I. **POLICY**

It is the policy of the Respiratory Care Department to provide a non-invasive method of measuring the concentration of CO2 in exhaled gases continuously during mechanical ventilation.

**Indications:**

All intubated patients on conventional mechanical ventilation with the exception of the Neonatal Intensive Care Unit and patients on high frequency oscillatory ventilation.

II. **ACCOUNTABLE EXECUTIVE AND REVIEWER(S)**

A. Accountable Executive: Administrator on Call  
B. Department Responsible for Review: Respiratory Care Services  
C. Committee Responsible for Review: Critical Care Committee

III. **APPROVAL**

Approved by:

Scott Pettinichi MEd, RRT, NPS, AE-C  
Administration & Professional Development Director, Respiratory Care Services

Venket Shankar MD  
Division Chief & Medical Director of Respiratory Care Services

IV. **APPLICABILITY**

Respiratory Therapists at Children’s National Medical Center
V. **REVIEW OR REVISION DATE**

Original: January 2001  
Revised: April 2004  
Revised: January 2013  

VI. **REFERENCES**

411P, Intubation Assist Procedure
I. PROCEDURE

- Check for physicians order and identify patient
- Wash hands
- Choose appropriate size ETCO2 adapter
- Connect adapter between endotracheal tube and ventilator circuit
  1. Ensure sample line port is facing upward to prevent moisture from settling in sample line
- Insert sample line into CO2 module on ECG monitor
- Observe for a waveform on the ECG monitor
- Ensure hig and low alarms are set appropriately
- Ensure blood gas is obtained for initial correlation of ETCO2 and PaCO2

Documentation:

- Document in electronic medical record

II. REVIEW OR REVISION DATE

Original: January 2001
Revised: April 2004
Revised: January 2013

III. REFERENCES

411P, Intubation Assist Procedure