### CARE AT HOME SERIES Caring for Pressure Injuries at Home Preventing and Managing Pressure Injuries



# Wounds Canada has developed a simple guide that can be used by patients and their care partners for preventing or caring for pressure injuries at home.

Do you, or someone you are caring for at home, have a pressure injury? Are you or they at risk of developing a pressure injury? There are many things you can safely do to prevent a pressure injury from developing or to care for an existing pressure injury.

### What is a pressure injury?

A pressure injury, also known as a pressure sore or a bed sore, is an area of discoloured or broken skin caused when the skin is pressed against a surface. It can happen because the pressure against the skin is long or intense (strong) or both. It can also be caused or made worse by a force called "shear." Pressure injuries usually occur over bony areas, such as heels, your tailbone and hips (see Figure 1 for the most common areas).

The pressure causes the skin and the tissue underneath to be pressed against the bone. Blood flow to the compressed tissues is reduced or stopped, which can cause damage to the tissues, leading to a pressure injury (see Figure 2).

Common causes of pressure injuries include:

- sitting or lying in one position for too long
- sitting or lying on any object, such as a catheter tube, lift sling, or even wrinkled sheets or clothing
- improper sitting posture
- incorrect methods of moving someone to a new position
- incorrect use, or sustained use without changing position, of equipment like wheelchairs, specialty wheelchair cushions and mattresses

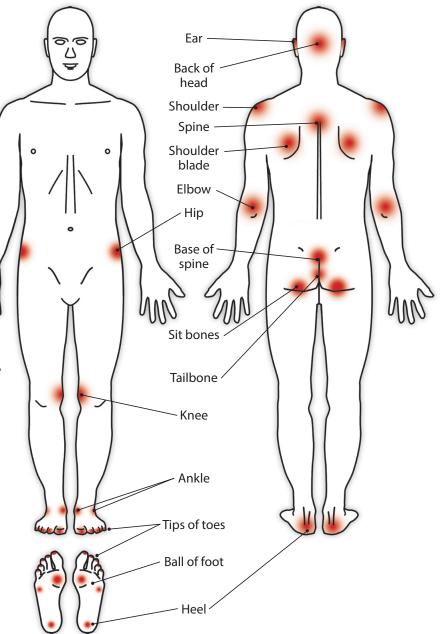
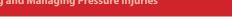


Figure 1: Common areas for pressure injuries

**Disclaimer:** The content in this resource is for informational purposes only and is NOT a substitute for professional medical advice, diagnosis or treatment. You should always consult with your health-care professional before starting any new treatment or changing or stopping an existing treatment.



a. No pressure

Bone

### What can lead to a pressure injury?

#### Lack of Ability to Feel

Most of the time, when you have been sitting too long in one position and your tissue is being pressed between a bone and the surface you're sitting on, you feel some discomfort and shift your position to relieve the uncomfortable feeling. You probably do this many times every hour and never even think about it. But there are times when this is not easy or even possible—to do. Conditions such as multiple sclerosis, spinal cord injuries, diabetes, and paralysis from stroke or some medications like pain killers, can increase your risk of a pressure injury, because these conditions may block your ability to feel the uncomfortable feeling caused by the pressure. In these cases you might continue sitting or lying on the area, reducing blood flow and causing damage.

#### Lack of Ability to Move

As well, any time you are unable to change your position you are at risk for developing a pressure injury. This can occur if you have paralysis, extreme weakness or if you are unconscious or deeply drugged.

Tissues (fat, – blood vessels, muscle, bone) Skin Skin Such as multiple s, diabetes, and paralysis ations like pain killers, pressure injury, because cyour ability to feel the sed by the pressure. In tinue sitting or lying on the ind causing damage. Tissues (fat, – bone) Skin Tissues (fat, – blood vessels, muscle, bone) Skin

surface

Figures 2a and b: How pressure affects skin and other tissue

Pressure

#### Lack of Ability to Communicate

Dementia, Alzheimer's disease and other similar conditions, along with some medications, can increase your risk of a pressure injury because they may make you less able to communicate that you have skin discomfort. If you can't move yourself and you can't communicate to others that you are uncomfortable and need help to move, a pressure injury may occur.

