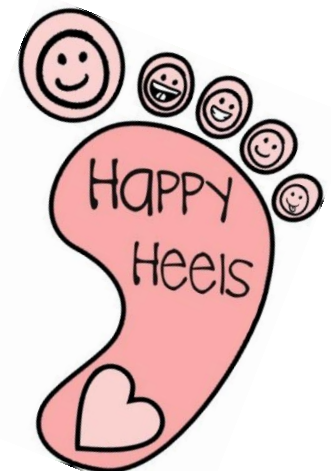
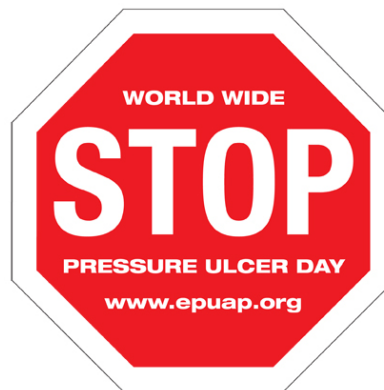
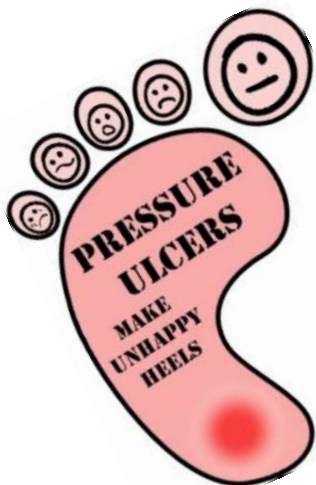


# Preventing heel pressure ulcers at UHNM

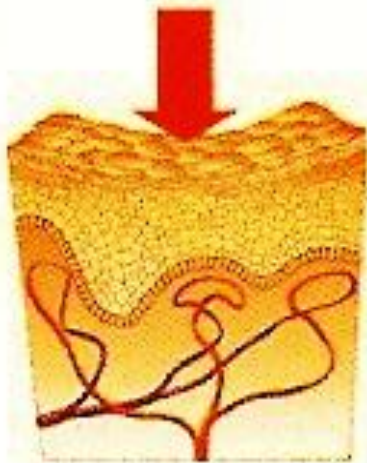


# What is a pressure ulcer?

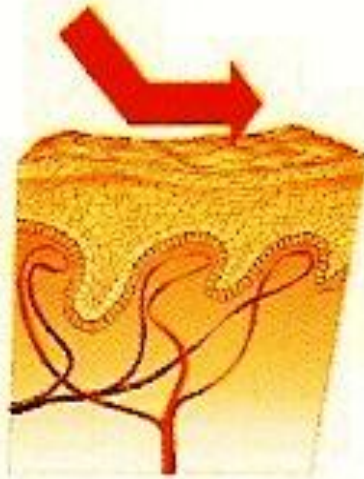


Localised injury to the skin and/or underlying tissue, usually over a bony prominence, as a result of pressure, or pressure in combination with shear.

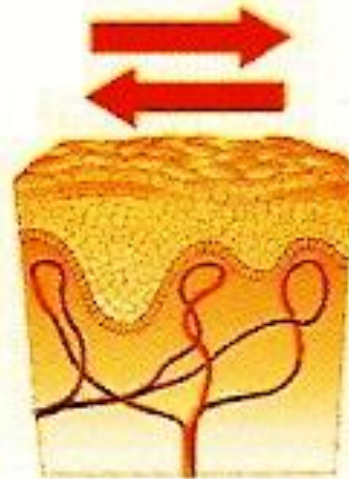
# Forces contributing to skin breakdown



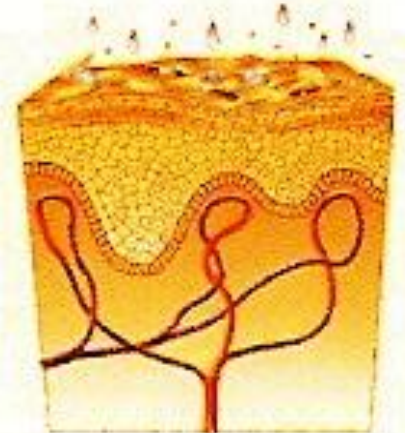
Pressure



Shear



Friction



Heat, Moisture



## Grade 2 pressure ulcer

- Partial thickness skin loss.  
Epidermis/dermis
- Abrasion/blister/shallow ulcer.



