

# Skin Tears and PI Staging

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Otago

With thanks to

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Southland

# Agenda

- Skin Tear Prevention
- Skin Tear Classification, Management and Documentation
- Pressure Injury Definition
- Pressure Injury Staging
- Incontinence Associated Dermatitis vs Pressure Injury

# Skin Tear Prevention

- **MOISTURISE:** Apply prescribed Sorbolene cream (soap substitute) for showering / bathing. Use soft cloths & towels, pat skin dry, do not rub. Moisture arms and legs (Sorbolene: thin application).
- **MINIMISE:** manual handling. Use slide sheets to reposition. Falls prevention.
- **STAFF:** **Short nails & minimise jewellery (per Policy)**
- **PROTECT:** Non-restrictive clothing over arms and legs. Utilise limb protectors.
- **SAFETY:** Exercise caution when using equipment such as hoists, commodes, wheelchairs, side rails etc.
- **NUTRITION + HYDRATION:** dietary consult if deficits are identified.



**Twice-daily skin moisturising has been proven to reduce the incidence of skin tears by 50%**

# What is a skin tear?

The International Skin Tear Advisory Panel (ISTAP) defines a skin tear as “a traumatic wound caused by mechanical forces, including removal of adhesives. Severity may vary by depth (not extending through the subcutaneous layer)”<sup>1</sup>.

Skin tears have been reported to occur in the extremes of age (newborn and the elderly), and among the critically and chronically ill. They can be found on all areas of the body, but are particularly common on the extremities.

**A skin tear can be classified as either partial-thickness or full-thickness.**



## Partial-thickness

Means that a separation of the epidermis from the dermis has occurred.

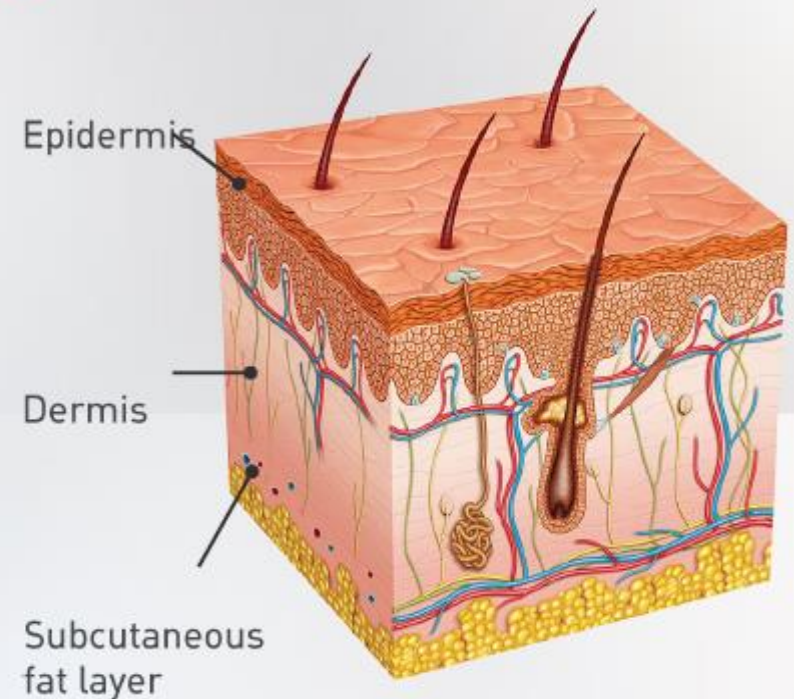


## Full-thickness

Means a separation of both the epidermis and dermis from underlying structures.



## The layers of the skin



# ISTAP Skin Tear Classification System

The ISTAP Skin Tear Classification System was developed to standardise terms used in identifying and documenting skin tears.

According to the system, skin tears are classified as Type 1 (no tissue loss), Type 2 (partial tissue loss), and Type 3 (total tissue loss).

## Type 1: No tissue loss



Linear or flap tear which **can be repositioned** to cover the wound bed<sup>1</sup>.

## Type 2: Partial tissue loss



Partial flap loss which **cannot be repositioned** to cover the wound bed<sup>1</sup>.

## Type 3: Total tissue loss



**Total flap loss** exposing entire wound bed<sup>1</sup>.

# Initial treatment of skin tears

## Reapproximate wound edges

### How to reapproximate wound edges

If the skin flap is viable, gently ease the flap back into place as a "dressing". You can use a gloved finger, a dampened cotton tip or a silicone strip to align the flap.

If it is difficult to align the skin edges, consider using a moistened non-woven swab for 5-10 minutes to re-hydrate the flap.

These are the recommended steps:

A



This shows a skin flap which is intact but needs to be rehydrated before being repositioned.

B



Flap is now clean, moistened, and ready to be realigned.

C



Carefully ease the flap back into place like a "dressing".

D



Return flap back to its original position, fully covering the wound bed.

# Steri Strips

- **Expert opinion advise adhesive strips (i.e. steri-strips) are no longer a preferred treatment for skin tears**
- Steri-strips: If using less is best, apply on intact skin, gently pull wound edges together avoid skin pinching or traction and allow gaps for exudate to drain
- **DO NOT USE COMFEEL OR FILM DRESSINGS**

Steri-strips are too close -  
not allowing wound drainage

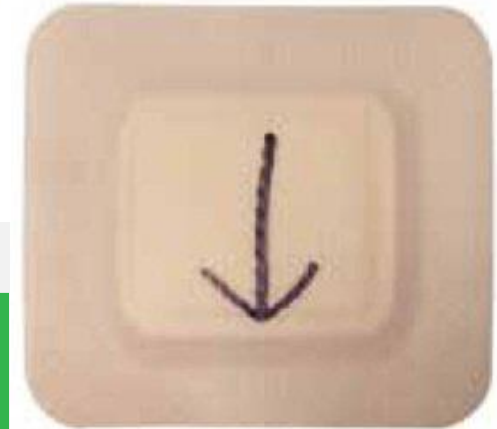


# Dressing Tips

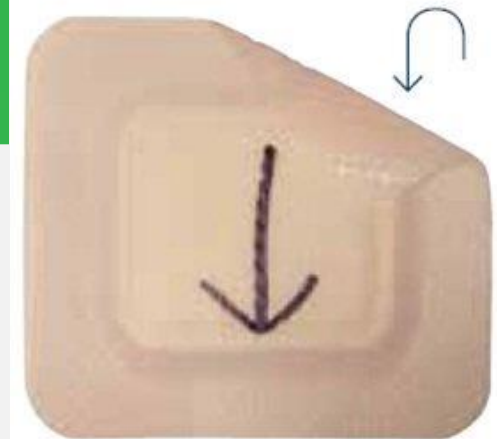
- The absorbent pads on dressings must be larger than the wound to absorb exudate
- Draw arrow on the dressing to indicate direction of removal so the skin flap will not be lifted
- \*Use skin barrier to protect intact skin from adhesives
- \*Remove dressings low and slow using 'remove wipes'
- \**Not required when silicone foam dressings are used*
- To reduce skin swelling a glove of tubigrip over forearm and hand can be used
- Nurses must assess circulation first before applying tubigrip to the lower leg (use toe to knee softban, firm crepe then apply tubigrip)



Skin tear



Arrow to indicate direction of dressing removal



Remove in the direction of the arrow



# Light Compression

- To reduce skin swelling a glove of tubigrip over forearm and hand can be used
- Nurses must assess circulation first before applying tubigrip to the lower leg (use toe to knee softban, firm crepe then apply tubigrip)



## Skin Tear Management (District)

Sutures & staples are not recommended in older persons or persons with fragile skin.

