

Pressure Ulcer Prevention

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Common Causes of Skin Breakdown in the Health Care Setting

- **Skin tears** due to thin skin that has lost its elasticity
- **Maceration** (irritation of the skin with superficial open areas) secondary to urine and/or fecal contamination
- **Lower leg ulcers** secondary to circulation concerns (arterial and/or venous insufficiency), loss of protective sensation (neuropathy) and complications of diabetes which leads to circulatory and loss of sensation issues.
- **Pressure Ulcers**

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Pressure Ulcers

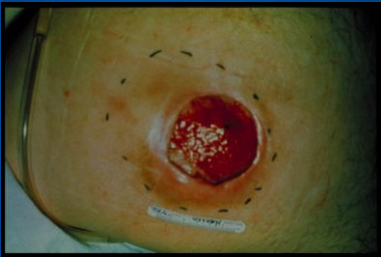
A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction.

NPUAP 2007

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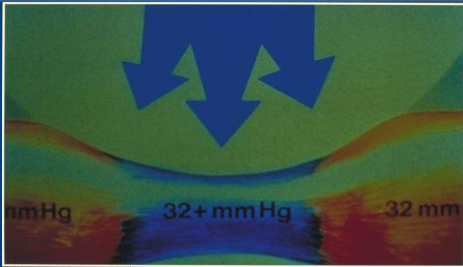
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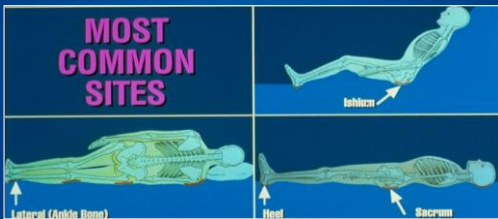
The Effects of Pressure



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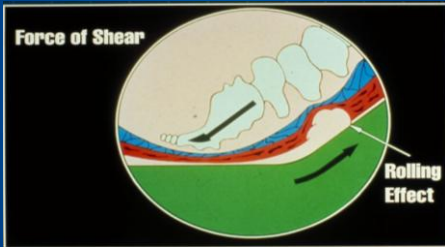
Contributing Factors



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Contributing Factors: Shear



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Contributing Factors: Shear

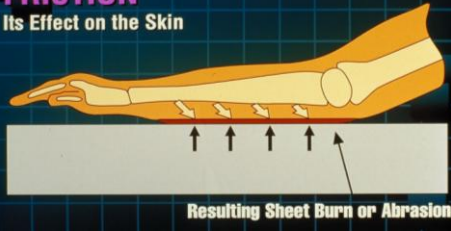


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Contributing Factors: Friction

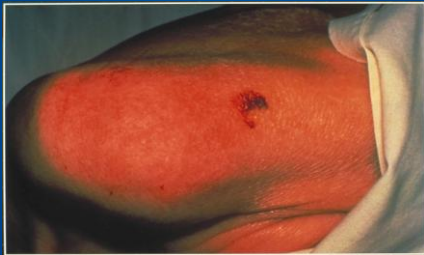
FRICTION Its Effect on the Skin



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Contributing Factors: Friction



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Risk Factors

- Unavoidable:
 - Means you identified all risk factors,
 - Put interventions in place & implemented them,
 - Up-dated the care plan as appropriate, and
 - The individual still developed a pressure ulcer despite this
- Formulating your plan of care by assessing the person's INDIVIDUAL risk factors for skin breakdown

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Risk Assessment Tools

A COMPREHENSIVE RISK assessment in **Long Term Care** should be completed:

- Upon admission
- **Weekly for the first four weeks after admission**
- With a change of condition (including pressure ulcer formation, change in mobility and/or continence status, decrease in weight, etc.)
- Quarterly/annually with MDS

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Risk Assessment Tools

A COMPREHENSIVE RISK assessment in **Acute Care** should be completed:

- Upon Admission
- Daily

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Risk Assessment Tools

A COMPREHENSIVE RISK assessment in **Home Care** has no clear guidance, however WOCN recommends:

- Upon admission
- With every visit

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Risk Assessment Tools

- Use a recognized risk assessment tool such as the Braden Scale or Norton
- Use the tool consistently
- Regardless of the overall score of the risk assessment, assess each individual risk factor

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Risk Assessment Tools

- No risk assessment tool is a comprehensive risk assessment
- Incorporate the risk assessment into the plan of care

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Risk Assessment Tools

BRADEN SCALE

- Mobility
- Activity
- Sensory Perception
- Moisture
- Friction & Shear
- Nutrition

*Please note: Using the Braden scale requires obtaining permission at www.bradenscale.com or (402) 551-8636

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Breaking Down the Braden

Risk Factor: Immobility

- Anything that contributes to limiting mobility should also be listed as a risk factor:
 - ✓ Diagnosis: CVA, MS, Paraplegia, Quadriplegia, end stage Alzheimer's/Dementia, etc.
 - ✓ Fractures and/or casts
 - ✓ Cognitive impairment
 - ✓ Pain
 - ✓ Restraints or medical equipment

