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Contents

What is a pressure ulcer?	3
Stages of pressure ulcers	3
Why are they important?	3
Who gets pressure ulcers?	3
Assessing your risk	3
How do pressure ulcers start?	4
Where are they found on the body?	5
How can you prevent pressure ulcers?	6
Move, move, move	6
What to do if you have limited movement	6
Special equipment	8
Look after your skin	9
Pressure ulcers in the past	9
Loss of bladder and/or bowel control	9
Sensory changes	9
Poor circulation	10
Foot care	10
Eat a balanced diet	11
Smoking	11
How to recognise the early warning signs	12
The signs to look for	12
The signs to feel for	12



Preventing Pressure Ulcers

You have been given this booklet because you have been identified as having an increased risk of developing a pressure ulcer, you have had a pressure ulcer in the past or because you currently have a pressure ulcer.

This booklet will tell you more about pressure ulcers – what they are, how they start, how you can prevent them and how to recognise the early warning signs.

This booklet is designed for patients, but also provides useful information for carers.

If you want further information about preventing pressure ulcers, ask your nurse or healthcare professional. Comment from Brian Johnson – a patient who developed a pressure ulcer.

"I was told frequently to "push myself up in the bed with my good foot". As I have little feeling in my feet I didn't realise the damage was occurring (in my other foot).

I was housebound for many months...and the heel took approximately 12 months to heal and I still have scar tissue."

What is a pressure ulcer?

A pressure ulcer is a sore, an area of skin that has been damaged due to unrelieved and prolonged pressure. They are also known as pressure sores or bed sores.

Stages of pressure ulcers

Pressure ulcers are grouped into four stages, depending on how deep the ulcer is. You might hear medical and nursing staff referring to your pressure ulcer as a Stage 1, 2, 3 or 4. Stage 1 ulcers are less severe while a Stage 4 is more severe.

Why are they important?

Pressure ulcers can happen quickly, so it is important to heed warning signs and act swiftly to prevent them occurring or becoming worse. Pressure ulcers can affect your health and slow your recovery. They can lead to a longer stay in hospital.

Pressure ulcers often look to be minor, just redness in the skin to begin with, but they can hide more damage under the skin's surface. Pressure ulcers can be painful and they can become infected, sometimes causing blood poisoning or bone infections. In severe cases, they can spread deeply under the skin and some of the underlying muscle or bone may be destroyed.

Who gets pressure ulcers?

You can be at risk of getting a pressure ulcer if one or more of the following situations relates to you:

- You are confined to bed or a chair and unable to move yourself independently or have limited movement
- You have loss of sensation or poor circulation
- You have skin that is frequently moist through perspiration or loss of bowel or bladder control
- You have poor nutrition
- You are unwell

Assessing your risk

To assess your risk of developing pressure ulcers, a staff member will examine you and ask you certain questions about your general health, your skin and your ability to move independently. This is called a 'risk assessment'. Together you can work out the best plan to prevent or reduce the risk of you getting a pressure ulcer.

How do pressure ulcers start?

Blood vessels supply oxygen and nutrients to every part of the body, including the skin. Constant pressure in one area means that blood and nutrients are less able to reach the skin in this area.

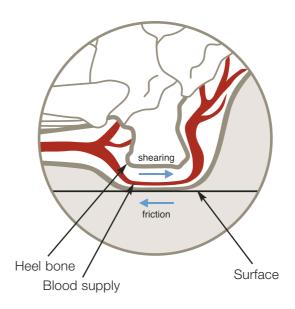
Imagine the blood vessel is like a garden hose. If you put your foot on the garden hose, the pressure of your foot stops the water from getting through. If the bones inside your body put too much pressure on the blood vessels, then the blood cannot get through and this can cause damage to your skin and other tissues.

If the pressure of normal body weight is not relieved in people at risk, it can harm the blood supply to the area, which can lead to skin and tissue damage.

Although unrelieved pressure is the main cause of pressure ulcers, a combination of other factors such as friction (from rubbing, dragging) and shear (sliding down the bed) can also contribute to skin damage leading to a pressure ulcer.

Poor lifting and moving techniques can remove the top layers of skin through friction with the bed or chair surfaces. Repeated friction can increase the risk of pressure ulcers.

Sliding forces (shears) the upper layers of skin away from the deeper layers. This can happen when you slide down, or are dragged up, a bed or chair.



Heel showing shearing and friction

If you experience limited movement, constantly moist skin, changes in sensation, poor circulation and poor nutrition these factors can also contribute to pressure ulcers occurring.

Where are they found on the body?

Pressure ulcers are usually found on bony parts of the body, but can occur almost anywhere that pressure has been applied for a period of time. They are generally found where bones are close to the skin and where the skin presses against a firm surface, such as a chair or mattress.

