

### Pressure Injury Risk Reduction Interventions

Total Braden Score	Total Braden Q Score	Total PURS Score	PUAP Risk Category
14 or higher	26 or higher	0	Very Low Risk
15-18	22-25	1-2	Low (At Risk)
13-14	17-21	3	Moderate Risk
10-12	<16	4-5	High Risk
9 or below		6-8	Very High Risk

### Interventions Based on Braden Scale, Braden Q Scale and PURS Score Risk Categories

Risk Category	Interventions
<b>Very Low</b>	<ul style="list-style-type: none"> <li>• Daily head-to-toe skin assessment by nursing staff during personal care</li> <li>• Keep positioned off bony prominences</li> <li>• Minimal linens on bed</li> <li>• Keep skin moisturized with non-scented pH balanced moisturizer</li> <li>• Encourage eating/drinking as per dietician instruction</li> <li>• Mobilize as much as possible</li> <li>• Do not massage reddened areas</li> <li>• Turn/reposition regularly as indicated</li> <li>• No donut type devices</li> <li>• Avoid drying the skin</li> <li>• Initiate a mattress with low interface pressure, i.e. a high-density foam mattress (do <b>NOT</b> allow persons at risk to remain on a standard mattress)</li> </ul>
<b>Low Risk</b>	<p>All of the above <b>PLUS</b>:</p> <ul style="list-style-type: none"> <li>• Frequent turning</li> <li>• Maximal remobilization</li> <li>• Protect heels, i.e. medical grade sheep skin booties and elevate heels off the mattress (even when the person is on a therapeutic surface and even in the operating room, unless this interferes with the surgical procedure)</li> <li>• Manage moisture, nutrition, and friction and shear</li> <li>• Initiate a pressure reduction support surface if bed or chair bound or if undergoing a surgical procedure greater than 90 minutes in length</li> </ul>
<b>Moderate Risk</b>	<p>All of the above <b>PLUS</b>:</p> <ul style="list-style-type: none"> <li>• Initiate a turning schedule</li> <li>• Use foam wedges, rolls, or pillows for 30* lateral positioning when in bed</li> <li>• Initiate a pressure reduction support surface</li> </ul>
<b>High Risk</b>	<p>All of the above <b>PLUS</b>:</p> <ul style="list-style-type: none"> <li>• Increase frequency of turning</li> <li>• Initiate a pressure reduction support surface</li> </ul>
<b>Very High Risk</b>	<p>All of the above <b>PLUS</b>:</p> <ul style="list-style-type: none"> <li>• Use a pressure <u>relieving</u> surface if the person has intractable pain or severe pain exacerbated by turning, or additional risk factors</li> </ul>

### **Tips to Manage Moisture:**

- Address the cause of moisture if possible, i.e. establish and bowel and/or prompted voiding program, and support people to toilet as frequently as necessary to maintain continence
- If the person cannot toilet successfully consider the use of absorbent pads or briefs that wick and hold moisture. Briefs/pads should be checked for soiling with every repositioning or every 4 hours if the person is able to independently position themselves, and should be change when soiled or wet
- Avoid double padding – use a pad or brief that meets the needs of the individual and/or change the product more often
- If the person is wearing an incontinent product, do not use soaker pads
- Gently cleanse skin folds and perineal area after each incontinent episode using a pH balanced skin cleanser. Rinse well. Gently pat dry.
- Use a commercial moisture barrier to protect skin from urine, feces, and perspiration
- Offer bedpan/urinal and glass of water in conjunction with turning schedule
- **DO NOT** use bedpans with Spinal Cord Injured people with sensory loss. If the person cannot use a padded commode or toilet, place the person on the left side and place a disposable incontinent pad on the bed to collect stool
- Use bedpans with caution in people with lack of sensation and lack of ability to communicate their needs, i.e. cognitively impaired, reduced level of consciousness
- Consider the use of a fecal collector bag, condom catheter or indwelling catheter as indicated to divert moisture to allow for pressure injury healing
- If possible, remove the transfer board, slider sheet, or lifting sling from under the person after use if they could potentially cause areas of moisture
- Avoid the use of powders, cornstarch and talc to reduce moisture
- Consider a wicking material or moisture transfer dressing to reduction friction and absorb moisture in groins, axillae, and under breasts
- Individualize bathing schedules; avoid use of hot water and alkaline soaps and avoid force and friction when cleansing and drying
- Seek medical intervention for fungal dermatitis
- During surgical procedures, avoid pooling of all surgical solutions and body fluids under the person

### **Tips to Manage Nutrition:**

- Maximize the person's nutritional status through adequate protein and calorie intake if compatible with the goals of care
- Encourage a minimum of 1500-2000mL of fluid per day, unless medically contraindicated
- Offer fluids every 2 hours for adults with dehydration, fever, vomiting, sweating, diarrhea, heavily draining wounds, unless medically contraindicated

- Act quickly to alleviate deficits
- Consult the Home's dietician re the need for dietary modifications, nutritional supplements, and vitamin/mineral preparations
- Consider order for nutritional values – Hgb, Albumin, etc.

