

7.08 PULSE OXIMETRY – *EMSAC February 2023*

INDICATION

- Any patient that presents with respiratory compromise
- Ambulance company's medical director must approve the use of the pulse oximeter by EMT's.

PROCEDURE

1. Ensure any nail polish is removed, if possible.
2. Place probe on finger. Pediatric finger wraps may be used on pediatrics.
3. Target O₂ saturation 94-95%. Supplement **Oxygen** via nasal cannula (2-6 L/min) for awake, oriented, stable patients without evidence of hypoperfusion or 100% high flow via nonrebreather mask (10-15 L/min) if indicated.

NOTES

- Some inhalational poisonings, such as carbon monoxide and hydrogen sulfide, may result in patients with normal oxygen saturation readings, but cellular hypoxia due to displacement of the oxygen molecule from the hemoglobin in red blood cells.
- Pulse oximetry may overestimate SpO₂ in patients with darker skin. Signs and symptoms of hypoxia should be considered to guide therapy.
- In all of the above cases, maximal **Oxygen** therapy should be delivered to the patient regardless of pulse oximeter reading if the patient has signs of respiratory compromise.