

[HEALTH SERVICE LOGO]

SITE:

SPINAL CORD INJURY [SAMPLE] POSITIONING PLAN

FAMILY NAME: MRN:
GIVEN NAME: MALE/FEMALE
DOB:/...../.....
ADDRESS:
.....
LOCATION:

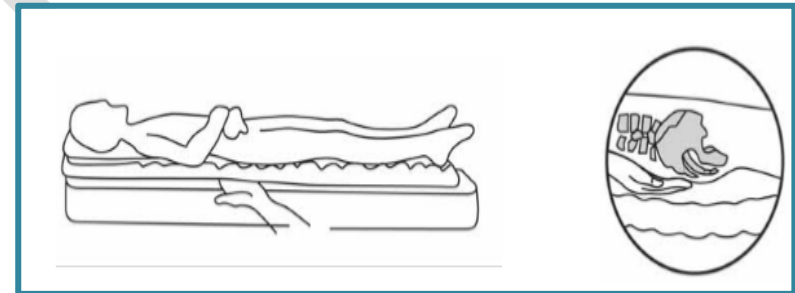
INDIVIDUALISED BED POSITIONING AND REPOSITIONING PLAN


This plan is intended for use with the **SCI PI Toolkit** found on the Agency for Clinical Innovation website [<https://www.aci.health.nsw.gov.au/networks/spinal-cord-injury/resources>] and guidance from a multidisciplinary team of health professionals.

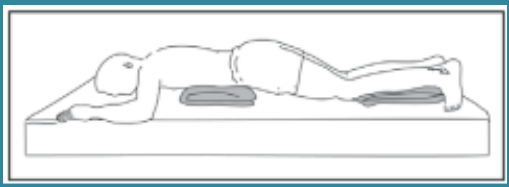
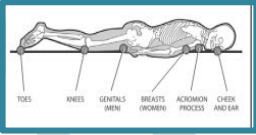
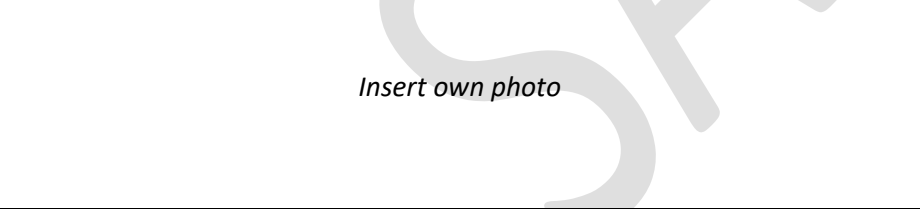
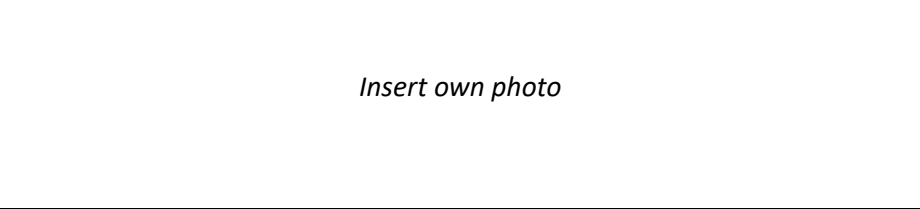
- If the pressure injury is on the person's bottom and/or contacts the sitting surface of the wheelchair, immediate (24 hour) bed rest is usually required to remove/ offload pressure from the wound effectively.
- With the person, identify the positions in which they can lie so that there is no or minimal pressure on the wound.
- Document a plan to alternate between positions in order to avoid prolonged pressure on another part of the body.

Steps in devising a positioning plan:

1. Use the information (**Areas offloaded** and **Areas most vulnerable**) in the plan below to determine possible positions according to wound location.
2. Trial positions:
 - i. Therapist/nurse/carer to **check for areas of excessive pressure or bottoming out on mattress** by sliding hand between a bony prominence and the mattress. Consider the need to 'upgrade' the mattress and the use of additional positioning aids.
 - ii. Trial any new position for 2 hours during the day and gradually increase to overnight depending on **skin checks**, comfort and safety. Reposition carefully, consider using slide sheets. Use the **Daily Skin Check Guide** (provided in the NSW ACI Spinal Cord Injury Pressure injury Toolkit).
3. **Re-assess** weekly and check for complications of bed rest, such as deep venous thrombosis/ pulmonary embolism, pneumonia, secondary pressure injuries, dehydration / malnutrition, contractures, deconditioning, muscle weakness, altered sleep patterns, psychological deterioration. Refer to Red Flags in the NSW ACI Spinal Cord Injury Pressure injury Toolkit for more information.



