

# Quality Bundles:

## VAP Reduction Bundle

### VAP REDUCTION BUNDLE

1. **HOB goal  $\geq 30$  degrees** or as high as tolerated if intubated or a tracheostomy tube is in place, except during temporary procedures (e.g., bed changes, line insertion) unless contraindicated\*

Continue to reposition frequently and balance HOB elevation with pressure injury prevention and sleep promotion. Bed should not be flat except for procedures.

2. **Maintain appropriate level of sedation:**

- ✓ Adjust sedation to target VAMAAS
- ✓ Q shift SWAP and attempt dose reduction of continuous sedatives unless contraindicated\*

3. **Daily SBT**

- ✓ Screen daily for SBT readiness and document screen results
- ✓ If screen is passed, conduct SBT daily\*

4. **Subglottic Secretion Drainage (SSD)**

- ✓ SSD for all patients with endotracheal tube
- ✓ If intubated without SSD, review during rounds re suitability for possible tube exchange

5. **Initiate safe enteral feeding within 24-48 hours** unless contraindicated\*

- ✓ Attempt small bowel placement for all feeding tubes
- ✓ Avoid nasal placement for gastric drainage tubes; remove and replace orally within 48 hrs unless contraindicated (e.g., esophageal/oral surgery or varices)

6. **Oral decontamination**

- ✓ Oral hygiene with teethbrushing per CCTC procedure
- ✓ Chlorhexidine oral rinse Q12H (unless contraindicated\*)

\* **See reverse for details**

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# VAP Reduction Bundle Details

1. **HOB Elevation:** Document HOB elevation in degrees in 24 Hour Flowsheet with each change in position.
  - HOB  $\geq 30$  degrees may be contraindicated or require modification in a number of situations, such as: unclear C-spines, open abdomen, hemodynamic instability, patient discomfort, skin breakdown, femoral lines, sleep disturbance or where alternate HOB elevation has been ordered. Patients should not be flat except for procedures.
  - Document HOB elevation in degrees. If HOB cannot be elevated, document the reason. For hemodynamic instability or patient discomfort, reassess Q 4H and position HOB at highest tolerated level.
  
2. **Sedation Assessment and Weaning:**
  - a) **Adjust analgesia and sedation to target VAMAAS and pain scores:** Chart VAMAAS or MAAS in 24 Hour Flowsheet, recording the “typical” score for the preceding hour.
    - Q shift for all patients
    - Q 4H and prn for patients receiving continuous sedation
    - Chart the VAMAAS on the MAR to explain reason for PRN sedation.
    - Q shift, document a DAR note under the heading “comfort”. Document overall assessment findings re pain, agitation, and delirium. Include treatments and response
  
  - b) **Screen Q shift and prn for sedation weaning readiness:**
    - Screen for sedation weaning readiness Q shift using Sedation Weaning Assessment Tool (SWAP) unless deep sedation (VAMAAS 0) is the target (e.g., acute brain injury, hypothermia protocol, neuromuscular blockers, open abdomen, etc).
    - If SWAP passed, initiate sedation weaning as per orders
    - If SWAP failed, review sedation plans during rounds
    - Document SWAP, weaning strategy and response
  
3. **Contraindications to SBT (reasons for screening failure):**
  - Underlying reason for ventilation has not been resolved (e.g., cardiogenic shock, acute brain injury, hypothermia protocol)
  - Use of deep sedation or paralytic agents (continuous or intermittent)
  - Inability to initiate spontaneous effort
  - Hemodynamic instability (including use of vasoactive infusions)
  - PaO<sub>2</sub>/FiO<sub>2</sub> ratio  $\leq 200$  on  $> 0.5$  FiO<sub>2</sub> or PEEP  $> 8$  or pH  $\leq 7.30$  \*
  - Medical order
  - **See SBT Screening:**  
[http://www.lhsc.on.ca/Health\\_Professionals/CCTC/protocols/SBT.pdf](http://www.lhsc.on.ca/Health_Professionals/CCTC/protocols/SBT.pdf)
  
4. **Contraindications to Subglottic Secretion Drainage (SSD):**
  - An SSD is not used if a patient requires a tube other than a standard endotracheal tube (e.g., blocker tube, armoured tube)
  
5. **Initiate enteral feeding within 24-48 hours:**
  - Contraindications must be documented in clinical record. Bundle compliance is confirmed if a contraindication is documented, or if feeding is started within 48 hrs of an order to initiate enteral feeding in a patient with prior contraindications.
  
6. **Oral decontamination with chlorhexidine and oral care with teeth/tongue brushing:**
  - Contraindications to teethbrushing includes adentulous or recent oral surgery. Document oral care in 24 Hour Flowsheet.
  - Contraindications to Chlorhexidine include allergy or medical order (e.g., following recent oral surgery).