

Chronic obstructive pulmonary disease (COPD) is a long-term lung condition that makes it hard to breathe. It includes chronic bronchitis (airway inflammation) and emphysema (destruction of air sacs). With the right diagnosis, treatment and support, many people can reduce symptoms, fewer flare-ups and maintain an active, independent life.

**EARLIER
DIAGNOSIS
BETTER
BREATHING
BRIGHTER
TOMORROWS**

WHAT HAPPENS IN COPD?

HEALTHY LUNG

Normal airway
Open airway
with thin lining
and little mucus

Healthy air sacs (alveoli)

Thin, elastic walls
allow oxygen to
pass into the blood

LUNG WITH COPD

Chronic bronchitis
Inflamed, thickened
airway lining
Excess mucus
Narrowed airway

Emphysema

Destroyed air sac
walls (alveoli)
Loss of elasticity
Less surface area
for oxygen transfer

KEY EFFECTS IN THE LUNGS AND BODY

NARROWER AIRWAYS

Inflammation, mucus
and airway wall
thickening increase
resistance to airflow.

LOSS OF ELASTICITY

Alveolar walls are
destroyed, reducing
the lung's ability to
recoil and expel air.

AIR TRAPPING

Air becomes trapped
in the lungs, leading
to **over-inflation**
(hyperinflation).

REDUCED OXYGEN TRANSFER

Fewer healthy air sacs
reduce the transfer
of oxygen into the
bloodstream.

SYSTEMIC EFFECTS

Breathlessness, reduced
exercise capacity,
muscle loss and increased
risk of cardiovascular
disease and other
conditions.

COMMON SYMPTOMS



Breathlessness
(especially with
activity)



Chronic cough
(with or without
mucus)



Excess mucus
(phlegm)



Wheeze
or noisy breathing



Chest tightness



**Reduced exercise
tolerance**

RISK FACTORS



Cigarette smoking (current or past)



Exposure to second-hand smoke



Occupational dusts and chemicals
(e.g. mining, construction, farming)



Outdoor and indoor air pollution



Biomass fuel smoke (e.g. wood, cooking fuels)



Previous lung infections (e.g. severe pneumonia)



Genetic factors (e.g. alpha-1 antitrypsin deficiency)

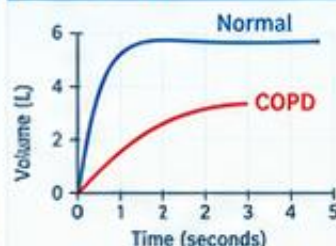


Increasing age



Other lung conditions (e.g. asthma, bronchiectasis)

LUNG FUNCTION IN COPD



- Reduced FEV₁ (airflow out in 1 second)
- Reduced FEV₁/FVC ratio (<0.70)
- May have hyperinflation (↑ RV, ↑ TLC)
- Severity is graded based on lung function and symptoms.

HOW COPD IS DIAGNOSED



CLINICAL ASSESSMENT
Symptoms, history,
risk factors and
physical examination.



SPIROMETRY
Measures lung
function (FEV₁, FVC)
to confirm persistent
airflow limitation.



IMAGING
Chest X-ray or CT scan
to look for emphysema,
other lung conditions
or complications.



ADDITIONAL TESTS
May include oxygen
levels, blood tests
and assessment for
other conditions.



ASSESS EXACERBATIONS
Frequency and severity
of flare-ups help guide
treatment.



TREATMENT GOALS



Relieve symptoms and improve breathing



Increase exercise capacity and daily activity



Prevent and reduce the severity of flare-ups



Slow disease progression



Improve overall health and quality of life



Personalised care based on your goals and circumstances

INHALER TREATMENTS

Inhalers are the mainstay of treatment. They relax the airways, reduce inflammation and help you breathe more easily.

BRONCHODILATORS (relax the airways)



- Short-acting (SABA, SAMAs) for quick relief of symptoms
- Long-acting (LABA, LAMAs) for regular maintenance treatment

INHALED CORTICOSTEROIDS (reduce inflammation)



- Often used in combination with long-acting bronchodilators
- Particularly helpful if you have frequent flare-ups or features of eosinophilic inflammation

COMBINATION INHALERS (COPD LABA/ICS/LAMA)



- Two or three medications in one inhaler (e.g. ICS/LABA or ICS/LABA/LAMA) to improve symptom control and reduce exacerbations.

INHALER TECHNIQUE MATTERS



- ✓ Use the right device for you
- ✓ Follow the correct steps
- ✓ Breathe in slowly and deeply
- ✓ Hold your breath for 5-10 seconds
- ✓ Check your technique regularly

OTHER TREATMENT APPROACHES

PULMONARY REHABILITATION



Supervised exercise, education and support to improve fitness, reduce symptoms and enhance quality of life.

VACCINATIONS



Annual influenza vaccine and pneumococcal vaccination reduce the risk of serious infections.

SMOKING CESSATION



The most important step to slow disease progression. Support and medications can help you quit.

OXYGEN THERAPY



For people with persistent low oxygen levels. Improves survival, exercise capacity and quality of life.

NUTRITION



Maintain a healthy weight and muscle mass. Seek dietary advice if needed.

MANAGE COMORBIDITIES



Treat accompanying conditions such as heart disease, osteoporosis, anxiety and depression.

ADVANCED OPTIONS FOR SELECTED PATIENTS

BRONCHOSCOPIC LUNG VOLUME REDUCTION (BLVR)



Endobronchial valves or other techniques can reduce hyperinflation in selected patients with severe emphysema.

LUNG TRANSPLANTATION



Considered for carefully selected patients with very advanced disease.

MANAGE FLARE-UPS EARLY



Early treatment of worsening symptoms can reduce the severity and duration of exacerbations.

MONITORING YOUR COPD

- Regular review with your respiratory specialist
- Lung function tests (spirometry)
- Check inhaler technique
- Monitor symptoms (e.g. CAT score)
- Assess oxygen levels if needed
- Review treatment and adjust based on your progress

YOUR COPD ACTION PLAN

STABLE ZONE
Your usual treatment. Keep active and well.

WORSENING ZONE
Increased breathlessness, more cough or mucus. Follow your action plan and seek advice early.

SEVERE ZONE
Severe breathlessness, blue lips, confusion, chest pain or collapse:
CALL 000

LIVING WELL WITH COPD

- ✓ Stay active and exercise regularly
- ✓ Maintain a healthy diet and weight
- ✓ Avoid respiratory irritants (smoke, dust, fumes)
- ✓ Plan ahead for travel and illness
- ✓ Seek support from healthcare professionals, family and support groups

