# Lippincott Respiratory Problems Practice Exam (Sample)

## Study Guide


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# Questions

**1. Which nursing intervention would help minimize respiratory distress in a patient with cystic fibrosis?**

**A. Increasing fluid intake.**

**B. Encouraging frequent handwashing.**

**C. Administering bronchodilators.**

**D. Providing chest physiotherapy.**

**2. What is the proper technique for parents performing back slaps on an infant?**

**A. Using the palm of the hand**

**B. Using the heel of the hand**

**C. Using fingertips**

**D. Using the entire hand**

**3. What is an expected chest finding in a patient with emphysema?**

**A. Decreased breath sounds**

**B. Cyanosis of lips and fingers**

**C. Normal respiratory rate**

**D. Increased tactile fremitus**

**4. What symptom indicates that a child may be experiencing epiglottitis and requires emergent intervention?**

**A. Fever and cough**

**B. Muffled voice and drooling**

**C. Barky cough with retractions**

**D. Hoarse cough and restlessness**

**5. What is a typical symptom of asthma exacerbated by histamine?**

**A. Decreased blood pressure**

**B. Increased appetite**

**C. Wheezing**

**D. Improved breathing**

**6. What instruction should the nurse include in the discharge plan after a tympanostomy tube insertion?**

**A. Insert ear plugs during bathing**

**B. Blow the nose forcibly during a cold**

**C. Administer antibiotics continuously**

**D. Disregard drainage after one week**

**7. What is a common diagnostic tool used to evaluate lung function?**

**A. X-ray**

**B. Pulse oximetry**

**C. Pulmonary function test**

**D. Nebulization**

**8. What is one primary benefit of pulmonary rehabilitation for patients with COPD?**

**A. Increased medication usage**

**B. Improves exercise capacity**

**C. Reduces risk of lung cancer**

**D. Enhances sleep quality**

**9. Which food should parents be cautious with regarding potential aspiration in toddlers?**

**A. Crackers**

**B. Raw vegetables**

**C. Round candy**

**D. Popcorn**

**10. Which symptom is commonly seen in someone experiencing a severe asthma attack?**

**A. Prolonged cough**

**B. Chest discomfort**

**C. Difficulty speaking full sentences**

**D. Fatigue**

# Answers

**1. D**
**2. B**
**3. A**
**4. B**
**5. C**
**6. A**
**7. C**
**8. B**
**9. D**
**10. C**

# Explanations

## 1. Which nursing intervention would help minimize respiratory distress in a patient with cystic fibrosis?

**A. Increasing fluid intake.**

**B. Encouraging frequent handwashing.**

**C. Administering bronchodilators.**

**D. Providing chest physiotherapy.**

**Providing chest physiotherapy is a critical nursing intervention for minimizing respiratory distress in a patient with cystic fibrosis. This technique helps to clear mucus from the airways, which is essential for patients with this condition, as they tend to have thick, sticky mucus that can obstruct airflow and lead to respiratory infections. By using chest physiotherapy, the nurse can help patients improve their lung function, enhance their ability to breathe, and reduce the risk of developing complications associated with retained secretions. Chest physiotherapy typically includes techniques such as percussion, vibration, and postural drainage, all designed to mobilize and facilitate the clearance of secretions from the lungs. These interventions can lead to improved ventilation, reduced work of breathing, and a decrease in exacerbations of respiratory issues, which are common in individuals with cystic fibrosis. Overall, this intervention is particularly effective in supporting respiratory health in these patients, aligning with their needs for ongoing pulmonary care.**

## 2. What is the proper technique for parents performing back slaps on an infant?

**A. Using the palm of the hand**

**B. Using the heel of the hand**

**C. Using fingertips**

**D. Using the entire hand**

**The proper technique for performing back slaps on an infant is to use the heel of the hand. This method is advocated because the heel of the hand can effectively deliver the necessary force to help dislodge an obstruction in the airway without risking injury to the delicate structure of an infant's back. The heel is wider and flatter, which helps distribute the force more evenly and reduces the risk of causing harm compared to using other parts of the hand, like the palm or fingertips. Using the heel of the hand allows for controlled and effective thrusts that are essential in cases of choking. Additionally, this technique helps ensure that the pressure applied is firm enough to be effective, while still being gentle enough to prevent trauma to the infant's fragile body. Understanding this technique is vital for parents and caregivers to respond appropriately to emergencies involving choking.**

