# Cough

# A cough is the forceful release of air from the lungs against closed vocal cords, which results in its characteristic sound.

Coughing helps expel inhaled particles, irritants, fluids, or microorganisms and helps clear secretions from the lungs. A cough can also spread viral or bacterial infections to other people.

### When Does a Cough Require Medical Attention?

Evaluation by a medical specialist is recommended for coughing that is accompanied by any of the following symptoms: fever, shortness of breath, bloody mucus, hoarse voice, vomiting, weight loss, leg swelling, and difficulty swallowing. Smokers older than 45 years or former smokers aged 55 to 80 years who develop a new cough also should seek medical evaluation.

# **Acute Cough**

An **acute cough** is defined as lasting less than 3 weeks and is one of the most frequent symptoms evaluated by primary care clinicians. For a person with an acute cough, a clinician performs a physical examination and asks about environmental, occupational, and travel exposures.

The most frequent cause of acute cough is a common cold, a short-lived viral infection of the upper respiratory tract. Infections of the lower airways, including acute viral bronchitis, pertussis, and tuberculosis, are also potential causes of acute cough. SARS-CoV-2, the virus that causes COVID-19, is a new cause of acute cough and may lead to severe respiratory failure and death. Acute cough may also be due to a worsening underlying medical condition, such as asthma, chronic obstructive pulmonary disease, other chronic lung conditions, or heart failure.

#### **Subacute Cough**

A **subacute cough**, defined as lasting 3 to 8 weeks, is most often due to a recent respiratory infection. If a cough does not improve in 4 to 6 weeks, patients should seek further medical evaluation.

## **Chronic Cough**

A **chronic cough** is defined as lasting more than 8 weeks and requires a full medical examination and a chest x-ray. Physicians may advise patients taking an angiotensin-converting enzyme (ACE) inhibitor to stop using this drug because it can cause chronic cough. Smokers should be counseled to quit tobacco use. The 3 most common causes of chronic cough in nonsmokers who are not taking an ACE inhibitor are asthma, acid reflux, and postnasal drip. Initial treatment should target the most likely cause of chronic cough based on

**Coughing** occurs when there is a forceful release of air from the lungs to help expel inhaled particles, irritants, infectious microorganisms, and secretions from the lower respiratory tract. Nasal passages Trachea-Primary bronchus -Acute cough Typically caused by upper respiratory tract infection infection (viral bronchitis, pertussis, tuberculosis) - 3 Subacute cough Typically caused by acute respiratory infection 3-8 weeks Medical evaluation needed if no improvement in 4-6 weeks Typically caused by asthma, acid reflux, postnasal drip, certain blood pressure drugs (ACE inhibitors), Chronic cough >8 weeks Requires full medical evaluation and chest x-ray Seek medical care for your cough if you have fever, shortness of breath, difficulty swallowing, or are a current or former smoker

a patient's medical history and physical examination. If a cough persists after the initial treatment, medications can be added because patients may have more than 1 condition that causes cough. Patients with a persistent chronic cough despite adequate treatment should undergo further testing to evaluate for a foreign body in the lung, lung cancer, or aspiration. Patients with an unexplained chronic cough that fails to improve even after a complete medical evaluation and treatment should be referred to see a cough specialist.

#### FOR MORE INFORMATION

American Thoracic Society

www.thoracic.org/patients/patient-resources/resources/cough.pdf

To find this and other JAMA Patient Pages, go to the Patient Information collection at *jamanetworkpatientpages.com*.

Author: Kristin Walter, MD, MS
Author Affiliation: Fishbein Fellow, *JAMA*.
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