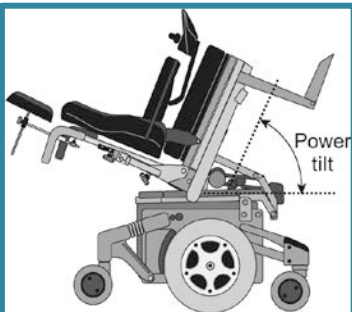


SCI Level and Completeness	Special Considerations	Pressure Injury Location(s)	Stage		
Position	Areas Offloaded *Visual inspection & palpation essential	Areas most vulnerable in this position	Precautions	Time Tolerated	Comments
30° Side-lying 	On side facing away from mattress <ul style="list-style-type: none">✓ IT (Sitting bone)✓ GT (Hip)✓ Ankle – outer✓ Scapula May reduce pressure on <ul style="list-style-type: none">✓ Coccyx✓ Sacrum	Side in contact with bed <ul style="list-style-type: none">× IT× GT× Ankle – outer× Scapula	<ul style="list-style-type: none">• Do not position directly on hip (GT) and shoulder• Place pillow or wedge behind back• Place pillow between legs and knees• Position feet to protect bony prominences and minimise risk of contracture.	<input type="checkbox"/> LYING ON RIGHT SIDE	
				<input type="checkbox"/> LYING ON LEFT SIDE	
Insert own photo		Insert own photo			

Position	Areas Offloaded *Visual inspection & palpation essential	Areas most vulnerable in this position	Precautions	Time Tolerated	Comments
Lying Face Down (Prone)  <p>Must consider: Respiratory function; Hip and knee flexibility; Neck stability /flexibility; Comfort; Ostomy sites on the abdomen; Bladder management; Pillow that keeps neck in a relatively neutral position and does not interfere with breathing.</p> <p>Consult specialist SCI services for more information.</p> <p>Whilst this is an ideal positioning for offloading pressure on the buttocks, it can be difficult for a person to sustain.</p>	<ul style="list-style-type: none"> ✓ ITs ✓ GTs ✓ Heels ✓ Ankle ✓ Scapula ✓ Coccyx ✓ Sacrum ✓ Spinous Processes ✓ Occiput 	<ul style="list-style-type: none"> × Pubic symphysis, genitals × Front of hip × Toes, feet × Knees × Elbows <p>Protect these areas with cushioning:</p> 	<ul style="list-style-type: none"> • Ensure respiratory function is not compromised • Continence aids such as stoma or IDC/SPC tubes are not obstructed or cause pressure. • Place pillow under the lower abdomen to prevent hyperextension. • Ensure sufficient pain-free range of motion of neck flexion and rotation to sustain a left- or right-rotated head position. 		
 <p><i>Insert own photo</i></p>		 <p><i>Insert own photo</i></p>			

Position	Areas Offloaded *Visual inspection & palpation essential	Areas most vulnerable in this position	Precautions	Time Tolerated	Comments
Lying Flat (Supine) Allows stretching out <div style="border: 1px solid black; height: 300px; width: 100%; display: flex; align-items: center; justify-content: center; margin-top: 20px;"> <i>Insert own photo</i> </div>	<p>It is possible that the ITs and GTs are not weight bearing in this position.</p> <p>They can be further offloaded by slightly flexing hips with a supporting wedge/pillow under the knees. However, this will increase pressure under sacrum and coccyx.</p>	<ul style="list-style-type: none"> × Coccyx × Sacrum × Heels × Scapulae × Elbows × Occiput 	<ul style="list-style-type: none"> • Avoid raising bed head more than 30°. • Ensure breathing is not compromised by lying flat. • Offload the heels and prevent plantar flexion contracture with a heel wedge and bed bolster or specialised pressure redistribution boot with optimal foam padding that can move with the person if they experience leg spasms. • Flexing hips and knees will increase pressure under sacrum and coccyx. 		
Repositioning and Transfers				Transfer Type	Technique & Equipment
<input type="checkbox"/> All techniques must be safe for the carer and minimise friction and shear to the person. <input type="checkbox"/> Eliminate or significantly reduce number of transfers <input type="checkbox"/> Transfers should be visually assessed to identify friction and shear <input type="checkbox"/> Consider use of hoist, additional assistance, slide sheets, slide boards and height adjustable bed.					

