DYSPNEA	COPD		Asthma	Status Asthmaticus	Pneumonia	Pulmonary Edema CHF	ARDS	Pleural Effusion
	Emphysema	Chronic Bronchitis						
Patho-physiology	Destruction and thickening of alveoli walls	Chronic secretion of **mucus** and thickened bronchiole walls	- **Exaggerated response to an irritant** - Generic susceptibility - Hx of asthma	- **Steroid-dependent asthma pt** - Hx respiratory failure - Rapid fluctuations in the severity of the previous attacks	**Infection** commonly caused by bacteria	- CHF - Pt has a chronic Hx of heart problems and HTN	Accumulation of **fluid** in the **lung** tissue - similar presentation to Pulmonary Edema - additional sings relate injury or disease	- Abnormal large collection **fluid** in **pleural cavity** - Compression of lung tissue causing dyspnea
	Hx of Lung problem							
Results	- **Narrowed bronchiole passages** - Chronic secretion of **mucus** - Less surface area for gas exchange in the alveoli - Thicker alveolar walls make gas exchange difficult. Alveoli become less elastic and cannot perform effective recoil **Meds** pt is on: - Bronchodilators - **Steroids**		- Widespread **brochoconstriction** - **mucus** secretion - Irritation of the bronchioles **Meds** pt is on: - Bronchodilators	Prolonged exacerbation (Increase in severity) that does NOT respond to conventional therapy; life-threatening	- Irritation of the respiratory system: -**Brochoconstriction** - ↑ **mucus** production - Decompensation may occur in pt w/later stages of COPD	Recent hx: - Orthopnea or Paroxysmal Nocturnal Dyspnea (PND) - Pt begins using extra pillows or recliner to sleep at night **Meds** pt is on: Digoxin, antiHTN, diuretics	Result major injury or disease: Burns, aspiration, hypothermia, high altitude sickness, cardiac arrest, pneumonia or inhalation injury. Damage to alveoli - Chemical burn to tissue - Fluid shifts wash away surfactant	Causes: - CHF - Inflammation (pulmonary embolus, high level of enzymes from other diseases: Pancreatitis, kidney failure, liver failure)
Signs	**Moderate** Chronic COPD: - Chronic Dyspnea - ↑RR (compensates for their inability to increase tidal volume) - Productive cough (bronchitis) **sputum** changes: - ↑productivity in the morning - Change color: BROWN - Lung sounds: - diminished, especially in the bases - rhonchi in upper lobes - wheezes **Severe** Chronic COPD: - Expiratory wheezes - HTN/CHF (late emphysema) - Some difficulty speaking (5-word sentences) - Low-dose O_2 therapy - ↑SOB w/any physical exertion		- High work of breathing w/low air movement - **Pursed-lip breathing** - Prolonged expiration phase - Expiratory Wheezes - Tachypnea - Tachycardia - Chest tightness - Sitting or learning forward - LOC - baseline and changes - #-word sentences: - changes - 1-3: severe impairment	- High work of breathing w/minimal air movement. - Wheezing inspiratory+expiratory - diminished or silent at the bases - Severe anxiety or lethargy - Cyanosis - **Pulsus paradoxus**	- Fever + chills (may not be as evident in the elderly) - Deep + productive cough - **Thick sputum** (color changes to yellow-green) - Pleuritic chest pain - ↓Air movement - Wheezes + Rhonchi - May have signs of dehydration	- **Sudden Onset** (typically at night) - Audible wheezes or crackles - May have very **high BP** - Anxiousness, restlessness likely - Lung sounds: -Wheezes (bcos breathing through fluids) - Crackles - or quiet - **Cough w/foamy sputum (white/pink)** - Acute wt. gain - Edema in legs	-↑RR and HR - Dyspnea - Lung sounds: - Crackles - Wheezes - May appear very ill	-↑RR and HR - Dyspnea - Pleuritic chest pain - Decreased breath sounds
Prehospital Tx	- Low-flow **O_2** if mild distress - **Combi-vent** (Albuterol + Atrovent) - **IV**:18-gauge as a standard - **Seated or semi-seated position** - ECG - Assess for pneumonia - Watch for sings of **decompensation**: - acute episodes of worsening dyspnea at rest - **pursed-lip breathing** - △LOC - 1-2 word sentences - focused on breathing or undistracted - accessory muscle use or retractions **COPD decompensation typically results from respiratory infections or acute complications from cardiac disease!!!** **Aggressive COPD management:** **- BVM just to chest rise** **- Medication will relieve the obstruction**		- **O_2** - **Combi-vent** - **IV** NS tko (fluid challenge if signs of dehydration) - **Position of comfort** - ECG **Note**: Focused Hx Always ask pt if in previous attacks: - hospitalization - intubation	- Call for ALS response - Support Ventilation: BVM w/ **O_2** 15 LPM - Support Respiration: - Adaptation of nebulizer to BVM - Epinephrine	- High Flow **O_2** - **Combi-vent** - **IV** w/isotonic fluids (↑infusion rate w/signs of dehydration) - **Position of comfort** (semi-seated for COPD + CHF pt)	- High Flow **O_2** - Nitroglycerine + Morphine + Lasix - BVM w/combitube - CPAD	- **O_2** - **IV** (restrict flow) - BVM use if presence of △LOC or shock - Transport to a facility capable of critical care - ICU	- **O_2** (depending on level of - hypoxia) - **IV** tko - Position of comfort