

Pressure ulcers

Pressure ulcers can be painful and distressing.
Deep ulcers can be extremely debilitating and fatal.

Stop, plan, prevent!

With the right knowledge and advice,
many pressure ulcers are preventable.

This is a guide to support you in preventing pressure
ulcers or managing any existing skin damage to
prevent it deteriorating.

Think **aS SKING**

Use this booklet
to prevent skin damage,
however if you develop a
pressure ulcer seek prompt
help through your GP, carer or
your healthcare professional

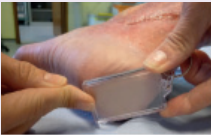
Warning: There are images within this leaflet that some
readers may find upsetting.

What is a pressure ulcer?

A pressure ulcer (sometimes called a bed sore) is an area of damaged skin that has been caused by continuous pressure. It can happen to anyone, anywhere on the body but usually over a bony part. It ranges from a discolouration of the skin (reddening on light skin tones and grey/bluish/purple on dark skin tones) to a deep wound reaching the bone.

Pressure ulcers can also develop as a result of moisture, friction and shearing (pressure that occurs when part of the body tries to move but the surface of the skin remains fixed). There are four categories of pressure ulcer, one being the least damage up to four being the most severe, including damage that is classed as unstageable. Unstageable means we are unable to categorise because dead skin is covering the wound. Deep tissue injury can also occur - this is when the underlying skin has become damaged but outer skin remains intact.

Blanching



Healthy skin may develop redness (on light skin tones) after being subjected to pressure e.g. if the legs are crossed. To perform a blanch test, gently press the skin to see if it blanches (goes white, then back to red) - this means that the skin is healthy and the redness should resolve if pressure is removed.



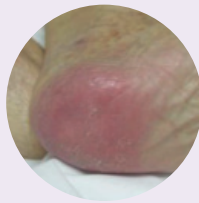
Dark skin may not blanch, even if it is healthy. So check for other visual changes such as purple grey or blue tones to the skin, or it may be lighter or darker than usual. There may be changes to the texture or temperature of the skin for example it may feel spongy, firm, or warmer or cooler than adjacent skin or feel painful. Ensure that pressure is removed to prevent deterioration.



Pressure ulcers can deteriorate within hours!

Report any signs of pressure damage promptly to a health care professional.

Categories of pressure ulcer



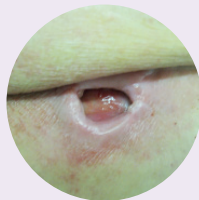
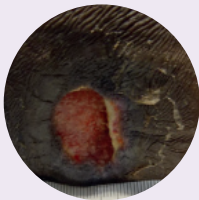
Category 1

Skin is intact and non-blanching in a localised area. May feel tight, spongy, warmer or cooler and could look shiny with pain or numbness.



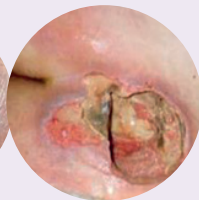
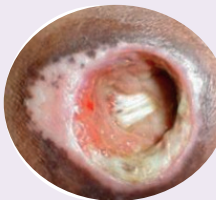
Category 2

Superficial skin loss, may present as a water filled blister. As soon as the skin is broken the risk of deterioration is higher.



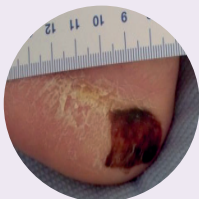
Category 3

Deep skin loss that may extend beneath the skin surface. Slough may be present but does not obscure the wound bed.



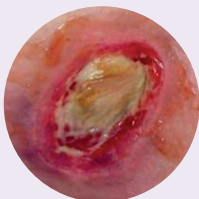
Category 4

Deep skin loss. Bone, tendon, muscle can be seen or felt.



Deep tissue injury

Discoloured skin or blood filled blister, can resemble a bruise but there has been no impact injury.