# Grade 3 pressure ulcer



- Full thickness skin loss.
- Damage to subcutaneous tissue
- Not through underlying fascia
- With or without undermining

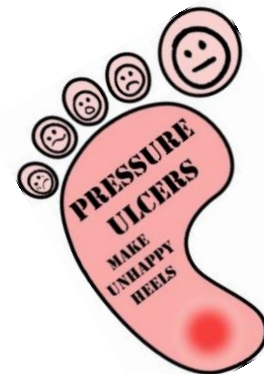
# Deep tissue injury

- Difficult to grade initially
- May resemble a bruise
- Can be life threatening
- Often extending to underlying bone
- Will deteriorate rapidly
- May lead to systemic infection as the dead tissue breaks down if not managed effectively.



# Patients who are at risk

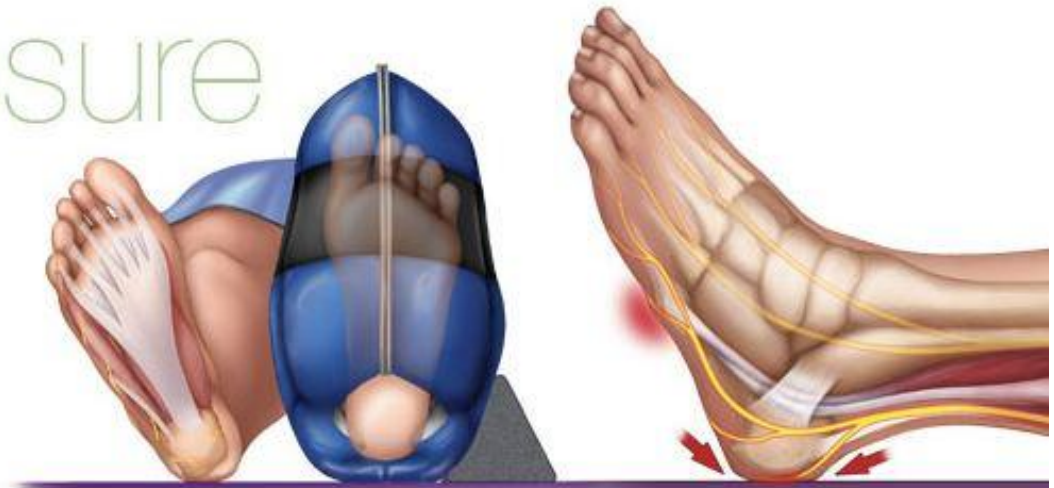
- Heavily sedated patients/ unconscious
- Post operatively
- Immobile
- Diabetic//vascular/renal disease
- Large/oedematous/contracted or cachexic limbs
- Any heel tissue breakdown, blistering, ulceration
- Unilateral amputee.
- # NOF
- stroke



# Why are the heels at risk?

- Bony prominence
- The foot is load bearing
- The calcaneus heel bone is not well protected
- Approx. 3.8mm between the bone and surface of the skin
- Subject to internal and external forces
- Achilles tendon has poor blood supply

Heel Pressure  
Ulcers





# What does this mean to our patient?

- Pain... think how a heel blister feels when you buy new shoes... only much worse.
- Smell. Dead tissue smells.
- Infection.
- Reduced mobility
- Longer stay in hospital
- Potential amputation.



# High risk factor: diabetes

- One of the most common chronic diseases in the UK
- Estimated more than 5 million people by 2025
- Peripheral arterial disease affects 1:3 people with diabetes over the age of 50.
- 10% of people with diabetes will have a foot ulcer
- Foot ulcers precede 80% of amputations in people with diabetes
- Up to 70% of those who have amputations die within 5 years
- Approx. £1 for every £150 spent in the NHS annual is related to foot ulcers or amputations. (£650 million) NHS Diabetes 2012.

# Preventative strategies

- Prevention and management involves a myriad of interventions
- Selection of support surface and equipment
- SSKIN bundle : an acronym for the key elements central to prevention
  - Skin care
  - Support surface
  - Keeping the patient moving
  - Incontinence
  - nutrition

# Skin Care

## Xerosis (dry skin)



- Dry unhealthy skin is at risk of pressure ulcers and skin tears
- Keep skin clean and well hydrated.
- Remove socks/ antiembolic stockings daily
- Wash, dry and use a mirror to inspect the feet.
- Avoid Hibiscrub unless clinically indicated.
- Apply an emollient such as balnium cream .
- Do not use Aqueous cream.

