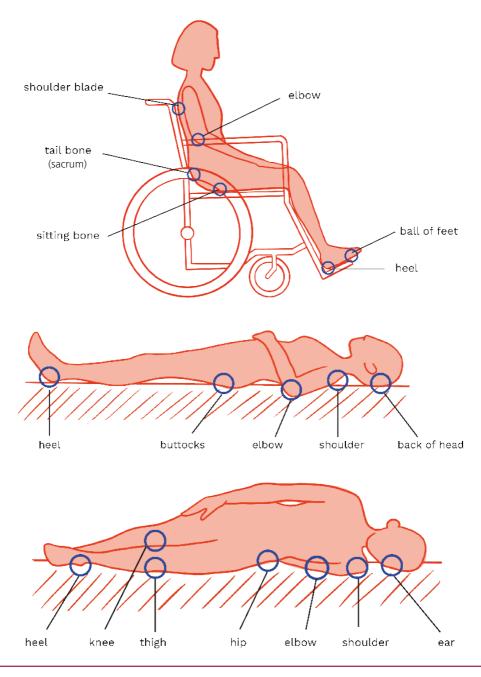
Pressure injuries can develop anywhere on the body. However, certain areas of the body are more likely to come under pressure than others.

The areas more at risk of pressure injury are located over bony places (called bony prominences) that are not covered by much body fat or muscle including the sacrum (very low back), hips, heels and sitting bones that are in direct contact with surfaces such as a bed, shower chair or wheelchair.

Pressure injuries can sometimes develop from essential equipment used in your care, for example, oxygen masks, urinary catheters, splints or casts.

Most Common Areas	Less Common Areas
Sacrum (one of the lowest bones in your back leading to your tailbone or coccyx)	Back of head
Heels	Shoulder blades
Sitting Bones	Ears
Hips	Knees
	Back bone (above the sacrum)
	Elbows
	Toes

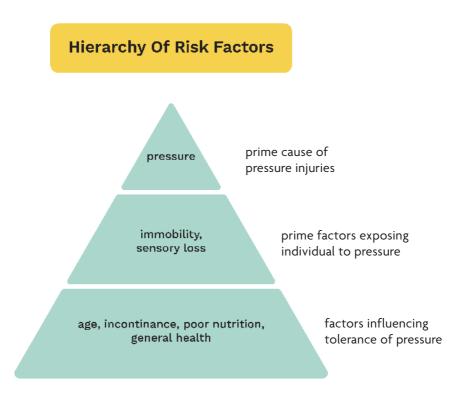
The diagrams below show where pressure injuries are most likely to develop.



Why am I at risk of a Pressure Injury after SCI?

Anyone who spends a lot of time in bed or in a wheelchair, and is unable to move independently, is at risk of getting a pressure injury. After SCI, the loss of sensation and ability to move to relieve pressure increases the risk of developing a pressure injury.

Other risk factors include weight change (loss or gain), smoking, diabetes, incontinence, infections, age and past history of pressure injuries.



Prevention is the Key

Try to avoid getting a pressure injury. There are a number of ways to avoid pressure injuries. You can keep your skin in very good condition and prevent long stays on bedrest or in hospital by paying attention to 'SSKIN' (see below):

For prevention, remember the SSKIN Bundle

SKIN SURFACE KEEP MOVING INCONTINENCE NUTRITION & HYDRATION

Skin inspection

Remember, as a result of SCI, the nerves in your skin cannot send messages to the brain in the same way as before. By checking your skin every day, problems may be noticed before they become serious.

You should check your whole body at least twice a day, paying special attention to bony areas. This is best done every morning and evening before you dress and after you undress. It is also good to check when washing or going to the toilet. If you do not get out of bed, you should still check your skin in the morning and again in the evening. If you have an accident or see a burn, cut or bruise, check your skin as soon as possible. Remember to check skin problem areas more than twice a day.

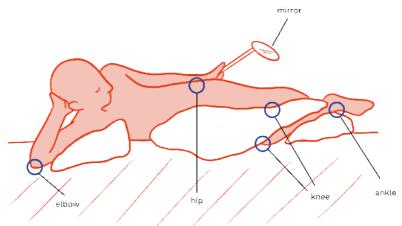
Continue to do your weight shifts when travelling. Always sit on your wheelchair cushion unless you have a special cushion made for travelling.

How to do a skin check

The importance of checking your skin cannot be overestimated, so if you cannot do it yourself, it is vital to ask someone to help and make sure it's done.

A clean, plastic mirror, with a long or short handle, may be used to look at areas that are hard to see. Help may be needed to hold the mirror or inspect the skin for you.

