

Pressure Injury Prevention for Older Adults

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Objectives

- Discuss incidence/cost of pressure injury in long term care
- Describe contributing factors associated with development of pressure injuries
- Identify prevention strategies and best practice

Pressure Injuries in Long-Term Care

Rates of Pressure Injury:

National—8.1%

Oklahoma—8.9%

Estimated costs:

Stage 1--\$2000

Stage 2--\$8000

Stage 3--\$15,000

Stage 4--\$20,000+

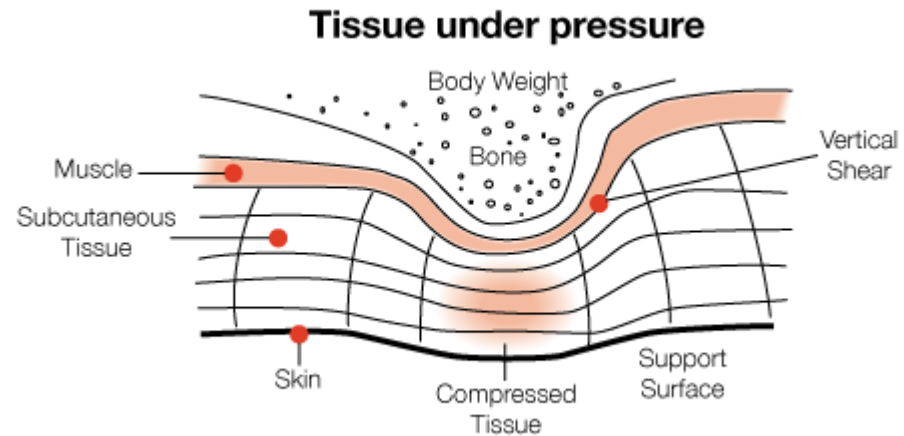


Skin Changes with Aging

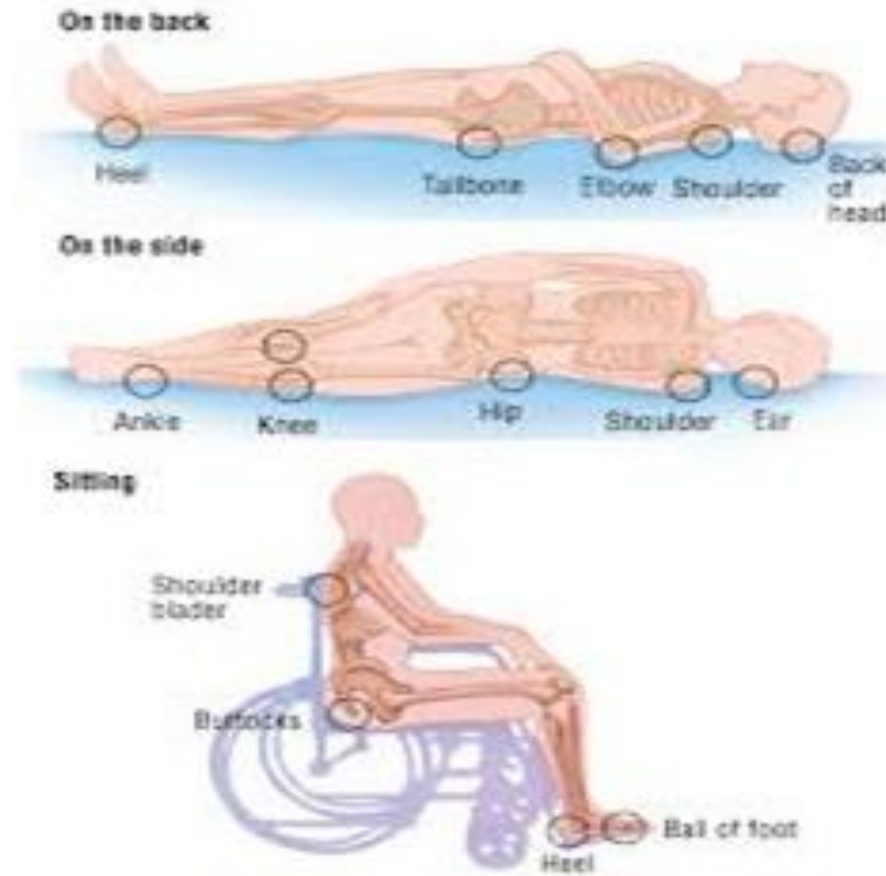
- Decreased
 - Dermal thickness (esp. legs and arms)
 - Fatty layers (bony prominences less protected)
 - Collagen and elastin (less recoil)
 - Size of rete ridges (allows easier separation of epidermis and dermis)
 - Sensation and metabolism
 - Sweat glands (dry skin)
 - Circulation (healing, poor heat regulation)
 - Epidermal regeneration (slower healing)