Unstageable pressure ulcers

We are unable to confirm what category these pressure ulcers are due to the dead tissue that is present on the wound bed. This dead tissue hides the true depth of the ulcer.

a**assess risk****Your risk of getting a pressure ulcer.****Are you likely to get a pressure ulcer?**

Always remember anyone can develop a pressure ulcer. Certain factors put you at higher risk of developing pressure ulcers, the more of these factors you have, the higher your risk.

Reduced or lack of mobility

When you don't move regularly, you may notice that your skin feels uncomfortable or even painful, this is because your blood supply is not effectively getting to your tissues. When this happens, you would usually change your position to stop the discomfort, however you may be unable to move without assistance or find it challenging to do on a frequent basis, this causes prolonged lack of blood supply to your skin, resulting in tissue damage.

Also with some conditions your sense of feeling is affected, for example if you have diabetes, you may not feel the pain in your feet and so miss the trigger to move: this can lead to pressure ulcers. You may also lack the ability to report pain due to cognitive (your ability to clearly think, learn, and remember) or communication difficulties.

Incontinence or perspiration

Prolonged exposure to moisture can irritate the skin and make it vulnerable to damage.

Poor diet/hydration

A lack of good nutrition can weaken the immune system and slow the healing process.

Obesity

Being overweight can affect mobility, cause diabetes, heart disease, a stroke or depression - all factors that increase the risk of a pressure ulcer.

Skin type

Skin that is dry, fragile, thin or previously damaged is more likely to develop an ulcer.

Long term health conditions

Diabetes, renal disease, heart/circulatory and respiratory problems. Stroke, multiple sclerosis, dementia, Huntington's disease, profound multiple disabilities, paraplegia, organ failure, anaemia, peripheral vascular disease and terminal illness. All of these increase your risk either due to them impacting on your understanding and ability to carrying out advice, ability to feel pain or carry an adequate blood supply to the skin.

Smoking

Smoking can make existing skin conditions worse, create eczema/psoriasis and effect the body's ability to circulate blood, making it harder to heal wounds.

Alcohol

Alcohol can increase blood sugar and reduce vitamins needed for healthy skin.

Recent major surgery

This can affect mobility and your ability to self-care.

Medication

Some medications can thin the skin. Other medications can make you sleepy and therefore reduce your mobility and your stimuli to relieve pressure/turn in bed.

Acute illness

Fractures, infection and being generally unwell can all reduce your mobility and increase your risk.

Incorrect footwear

Incorrect or ill-fitting footwear can cause friction, blisters and damaged skin.

If your choice differs from advised treatment this may increase your risk. Talk to your health care professional to see if there are other options.

How do you reduce your risk?

Think:

a

Assess risk

S

Skin inspection

S

Surface

K

Keep moving

I

Incontinence/moisture

N

Nutrition/hydration

g

Giving information

Seven steps to preventing pressure ulcers - **aSSKINGg** explained

As part of your treatment plan, your care team will discuss with you the best way to prevent pressure ulcers. This will be based on your individual circumstances and the

aSSKINGg approach.

S

Skin inspection

Early inspection means early detection!

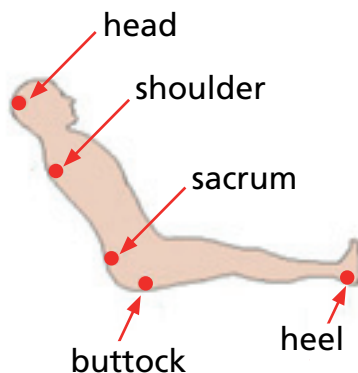
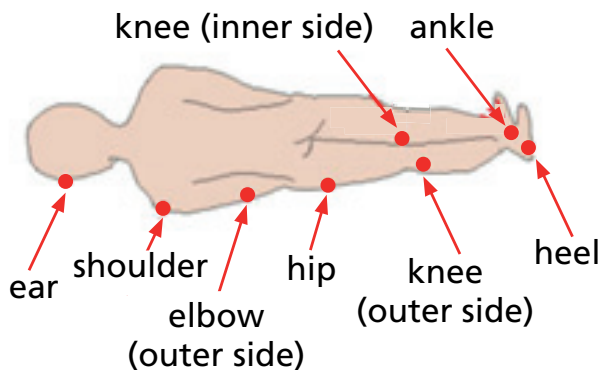
Check your skin daily.