If you can, feel your skin for raised or hardened areas. Start at the front of your body and check from head to toe. Then check all areas on your back.



Warning Signs to look out for:

- colour change redness on pale skin or purple, bluish or dark areas on darker skin
- heat or coolness compared to the surrounding skin
- hardness or swelling
- pain or discomfort
- blistering, rashes, scratches, cuts or pimples
- breaks to the skin, wounds or skin loss.

Note

- Check your skin more often if you increase your sitting or lying times.
- Check your skin after a fall or accident to any area with reduced sensation.
- Check known problem areas more than twice daily.
- Ask for help if you have any open areas, darkened or black areas, burns or blisters.

Support Surface

Cushion

It is important to have the right wheelchair and cushion for your level of injury and lifestyle. If your wheelchair isn't quite right for your body, for example, if you have gained weight or your body shape has changed, then your chair might contribute to a pressure injury.

If you cannot move around much by yourself, you may need a pressure relieving cushion. Take care of your wheelchair cushion. Check your cushion for wear and tear, at least once a week when you wash your cushion cover. Pressure injuries may occur when the wheelchair cushion is worn or damaged. Most wheelchair cushions last from 1 ½ to 3 years.

Your treating Physiotherapist and Occupational Therapist in the NRH will provide you with information about the pressure relieving properties of your cushion and what you need to do to care for your cushion. When you are discharged, you will need to contact your Community Occupational Therapist if you need a review of your cushion.



Mattress

If you cannot move around enough by yourself in your bed, you may need a special pressure relieving mattress. There are many different pressure relieving mattresses available. Some have a turning (or rotational) function.

If a pressure relieving mattress is needed, the correct mattress will be recommended to the community public health nursing team on discharge from the NRH. There are also mattresses available that are suitable for travel. A Repose mattress can be used on top of a regular mattress.

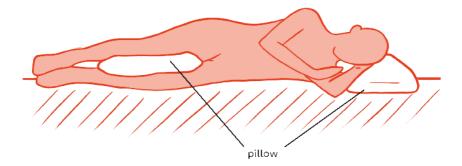
It is important to remember that a pressure relieving mattress alone will not prevent pressure injuries. You must still follow a turning schedule. It is also important to use the rotational function if it is included. It is a good idea to learn how to identify and deal with problems associated with specialist mattresses so you do not have to wait for repairs to be completed by the company that supplies your mattress.

Please note that not all SCI patients require pressure relieving mattresses. If you have any questions regarding a pressure relieving mattress you can contact your Public Health Nurse (PHN) or Spinal Cord Injury Liaison Nurse in the NRH.

Padding

If you get spasms, protect body parts from rubbing together by using correct padding in your bed and wheelchair. Place a pillow between your knees if you have leg spasms. Pillows help to reduce pressure on the bed and between your knees and ankles.

Keep heels off the bed or use heel protectors.



Keep Moving

Lack of movement reduces blood flow to the skin below the level of injury. Changing your position is one of the best ways to avoid pressure injuries.

- Keep moving: change position regularly and, if you cannot change position yourself, make sure you are turned regularly or use specialist mattresses and or cushions. Turn or follow a turning schedule at night.
- Remove pressure on at-risk areas and do regular weight shifts. If you are unable to move yourself in bed you will need to have your position changed by a carer.
- Pressure relief is usually recommended every 15 to 30 minutes and held for at least 1 – 2 minutes to ensure blood flow into vulnerable areas.

- There is no single recommendation that guarantees you won't get a pressure injury. The more you can move, the better.
- You can relieve pressure by:
 - leaning to each side
 - leaning forward as far as you can
 - use of tilt or recline features, if your wheelchair has these
 - getting out of your wheelchair onto a bed.

Pressure Relief by Repositioning and Weight Shifts

Note: Do not lift yourself. Lifting yourself off your seat and arm-rests is not recommended. You would need to hold yourself off your seat for 1- 2 minutes to be helpful, and this will cause shoulder and wrist pain over time.

Note: If in a manual wheelchair, you should always remember to put the brakes on your chair and have the wheels facing forward before doing a weight shift.



You can relieve pressure in the following ways:

Leaning to Each Side: Leaning side to side relieves pressure over one ischium (sitting bone) at a time. You must lean over far enough to relieve the pressure on your bottom. Make sure you do it for each side every 15 - 30 minutes for 1 - 2 minutes.

