

# Preventing and Caring for Pressure Ulcers (Pressure Sores, Bedsores)

## What is a Pressure ulcer?

A pressure ulcer is an injury to the skin that occurs when a patient lies or sits too long in the same position.



Pressure keeps blood from getting to the tissue, causing cells to die and the skin to break down. As the tissue dies, an open sore forms. This can even be painful or become infected. In severe cases, the muscle, tendon, or bone may begin to show. Pressure ulcers usually occur on bony areas of the body, such as the tailbone, back, buttocks, back of the head, elbows, heels, hips, and shoulders. Some patients get them on their ears. If you spot them early, you may be able to stop them from forming or prevent them from getting worse.

## How do people get pressure ulcers?

Patients who are unable to get out of bed or spend most of the day in a wheelchair are at high risk of getting a pressure ulcer. People who cannot move certain parts of their bodies are also at risk

(e.g., a person who has difficulty moving his/her leg after a stroke). Older people are at risk because their skin is thin and fragile. People with certain medical problems are also at risk. These problems include:

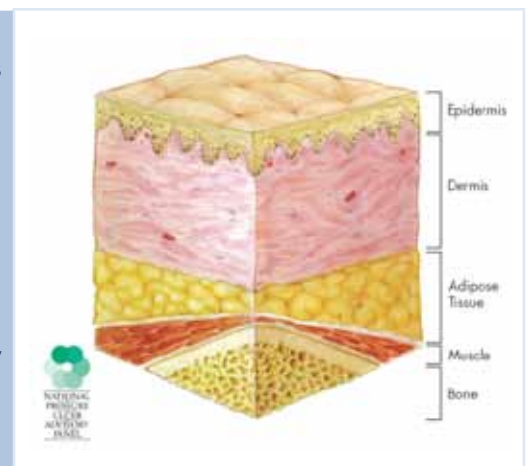
- diseases that affect the flow of blood in the body, such as diabetes or heart disease
- kidney disease and anemia (lack of iron in the blood)
- swelling or infection
- mental illness or Alzheimer's disease
- low body weight, dehydration, and poor diet
- skin that is too dry or too wet (from urine or sweat)

## What are the stages of pressure ulcers?

The doctor or nurse can tell how bad the problem is by looking at the skin and measuring the sore. Each pressure ulcer is graded (this is called **staging**) based on the amount of breakdown to the skin.

### Normal Skin:

The skin is made up of two layers: the epidermis and the dermis. The epidermis is the thin, tough outer layer. This layer has no blood vessels and renews itself about every month. The dermis is the thick, inner layer that attaches to the tissue beneath. The dermis gives the skin strength and flexibility. The dermis contains blood vessels, hair follicles, oil glands, sweat glands, and nerve endings. Underneath the dermis are fatty tissue, muscle, blood vessels, nerves, and bone.



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## Category/Stage I:

In people with lighter skin tones, the area over a bony body part may look red. When you press the area with your fingers, the skin does not turn white.

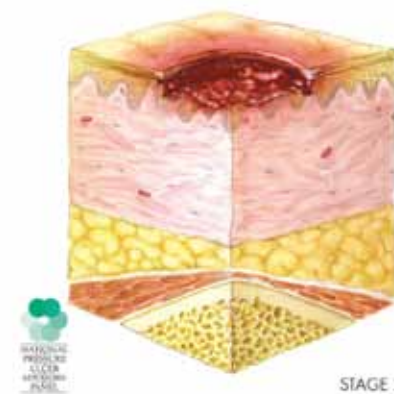
In people with darker skin tones, this area may look red, blue, or purple.

The area may be painful and feel warmer or cooler than the skin around it. At this point, the skin is not broken.



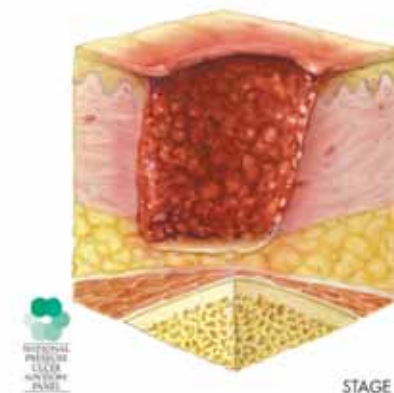
## Category/Stage II:

The outer layer of skin blisters or forms a shallow, open sore.



## Category/Stage III:

The area below the skin, including the nerves, is damaged by the blister, and the sore looks like a crater. Fat may be visible, but bone and muscle cannot be seen.