## 3. What is an expected chest finding in a patient with emphysema?

**A. Decreased breath sounds**

**B. Cyanosis of lips and fingers**

**C. Normal respiratory rate**

**D. Increased tactile fremitus**

**In patients with emphysema, the destruction of the alveolar walls leads to larger air spaces and reduces the surface area available for gas exchange. This air trapping results in hyperinflation of the lungs, which can create decreased airflow during auscultation. Consequently, decreased breath sounds are commonly noted upon examination. In cases of hyperinflation, the lung volumes increase, and as a result, the normal acoustic transmission of breath sounds diminishes, leading to this expected finding. Cyanosis of lips and fingers, while it may occur in advanced emphysema due to hypoxemia, is not an expected or primary finding. A normal respiratory rate is also not characteristic since patients with emphysema often present with increased respiratory effort and rate due to airway obstruction. Increased tactile fremitus would indicate conditions associated with lung consolidation (like pneumonia), which is not relevant in emphysema where air-filled spaces are prominent. Thus, decreased breath sounds are an expected and characteristic finding in patients with emphysema.**

## 4. What symptom indicates that a child may be experiencing epiglottitis and requires emergent intervention?

**A. Fever and cough**

**B. Muffled voice and drooling**

**C. Barky cough with retractions**

**D. Hoarse cough and restlessness**

**A child experiencing epiglottitis often presents with specific symptoms that indicate swelling of the epiglottis, which can rapidly compromise the airway. The combination of a muffled voice and drooling is particularly characteristic of this condition. The muffled voice, sometimes referred to as "hot potato voice," occurs because the child may be unable to speak clearly due to the discomfort and swelling in the throat. Additionally, drooling is common because the child may have difficulty swallowing; they often prefer to keep their mouth open and may avoid swallowing saliva due to pain or discomfort. Given the potential for airway obstruction, these signs—muffled voice and drooling—signal the need for immediate medical attention to ensure the child's airway remains open and is not compromised. Other symptoms commonly seen in various respiratory conditions often present differently or may not indicate the same level of urgency as those seen in epiglottitis.**

## 5. What is a typical symptom of asthma exacerbated by histamine?

**A. Decreased blood pressure**

**B. Increased appetite**

**C. Wheezing**

**D. Improved breathing**

**Wheezing is a hallmark symptom associated with asthma, particularly during an exacerbation. In asthma, histamine plays a crucial role as a mediator of inflammation and bronchoconstriction. When histamine is released in the lungs, it causes the smooth muscles around the airways to constrict, leading to narrowing of the air passages. This constriction, along with increased mucus production and airway swelling, culminates in the characteristic wheezing sound during breathing. Wheezing indicates that the airways are partially obstructed, making it more challenging for air to move in and out of the lungs. This symptom is often assessed during an asthma attack and is a crucial sign that an individual is experiencing significant respiratory distress. Understanding wheezing as a symptom recognizes its association with the underlying pathophysiology of asthma exacerbation, where inflammation and bronchial hyperreactivity are exacerbated.**

## 6. What instruction should the nurse include in the discharge plan after a tympanostomy tube insertion?

**A. Insert ear plugs during bathing**

**B. Blow the nose forcibly during a cold**

**C. Administer antibiotics continuously**

**D. Disregard drainage after one week**

**Instructing the patient to use ear plugs during bathing is vital after a tympanostomy tube insertion. This guideline helps to prevent water from entering the ear canal, which can lead to infections or complications since the tympanostomy tube creates a direct passage from the external ear to the middle ear. Keeping water out of the ear is essential during healing and provides a protective measure for the newly placed tube, ensuring it functions effectively in equalizing pressure and draining fluid. The other options present potential risks or do not align with best practices for post-surgery care after tympanostomy tube insertion. For instance, forcing the nose can increase pressure in the middle ear and disrupt the function of the tube. Continuous antibiotic administration is not generally required unless there is an active infection, and drainage should be monitored as it may still be normal in the post-operative period rather than disregarded.**