- ✓ **Control bleeding.**
- ✓ **Cleanse & irrigate** remove residual clot & debris.
- ✓ **Assess tetanus risk** & vaccination status.
- ✓ **Preserve skin flap** & gently realign.
- ✓ **If skin flap is dry:** re-hydrate with saline gauze soak.
- ✓ **Classify skin tear** & document (e.g. residual clot, flap is pale or dusky).
- ✓ **Reassess** in 24 - 48 hrs if flap is pale or dusky. Non-viable flaps will need debridement.



Type 1: No skin loss



Type 2: Partial flap loss



Type 3: Total flap loss

### Select Dressing:

- Avoid Film or Comfeel dressings. If required secure flap with Mepitel (do not overlap).
- **Steri-strips: none, or less is best, apply skin to skin (not on wound), gently pull wound edges together avoid pinching & allow gaps for exudate to drain.**
- If bleeding: Alginate (Kaltostat) & dry dressing (e.g. combine or mesorb);  
or Cuticerin or Mepitel & dry dressing;  
or Mepilex Border or Mepilex dressing. Mark an arrow on dressing to show direction of removal.
- Opsite Post-Op has low absorbency use only on <2cm Type 1 or 2 skin tears.
- Avoid adhesives on fragile skin. To secure dressings & reduce swelling on lower leg or arm apply soffban and firm crepe. Add tubigrip (toe to knee or hand to elbow) if arterial circulation is not compromised.



Hospital acquired skin tears must be reported on Safety1<sup>®</sup> and ACC forms completed

# Stick to your Wound Product Guide



## Wound Product Practice Guideline (District)

**Cost Guide: GREEN:** Go! Continually monitor wound progress.

**Cost Guide: ORANGE:** Consider! Dressing must stay in situ 3 to 7 days (unless otherwise indicated); if not choose a more cost-effective option.

**Cost Guide: RED:** Stop! Dressing must stay in situ 5 to 7 days (unless otherwise indicated); if not choose a more cost-effective option.

Depending on exudate levels most products can be left up to 7 days unless stated otherwise.

Primary Product	Function	Secondary Dressing e.g.	Wound Indication	Practice Tips
<b>Low Adherent Mesh (no absorbency)</b>				
Cuticrin	Low-adherent	gauze, combine or mesorb	Flat wound, finger/hand wounds	Cut slits in dressing to allow passage of viscous exudate; do not overlap or use under foam or hydrocolloid dressings. For finger injuries cut slits down the side to allow finger to bend.
<b>Open Pore- Silicone (no absorbency)</b>				
Mepitel	Non-adherent; anchors onto skin, secure skin tears	gauze, combine or mesorb	Painful and/or flat wounds e.g. skin tears and finger-injuries.	Moisten gloves with sterile water or saline to avoid sticking to gloves; do not overlap. Can be left up to 14 days (but change secondary dressing) in non-infected wound or if dressing pores are not clogged with exudate.
<b>Gel (donates moisture)</b>				
Solosite & Intrasite conformable	De-slough & re-hydrate	opsite, comfeel or mepilex border	Dry necrosis & dry slough	Not for wet wounds. Apply gel at 5mm thickness. Left up to 3 days. Recommend intrasite conformable dressing over exposed tendon / bone to keep moist and viable.
<b>Film (donates moisture) - use remove wipes to remove</b>				
Opsite or Tegaderm	Waterproof, fixative	not required	As a secondary dressing to retain moisture	Not advised as a primary dressing as not absorbent. Avoid over dressings such as mesorb or foams as reduces dressing breathability and increase microbial growth.
Opsite post-op (island film)	Waterproof with low adherent pad	not required	Surgical post-op wounds, small cuts/grazes	Low absorbency. Do not use on infected or highly exuding wounds.
<b>Hydrocolloid (minimal to moderate absorbency) - use remove wipes to remove</b>				
e.g. Comfeel/Duoderm transparent & ulcer plus	Waterproof, re-hydrate & debride	not required	Transparent: low exudate & Ulcer: moderate exudate	Cover 1-2cm larger than wound. Not for infected/highly exuding wounds. AVOID USE ON SACRUM OR BUTTOCK as wrinkles increase risk of pressure injury.
<b>Calcium-Alginate (moderate absorbency)</b>				
Kaltostat – flat dressing or rope	Absorb, debride & haemostatic	combine, mesorb, or foam	Moderate to high exuding wounds.	Pack lightly into cavities. Can break hence do not use if dressing cannot be fully reached or removed safely.
<b>Hydrofibre (high absorbency)</b>				
Aquacel Extra - flat dressing or rope	Absorbent, debride	combine, mesorb, or foam	Moderate to high exuding wounds.	Pack lightly into cavities. Dressing is stitched to ensure residual dressing is not left behind; leave 2cm end out of wound cavities to allow easy removal.
<b>Absorbent Pad (high absorbency)</b>				
Mesorb	Absorbent with low adherent	secure with hypafix or bandage	High exuding wounds	Mesorb is more absorbent than gauze/combine and these products should not be used under Mesorb. If adheres to wound use cuticrin under mesorb.
<b>Self-Adherent Soft Silicone Foam (moderate to high absorbency)</b>				
Mepilex & Mepilex Border (shower-proof)	Absorbent (border dressing is more absorbent), non-adherent	not required	Moderate to high exuding wounds. Recommended for skin tears, sacral/buttock pressure injuries	Change: exudate reaches outer dressing edge. Dressing 1-2cm larger than wound. May be lifted/adjusted without losing adherence. Do not use skin-prep/moisturisers under dressing. Cavity wounds: kaltostat or aquacel under mepilex. Mepilex lite: for low exudate. Dressings use to prevent identification of pressure ulcers.

# Company Guidelines

## Mölnlycke® dressing selection guide for skin tears

Before applying dressings, control bleeding, cleanse or debride the wound, and reapproximate the skin flap.

Wound type	Skin at risk Mature skin is more vulnerable and prone to skin tears.	Type 1: No skin loss Linear or flap tear that can be repositioned to cover wound bed.	Type 2: Partial flap loss Partial flap loss that cannot be repositioned to cover the wound bed.	Type 3: Total flap loss Total flap loss exposing the entire wound bed.
Suggested product	Epaderm® Cream or Epaderm® Ointment	Mepitel® One + Mesot® or Mesorb®	Mepitel® One or Mepilex® Border Flex	Mepilex® Border Flex
Bacterial imbalance /infected			OR Mepilex® Border Ag	OR Mepilex® Border Ag
Fixation /protection		Tubifast® or Mepitel® Film	Tubifast® or Mepitel® Film	
Management tips	Avoid soaps that dry the skin. Moisturise skin with emollients twice a day. Use products that are fragrance-free and hypoallergenic.	Approximate the wound edges. Mepitel One should remain in place for over a minimum of five days to allow the flap to heal to underlying tissue. The absorbent dressing over Mepitel One is changed as required, leaving Mepitel One in place. Change Mepitel One when complete re-epithelialisation is confirmed.	After dressing application: mark it with an arrow indicating direction in which to remove the dressing. If the skin is very fragile: peel the bordered dressing off from the corner.	

