

Pharmacology

Pharmacy Department

4th Grade

Drugs for  
Disorders of the  
Respiratory System

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## OVERVIEW:

- **Asthma, chronic obstructive pulmonary disease (COPD), and allergic rhinitis** are commonly encountered respiratory disorders. Each of these conditions may be associated with a troublesome **cough**, which may be the only presenting complaint.
- **Asthma is a chronic disease characterized by hyperresponsive airways**, affecting over 25 million patients in the United States, and resulting in 2 million emergency room visits and 500,000 hospitalizations annually.
- More than 12 million Americans have been diagnosed with **COPD**, and it is **currently the fourth leading cause of death in the world**.
- **Allergic rhinitis** characterized by **itchy, watery eyes, runny nose, and a nonproductive cough** that can significantly decrease quality of life.
- Each of these respiratory conditions may be managed with a combination of lifestyle changes and medications.
- Drugs used to treat respiratory conditions can be **delivered topically to the nasal mucosa, inhaled into the lungs, or given orally or parenterally for systemic absorption**. **Local delivery methods, such as nasal sprays or inhalers, are preferred to target affected tissues while minimizing systemic side effects.**

- **B. Benzonatate:**

- Unlike the opioids, ***benzonatate* suppresses the cough reflex through peripheral action. It anesthetizes the stretch receptors located in the respiratory passages, lungs, and pleura.**
- **Side effects include dizziness, numbness of the tongue, mouth, and throat.** These localized side effects may be particularly problematic if the capsules are broken or chewed and the medication comes in direct contact with the oral mucosa.

Thank  
you!