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Breaking Down the Braden

Activity:

- List on the care plan if they are:
 - ✓ Chairfast
 - ✓ Bedbound

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Breaking Down the Braden

Impaired Sensory Perception

- Also list those factors leading to the sensory impairment:
 - ✓ CVA, paraplegia, quadriplegia, etc.
 - ✓ Cognitive impairment
 - ✓ Neuropathy

Note how many of these are the same risk factors for immobility

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Breaking Down the Braden

- The interventions are basically the same for:
 - immobility,
 - impaired sensory perception, and
 - decreased activity (chairfast or bedbound)
- Goal is to promote circulation & decrease the pressure

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Immobility, decreased activity and/or impaired sensory perception interventions

- Pressure Redistribution: The ability of a support surface to distribute load over the contact area of the human body.
 - This term replaces prior terminology of pressure reduction and pressure relief support surfaces
- Overall goal of any support surface is to evenly distribute pressure over a large area

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Immobility, decreased activity and/or impaired sensory perception interventions

Support surfaces for the bed:

- Foam
- Low Air-loss
- Air fluidized
- Document on care plan type and date implemented

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Immobility, decreased activity and/or impaired sensory perception interventions

Support surfaces for the bed: *continued*

- Not a substitute for turning schedules
- Heels may be especially vulnerable even on low air loss beds

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Immobility, decreased activity and/or impaired sensory perception interventions



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Immobility, decreased activity and/or impaired sensory perception interventions

- All wheelchairs should have a cushion
- Air and gel is more aggressive than foam products
- A sitting position = the head is elevated more than 30 degrees
- All sitting surfaces should be evaluated for pressure redistribution

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Immobility, decreased activity and/or impaired sensory perception interventions

- When positioning in a chair consider:
 - Postural alignment
 - Weight distribution
 - Sitting balance
 - Stability
 - Pressure redistribution
- Recommend an OT/PT screen

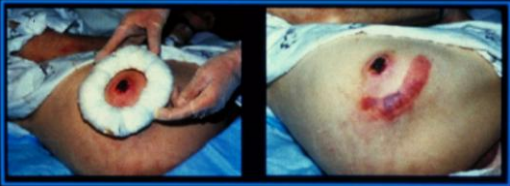
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Immobility, decreased activity and/or impaired sensory perception interventions

DONUT


- Do **NOT** use DONUTS for pressure relief



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Immobility Interventions



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Immobility, decreased activity and/or impaired sensory perception interventions

- Develop an **INDIVIDUALIZED** turning & repositioning schedule
- Current recommendations are:
 - Turn and reposition at least every 2 hours while lying
 - Reposition at least hourly in a sitting position (if the resident can reposition themselves in wheelchair encourage them to do so every 15 minutes)

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Immobility, decreased activity and/or impaired sensory perception interventions

- Current recommendations are: *continued*
 - When possible avoid positioning on existing pressure ulcer

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Immobility, decreased activity and/or impaired sensory perception interventions

F314 Guidance in LTC:

- **Tissue tolerance** is the ability of the skin and its supporting structures to endure the effects of pressure without adverse effects
- A skin inspection should be done, which should include an evaluation of the skin integrity & tissue tolerance, after pressure to that area has been reduced or redistributed

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Immobility, decreased activity and/or impaired sensory perception interventions

F314 Guidance in LTC: continued

- Therefore the turning and repositioning schedule can be individualized

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Immobility, decreased activity and/or impaired sensory perception interventions

- F314: “Momentary pressure relief followed by a return to the same position is usually NOT beneficial (micro-shifts of 5 to 10 degrees or a 10-15 second lift).”
- “Off-loading” is considered 1 full minute of pressure RELIEF

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Immobility, decreased activity and/or impaired sensory perception interventions

- Pain management
- Release restraints at designated intervals
- Do not place Individuals directly on a wound when ever possible or limit the time on the area

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Immobility, decreased activity and/or impaired sensory perception interventions

- Pad and protect bony prominences (note: sheepskin, heel and elbow protectors provide comfort, and reduce shear & friction, but do NOT provide pressure reduction)
- Do not massage over bony prominences

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Breaking Down the Braden

Moisture

- ✓ Incontinence of bladder
- ✓ Incontinence of bowel
- ✓ Excessive perspiration

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Breaking Down the Braden

Interventions to protect the skin from moisture

- Peri-care after each episode of incontinence
- Apply a protective skin barrier (ensure skin is clean before application)
- Individualized B & B Program
- Foley catheter and/or fecal tubes/pouches as appropriate (in LTC for stage III or IV only)

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Breaking Down the Braden

Interventions to protect the skin from moisture

- 4x4's, pillow cases or dry cloths in between skin folds
- Bathe with MILD soap, rinse and gently dry
- Moisturize dry skin
- Keep linen dry & wrinkle free