### Would you like to learn more?

To really understand what the right management routines and the right selection of products can do for you and your patients, you may wish to visit [www.molnlycke.com](http://www.molnlycke.com) where you can find a skin tear training module with a detailed description on how to predict, prevent, assess and manage skin tears. This module is endorsed by ISTAP, the International Skin Tear Advisory Panel.

## Treatment of superficial skin tears of any size that can be managed within the care home

Smith+Nephew

S<sup>1,2</sup>

Control bleeding and clean

- Select appropriate cleanser
- Assist in bleeding control
- Clean wound if needed



T<sup>1,2</sup>

Tissue alignment

- Align skin flap (where possible) over wound
- Use moistened glove to roll skin flap if able



A<sup>1,2</sup>

Assess and dress

- Consider factors affecting wound healing (holistic health assessment)
- Assess surrounding skin
- Categorise using STAR<sup>1,2</sup> classification
- Select appropriate dressing
- In the direction of the skin flap, draw an arrow on top of the dressing



Product solution  
ALLEVYN® GENTLE BORDER Foam Dressing

Category 1a and 1b - Skin flap can be realigned

Category 2a and 2b - Skin flap cannot be realigned

Category 3 - No skin flap

For full STAR classification system for reassessment refer overleaf

R<sup>1,2</sup>

Review and re-assess

- Reassess within 5 days unless signs and symptoms of infection, if concerned, or if dressing needs changing (see ALLEVYN When to Change Poster)
- Determine date of wound review and dressing change, document
- Remove the dressing in the direction of the arrow
- Monitor for changes in the wound and exudate
- Assess surrounding skin integrity



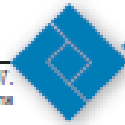
# Documentation

- Wound:
  - Cause and location of skin tear
  - Length, width and depth of injury
  - Skin Tear Classification 1-2-3
  - Presence of unmovable clot
  - Level of pain
  - Dressing/s applied
- Preventative actions taken
- Notify nurse & family informed
- Incident reported via facility protocol
- ACC notification

# Pressure Injury Staging (PI)

## Wound Care

J Wound Ostomy Continence Nurs. 2016;49(5):565-567.  
Published by Lippincott Williams & Wilkins



OPEN

## Revised National Pressure Ulcer Advisory Panel Pressure Injury Staging System

### *Revised Pressure Injury Staging System*

Laura E. Edsberg ♦ Joyce M. Black ♦ Margaret Goldberg ♦ Laurie McNichol ♦ Lynn Moore ♦ Mary Sieggreen

## Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline



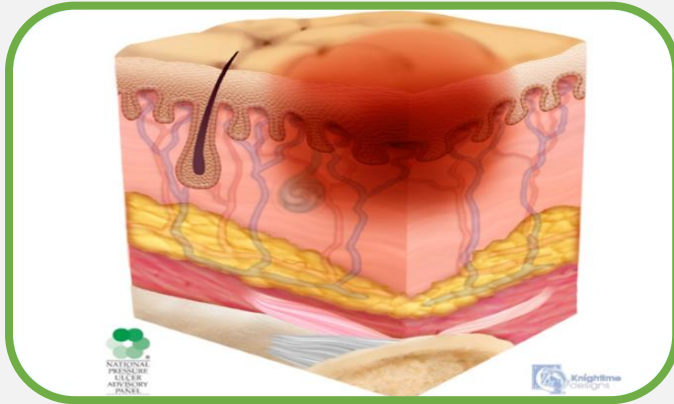
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PRESSURE  
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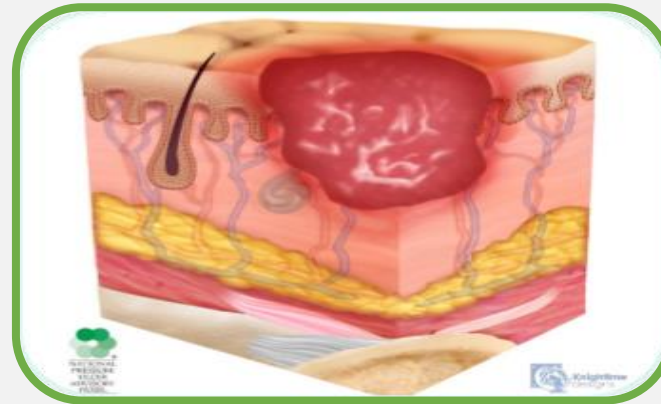
# Definition of Pressure Injury (PI)

- ✓ Localized damage to the skin and underlying soft tissue usually over a bony prominence
- ✓ The injury can present as intact skin or an open ulcer and may be painful
- ✓ The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear
- ✓ The tolerance of soft tissue for pressure and shear may also be affected