# Heel offloading devices

Designed to minimize risk of pressure damage to heels

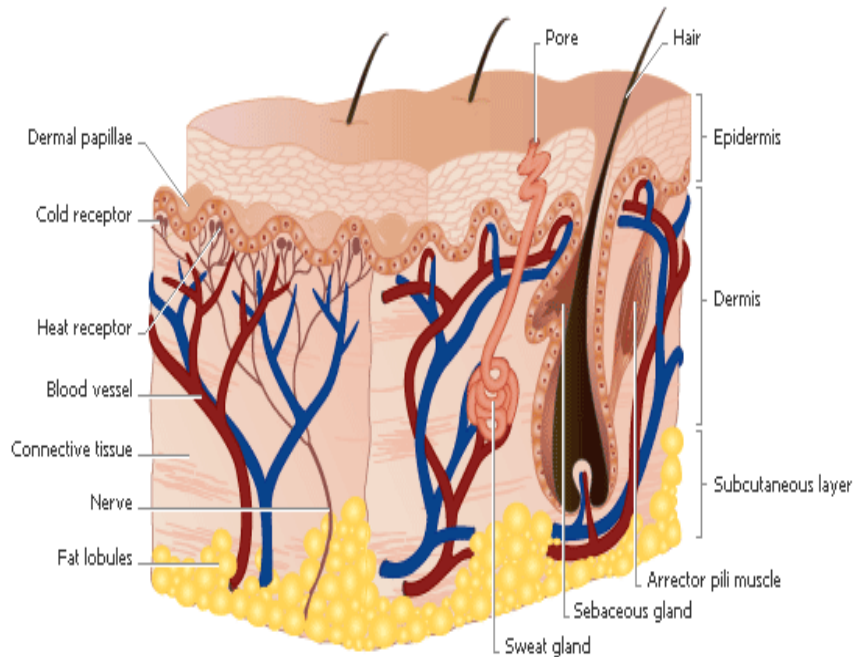


# Keep moving

- Skin bundle
  - Theatres
  - Outpatients
  - Childrens
  - adults
- Regular repositioning
- Using slide sheets
- Using lateral transfer sheets in theatre.

Name of Patient:		Hospital Number:		Ward:	
Date:		One chart to be used per 24 hours			
SKIN BUNDLE CHART					
<b>BUNDLE TIME</b>					
<b>SURFACE</b>		Mattress: A = Mattress type A = alternating pressure B = Foam			
Mattress type					
Inflation/alarms checked					
Heels off loaded					
Check bed height (safety)					
<b>Skin inspection</b>		A = Normal B = Red & blanching C = Enter grade of PU (1-4) if observed. D = Dressing in situ. Enter corresponding letter below with location ( or number if PU present)			
Left Heel					
Right Heel					
Sacrum					
Buttocks					
Other:					
Anti embolics (check heels)					
<b>KEEP MOVING</b>		1. Left side 30° tilt 2. Right side 30° tilt 3. Sitting in bed 4. Lying flat in bed 5. sitting in chair 6. Stand / walk 7. Declined (Enter number in box below)			
Position Changed enter number from key above					
<b>INCONTINENCE</b>					
Clean and dry					
Barrier applied					
<b>NUTRITION</b>					
Drink taken					
Food taken					
Supplement taken					
INITIALS:					
Bundle prescription of care: to be completed by the registered nurse responsible for the patient today					
<b>SURFACE</b>		<b>KEEP MOVING</b>		<b>INCONTINENCE</b>	
Heels: Boots <input type="radio"/> Cushion <input type="radio"/> Knee break (bed) <input type="radio"/> Cushion: Integral <input type="radio"/> additional <input type="radio"/>		Independent <input type="radio"/> 1-2 hrs <input type="radio"/> 2-4 hrs <input type="radio"/> Advice given <input type="radio"/>		Pad and pants <input type="radio"/> Wrap around pad <input type="radio"/> Type of Cleanser barrier <input type="text"/> <input type="text"/>	
				Food record chart <input type="radio"/> Red tray/lid <input type="radio"/> Support needed <input type="radio"/> Enteral feed <input type="radio"/> Independent <input type="radio"/> Fluid balance chart <input type="radio"/>	

# Nutrition and hydration



- Dehydrated skin is prone to injury.
- Poor nutrition delays or prevents healing.

# International Pressure Ulcer Prevention Guidelines

NPUAP/EPUAP/PPPIA 2014

- Ensure that the heels are free of the surface of the bed
- Use heel suspension devices that offload the heel completely
- The knee should be in flexion 5-10 degrees, to avoid popliteal vein compression and increased risk of DVT.
- Avoid pressure to the Achilles
- If using a foam pillow ensure that it extends the full length of the calf, and the heel can be maintained free from the surface.
- Decrease friction and shear. Use slide sheets to reposition and lateral transfer sheets.
- Remove anti-embolic stockings regularly in high risk patients to check the heels. Use a large mirror if necessary
- Feet should be washed daily and an emollient applied to any dry skin.
- Apply heel suspension devices according to the manufacturers instructions



# Questions?

Contact the Tissue Viability Team  
ext 75499