



## Preventing Wounds and Pressure Sores

Pressure sores, often called bedsores, are dangerous and every effort should be made to prevent them because it isn't easy to cure them once the process has started. Bedsores can develop in spite of good care. They occur when skin or tissue below the skin level is damaged as result of a person being in one position for long periods of time. Pressure on one area, such as the hip or back, pinches blood vessels and decreases circulation to that area. Over time, the tissue starts to die and pressure sore forms. Pressure sores must be treated and treated aggressively and consistently to heal them before they become dangerous and spread. Position changes are crucial.

- Keep linens clean and dry, limiting wrinkles under patient
- Inspect skin at least daily
- Do not drag person over bed; use draw sheet
- Pat skin dry when bathing; no rubbing
- Relieve pressure points with pillows; do not use donut shaped items
- Frequent repositioning; at least every 2 hours
- Avoid lying directly on hip

It takes just a few hours of immobility for a pressure sore to begin to form. For that reason, experts advise shifting position about every 15 minutes that you're in a wheelchair and at least once every two hours, even during the night, if you spend most of your time in bed. If you can't move on your own, a family member or caregiver must be available to help you. A physical therapist can advise you on the best ways to position yourself in bed, but here are some general guidelines:

- **Avoid lying directly on your hipbones.** On your side, lie at a 30-degree angle.
- **Support your legs correctly.** When lying on your back, place a foam pad or pillow — not a doughnut-shaped cushion — under your legs from the middle of your calf to your ankle. Avoid placing a support directly behind your knee — it can severely restrict blood flow.
- **Keep your knees and ankles from touching.** Use small pillows or pads.
- **Avoid raising the head of the bed more than 30 degrees.** A higher incline makes it more likely that you'll slide down, putting you at risk of friction and shearing injuries.

If the bed needs to be higher when you eat, place pillows or foam wedges at your hips and shoulders to help maintain alignment.

**Use a pressure-reducing mattress or bed.** You have many options, including foam, air, gel or water mattresses. Because these can vary widely in price and effectiveness, talk to your doctor about the best choice for you. For some people, a low-air-loss mattress may provide enough support. But more expensive and technologically sophisticated beds may be needed for people who have recurring pressure sores or who are at very high risk.

**Pressure-release wheelchairs**, which tilt to redistribute pressure, may make sitting for long periods easier and more comfortable. If you don't have a pressure-release chair, you or your caregiver will need to manually change your position every 15 minutes or so. If you have movement and enough strength in your upper body, you can do wheelchair push-ups — raising your body off the seat by pushing on the arms of the chair.

All wheelchairs need cushions that reduce pressure and provide maximum support and comfort. Various cushions are available, including foam, gel, and water- or air-filled cushions. Although they may help relieve pressure, cushions and other devices don't prevent pressure sores from forming or replace the need to change your position often.

- Have adjustable bed, keep incline as low as possible
- No rubbing of reddened areas
- Keep skin moisturized
- If you notice an area of concern, seek medical attention immediately

Who can develop a pressure sores? Anyone, but especially:

- The elderly
- Those with poor nutrition
- Obese or very thin frame
- Bedbound/Chair-bound
- Spinal Cord Injuries
- Anyone laying on wrinkled linens
- Incontinent persons
- Diabetics

Where do they normally occur?

- Wherever bony parts of the body are in contact with bed or chair
- Where there is friction of skin against surface
- Heels, ankles, hips, shoulders, back of head, elbows, tailbone, etc.

#### What to look for

- Any area where skin stays reddened for longer than 30 minutes after pressure removed
- Areas of increased warmth
- Changes in skin color
- Signs of infection
- Swelling
- Increased redness or warmth
- Tenderness
- Drainage (pus)
- Odor
- Fever/chills
- New onset mental confusion

#### Stages and Average healing times

- Reddened skin area that is still intact; takes approximately 14 days to heal
- Area that appears as blister; skin now open; takes approximately 45 days to heal
- Deeper than stage 2 and involving second layer of skin; takes approximately 90 days to heal
- Involving muscle, surrounding tissues, sometimes bone; dead tissue; takes approximately 120 days to heal

#### What complicates wound healing?

- Age—takes more time to heal as age increases
- Body size—affects nutritional status and/or circulation
- Diseases such as diabetes or those affecting the immune system
- Infection
- Incontinence
- Mental status—people may not understand or forget to leave wound alone
- Bedbound or chair-bound patients with limited mobility
- Nutrition—especially protein