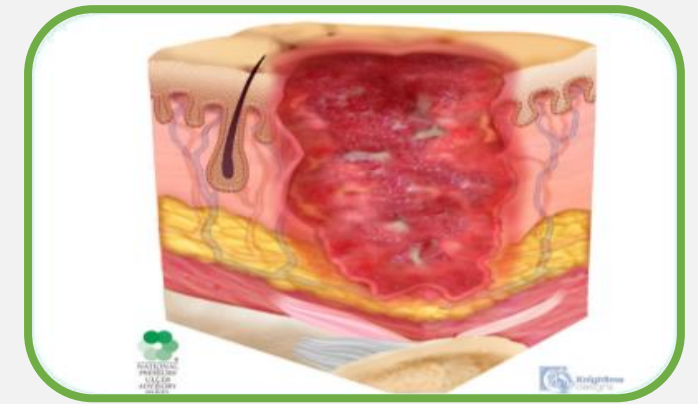
# PI Staging



Stage 1



Stage 2



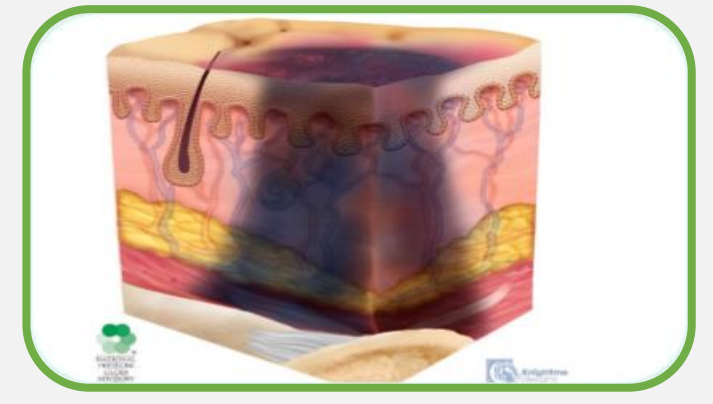
Stage 3



Stage 4



Unstageable



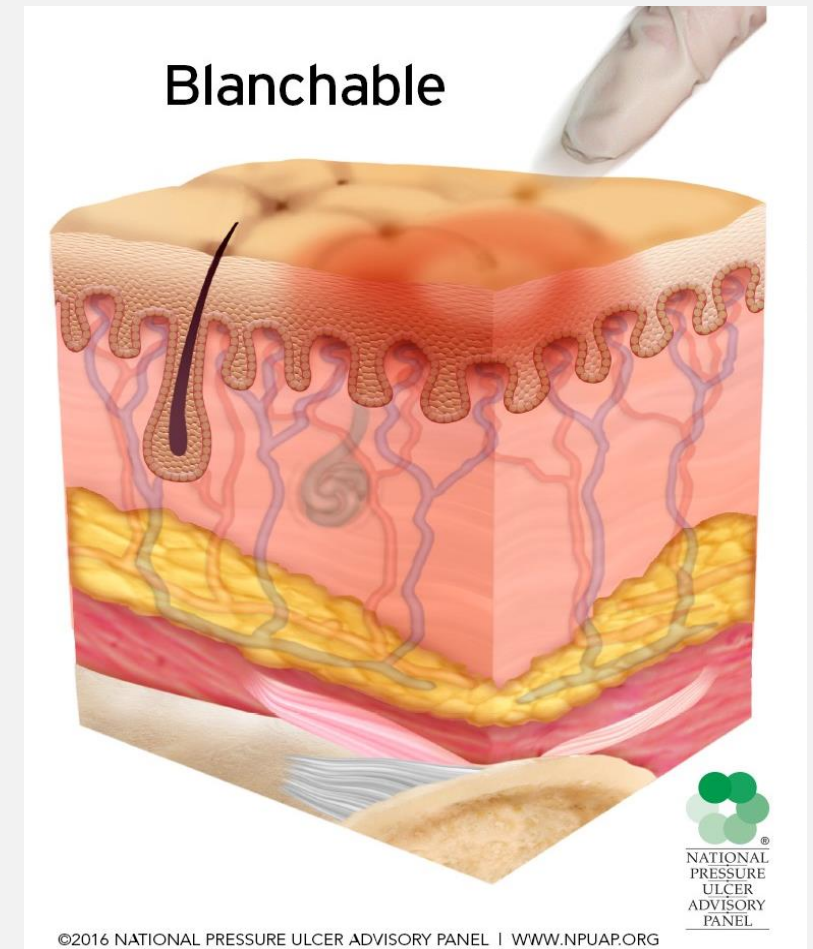
Deep Tissue Injury



# Blanching Redness – not a PI

✓ When lightly pressed the redness will turn white indicating the blood supply is intact

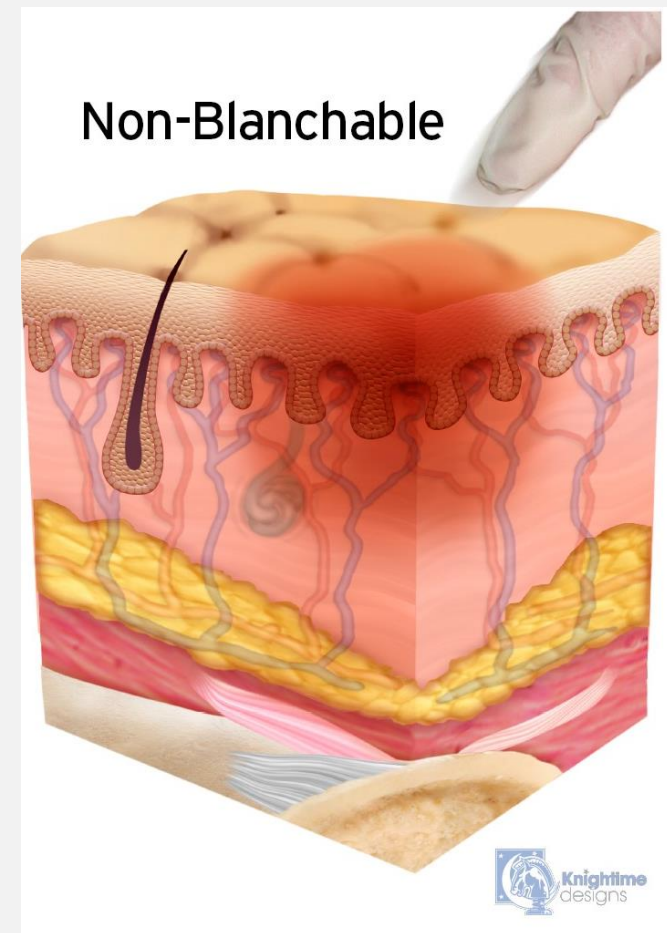
Reddened area that turns pale under applied light pressure.  
This is NOT a Stage 1 pressure injury



# Non Blanching Redness – Stage 1

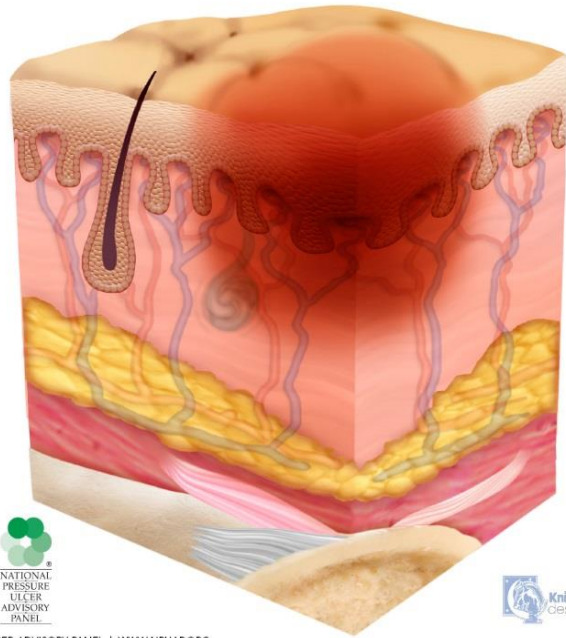
- ✓ There is **NO** change in the redness when lightly pressed
- ✓ An area of persistent redness in lightly pigmented skin with intact skin

The PI appears as a defined area of redness that does not blanch (become pale) under applied pressure

