

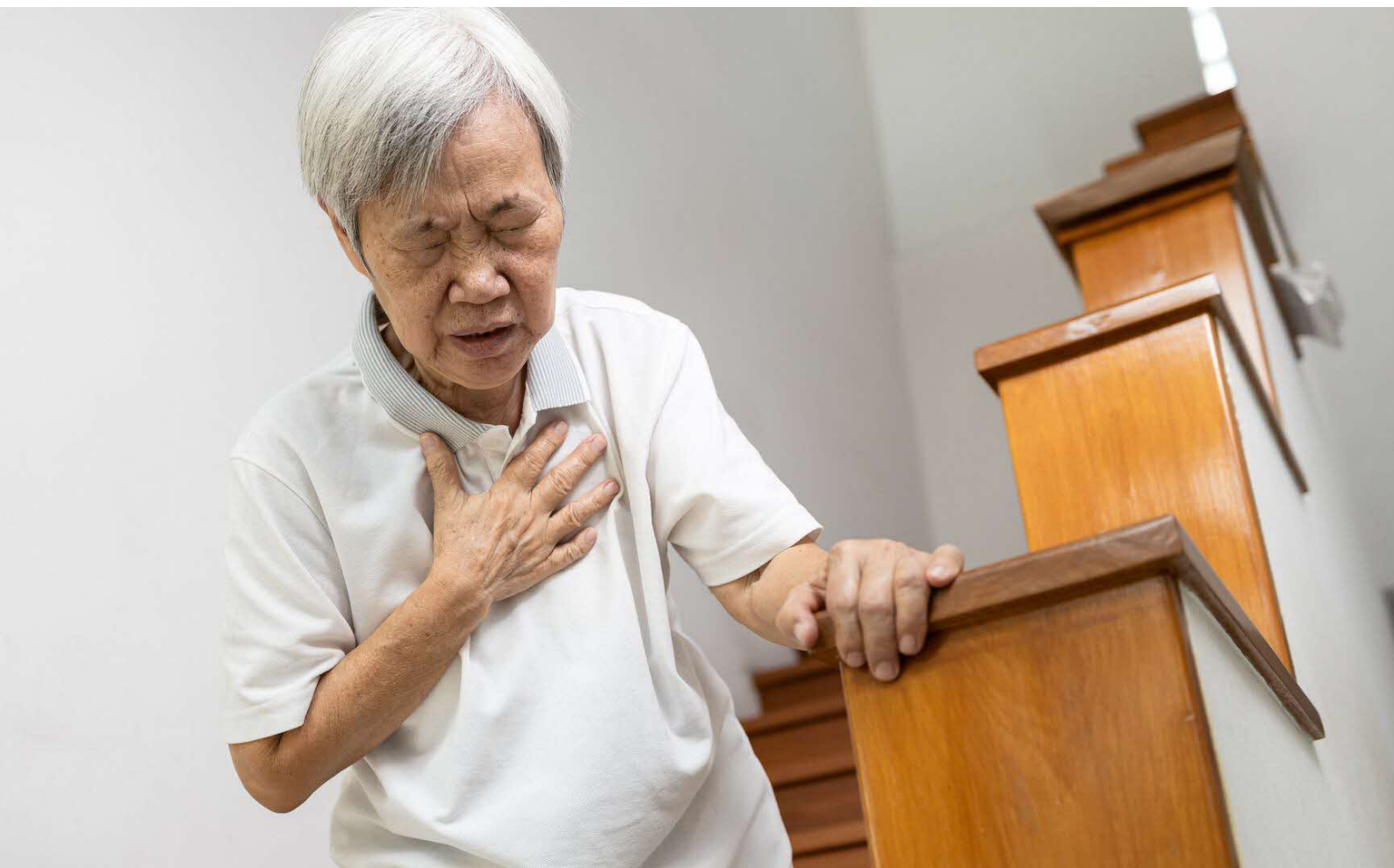
A Guide for Patients and Families

Chronic Obstructive Pulmonary Disease (COPD)

What is COPD?