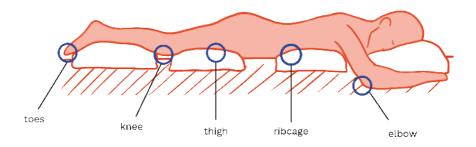
Leaning Forward: Leaning forward relieves pressure over both ischia (sitting bones) at the same time. You must lean over far enough to relieve the pressure on your bottom (you don't have to reach for your toes, often leaning forward with your elbows on your knees is enough).

Use the Tilt or Recline Feature on your Wheelchair: Some manual and power wheelchairs allow you to change position, and reduce pressure, by tilting and reclining the chair. It is recommended that you spend at least 1 - 2 minutes every 15 - 30 minutes in a tilted or reclined position.



Follow a Turning Schedule: During the night, or while you are in bed, follow the turning schedule that was advised during your rehabilitation programme. You will usually require a turning schedule (moving from side to back to the other side) every 2 to 6 hours. You may be able to remain in one position for longer than this if you slowly build up your tolerance to do so.

If you are able to lie prone (on your stomach) you may stay in that position for long periods using pillows to support your body. As every injury is different, it is important to get professional advice on how best to lie, turn and use pillows to best suit your needs (see example below).



Incontinence

Keep your skin clean and dry. Careful use of moisturizer or barrier cream may be recommended. Wet skin gets damaged more easily. Wet skin can be caused by sweat, leaking wounds or bladder or bowel incontinence. If not properly cleaned, these can start to break down the skin. Pat your skin dry instead of rubbing it too hard. Wash with gentle products.

Avoid perfumed soap or talcum powder as they can soak up natural oils and hold moisture between skin folds, causing skin damage. If you have incontinence, ask for advice about pads and barrier creams to prevent skin irritation.

Nutrition

The risk of developing a pressure injury increases if you are underweight or overweight. Being overweight can reduce mobility and increase the pressure on your skin. Being underweight can mean there is less natural padding on bony areas such as the buttocks and hips.

If you have a pressure injury, nutrition plays an important role in the healing process. This is because the body needs protein, energy (calories), vitamins and minerals (such as vitamin C, iron and zinc), and plenty of fluids to support the wound healing process. A balanced diet and plenty of fluids is important to help keep the skin healthy and prevent pressure injuries.

Protein: Your body may need more protein if you have a pressure injury. Foods that are high in protein include meat, fish, eggs, dairy products, nuts, beans and pulses. Aim to have at least one of these at each meal. Aim to have one pint of milk or a variety of dairy foods each day, such as milk puddings, cheese or yoghurts. If you are overweight choose low fat versions.

Iron: is important for the healing process because it helps to maintain your blood haemoglobin levels. Foods that are good sources of iron include meat, fish and eggs. Iron is also found in other foods such as beans, pulses, green vegetables and dried fruit. These are less easily absorbed by your body.

Vitamin C: helps you to absorb iron from your food and this helps the healing process. Vitamin C is found in a wide variety of fruit and vegetables.

Zinc: is important for the formation of new skin tissue and to help pressure injuries to heal. Good sources are lean red meat, shellfish, milk, cheese, bread, lentils, beans and cereal products such as wheatgerm.

Vitamin and mineral supplements: If you are unable to manage a varied diet, or have a poor appetite, a multivitamin and mineral supplement may be necessary.

Fluid: Dehydrated skin can become dry and fragile. You should aim to drink 1.5 to 2 litres per day (6 - 10 cups). This could include any liquid (tea, coffee, milk, water, juice) but not alcohol. If you are overweight, avoid drinks that contain sugar. Choose sugar free alternatives or use low calorie sweeteners in hot drinks.

Body weight: If you are overweight, losing weight could help to reduce the risk of pressure injuries and protect a newly healed pressure injury. However, if you limit your food intake too much when a pressure injury is healing, it may delay the healing process.

It is important to maintain a balance in your diet so that your body continues to get all the nutrients it needs.









Simple changes that you could make to your diet if you are **overweight** are:

- Cutting out sugar from hot drinks or using a sweetener.
- Using low fat cooking methods such as grilling, baking, air-frying, microwaving or steaming rather than frying.
- Choosing snacks that are lower in energy and fat such as low fat yoghurts and fruit.
- Having balanced meals and not skipping meals.
- Aim to lose an average of no more than 0.5 to 1kg a week.

If you are **underweight**, you may not have enough nutrient stores in your body so you will need extra nutrition from your diet. Without nutrients, the healing process may take longer. Changes that may help to increase your intake are:

- Having regular meals.
- If you find it difficult to prepare and cook meals then use tinned, chilled or frozen 'ready meals' and vegetables.
- Try to have 3 small meals and 2 3 nourishing snacks during the day (such as yoghurts, cheese, nuts and biscuits).
- If your appetite is poor, try to also include 2 nourishing drinks each day such as milk, malted milk drinks, fruit juice or powdered supplement drinks which are available from your local chemist or supermarket.