#### **Poor Skin Health**

Other things play a role too. If your skin is often wet from urine, stool, sweat, saliva or wound drainage, it breaks down more easily, putting you at greater risk for a pressure injury. Skin that is too dry is also a problem. So good skin health is important. As well, if you don't drink enough fluids and eat healthy foods you may be at higher risk of a pressure injury.





Normal

blood flow

in this area

Reduced

blood flow

in this area

### How long does it take to develop a pressure injury?

Sometimes it doesn't take very long. It can take as little as a few minutes to several hours, depending on what is causing the pressure, where it is located on the body, and the health of the person. Areas that often get a lot of pressure, such as heels, elbows and tailbones, may become red or discoloured quite quickly in people who spend most or all of their time in bed or on a chair. If the skin and bony areas are not protected they may worsen and become open sores. Once you have had a pressure injury, that area is more likely to get a new injury, even though the previous injury has healed.

### What does a pressure injury look and feel like?

Some pressure injuries have only minor skin damage and some have a complete breakdown of the skin and other tissues, including muscle and even to bone. A pressure injury may appear as:

- A red, warm, tender area of unbroken skin. It may have a blister filled with clear fluid. The redness does not go away when pressure is taken off of the area.
- A purple or maroon, warm, tender area. It may have an unbroken blister filled with blood.
- An area of broken skin that ranges from a shallow hole filled with slightly moist, pink tissue, to a deep hole filled with red, yellow, brown, grey or black tissue that drains a lot of fluid.

### **Important:**

**DO NOT** rub reddened areas. Doing so can cause more damage.



**Figure 3:** An injury from pressure that has caused redness that has not resolved in 10 to 15 minutes and may develop into open areas



Figure 4: Pressure injury on the hip



**Figure 5:** Pressure can cause a break in the skin that may be shallow or deep into muscle and bone. This type of pressure injury can easily lead to infection.



**Figure 6:** Extensive pressure injury on the tailbone

### What can you do?

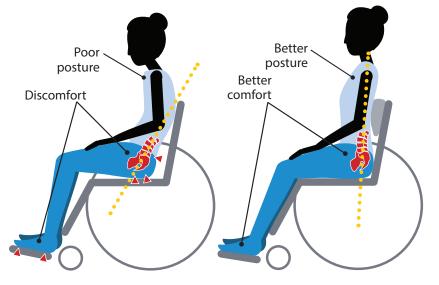
If you or the person you are caring for is at risk for a pressure injury, follow the steps listed below to prevent skin breakdown caused by pressure.

#### Look After Your Skin

- Keep skin clean and dry. Don't take long, hot baths; short, warm showers are a better choice. Use a mild, fragrance-free skin cleanser and a soft washcloth when cleaning skin. Pat skin dry, but dry well, especially between the toes and in skin folds (under breasts, in groin and armpits and anywhere skin overlaps or where skin touches skin).
- Moisturize dry skin daily with a mild, fragrance-free moisturizer (except between the toes and skin folds). It's best to moisturize right after patting skin dry.
- Look at your skin at least once a day for signs of pressure damage. Be sure to check parts you can't see—use a mirror or have a care partner help you.
- Eat a well-balanced diet and drink lots of noncaffeinated fluids.

### **Tips:**

- If you or the person you are caring for is incontinent (they can't get to the toilet in time), remove soiled absorbent pads or incontinence products immediately, cleanse skin right away and replace the incontinence products with clean, dry ones. You may wish to apply a barrier cream such as zinc oxide to protect the skin from getting wet with urine and/ or stool. This should be done after cleaning the skin. Regular visits to the toilet (a scheduled toileting routine) can help.
- If you are sweaty, change clothing often or choose clothing with the ability to "wick" moisture away from skin. Wool and bamboo are two natural fabrics that help keep moisture away from skin. Newer materials, such as those used in some sports clothing, do the same and can keep skin dry.



**Figure 7:** If you are in a wheelchair you are at higher risk for a pressure injury to the base of your spine, sit bones, tailbone and bottoms of feet. Proper posture and regular small movements will help you prevent pressure injuries.

**Keep moving!** Do small body activities or movements such as moving a hand, arm or leg or chair push-ups often (several times an hour).





Wounds CANADA®

**Figure 8a:** To do a chair push-up, place your hands or arms on the armrests of the chair, lift your buttocks up off the chair seat and hold for a count of 5.

