Quality Bundles:
VAP Reduction Bundle

VAP REDUCTION BUNDLE

1. **HOB ≥ 30 degrees** if intubated or a tracheostomy tube is in place, except during temporary procedures (e.g., bed changes, line insertion) unless contraindicated*

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
   - 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 > 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.
   - If HOB < 30 degrees, the reason must be documented in the AI record. For hemodynamic instability or patient discomfort, reassess Q 4H and position HOB at highest tolerated level.

2. **Sedation Assessment and Weaning:**
   a) **Adj Fas analgesia and sedation to target VAMAAS:** 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 sedatives
      - 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, anxiety, 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)
   - PaO2/FiO2 ratio < 200 on > 0.5 FiO2 or PEEP > 8 or pH ≤ 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).

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