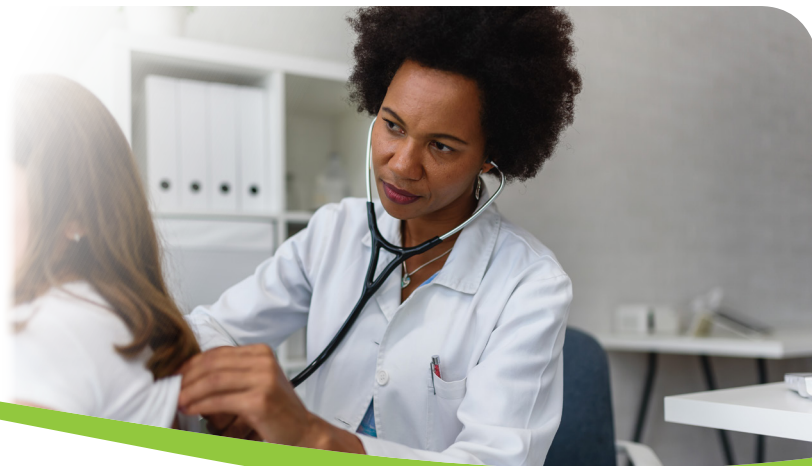


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WHAT IS FRACTIONAL EXHALED NITRIC OXIDE (FeNO) TESTING?

ASTHMA

WHAT IS FeNO TESTING?

FeNO is a test that can help determine how much inflammation (irritation or swelling) you have in your airways (the tubes that carry air in and out of your lungs). A FeNO test does not directly test for asthma, but it can help your health care provider confirm an asthma diagnosis in adults and children ages 5 and older.

WHEN WOULD YOUR HEALTH CARE PROVIDER USE FeNO TO TEST FOR ASTHMA?

You might be given a FeNO test if you are age 5 or older and the diagnosis of asthma is unclear after your health care provider has reviewed your medical history, performed an examination, and used a standard lung function test, known as spirometry. Your health care provider may also recommend a FeNO test if spirometry cannot be performed.

HOW DOES THE TEST WORK?

Your body produces a gas called nitric oxide. During a FeNO test, you breathe into a mouthpiece connected to a device that measures how much of this gas is in the air you exhale (breathe out). When combined with other information that your health care provider has about you, this test can confirm whether you have asthma or whether your asthma needs more treatment.



U.S. Department of Health and Human Services
National Institutes of Health



National Heart, Lung,
and Blood Institute

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For more information and resources on asthma, visit nhlbi.nih.gov/BreatheBetter.

WHEN WOULD YOUR HEALTH CARE PROVIDER RECOMMEND FeNO TESTING TO MONITOR YOUR ASTHMA OR ADJUST YOUR TREATMENT?

Your health care provider may ask you to have FeNO tests regularly to monitor your asthma and make decisions about treatment. He or she may also recommend a FeNO test if you have:

- Uncontrolled, persistent asthma and you are currently taking an inhaled corticosteroid alone or with other drugs.* An inhaled corticosteroid is a medicine that you inhale into your airways to help prevent or reduce any inflammation and narrowing.
- Uncontrolled, persistent asthma and are currently taking an inhaled corticosteroid alone or with other drugs.* Inhaled corticosteroids are medicines you inhale into your lungs that help stop your airways from becoming inflamed and narrowed.
- Symptoms that might require additional anti-inflammatory treatment.
- A genetic tendency to develop allergic diseases, such as allergic rhinitis, asthma, and atopic dermatitis (eczema).
- A plan that your health care provider agrees would be helpful to measure your asthma control every two to three months.

** The effects of newly available anti-inflammatory biologic therapies on FeNO levels were not reviewed.*



WHEN SHOULD YOUR HEALTH CARE PROVIDER NOT USE FeNO TESTING?

- ✓ FeNO measurements alone should not be used to diagnose asthma, assess asthma control, predict future flare-ups, or assess flare-up severity.
- ✓ FeNO testing should only be used when an asthma diagnosis is unclear or when the testing is part of an ongoing monitoring and management strategy in adults and children ages 5 and older.
- ✓ FeNO testing does not always correctly predict if children ages 4 and younger who have repeated wheezing flare-ups will have asthma in the future.



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NITRIC OXIDE (FeNO)
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