Figure 8b: You can also reduce pressure by leaning forward or sideways in a chair with no armrests for a count of 5. But **be careful** not to tumble onto the floor.

#### **Keep the Pressure Off**

The most important part of preventing or treating a pressure injury is making sure there is no pressure for long periods on any part of your body from sitting, or lying down or any type of equipment, such as shoes, casts and braces, breathing tubes or other medical devices.

The suggestions below can help you keep yourself or the person you are caring for safe from pressure injury.

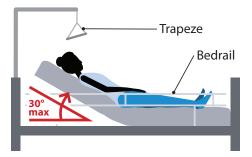
- Change positions often, both when sitting and lying, so pressure is removed from the areas most at risk (over bony spots). Even small shifts can make a difference. This is very important if you have trouble feeling pain or discomfort. Get into the habit of changing positions, even if you don't feel discomfort. If you notice an area of red, warm, tender unbroken skin, change your position more often. Talk to your health-care provider about using assistive devices, such as trapeze bars, bedrails, chair armrests.
- Place pillows between your knees and/or ankles to keep them from touching. Keep your heels from touching your mattress by placing a pillow beneath your calves—even if you are using a specialty mattress.
- **Reduce the shear** that happens when you slide down in the chair or bed by making sure you are lying or sitting correctly. If possible, avoid raising the head of your bed more than 30 degrees for long periods.
- **Reposition correctly.** If you are caring for someone who cannot move themselves, you will need to reposition them so pressure does not stay for too long on any body part.
- Create and use a turning schedule. Contact your health-care professional to work with you to create a repositioning or turning schedule that will help you remember when and where to reposition in the chair or turn in bed. The schedule needs to be based on the health of the person and the quality of the surfaces they are on. **Note:** If the area of the body the person has been sitting or lying on becomes red, even with a schedule, they may need to be repositioned or turned more frequently or be on a better surface (i.e., better chair cushion or mattress).

#### **Important:**

Moving someone can be harmful to them and to you if it is not done correctly. It is best if your health-care professional can train you before you attempt to reposition someone.



**Figure 9:** Use a turning sheet to reposition someone in bed who cannot move themselves.



**Figure 10:** Avoid raising the head of your bed more than 30 degrees for long periods.

### **Tips:**

- Most health-care supply stores have a range of pressure-reducing surfaces for both the chair and the bed. Make sure you use these products the way the manufacturer recommends. Check that they are working properly each time you use them. For the best performance and maintenance, consult an occupational or physical therapist.
- If you have a bed that elevates, lower the head of the bed before repositioning the person you are caring for. This makes it easier to move them.
- A bed with side rails and/or a trapeze bar can help a person reposition themselves.
- Lift, rather than slide, the person being repositioned. You may need two people to do the lifting to avoid injury to everyone.
- Learn how to use a turning sheet to help you in repositioning. Proper use of a turning sheet is safer for you and for the person you are turning.

Wounds CANADA®

## Quick tips for preventing pressure injury

- Change your body position and make small body movements often. If you cannot do this yourself, ask for help.
- ☑ Use special support surfaces if you cannot move yourself.
- $\ensuremath{\boxtimes}$  Avoid lying for long periods of time on bony areas such as your hip.
- ☑ To avoid a shear injury, use lifting or transferring devices such as a transfer board or a trapeze bar.
- $\ensuremath{\boxtimes}$  Gently clean and pat dry, then moisturize.
- ☑ Protect skin from incontinence (loss of bowel and bladder function) by using a skin barrier cream and incontinence pad.
- ☑ Eat a well-balanced diet and drink plenty of fluids to keep skin healthy and hydrated.
- ☑ Do not rub reddened or discoloured areas of skin. This will cause more damage.
- ☑ If you are not sure if you are at risk for a pressure injury, ask your health-care professional to assess you. Then, together create a pressure injury prevention program designed especially for you.

### What do you do if you have a pressure injury?

If you do notice that you or the person you are caring for does get a new pressure injury, **contact your health-care professional as soon as possible** to create a plan for treating the wound. Part of the plan will involve following most of the prevention steps listed in this resource because **a pressure injury will not heal if the pressure is not removed first.** 

If you need to do your own dressing changes on the wound, go to Caring for a Wound at Home at www.woundscanada.ca/docman/public/1680-care-at-home-series-changing-a-dressing/file for information on how to do so safely.

