

ASTHMA (REACTIVE AIRWAY DISEASE; RAD)

Asthma, also called reactive airway disease (RAD), is a reaction affecting the muscles of the air passages, causing them to narrow and make breathing difficult. This narrowing is called *bronchoconstriction*. In addition to the spasm of muscles that narrows the airways, there is also swelling of the mucus membranes and the build-up of thick mucus in the air passages, which can cause blockage. An asthma attack can be brought on by one of many *triggers*. It varies for different people but common triggers include pollens, dust, animal dander, molds, feathers, emotional upset, exercise, extremes of humidity, cold air, air pollution, cigarette or other smoke, certain food additives and some medications. In very young children, asthma is most often triggered by a viral infection. Asthma may only flare up during a certain pollen season or only with exercise. Children with asthma may have other allergies also. Asthma is not a contagious disease.

Symptoms *may* include:

- *Wheezing* (a high-pitched sound made when breathing out)
- Tight feeling in the chest, difficulty breathing, or attacks of coughing, especially at night
- Attacks that may last anywhere from a few minutes to a few days
- There is normally no fever

What *your doctor* can do:

- Diagnose asthma based on symptoms. Asthma can be classified as intermittent or persistent; and mild, moderate, or severe.
- Prescribe oral medications and inhaled medications to use when an attack occurs.
- Treatment will depend on the frequency and severity of attacks and other factors.

What *you* can do:

- Work closely with your doctor to determine the best combination of medications for your child as this will vary for different people and may change over time. The easiest to use and most popular medications are aerosol inhalers that contain medications that both decrease inflammation and swelling and stop the narrowing of airways.
- Triggers should be identified, then eliminated or avoided. If this is not possible, anticipate exposure and act accordingly. For instance, if an asthma attack is usually brought on by exercise, medication can be used before beginning exercise to reduce the effect. (Oral asthma medicines should be taken about 90 minutes prior to exercise, or 10-30 minutes prior with an inhaler). If caused by animal dander, pets should be given away or, at the least, kept outdoors.
- Change air conditioning and heating filters routinely. Consider an additional air-filtering unit if necessary.
- DO NOT smoke.

What to do when an attack occurs:

- Always keep asthma medicine close by, at home but also in the car, at school, in your purse, etc.
- Start medicine at the first sign (cough, itch, wheezing) of an attack. The longer you wait to begin, the longer it will take to stop wheezing.
- During a mild attack, your child can go to school but should avoid physical activity (PE).
- Fluids keep mucus thin; so encourage drinking one glass of fluid every 2 hours while awake (1/2 glass under age 5). Warm fluids may help.

What *you* can expect:

- Some children with asthma will outgrow it, although for some people it gets worse as they

get older.

Contact your doctor within 24 hours if your child has poor fluid intake, congested sinuses or yellow nasal discharge, vomiting or stomach pain from theophylline medicine; if getting worse or if attack lasts longer than 5 days.

Seek immediate medical assistance if extreme shortness of breath, severe wheezing, or wheezing is no better after 2nd dose of medicine; if unable to sleep or speak, lips or nails turn dusky or blue, chest or neck pain occurs, or if medicine is vomited! This could indicate a life-threatening emergency!