# PREVENTING PRESSURE ULCERS: A PATIENT'S GUIDE

#### WHAT ARE PRESSURE ULCERS?

A pressure ulcer is an injury usually caused by unrelieved pressure that damages the skin and underlying tissue. Pressure ulcers are also called bed sores and range in severity from mild (minor skin reddening) to severe (deep craters down to muscle and bone).

Unrelieved pressure on the skin squeezes tiny blood vessels, which supply the skin with nutrients and oxygen. When skin is starved of nutrients and oxygen for too long, the tissue dies and a pressure ulcer forms. Skin reddening that disappears after pressure is removed is normal and not a pressure ulcer.

Other factors cause pressure ulcers too. If a person slides down in the bed or chair, blood vessels can stretch or bend and cause pressure ulcers. Even slight rubbing or friction on the skin may cause minor pressure ulcers.



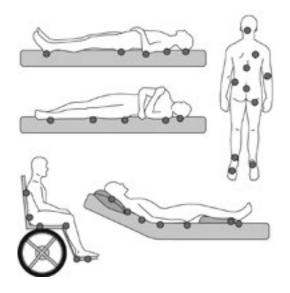
### PURPOSE OF THIS BOOKLET

Pressure ulcers are serious problems that can lead to pain, a longer stay in the hospital or nursing home, and slower recovery from health problems. Anyone who must stay in a bed, chair, or wheelchair because of illness or injury can get pressure ulcers.

Fortunately, most pressure ulcers can be prevented, and when pressure ulcers do form, they do not have to get worse. This booklet describes where pressure ulcers form and how to tell if you are at risk of getting a pressure ulcer. It also lists steps to take to prevent them or keep them from getting worse, and suggests how to work effectively with your health care team.

## WHERE PRESSURE ULCERS FORM

Pressure ulcers form where bone causes the greatest force on the skin and tissue and squeezes them against an outside surface. This may be where bony parts of the body press against other body parts, a mattress, or a chair. In persons who must stay in bed, most pressure ulcers form on the lower back below the waist (sacrum), the hip bone (trochanter), and on the heels. In people in chairs or wheelchairs, the exact spot where pressure ulcers form depends on the sitting position. Pressure ulcers can also form on the knees, ankles, shoulder blades, back of the head, and spine.



Nerves normally tell the body when to move to relieve pressure on the skin. Persons in bed who are unable to move may get pressure ulcers after as little as 1-2 hours. Persons who sit in chairs and who cannot move can get pressure ulcers in even less time because the force on the skin is greater.

#### **YOUR RISK**

Confinement to bed or a chair, being unable to move, loss of bowel or bladder control, poor nutrition, and lowered mental awareness are some common risk factors that increase your chance of getting pressure ulcers.

- 1. Bed or chair confinement. If you must stay in bed, a chair, or a wheelchair, the risk of getting a pressure ulcer can be high.
- 2. Inability to move. If you cannot change positions without help, you are at great risk. Persons who are in a coma or who are paralyzed or who have a hip fracture are at special risk. Risks of getting pressure ulcers are lower when persons can move by themselves.
- 3. Loss of bowel or bladder control. If you cannot keep your skin free of urine, stool, or perspiration, you have a higher risk. These sources of moisture may irritate the skin.
- 4. Poor nutrition. If you cannot eat a balanced diet, your skin may not be properly nourished. Pressure ulcers are more likely to form when skin is not healthy.
- 5. Lowered mental awareness. When mental awareness is lowered, a person cannot act to prevent pressure ulcers. Mental awareness can be affected by health problems, medications, or anesthesia.

Fortunately, you can lower your risk. Following the steps in this booklet can help you and your health care provider to reduce your risk of pressure ulcers.

# **KEY STEPS TO PREVENT PRESSURE ULCERS**

The following steps for prevention are based on research, professional judgment, and practice. These steps can also

keep pressure ulcers from getting worse. Talk to a nurse or doctor about which steps are right for you.

#### TAKE CARE OF YOUR SKIN

# Inspect Skin Daily

Your skin should be inspected at least once a day. Pay special attention to any reddened areas that remain after you have changed positions and the pressure has been relieved. This inspection can be done by yourself or your caregiver. A mirror can help when looking at hard-to-see areas. Pay special attention to pressure points shown on page 1. The goal is to find and correct problems before pressure ulcers form.