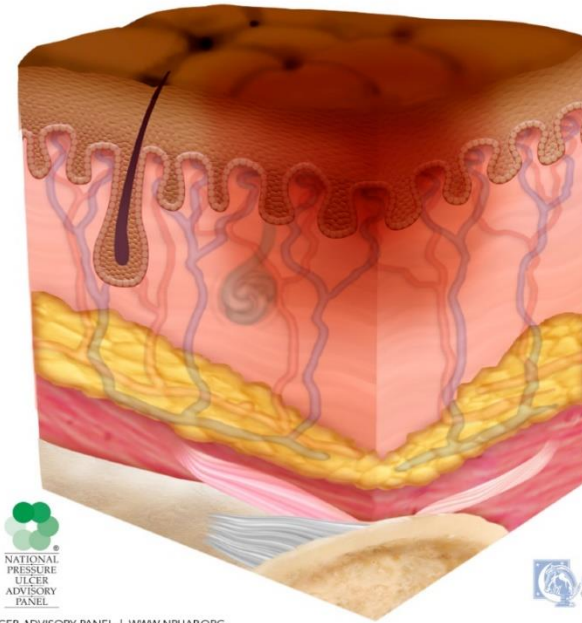


# Stage 1 PI

Stage 1 Pressure Injury - Lightly Pigmented



Stage 1 Pressure Injury – Darkly Pigmented



- ✓ Intact skin with non-blanchable persistent redness
- ✓ Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area
- ✓ Stage 1 are often the first visible change in the skin
- ✓ Important that scar tissue and Deep Tissue PI (DTI) are not classified as Stage 1

# Stage 1 PI



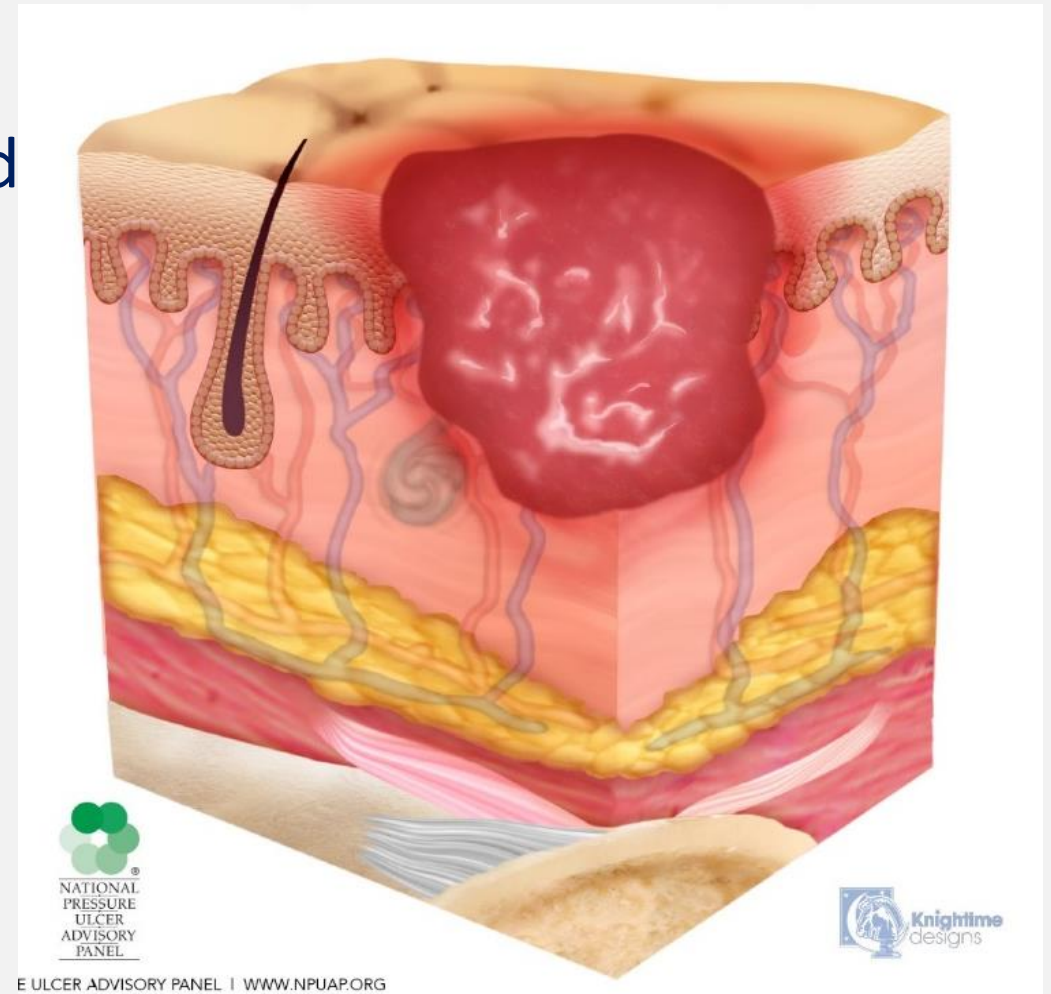
# Stage 2 PU

Partial-thickness loss of skin with exposed dermis

Wound bed viable, pink or red, moist and may present as blister

Fat tissue not visible

This stage should not be used to describe moisture-associated skin damage, mucosal ulcers or skin tears



# Stage 2 PI



# Incontinence-Associated Dermatitis (IAD)

- ✓ IAD is a reactive response of the skin to chronic exposure to urine and faecal material which may be observed as an inflammation and erythema with or without erosion
- ✓ It is not a pressure injury
- ✓ In infants and young children it is referred to as nappy rash or contact diaper dermatitis



Slide Courtesy of S+N



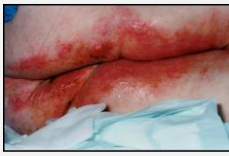
# Differentiating between IAD and PI

	<b>IAD</b>	<b>Pressure injury</b>
<b>Cause</b>	Moisture	Pressure/ischaemia
<b>Location</b>	Perineal	Over bone
<b>Shape</b>	Irregular	Well defined
<b>Depth</b>	Superficial	Superficial to deep
<b>Tissue colour</b>	Pink/red	Pink/red, black, yellow
<b>Edges</b>	Diffuse/wandering	Well defined
<b>Associated factors</b>	Urinary and/or faecal incontinence	Reduced mobility Sensory impairment

