

Part 3: Recognizing and Treating Pressure Sores



For more information, contact your nearest SCI Model System. For a list of SCI Model Systems go to:
<http://www.msktc.org/scimodel-system-centers>

This publication was produced by the SCI Model Systems in collaboration with the University of Washington Model Systems Knowledge Translation Center with funding from the National Institute on Disability and Rehabilitation Research in the U.S. Department of Education, grant no. H133A060070.

How can I tell if I have a pressure sore?

- **First signs.** One of the first signs of a possible skin sore is a reddened, discolored or darkened area (an African American's skin may look purple, bluish or shiny). It may feel hard and warm to the touch.
- **A pressure sore has begun** if you remove pressure from the reddened area for 10 to 30 minutes and the skin color does not return to normal after that time. **Stay off the area** and follow instructions under Stage I, below. Find and correct the cause immediately.
- **Test your skin with the blanching test:** Press on the red, pink or darkened area with your finger. The area should go white; remove the pressure and the area should return to red, pink or darkened color within a few seconds, indicating good blood flow. If the area stays white, then blood flow has been impaired and damage has begun.
- **Dark skin** may not have visible blanching even when healthy, so it is important to look for other signs of damage like color changes or hardness compared to surrounding areas.
- **Warning:** What you see at the skin's surface is often the smallest part of the sore, and this can fool you into thinking you only have a little problem. But skin damage from pressure doesn't start at the skin surface. Pressure usually results from the blood vessels being squeezed between the skin surface and bone, so the muscles and the tissues under the skin near the bone suffer the greatest damage. Every pressure sore seen on the skin, no matter how small, should be regarded as serious because of the probable damage below the skin surface.

Stages of pressure sores

[Also see "Stages of Pressure Sores: Illustrations."]

STAGE 1

- **Signs:** Skin is not broken but is red or discolored or may show changes in hardness or temperature compared to surrounding areas. When you press on it, it stays red and does not lighten or turn white (blanch). The redness or change in color does not fade within 30 minutes after pressure is removed.
- **What to do:** Stay off the area and remove all pressure; keep the area clean and dry; eat adequate calories high in protein, vitamins (especially A and C) and minerals (especially iron and zinc); drink more water; find and remove the cause; inspect the area at least twice a day; call your health care provider if it has not gone away in 2-3 days.
- **Healing time:** A pressure sore at this stage can be reversed in about three days if all pressure is taken off the site.

STAGE 2

- **Signs:** The topmost layer of skin (epidermis) is broken, creating a shallow open sore. The second layer of skin (dermis) may also be broken. Drainage (pus) or fluid leakage may or may not be present.
- **What to do:** Get the pressure off, follow steps in Stage 1, and see your health care provider right away.
- **Healing time:** Three days to three weeks.

STAGE 3

- **Signs:** The wound extends through the dermis (second layer of skin) into the fatty subcutaneous (below the skin) tissue. Bone, tendon and muscle are not visible. **Look for signs of infection** (redness around the edge of the sore, pus, odor, fever, or greenish drainage from the sore) and possible necrosis (black, dead tissue).
- **What to do:** If you have not already done so, get the pressure off and see your health care provider right away. Wounds in this stage frequently need special wound care. You may also qualify for a special bed or pressure-relieving mattress that can be ordered by your health care provider.
- **Healing time:** One to four months.

STAGE 4

- **Signs:** The wound extends into the muscle and can extend as far down as the bone. Usually lots of dead tissue and drainage are present. **There is a high possibility of infection.**
- **What to do:** Always consult your health care provider right away. Surgery is frequently required for this type of wound.
- **Healing time:** Anywhere from three months to two years.

SUSPECTED DEEP TISSUE INJURY *

- Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be surrounded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to nearby tissue.
- Deep tissue injury may be difficult to detect in individuals with dark skin tones. Progression may include a thin blister over a dark wound

bed. The wound may further evolve and become covered by thin eschar (scab). Progression may be rapid exposing additional layers of tissue even with optimal treatment.

UNSTAGEABLE *

- Full thickness tissue loss in which the base of the ulcer is covered by slough (dead tissue separated from living tissue) of yellow, tan, gray, green or brown color, and/or eschar (scab) of tan, brown or black color in the wound bed.

* From: Pressure Ulcer Stages Revised by National Pressure Ulcer Advisory Panel (2007). <<http://www.npuap.org>>.

Possible complications of pressure sores:

- **Can be life threatening.**
- Infection can spread to the blood, heart and bone.
- Amputations.
- Prolonged bed rest that can keep you out of work, school and social activities for months.
- Autonomic dysreflexia.
- Because you are less active when healing a pressure sore, you are at higher risk for respiratory problems or urinary tract infections (UTIs)
- Treatment can be very costly in lost wages or additional medical expenses.