Oral Nutritional Supplements: If your food intake remains low, it may not be enough to help heal the pressure injury. It may then be necessary for you to have some prescribed oral nutritional supplements. These types of drinks provide a rich source of energy, protein and other nutrients. If possible, ask a dietitian to help you choose the right type and amount of supplement. **If you have diabetes:** Poorly controlled diabetes can delay healing. Diet and medication may need to be adjusted to achieve good blood sugar control. Speak to your GP, nurse or dietitian if you require help with this.

In summary, to prevent pressure injuries remember the SSKIN Bundle (see page 15).

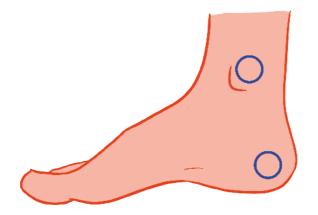
Other Skin Care Tips

Take Care of Your Feet

Remember to check your feet every morning and evening with your regular skin checks. Open areas, callouses and toenails (if not cut correctly) can lead to skin injuries.

Wash and dry your feet every day, paying special attention to drying between the toes. Cut toenails straight across. Check for ingrown toenails. Ingrown toenails may cause autonomic dysreflexia and infection. Puffy or reddened areas around the edge of the nail may be a sign of an ingrown toenail.

Discuss such signs with your Public Health Nurse or GP.



Wear appropriate clothes

Wear clothes that allow air to circulate (cotton and other natural fibres). Tight clothes, stockings, belts or shoes can reduce blood supply to the skin. Watch out for thick seams, buttons, zips or pockets on clothes that may cause pressure. Be sure clothes are not too tight.

Wear appropriate shoes

Wear shoes 1 to 1 ½ sizes bigger than you wore before your SCI. Bigger shoes are needed because your feet may swell and need more room than before your SCI. Slowly increase the amount of time you wear new shoes. If you are unable to wear shoes, place a pad or a pillow under your feet in the wheelchair.

Be aware of heat sources

Be careful with hot food, drink and containers. Spills can burn. Do not sit too close to a fire or heater. If possible, have your cooker and oven at a height that you can reach easily. Do not use hot water bottles on areas where you have no sensation. Test the water temperature before a bath or shower.

Watch out for swelling

Swelling happens after spinal cord injury because of loss of movement in the arms and legs. This can cause the body fluids to collect in the tissues. If swelling is a problem, care should be taken to avoid pressure over swollen areas and elevate the legs and hands many times during the day. Wearing elastic (TED) stockings may help, although be careful as, if too tight, these can cause a pressure injury.

Use your smart phone to help pressure injury prevention

A smart phone can be used to help you with pressure injury prevention and management. It can be used to take photos of areas that are hard to see and to check on how injuries are healing.

What Should I do if I See Signs of a Pressure Injury?

A pressure injury is serious. Do not ignore it. It is most important to pay attention to problems before they become serious. If you are not sure what to do for skin problems, call your doctor, public health nurse or NRH liaison nurse immediately and stay off the problem area. Any mark must not be ignored as it can take several weeks or months in hospital or on bed rest in order for the wound to heal. If you have a red mark on your skin (purplish on darker skin), do the blanching test as outlined below.

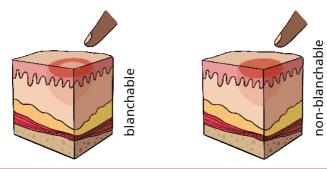
Even after it has healed, any area that has had a pressure injury is more vulnerable to another pressure injury. Therefore, it is crucial that you take care of your skin after a spinal cord injury and actively predict and try to prevent damage before it occurs.

Blanching Test

If you see a red area on your skin, and if you think it might be a stage 1 pressure injury, use the blanching test

- Press a finger over the red area for 3 seconds
- Lift up your finger
- If the area blanches (turns pale) it is not a stage 1 pressure injury
- If it stays red, it is a stage 1 pressure injury

Remember: You can prevent the reddened or darkened area from becoming a pressure injury. You must keep all pressure off the area until the colour returns to normal.



