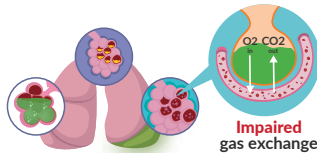


Respiratory Pneumonia

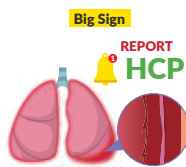
Pathophysiology

Infection that causes severe inflammation in the lungs which makes the alveoli to fill with mucus, fluid, & debris leading to **impaired gas exchange** where CO₂ can't get out & oxygen now can't get IN, resulting in hypoxia (low oxygen).



Signs & Symptoms

1. Altered Mental Status
Restlessness, Agitation, Confusion
2. **Fever** (Over 100.4 F / 38°C)
3. Productive cough **"Yellow Sputum"**
4. Fine or Coarse **Crackles**
5. **Dyspnea** "Shortness of Breath"
6. Pleuritic Chest pain
(**Pleural friction rub**) **Report to HCP**
"Sharp" chest pain upon inspiration or coughing



Critical Complications

1. Pleural Effusion **NCLEX TIP**

Fluid that fills the pleural space (space between the lung itself & the chest wall) This prevents full expansion of the lung, resulting in decreased gas exchange.

KEY SIGNS

1. D - During **inhalation** = Chest pain
2. D - Dyspnea
3. **D** - **Diminished** breath sounds
4. **D** - **Dull** resonance on percussion

Priority to report

- **Asymmetrical** Chest Expansion
- **Decreased** Breath sounds

2. ARDS (acute respiratory distress syndrome)

- Deadly STIFF lungs - ARDS - think **HARDS** hard stuff lungs

KEY SIGNS

Refractory Hypoxemia = Low PaO₂

MEMORY TRICK

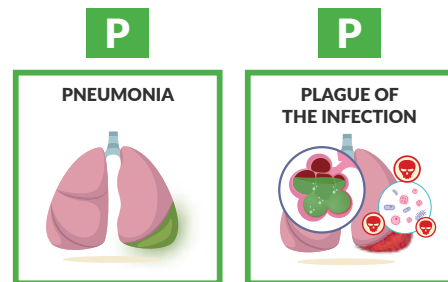
- **RE**sistant to Oxygen
- **RE**fractory Hypoxemia

#1 Sign of **Low O₂** = Altered Mental status

1. Confusion
2. Agitation
3. **Restlessness**



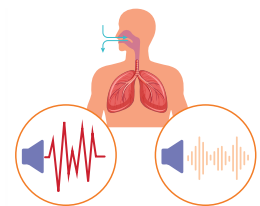
Memory Trick



KAPLAN

Pleural friction rub?

- **Grating** sound or **vibration** heard during inspiration and expiration



Common NCLEX Question

Priority Patient: who to see first?

- ✓ **Post-operative** patient with suspected **pneumonia** temp. of 98.2F, SpO₂ 94%
... **becoming restless & agitated.**

KEY TERM



3. Septic Shock

If the infection gets severe, the body releases chemicals into the bloodstream to fight the infection resulting in severe low blood pressure & total body inflammation which can damage multiple organs causing them to fail, known as MODS - multiple organ dysfunction syndrome.

Memory Trick:

- S** - Shock
- S** - Severely Low BP & perfusion

Key signs

- Hypotension **NCLEX TIP**
 - Systolic < **90** mm Hg
 - MAP < **65** mm Hg
- Cap refill over 3 - 4 seconds
- Tachycardia
- Early - Fever (Over 100.4)
- **Late - Hypothermia (Under 96.8)**
- Elevated WBC (norm: 10,000 or less)
- Decreased Urine Output
 - **30 ml/hr** or **Less** = Kidney Distress