## Category/Stage IV:

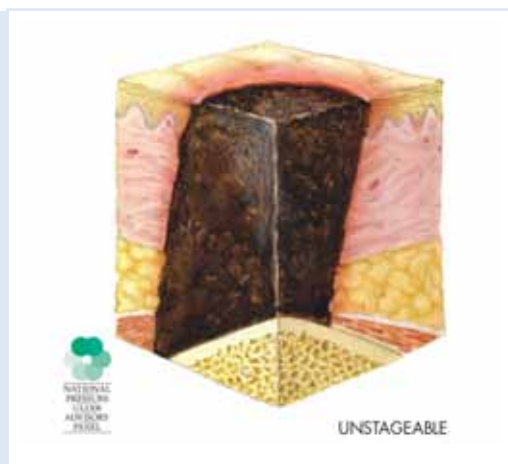
This is a deep wound, and you can see muscles, tendons, or bone.



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## **Unstageable/Unclassified:**

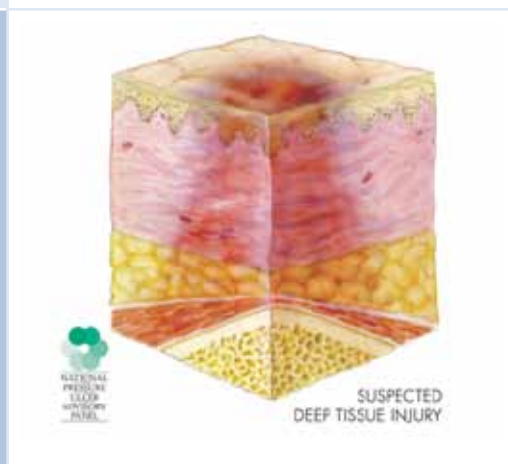
The top layer of the sore is covered by dead tissue, which may have a yellow, tan, gray, green, or brown color. It may also look like a scab. The dead tissue or scab covers a deeper, more serious wound and needs to be removed by a doctor or wound specialist.



## **Suspected Deep Tissue Injury:**

A deep tissue injury, not to be confused with a Stage I pressure ulcer, is a purple or maroon area of damaged tissue under intact skin; it looks like a deep bruise.

A suspected deep tissue injury needs to be examined by a doctor or wound specialist as it can quickly become a Stage III or Stage IV pressure ulcer.



*Illustrations presented with permission from the NPUAP*

## What should I do if I find a pressure ulcer?

Pressure ulcers can be painful and can cause infections that may require a hospital stay. It is important to work closely with the doctor or nurse to make sure that everything is being done to heal ulcers when they show up, and to stop more ulcers from forming.

Follow the steps to prevent new ulcers (see “**How do you prevent pressure ulcers?**”). In addition, the doctor or nurse may suggest that you speak with a registered dietitian to make sure the patient follows a good diet and drinks enough fluids. The doctor or nurse will also monitor the ulcer and may follow up with a wound care surgeon.

## How do you prevent pressure ulcers?

Pressure ulcers are very hard to treat, so it is very important to do everything possible to prevent them. Here are some helpful tips:

### **Skin Care (for intact or normal skin)**

- Wash skin with warm (not hot) water and use a mild soap. This will reduce irritation and dryness.
- Apply lotion to keep the skin from drying out.
- Keep clothes and bed sheets dry. Protect the skin from sweat and urine.

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- Check the skin every day. Look closely at bony areas for redness or temperature changes.
- Gently massaging intact skin may help with circulation and comfort. Avoid massaging bony areas.

## Moving and changing position

- Help the person move as much as possible. If able, the person should move from a bed to a chair, and stand and walk. A person who cannot get out of bed, or who is in a wheelchair, can be helped with range of motion exercises. The doctor or nurse can show you how to do these exercises.
- Turn the person in bed as often as possible (at least every 2 hours). Use pillows under legs to keep heels off the mattress.
- Help persons who are in a wheelchair to shift their weight every 15 minutes. (If watching TV, shift weight with each commercial break.)
- Do not raise the head of the bed too high. If the head of the bed is too high, the person may slide downward in the bed, which can cause skin damage to the lower back and buttocks areas.
- Use pillows, special foam cushions, or medically approved sheepskin to reduce pressure and keep bony areas from touching. Do NOT use 'donut' cushions.
- Use a bed sheet or other device to help move the person. Do not drag the person across the bed. Use proper techniques to change a person's position. The doctor or nurse can show you ways to safely change a person's position.



## Support surfaces

- Make sure bed sheets and blankets are dry and wrinkle-free (smooth).
- Use special mattresses or pads that lessen

pressure against the skin. These include foam pads or cushions filled with gel, fluid, or air. You can get them from medical supply stores. They vary in cost and in how easy they are to use. The doctor or nurse can help you to choose the best surface for the person's needs.