### **Taking the Pressure Off**

There are many products available to help you prevent pressure injuries—but which one should you choose? Your occupational therapist or home health store representative can help you decide which is the best choice for your situation. Here are some options:

#### Products to reduce pressure:

- mattresses or chair cushions (air, gel, foam overlay or high-density foam)
- heel and elbow protectors
- padded clothing

## Equipment to assist with someone who can't move themselves:

- Dowered bed/mattress and/or chair
- turning sheets
- □ transfer boards and/or belts
- patient lifts and slings (ceiling-mounted or portable)

## Equipment for moving and repositioning yourself:

- □ trapeze bars above the chair or bed
- bed side rails
- grab bars in
- bathroom transfer poles in bedroom and bathroom
- Chair armrests
- □ lift recliners
- transfer boards

Many of these products can be very costly, so ask your health-care professional to help you source financial support. Consider financial assistance programs and organizations providing support, such as provincial/territorial aids-to-daily-living programs, private insurance, veteran services and organizations such as the ALS Society of Canada.





### **Frequently Asked Questions**

#### My mom is in a wheelchair and doesn't move much. I don't want her to develop a pressure injury. What should I do to help her?

Check her skin often for red spots. For example, your mom may move from her comfortable chair to a wheelchair to go to the car, then to a hard chair or stretcher in a clinic. Each time she comes into contact with a different surface, her skin may be at risk of harm.

#### What do I do if I see a red spot on the skin?

If you see a red spot immediately move the person so the pressure comes off the area. Contact the person's health-care professional to let them know right away.

#### My father is paralyzed and in bed all the time. How do I know if he needs to be turned?

When a person can't move themselves you need to do a couple of things to keep their skin from getting damaged. First, make sure you check their skin every day. Second, you will have to turn, or reposition, your father several times every day to make sure no area of his body can get damaged by pressure. Ask his health-care professional to help you create a turning schedule. Follow the schedule as planned. Report any red areas on his skin to the health-care professional as soon as you notice them.

#### How do I know if my chair cushion or mattress is inflated correctly?

Cushions on chairs and mattresses need to be looked after regularly. Each cushion or mattress has instructions for care that you should follow. Ask your occupational therapist, physiotherapist or the provider of the equipment (such as the pharmacy) for written steps on how to care for any equipment you are using.

## My friend is in a coma, and when I visit him I notice his ears and the back of his skull are red. Why is this happening, and is there anything I can do?

Ears have no bones, but the skin over the cartilage that they are made of can become red and tender when they are touching a surface for too long. The back of a person's skull can also get red and tender if they are lying on it too long. Buy your friend a small, soft hat to protect his skin and ask the caregivers in his facility to put it on. Also ask them to make sure they are checking his ears at least every day.

#### Sometimes I have redness under my breasts. Is this a pressure injury?

No, redness in places where skin touches other skin, like under the breasts or in the groin (between the legs) is not usually caused by pressure. Redness under the breast tissue or in the groin may be due to extra moisture. Over time the area may have an odour, which may smell yeasty, and be painful. Some simple steps can help prevent this type of skin redness:

- Check these areas daily or more often.
- Clean the area and dry carefully.
- Wear breathable clothing that dries quickly.
- Wear a well-fitted bra if you need to hold your breasts up off your chest.

### Tip:

• Take a photo of the reddened area or wound if you have a digital camera/tablet/phone. This can help you when you contact a health-care professional. You will be able to show them the new injury.





### CARE AT HOME SERIES Caring for Pressure Injuries at Home

**Preventing and Managing Pressure Injuries** 

#### **Contributors:**

David H. Keast Robert Ketchen Janet Kuhnke Crystal McCallum Shannon McGrath Heather L. Orsted Sue Rosenthal

Wounds Canada P.O. Box 35569, York Mills Plaza North York, ON M2L 2Y4 416-485-2292 www.woundscanada.ca

© 2021 Canadian Association of Wound Care Printed in Canada · 1940r1E

**Disclaimer:** The content in this resource is for informational purposes only and is NOT a substitute for professional medical advice, diagnosis or treatment. You should always consult with your health-care professional before starting any new treatment or changing or stopping an existing treatment.

