## Ventilator Management in School

<table>
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<th>STEPS/ACTIONS</th>
<th>RATIONALE</th>
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<td>Assess the tracheostomy site and ventilator function/student response when the student arrives at school and as needed through the school day.</td>
<td>Problems and complications will be detected more quickly.</td>
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<td>Ensure that the healthcare provider’s orders are in place and clear regarding dressing changes, site care requirements, suctioning, and oxygen administration or ventilation requirements.</td>
<td>Any hands-on procedures done in the school should have provider orders in place to direct that care.</td>
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| Assess ventilator and alarm settings compared with provider orders and assess student response to those settings:  
  • Assess oxygen saturation, heart rate, respiratory status, and blood pressure.  
  • Assess for increased or decreased bronchial breath sounds, localized dullness, increased breathing effort, tracheal deviation, and increased Peak Inspiratory Pressure (PIP) that may indicate atelectasis.  
  • Assess for decreasing blood pressure, changes in heart rate, increased capillary refill time, weak peripheral pulses, or decreased pulse pressure that may indicate cardiovascular depression.  
  • Assess ventilation: work of breathing (shallow, irregular, or agonal breathing); apnea, tachypnea, or dyspnea; intercostal, substernal, abdominal, or tracheal retractions; nasal flaring; pursed lipped breathing; central cyanosis; tripod positioning (leaning forward with hands on knees or on a supportive object).  
  • Assess for acutely increased PIP, acutely decreased oxygen saturation, acute changes in heart rate and vital signs, restlessness, agitation, panic, increased breathing effort, subcutaneous emphysema, acutely decreased or absent breath sounds, acute chest pain indicative of volutrauma (caused by overinflation and a tidal volume set too high), atelectotrauma (lung injury caused by repeated opening and closing of the alveoli), and barotrauma (caused by rapid or extreme changes in pressure). | Problems and complications can be detected more quickly. |
### STEPS/ACTIONS

- Auscultate for adventitious breath sounds.
- Observe for restlessness, agitation, confusion, lethargy, tachycardia, cardiac dysrhythmias, or change in blood pressure that may accompany inadequate ventilation.
- Observe ventilator tubing to prevent kinks or clamping.
- Suction the student’s airway as needed.
- Reposition the student every 2 hours and as needed.
- Communicate any signs of infection, inflammation, or complication to the family and the healthcare provider.
- Document all care and communication in the student health record.

### RATIONALE

- Remove secretions and potential mucous plugs.
- Promote adequate circulation and prevents skin breakdown. Enhance lung ventilation.
- Facilitate early intervention in the event of problems.
- Provide a complete record and facilitate continuity of care.