Living Well with COPD

This book was created for patients and their families to help them manage their lung disease.

Your doctor or nurse chose this section because they felt it would be most helpful for you.

There are 10 sections in the COPD book and a list of definitions in the glossary section. Share this information with family, friends and those who help care for you.
COPD: Causes
What Causes COPD?

Tobacco smoke

Smoking is the number one cause of COPD in the United States. Smoke from tobacco products, including secondhand smoke, has over 7,000 harmful chemicals. These chemicals can cause irritation and swelling in your lungs. This can lead to permanent lung damage. Over 70 of these chemicals also cause cancer.

Some people with COPD have never smoked but have been around people who smoke and get sick from secondhand smoke.

Secondhand smoke

Secondhand smoke is the smoke from a burning cigarette, cigar, pipe or hookah. Breathing in secondhand smoke can cause:

- COPD
- symptoms of COPD or asthma to be worse
- lung infections and bronchitis
- irritation in the nose and throat

Thirdhand smoke

Thirdhand smoke is the tobacco particles that stay on surfaces long after burning tobacco has been put out. Thirdhand smoke clings to hair, skin, clothes, furniture, drapes, walls and carpets. The smoke particles build up over time and are hard to get rid of. They do not go away by airing out a room or opening a window or using a fan or air conditioner. Thirdhand smoke is becoming a greater concern for non-smokers.

Tobacco can cause:

- heart disease
- stroke
- smoking-related chronic diseases
Genetic disease Alpha-1

Some people are born with a genetic disease called alpha-1-antitrypsin (ALF-a-ONE-anty-TRIP-sin) deficiency, or alpha-1. Alpha-1 can cause COPD.

- This disease makes your lungs very sensitive to chemicals and pollutants in the air.
- Alpha-1 can cause COPD at a young age.
- Alpha-1 can be treated with medicines to slow down the lung damage.

You can have a blood test to find out if you have this disease. Anyone with COPD that is younger than 40 years old should be tested.

Lung infections

Having severe lung infections (pneumonia) as a child or adult can damage your lungs and cause COPD. Staying healthy and getting a yearly influenza (flu) vaccination can help prevent lung infections.

Chemicals and pollutants

Breathing in chemicals and pollutants can cause COPD and other lung diseases. The air in your home or workplace can worsen COPD.

Smog

Mold

Mildew

Work-related materials

- coal dust
- silica
- asbestos

Smoke

- cooking
- heating
- woodstoves

Fumes

- paint
- cooking fuels
- perfumes
- deodorants
- car exhaust

Spray products

- bug spray
- cleaners
- hair spray
- air fresheners
Glossary

Advance directives (sometimes called living wills): forms that you fill out once you decide what is important to you if you should get into a health crisis

Air trapping: when it is difficult to exhale completely

Allergic rhinitis: runny nose caused by allergies

Alpha-1 antitrypsin deficiency: a genetic disease that can cause COPD

Alveoli: air sacs

Arteries: blood vessels that carry oxygenated blood away from the heart to the body’s cells, tissues and organs

Arterial blood gas (ABG): a blood test from an artery that measures how well your lungs are able to move oxygen into your blood and remove carbon dioxide from your blood

Asbestos: mineral that can be woven into fabrics and is used in fire-resistant and insulating materials such as brake linings

Bone density test: x-ray that measures bone loss

Bronchial tubes: air passages or airways

Bronchodilators: medicines that make you breathe better by relaxing the muscles in your air passages and keep them from squeezing

Carbon dioxide: waste air

Cardiopulmonary resuscitation: emergency lifesaving procedure that is done when someone’s heart has stopped

Cataracts: clouding of the lens in your eye

Comorbidities: other chronic diseases a person has that make treating chronic disease more difficult

Continuous flow oxygen: oxygen that runs constantly through a tube into your nose and throat

Continuous positive airway pressure (CPAP): a device prescribed by a doctor or nurse to treat OSA

COPD Action Plan: a guide to help you recognize the early signs of a flare-up and what you should do when a flare-up occurs

