

Introduction

Care professionals working with clients who have impaired mobility have a key role to play in:

- The prevention of pressure ulcers
- The promotion of safe mobility

Clients with impaired mobility are at high risk of developing pressure ulcers.

Bedsore	A chronic ulcer of the skin caused by prolonged pressure on it (as in bedridden patients)
Ulcers	Begin as reddened skin. There is then a rapid progression to skin and underlying tissue breakdown. This results in the formation of ulcers and sores.

Skin

- The skin is the largest and one of the most important organs of the body
- It is the outer protective covering and is normally unbroken
- Provides a protective covering for other organs
- Retains moisture and provides a protective barrier
- Regulates body temperature
- Releases waste products
- Absorbs sunlight and helps to convert it into Vitamin D
- Detects sensations such as external pressures, external temperature changes and pain

Pressure, friction and shear

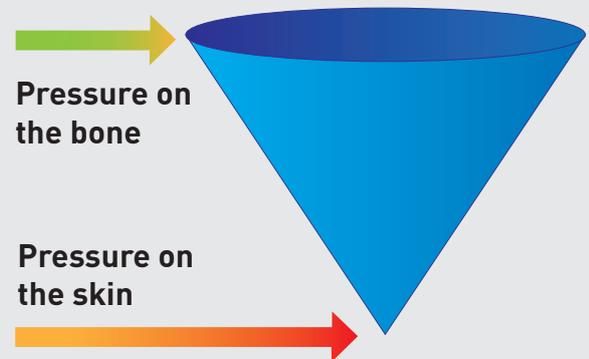
Friction	Occurs when a client is dragged instead of lifted. This causes damage to the top layer of the skin, resulting in a grazed or burnt appearance.
Shearing	Occurs through sliding, causing blood vessels to tear. Appears like rubbed or burnt skin.
Maceration	Occurs when skin becomes puffy or waterlogged and softens. This may be due to illness or prolonged contact with bodily fluids or other liquids.

Pressure areas

The areas of the body at risk of pressure sores are usually termed pressure areas.

Other names for pressure ulcers:

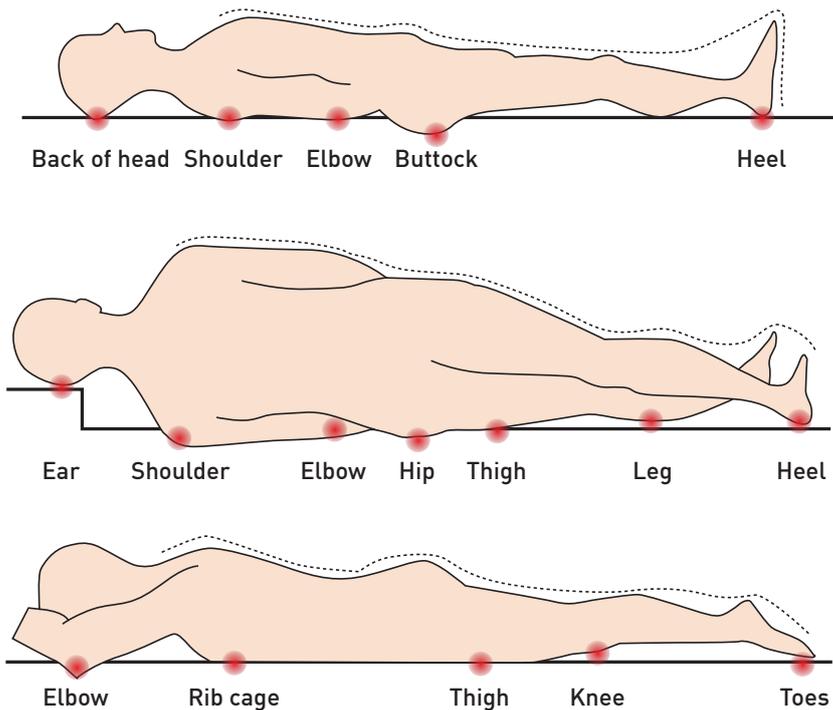
- Pressure sores
- Bedsore
- Pressure wounds
- Decubitus ulcers



Unrelieved pressure

Pressure damage occurs when skin and the underlying tissues are compacted between bone and another surface. Due to the cone of pressure, the extent of damage is greater under the skin's surface. The degree of damage may not always be obvious to the eye.