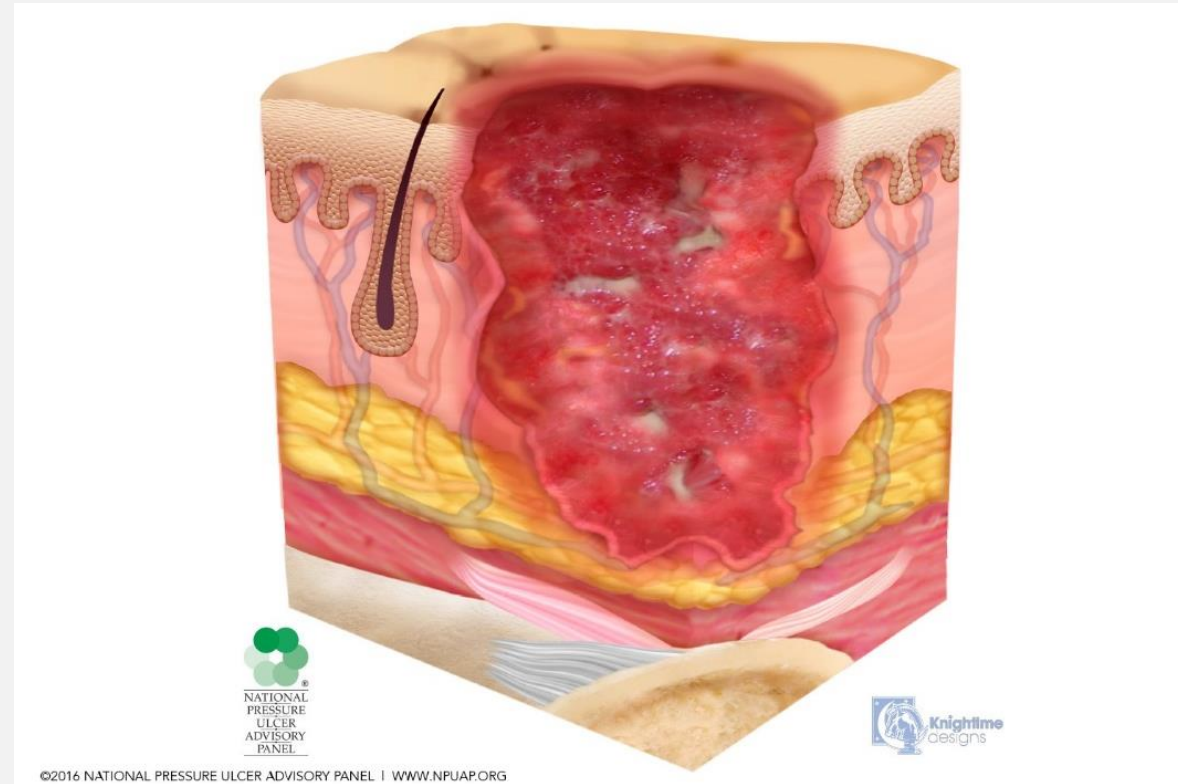
Slide Courtesy of S+N



# Treatment: Refer To Your Local IAD Guidelines

 <b>Adult Skin Care Formulary &amp; Prevention and Treatment of Incontinence Associated Dermatitis (IAD) (District)</b>	
Skin Issue	Products & Practice Tips
<b>Normal skin moisturiser</b> <b>Dry &amp; sensitive skin care</b> Please refer to pharmacist for advice if lip/skin lesions or weeping eczema are present.	Non-ionic cream 100g tubes \$1+. Fatty cream (100g tube \$1.60) <b>OR</b> non-ionic cream (100g tube \$1+). Patients requiring larger volumes of fatty or non-ionic cream can order 500g tubs for single-patient use only.
<b>Massage</b> <b>Dry heels</b>	Fatty cream is greasy and suitable for massage. White soft paraffin or fatty cream can be used for cracked dry heels.
<b>Lip care</b>	White soft paraffin (10g tube <\$1)
<p><b>Cleansing:</b> Continue with soap for normal skin. <b>Clinical note:</b> Soap can raise skin pH and damage the acid mantle causing skin dryness. Microshield handwash solution found at each sink pH 5.5 and pH 7 should be used for washing instead of soap for older patients and where patients have dry or sensitive skin. Alternatively, fatty and non-ionic cream can be added to water and used as a soap substitute for patients with sensitive skin (note these will not foam).</p> <p><b>Urine and stool incontinence - skin irritation and inflammation and risk of IAD:</b> The use of oil, silicone-based creams or talcum powder on the skin may affect the permeability and function of incontinence products.  <b>Note:</b> For incontinence-associated dermatitis (IAD) <b>avoid all soaps and use 'Secura' cleanser.</b></p>	
<p><b>Intact mild inflammation but no broken areas</b>  <b>Aim:</b> to prevent skin breakdown.  <b>Step 1:</b> Smith &amp; Nephew Secura Moisturising Cleanser (236mL \$10+). No-rinse product that aids removal of urine, faeces and exudates, and moisturises the skin. Spray directly onto skin, especially after an incontinence episode, wait few seconds to loosen debris then blot or carefully wipe with a damp wash cloth. Do not use water to cleanse.  <b>Step 2: First choice</b> - 10% dimethicone barrier cream (100g tube \$3+) for use on intact skin or as a <b>second choice</b> - zinc cream (20g \$2+) can be used on dry and mildly abraded skin.  <b>NB: Zinc contains traces of peanut oil.</b></p>	
<p><b>Broken skin with large amounts of exudate</b>  <b>Aim:</b> to heal skin lesions and restore healthy skin integrity.  <b>Step 1:</b> Smith &amp; Nephew Secura Moisturising Cleanser (236mL \$10+) No rinse product that aids removal of urine, faeces and exudates and moisturises the skin. Spray directly onto skin, especially after an incontinence episode, wait few seconds to loosen debris then blot or carefully wipe with a damp wash cloth. Do not use water to cleanse.  <b>Step 2:</b> Smith &amp; Nephew Secura Extra Protective Cream 30% (92g tube \$9+). Warm cream in gloved hands, dab or pat on to build a thick protective layer over affected area. Apply after every incontinent episode to seal out wetness and prevent further skin breakdown. Remove cream with the moisturising cleanser; unsoiled cream can be left in place. Avoid on deep or puncture wounds, infections or lacerations.</p>	
<p><b>&gt; Safe Application of Creams, Lotions, Ointments + Topical Solution Products (Southland) (65737)</b>                      Perform hand hygiene before and after wearing protective gloves. Multi-use creams, lotions and ointment <b>must be dated when first opened</b> and discarded after one month in acute patient areas. Keep product in a central area for dispensing, dispense cream from tubes by allowing it to flow from the tube and drop onto a clean gauze, pot or gloved hand and use immediately. Do not allow the product container to come into contact with your unclean hands/gloves or patient's skin, blood or body fluids. Any product missing lids/caps or with visual evidence of blood or body fluid should be discarded.</p>	

