

DISEASE / PATHOLOGY

- Failure of gas exchange causing hypoxemia, hypercapnia, or both. It can develop quickly from lung, airway, neuromuscular, or CNS problems.
- Type 1 = oxygenation problem; Type 2 = ventilation problem with CO₂ retention.

RISK FACTORS

- Pneumonia, COPD/asthma exacerbation, PE, pulmonary edema, trauma, overdose, neuromuscular weakness.
- Post-op sedation, aspiration risk, sepsis, ARDS, obesity hypoventilation, high spinal cord injury.

SIGNS AND SYMPTOMS

- Dyspnea, tachypnea, accessory muscle use, cyanosis, agitation, confusion, fatigue.
- Late signs: bradypnea, decreasing LOC, silent chest, severe hypoxemia, rising CO₂, impending arrest.

DIAGNOSTIC TESTING

- ABG/VBG, pulse oximetry, CXR, ECG, labs, sputum/cultures if infection suspected.
- Watch PaO₂, PaCO₂, pH, work of breathing, and response to oxygen or ventilation.

TREATMENT

- ABCs: position upright, oxygen, airway support, suction, bronchodilators/diuretics/antibiotics as cause requires.
- Prepare for noninvasive ventilation or intubation if exhaustion, altered LOC, shock, or worsening gases.

PATIENT EDUCATION

- Teach inhaler/oxygen safety, early symptom reporting, smoking cessation, vaccines if appropriate.
- Seek urgent care for blue lips, confusion, severe dyspnea, chest pain, or SpO₂ below ordered goal.

ADDITIONAL NOTES:

- NCLEX: do not wait for cyanosis; restlessness and confusion may be early hypoxia.
- Priority question: airway and breathing come before comfort, teaching, or routine meds.