These diagrams show you where pressure ulcers occur in various positions

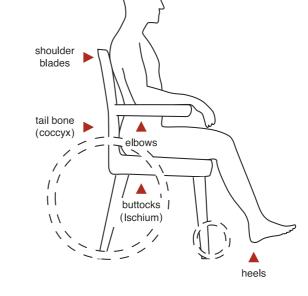
or postures.

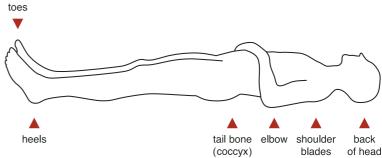
When sitting:

- o tail bone (coccyx)
- buttocks (ischium)
- backs of heels
- elbows
- shoulder blades

When lying on your back:

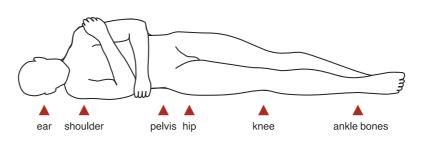
- the back of your head
- shoulder blades
- elbows
- o tail bone (coccyx)
- heels
- o toes





When lying on your side:

- ear
- side of your shoulder
- pelvis
- hip
- knee
- o ankle bones (malleolus)



05

How can you prevent pressure ulcers?

The three most important ways to prevent pressure ulcers are to:

- Move, move, move to relieve the pressure
- ✓ Look after your skin
- ✓ Eat a balanced diet

Move, Move, Move

What to do if you have limited movement

When you are unwell, or less mobile, it can be difficult to change position or to move around by yourself. Below are some ways you can help to reduce your risk of getting a pressure ulcer. It is important to keep moving, as exercising increases blood flow to the skin, muscles and joints. A nurse or physiotherapist can advise you on exercises you can do while you are recovering.

While you are lying in bed

- Turn yourself at least every hour, more frequently if you are not on a support surface or specialised equipment. If you are unable to move yourself, ask the staff to help change your position regularly.
- When you lie down, your headrest and foot section of the bed should be level. Your body should be tilted slightly to the side (around a 30° angle) and supported with pillows. This will remove pressure from your tail bone and your hips and put the pressure on a more fleshy part of your bottom.



Lying 30° side tilt

 Keep the pressure off your lower leg by bending your knees a little and putting a pillow in between your knees and ankles.

- Make sure you are lifted correctly, not dragged, when changing position.
- Wear long sleeved clothing as well as socks. Ask staff to use a 'slide sheet' between you and the surface of the bed or chair to help reduce friction.
- Avoid sitting on creases in sheets or clothes, and avoid leaning against zippers and buttons.



Lying 30° head tilt

- If you do raise the head of the bed, keep it below 30°; otherwise you will tend to slide down in bed which can damage your skin through friction and shear. It can help if you have a bed that can raise the mattress under your knees a little as this will help prevent you from sliding down.
- It is important to sit up while eating to prevent choking and to aid digestion. However, only sit up in this position for half an hour.

While you are sitting in a chair

 Good posture is important, so avoid sitting in a slumped position.
 Sit up straight with your bottom well back in the chair and with your back touching the back of the chair.
 Support your feet so that your knees are level with your hips. Never have your knees higher than your hips.



Sitting correctly

When you are sitting down, lift your bottom up from the chair for 15 seconds. Do this every 15 minutes. This is also important if you sit on the toilet or commode chair for long periods, make sure you lean forward every 15 minutes to relieve pressure from your bottom. Lean forward while seated if you have a pressure sore or uncomfortable area.

- Push yourself up off the chair using the armrests, leaning to the side, or by lifting one buttock off the seat at a time.
- Avoid leaning to one side for any length of time – the pressure increases on both your buttocks and your elbow.
- If you find you still slide forward in your chair, ask to see an Occupational Therapist (OT) who can suggest chair or cushioning alternatives to keep you in an upright position.
- Lie down to rest during the day this will give your bottom a break from the pressure.



Sitting incorrectly

Special equipment

If you are at high risk of getting a pressure ulcer, staff may use a range of special equipment to help reduce the pressure from particular places. These may include air or dynamic mattresses, cushions and heel wedges.

Look after your skin

Skin grows thinner and less elastic with advancing age. The layer of tissue and fat under the skin also reduces in thickness. This means that blood circulation is less protected, and as a result, it is easier to damage your skin as you get older.

- Try and keep your skin clean and dry at all times. Let staff know if your clothes or bedding are damp.
- Check your skin regularly. Use a mirror for any areas that are difficult to inspect. If you are unable to do this staff will inspect your skin for you as part of your pressure ulcer prevention plan.
- Use a moisturising lotion to prevent skin drying out and cracking and protect your skin from dry or cold air.
- Bathe or shower in warm (not hot)
 water using a mild cleanser or soap.
 Dry your skin gently to prevent
 further damage to the skin.
- Avoid massaging your skin over bony parts of the body.

Pressure ulcers in the past

If you have had a pressure ulcer in the past the scar tissue in that area is weaker and more prone to further damage. After a pressure ulcer heals, the new skin does not have the same strength as the original. The new skin is only 80% as strong as it was.