Effects of Pressure

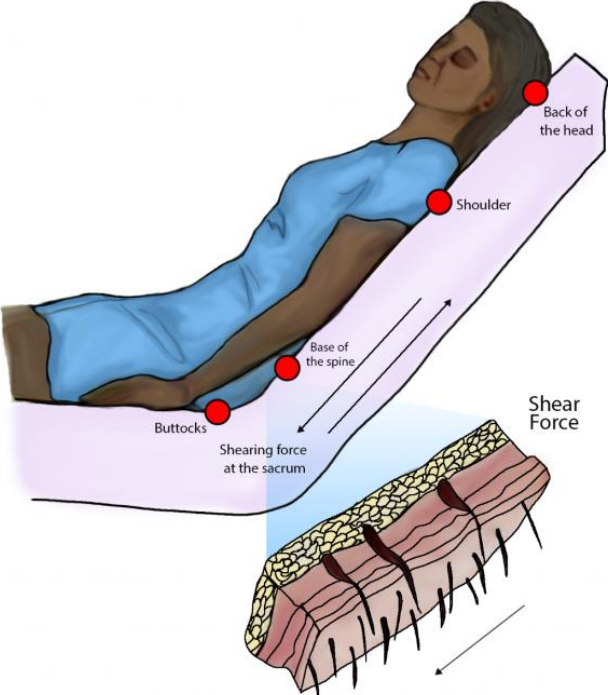
- Can be attributed to:
 - Intensity of pressure
 - Duration of pressure
 - Tissue tolerance



