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### **Asthma**

NRS DATE INITIAL

Patient name:			
NI		<u> </u>	
DATE INIT		The client/caregiver has a basic understanding of anatomy and physiology of the lung and respiratory systems.	
		<ul><li>A. The lungs are two sac-like organs located in the chest cavity.</li><li>B. The main windpipe (trachea) breaks into right and left bronchi and then connects to</li></ul>	
		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	
		<ul><li>B. Cockroaches and dust mites</li><li>C. Air pollution and irritants</li><li>D. Smoke</li></ul>	
		E. Strong odors or scented products or chemicals	
		F. Respiratory infections and/or sinusitis G. Physical exercise H. Strong amotions and stress	
		<ul><li>H. Strong emotions and stress</li><li>I. Cold air</li><li>I. Certain medications</li></ul>	
		K. Preservatives and chemicals added to perishable foods	

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

A. Wheezing

Admission:

- 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).

(Continued)

L. Gastroesophageal reflux disease (GERD)

Part II

- 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.



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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