

1

Asthma

Patient name: _____

Admission: _____

NRS
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I. The client/caregiver has a basic understanding of anatomy and physiology of the lung and respiratory systems.

- A. The lungs are two sac-like organs located in the chest cavity.
- B. The main windpipe (trachea) breaks into right and left bronchi and then connects to each lung.
- C. The bronchi are further divided into smaller branches called bronchioles.

II. The client/caregiver can define asthma.

- A. It is a chronic respiratory disorder with irritation and constriction of bronchi and bronchioles.
- B. Bronchospasms occur with wheezing, shortness of breath, and increased mucus production.
- C. Episodes may last a few minutes to hours and may be relieved with medication or spontaneously.
- D. Asthma can range from mild to severe. Some have a chronic set of symptoms: coughing and wheezing with intermittent more severe asthma "attacks."

III. The client/caregiver can list factors that may precipitate an attack of asthma.

- A. Allergens, such as pollens, animal dander, or mold
- B. Cockroaches and dust mites
- C. Air pollution and irritants
- D. Smoke
- E. Strong odors or scented products or chemicals
- F. Respiratory infections and/or sinusitis
- G. Physical exercise
- H. Strong emotions and stress
- I. Cold air
- J. Certain medications
- K. Preservatives and chemicals added to perishable foods
- L. Gastroesophageal reflux disease (GERD)

NRS
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IV. The client/caregiver can recognize warning signs and symptoms.

- A. Wheezing
- B. Coughing
- C. Shortness of breath
- D. Chest tightness or pain
- E. Disturbed sleep caused by shortness of breath, coughing, or wheezing
- F. Increased need to use bronchodilators
- G. Changes in lung function as measured by a peak flow meter
- H. Children often present with
 - Audible wheezing or whistling sound when exhaling
 - Frequent coughing spasms

V. The client/caregiver can list measures to manage asthma.

- A. Identify and avoid precipitating factors and warning signs.
- B. Take long-term medications that are ordered to control chronic symptoms and prevent attacks.
- C. Quick relief medications are ordered for rapid, short-term relief of symptoms.
- D. Other medications are ordered to decrease sensitivity to allergens and prevent reaction to the allergens.
- E. Be careful to keep extra medication on hand. Keep emergency medication available with you in case of asthma attack.
- F. Avoid aspirin and over-the-counter drugs that contain aspirin.
- G. Prevent upper-respiratory infections:
 1. Avoid exposure to persons with respiratory infections.
 2. Avoid crowds and poorly ventilated areas.
 3. Obtain immunization against influenza and pneumonia.
 4. Report early signs of infection (i.e., increased cough, shortness of breath, fever, and chills).

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NRS
DATE INITIAL

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- H. Eat a well-balanced diet.
- I. Drink 2 to 3 quarts of fluid each day to liquefy secretions.
- J. Use stress-management techniques.
- K. Exercise daily, avoiding overexertion. Avoid exercise in cold temperatures.
- L. Obtain allergy shots as recommended.
- M. Environmental measures are
 - 1. Use air conditioner.
 - 2. Close windows during pollen season.
 - 3. Use dust-proof covers for bedding. Avoid carpets. Use washable curtains.
 - 4. Use dehumidifier if needed to maintain optimal humidity. Change water daily.
 - 5. Keep air conditioner and furnace serviced and clean.
 - 6. Reduce pet dander by avoiding pets with fur or feathers.
 - 7. Clean home regularly. Wear a mask if doing the cleaning yourself.
 - 8. Limit use of contact lenses when pollen count is high.
 - 9. Control heartburn and GERD to prevent complications.
- 10. Monitor pollen counts in newspapers, Internet, or radio/television reports.
- 11. Avoid smoking or being around smoke.
- N. Keep follow-up appointments with physician and laboratory.
- O. Wear Medic Alert bracelet.
- P. For children, communicate the child's condition and treatment plan with school personnel, coaches, and so forth.

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- VI. The client/caregiver can list possible complications.**
- A. Status asthmaticus (prolonged symptoms of asthma)
 - B. Pneumonia
 - C. Respiratory arrest
 - D. Emphysema
 - E. Bronchitis
 - F. Right-sided heart failure

RESOURCES

Support groups
 American Lung Association
www.lungusa.org
 American Academy of Allergy, Asthma, and Immunology
www.aaaai.org
 The following two organizations are part of National Institutes of Health:
 National Heart, Lung, and Blood Institute
www.nhlbi.nih.gov
 National Institute of Allergy and Infectious Diseases
www.niaid.nih.gov

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