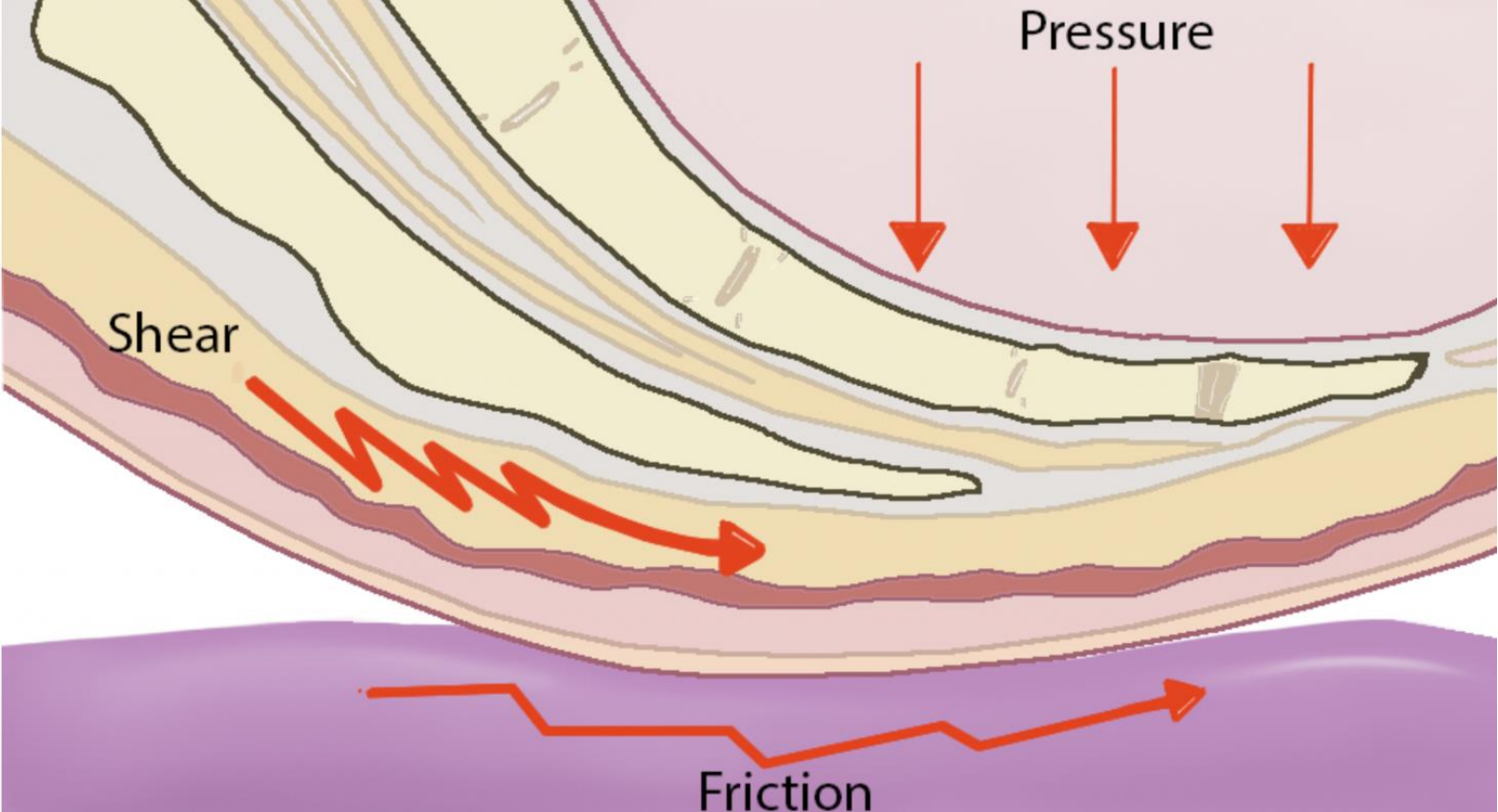
Common Areas for Pressure Injury



Shear Forces



Shearing forces can occur when a patient is moved carelessly or slides down in bed.



