

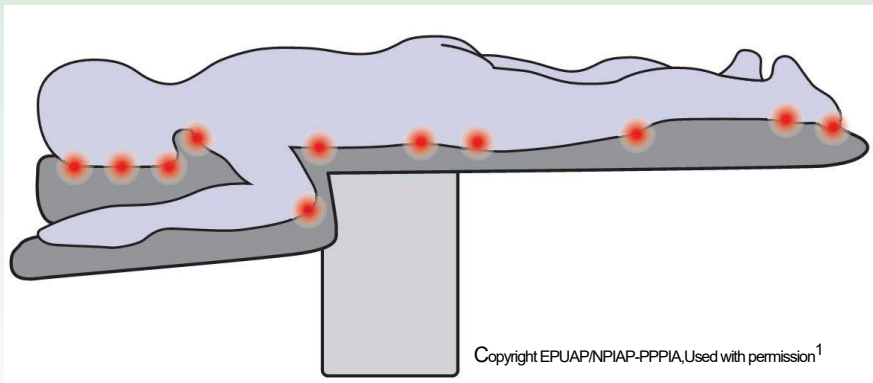
Pressure Injury Prevention - PIP Tips for Prone Positioning

General Tips:

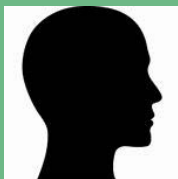
- Use a pressure redistribution surface (for those not on a bed specifically designed for proning)
- Follow manufacturer instructions when using beds and positioning devices specifically designed for proning.
- Positioning devices/pillows are needed to offload pressure points. Involve enough trained staff to avoid friction-shear.
- Microshifts and small position changes should be performed while proned, especially in non-rotating beds.
- Assess all pressure points :
 - Prior to proning (anterior surfaces)
 - Prior to returning to supine position (posterior surfaces)
 - When alternating arm position, assess integrity of skin of arm/head/face.
 - Document all skin assessments and preventive measures.

Pressure Points:

- Forehead
- Chin
- Cheeks
- Nose
- Clavicle - shoulder
- Elbow
- Chest - breasts
- Genitalia -penis
- Anterior pelvic bones (*iliac crests, ishium, symphysis pubis*)
- Knees - patella
- Dorsal feet and toes¹
- Under/around medical devices



Pay special attention to the following areas:



HEAD

- Apply soft silicone multi-layered foam prophylactic dressings to pressure points on face.
- Manage moisture: Suction oral secretions. Use liquid skin protectants/sealants on face. Change foam dressing pm. Apply hydrofiber/calcium alginate dressing under prophylactic dressing for excess moisture.
- Apply thin foam dressings under medical devices. Avoid multiple layers of dressings that increase pressure.
- Offload head with offloading device(s): Consider the density of foam, height of the cushion, angle of the face, and endotracheal tube (ETT) positioning when selecting an appropriate device.
- With manual proning, shift the patient's head at least every 2 hours and re-position the head every 4 hours.
- Note: commercially available ETT securement devices may contribute to increased skin breakdown in proned patients. Assess skin carefully. Consider tape to secure ETT during proning.
- Maintain eye care to prevent corneal abrasions. Apply ophthalmic lubricant. Tape eyelids shut horizontally.
- Ensure tongue is inside patient's mouth.



TORSO

- Place EKG leads on back while proning.
- Apply prophylactic foam dressings to pressure points.
- Ensure central lines, arterial lines and cannulas are secured (i.e. sutured).
- Empty ileostomy/colostomy pouches and pad around stoma site.
- If using gastric feedings, turn off tube feeding one (1) hour before prone position turn. They can be resumed once in prone position.
- Secure all tubes and devices away from skin; protect surrounding skin with prophylactic dressings and bridge area with positioning devices.
- Create channels for tubes with positioning aids. Ensure that there are no unsecured devices under the torso.



LEGS

- Apply prophylactic foam dressings to pressure points (e.g., patella and pretibial area).
- Remove securement device for urinary catheter. Align foley toward foot of bed.
- Ensure that there are no unsecured devices under legs. Elevate feet.

BREASTS & GENITALIA are particularly sensitive tissues that should be offloaded and protected.

Special considerations:

Acute Respiratory Distress Syndrome (including from COVID-19) and Proning

Rationale for Proning in ARDS

- Eight RCTs have demonstrated improved oxygenation and reduced mortality with prone positioning in moderate and severe ARDS.^{2,3}
- Prone positioning in ARDS enhances oxygenation by improving alveolar recruitment and ventilation-perfusion ratios while decreasing strain on lung tissue and the risk of ventilator injury.^{4,5}

Special considerations with ARDS

- Consider the potential impact of oxygenation deficits on the risk of pressure injuries. (Recommendation 1.9)¹
- Episodes of prone positioning usually last for 12 or more hours.³
- Make small shifts in body position and reposition head every 2 hours.
- Major complications of proning in ARDS include displacement of ET tube, pressure injuries and loss of venous access.²
- If proning in combination with ECMO, carefully secure and offload the ECMO cannula.

Beds and Positioning Devices Designed to Support Prone Positioning

Beds

- Proning can be done manually on a specialty support surface with high quality pressure redistribution and shear reduction features.
- Beds specifically designed for prone positioning combine prone positioning features and the ability to rotate the bed 40 to 62 degrees. The rotation feature facilitates drainage of pulmonary secretions and enhances ventilation-perfusion matching.
- Follow manufacturer instructions and training when using beds designed for proning.⁷ The rotation feature should not be used with unstable fractures, cervical or skeletal traction and uncontrolled intracranial pressure.

Positioning devices:

- Several devices are commercially available to support prone positioning. They are made of various materials designed to redistribute pressure and reduce shear. Devices include those specifically designed for the head and torso, as well as, cushions that can be molded to conform to the body.
- Follow manufacturer instructions and training recommendations when using positioning devices designed for prone positioning.

2019 International Pressure Injury Guideline Recommendations (Refer to full guideline for supporting evidence)

Repositioning Principles

- Reposition individual in such a way that optimal offloading of all bony prominences and maximum redistribution of pressure is achieved. (5.5)
- Use a soft silicone multi-layered foam dressing to protect the skin for individuals at risk of pressure injuries. (3.5)
- Do not use ring or donut-shaped positioning devices.
- Once positioned check for uneven distribution of pressure and positioning of medical devices if possible.
- Avoid extended use of prone positioning unless required for management of the individual's medical condition. (5.10)
- Reposition unstable critically ill individuals who can be repositioned using slow, gradual turns to allow time for stabilization of hemodynamic and oxygenation status. (5.17)
- Initiate frequent small shifts in body position for unstable critically ill individuals who are too unstable to maintain a regular repositioning schedule and to supplement regular repositioning. (5.18)

Medical Devices

- Regularly monitor the tension of medical device securements. (8.2)
- Assess the skin under and around medical devices. (8.3)
- Use a thin prophylactic dressing beneath a medical device. (8.5)
- Avoid multiple layers of dressings that increase pressure.
- Regularly rotate or reposition the device if possible. (8.4)
- Avoid positioning the individual directly onto medical devices.

Additional Educational Resources:

- An excellent educational program on prone positioning for ARDS can be found in the AACN Webinar Series.^{4,6}
- See this publication for a picture of facial prophylactic dressing placement techniques.⁷

Disclaimer: This document is intended for educational and informational purposes only. It does not constitute medical advice for individual patient(s). Follow institutional policies, manufacturer recommendations and principles of sound clinical judgment in addressing the needs of individual patients.

References



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