

## F314 Pressure Ulcers

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# Pressure Ulcer Management

- **Discuss risk assessment and prevention strategies**
- **Demonstrate how to properly stage a pressure ulcer**
- **Be able to identify an arterial, venous or neuropathy wound from a pressure ulcer**
- **Describe overall goals for pressure ulcer healing**

# Pressure Ulcers

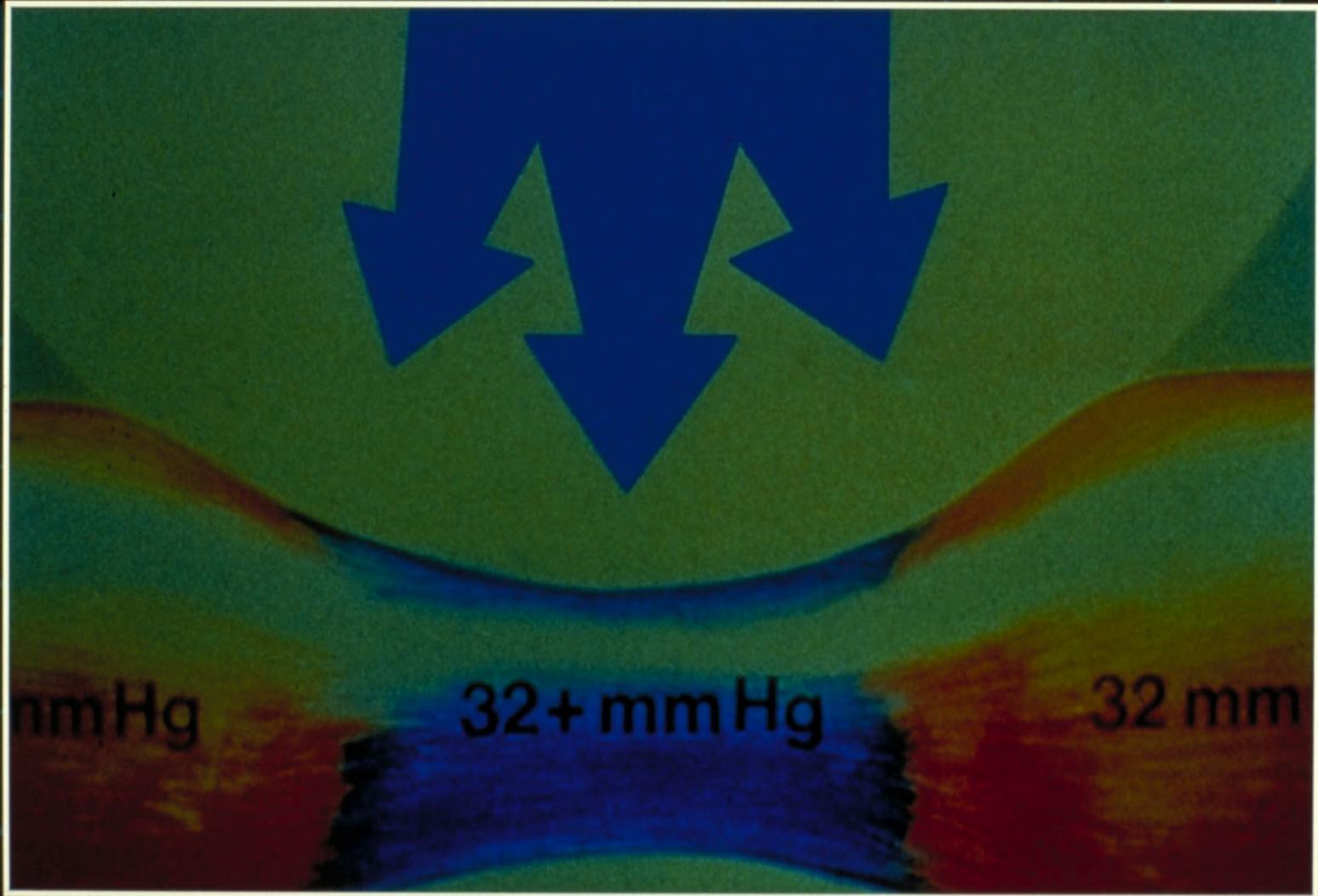
A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction.

