



## Alpha-1 Antitrypsin Deficiency (Alpha-1)

Alpha-1, or genetic chronic obstructive pulmonary disease (COPD), is an inherited condition that can cause serious lung disease in adults and/or liver disease as a result of an alpha-1 antitrypsin (AAT) protein deficiency in the blood.



### Prevalence

More than **3 million** people worldwide are affected



### Symptoms

- Shortness of breath
- Excess phlegm or sputum
- Frequent wheezing or coughing
- Trouble taking deep breaths



### Diagnosis

In spite of available testing, fewer than **10%** of all patients have been diagnosed. On average, this process takes over **8 years** and multiple physicians.



### Treatments

- Treatment of infections
- Supplemental oxygen
- Augmentation therapy



**900**  
plasma  
donations

are on average  
required to treat 1  
person annually