**Tips to Manage Mobility, Friction and Shear:**

- Elevate the heels off the surface of the bed (even beds with therapeutic mattresses), using pillows, therapeutic pressure offloading devices, or custom pressure offloading devices. You may need to collaborate with an occupational or physiotherapist to determine the most appropriate heel off-loading device.
- Do NOT use rolled blankets, towels, pillow cases, incontinent pads or IV bags to elevate heels
- Elevate HOB no more than 30 degrees
- Provide people with devices that will enable independent positioning and transfers, such as trapeze bars, transfer boards, and bed rails; consult with PT and/or OT as indicated
- Use lift/draw sheet to move the person in bed
- For lateral transfers, use sliding boards, roll boards or transfer sheets to minimize shearing
- Protect elbows and heels if being exposed to friction and/or shear
- Use pillows to avoid contact between bony prominences such as knees and ankles when side lying in bed
- Instruct chair bound people to shift their weight every 15 minutes if the person can move independently in their chair (consider using tilt feature if applicable). Reposition chair bound people who cannot move themselves every hour
- If the person has an injury on a sitting surface, reduce sitting time to two-45 minute sessions per day
- If the person has a tilt wheelchair, utilize the tilt feature to regularly alleviate pressure (the chair must be tilted at least 30 degrees to alleviate pressure)
- When in bed, people should be repositioned every 2 hours, depending on their overall health, risk score, ability to reposition independently, severity of any current pressure injuries and characteristics of the person's mattress surface
- Consider initiating a turning schedule
- Keep bed linens and layers under the person smooth and unwrinkled
- Remove handling equipment from under the person after use if they could potentially cause areas of pressure
- Avoid positioning the person on a pressure injury or reddened area; if this is not possible then limit the time to less than one hour and assess for further damage
- Consider using therapeutic surfaces reduce/relieve pressure on beds, chairs, commode chairs, toilets, bath benches, etc. You may need to collaborate with an occupational or physiotherapist to select /access the most appropriate therapeutic surface
- For people using therapeutic surfaces, check to ensure the support surface is functioning properly at least daily or with each home visit

- Avoid the use of multiple layers of bedding and padding over therapeutic support surfaces. Use coverings or pads that are recommended by the surface manufacturer
- Use protective barriers, i.e. liquid barrier films, transparent films, or hydrocolloid dressings or protective padding to reduce friction
- When sitting, ensure the person's feet are supported directly on the floor, on a foot stool, or on a foot rest so that the person's hips and knees are at 90 degrees to prevent sliding down in the chair
- Raise the foot of the bed 10-20 degrees before raising the HOB  $\leq$  30 degrees to minimizing shearing and friction, unless contraindicated
- For people undergoing a surgical procedure greater than 90 minutes, consider placing a therapeutic surface on the operating table. Heels should be elevated off the operating table surface (even if a therapeutic mattress is in place) at all times, unless it interferes with the surgical procedure
- Minimize/eliminate pressure from medical devices – reassess every 8-12 hours

**Also:**

- Consider the impact of pain as its presence may decrease mobility and activity. Assess regularly using a valid pain assessment tool and implement appropriate pharmacological and non-pharmacological interventions as indicated
- Consider the person's risk for skin breakdown related to the loss of protective sensation or the ability to perceive pain and to respond in an effective manner, i.e. the impact of analgesics, sedatives, neuropathy, etc.
- Inspect the skin of people at risk for pressure injury each time the person is repositioned, toileted, or assisted with ADLs
- Apply oxygen as ordered
- Apply warm blankets PRN

**References**

Poss et al. Development of the interRAI Pressure Ulcer Risk Scale (PURS) for use in long-term care and home care settings. *BMC Geriatrics*. 2010;10:67.

Braden B and Bergstrom N. Protocols by level of risk. 1988. Accessible at:  
[http://www.bradenscale.com/images/protocols\\_by\\_level\\_of\\_risk.pdf](http://www.bradenscale.com/images/protocols_by_level_of_risk.pdf)