Chronic Obstructive Pulmonary Diseases (COPD) is a group of airway (passageways for air to go in and out of the lungs) diseases that:

- Blocks air from going in and out of the lungs.
- Causes breathing-related problems (e.g. breathlessness, cough, excessive mucus production).

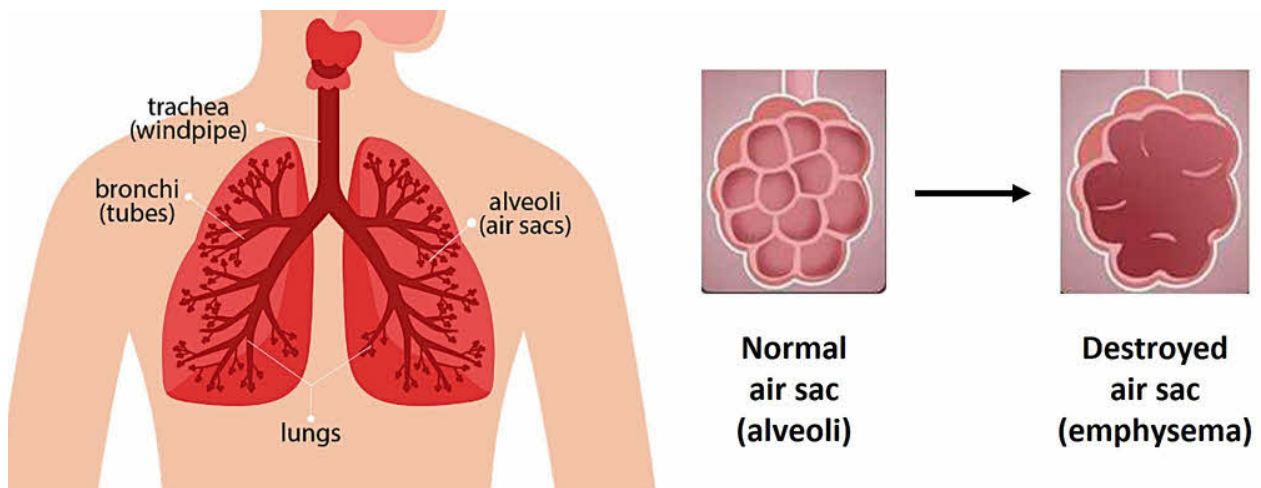


What happens when you have COPD?

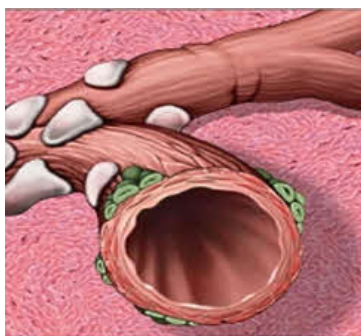
When you have COPD, your airways become smaller which makes it hard to breathe.

This happens because:

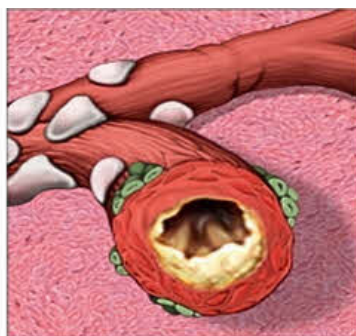
- The airways and air sacs (alveoli) in the lungs get destroyed, a condition known as emphysema.



- The walls of the airways become swollen (inflamed) with excess mucus and may become blocked, a condition known as chronic bronchitis.



Normal bronchi*



Inflamed bronchi*

*Bronchi are large tubes that are connected to your windpipe and bring air into your lungs.

Causes and symptoms of COPD

Causes of COPD



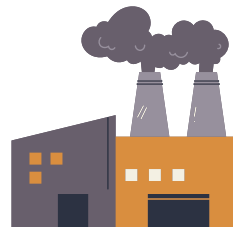
- Smoking is the most common cause of COPD.
- Second-hand smoke can also cause COPD in non-smokers.



- Patient who are 40 years old and above are at a higher risk of developing COPD.



- Genetic conditions can cause lung damage.



- Air pollution/bad air quality/ occupational exposure may increase the risk of developing COPD.