Early symptoms

Red patches of skin on light skin tones that don't blanch (see page 2) and grey/bluish/purplish patches on people with dark skin tones that don't go away (see page 2).

- Blisters or damaged skin
- Swelling
- Patches of hot/cool skin
- Patches of hard/boggy skin
- Increased tenderness

These are the high risk areas on your body but be mindful that pressure ulcers can develop anywhere.



Don't forget the palms of your hands



S

Surface

Make sure you have the right support for your chair and bed.

Pressure ulcer prevention equipment will not take away the need to reposition.

It is important to use the equipment provided by your health care professional or discuss with them why you are choosing not to, to ensure you understand the associated risks.

Equipment Care:

- Check your equipment is the right size and comfortable.
- Check that you know about the digital settings – ask a healthcare professional if you're unsure.
- Check foam/cover/zip/flap: damage, staining, odour, or able to feel the bed base.
- Wash surface with plain, soapy water – check additional washing instructions.



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If you are provided with an Air Flow Mattress, please ensure you, your family and/or carers are aware of the correct setting.
If you are provided with a turning system, please ensure you, your family and/or carers are aware of the setting and when to switch on/off.

K

Keep moving

Changing position.

If you are able to walk independently then you should get up and move around regularly, changing your position from sitting to standing, or transfer to a different chair if you are able.

If you are unable to walk or stand independently then someone should assist you to do this, every two hours would be best. We appreciate that this is not always possible - for example if your carers only visit 1 - 4 times daily. If this is the case, walk or stand each time they visit. Your clinician may advise that you require specialist equipment to support you with this or increasing your carer support package. If you are in a tilting wheelchair or recliner chair, use them to alter your position.

Keep moving by altering your position frequently, even small movements can help. Please refer to section on 'how to reposition myself effectively' to support with this.



To protect your heels they should 'float' in air, to avoid prolonged contact with a surface. You can do this by using a pillow under your calf. You must ensure that your calves are well supported and the pillows is soft and does not have any beading or rough material as this can cause indentations in your skin. Your health care professional may advise the use of a heel lift boot to support you to offload your heel. Ensure that you and your family and/or carers know how to put them on correctly, and check regularly for debris. Please refer to the manufacturers information on cleaning.

Warning: heel boots should not be walked in!



Keep moving

Changing position.

How can I effectively reposition myself?

Any movement (however small) that you can make will help provide pressure relief to your vulnerable 'at risk' areas as described within this leaflet.

Please consider what is within your capability to perform safely and always discuss with your health care professional if you are unsure.

- Raising/moving your arms up/down
- Lifting your legs and/or rotating your ankles
- Turning your body from side to side
- Moving your head up/down, side/side
- When seated tilting slightly forwards/backwards and side/side, lifting your bottom off the chair momentarily
- Ensure you raise your bottom cheek off the seat if tilting side to side.

If you spend a lot of time in bed, your health care professional will talk to you about using the 30 degree tilt, this is a way of using soft pillows to gently tilt you off your high risk areas, it is a common and effective practice used by patients, family, carers and nursing staff.

Please see the pictorial on page 12 to support you in performing this.

Caution in cold weather

During periods of cold weather, it is common for people to sit for longer periods, under blankets for warmth however please remember the importance of keeping moving. This will also help with your circulation and keeping the body warm.

Repositioning charts

The use of a repositioning chart can support you, your family and/or carers to keep a record of each time you move and in what position i.e the date, time, left, right, back. These can be provided by your health care professional and will support them to review your repositioning needs effectively.