Loss of bladder and/or bowel control

When moisture and other substances sit on your skin for a period of time, it provides bacteria a place to grow. When bacteria sit on the skin for any length of time, it can irritate and further damage the skin.

- If you use a continence appliance, check it regularly and change it when necessary.
- If you have problems with your bowel or bladder, clean your skin as soon as it is soiled or ask staff to assist you. If you need more information about how to manage incontinence ask your nurse.

Sensory changes

Some medical conditions can change your perception of pain or discomfort. With altered sensation, it is easy to miss the warning signs alerting you to the need to move or roll over so that you take the pressure off particular area of your body.

Poor circulation

Some medical conditions like arterial disease, diabetes, anaemia and oedema (swelling) result in poor blood circulation and increase the risk of pressure ulcers forming in areas such as the feet and heels. When circulation is poor wounds can take longer to heal.

 If you are unable to feel pressure or have poor circulation, it is important that you check your skin twice a day. Use a hand mirror, or ask your nurse or carer for assistance if you have difficulty doing this.

Foot care

Good foot care is important, particularly if you have a loss of sensation or changes in your blood supply to your feet from conditions such as diabetes, smoking, arterial disease or stroke.



Correctly fitting shoes

We suggest that you:

- Wash your feet daily with mild soap, in luke-warm water and dry carefully between the toes.
- Examine your feet daily. Use a mirror to make sure you see all of the foot. Ask staff to help if you have difficulty with this inspection.
- Keep toenails trimmed with no sharp edges.
- Shoes should never need to be broken in, they should fit properly from the start. Buy shoes in the afternoon when feet are most swollen.
- Check the insides of your shoes for stones or sharp edges before wearing them.
- Use socks or stockings with a high natural fibre content (cotton or wool) to absorb perspiration.
- See a podiatrist if assistance is required with toenails, callouses, footwear or general foot care.

10



Eat a balanced diet

Eating properly and maintaining a healthy weight is important in preventing pressure ulcers. Good nutrition plays a vital role in wound healing by working from the insides out.

- Lean meats, poultry, eggs and dairy products are good sources of iron and protein, which helps your skin to heal.
- Oily fish like tuna, sardines or salmon contain fish oils that boost the body's natural defences and help fight infection.
- Vitamins C and E are important in wound healing so include plenty of fruits, vegetables, wholegrain breads and cereals in your diet.

- o If you lose weight quickly or your appetite is poor for long periods of time you are at risk of malnutrition and pressure ulcers. Similarly if you are carrying too much weight you may also be at high risk. In these situations you will need to see a dietician who will help you improve your diet.
- If you have diabetes aim to keep your blood sugar levels within the range recommended by your doctor, which will contribute to better healing.

Smoking

 Smoking damages blood vessels and affects overall skin health.
 It is advisable to stop smoking.
 Apart from long-term damage, each puff on a cigarette or cigar causes the blood vessels to constrict, further reducing the blood flow.

How to recognise the early warning signs

Check your skin twice a day. Let staff know if you notice any possible or actual signs of damage immediately. If you are having difficulty checking your skin, ask staff to help you or to inspect it for you.

The signs to look for (especially on skin over bony areas) are:

- Red / purple / blue skin
- Blister
- Swelling
- Dryness or dry patches
- Shiny areas
- Cracks, calluses, wrinkles

The signs to feel for are:

- Hard areas
- Warm areas
- Swollen skin over bony points

If you find a reddened or suspicious area on your skin, change your position and if the redness is still there after 30 to 45 minutes, try not to sit or lie down on the area for 24 hours.

Remember to let staff know if you notice any of these early warning signs.

The best treatment for a pressure ulcer is the removal of all pressure from the location until it heals.

Remember...

- ✓ Move, move, move
- Look after your skin
- Eat a balanced diet



Further information on pressure ulcers

Australian Wound Management
Association at www.awma.com.au

Wound Management Association of Victoria Inc on (03) 9526 6912

Nutrition and dieticians

Look under 'Dieticians' in the Yellow pages or have your health professional contact the Nutrition/ Dietetics Department of your local hospital for further information.

Podiatrists

Look under 'Podiatrists' in the Yellow pages or have your health professional contact the Podiatry Department of your local hospital for further information

Acknowledgements

This booklet has been collated from a number of resources

Our thanks to staff at Sir Charles Gairdner Hospital, Nedlands, Western Australia and the National Institute for Clinical Excellence, London, England whose material provided the basis for much of this information.

A full reference list of the sources used as well as PDF copies of the booklet can be obtained from the Victorian Quality Council on our website at www.health.vic.gov.au/qualitycouncil

Several photographs used in this booklet were taken with the assistance of staff from Frankston Hospital, Peninsula Health.



Local information

If you have any queries or want further advice or information speak with your nurse.