



# PEDIATRIC HOME MECHANICAL VENTILATORS



## Escambia County, Florida - ALS/BLS Medical Protocol

---

Home mechanical ventilators may be indicated for chronically ill children with abnormal respiratory drive, severe chronic lung disease, or severe neuromuscular weakness.

Some children require continuous mechanical ventilation, while others only require intermittent support during sleep or acute illness.

Home ventilators may either be volume limited or pressure limited. All are equipped with alarms.

Types of ventilator alarms:

1. **Low pressure or apnea** – may be caused by a loose or disconnected circuit or an air leak in the circuit or at the tracheostoma, resulting in inadequate ventilation.
2. **Low power** – caused by a depleted battery.
3. **High pressure** – can be caused by a plugged or obstructed airway or circuit tubing, by coughing, or by bronchospasm.
4. **Setting error** – is caused by ventilator settings outside the capacity of the equipment.
5. **Power switchover** – occurs when the unit switches from alternating-current power to the internal battery.

## Supportive Care

1. [Medical Supportive Care Protocol](#).
2. If ventilator-dependent child is in respiratory distress and the cause is not easily ascertained and corrected, remove the ventilator and provide assisted manual ventilations with a bag-valve device.
3. Consider need for other protocols (e.g. [Pediatric Respiratory Emergencies](#)).



Approved: 10/01/2011  
Version: 3.1

Page 1 of 2

Approved by:

  
Charles Neal, D.O. Medical Director



# PEDIATRIC HOME MECHANICAL VENTILATORS



Escambia County, Florida - ALS/BLS Medical Protocol

---

## ALS Level 1

None

## ALS Level 2 *(Physician Authorization Required)*

None



Approved: 10/01/2011  
Version: 3.1

Page 2 of 2

Approved by:

  
Charles Neal, D.O. Medical Director