



EMS System for Metropolitan Oklahoma City and Tulsa 2025 Medical Control Board Treatment Protocols



Approved 9/04/24, Effective 1/15/25, replaces all prior versions

3G – PULSE OXIMETRY ADULT & PEDIATRIC

EMERGENCY MEDICAL RESPONDER
EMT
EMT-INTERMEDIATE 85
ADVANCED EMT
PARAMEDIC

Indications:

1. Medical General Assessment/General Supportive Care.
2. Trauma General Assessment/Trauma & Hypovolemic Shock Supportive Care.
3. Acute Dyspnea (Uncertain Etiology, Asthma, COPD, CHF, BRUE).
4. Cardiovascular Disorders (Chest Pain, Acute Coronary Syndrome, Dysrhythmias).
5. Neurologic Disorders/Altered Mental Status (Stroke, Seizure, Syncope).
6. Toxicologic/Poisonings (Altered Mental Status, Dyspnea).
7. Trauma (Head, Face, Neck, Chest Injuries).

Contraindications: None

Technique:

- A. Power on the pulse oximeter (may be included with monitor/defibrillator).
- B. Select an appropriate site for measurement.
 1. Best skin color on hand (or foot/ear if pediatric).
 2. Not distal to acute suspected orthopedic injuries.
- C. Place the infrared sensor on the patient.
- D. Read the pulse rate and oximetry reading (SpO₂).

Precautions:

- A. Pulse oximetry values may be inaccurate in hemodynamically compromised patients (shock), patients with peripheral vascular constriction, carbon monoxide poisonings/smoke inhalations, and any conditions that may cause methemoglobinemia or sulfhemoglobinemia. Always correlate the patient's clinical condition with SpO₂ readings.
- B. Trends prove more informative than a single measurement. At least two measurements should be performed and documented when using pulse oximetry. In the setting of artificial airway placement, pulse oximetry should be utilized continuously.