



<ul style="list-style-type: none">▪ Medical condition (heart attack, allergic reaction)▪ Other conditions (drowning, vomiting)▪ Anxiety, stress	
<ul style="list-style-type: none">• May be a chronic condition	
<ul style="list-style-type: none">▪ COPD▪ Asthma	
<p>Chronic Obstructive Pulmonary Disease (COPD)</p>	
<ul style="list-style-type: none">• Includes emphysema, chronic bronchitis, and black lung• Generally affects older patients• Affects patient continuously• Causes include cigarette smoking, chemical exposure, and pollution	
<p>COPD – Chronic Bronchitis</p>	
<ul style="list-style-type: none">• Inflammation of bronchiole lining• Produces excess mucus• Damage or destruction of cilia prevents removal of this mucus	
<p>COPD – Emphysema</p>	
<ul style="list-style-type: none">• Breakdown of alveoli walls• Reduces surface area for exchange of oxygen and carbon dioxide• Reduced elasticity of lungs	
<p>Asthma</p>	
<ul style="list-style-type: none">• Episodic disease• Narrowing of bronchioles & overproduction of mucus• Typically one directional, allowing air into lungs but	

<ul style="list-style-type: none"> • Able to speak in full sentences without stopping for breath • Skin color normal • Normal mental status • Evaluate rate, rhythm, and quality 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Respiratory Rate</p>	<hr/> <hr/>
<p>Normal Rates</p>	<hr/> <hr/>
<ul style="list-style-type: none"> • Adult 12-20/minute • Child 15-30/minute • Infant 25-50/minute 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Critical finding: very slow or very fast rates</p>	<hr/> <hr/> <hr/> <hr/>
<p>Respiratory Rhythm</p>	<hr/> <hr/>
<ul style="list-style-type: none"> • Usually regular • Breaths taken at regular intervals • Breaths last for approximately same length of time • May be influenced by talking, coughing, etc. 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Critical finding: irregular (not an absolute indicator)</p>	<hr/> <hr/> <hr/> <hr/>
<p>Respiratory Quality</p>	<hr/> <hr/>
<ul style="list-style-type: none"> • Measure by watching for equal chest rise • Measure by feeling chest wall for equal expansion during inspiration • Listen with stethoscope for abnormal noises 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Critical findings:</p>	<hr/> <hr/>
<ul style="list-style-type: none"> • Shallow or gasping 	<hr/> <hr/>

<p>of mucus. They are often heard in chronic bronchitis, emphysema, aspiration, and pneumonia.</p>	<hr/> <hr/> <hr/>
<p>Stridor</p>	<hr/>
<p>Stridor is usually caused by a blockage in the throat or larynx (voice box) and typically heard when the patient inhales.</p>	<hr/> <hr/> <hr/> <hr/>
<p>Treatment of Respiratory Emergencies</p>	<hr/> <hr/>
<p>Evaluate patient for need to <i>provide ventilation</i> or <i>supplement breathing</i></p>	<hr/> <hr/>
<p>General Treatment Considerations</p>	<hr/>
<ul style="list-style-type: none"> • Ensure open airway – jaw-thrust or head-tilt, chin-lift • Heimlich maneuver as needed • Insert oral/nasal airway as needed • Suction secretions and fluids as needed 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Providing Artificial Ventilation</p>	<hr/>
<p>Provided through (in order of preference):</p>	<hr/> <hr/>
<ul style="list-style-type: none"> • Pocket face mask with supplemental oxygen • 2 rescuer bag-valve-mask with supplemental oxygen • Flow-restricted, oxygen-powered ventilation device (FROPVD) • One rescuer bag-valve mask with supplemental oxygen 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Evaluating Artificial Ventilation</p>	<hr/>
<ul style="list-style-type: none"> • Ensure chest rise and fall 	<hr/>

<ul style="list-style-type: none"> • Rate of 12 breaths per minute for adults, 20 breaths per minute for children • Monitor for a return to normal pulse rate and improved skin color 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Supplemental Breathing</p> <ul style="list-style-type: none"> • Provided for patients with adequate respirations • Delivered through nonrebreather mask (12 to 15 liters per minute) or nasal cannula (2-6 liters per minute) • Carefully monitor to ensure that ventilations are adequate 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Positioning</p> <ul style="list-style-type: none"> • May significantly help patient with proper positioning • Patient may have placed themselves in “position of comfort” that allows best ability to breathe • If not, place patient in upright sitting position for best results 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Patient Interview</p> <ul style="list-style-type: none"> • Conduct after initiation of oxygen therapy • Use OPQRST and SAMPLE as guides for questions • If patient has difficulty breathing, use family/friends to help with answers <ul style="list-style-type: none"> ▪ O – Onset – when did it begin? ▪ P – Provocation – what were you doing when it began? 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

