

## What You Need to Know About Alpha-1

Alpha-1 Antitrypsin Deficiency, or Alpha-1 is a genetic condition that can cause liver disease in both adults and children. It affects about 100,000 people in the United States. The most alarming news is that less than 10% of those people living with Alpha-1 have been properly diagnosed. Alpha-1 is often misdiagnosed as asthma or smoking-related Chronic Obstructive Pulmonary Disease (COPD).

More than 12 million people have been diagnosed with COPD in the United States, and about 3 percent of them are predicted to have Alpha-1. (Another 12 million people with COPD don't even know they have it, according to the National Heart, Lung & Blood Institute.)

### Important Facts About Alpha-1

Alpha-1 is widely under-diagnosed and misdiagnosed. According to a recent study, it takes an average of three doctors and seven years from the time symptoms first appear before proper diagnosis is made.

An estimated **20 million** people in the United States are undetected carriers of an abnormal gene that causes Alpha-1, and may pass the gene on to their children.

Lung disease is the most frequent cause of disability and early death among affected persons, striking in the prime of life, and a major reason for lung transplants.

### Common Signs and Symptoms of Alpha-1

Family history of lung disease or liver disease

Symptoms:

- Shortness of breath
- Wheezing
- Coughing
- Sputum (phlegm) production
- Decreased exercise tolerance
- Non-responsive asthma or year-round allergies
- Recurring respiratory infections
- Rapid deterioration of lung function
- Unexplained liver problems
- Elevated liver enzymes

For more information, visit the Alpha-1 Association's website at [www.alpha1.org](http://www.alpha1.org) or the Alpha-1 Foundation website at [www.alphaone.org](http://www.alphaone.org).