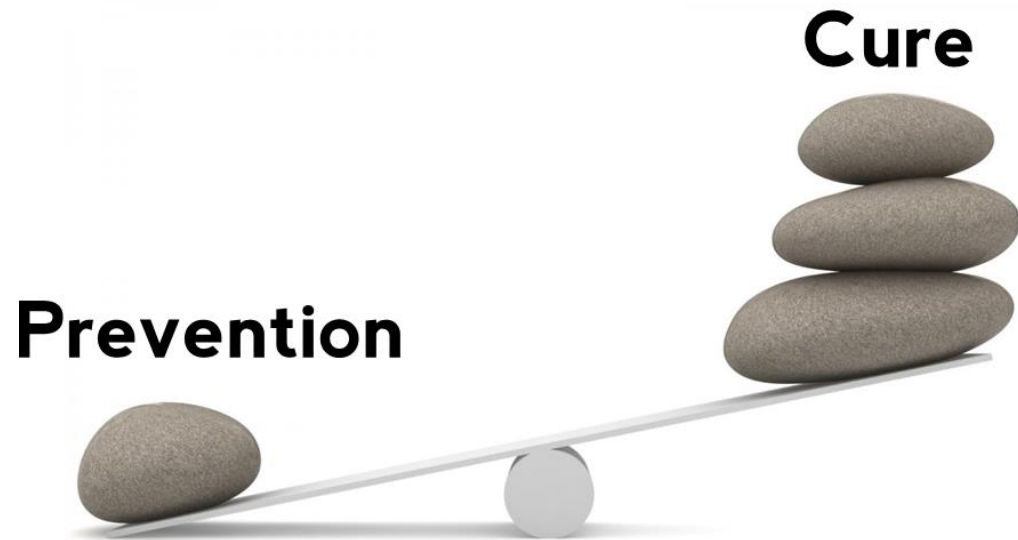
Other Contributing Factors

- Nutrition
- Decreased blood flow
- Low blood pressure
- Psychosocial status
- Smoking
- Elevated body temperature
- Poor oxygen perfusion



May Impact the Unavoidable Pressure Injury!

Prevention



- Identify at-risk individuals needing prevention and the specific factors placing them at risk
 - Admission risk assessment
 - Use of a validated scale
 - Is there a planned intervention for at-risk residents?
 - If so, is it followed?



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Prevention Interventions

- Are risk assessments done appropriately, correctly?
 - On admission within a maximum of 24 hours
 - Reassess based on acuity
 - Reassess if significant change in condition
 - Based on facility protocol
 - Skin assessment should be part of everyday care
- Staff education on tools (sensory perception, shear/friction, nutrition)
- Are plans of care changed based on changes in risk assessment?
- Document risk factors and interventions!

Braden Scale

Parameters:

Sensory Perception—Moisture—Activity—Mobility—Nutrition—
Friction and Shear

Scores:

- Mild Risk = 15-18
- Moderate Risk = 13-14
- High Risk = 10-12
- Very High Risk = 9 or below



Prevention

- Maintain and Improve tissue tolerance to pressure in order to prevent injury
 - Assess skin daily during basic care
 - Cleanse skin properly
 - Protect skin from drying
 - Avoid massage
 - Toilet routine, protect from incontinence
 - Nutrition!