K

Keep moving

Exercises.

These exercises have been recommended to help with maintaining your functional abilities through strengthening and to relieve the pressure with frequent movement. We have included bed or chair exercise depending on your current ability. Start with low repetitions as recommended and increase gradually in increments of 5x as they get easier.

These exercises have been provided for general guidance and do not replace any individual clinical advice you have had from healthcare professionals. Exercises should not cause sharp pain; you may feel a stretching or aching sensation to start with. If pain continues or gets worse, or if you have severe shortness of breath, any redness or swelling after exercising - **stop** and speak to a health professional such as your GP, or 111 if you are in severe discomfort.

Knee extension or straight leg raise



Sitting with your feet supported on the floor. Bend your ankle and straighten your knee using your front thigh muscles.



Or lying down tighten your thigh muscle and lift one leg keeping it straight, go as far as is comfortable for you.

In a controlled manner, return to the starting position.

Repeat 5 times on both legs.

Bridging or sit to stand



In sitting using your hands on the armrests of the chair, lean forward and lift your bottom off the chair, hold for a moment and then bring your bottom back down and rest on the chair.



Or lying on your back with legs bent, feet flat on the bed, squeeze your buttocks, slowly lift your hips off the bed to hover off the bed, hold for a moment and then in a controlled manner return to the starting position.

Repeat 5 times.

Ankle pumps



In sitting lifting your foot off the ground or lying on your back with your leg supported, straighten your ankle to point your toes up towards you and then down away from you.

Repeat 5 times on both legs.

Elbow and shoulder reach



Either supported sat in the chair or lying on the bed, take your hands to your shoulders, then straighten your elbows and take your hands above your head as far as is comfortable to you, then return to the starting position.

Repeat 5 times.

Static quads

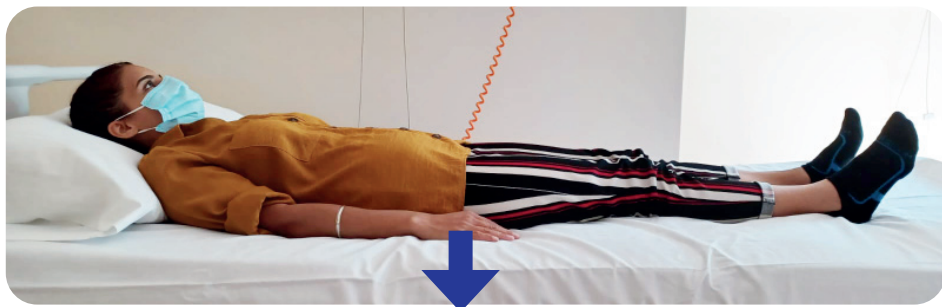


Lie on your back with your knees straight. Bend your ankles and press the back of your knees against the floor/bed by using your front thigh muscles. Hold the tension for a moment and then relax.

This can be achieved in sitting by elevating your feet on to a stool, and pushing down on to the surface of the stool.

Repeat 5 times (both legs).

Isometric glutes




Lying on your back with your arms close to your side. Squeeze your bottom together and into the surface beneath you. Hold the tension for a moment and then relax.

This can be achieved in sitting by squeezing your bottom together and down into the chair below.

Repeat 5 times.

Pressure prevention bingo

Leg raises 10x	Sit upright 30 secs	Drink water 1 glass	Ad break: stand - march on spot 10x	Side arm lift 10x
Ad break: stand and do any exercise	Sit to stand 10x	Hand to shoulder 10x	Deep breaths 10x	Short walk: to kitchen put kettle on
Drink water 1 glass	Ad break: stand - march on spot 10x		Sit upright 30 secs	Knees to chest 10X
Reach out 10x	Front arm lift 10x	Ad break: change position	Ankle pump 10x	Eat snack
Ad break: sit to stand 10x	Sit upright 30 secs	Deep breaths 10x	Short walk: around the room	Ad break: change position