Source

Our health information content is based on research evidence and/or professional consensus and has been reviewed and approved by an editorial team of experts from the SCI Model Systems.

Authorship

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The *Skin Care and Pressure Sores* series:

- Part 1: Causes and Risks of Pressure Sores
- Part 2: Preventing Pressure Sores
Supplements:
 - How to do Pressure Reliefs (Weight Shifts)
 - Building Skin Tolerance for Pressure
 - Areas of the Body at High Risk for Pressure Sores
- Part 3: Recognizing and Treating Pressure Sores
Supplements:
 - Stages of Pressure Sores: Illustrations

Skin Care & Pressure Sores

Part 3: Recognizing and Treating Pressure Sores

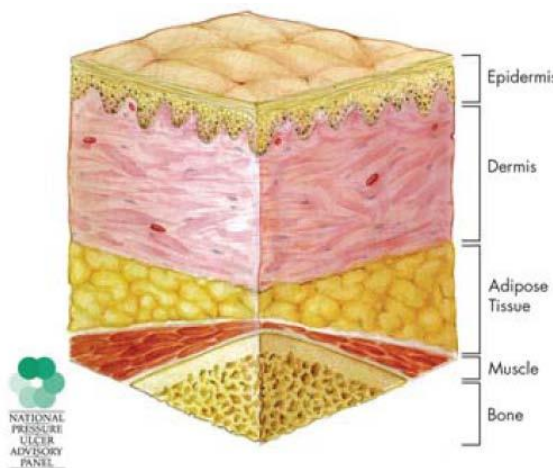
Supplement: Stages of Pressure Sores: Illustrations



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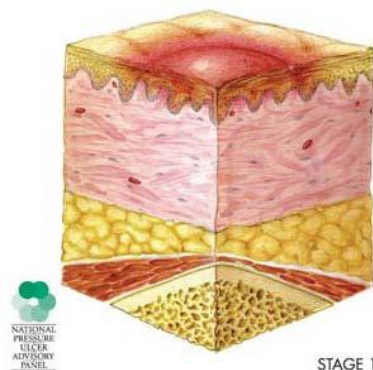
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NORMAL SKIN



STAGE 1

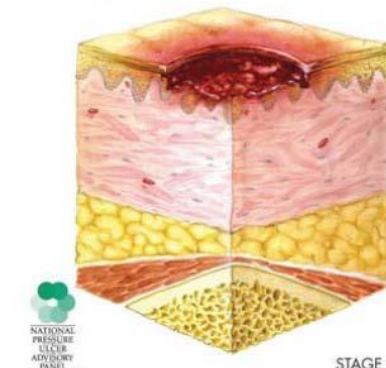
Skin is not broken but is red or discolored. When you press it, it stays red and does not lighten or turn white (blanch). The redness or change in color does not fade within 30 minutes after pressure is removed.



STAGE 1

STAGE 2

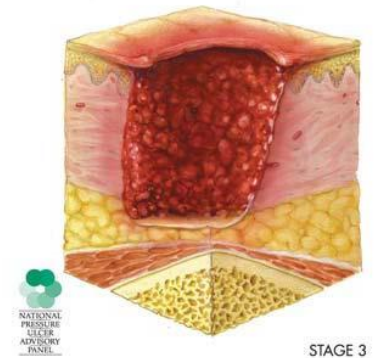
The topmost layer of skin (epidermis) is broken, creating a shallow open sore. The second layer of skin (dermis) may also be broken. Drainage may or may not be present.



STAGE 2

STAGE 3

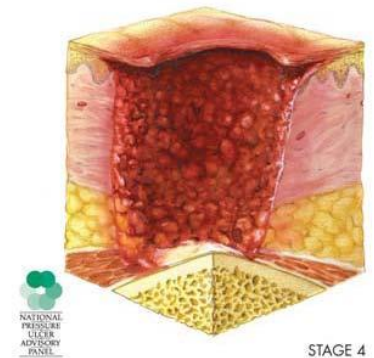
The wound extends through the dermis (second layer of skin) into the subcutaneous (below the skin) fat tissue. Bone, tendon and muscle are not visible. Look for signs of infection (pus, drainage) and possible necrosis (black, dead tissue).



STAGE 3

STAGE 4

The wound extends into the muscle and can extend as far down as the bone. Usually lots of dead tissue and drainage are present. There is a high possibility of infection.



STAGE 4

Illustrations are from the National Pressure Ulcer Advisory Panel (<http://www.npuap.org/>).

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