## Keep it Clean

Your skin should be cleaned as soon as it is soiled. A soft cloth or sponge should be used to reduce injury to skin.

Take a bath when needed for comfort or cleanliness. If a daily bath or shower is preferred or necessary, additional measures should be taken to minimize irritation and prevent dry skin. When bathing or showering, warm (not hot) water and a mild soap should be used.

### Prevent Dry Skin

- Use creams or oils on your skin.
- Avoid cold or dry air.

#### Minimize/Control Moisture

- Minimize moisture from urine or stool, perspiration, or wound drainage. Often urine leaks can be treated.
- Pads or briefs that absorb urine and have a quick drying surface that keeps moisture away from the skin should be used.
- A cream or ointment to protect skin from urine, stool, or wound drainage may be helpful.

#### PROTECT YOUR SKIN FROM INJURY

Avoid massage of your skin over bony parts of the body. Massage may squeeze and damage the tissue under the skin and make you more likely to get pressure ulcers.

Limit pressure over bony parts by changing positions or having your caregiver change your position.

- If you are in bed, your position should be changed at least every 2 hours.
- If you are in a chair, your position should be changed at least every hour.

Reduce friction (rubbing) by making sure you are lifted, rather than dragged, during repositioning. Friction can rub off the top layer of skin and damage blood vessels under the skin. You may be able to help by holding on to a trapeze hanging from an overhead frame. If nurses or others are helping to lift you, bed sheets or lifters can be used. A thin film of cornstarch can be used on the skin to help reduce damage from friction.

Avoid use of donut-shape (ring) cushions. Donut-shape cushions can increase your risk of getting a pressure ulcer by reducing blood flow and causing tissue to swell.

# If you are confined to bed:

 A special mattress that contains foam, air, gel, or water helps to prevent pressure ulcers. The cost and effectiveness of these products vary greatly. Talk to your health care provider about the best mattress for you.

- The head of the bed should be raised as little and for as short a time as possible consistent with medical conditions and other restrictions.
  When the head of the bed is raised more than 30 degrees, your skin may slide over the bed surface, damaging skin and tiny blood vessels.
- Pillows or wedges should be used to keep knees or ankles from touching each other.
- Avoid lying directly on your hip bone (trochanter) when lying on your side. Also, a position that spreads weight and pressure more evenly should be chosen -- pillows may also help.
- If you are completely immobile, pillows should be put under your legs from mid-calf to ankle to keep heels off the bed. Avoid placing pillows behind the knees.



## If you are in a chair or wheelchair:

- Foam, gel, or air cushions should be used to relieve pressure. Ask your health care provider which is best for you. Avoid donut-shape cushions because they reduce blood flow and cause tissue to swell, which can increase your risk of getting a pressure ulcer.
- Avoid sitting without moving or being moved.
- Good posture and comfort are important.

#### **EAT WELL**

Eat a balanced diet. Protein and calories are very important. Healthy skin is less likely to be damaged.

If you are unable to eat a normal diet, talk to your health care provider about nutritional supplements that may be desirable.



#### **BE ACTIVE IN YOUR CARE**

The best program for preventing pressure ulcers will consider what you want and be based on your condition.

## Be sure you:

- Ask questions of your health provider.
- Explain your needs, wants, and concerns.
- Understand what and why things are being done.
- Know what is best for you. Talk about what you can do to help prevent pressure ulcers -- at home, in the hospital, or in the nursing home.

You can help to prevent most pressure ulcers. The extra effort can mean better health.

## **ADDITIONAL RESOURCES**

National Pressure Ulcer Advisory Panel (NPUAP) 2300 N. Street NW, Suite 710, Washington, D.C. 20037 (202) 521-6789 – A non-profit professional organization dedicated to the prevention and management of pressure ulcers through public policy, education and research. www.npuap.org

Agency for Healthcare Research and Quality (AHRQ) 540 Gaither Road, Rockville, MD 20850 (301) 427-1364 – The federal agency that conducts research on health care quality issues, health care cost and patient safety. Their mission includes translating research into better patient care. www.ahrq.gov

www.guideline.gov - National Guideline Clearinghouse™ (NGC), a public resource for evidencebased clinical practice guidelines.

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