Positioning for comfort and support: 30 degree tilt in side lying

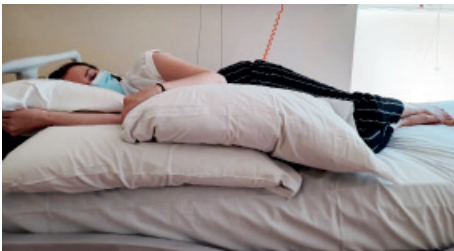


This is the 30 degree tilt position. It provides comfort, together with the minimum pressure on parts of your body at highest risk from pressure ulcers. Please follow the steps below to achieve this position.



1

Use a pillow to support the head, and the bottom arm's elbow, you may find you need an additional pillow to support your top arm from rolling you backwards or forwards off the tilted position.



2

Position one pillow behind and slightly underneath the individuals trunk, this allows the patient to be positioned on one buttock, and allows their sacrum to be off the mattress.



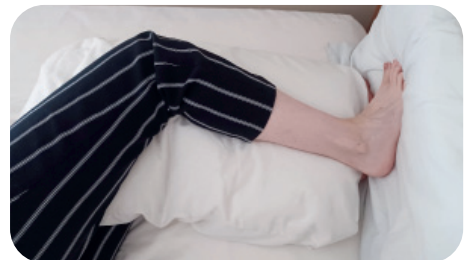
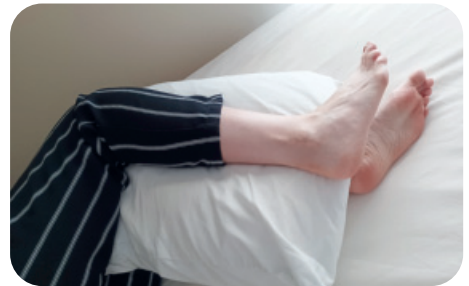
3

Position a second pillow at the thighs, creating the tilt and offloading the sacrum (circled in red) making sure it's not in contact with the mattress.



4

Use an additional pillow between the legs, ensure the heel overhangs the edge of the pillow and is not in contact with the mattress however ensure the bony prominence on the ankles between the legs is supported by the pillow to avoid friction.

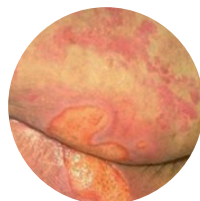


I

Incontinence/ moisture

Incontinence and moisture care.

Prolonged exposure to moisture from perspiration or incontinence makes skin fragile and moisture lesions can develop which increases your risk of developing pressure ulcers.



It is important to keep your skin as clean and dry as possible by washing with a mild, non-perfumed soap, to minimise the risk of skin dryness and irritation. Ensure your skin is dried thoroughly but gently.

*If your skin is broken then plain water would be advised.

Your healthcare professional will be able to advise if any further creams are necessary, for example barrier creams/films which protect the skin or emollients if your skin is dry.

Caution in hot weather

During periods of hot weather, the body produces more sweat, putting you at increased risk of moisture damage which can lead to pressure ulcer development. This makes it extra important to keep your skin clean, dry and protected.

Are you leaking urine or faeces?

Help and advice is available for you. Please speak to your GP or health care professional.

The use of baby wipes to cleanse your skin, zinc oxide pastes and talcum powder are not advised.

N

Nutrition/hydration

Have a balanced diet and drink plenty of fluids.

You should aim to drink 8 - 10 cups of fluid per day. Try foods high in fluid content such as fruit, vegetables, adding milk to mashed potatoes, custard.