*NPUAP 2007*

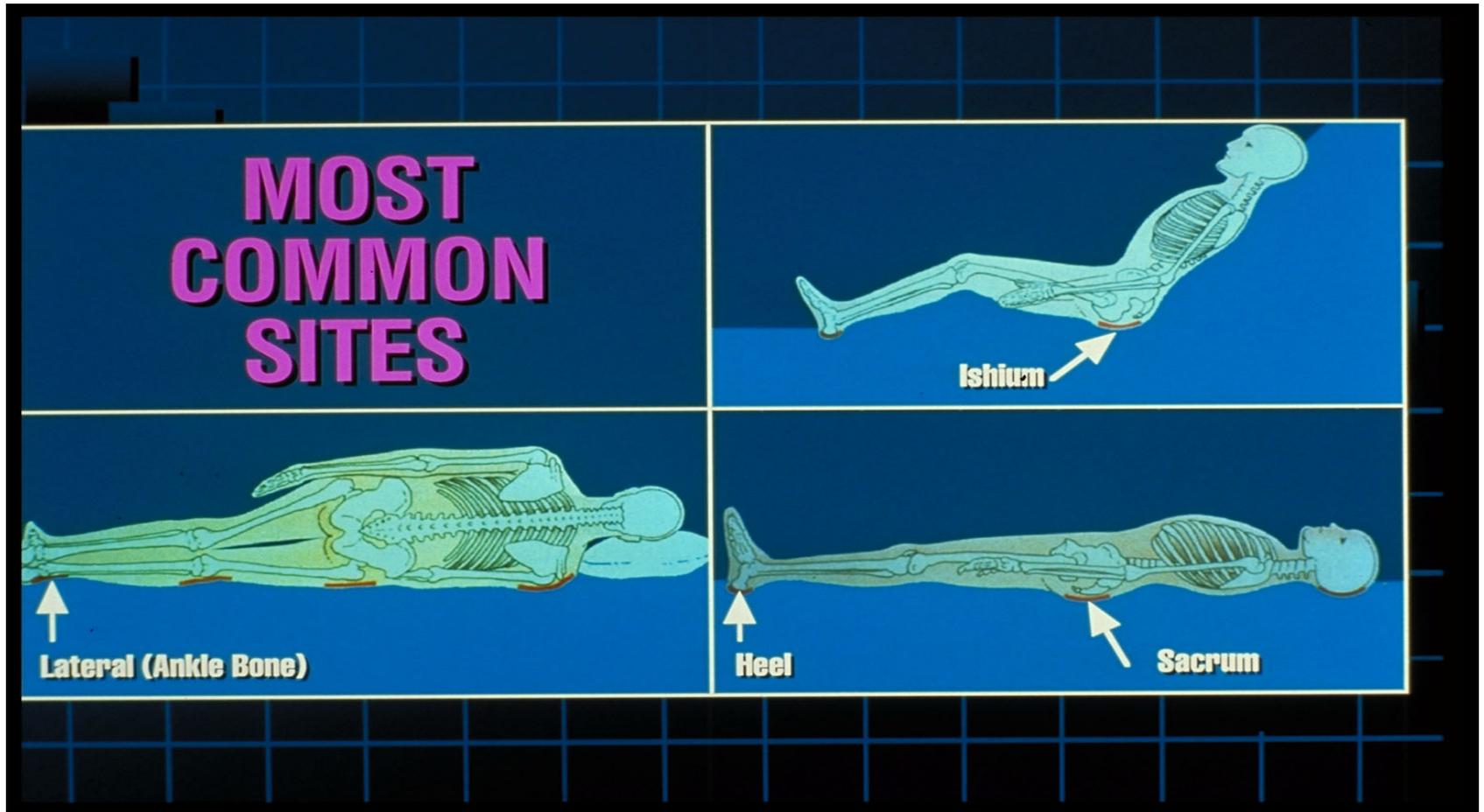
# Pressure Ulcers



# THE EFFECTS OF PRESSURE



# Pressure Ulcers

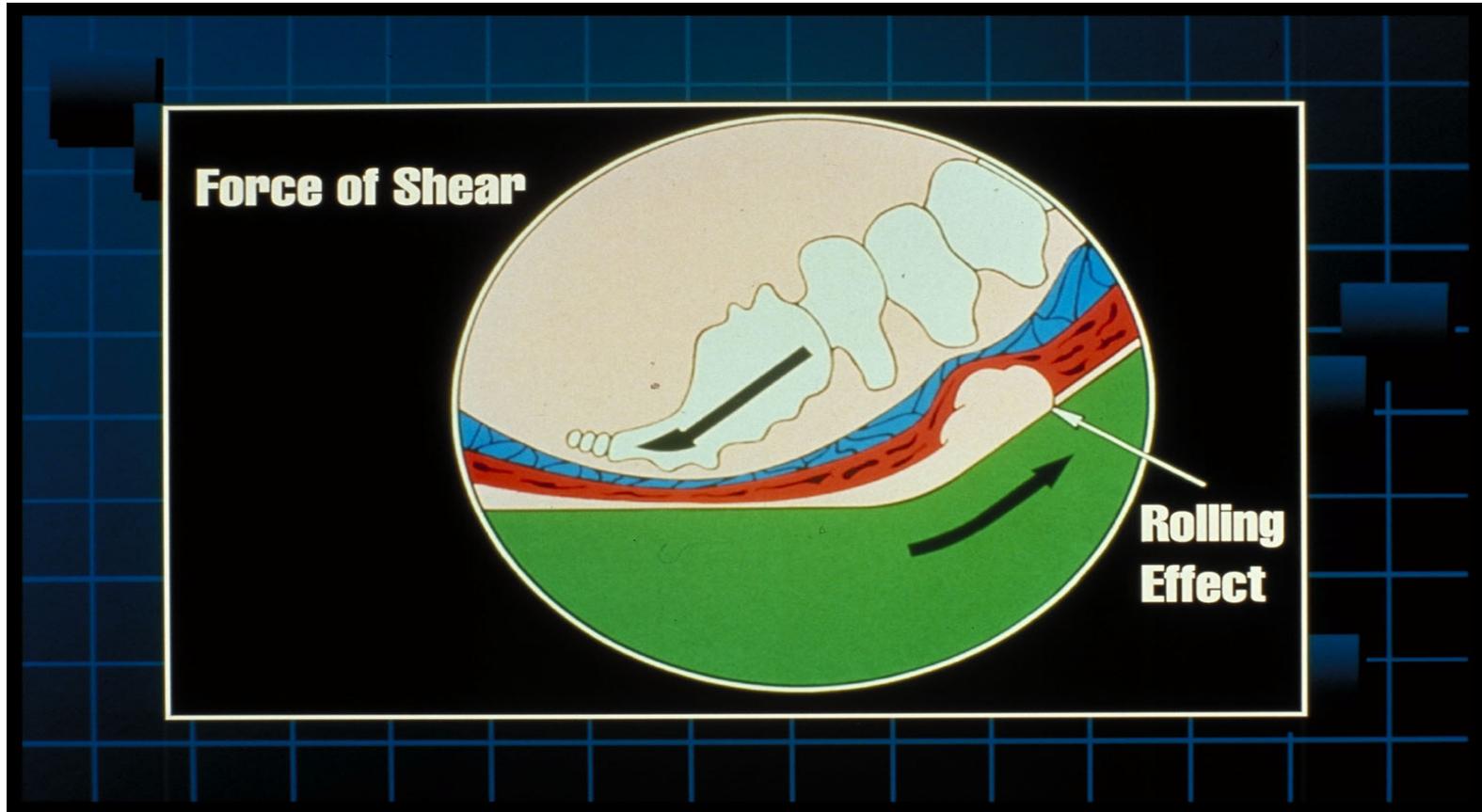


# Contributing Factors

## Contributing factors



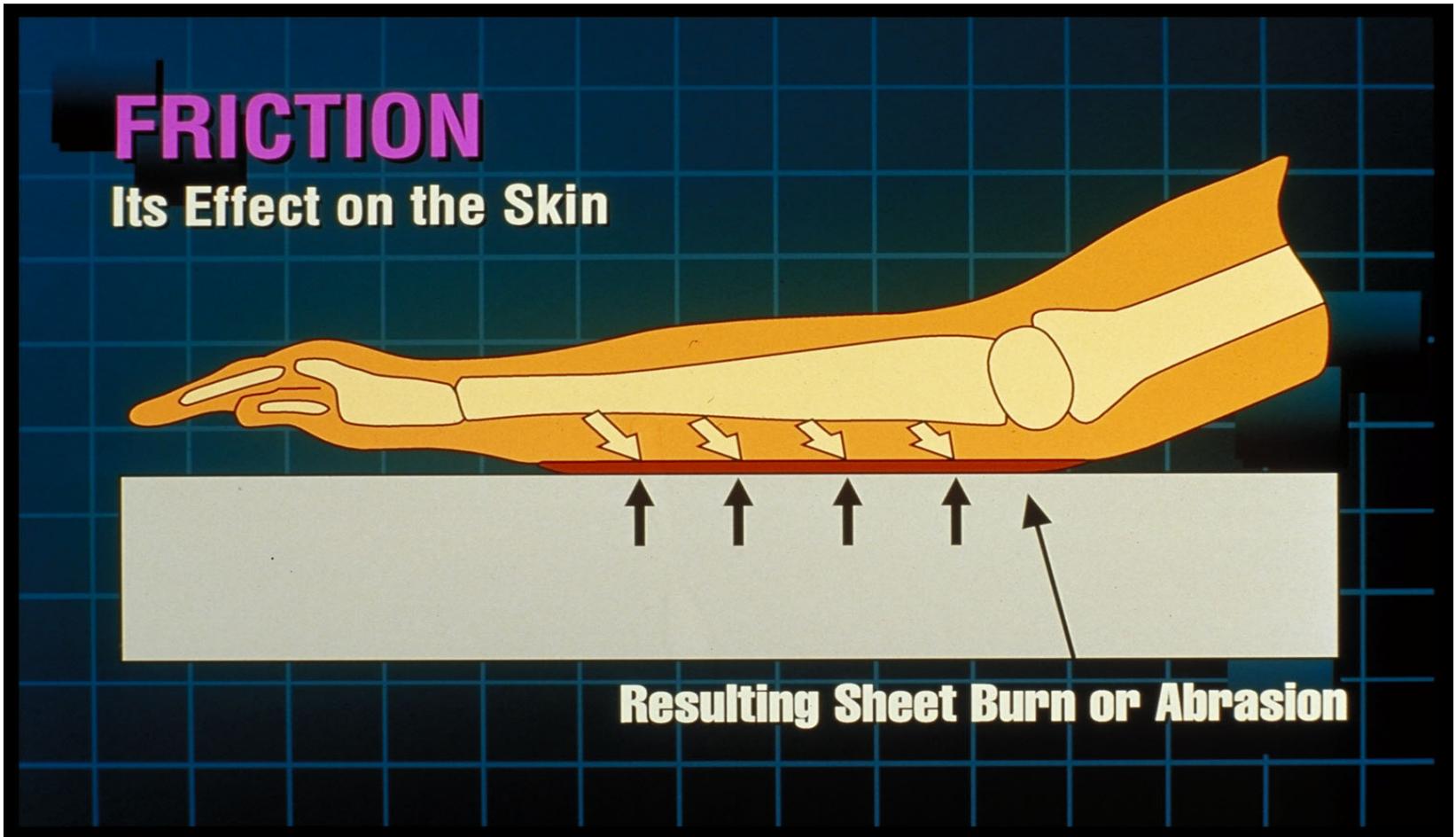
# Contributing Factors: Shear



# Contributing Factors: Shear



# Contributing Factors: Friction



# Contributing Factors: Friction



# Risk Factors

- Unavoidable:
  - Means you identified all risk factors, put interventions in place, up-dated the care plan and the individual developed a pressure ulcer despite this
- Formulating your plan of care by assessing the individual's specific risk factors for skin breakdown