Prevention

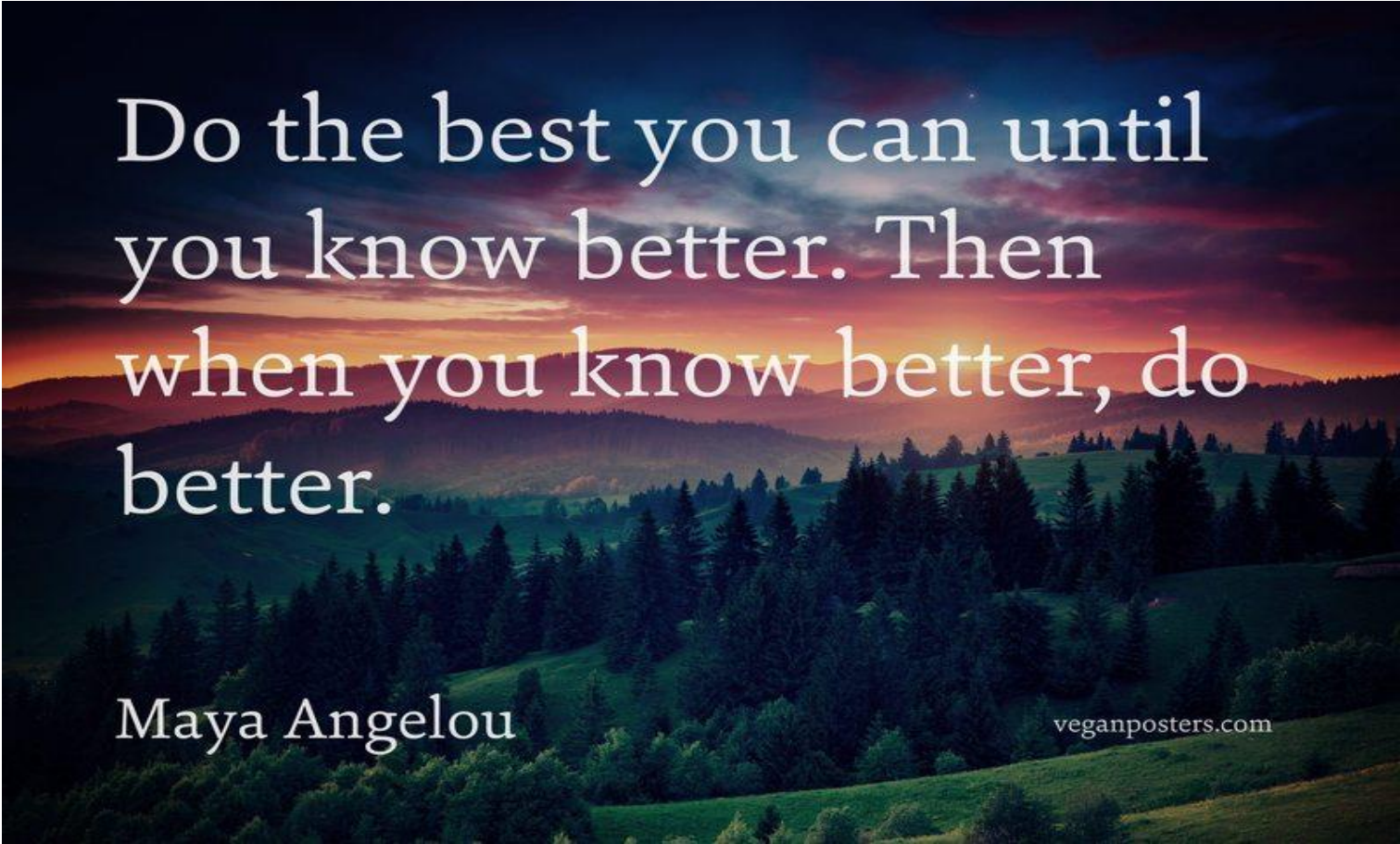
- Turning schedule
 - Evidence supports that turning Q4hr on viscoelastic foam mattress/surface resulted in fewer pressure injuries compared to turning Q2H on standard mattress
 - Defloor et al., (2005)
 - Bergstrom et al., (2013)
- Positioning devices
 - Pressure redistribution devices – special care to heels/avoid direct pressure on trochanter/sacrum
 - Limit head elevation < 30 degrees
 - Lifting devices: remove after resident is moved

Prevention

- Avoid direct pressure on bony prominences (30° lateral turn)
- Position off any redness or existing injury
- If unable to turn due to condition, consider higher level of support surface
- Use caution with medical devices (catheters, bedpans)
- All devices can have issues
 - Check tubing/hoses
 - Check for bottoming out
 - Make sure device is weight appropriate
 - Keep sheets loose



- Prevention interventions
 - Based on risk assessment
 - Individualized
- Surfaces—Key to prevention
 - Assessment of all surfaces
 - Are they used consistently?
 - Do they need to be replaced?
 - Are they working appropriately?
- Routine practices to ensure pressure injury strategies are consistently implemented
- Ensure adequate access to supplies and equipment
- Education for all!



Do the best you can until
you know better. Then
when you know better, do
better.

Maya Angelou

veganposters.com

Thank You!

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Questions?



Resources and Citations

Braden Scale Information

<https://wtcs.pressbooks.pub/nursingfundamentals/chapter/10-5-braden-scale/>

AHRQ *On-Time Pressure Ulcer Prevention*

<https://www.ahrq.gov/patient-safety/settings/long-term-care/resource/ontime/pruprev/intro.html>

Defloor, T., De Bacquer, D., & Grypdonck, M. (2005). The effect of various combinations of turning and pressure reducing devices on the incidence of pressure ulcers. *International Journal of Nursing Studies*, 42(1), 37-46.

Bergstrom, N., Horn, S., Rapp, M. P., Stern, A., Barrett, R., & Watkiss, M. (2013). Turning for ulcer reduction: A multisite randomized clinical trial in nursing homes. *Journal of the American Geriatrics Society*, 61(10), 1705-1713. <https://doi.org/10.1111/jgs.12440>