Coronary arteries: blood vessels that supply oxygen-rich blood to your heart muscle

Coronary artery disease: a disease in which a waxy substance called plaque builds up inside your coronary arteries

Cor pulmonale: a condition that causes the right side of the heart to fail

CT scan: a picture of the inside of a part of your body

Diabetes: a condition in which your body does not make enough insulin or does not use insulin correctly

Diaphragm: a large muscle that sits below your lungs and does most of the work of breathing

Dose: amount of medicine

Echocardiogram: an ultrasound of the heart

Electrocardiogram: a test that checks for problems with the electrical activity of your heart

Energy conservation: saving energy

Esophagus: passage that connects the mouth and the stomach

Exacerbation: flare-up of your symptoms

Expectorant: medicine that loosens mucus so it’s easier to cough up

Gastroesophageal reflux disease (GERD): acid reflux

Glaucoma: a condition of increased pressure within your eyeball, causing gradual loss of sight

Healthcare agent: the person you want to speak for you if you cannot speak for yourself

Heart failure: a condition in which your heart can’t pump enough blood to meet your body’s needs

Hospice: care for people closer to the end of life who want their treatment focused on comfort

Hypertension: high blood pressure

Inflammatory: swelling

Inhaler: device that contains medicine as a mist or powder
Insulin: hormone that carries sugar into your cells so that it can be used for energy

Intravenous: in a vein

Long-acting (controller) medicines: medicines taken once or twice a day that prevent shortness of breath

Lung transplantation: surgically replacing one or both of your lungs

Lung volume reduction surgery: surgically removing diseased parts of one or both of your lungs

Mucolytics: medicines that break up mucus

Nebulizer: device that turns liquid medicine into mist

Nicotine replacement: medicines that replace the nicotine you do not get when you quit smoking

Obstructive sleep apnea (OSA): a condition that causes you to have periods when you stop breathing during sleep

Osteoarthritis: mechanical wear and tear on joints

Osteoporosis: illness that makes your bones brittle and fragile

Oxygenated: combined or mixed with oxygen

Palliative care: care provided at any stage of an illness focused on preventing suffering, managing symptoms and coordinating communication between the many caregivers

Peripheral vascular/arterial disease: a condition of the blood vessels that supply the legs and feet. It leads to narrowing and hardening of the arteries. This causes decreased blood flow, which can injure nerves and other tissues.

Pneumonia: lung infection

Pollutants: waste materials that are harmful to air, soil or water

Physician Orders for Life-Sustaining Treatment (POLST): a medical order stating a patient’s wishes regarding treatments that are commonly used in a medical crisis

Pulmonary hypertension: high blood pressure in the arteries of the lungs

Pulse dose oxygen: oxygen that flows when you breathe in through your nose and stops when you breathe out

Pulse oximeter: a machine that measures the oxygen in your blood with a clip that goes on your finger, toe or earlobe

Quick-relief (rescue) medicine: medicine that starts to work in a few minutes and lasts a few hours

Reflux: when stomach acid backs up and irritates the esophagus

Rheumatoid arthritis: when your immune system mistakenly attacks the lining of your joints, causing a painful swelling that can eventually result in joint deformity

Secondhand smoke: smoke from a burning cigarette, cigar, pipe or hookah

Silica: a very common mineral found in many materials common on construction sites, including soil, sand, concrete, masonry, rock, granite and landscaping materials. The dust created by cutting, grinding or drilling can cause lung disease and cancer.

Sinusitis: swelling of the air cavities within the passages of the nose. Sinusitis can be caused by infection, but also can be caused by allergies and irritation of the sinuses.

Spirometry: a test to see how well your lungs are working

Sputum: mucus in your lungs

Stroke: when blood flow to an area of your brain is cut off

 Suppressant: medicine to help you cough less

Thirdhand smoke: tobacco particles that stay on surfaces long after burning tobacco has been put out

Thrush: infection of the mouth and throat

Trachea: windpipe

Ultrasound: a test that uses sound waves to see inside your body

Vaping devices: electronic cigarettes, cigars and pipes that produce steam vapor when smoked