Prevent and monitor for complications of bed rest	
Complication	Prevention Strategy
Deep Venous Thrombosis (DVT)	<ul style="list-style-type: none"> Refer to General Practitioner or other treating medical specialist for prescription of anticoagulant medications and advice if the individual is to be immobilised or on bed-rest for a prolonged period of time, in accordance with current clinical practice guidelines.
Pulmonary Embolism (PE)	<ul style="list-style-type: none"> Treatment with anticoagulants for prophylaxis, as above. Monitor for the following signs: Chest pain on deep inspiration, shortness of breath, possible blood in sputum. Investigate with spiral CT or V/Q scan.
Pneumonia	<ul style="list-style-type: none"> Refer to physiotherapist for an individualised deep breathing exercise program that aims to clear and inflate lungs regularly and is based on how much difficulty a person has clearing secretions. Secretions need to be mobilised daily through assisted coughing, mechanical insufflator–exsufflator or glossopharyngeal breathing. Increase preventative strategies if signs of a cold, bronchitis or upper respiratory tract infection develop (Burns 2004).
Secondary pressure injuries	<ul style="list-style-type: none"> Ensure that the person and/or carers are able to perform regular skin checks of areas vulnerable to breakdown to prevent additional PIs. Plan for regular wound monitoring in place. Nutrition and hydration optimised. The mattress has been assessed and provides adequate pressure redistribution. A <i>Positioning Plan</i> is in place. Refer to Occupational Therapist. For more information, refer to Toolkit section: <i>Red Flag: Multiple Pressure Injuries</i>.
Dehydration and malnutrition	<ul style="list-style-type: none"> Refer to Dietitian for comprehensive assessment. Enhance meals and snacks by incorporating liquid or powder supplements and initiating vitamin and mineral supplementation as per Dietitian recommendations. For more information, refer to Toolkit sections: <i>Red Flag: Malnutrition</i> and <i>Assessment: Nutrition</i>.
Spasticity and contractures	<ul style="list-style-type: none"> Positioning aids used in bed to prevent contracture of upper and lower limbs (particularly the feet and ankles). Refer to Occupational Therapist. For more information, refer to Toolkit sections: <i>Assessment: SCI-specific factors and other medical conditions</i>.
Deconditioning /muscle weakness	<ul style="list-style-type: none"> Upper limb strengthening program provided. Refer to Physiotherapist
Lowered mood	<ul style="list-style-type: none"> Provide immediate social, practical and psychological support at the time bed rest is commenced. Implement a coordinated interdisciplinary pressure management plan to avoid prolonged bed rest. Refer to Social Worker and consider referral to Psychologist. For more information, refer to Toolkit sections: <i>Assessment: Psychological Disorders</i> and <i>Assessing the impact of PI</i>.

Sitting			
Wheelchair <ul style="list-style-type: none"> Consider ONLY when recommended by the interdisciplinary team. The wheelchair seating should be optimised and trialed with a Seating Therapist or Occupational Therapist and recommendations implemented. Pressure relieve by shifting weight and holding the position for 2 minutes every 15-20 minutes unless specified (see effective techniques opposite and trial strategies with Seating Therapist or Occupational Therapist). Sit for short periods for instance 30 minutes (no more than 2 hours) at one time unless recommended otherwise. If returning to seating, use a Gradual Return to Sitting Plan (provided in the NSW ACI Spinal Cord Injury Pressure injury Toolkit) with guidance from the appropriate health professional. 	Leaning to the side 	Leaning forward 	Tilt in space (to maximum angle) on power wheelchair 
Commode For wounds on ITs, GTs, sacrum and coccyx, regardless of the original cause: <ul style="list-style-type: none"> <input type="checkbox"/> Optimise bowel routine to minimise time sitting on commode/toilet seat (less than 30 minutes if possible) <input type="checkbox"/> Ensure commode seat provides optimal pressure redistribution (Consult an Occupational Therapist) <input type="checkbox"/> Visual assessment of person sitting on commode is essential to determine extent of risk <input type="checkbox"/> Consider additional assistance to minimise friction, shear and duration <input type="checkbox"/> Consider bowel care in bed 			Comments:
Sitting Schedule			
Clinician Name: Signature: Date:			

Information and images used with permission from Houghton PE, Campbell KE and CPG Panel (2013). Canadian Best Practice Guidelines for the Prevention and Management of Pressure Ulcers in People with Spinal Cord Injury. A resource handbook for Clinicians. Accessed at <http://www.onf.org>. Other references include: Burns, S. (2004) SCI Forum Reports: Common respiratory problems in SCI – what you need to know. Accessed at http://sci.washington.edu/info/forums/reports/common_respiratory.asp