



Acute Respiratory Distress Syndrome COVID-19



Considerations:
COVID-19 produces a very rapid and severe condition of acute respiratory distress syndrome (ARDS)



ARDS is an inflammatory condition of the lung that is characterized by **hypoxia**, **decreasing pulmonary compliance** (“stiff lungs”), and **“ground glass” infiltrates on CXR or CT scan** secondary to flooding of the lung alveoli.

Patients with ARDS are best treated by careful attending to low tidal volumes, low inspiratory pressure, high peep mechanical ventilation.

L	How will they LOOK	
	<ul style="list-style-type: none"> • Severe Respiratory Distress • Restlessness • Fatigue 	<ul style="list-style-type: none"> • Unable to maintain O₂ sat above 93% • Tachypnea
A	ASSESSMENT	
	<ul style="list-style-type: none"> • Assess RR and use of accessory muscles • Hypoxia • Decreased mental status – confusion • Lethargy, combative 	<ul style="list-style-type: none"> • Complications include possible Deep Vein Thrombosis • Lung Sounds – crackles and eventually deteriorating sounds
T	TEST	
	<ul style="list-style-type: none"> • ABG-respiratory acidosis 	<ul style="list-style-type: none"> • Chest x-ray
T	TREATMENT	
	<ul style="list-style-type: none"> • Head of bed up • Heated High Flow Nasal Cannula 	<ul style="list-style-type: none"> • Noninvasive Positive Pressure Ventilation (monitor closely for failure) • Mechanical ventilation
	TREATMENT GOALS	
	<ul style="list-style-type: none"> • Ventilator/pulmonary consult is essential • Follow ARDSnet ventilation when possible: <ul style="list-style-type: none"> ◦ Goal Tidal Volume (Vt) is 4-6 mL/kg using ideal body weight (IBW) • Titrate to pH, not PCO₂ 	<ul style="list-style-type: none"> • RR may need to be set higher to accommodate for lower Vt (20-35 breaths/minute) • Goal pH 7.25-7.45 • Initiate proning early for severe ARDS • Goal plateau pressure, 30 cm H₂O • Goal FiO₂ < 75%
E	EDUCATION	
	<ul style="list-style-type: none"> • Keep family aware of condition 	<ul style="list-style-type: none"> • Education and explain to patient and family rationale of treatments