If there is redness:

- Watch your skin carefully to see how long it takes to fade to the color of the surrounding tissue (or the color it was before you applied the pressure if there is a scar). If fading occurs in 15 minutes or less, no damage has occurred. Wait at least 1 hour and then put pressure on the area again.

- After your skin has returned to normal in 15 minutes or less 3 times, try applying pressure for 30 minutes and then check again for fading time. If it takes 15 minutes or less to fade, wait at least 1 hour and repeat. When your skin returns to normal in 15 minutes or less after you have put pressure on the area for 30 minutes 3 times in a row, increase the time by 30 minutes each day.

If at any point your skin does not return to normal in the time allowed, repeat that level until you have had 3 successful trials. This will help your skin build up tolerance to pressure.
What is a pressure sore?
A pressure sore is any redness or break in the skin caused by too much pressure on your skin for too long a time. The pressure prevents blood from getting to your skin so the skin dies. Usually, the nerves in your skin send messages of pain or discomfort to your brain to let you know that you need to change position. But, if you have damage to your spinal cord, these messages do not reach your brain.

How do pressure sores develop?
Pressure sores can occur when you sit or lie in one position too long. You may need to learn new ways to change your position to prevent too much pressure in one place on your skin.

Shearing is also a kind of pressure injury. It happens when the skin moves one way and the bone underneath it moves another way. This happens if you slouch when you sit.

Another type of skin injury is an abrasion. It can occur when you pull yourself across a surface instead of lifting. This is called a friction injury.

A short burst of high pressure, such as a bump or fall, may also damage skin. This damage may not show up right away.

When to Call the Doctor
Call your health care provider if:
- The sore gets larger or starts to drain more
- The sore gets redder or has black areas
- The sore starts smelling or the drainage looks slightly green
- You have a fever higher than 101°F (38.3°C)

Complications from Pressure Sores
The complications from pressure sores can be life-threatening. They include:
- Infection that spreads to your blood, heart, and bones
- Amputation
- Long-term bed rest
- Autonomic dysreflexia (very high blood pressure that can lead to stroke)

Reapplying Pressure
Do not put any pressure over the sore until the area is fully healed. Complete healing means that the outer layer of skin (epidermis) is unbroken and has normal coloring. Sometimes a scar may remain. A scar is healed tissue that is a slightly different color from the skin around it. Scar tissue is never as strong as uninjured skin.

The first time you put pressure on a newly healed area, it must be for a very short time – no more than 15 minutes. Then remove pressure from the area and check it for redness.
Stage 4

How to recognize Stage 4:
The breakdown extends into the muscle and can extend as far down as the bone. Usually, there is a lot of dead tissue and drainage.

What to do: Talk with your health care provider right away. You may need to have surgery.

What happens as the sore heals?

- The sore gets smaller.
- New pink tissue usually starts forming along the edges of the sore. From there, it moves toward the center. The new tissue may be smooth or bumpy.
- You may have some bleeding. This shows that there is good blood flow to the area, and this helps healing.

Stage 1

How to recognize Stage 1:
The skin is not broken, but it is red or discolored. The redness or change in color does not fade within 30 minutes after the pressure is removed.

What to do:
1. Keep pressure off the sore!
2. Wash the area with mild soap and water, rinse well, and pat dry carefully and gently. Do not rub hard right over the wound.
3. Check your diet. Are you getting enough protein, calories, vitamins A and C, zinc and iron? All of these are needed for healthy skin.
4. Check your mattress, wheelchair cushion, transfers, and pressure releases for possible causes of the problem. Also check how you usually turn your body while you are in bed – do you usually put pressure on the area of your skin that is red or discolored?
5. If the sore seems to be caused by friction, you can try putting a protective transparent dressing such as Op-Site or Tegaderm on it. This will help protect the area. These products let your skin slide easily across surfaces.

6. If the sore does not heal in a few days or it comes back, talk with your health care provider.

**Stage 2**

**How to recognize Stage 2:**

The *epidermis* (top layer of the skin) is broken, creating a shallow, open sore. The sore may or may not drain.

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**What to do:**

Follow steps 1 through 4 under Stage 1. Talk with your health care provider about how to treat it. Your provider may tell you to:

1. Clean the wound with saline solution **only**. Dry carefully.

2. Apply a transparent dressing (such as Op-Site or Tegaderm), a hydrocolloid dressing (such as DuoDERM), or gauze you have dampened with saline. You can leave the first 2 types of dressing on until they wrinkle or loosen (up to 5 days). If you use gauze, it should be changed 2 times a day and should **stay damp** between dressing changes.

3. Check for healing each time you change the dressing.

4. If you see signs of infection (see “When to Call the Doctor” on page 7), talk with your health care provider for other wound-care ideas and to review the possible causes (see Stage 1, step 4).

**Stage 3**

**How to recognize Stage 3:**

The wound is deeper than in Stage 2. It goes through the *dermis* (2nd skin layer) into the *subcutaneous* (beneath the skin) fat tissue.

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**What to do:**

1. Follow steps 1 through 4 under Stage 1 and steps 1 through 3 under Stage 2.

2. **Talk with your health care provider.** Stage 3 wounds often need extra care with special cleaning or **debriding** agents to remove unhealthy tissue. You may need to use different packing agents. You may need antibiotics (creams or oral pills). Ask your provider if you qualify for a special bed or pressure-relieving mattress.