# Beth Israel Medical Center

**SEDATION & ANALGESIA PROTOCOL &
SEDATION VACATION GUIDELINES**

Protocol for use with mechanically ventilated patients ONLY.
Provider must order medications and titration as per protocol in PRISM and then MICU
Registered Nurse will follow protocol as outlined.

## Candidates, Goals & Agents

<table>
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<tr>
<th>Candidates:</th>
<th>IMPLEMENTATION</th>
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<th>Candidates:</th>
<th>Promote comfort</th>
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<tr>
<th>Candidates:</th>
<th>Support ventilatory synchrony, oxygenation and hemodynamic stability</th>
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<th>Goal:</th>
<th>Sedation &amp; Analgesia Scores of:</th>
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- **RICHMOND AGITATION SEDATION SCORE (RASS):**
  - between -2 (light sedation) to 0 (zero) [alert & calm]
- **PAIN SCORE** (numeric) of less than 4, or a Hopkins Behavioral Pain Scale of A (none) or B (mild)

The sedation protocol goal also is to avoid over sedation and delirium that can be associated with prolonged mechanical ventilation and poor outcomes

**Physician must order:**

Sedatives & analgesics: most often a combination of an analgesic and a sedative is prescribed.

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<tr>
<th>Ordered DAILY</th>
<th>IV bolus/loading doses: ordered in PRISM</th>
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- **Fentanyl bolus:** 50 mcg IVP q 5-10 minutes to maximum dose of 200 mcg
- **Versed bolus:** 2mg IVP q 5 to 10 minutes until desired sedation level achieved, or
- **Propofol bolus:** 0.5 mg/kg q 5 to 10 minutes until desired sedation level achieved, or
- **Precedex loading dose:** (if prescribed) 1 mcg/kg over 10 minutes. *Note loading dose can be omitted since it might cause hemodynamic compromise.

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<th>IV continuous infusions: ordered in PRISM</th>
<th>The Registered Nurse will:</th>
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- **Fentanyl:** continuous IV infusion of 50 to 200 mcg/hr.
- **Versed:** continuous IV infusion of 1 to 10 mg/hour, or
- **Propofol:** continuous IV infusion of 1 to 40 mg/hour, or
- **Precedex:** continuous IV infusion of 0.2 to 0.7 mcg/kg/hour (usual range) but can go up to 1.5 mcg/kg/hour

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<th>Sedation Vacation’ Candidates:</th>
<th>Assess all patients sedation and analgesia levels:</th>
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- **Upon initiation of mechanical ventilation**
- **Q 1 hour thereafter**

**Note:**

- **RASS lower than -2 should be avoided unless specifically prescribed or in patients whom ventilator dysynchrony leads to hemodynamic instability or high FiO₂ requirements.**
  - If the RASS is from -4 to -5 HOLD sedation and continue to monitor for 1 hour:
    1. then restart sedation at half the previous dose once the RASS is at -3.
    2. then continue monitoring and titrating until RASS is between -2 and 0 (zero).

- **Administer intermittent bolus doses of sedative or opioid at any point during continuous sedation or ‘sedation vacation’ if the patient becomes extremely agitated.
  - Agitation scores on the RASS are from + 1 (restless) to + 4 (combative)
  - Assess for presence of Delirium* especially if patient is on increasing or high doses of Versed, Propofol or Fentanyl.
  - *If present, an alternate or change in therapy may be required.

**Delirium:**

- Patient will demonstrate signs of:
  - Acute mental status changes or fluctuating course
  - Inattention
  - Disorganized thinking or altered level of consciousness

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<th>‘Sedation Vacation’</th>
<th>The Registered Nurse will:</th>
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1. **HOLD sedative and analgesics between 6 and 8 AM daily** [earlier for long acting drugs (e.g. Versed) and later for short acting (e.g. Propofol)] on all eligible mechanically ventilated patients
2. Document the ‘sedation vacation’ and the patients response, including q 1 hour RASS and pain scores

**Sedatives and opioids should be stopped until patient is awake and able to follow commands. Neurological and mental status assessments should be done and documented at that time**
3. Assess and document mental and neurological status and if patient is not a candidate for extubation, then restart
   a. Sedative at half the previous dose
   b. Opioid at same dose as initial order.

During ‘sedation vacation’ as the patient wakens they can be prone to unplanned (self) extubation. Wrist restraints (with app. order) may need to be applied to prevent the patient from removing the ET tube.