# Stage 3 PI



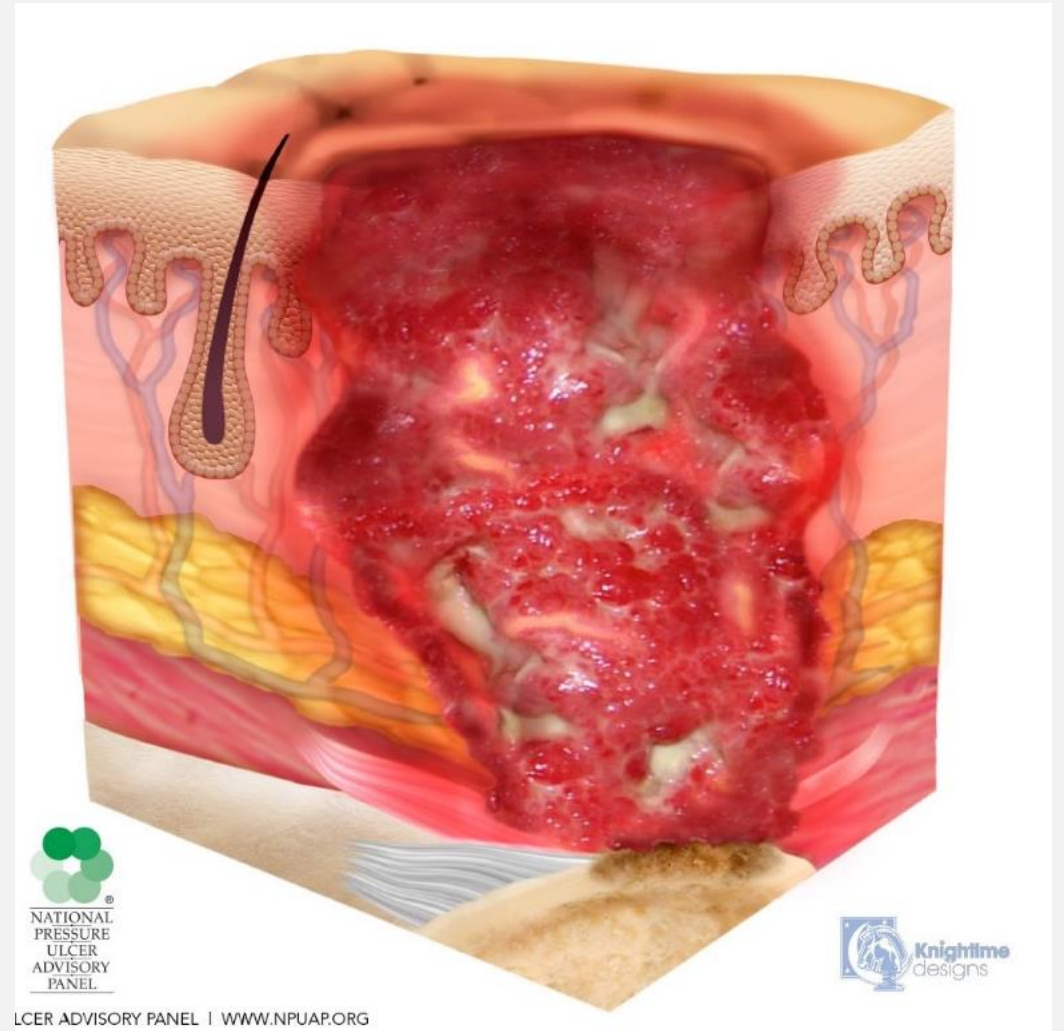
- ✓ Full-thickness loss of skin
- ✓ Adipose (fat) is visible, granulation tissue
- ✓ Undermining and tunnelling may occur
- ✓ Fascia, muscle, tendon, ligament, cartilage and/or bone are **not** exposed
- ✓ If slough or eschar obscures the extent of tissue loss this is an Unstageable PI

# Stage 3 PI



# Stage 4 PI

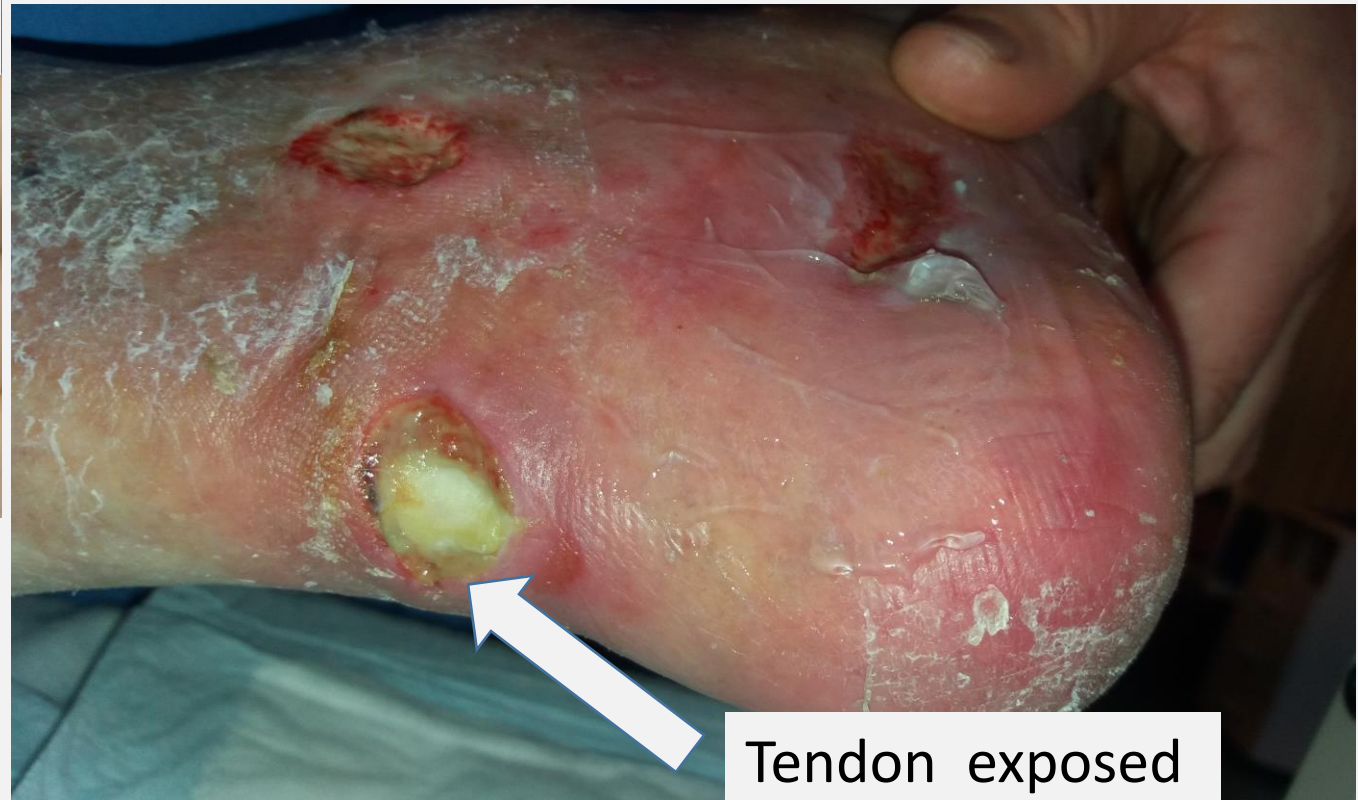
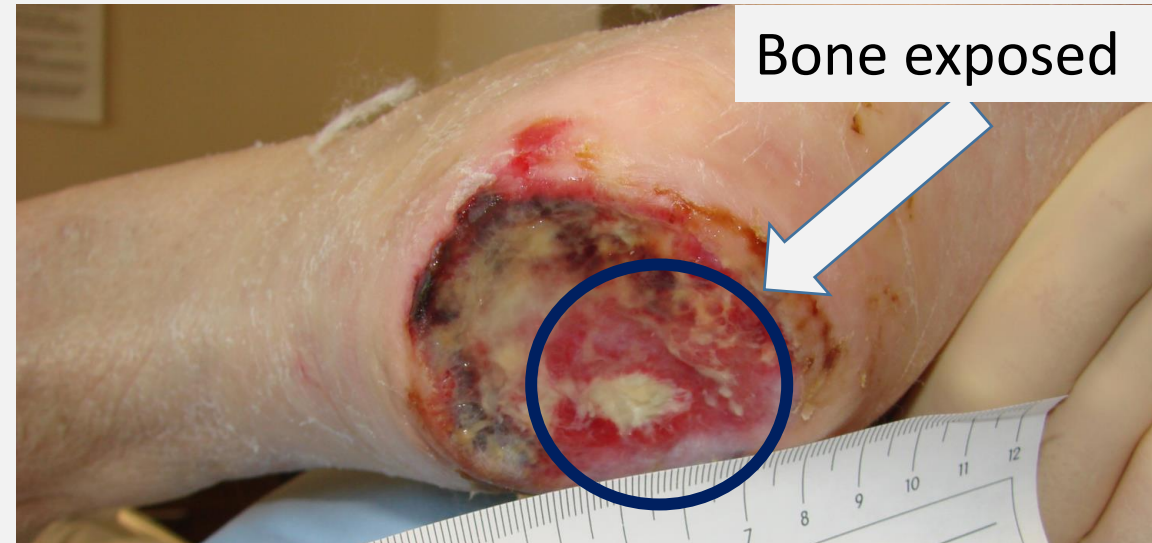
- ✓ Full-thickness skin and tissue loss with **exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone**
- ✓ Slough and/or eschar may be visible
- ✓ Depth varies by anatomical location



