# Asthma and Gastroesophageal Reflux Disease

### What is asthma?

- Asthma is a disease of increased responsiveness of the airways to various stimuli including allergens and irritants that cause obstruction of the airways. Constriction of muscles around the airway and inflammation result in swelling of the lining and increased secretion of mucous.
- People who have asthma may experience wheezing, cough, shortness of breath, and chest tightness.
- Asthma can begin at any age but with proper management and education, people with asthma can lead normal, active lives.

## What is gastroesophageal reflux disease?

- GERD is a digestive disorder that affects the circular band of "sphincter" muscle of the lower esophagus. The esophagus is the "food tube" that carries swallowed food to the stomach.
- Gastroesophageal reflux occurs when the lower esophageal sphincter does not close completely, allowing some semi-digested food and gastric acid to be pushed back up into the esophagus.
- People with GERD may experience reflux periodically or on a very regular basis both upright and when lying down.

# What is the link between asthma and gastroesophageal reflux disease?

- Researchers have discovered that GERD can trigger asthma symptoms. In addition, GERD is more common in people with asthma than in the general population. Individuals whose asthma is especially hard to treat appear to be more prone to GERD than other affected persons.
- Generally speaking, reflux may cause asthma symptoms in two ways.
- 1. The stomach acid that leaks back into the esophagus creates a chain reaction leading to asthma symptoms. The refluxed gastric acid irritates the nerve endings in the esophagus generating signals to the brain. Subsequently, the brain responds with impulses to the lungs that stimulate the muscle and mucus production in the airways. The small airways of the lungs then constrict, resulting in asthma symptoms.
- 2. In many cases, physicians believe that the refluxed stomach contents enter the lungs directly. This situation is called aspiration. The foreign material is a potent irritant for the airways, creating wheezing, coughing, chest tightness, and other symptoms of asthma.

### Who develops GERD-related asthma?

Anyone — including infants, children, and teens — can develop gastroesophageal

reflux. Keep in mind that people may experience GERD symptoms periodically or

chronically. GERD symptoms also may be related to eating specific foods or, rarely,

even to food allergies.

## THANK YOU

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