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Breaking Down the Braden

- If there is already an elimination problem on the care plan that addresses the interventions:
 - List "incontinence of bowel and/or bladder" as a risk factor under skin integrity, however,
 - State under interventions:
 - See elimination problem

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Breaking Down the Braden

- At risk for friction and shear
 - ✓ Needs assistance with mobility
 - ✓ Tremors or spasticity
 - ✓ Slides down in bed and/or the wheelchair
 - ✓ Agitation

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Breaking Down the Braden

- Interventions for Friction and Shear
 - Lift -- do not drag -- individuals
 - Utilize lifting devices
 - Elbow or heel pads
 - Protective clothing
 - Protective dressings or skin sealants
 - Raise the foot of the bed before elevating

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Breaking Down the Braden

- Interventions for Friction and Shear *continued*
 - Wedge wheelchair cushions (therapy referral)
 - Pillows

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Breaking Down the Braden

- Nutritionally at Risk
 - ✓ Serum Albumin below 3.5g/dl
 - ✓ Pre-Albumin 17 or below (more definitive than an albumin level)
 - ✓ Significant unintended weight loss
 - ✓ Very low or very high body mass index

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- Nutritionally at Risk *continued*
 - ✓ Inability to feed self
 - ✓ Poor appetite
 - ✓ Difficulty swallowing
 - ✓ Tube fed
 - ✓ Admitted with or history of dehydration

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Breaking Down the Braden

- Interventions for Nutritional deficits
- Dietary consult to determine interventions
 - Provide protein intake of 1.2-1.5 gm/kg/body weight daily
 - WOCN's guideline also recommends 35-40 kcalories/kg of body weight/day

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Breaking Down the Braden

- Interventions for Nutritional deficits
- Dietary consult to determine interventions
 - Provide a simple multivitamin (unless a resident has a specific vitamin or mineral deficiency, supplementation with additional vitamins or minerals may not be indicated)
 - Appetite stimulants
 - Providing food per individual preferences
 - Provide adequate hydration

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Breaking Down the Braden

- If nutrition is already addressed on the care plan:
 - List “nutritionally at risk” as a risk factor under skin integrity, however,
 - State under interventions:
 - See nutritional problem

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Other Risk Factors

- Overall diagnoses that can lead to skin breakdown:
- Anything that impairs blood supply or oxygenation to the skin (cardiovascular or respiratory disease)
- History of pressure ulcers
- End stage diseases (renal, liver, heart, cancer)

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Other Risk Factors

- Overall diagnoses that can lead to skin breakdown:
- Diabetes
- Anything that renders the individual immobile
- Anything that can affect his/her nutritional status (inability to feed themselves)
- Anything that affects his/her cognition

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Other Risk Factors

- Medications or Treatments, such as:
- Steroid therapy
- Medications that decrease cognitive status
- Renal dialysis
- Head of bed elevation the majority of the day
- Medical Devices (tubes, casts, braces, shoes, positioning devices)

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Other Risk Factors

- Individual choice
- Be specific as to what the individual is choosing not to do or allow
 - List interventions and alternatives tried on the plan of care (do not delete)
 - Document date and location of risk/benefit discussion on care plan
 - Re-evaluate at care planning intervals

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Overall Prevention Interventions

- Monitor skin – this should be listed on all plans of care
 - Inspect skin daily by caregivers
 - Inspect bony prominences
 - After pressure has been reduced/redistributed
 - Under medical devices (cast, tubes, orthoses, braces, etc).

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Skin Inspection

- Skin should be inspected in Long Term Care:
 - Upon Admission by Licensed staff
 - Daily with cares by caregivers
 - Weekly by Licensed staff
 - Upon a PLANNED discharge

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Skin Inspection

- Skin should be inspected in Acute care:
 - Upon Admission to ED/hospital
 - Upon Admission to the Unit
 - Daily
 - Upon Discharge
- Skin Should be inspected in Home Care:
 - Upon Admission
 - With each visit
 - Upon planned discharge

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Other Considerations for Prevention Interventions

- Monitoring & management of diabetes
- Provide adequate psychosocial support
- Obtain a PT, OT, Dietary, Podiatrist, and/or Wound Care Consultation as appropriate
- Involve primary physician and/or appropriate physician support
- Educate/involve the individual and/or family members

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RISK ASSESSMENT EXERCISE Using the Braden Tool

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Case Study - Ima Sweetie

- 75yo female
- Suffered from a stroke affecting her right side.
- Progressed to the point where she can use a walker, independently for short distances.
- Suffers from depression and does not like to leave her room.
- Is intermittently incontinent and requires pad changes qshift. However, she does not inform staff/family when she has been incontinent.

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Case Study - Ima Sweetie

- Prefers to spend most of her day laying in her bed on right side, despite attempts to reposition q2 hrs.
- States she has diminished sensation on her right side and occasionally slides down in her chair at the evening meal.
- Eats about half of each meal served, and occasionally will take dietary supplements

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