

UTMB RESPIRATORY CARE SERVICES <b>PROCEDURE - Analyzing FiO<sub>2</sub> on Delivery Systems</b>	Policy 7.3.29 Page 1 of 2
Analyzing FiO <sub>2</sub> on Delivery Systems  Formulated: 01/89	<b>Effective:</b> 2/02/95 <b>Revised:</b> 12/03/14

## Analyzing FiO<sub>2</sub> on Delivery Systems

<b>Purpose</b>	To standardize the practice of verification of FIO <sub>2</sub> on delivery systems without an integrated oxygen analyzer.
<b>Scope</b>	The Department of Respiratory Care Services verifies the concentration of oxygen delivered to patients by high flow oxygen delivery systems without an integrated oxygen analyzer.
<b>Audience</b>	Licensed Respiratory Care Practitioner in the department of Respiratory Care Services.
<b>Equipment</b>	<ul style="list-style-type: none"> <li>• O<sub>2</sub> analyzer which has been calibrated per manufacturers procedure</li> <li>• Analyzer adapter</li> <li>• 5" flex hose</li> <li>• Oxyhood, and Sensormedics Oscillator 3100A/B, EnVe transport ventilator</li> </ul>

### Procedure

Note: The following oxygen delivery systems are to be analyzed continuously when in use: oxyhoods, High Frequency Oscillators, and EnVe transport ventilators. The analyzer should be calibrated a minimum of once per day (night shift).

Step	Action
1	Verify patient's FiO <sub>2</sub> order and patient using two identifiers.
2	Wash hands per hospital policy and follow any isolation procedure indicated.
3	Introduce yourself and identify the patient.
4	Briefly explain the procedure and purpose to the patient.
5	Prior to placing the analyzer inline, perform a 2-point calibration, according to manufacturer's instruction.
6	Place the O <sub>2</sub> analyzer in the appropriate place within the delivery system. Keep the analyzer probe positioned so that condensation will not collect on it.
7	Reading should be within + 2% of order FIO <sub>2</sub> . <ul style="list-style-type: none"> <li>• If analyzed FIO<sub>2</sub> is not the same as ordered FIO<sub>2</sub>, adjust the device until the proper FIO<sub>2</sub> is reached.</li> </ul>

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## Procedure Continued

Step	Action
7	<ul style="list-style-type: none"> <li>If you are unable to reach the ordered FIO<sub>2</sub> by adjusting the device, remove the analyzer and recalibrate it.</li> <li>Document FiO<sub>2</sub> in Epic as part of the respiratory assessment.</li> </ul>
8	Document in EPIC as outlined in RCS Policy # 7.1.1.

## Infection Control

Follow procedures outlined in Healthcare Epidemiology Policies and Procedures #2.24; Respiratory Care Services.

<http://www.utmb.edu/policy/hcepidem/search/02-24.pdf>

## References

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Scanlan CL, Thalken RF; Medical Gas Therapy. In: Scanlan CL, Spearman CB, Sheldon RL, Eds. Egan's Fundamentals of Respiratory Care, Eighth Edition, Mosby; June 2, 2003

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