# Risk Assessment

- **Starts with prevention!!!!**
- **Within the first 24 hours:**
  - **Skin inspection**
  - **Risk Assessment**
  - **Temporary care plan with interventions**

# Risk Assessment

- **Skin Inspection in Long Term Care**
  - **\*Upon Admission/re-admission – the sooner the better**
  - **If the resident has been out for an extended period of time**
  - **\*Daily with cares by the Nursing Assistant**
  - **\*Weekly by Licensed Staff**
  - **Upon a planned discharge**
    - \*F314 Guidance for LTC**

# Risk Assessment Tools

- **In Long Term Care A COMPREHENSIVE risk assessment should be done:**
  - Upon admission
  - ***\*Weekly for the first four weeks after admission\****
  - With a change of condition (including pressure ulcer formation)
  - Quarterly/annually with MDS

# Risk Assessment

- **Change of conditions that should signal a new skin inspection & a new skin risk assessment**
  - Decline in mobility
  - Change in continence status
  - Individual is losing weight or decrease in intake
  - Acute illness
  - Decrease in cognition
  - Development of a skin concern
- **BE PROACTIVE**

# Risk Assessment

- **Move your risk and skin assessment past paper compliance**
  - **Involve Interdisciplinary team (minimum of nursing, dietary and therapies)**
  - **Ensure you carry forward the risk factors identified on your risk assessment to the plan of care**
  - **Breakdown the Braden**
  - **Implement interventions to modify or limit the effects of the risk factors identified**
  - **Have correlating interventions for identified risk factors**

# 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](http://www.bradenscale.com) or (402) 551-8636

# Risk Assessment

- 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
- A comprehensive risk assessment should be done and integrating the Braden or Norton results

# Comprehensive Risk Assessment

## ✓ Breakdown of the Braden

- **At for decreased/impaired sensory perception (scored 3 or lower)**
- **At risk for moisture (scored 3 or lower)**
  - » **Incontinent of bladder**
  - » **Incontinent of bowel**
- **Decreased activity level (scored 3 or lower)**
  - » **Chairfast**
  - » **Bedbound**
- **Impaired mobility (scored 2 or lower)**
- **Nutritionally at risk (scored 2 or lower)**
- **At risk for friction and shear (scored 2 or lower)**

# Comprehensive Risk Assessment

- ✓ Cognitively impaired
- ✓ Contractures of: \_\_\_\_\_
- ✓ HOB elevated majority of day
- ✓ Assistance with ADLs
- ✓ Low Albumin or Pre-albumin
- ✓ Fragile skin (prone to skin tears)
- ✓ Non-compliance of: \_\_\_\_\_

# Comprehensive Risk Assessment

- ✓ Restraint use, type: \_\_\_\_\_
- ✓ Pain; type: \_\_\_\_\_
- ✓ Psychotropic drug use
- ✓ Medications that may cause lethargy
- ✓ Steroid use
- ✓ Smoker or history of smoking
- ✓ Medical devices (i.e., splints, casts, O2 tubing...)
- ✓ History of pressure ulcers:

\_\_\_\_\_

# Comprehensive Risk Assessment

## ✓ **Contributing diagnosis**

- ✓ **Anything that renders the resident immobile**
- ✓ **Anything that impairs circulation or oxygenation**
- ✓ **Anything that affects cognition**
- ✓ **End stage or major organ diseases**
- ✓ **Anything that affects nutritional status**