Signs and Symptoms of COPD



**Chronic
(Severe) Cough**



**Chest
Tightness**



**Wheezing
(Whistling During
Breathing)**



**Mucus Buildup
in Throat**



**Fatigue/
Tiredness**



**Frequent Respiratory
(Lung) Infections**



**Shortness
of Breath**



**Blueness of Lips
or Fingernail Beds**

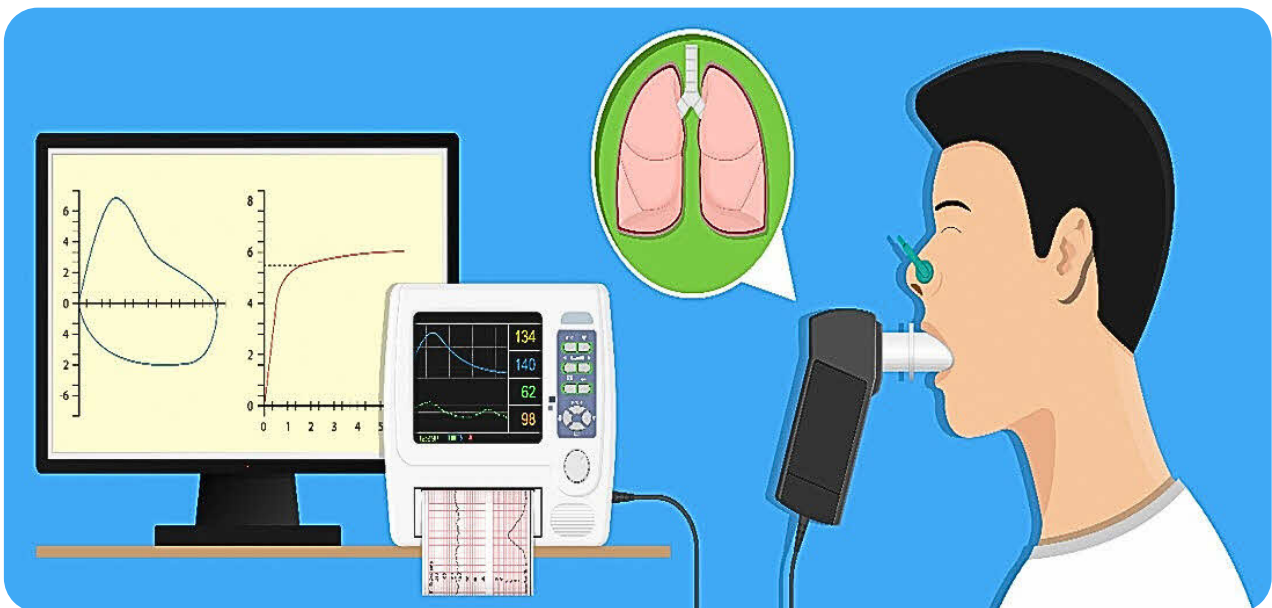
How is COPD diagnosed?

Your doctor will:

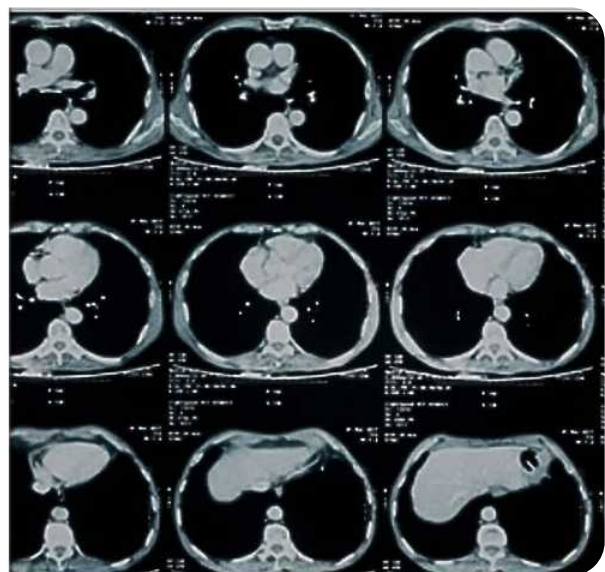
- Check you for symptoms/signs of COPD.
- Discuss your family and medical history with you.
- Check your exposure to lung irritants (things that may worsen the condition) such as cigarette smoke.

