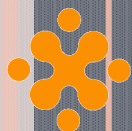




# PRESSURE INJURY DEVELOPMENT 101

## HOW AND WHY PRESSURE ULCERS OCCUR

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# WHAT IS A PRESSURE INJURY ?

(ALSO KNOWN AS A PRESSURE ULCER, BEDSORES  
OR DECUBITUS ULCER)

“A **Pressure Ulcer** is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of **pressure**, or **pressure** in combination with shear.”

NATIONAL PRESSURE ULCER ADVISORY PANEL



# # 1 PROBLEM IS PRESSURE

PRESSURE



Ischemia (Circulation Cut Off)



Inflammation (Swelling, Redness)



Tissue Anoxia (Tissues Deprived of Oxygen)



Necrosis (Tissues Die)



Pressure Injury / Ulcer / Bedsore



## # 2 PROBLEM IS IMMOBILITY

IMMOBILITY is *almost always* an issue

- ❖ Severe Weakness
- ❖ Nerve damage (MS, Spinal Cord Injury, Neuropathy, Traumatic etc)
- ❖ Pain with movement
- ❖ Uncomfortable in turned position
- ❖ Must stay in a certain position
  - ❖ Must keep head of the bed up to breath, due to feeding or intubation tube
  - ❖ Must stay on back due to unstable injury like broken hip or broken neck)
  - ❖ Cant be moved during operation or medical procedures
- ❖ Sedation



## # 3 PROBLEM IS MOISTURE

MOISTURE is *almost always* an issue in Sacral/Coccyx Wounds

- ❖ Usually from incontinence
- ❖ Can also be from perspiration/ sweating (Too much heat from blankets or pillows or fever)





## # 4 PROBLEM FRICTION / SHEAR

- ❖ Skin that is weakened / damaged for any reason is soft and fragile
- ❖ Skin will tear easily from patient movement or caregiver sliding, pushing, pulling or rubbing (while cleaning or pulling at bedding etc.)





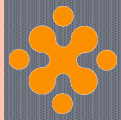
# # 5 PROBLEM IS ILLNESS / DISEASE

Illness / Diseases that affect the blood Circulation is *almost always* an issue

- ❖ Low Blood Pressure
- ❖ Diabetes (clogs up the veins)
- ❖ Artereolsclerosis and other Cardiac conditions
- ❖ Kidney disease
- ❖ Venous stasis, arterial stasis
  - ❖ Poor circulation, especially to the legs
- ❖ Nerve damage (also affects blood flow)
- ❖ Skin problems:
  - ❖ Thin skin from age or blood thinners
  - ❖ Diseases that weaken skin integrity







# # 6 IS POOR HYDRATION AND / OR NUTRITION

Poor Nutrition and Hydration can contribute to pressure injury

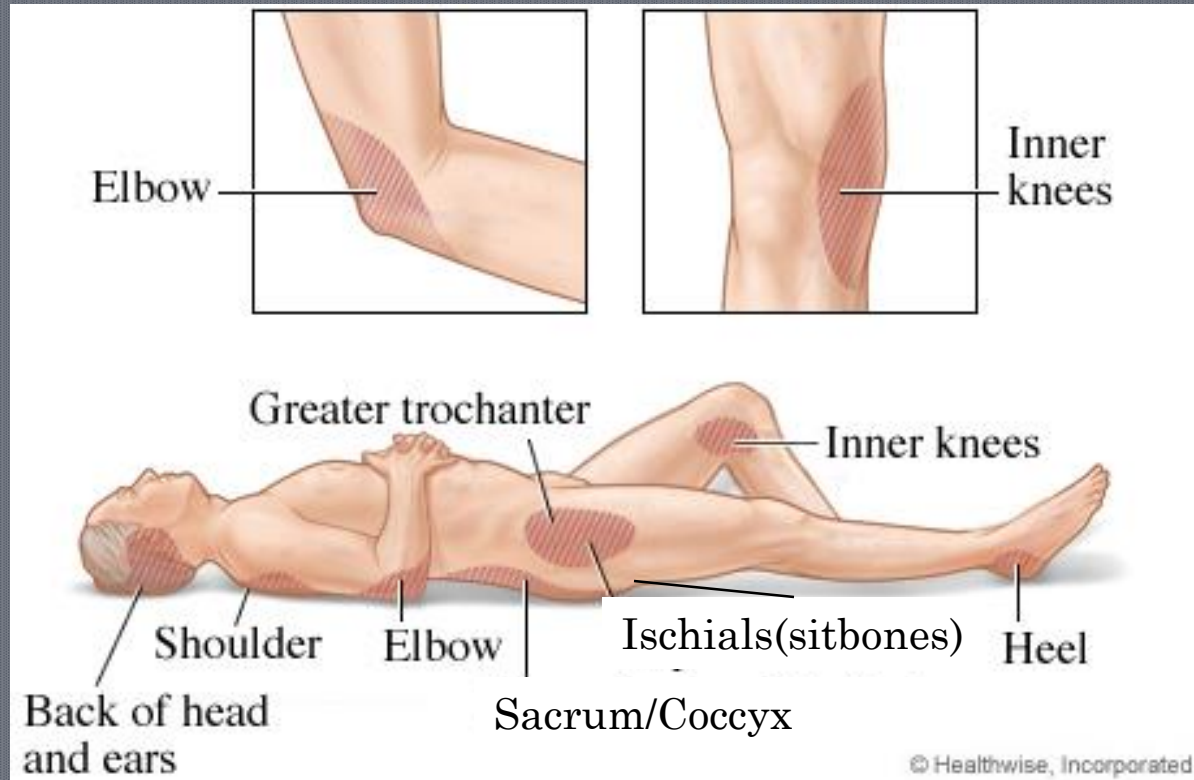
- ❖ Chewing or swallowing problems
  - ❖ Leads to dehydration and / or starvation. Compromises skin circulation and delivery of fluid and nutrients to skin
  
