

# Get wise to pressure ulcer prevention in sitting



**A guide to pressure ulcer prevention in sitting.**

This leaflet is designed to help users and carers in the public domain to learn more about preventing pressure ulcers when sitting in a chair or wheelchair. It is not intended for clinicians. The leaflet was put together by BHTA Industry Expert Members.

## What is a pressure ulcer?

A pressure ulcer is any area of localised damage to the skin and underlying soft tissue. There are a number of risk factors, including age, diagnosis, medication, continence, nutrition, mobility, and weight. There are also other factors not specific to the person, such as the support surface, temperature, and moisture.<sup>1</sup>

Whilst sitting, the skin and soft tissues get squeezed and deformed between the bone and the support surface. Over time this can cause the cells to die and the area of resulting dead tissue is called a **pressure ulcer**.



**Everyone is potentially at risk of developing a pressure ulcer<sup>2</sup>**

## Why is sitting important in pressure ulcer prevention?

When sitting in an upright stable position, we still have localised high pressure areas:



Through buttocks and thighs: 75%  
Through the feet: 19%  
Through the arm supports: 2%  
Through the back support: 4%<sup>3</sup>

Therefore, posture and pressure are linked, with both affecting one another.

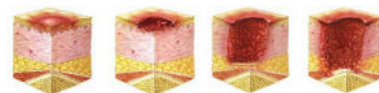
## Why might someone be at risk of pressure ulcers?

- Neurological impairment
- Changes in body shape and size
- Little or no active movement
- Movements that are difficult to control
- Lack of body awareness and/or sensory impairments
- Difficulty communicating discomfort

## What are the signs and symptoms to look out for?

Early symptoms of a pressure ulcer include:

- Persistent discolouration of the skin
- Discoloured patches not turning white when pressed
- A patch of skin that feels warm, spongy, or hard
- Pain or itchiness in the affected area
- The skin may not be broken at first, but if the pressure ulcer gets worse, it can form an open wound or blister
- A deep wound that reaches the deeper layers of the skin
- A very deep wound that may reach the muscle and bone<sup>4</sup>



## How does a pressure ulcer affect a person?

- The impact of a pressure ulcer on a person is significant, with their being affected physically, psychologically, socially, emotionally, spiritually, and financially<sup>5</sup>
- Pressure ulcers are often painful and debilitating<sup>6</sup>
- Infected ulcers can cause an unpleasant odour and further health problems



- Healthcare professionals may advise keeping weight off the pressure ulcer to allow healing, which can impact on independence and interaction

**With care, pressure ulcers are mostly preventable<sup>7</sup>**

Prevention can not only improve a person’s outcomes, but it can also reduce the costs to the National Health Service and benefit the wider community:



**Where can you get further information or advice?**

- Consult a General Practitioner or Healthcare Professional for information and advice on:
  - Ensuring a regular change of position: a person with a pressure ulcer, or at risk of developing a pressure ulcer, needs to change position frequently
  - Considering pressure relieving and postural management equipment
  - Applying special dressings that speed up the healing process
  - Eating a healthy, balanced diet

**Chair functions, such as tilt-in-space, can be effective in redistributing pressure<sup>8</sup>**

**Case Study:**

- Mrs A, a 72 year old lady diagnosed with Dementia
- Mrs A is frail, generally weak, and not always aware of her position
- She struggles to sit upright and tends to slump with her head falling forward
- Without a chair that is set up to her body shape and size, she is at risk of discomfort, sliding out of the chair, not being able to eat or drink safely, and developing pressure ulcers
- With the appropriate chair, she is more comfortable, and her risk of pressure ulcers is reduced. She has a more stable upright position and her head is supported, making it easier for her to eat, drink and communicate
- Needs regular change of position
- Needs regular skin inspection to check if damage has started

**References:**

- European Pressure Ulcer Advisory Panel (EPUAP), National Pressure Ulcer Advisory Panel (NPUAP), Pan Pacific Pressure Injury Alliance (PPPIA) (2014) Prevention and Treatment of Pressure Ulcers: Quick Reference Guide Available from: <http://www.epuap.org/wp-content/uploads/2016/10/quick-reference-guide-digital-npuap-epuap-pppia-jan2016.pdf>
- National Institute for Health and Care Excellence (NICE) (2014) [CG179] Pressure ulcers: prevention and management Available from: [www.nice.org.uk/guidance/cg179](http://www.nice.org.uk/guidance/cg179)
- Collins F (2001) Selecting cushions and armchairs: how to make an informed choice *Journal of Wound Care / Therapy Weekly Supplement* 13(5)
- NHS (2017) Pressure ulcers (pressure sores) Available from: <https://www.nhs.uk/conditions/pressure-sores/#symptoms-of-pressure-ulcers>
- Langemo DK (2005) Quality of Life and Pressure Ulcers: What is the Impact? *Wounds* 17(1)
- Moore ZE, Webster J, Samuriwo R (2015) Wound-care teams for preventing and treating pressure ulcers *Cochrane Database Syst Rev* 16(9)
- NHS Improvement (2018) Stop the Pressure Available from: <http://nhs.stopthepressure.co.uk/>
- Jan YK, Crane BA, Liao F, Woods JA, Ennis WJ (2013) Comparison of muscle and skin perfusion over the ischial tuberosities in response to wheelchair tilt-in-space and recline angles in people with spinal cord injury *Archives of Physical Medicine and Rehabilitation* 94(10):1990-6

**www.bhta.com**

The BHTA represents almost 500 companies, all of whom commit to the BHTA Code of Practice, the only one in this industry to be approved by The Chartered Trading Standards Institute. BHTA member companies operate to higher standards of customer protection than the law requires.

**British Healthcare Trades Association**  
 Suite 4.6 · 4th Floor · The Loom · 14 Gowers Walk  
 London · E1 8PY  
 T 020 7702 2141 · E [bhta@bhta.com](mailto:bhta@bhta.com)



*At the heart of healthcare since 1917*