

OXYGEN

ACTION:

1. Increases arterial oxygen tension (SaO₂) and hemoglobin saturation

INDICATIONS: LOW CONCENTRATION (24 - 44%):

1. History of chronic obstructive pulmonary disease:
 - A. Emphysema or Chronic bronchitis
 - B. Asthma in adult
 - C. Heavy smoker (40 pack years or more)

INDICATIONS: HIGH CONCENTRATION (60 - ≈ 100%):

1. Shock
2. Smoke, carbon monoxide, or toxic gas inhalation
3. Head injury and other trauma
4. Pulmonary edema
5. Severe hypoxia (SaO₂ below 93%) from any cause
6. Child with respiratory distress, poor capillary refill or other indications of poor oxygenation (includes asthma)
7. Angina and myocardial infarction
8. Overdose
9. Unresponsive patient
10. Obstetric patients in active labor or with complications

CONTRAINDICATIONS:

1. None

PRECAUTIONS:

1. This guideline refers to spontaneously breathing and adequately ventilating patients only.
2. High concentration O₂ in some cases (emphysema and asthma) may depress respiratory drive; be prepared to assist ventilation, but don't allow patients to become severely hypoxic for fear of respiratory arrest.
3. Agitation or restlessness can be a sign of hypoxia.

ADVERSE REACTIONS/SIDE EFFECTS:

1. Nonhumidified oxygen can dry mucous membranes, but humidified O₂ is not indicated in the prehospital setting.

ADULT & PEDIATRIC ADMINISTRATION:

1. Deliver low concentrations via nasal cannula @ 1 - 6 lpm.
2. Deliver high concentrations via non-rebreather mask @ 10 - 15 lpm.
3. Attempt to obtain and document pulse oximetry readings before and during oxygen therapy.
4. Treatment for anxiety hyperventilation should be treated with reassurance and coaching to slow breathing. If the possibility of another underlying cause exists (i.e. pulmonary embolus, asthma, M.I.) then the patient should be treated with oxygen. DO NOT treat any patient by having them breathe into a paper bag or O₂ mask that is not supplied with O₂.
5. For pediatrics, use an appropriate sized mask or cannula.

SPECIAL NOTES:

1. May be administered by First Responder, Basic, Basic-IV or ALS personnel.
2. Keep oxygen away from heat or flames. Oxygen is an accelerant.

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