- Remember that support surfaces do not completely get rid of pressure. So, the person must be turned regularly.

## Nutrition and Hydration

Make sure the person eats good food and gets enough fluids. A healthful diet should include protein (e.g., poultry, fish, dairy, or soy products), as well as vitamins and minerals.

## How is a pressure ulcer treated?

The nurse and doctor will examine the ulcer and recommend a treatment plan. This plan includes the following recommendations:

### Relieve pressure on the area near the ulcer

- Do not allow the person to lie or sit on a pressure ulcer. Move and change the person's position regularly.
- Remember to use pillows, special foam cushions, or medically approved sheepskin to reduce pressure and keep bony areas from touching each other. Do NOT use 'donut' cushions.
- Ordering a special air bed may help.

### Treat the pressure ulcer itself

- Keep the pressure ulcer and skin around it clean. A Stage I pressure ulcer can be cleaned with warm (not hot) water and a mild soap. An open pressure ulcer can be cleaned by rinsing the area with normal saline solution (salt water) and gently dabbing the area with a clean gauze pad.

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Avoid antiseptics, such as hydrogen peroxide and iodine, as these can cause irritation and delay healing. The nurse can show you how to clean a pressure ulcer.

- Many types of dressings are used to treat pressure ulcers. The doctor or nurse will choose the right dressing for the pressure ulcer. Make sure to change the dressing as often as the doctor or nurse recommends. Some dressings must be changed every day. Others can stay on for several days at a time.
- Watch for signs of infection. These include pain, red skin around the sore, bad smell, and increased fluid that looks like yellow or green pus. Tell the doctor or nurse immediately if you think the pressure ulcer is infected.
- The doctor may prescribe medicine that you apply directly to the pressure ulcer if it is not healing properly. Sometimes antibiotics are given (by mouth or injection).
- Sometimes a pressure ulcer has dead tissue that must be removed before it can heal. Removing the dead tissue is called debridement. The doctor will select the best method of debridement for the pressure ulcer. One way is to rinse the sore when changing the dressing. Another way is to use a special dressing that helps the body dissolve the dead tissue. Surgery is sometimes needed. If debridement is painful, the doctor or nurse can suggest a pain reliever that the person can take before the procedure.
- Plastic surgery may be needed to repair some pressure ulcers.

## Improve nutrition

Good nutrition is necessary for the pressure ulcer to heal. The nurse or dietitian can give you advice about a healthful diet. If the person loses or gains any weight, tell the doctor or nurse.

## Communicate the patient's progress

Check the person's skin every day for new pressure ulcers. The nurse will keep a log (or chart) that tells how each pressure ulcer is healing (e.g., it should be getting smaller, have healthier tissue, and less drainage). This will help the doctor or wound care specialist to prescribe the best treatments for the person. The nurse may also use a special form, such as the Pressure Ulcer Scale for Healing or **PUSH tool**, to track the pressure ulcer's progress. He or she can provide you with copies of this or a similar tool.

## When to call the doctor or nurse

Call the doctor or nurse if a pressure ulcer gets worse or if a new one shows up the next time you check the patient's skin. Call **immediately** if you think a pressure ulcer is infected. Signs of infection include pain, red skin around the sore, bad smell, fluid that looks like yellow or green pus, fever, and the person may seem weak or confused. Ask the doctor or nurse for the name and phone number of who to call for help.

## Healthcare Professional Contact Information

Contact name: \_\_\_\_\_

Telephone: \_\_\_\_\_

# **Preventing and Caring for Pressure Ulcers**

## **(Pressure Sores, Bedsores)**

### Helpful Websites:

***International Pressure Ulcer Guidelines***

<http://www.pressureulcerguidelines.org/>

***JAMA Patient Page: Pressure Ulcers***

<http://jama.ama-assn.org/cgi/content/full/296/8/1020>

***MedlinePlus: Pressure Ulcer***

<http://www.nlm.nih.gov/medlineplus/ency/article/007071.htm>

***National Pressure Ulcer Panel***

<http://www.npuap.org/>

***New York Times Health Guide: Pressure Ulcer***

<http://health.nytimes.com/health/guides/injury/pressure-ulcer/overview.html>

***Pressure Ulcer Prevention and Treatment Following Spinal Cord Injury***

[http://www.guideline.gov/summary/summary.aspx?doc\\_id=2589](http://www.guideline.gov/summary/summary.aspx?doc_id=2589)

***The Wound, Ostomy and Continence Nurses Society (wound care specialists)***

<http://www.wocn.org>

***Your Skin – Kid’s Health Website***

<http://kidshealth.org/kid/htbw/skin.html>