# Comprehensive Risk Assessment

## ✓ **Examples of diagnoses:**

- ✓ **Any cardiovascular disease**
- ✓ **Any pulmonary disease**
- ✓ **PVD**
- ✓ **Diabetes**
- ✓ **CVA**
- ✓ **Paraplegia or quadriplegia**
- ✓ **Terminal cancer**
- ✓ **Chronic/end stage renal, liver or heart disease**
- ✓ **Fracture of: \_\_\_\_\_**
- ✓ **Alzhiemers/Dementia**
- ✓ **Parkinsons**
- ✓ **Multiple sclerosis**

# Comprehensive Risk Assessment

- All identified risk factors should be brought forward to the plan of care
- Interventions should correlate with identified risk factors

# Prevention Interventions

- **Promote circulation & decrease the pressure**
  - Pressure redistribution surface for the bed
  - Pressure redistribution surface wheelchair
  - Individualized turning and repositioning
  - Heel lift
  - 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

# Prevention 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**

# Prevention Interventions

- Support surfaces for the bed:
  - **Foam**
  - **Low Air-loss**
  - **Air fluidized**
- Document on care plan type and date implemented
- Not a substitute for turning schedules
- Heels may be especially vulnerable even on low air loss beds

# Prevention Interventions



# Prevention 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

# Prevention Interventions

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

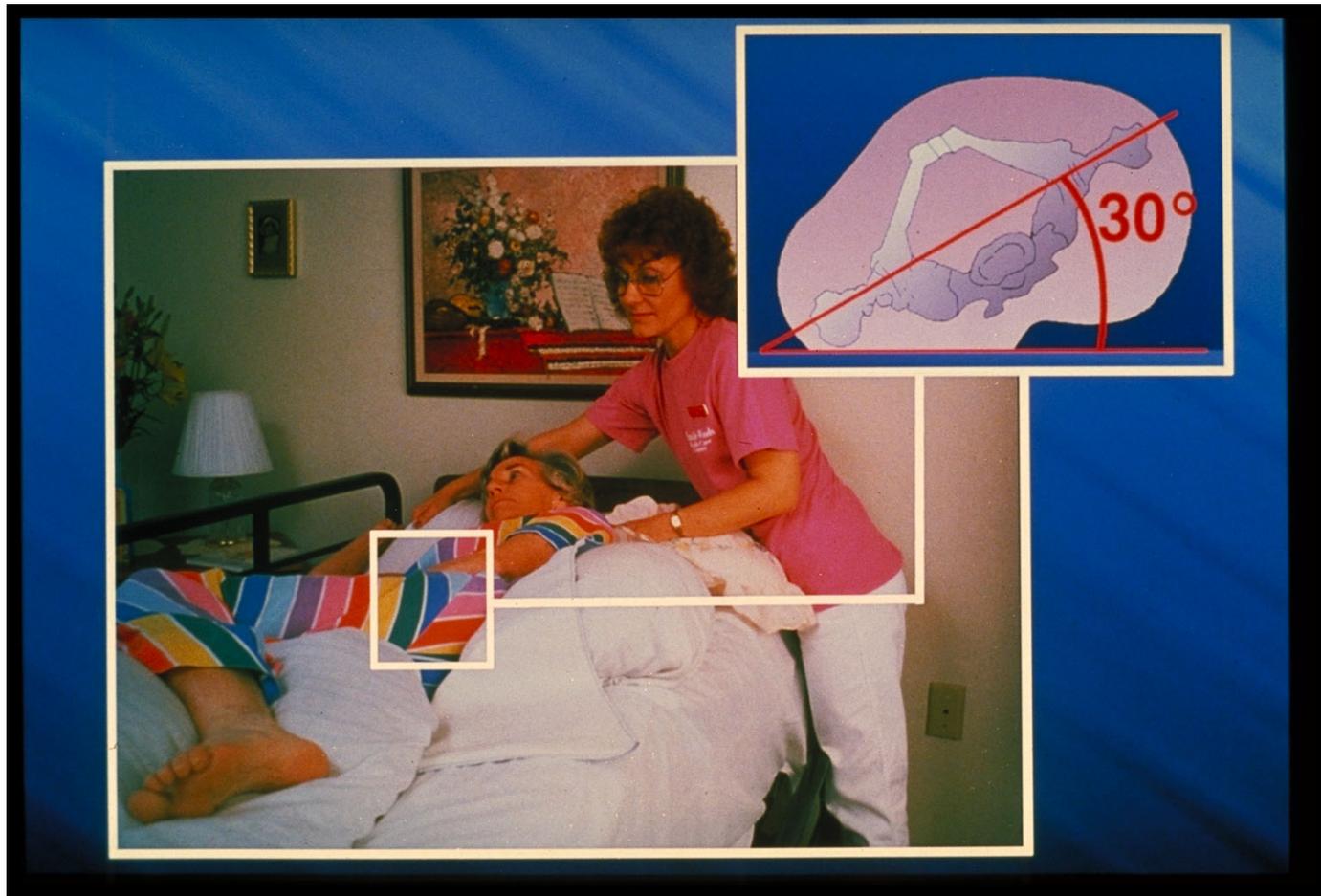
# Prevention Interventions

## Donut

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



# Prevention Interventions



# Prevention 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)
  - When possible avoid positioning on existing pressure ulcer

# Prevention Interventions

## **F314 Guidance:**

- **Tissue tolerance** is the ability of the skin and it's supporting structures to endure the effects of pressure with out adverse effects
- A skin inspection should be done, which should include an evaluation of the skin integrity and tissue tolerance, after pressure to that area, has been reduced or redistributed
- **Therefore the turning and repositioning schedule can be individualized**

# Prevention 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**

# Prevention Interventions

- Pain management
- Inspect skin under medical devices (oxygen tubing, casts, braces, splints and shoes)
- Release restraints at designated intervals
- Do not place the individual directly on bony prominences when possible

# Prevention Interventions

- **Interventions to protect the skin from moisture**
  - **Peri-care after each episode of incontinence**
  - **Apply a skin barrier (ensure skin is clean before application); Xenaderm (Healthpoint) for severe maceration with superficial open areas that a dressing will not adhere to**