Common Terms

Blanching: Blanching is when the skin becomes pale when pressure is applied to it

Blanching Test: Press on an area of skin with your finger. The area should go white. Remove your finger and the area should return to its usual colour indicating good blood flow

Bony Prominences: Bony prominences are places on the body where the bones stick out, such as the knees, hips, heels and elbows

Dermis: An inner layer of skin which includes hair roots, sweat glands, nerves and blood vessels

Eschar: A dry, dark scab

Epidermis: The top or outer layer of skin

Hypodermis: The deepest layer of skin in your body made up mostly of fat

Ischium: Sitting bones or bony areas of the buttocks

Prone: Lying on your stomach

Pressure Injury: Damage to the skin and underlying tissue, due to a lack of blood and oxygen supply

Sacrum: One of the lowest bones in your back leading to your tailbone or coccyx

Shearing: Shearing happens when bone and tissues under the skin move, when the skin itself doesn't move (for example when skin that is wet for any reason may 'stick' to the sheets on your bed)

Slough: (pronounced sluff) A layer or mass of dead tissue

Tilt-in-Space Wheelchair: A wheelchair that tilts backward for weight shifts

Sitting Tolerance: Amount of time you can stay in the same position without causing damage to the skin

Frequently Asked Questions

I can't see my feet or back – how can I check my skin?

Depending on your level of injury, you might have to ask someone else to check these areas. Alternatively, you could use a long-handled mirror or a smart phone to check these areas yourself.

Can I wear my favourite jeans with pockets, seams or studs on the back?

We advise you to be very cautious about this. It might be a good idea to try wearing your favourite clothes when you are still in rehabilitation so that the nursing staff can check how your skin responds. There are clothing companies that make jeans and trousers suitable for wheelchair users. Please ask your Occupational Therapist for a list of these companies.

Can I use my cushion when travelling?

If you have sensation and can relieve pressure independently and stay upright, then you may not need to use a cushion when travelling. If you usually need a cushion to reduce risk of pressure injury, or cannot maintain your position independently, get advice from your treating team about how to reduce risks when travelling.

Even though there are no manufacturers guidelines, some people with SCI take their wheelchair cushion with them onto a plane. However, it is important to consider the type of cushion you use. Air cushions may need to be adjusted during and after the flight due to changes in cabin pressure when flying. You may also require assistance with pressure relieving techniques for long haul flights.

Remember that tight clothing can lead to pressure injuries so it is also important to wear loose, comfortable clothes when travelling. If using a wheelchair cushion in a car, securing the cushion is important and it must be secured appropriately. A strap that is secured around the back of the seat, and that can take a heavy weight, is best. Remember to be aware of the properties of your cushion. A case was reported in The Journal of Spinal Cord Medicine of a person with a SCI receiving burns from a gel cushion that had been left on a car seat on a sunny day.

Do I need to be careful if my car has heated seats?

Yes, extreme caution is needed if you have heated seats in your car. If you sit directly onto the seat, it is advisable not to use the heating on the seats or to keep it very low. We have seen nasty burns in recent years caused by heated car seats.

Is a bruise a pressure injury?

A bruise may be a sign that too much pressure has been applied to an area. Therefore, while it may not be a pressure injury, if continued pressure is applied, it may become a pressure injury. If you develop a bruise in an area where there is pressure (for example, the sacrum) you need to observe this area closely and reduce the time you spend sitting on it.

If I am admitted to another healthcare facility, should I advise staff there about my risk of developing pressure injuries?

Yes. It is a good idea to make staff aware of your risk factors for developing pressure injuries. If you use a pressure relieving mattress at home, you should tell them this also. It is a good idea to be very familiar with the type of mattress you use at home and its settings. Always ask for your cushion or chair to be brought in, where possible, if you are staying and plan to sit out.

Am I at higher risk of sunburn with a spinal cord injury?

Some of the medications that people with spinal cord injury take may place them at a higher risk of sunburn. It is advisable for everyone to use adequate sun protection lotion and protective clothing. Ask your pharmacist to check if any of your medications can cause sun sensitivity.

I have noticed a darkened area on my skin but feel embarrassed to contact my liaison nurse or public health nurse

If you have concerns regarding your skin don't hesitate to contact your liaison or public health nurse. The earlier you deal with skin issues the faster the recovery time will be.



Contact details for: The Spinal Cord System of Care Programme

Administration: (01) 235 5145 (01) 235 5528 (01) 235 5537



An tOspidéal Náisiúnta Athshlánúcháin



Illustrations by Carol Lewis.

This booklet has been produced by the NRH Spinal Cord System of Care (SCSC) Programme; Spinal Injuries Ireland (SII) have been authorised to distribute this booklet on behalf of the NRH.

Version 1 – May 2023



National Rehabilitation Hospital Rochestown Avenue, Dun Laoghaire, Co. Dublin, Ireland Tel: +353 1 235 5000 Email: enquiries@nrh.ie www.nrh.ie