

OXYGEN

Classification: Elemental gas (room air contains 21% oxygen)

Actions:

1. Oxidizes glucose to provide cellular energy
2. Essential for normal aerobic metabolism

Indications:

1. Patients who have oxygen saturations $\geq 94\%$ without signs or symptoms of hypoxia or impending respiratory compromise should not receive O₂
2. When applying O₂ use the simplest method to maintain O₂ Sat $\geq 94\%$
3. Do not withhold O₂ if patient is in extremis

Contraindications: **No absolute contraindications exist in the field**

Administration:

Cannula: 2 to 6 L/min (25-40% concentration)
Mask: 10 to 15 L/min (50-60% concentration)
NRB Mask: 10 to 15 L/min (90-95% concentration)
BVM with reservoir: 15 L/min (40-90% concentration)
ET with BVM: 15 L/min (100% concentration)
Nebulizer: 10 L/min

Onset: 1-2 minutes

Duration: Up to 30 minutes

Notes:

- **Never use an oxygen-powered ventilation device with an ET tube or with pediatric patients.** This produces high pressure, which may result in a pneumothorax and/or gastric distension.
- Never withhold oxygen from a patient in respiratory distress. Use caution with COPD patients who have a chief complaint other than respiratory distress. In the COPD patient, hypoxic drive may be their stimulus to breathe. If respiratory depression occurs, support ventilations with 100% oxygen via BVM.