

DISEASE / PATHOLOGY

- Acute respiratory distress syndrome is severe inflammatory lung injury with noncardiogenic pulmonary edema and refractory hypoxemia.
- Alveolar-capillary damage causes fluid-filled alveoli, decreased compliance, shunting, and severe V/Q mismatch.

RISK FACTORS

- Sepsis, aspiration, pneumonia, trauma, burns, pancreatitis, massive transfusion, near drowning.
- Higher risk with shock, high oxygen/ventilator exposure, older age, alcohol use, and chronic illness.

SIGNS AND SYMPTOMS

- Rapid dyspnea, tachypnea, crackles, hypoxemia not corrected by simple oxygen.
- Ventilator cues: high pressures, low compliance, worsening PaO₂/FiO₂, agitation or fatigue.

DIAGNOSTIC TESTING

- CXR/CT with bilateral infiltrates, ABG, PaO₂/FiO₂ or SpO₂/FiO₂, rule out fluid overload/cardiogenic edema.
- Monitor plateau pressures, PEEP, lactate, cultures, hemodynamics, and organ dysfunction.

TREATMENT

- Lung-protective ventilation, PEEP, prone positioning when ordered, conservative fluids after shock corrected.
- Treat cause, prevent VAP, oral care, sedation safety, DVT prevention, nutrition, skin/pressure protection.

PATIENT EDUCATION

- Explain ventilator, proning, sedation, lines, and slow recovery to family.
- After ARDS: pulmonary rehab, energy conservation, follow-up for weakness, anxiety, and cognitive changes.

ADDITIONAL NOTES:

- NCLEX: ARDS hypoxemia often persists despite oxygen because alveoli are collapsed/fluid-filled.
- Priority: oxygenation plus preventing ventilator complications and pressure injuries during proning.