Your doctor may also order some tests to diagnose your condition. These may include:

1. Lung Function Test



2. Chest X-ray / CT Scan



Effects of COPD



Affects your ability
to exercise



Affects your
sleeping pattern



Affects your
social activities & ability to
participate in family
activities



Affects your ability
to perform
household chores



Affects your ability to work at
your fullest potential



Increases your risk
for heart diseases

How Can You Manage COPD?

Even though COPD is not curable, medication can help to treat symptoms and prevent complications/problems.

Changes to your lifestyle can also significantly delay the worsening of the condition.

1. MEDICATION

a. Bronchodilators (inhalers or pills)

- Helps to relax the airway muscles and keep it open, which can improve the flow of air into the lungs.

b. Anti-inflammatories (inhalers or pills)

- Commonly known as steroids
- Reduces airway swelling (inflammation) and decreases mucus production



How Can You Manage COPD?

Inhaler techniques videos in 4 different languages



English



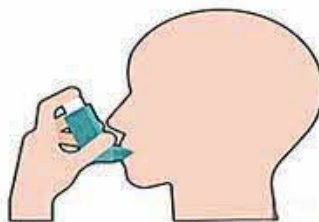
Mandarin



Malay



Tamil



c. Antibiotics (injections or pills)

- Treatment used during acute attacks to treat any underlying infections if present.



2. QUIT SMOKING

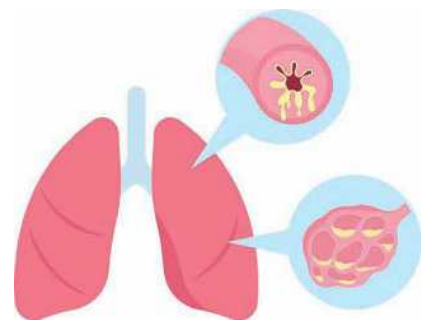
Although damage to the airway cannot be reversed, quitting smoking helps to prevent worsening of the condition.



3. VACCINATIONS

Infections can cause swelling of the airways, resulting in:

- the airways becoming smaller due to the muscles tightening
- the airways becoming filled with mucus



Vaccines allow your body to produce its own antibodies (proteins) that protect you against bacteria and viruses that cause infections.

Some vaccines include:

- **Influenza vaccination**, which protects your body against influenza (flu) virus.
- **Pneumococcal vaccination**, which protects your body against infections caused by a bacteria pneumococcus).



4. OXYGEN THERAPY

Long term oxygen therapy may be given if the oxygen level in your body is constantly low. Your doctor will assess if this is suitable for you.



5. EATING WELL

Having a diet with good nutrients helps to prevent:

- Losing muscle mass, which can weaken the muscles used for breathing.
- Developing a weakened immune system, which will make you more likely to experience lung infections.

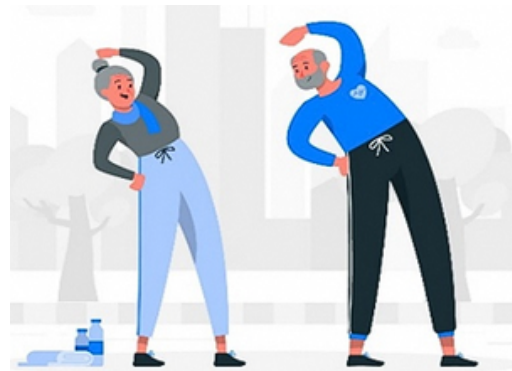


** Please speak to our dietitians to find out how you can eat well.*

6. EXERCISE / PULMONARY REHABILITATION PROGRAMME

Exercising regularly (three to five times a week) may help improve your:

- Breathlessness
- Stamina
- General well-being
- Quality of life



**Please speak to physiotherapists to find out what exercises / Pulmonary Rehabilitation programmes are suitable for you.*