Where pressure ulcers occur?



Those at greatest risk

- Wheelchair users and the bedridden
- People unable to sense pain due to nerve damage (e.g. stroke) or medication
- Diabetics and clients with arterial disease are also at increased risk as their blood supply may be restricted
- Confused clients (e.g. dementia) may not know when their body is being injured
- Elderly people in general are at greater risk because the skin is thinner and more fragile

Risk Assessment

- Consider all bed-bound and chair-bound persons
- Use a valid, reliable and age appropriate method of risk assessment
- Assess all at-risk patients/residents at the time of admission

External factors likely to increase risk

- Friction to the outer skin layer
eg. wrinkled bedding and clothing
- Excessive exposure to moisture
eg. sweat, blood, urine or faeces

Acute care

Assess on admission, reassess at least every 24 hours or sooner if the patient's condition changes.

Long-term care

Assess on admission, weekly for four weeks, then quarterly and whenever the resident's condition changes.

Home care

Assess on admission and at every nurse visit.

Prevention

- Prevention is always better than a cure
- Avoid prolonged pressure
- Encourage regular positional changes
- Move immobile patients at least every 2 hours
- Avoid positioning patients on their prominent parts
- Patient repositioning should be recorded on care plans
- Inspect patients daily
- Keep skin clean
- Supply special padding materials
- Patients should be informed about the benefits of regular repositioning
- Bedsores can be painful and potentially fatal

Signs and symptoms

- Most people with pressure sores will feel some pain and itching
- Warning – clients with impaired senses may not feel any pain even with severe deep sores
- A pressure sore may initially appear as a red area of skin and may feel tender
- The area may become painful and purple in colour

Process

Grade 1 – Non-blanching

Intact skin with non-blanching redness of localised area usually over bony prominence. Darkly pigmented skin may not have visual blanching; its colour may differ from surrounding area.

Grade 2 – Broken Epidermis

Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open blister / ruptured serum-filled blister.

Grade 3 – Full thickness

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of the tissue loss. May include undermining and tunnelling.

Grade 4 – All layers

Full thickness tissue loss with exposed bone tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunnelling.

Nutrition

- A healthy diet (vitamin C and zinc rich) maintains healthy skin and may prevent pressure sores from occurring



- Fluids hydrate the skin
- Poor nutrition may lead to a slow healing process
- Consider nutritional supplementation/support for nutritionally compromised persons consistent with overall goals of care
- Multivitamins with minerals per physician's order

Pressure ulcers and pain

- Tissue damage pain (nociceptive pain) is the most common type of wound pain (often described as a burning or rubbing pain)
- Neuropathic pain (nerve damage) may occur following nociceptive pain and is often described as a stabbing sensation

Pain relief

- Tissue damage pain conventional analgesics - e.g. paracetamol, NSAIDs, local anaesthetics and opioids
- Neuropathic pain often treated with antidepressants or antiepileptics

Moisture lesions

- It is important to note the treatment and management of pressure ulcers and moisture lesions differ
- A moisture lesion will not heal if treated by pressure reduction/relief
- Unfortunately, incontinence managed with pads rather than the cause means that patients do not receive interventions to resolve or reduce the problems caused by moisture

Document

Observe and document skin changes and patient positioning / repositioning, using body maps. Issue Waterlow chart if required.

Summary

- The care professional has an important part to play in reducing the risks of clients developing pressure ulcers
- A clear understanding of pressure ulcers and client groups at risk means that the care professional is better equipped to reduce the risks and provide a better standard of care
- Re-positioning is vital in the prevention of pressure ulcers (following the correct procedures).
- Re-positioning includes independent movement by the patient/client
- Your role is one of education as well as that of a care giver
- Regular, methodical skin inspection and noting of care plans/records should always be done
- Pressure ulcer management is not just about care and treatment of pressure ulcers, it should incorporate prevention, including promotion of safe mobility so that the risks of a pressure ulcer developing are kept to an absolute minimum

Exercise

- Daily exercise is recommended for those at a high risk of developing pressure sores



Support equipment

Grade 1-2 pressure ulcer

- High specification foam mattress or cushion with pressure-reducing properties

Grade 3-4 pressure ulcer

- Alternating pressure mattress or sophisticated continuous low pressure system (depending on location of ulcer)