Memorial EMS
Decatur Memorial EMS
Springfield Memorial EMS

Expanded Scope Tier 1
Device Assisted Interventions

Developed March 2025

Ventilator Assisted Transport of Patients

INDICATIONS:

1. Advanced airway in place > 24 hours prior via endotracheal intubation or established tracheostomy.
2. Must be either 8 years of age or older or 45 kg or more.
3. Patient transfer must be from licensed facility to licensed facility.

CONTRAINDICATIONS:

1. Any acute airway case
2. Clinical signs of pneumothorax
3. Compromised cardiopulmonary status.

PROCEDURE:

1. Verify endotracheal tube placement.
    a. If unable to verify via auscultation of equal breath sounds
        i. Visualize endotracheal tube placement.
        ii. Consider tension pneumothorax or hemothorax and treat accordingly.
        iii. Notify ordering physician for review of patient case (ABG, CXR, etc) prior to transport.
2. Attach ventilator to gas source.
3. Work with respiratory therapy at transferring hospital to set up transport ventilatory settings
4. Set mode (i.e. AC, PC, SIMV, PS). If mode is not available on your ventilator or unable to match patient settings on your ventilator, contact Medical Control
5. Set breaths per minute (BPM) to maintain desired minute ventilation. Maintain plateau pressure $\leq$ 30 cm H2O.
6. If volume mode or combination set Tidal Volume (Vt): 5-8 mL/Kg ideal body weight.
7. If Pressure mode set pressure support to reach desired tidal volume.
8. Set I:E ratio. The I:E ratio should be optimized along with total cycle time (TCT) to provide optimum mean airway pressure, lung filling, and minimizing air-trapping (auto-PEEP).
9. Set breaths per minute (BPM): Range is 8-26 BPM adjusted to achieve optimum total cycle time and maintain desired minute ventilation while maintaining plateau pressure $\leq$30 cm H20 and delta P $\leq$ 20 cm H20.
10. Set Tidal Volume (Vt): 8 ml/Kg of ideal body weight (IBW), while maintaining above plateau pressures and delta.
11. Set I:E ratio: The I:E ratio should be optimized along with total cycle time (TCT) to provide optimum mean airway pressure, lung filling, and minimizing air-trapping (auto-PEEP).
12. Verify ventilator is delivering oxygen adequately (look, listen, and feel) to the device.
13. Attach ventilator tubing to patient.

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14. Verify patient ventilatory status:
    a. Rise and fall of chest
    b. Equal breath sounds
    c. Capnography waveform
    d. Pulse oximetry
    e. Updated vital signs
15. Ventilatory flow sheets must be completed and attached to medical record.
16. A Bag valve mask must be maintained with the patient at all times.

NOTE:

- An Expanded Scope Paramedic after six months of experience at the Expanded Scope level or with MD written preapproval, can be credentialed for this patient interventions based on agency utilization of ventilator transport.

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Patient's Name: _____ Date: _____

Diagnosis: _____

Sending Facility: _____

Receiving Facility: _____

Transporting Agency: _____ ePCR#_____

Report Received From:_____

Paramedic:_____ Lic No._____

Ventilator Settings

Mode: Control _____ Assist/Control (AC) _____ SIMV _____ PCV _____

Pressure Support _____ CPAP _____ Bi PAP _____ IPAP/ EPAP_____

Other _____

Tidal Volume _____ Respiratory Rate _____ FIO2 _____ I E Ratio _____

Was a sedative agent used prior to transport? Yes _____ No _____

If yes, list agent _____

Was a paralytic agent used prior to transport? Yes _____ No _____

If yes, list agent _____

This tools is provided as a minimum standard for Agencies to utilize when completing their QA as required in the Aministrative Code. QA shall be maintained by the agency for the first year for all new providers (new to agency or to role) as well as new medications and interventions. Reports should be submitted to the EMS System quarterly

Thoracostomy Patient Transport

INDICATIONS:

1. Must be either 8 years of age or older or 45 kg or more.
2. Patient transfer must be from licensed facility to another licensed facility.

CONTRAINDICATIONS:

1. Heimlich Valve

PROCEDURE:

1. Verify chest tube is securely attached to patient's chest prior to any patient movement by
    a. Confirming sutures to the skin are intact.
    b. Occlusive dressing attached to thoracostomy site, or secure taping of the chest tube to the chest skin.
    c. Inspect tube for any possible occlusions.
2. Verify the device the tube is connected to for drainage.
    a. Pleur-Evac.
3. For a patient on a Pleur-Evac
    a. Suction will be maintained during transport as it was at the facility.
    b. Note fluid and blood levels in the drainage and water seal compartments.
    c. Pleur-Evac must be maintained at a level lower than the point of insertion on the patient.
4. Chest tubes should be inspected every 15 minutes during transport to insure proper working condition.
5. Consult current patient orders for best patient positioning.
6. If the chest tube is not functioning and a tension pneumothorax is suspected, perform a needle decompression of the affected side. (See *Needle Thoracentesis Procedure*.)