

Respiratory Class Preparation Day 2

Medication Review

1. Your client has recently started on montelukast (Singular) for allergic rhinitis. You know that it is important to monitor what for this client?
 - a. Renal function
 - b. Blood pressure
 - c. Liver function**
 - d. Heart rate
2. You should instruct a client using phenylephrine spray for nasal congestion to do which of the following to avoid rebound congestion?
 - a. Limit the drug's use to 3 to 5 days.**
 - b. Add an intranasal glucocorticoid.
 - c. Taper the dose before discontinuation.
 - d. Restrict the drug's use to one nostril at a time.
3. You anticipate that your client with a dry, hacking cough would be prescribed which of the following medications?
 - a. Fluticasone
 - b. Dextromethorphan**
 - c. Amoxicillin
 - d. Diphenhydramine
4. You educate your patient these are common side effects of diphenhydramine, a first-generation antihistamine:
 - a. Diarrhea
 - b. Insomnia
 - c. Dry mouth, constipation**
 - d. Rash
5. During assessment, the nurse notes that the patient with acute pharyngitis has a thick, white coating on their tongue. Which medication do they anticipate giving to treat?
 - a. Amphotericin B
 - b. Azithromycin
 - c. Prednisone
 - d. Nystatin**
6. List the four drugs that are considered the initial treatment regimen of choice for patients newly diagnosed with tuberculosis: **Isoniazid, Rifampin, Pyrazinamide, Ethambutol**
7. Prompt treatment with what medication is essential to resolving bacterial pneumonia?
 - a. Bronchodilator
 - b. Antipyretic
 - c. Corticosteroid
 - d. Antibiotic**
8. A client diagnosed with sinusitis is newly prescribed a steroid nasal spray. The nurse includes which of the following in their teaching?
 - a. Systemic side effects are common
 - b. Should be used on a regular basis, not PRN**
 - c. Use care operating machinery and driving
 - d. Take on empty stomach

☐☐ Homework Activity: “Mission: Lung Possible”

🔍 Objective:

By the end of this activity, students will be able to:

- Identify key lower respiratory disorders
 - Understand basic ventilation mechanics
 - Explain respiratory defense mechanisms
 - Apply correct isolation precautions for common infections
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☐ PART 1: Lung Locker – Diagnosis Decoder (5 minutes)

Match the correct **lower respiratory disorder** to the patient scenario below:

Scenario	Diagnosis Choices
A 68-year-old with productive cough, fever, crackles in lower lobes, lives in a care home. C Pneumonia	A. Emphysema
A college student with fever, night sweats, hemoptysis, lives in shared housing. D Tuberculosis	B. Pertussis
A smoker with chronic cough, barrel chest, and pursed-lip breathing. A Emphysema	C. Pneumonia
A Child with coughing fits and “whoop” sound B Pertussis	D. Tuberculosis (TB)

☐ **Your Mission:** Identify each disorder (A–D) and list one typical **sign/symptom** for each.

☐ PART 2: Infection Intel – Isolation Match-Up (5 minutes)

Match each respiratory disorder to its correct **isolation precaution**:

Condition	Precaution Options
Asthma D	A. Airborne
Tuberculosis A (TB)	B. Droplet
Influenza B	C. Droplet + Airborne (per local policy)
COVID-19 D	D. Standard (no isolation)

□ PART 3: Ventilation Vault – Mechanics Riddle (5 minutes)

Agent Alveolus needs help remembering how air moves in and out of the lungs! Fill in the blanks:

1. When the **diaphragm contracts**, it moves **downward** creating **negative** pressure in the thoracic cavity and drawing air in.
2. When the diaphragm relaxes, air is pushed out because the pressure becomes **positive**
3. The primary muscles of ventilation include the **diaphragm** and **external intercostals**.

□ Bonus:

What happens to ventilation if the diaphragm is paralyzed?

Ventilation would stop and would lead to respiratory failure.

PART 4: Defense System ID (5 minutes)

Match each **respiratory defense mechanism** with its function:

Defense Mechanism	Function
Cough Reflex C	A. Sweeps particles up toward throat to be swallowed or coughed out
Alveolar macrophages B	B. Engulf and digest microbes deep in the lungs
Nasal hairs & mucus D	C. Clears irritants and secretions from upper airways
Mucociliary escalator A	D. Trap large particles before they reach the lungs

□ **Final Mission:** Choose one defense mechanism and explain how it could be impaired in a smoker.

Mucociliary escalator would be impaired in a smoker because the cilia would be destroyed from the cigarette smoke. Over time the hair-like cilia would be wiped away and there would be no mechanisms to “move” the particles up and out of the upper respiratory tract.

