

Ventilator Guidelines for Spinal Cord Injury Patients

PURPOSE: This ventilator guideline is to be considered for:

- All complete C1-C5 spinal cord injuries
- Select partial cervical spinal cord injuries
- Select complete C6-T5 spinal cord injuries

Respiratory complications are the main cause for morbidity and mortality in the acute phases of care for acute spinal cord injury patients.

High cervical and complete injuries are more likely to lead to respiratory dysfunction.

This guideline was created as part of a multidisciplinary effort to prevent/resolve atelectasis and other respiratory complications and to potentially improve ventilator weaning in this population.

Exclude:

- Major chest wall and/or traumatic lung injury
- Acute lung injury (non-traumatic)
- Massive transfusion (>10U / 24hr)
- Sepsis
- Chronic lung disease (consult pulmonologist)

TIDAL VOLUME MANAGEMENT (Tv):

- Initial Tv setting of 8ml/kg
- Increase by 100ml q24hr to target of 12ml/kg
- Target 15ml/kg for recurrent atelectasis or plugging
- Higher volumes per surgical intensivist discretion
- Maintain plateau pressure = <30 cm H₂O
- PEEP goal 5-8 cm H₂O

SECRETION CLEARANCE:

- Cough assist q6hr for PEEP = <10
- If PEEP >10, deliver sigh breaths q6hr (1.5 x Tv, 10x)