  - **Individualized B & B Program**
  - **Foley catheter and/or fecal tubes/pouches as appropriate (stage III or IV)**

# Prevention Interventions

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

# Prevention Interventions

- If there is already an elimination problem on the care plan that addresses the interventions:
  - List it as a risk factor under skin
  - State under interventions:
    - ✓ See elimination problem

# Prevention Interventions

- **Interventions for Friction and Shear**
  - Lift -- do not drag -- residents
  - Utilize lifting devices
  - Elbow or heel pads
  - Protective clothing
  - Protective dressings or skin sealants
  - Raise the foot of the bed before elevating
  - Wedge wheelchair cushions (therapy referral)
  - Pillows

# Prevention Interventions

## 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**

# Prevention Interventions

## 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**

# Prevention Interventions

- If nutrition is already addressed on the care plan:
  - **List it as a risk factor**
  - **State under interventions:**
    - ✓ **See nutritional problem**

# Prevention Interventions

## 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

# Prevention Interventions

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

# 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 resident and/or family members

# Documentation

- **Care plan list type and location of ulcer only (i.e., pressure ulcer to left hip)**
- **Once area resurfaced (healed) then indicate the deepest level of destruction (i.e., History of stage IV pressure ulcer to left hip)**

# Documentation

- **Need to be specific to turning and toileting schedules**
- **Can be generic on routine topical care -  
- Treatment as ordered**
- **If treatment is an adjunctive then be specific - - V.A.C. to left hip pressure ulcer as ordered**

# Documentation

- **The Temporary Care Plan (within 24 hours) should include at a minimum:**
  - **Pressure redistribution surfaces for the bed and the wheelchair**
  - **A turning and repositioning program**
  - **Heel elevation off of the bed**
  - **Skin protection from incontinence**
  - **Referral to Dietary and Therapies**
  - **Topical treatment as ordered if they are admitted with an ulcer**
    - » **Monitor area for progress, S/S of infection or complications**

# Assessment and Documentation of Pressure Ulcers

# Documentation

- **Accurate and timely wound assessments**
  - **Daily to ensure no complications/dressing intact**
  - **With each dressing change, noting any complications/concerns**
  - **Comprehensive/formal assessment**
    - **In long term care at least weekly or more frequently if complications**

