



# HEALTH ALERT

Gregory Cherpes, MD  
ODP Medical Director



February 10, 2021

## BE ALERT FOR PRESSURE INJURIES

The Office of Developmental Programs is issuing this Health Alert to create a greater awareness of pressure injuries in order to promote prevention and help ensure recognition and timely treatment if pressure injuries do occur.

### Terms to Know: Skin Integrity and Pressure Injuries

“**Skin integrity**” refers to the intact, unbroken nature of healthy skin. Skin is the largest organ of the body and protects the body by creating a barrier to the environment. Skin also regulates the body’s temperature, supports peripheral circulation, and helps maintain fluid balance. The skin is made of two layers, the epidermis and dermis, which cover the underlying tissues, muscles, and bones.

**Pressure injuries**, also known as bed sores, pressure ulcers, or decubiti are wounds that occur on the skin and underlying soft tissue. Pressure injuries can be very painful which can affect quality of life. Open wounds to the skin, such as those that occur with pressure injuries, make an individual more vulnerable to infection, sickness, and can lead to death.

### Pressure Injuries are Serious Health Concerns

**Pressure injuries disrupt skin integrity by destroying the skin and anything underneath, including muscle and bone.** Open wounds on the skin allow bacteria to enter the body and cause infection. In some cases, infection in the tissue can lead to bone infection, also called osteomyelitis. Infections can worsen and result in sepsis (when infection enters the blood), which can lead to shock and even death.

- Pressure injuries can occur quickly, within hours
- If the pressure is not relieved and if the injury is left untreated, it will progress to damage the skin and the underlying tissue, muscle, and bone
- The first sign of a pressure injury is localized area of:
  - Redness or purplish color which does not go away within 15 minutes after pressure is removed
  - Change in temperature from surrounding skin

- Change in the texture of the skin, such as feeling boggy or hard
- These signs do not go away after 15 minutes of relieving pressure from the area
- Pressure injuries are described by level of severity from Stage 1 through Stage 4, based on extent of damage to the skin and underlying tissue. Stage 4 pressure injuries have the greatest level of tissue damage. If the extent of damage cannot be determined at the time of evaluation, the wound is called unstageable. **Staging of a suspected pressure injury can only be completed by a health care practitioner.**

**IMPORTANT: Notify the health care practitioner (HCP) if there are concerns for a pressure injury. Because pressure injuries can have many different appearances, the HCP should be alerted to any skin changes that are noted, particularly in body locations at risk for pressure injury.**

### Be Aware that Pressure Injuries:

- Are always serious conditions
- Often begin as localized damage to the skin and underlying soft tissue
- Occur most often where the bony part of the skeleton is prominent, such as: elbows, heels, toes, base of spine, back of head, shoulders, hips, buttocks, and ears
- May also result from medical or other devices having contact with the individual's skin, such as tubing used for oxygen or an individual staying on a bedpan or bedside commode for an extended length of time
- Result from pressure caused by intense and/or prolonged contact with a surface such as a bed or a chair
- May result from shearing of the skin, produce from a combination of pressure and friction
  - Shearing occurs when the skin drags or slides against items including bedding, wheelchairs, chairs, or incontinence briefs
  - Shearing prevents blood from providing oxygen to the skin, causing damage to the tissue
- May occur more often in individuals with risk factors
- Can worsen very quickly
- Can take a very long time to heal and require extensive antibiotic therapy

## Risk Factors for Pressure Injuries Include:

- Advanced age
- Use of medical devices
- Incontinence
- Poor nutrition
- Immobility – sitting or lying in one position for an extended time
- Too little fluid intake
- Diabetes
- Impaired blood circulation
- Fragile skin
- Contractures
- Communication deficits
- Cognitive and physical impairments
- Diminished sensory perception
- Decreased mental awareness

## Prevention is the Best Way to Address Pressure Injuries

- Check skin for changes regularly – identify at risk individuals
- Maintain good nutrition
- Maintain adequate fluid intake
- Incontinence care – with each soiling:
  - Change briefs
  - Clean area gently with mild soap
  - Pat dry, apply barrier cream, ointment, pastes or skin protectants if prescribed
- Keep skin clean and dry
- Follow repositioning plan
  - While in bed, change position at least every 2 hours
  - When in wheelchair or sitting, change position every 15 minutes to 1 hour

- Use proper positioning and turn/lift techniques to decrease shearing and friction
- Apply skin moisturizers
- Provide protection from environment
- Provide protection from heat or from cold air
- Use prescribed pressure relieving cushions, mattresses, and devices
- Avoid rubbing skin or massaging bony prominences
- Avoid tight clothing/shoes
- Encourage activity/range of motion

### **Treatment for Pressure Injuries**

- Relieve pressure on the area with a change of position.
- **Notify the HCP at the first sign of redness that does not resolve within 15 minutes after relieving the pressure**
- **Follow treatment plan prescribed by the HCP, wound care clinic, or wound specialist**
- Apply and change wound dressings as prescribed
- Treatment may be painful; if so, notify health care practitioner
- Provide adequate nutrition and hydration
- Follow bowel and bladder incontinence plan
- Prevent/manage infection

### **Where to Learn More**

#### **Health Care Quality Units (HCQU) Skin Integrity/Training materials referenced:**

- PCHC: *Skin Health: Preventing Pressure Wounds*
- KEPRO SW HCQU: *Skin Care; Pressure Injuries*
- Milestone NW HCQU: *Pressure Ulcer Prevention*
- Advocacy Alliance: *Wound Management*

## **References:**

- Revised National Pressure Ulcer Advisory Panel (NPUAP) Pressure Injury Staging System
- NPUAP Pressure Injury Prevention Points (April 2016)
- National Pressure Injury Advisory Panel (NPIAP)

## **Citations:**

- Edsberg LE, Black JM, Goldberg M, McNichol L, Moore L, Sieggreen M. Revised National Pressure Ulcer Advisory Panel Pressure Injury Staging System: Revised Pressure Injury Staging System. *Journal of Wound, Ostomy, and Continence Nursing*. 2016; 43(6):585-597. doi:10.1097/WON.000000000000281.
- Goldberg, Margaret T. & Laurel R. Smith: Wound Management and Healing, 2nd Ed. CE Express. S.C. Publishing, <https://www.ce-express.com/>
- Mary Zeigler, MS Clinical Nurse Specialist, Rehabilitation Institute of Chicago; video: Why Are Pressure Sores So Serious?
- Ratcliff, CP, Droste, LR. WOCN (Wound, Ostomy, and Continence Nurses Society) Guide for Prevention and Management of Pressure and Management of Pressure Ulcers (Injuries) 2nd Ed. (2016). <https://www.wocn.org/>
- National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014. <http://www.internationalguideline.com/guideline>.