

Understanding AIRWAY INFLAMMATION IN ASTHMA

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This handout provides

INFORMATION for patients on how airway inflammation works in asthma. Consult your health care provider for information on your specific health situation.

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INFLAMMATION

Irritants

Allergens

Injuries

Infections

Inflammation is part of the body's immune response to irritants, allergens, injuries, and infections. When you have asthma, your immune system may overreact.

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Inflamed and
narrowed airways

An overactive immune response can cause your airways to become inflamed and narrowed.

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Cough



Wheeze



Shortness
of breath



Chest
tightness

This narrowing can cause you to experience asthma symptoms such as cough, wheeze, shortness of breath, and chest tightness.

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Normal Airway

Asthma

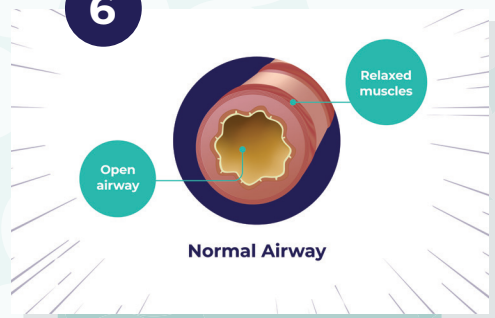
Flare-up

A normal airway

is changed when you have asthma and during an asthma flare-up these changes worsen and can make it hard to breathe.

Let's look at the airways in more detail

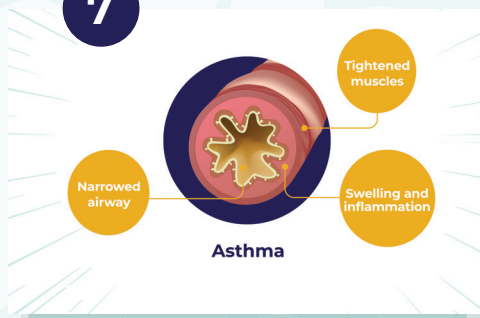
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Normal Airway

Normal airways are open. The muscles surrounding the airways are relaxed.

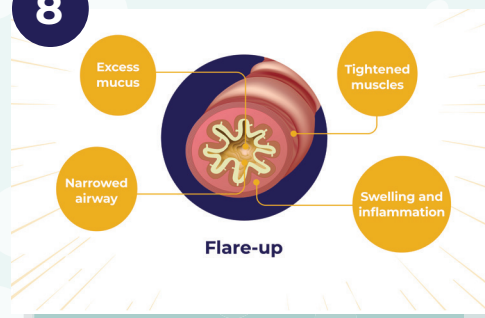
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Asthma

When you have asthma, airway inflammation, which causes swelling, and tightened muscles surrounding the airways, narrow the airways and can make it hard to breathe.

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Flare-up

When an asthma flare-up happens, asthma symptoms may worsen suddenly. Airway inflammation, which causes swelling, and tightened muscles surrounding the airways cause narrowed airways, and excess production of mucus can block the airways, which can make it hard to breathe.

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Asthma is a chronic condition.



CHRONIC inflammation

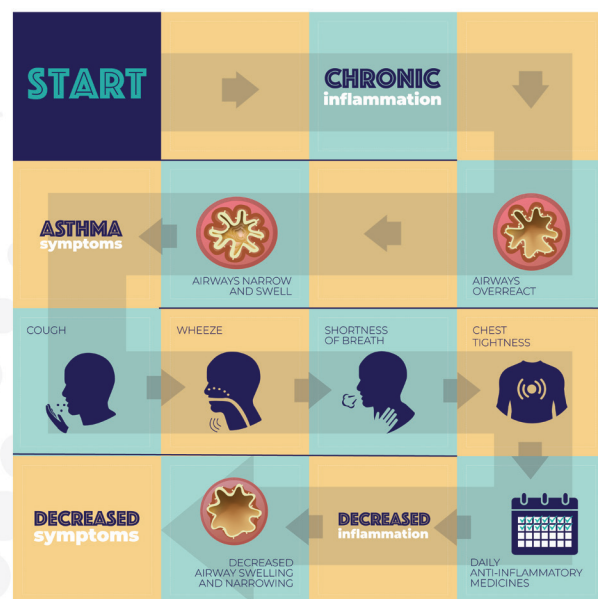
Most people with asthma have chronic (long-lasting) inflammation in their airways. The amount of airway inflammation can change over time. Asthma triggers can make airway inflammation worse.

Chronic inflammation

may make your airways overreact to triggers leading to airway narrowing and swelling, and cause symptoms such as cough, wheeze, shortness of breath, and chest tightness.

To treat chronic airway inflammation, most people may need to take daily anti-inflammatory medicines like inhaled corticosteroids to help control this inflammation, and the airway swelling and narrowing it causes.

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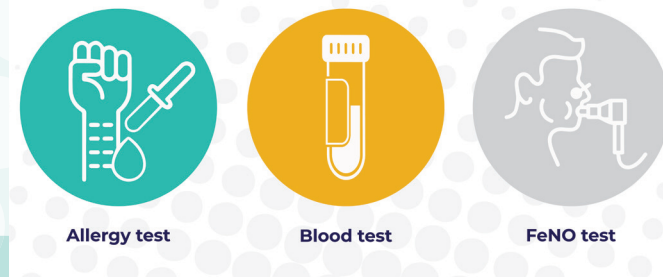


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Knowing what triggers worsening of your symptoms may help you and your health care provider better manage your asthma. Some common asthma symptom triggers are tobacco smoke, air pollution, respiratory infections, stress, exercise, certain medicines, and allergies.

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Medical tests, including allergy testing, blood work, and checking the air you breathe out for indicators of inflammation, can help your health care provider understand what triggers your airway inflammation and to identify your asthma type.

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Knowing what triggers your airway inflammation and your asthma type

can help you and your health care provider determine the best management for you. Individualized treatment that can reduce your airway inflammation may reduce your asthma symptoms.