

WHAT IS ALPHA-1 ANTITRYPSIN DEFICIENCY?

Alpha-1 Antitrypsin deficiency is an inherited disorder that can cause lung or liver disease. Alpha-1 is the name of a protein. Deficiency means there is not enough of it.

Many people with Alpha-1 are more susceptible to **bronchiectasis**, and can develop **Chronic Obstructive Pulmonary Disease (COPD, also known as emphysema)**, a long-term lung disease. COPD damages the air sacs in the lungs. These sacs lose their elasticity, trapping air inside, making it hard to take in new air. Most people get emphysema from smoking.

WHAT CAUSES ALPHA-1?

Alpha-1 deficiency is inherited- you can get the genes from your parents.

A person's lungs are normally protected by the protein - Alpha-1 antitrypsin. This protein helps prevent lung damage caused by common sicknesses and air pollution, especially tobacco smoke.

People born with alpha-1 antitrypsin deficiency don't have enough of the Alpha-1 protein protecting their lungs. This means their lungs can easily be damaged by even a small amount of sickness, air pollution, smoking, or second-hand smoke. Over many years, the lung damage can lead to COPD.

IS ALPHA-1 CONTAGIOUS?

No, it is not contagious. It can only be passed on to children from their parents, through genetic inheritance.

SIGNS & SYMPTOMS

- Eyes and skin turning yellow (jaundice)
- Swelling of the abdomen (ascites)
- Gastrointestinal bleeding (from large veins in the esophagus or stomach)
- Unexplained liver problems or elevated liver enzymes

Many people don't realize they have alpha-1 antitrypsin deficiency until they notice the signs and symptoms of COPD.

Signs and symptoms of COPD

- Shortness of breath - feeling like you can't get your breath out
- A barrel-shaped chest
- Wheezing
- Feeling tired (fatigue)
- Losing weight without trying

I would like more information on*

- Asthma
- COPD
- Quitting Smoking
- Radon
- Indoor Air Quality
- Outdoor Air Quality
- Other _____

***Please see reverse**

TREATMENT

There is no cure of Alpha-1 deficiency, but it is possible to slow down the disease.

Avoid cigarette and tobacco smoke. If you don't smoke, don't start. If you do smoke, quit. Stay away from second-hand smoke. **Cigarette/tobacco smoke is the most harmful thing to people with Alpha-1**

Avoid air pollution, smog, and dust.

Pursue medical treatment. this may include medication, oxygen, respiratory rehabilitation, and more

Get regular vaccines including: flu, pneumonia, hepatitis A, and hepatitis B

Replacement / Augmentation therapy. This once-a-week therapy is designed to increase alpha-1 antitrypsin in the body. It involves an injection of a protein made from specially prepared human blood plasma. The injections must be taken every week for the rest of people's lives to keep having an effect.

There is some medical evidence that augmentation therapy helps people with Alpha-1 antitrypsin deficiency, but the therapy has not been fully studied. Augmentation therapy can be very expensive.

You may have flare-ups, but with early recognition and treatment **you can remain in control of your breathing and activities.**

GENETICS

Alpha-1 runs in families. Ask your health professional about genetic counseling and testing for family members - those at risk can reduce that risk.