- ❖ Complication of Illness
  - ❖ Decreased appetite from cancer, flu, pneumonia, many others
  - ❖ Fluid loss from excessive sweating or frequent urination
  - ❖ Nausea and vomiting
  - ❖ Poor circulation, especially to the legs







# # 7 PROBLEM IS SENSITIVE SPOTS THAT TAKE ALL THE PRESSURE (ALSO KNOWN AS BONY PROMINENCES)



Healthwise, Inc with addition of Sacrum/Coccyx and Ishials





# MOST PRESSURE INJURY / ULCERS OCCUR IN THE TRUNK AREA AND HEELS

Body Area

Rate of Occurrence \*

Trunk Area ~60%

- ❁ Sacrum/Coccyx/Hip ~35%
- ❁ Ischials (“Sit Bones”) ~25%

❁ Heels ~30%

❁ All other spots combined\*\* ~10%

\*\* Including those caused by a foreign object (medical device, bed linen wrinkles/lumps, other object pressing against the skin)

\* Rates vary depending on source





# PRESSURE INJURY / ULCER OCCURANCE RATES BY FACILITY

## Where do Pressure Injuries / Ulcers start?

Home / Community Care 0 to 30%

(Reporting / counting is difficult in this sector)

Long Term Care (Skilled Nursing, Rehab) 2 to 28%

Acute Care (Hospitals): 0.4 to 38%

Rates vary greatly depending on facility

ICU has the highest rate of all acute care settings because of immobility





IN THE UNITED STATES EACH YEAR  
AN AVERAGE OF 2.5 MILLION PEOPLE WILL GET A  
PRESSURE INJURY / ULCER

NUMBERS ARE RISING DUE TO OUR AGING POPULATION  
AND BETTER SURVIVABILITY OF PEOPLE CHRONIC  
DISEASES AND INJURIES

THE US HEALTHCARE SYSTEM SPENDS ABOUT 7 BILLION  
THAT'S BILLION WITH A "B"

ON TREATING PRESSURE INJURIES

BUT APPROXIMATELY 60 THOUSAND PEOPLE WILL DIE  
EACH YEAR AS A CONSEQUENCE OF COMPLICATIONS  
ASSOCIATED WITH PRESSURE INJURIES  
(ESPECIALLY INFECTION)





# WHAT CAN YOU DO TO PREVENT AND OR TREAT PRESSURE INJURY?

## #1 Get the pressure off

Reposition off sensitive areas, “float” the heels

## #2 Protect the skin as much as possible

Use specialized soaps, barrier creams & lotions designed for incontinence care

## #3 Move As Much As Possible

Alternate frequently between laying and sitting positions.  
Walk as much as possible and reasonable

## #4 Manage Health Conditions

Best possible hydration and nutrition, blood sugar levels, blood pressure etc.



# HOW NURSES PREVENT AND TREAT PRESSURE INJURIES



More information available at  
[JewellNursingSolutions.com](http://JewellNursingSolutions.com)

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## How to Get The Pressure Off.

Techniques and product suggestions for reposition and supporting a

## Skin and Wound Care For Pressure Injury

Skin Care Techniques and Products for Pressure Injury Prevention and wound care.

## Pressure Injury Prevention and Woundcare Program Design and Implementation for Small Facilities

Coming soon. Applied nursing processes and procedures for small care homes and nursing facilities. Based on NPUAP best practices and AHRQ program recommendations. Contact us for more information