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# Pictures of Stage 4 PI

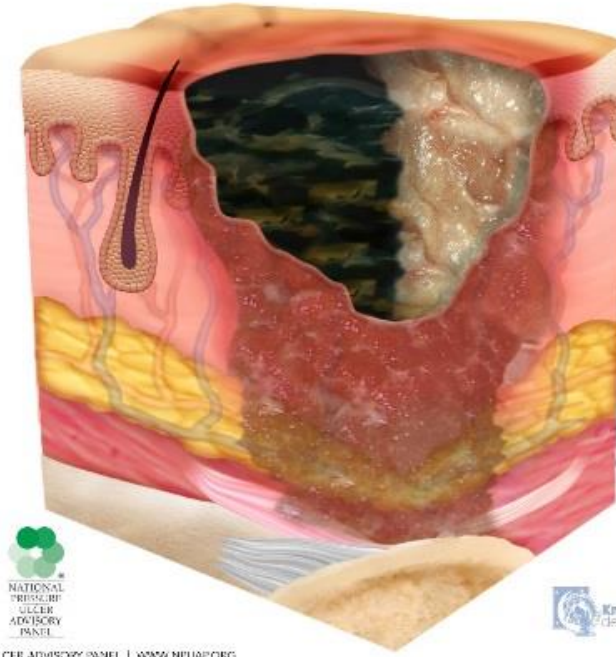


# Unstageable PI

Unstageable Pressure Injury - Dark Eschar



Unstageable Pressure Injury - Slough and Eschar

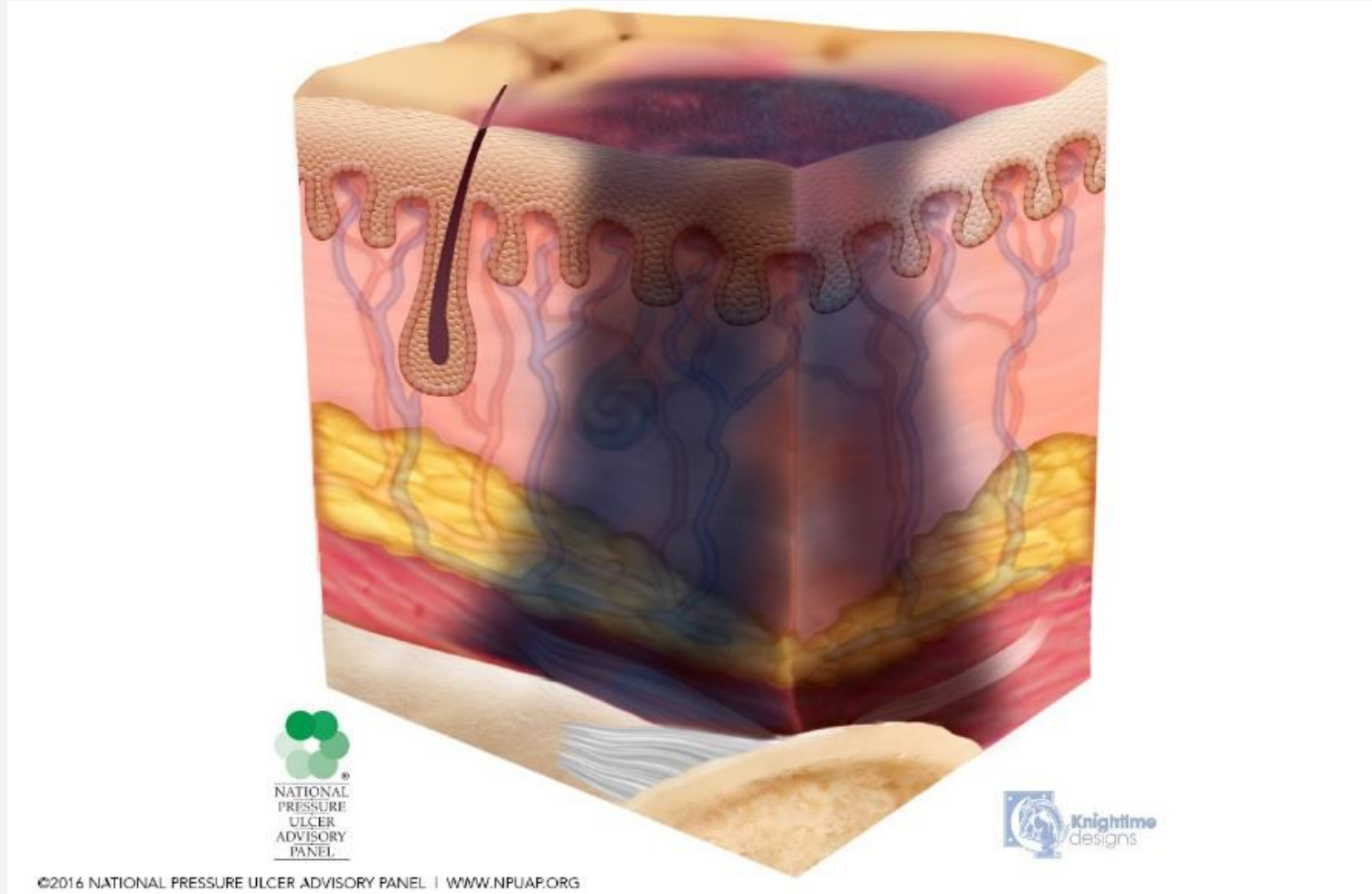


- ✓ Extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar
- ✓ Stable eschar (i.e. dry, adherent) on the heel or ischemic limb should not be softened or removed

# Unstageable PI



# Suspected Deep Tissue Injury (SDTI)



- ✓ Persistent non-blanchable deep red, maroon or purple discoloration
- Epidermal separation revealing a dark wound bed or blood-filled blister



# Pictures of SDTI



# Medical Device Related Pressure Injury



- ✓ Medical device related pressure injuries result from the use of devices designed and applied for diagnostic or therapeutic purposes
- ✓ The pressure injury generally conforms to the pattern or shape of the device