# Documentation

- **Comprehensive wound assessment to include:**
  - **Location**
  - **Type of wound**
  - **Stage (pressure ulcers ONLY)**
  - **Length, width and depth**
  - **Wound base description**
  - **Wound edge description**
  - **Presence of undermining/tunneling**
  - **Drainage**
  - **Odor**
  - **Pain**
  - **Progress**

# ASSESSMENT

- ◆ **A clean pressure ulcer with adequate blood supply & innervations should show evidence of stabilization or some healing within 2-4 weeks.**

# Assessment

- **All Staff need to be able properly describe a pressure ulcer**
- **Staff need to be aware of when a pressure ulcer is exhibiting signs of deep tissue injury or concerns**
- **Get outside support if your treatment plan is not getting results**

# Assessment

- **All nurses should be capable**
  - **Stage pressure ulcers (I, II, III, IV, DTI, Unstageable)**
  - **Measure in centimeters**
  - **Length – longest head to toe**
  - **Width – longest hip to hip**
  - **Depth – deepest point**
  - **Clock system for undermining and tunneling**
  - **Wound base in percentages – granulation, slough, eschar**
  - **Drainage**
  - **Odor**
  - **Periwound**
  - **DO NOT PHOTOGRAPH WOUNDS**

# Stage I Pressure Ulcer

- **Stage I:**

**Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area.**

***Further description:***

**The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage I may be difficult to detect in individuals with dark skin tones. May indicate "at risk" persons (a heralding sign of risk)**

# Stage I Appearance



# Suspected Deep Tissue Injury

- **Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.**

## ***Further description:***

**Deep tissue injury may be difficult to detect in individuals with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and become covered by thin eschar. Evolution may be rapid exposing additional layers of tissue even with optimal treatment.**

# Deep Tissue Injury



# Stage II

- Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister.

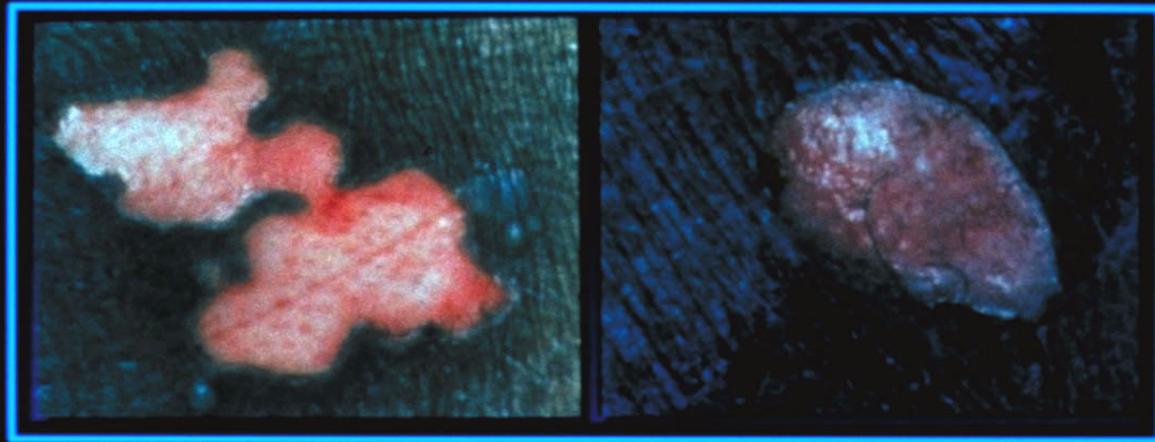
***Further description:***

Presents as a shiny or dry shallow ulcer without slough or bruising.\* This stage should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.

\*Bruising indicates suspected deep tissue injury

# Assessment

## Stage II



# Stage III

- Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.

## ***Further description:***

The depth of a stage III pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and stage III ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep stage III pressure ulcers.

Bone/tendon is not visible or directly palpable.

# Assessment

## Stage III

