

COVID-19 Adult Proning Tool

Ver 1.0 4 April, 2020



Not a Substitute
For Clinical Judgement

Indications

- Known/suspected COVID-19
- Severe ARDS for a period of 12-24h
- PaO₂/FiO₂ ratio < 150
- Chest X-ray or Chest CT consistent with ARDS
- PEEP > 10 cm H₂O
- FiO₂ > 0.60

Contraindications

- Hemodynamic instability
- Patient weight greater than 150kg (330lbs)
- Unstable fractures, traction, unstable spine
- Intracranial pressure > 30 mmHg
- Massive hemoptysis
- Pregnancy
- Open abdomen (relative contraindication)
- Cardiac pacemaker inserted in the prior 2 days
- DVT treated for less than 2 days
- Tracheal surgery or sternotomy within 15 days

Risks

- Accidental extubation
- Mainstem intubation
- Disconnection or kinking of breathing circuit
- Dislodgement of CVCs or other lines
- Pressure ulcers
- Less effective chest compressions

Suggested duration of therapy

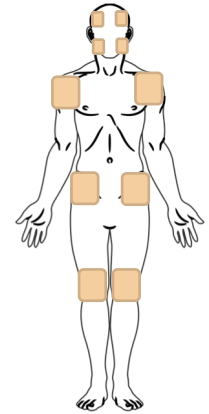
- 16 hours/day, turn patient then reassess

Required Supplies and Equipment

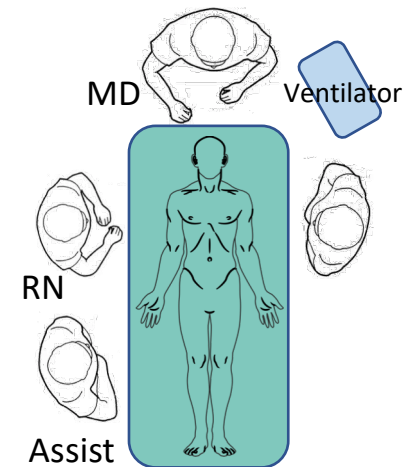
- Airway management equipment (outside of room)
- ECG Electrodes
- 2 Flat sheets
- 1 White pad
- 3-5 body pillows (# depends on patient size/shape)
- Eye protection (lube, tape)
- 1 Face pillow
- Endotracheal tube clamp

Pre-Turning checklist

- Ensure RASS -5
- Strongly consider paralysis
- Ensure **airway equipment and intubation personnel accessible**
- Ensure ETT **well secured with tape** & note depth
- Place on 100% FiO₂
- Remove Headboard
- Suction ETT and mouth
- Untangle and secure all lines/drains
- Assure sufficient length of lines for turn
- Disconnect all non-necessary tubing
- Place eye lubrication and protection
- Suction, disconnect, and cap NGT/OGT
- Empty Foley and place between legs
- Place chest tube drains between legs
- Remove patient clothing
- Place pressure dressing on pressure points
- Ensure bed is locked and max inflated
- Remove head pillow & place face pillow
- Ensure bed is set up with a fitted sheet and a regular sheet under patient



Suggested padding



Team Setup
Consider 5th assist
for patients > 100Kg

COVID-19 Adult Proning Tool

Ver 1.04 April, 2020



Not a Substitute
For Clinical Judgement

Proning Procedure

Patient will be rolled towards ventilator
MD at head of bed (airway manager) **directs all movements and controls the head and airway.

1. Tuck patients' hands under buttocks
2. Place pillow(s) over the patient's chest at the level of the clavicles and a second pillow(s), over the iliac crest (abdomen should be free), and 1 pillow over the shins.
3. Place sheet over the pillows
4. Use sheets to create "burrito" (twist roll on ventilator side towards the bed and the other side towards the ceiling). **Make it tight!**
5. Slide patient away from ventilator side
6. Roll patient to their side towards ventilator
7. Providers exchange the side of the sheets they are holding
8. Roll patient prone and center on bed
9. Position head turned towards ventilator initially – Absorbent pad for secretions
10. Ensure no pressure eyes, ear is not folded, minimize pressure points (**be innovative!**)
11. Ensure ETT is in safe position (e.g.; depth, US lung sliding)
12. Replace ECG leads and monitors
13. Ensure patient not laying on tubing or devices
14. Place arms in swimming position (head facing up arm)
15. Ensure ankles are not extended
16. Reverse Trendelenburg position (15-30°)
17. Rotate the bed 5-7 degrees laterally away from face direction
18. No pressure on genitals
19. Assess all pressure points and pad as needed

During Proning Maintenance

- Q 2-4-hour head movement to avoid prolonged facial pressure
- Q 2-4 hour alternation of arm position (swimmers' arms)
- Q 2-4 Switch bed's lateral rotation
- Q 2-4 Reassess pressure points

Indications for early cessation

Move patient to supine position if any of the following occur:

- Endotracheal tube leak or dislodgement
- Elevated peak airway pressures unresponsive to standard maneuvers
- Worsening hypoxemia
- New or worsening hypotension or arrhythmia
- Dysfunction or dislodgement of a central venous catheter
- Cardiac arrest (can initiate CPR prone)

Proning Reversal Procedure- Back to Supine

- *Patient will be rolled towards ventilator**
**Confirm Turning Checklist
MD at head of bed (airway manager) **directs all movements and controls the head and airway.
1. Cover patient with loose sheet on the back and form "burrito"
 2. Slide patient away from ventilator
 3. Roll patient over (providers exchange the side of the sheets they are holding)
 4. Slide patient to the center of the bed