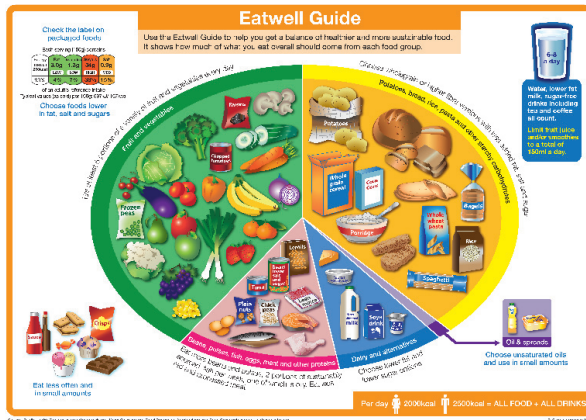
Caution in hot weather: Keeping hydrated stops the skin becoming dry/irritated and prevents tiredness, dizziness, confusion, a risk of falls and hospital admission.

A healthy diet that contains an adequate amount of protein and a good variety of vitamins and minerals can help prevent skin damage occurring and speed up the healing process.

An increase of protein in your diet will support healing.

You may be referred to a dietician so that a diet plan can be drawn up for you. If you are currently experiencing a reduced appetite due to a pre-existing health condition:

- Try eating smaller meals throughout the day rather than two or three larger meals.
- Set a timetable highlighting when you should eat, rather than waiting until you feel hungry.
- Limit drinks during your meals because this can make you feel fuller than you actually are.
- Drink most of your fluids 30-60 minutes before you have a meal.
- Speak to your GP if you are finding swallowing difficult.



Complications

Even with the best possible medical care, complications (which can occasionally be life-threatening) can arise from pressure ulcers. These complications are:

- Cellulitis - a bacterial infection of the deep layer of skin. Cellulitis makes your skin painful, hot and swollen. The area usually looks red, but this may be less obvious on brown or black skin.
- Blood poisoning (sepsis).
- Bone and joint infection.
- Necrotising fasciitis (commonly known as 'flesh-eating' bacteria).
- Gangrene - a rare but serious form of infection that occurs when a pressure ulcer becomes infected with the clostridium bacteria.
- Any open wound is susceptible to infection including MRSA.

Treatment options

It is important to comply with taking prescribed medications and adhering to medical advice, including attending appointments to manage your health conditions to prevent deterioration in your condition.

- Think **aSSKINg**
Adopting the seven key elements of pressure ulcer prevention will reduce your risk of developing a pressure ulcer or your existing skin damage deteriorating.
- Keep moving: changing position as advised by your health care professional.
- Using pressure ulcer prevention equipment provided – mattresses, cushions, boots.
- Dressings – specially designed dressings can be used to treat pressure ulcers, the type of product used will depend on your wound symptoms. *It is important to remember that dressings alone will not heal your pressure ulcer.
- Barrier creams and films to protect the skin deteriorating.
- Antibiotics to treat infection.
- Nutrition and hydration to prevent pressure ulcers and improve healing.

- Removing damaged tissue – surgically, with dressings or larvae therapy.
- Topical negative pressure (TNP) – a system that uses a vacuum to promote wound healing.

Consider what have you learnt from this leaflet?

What will you commit to changing before your next health care professional visit, in order to reduce your risk of developing a pressure ulcer or your current pressure ulcer deteriorating?



giving information

Pressure ulcer prevention resources

[Leicestershire Partnership NHS Trust tissue viability service - all you need to know about pressure ulcers - a series of videos on youtube:](#) or scan the QR code bottom right of this page.

<https://reactto.co.uk/react-to-red/>

www.nhs.uk/live-well/eat-well/eight-tips-for-healthy-eating

www.Inds.nhs.uk Leicestershire Nutrition and Dietetic Service

Patient stories:

<https://www.youtube.com/watch?v=1tzwzwQ5J1I>

<https://www.youtube.com/watch?v=naFqXcjevVQ>

<https://www.youtube.com/watch?v=OJzxOLauiv0>

<https://www.youtube.com/watch?v=YuG18uKth9w>

Blanch testing:

<https://www.youtube.com/watch?v=THjmtDDDoc>

If you need help to understand this leaflet or would like it in a different language or format such as large print, Braille or audio, please ask a member of staff.



**React to change in skin tone
- early detection is key!**