## 7. What is a common diagnostic tool used to evaluate lung function?

**A. X-ray**

**B. Pulse oximetry**

**C. Pulmonary function test**

**D. Nebulization**

**A pulmonary function test is a common diagnostic tool utilized to assess lung function by measuring the volume and flow of air in and out of the lungs. This comprehensive evaluation helps in identifying any impairments in lung capacity and airflow, which can be indicative of various respiratory conditions, such as asthma, chronic obstructive pulmonary disease (COPD), and restrictive lung disease. The tests typically include spirometry, which specifically measures how much air a person can inhale and exhale, and how quickly they can do so. These parameters provide critical data that can assist healthcare professionals in diagnosing and managing respiratory conditions effectively. Additionally, pulmonary function tests can help monitor the progression of lung disease and the effectiveness of treatment plans, making them invaluable in respiratory care.**

## 8. What is one primary benefit of pulmonary rehabilitation for patients with COPD?

**A. Increased medication usage**

**B. Improves exercise capacity**

**C. Reduces risk of lung cancer**

**D. Enhances sleep quality**

**Pulmonary rehabilitation is essential for patients with chronic obstructive pulmonary disease (COPD) as it primarily focuses on improving their physical fitness and overall well-being. One of the key benefits of this rehabilitation program is that it significantly improves exercise capacity. Patients with COPD often experience shortness of breath and fatigue, which can severely limit their ability to engage in physical activity. Through structured exercise training, education, and support, pulmonary rehabilitation helps patients to increase their stamina, strength, and overall endurance. This not only enhances their physical capabilities but also allows individuals to partake in daily activities with greater ease and confidence. While other options mentioned may have relevancy in some contexts, they do not encapsulate the primary objective and advantage of pulmonary rehabilitation as thoroughly as improved exercise capacity. This improvement in exercise capacity leads to better quality of life, reduced symptoms of COPD, and an overall enhancement of functional abilities in patients, making it a fundamental aspect of managing this chronic condition.**

## 9. Which food should parents be cautious with regarding potential aspiration in toddlers?

**A. Crackers**

**B. Raw vegetables**

**C. Round candy**

**D. Popcorn**

**Popcorn is particularly concerning in terms of aspiration risk for toddlers due to its shape, texture, and size. The irregular, hard pieces can be difficult for young children to chew and swallow properly. Additionally, the light and airy composition of popcorn may easily lead to choking when not chewed well, creating a risk of obstruction in the airway. When considering food safety for toddlers, it's vital to focus on items that can easily become lodged in the throat or that require more chewing than a toddler might be capable of. Foods like round candy and hard nuts can also pose risks, but popcorn is especially problematic because the pieces can be small and irregularly shaped, making them harder to swallow safely. In contrast, while crackers and raw vegetables can also present choking hazards if not prepared appropriately for a toddler's developmental stage, they are generally easier for young children to chew and swallow compared to popcorn. Thus, popcorn stands out as a food that parents should be particularly cautious about when it comes to preventing aspiration in toddlers.**

## 10. Which symptom is commonly seen in someone experiencing a severe asthma attack?

**A. Prolonged cough**

**B. Chest discomfort**

**C. Difficulty speaking full sentences**

**D. Fatigue**

**During a severe asthma attack, the hallmark symptom that is commonly observed is difficulty speaking full sentences. This occurs due to the significant narrowing of the airways, which restricts airflow and can lead to shortness of breath. As a result, individuals may find it challenging to take in enough air to complete a thought or express themselves verbally, often resorting to single words or short phrases instead. While prolonged cough, chest discomfort, and fatigue can also be present in asthma attacks, they are not as indicative of the severity of an attack as the ability to speak in full sentences. When a person struggles to communicate due to breathlessness, it is a critical sign that their condition is worsening and requires immediate medical attention. This symptom reflects an urgent need for treatment, as it signifies that the individual's respiratory function is severely compromised.**