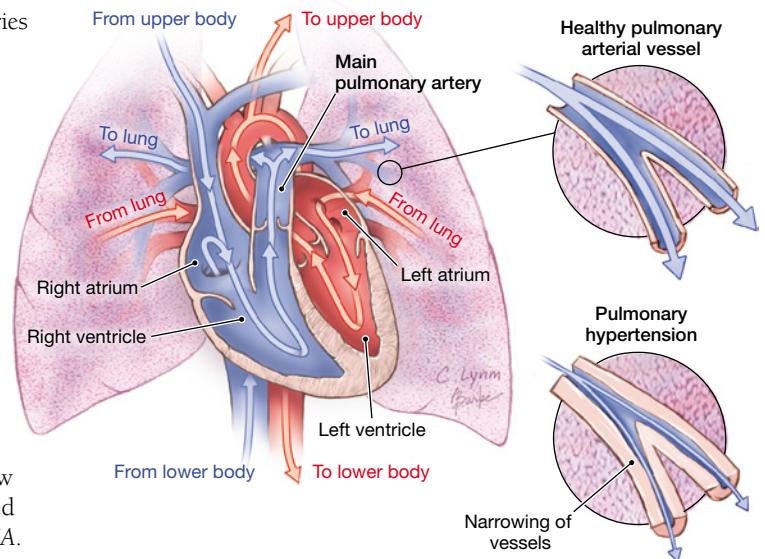


# Pulmonary Hypertension

The **pulmonary artery** is the main vessel that carries blood from the heart to the lungs. For a person at rest, blood pressure in a normal pulmonary artery is about 15 millimeters of mercury (mm Hg). In an individual with **pulmonary hypertension**, the average pressure in the pulmonary artery can be more than 25 mm Hg. This increase in pulmonary artery pressure occurs when the small arteries of the lungs become abnormally narrow. This condition can eventually lead to heart failure and death. Pulmonary hypertension can be **idiopathic** (unknown cause), **familial** (runs in families and is often linked to a genetic cause), or associated with other medical conditions. The October 7, 2009, issue of *JAMA* includes an article about the effects of iron supplementation on pulmonary hypertension due to low oxygen levels at high altitudes. This Patient Page is based on one published in the January 23, 2008, issue of *JAMA*.



## CONDITIONS ASSOCIATED WITH PULMONARY HYPERTENSION

- Low oxygen levels due to high altitude or heart or lung disorders
- Connective tissue diseases (autoimmune diseases such as scleroderma, sarcoidosis, or lupus)
- Portal hypertension (resulting from liver disease)
- HIV infection
- Drugs and toxins (appetite suppressants, cocaine, amphetamines)
- Thyroid disorders
- **Myeloproliferative** disorders (overproduction of red or white blood cells)
- **Hemoglobinopathies** (abnormal oxygen-carrying proteins in red blood cells, such as found in sickle cell anemia)
- Blood clots in pulmonary arteries

## SYMPTOMS OF PULMONARY HYPERTENSION

Initial symptoms may be minor and diagnosis may be delayed for several years until symptoms worsen. Typical symptoms may include

- Shortness of breath following exertion
- Excessive fatigue
- Dizziness and fainting
- Ankle swelling
- Bluish lips and skin
- Chest pain

## DIAGNOSIS OF PULMONARY HYPERTENSION

There is not one specific way to diagnose pulmonary hypertension. A doctor usually runs a series of tests to measure blood pressure in the pulmonary arteries, determine how well the heart and lungs are working, and rule out other diseases.

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## FOR MORE INFORMATION

- Pulmonary Hypertension Association  
[www.phassociation.org](http://www.phassociation.org)
- American Lung Association  
[www.lungusa.org](http://www.lungusa.org)
- National Heart, Lung, and Blood Institute  
[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

## INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at [www.jama.com](http://www.jama.com). Many are available in English and Spanish. A previous Patient Page on the evaluation of lung function was published in the May 16, 2007, issue.

Sources: American Lung Association; National Heart, Lung, and Blood Institute; Pulmonary Hypertension Association

