

Chronic Obstructive Pulmonary Disease & Physical Activity

Airflow to the lungs is restricted in people with Chronic obstructive pulmonary disease (COPD). It is usually caused and made worse by smoking. Inhalers can help ease symptoms but they do not cure COPD. Breathlessness caused by COPD can be very frightening and as a result many people reduce the amount of activity they do.

In the long term, this physical inactivity not only increases your chance of developing heart and circulation problems but it leads to a feeling of being tired, unfit and even more breathless. **Being inactive is one of the strongest predictors for a shorter life if you have COPD.¹ Starting and maintaining regular activity can improve breathing and make day to day activities easier and less frightening.²**

Regular physical activity also gives you more energy, builds confidence and can help you to sleep more soundly at night. You can combine your activity time with family and friends or use it as an opportunity to reflect on things and listen to your favourite music.



Physical Activity Recommendations for currently inactive adults with Chronic Obstructive Pulmonary Disease

Aim to do the following three types of activity:

-  **Aerobic activity** at relative moderate intensity for at least 150 minutes (2 hours and 30 minutes) a week – one way to approach this is to do 30 minutes on at least five days each week.
-  **Muscle strengthening activity** on two or more days a week which work all major muscles groups (legs, hips, back, abdomen, chest, shoulder and arms)
-  **Flexibility exercises** on a daily basis



Plan your lifestyle change

Keep it simple: Don't make drastic commitments. Choose activities that are easy, simple and enjoyable to maintain.

Set a goal and monitor: Set weekly targets that are achievable and keep a record of what you do. If you fail, create barriers to the things that stop you from reaching them.

Go Public: Discuss your goals and activities with others to keep you motivated for longer.

See 'Getting started' at www.prescription4exercise.com for useful tips on planning your next move.



Do not worry if you struggle to meet the recommendations, because by trying to become more active, you are still gaining some health benefits



Aerobic activity

Aerobic activity, also known as endurance activity, is when large muscle movements, maintained over a period of time, make the heart and lungs work harder.

Activity Type? – Any type that you can maintain comfortably is ideal. Choose exercises that you enjoy, such as walking, cycling or group fitness classes. Aerobic activities are really important if you want to improve the health of your heart and circulation.

How long (duration)? – You can split your total activity amount into minimum bouts of 10 minutes if needed. If you have been inactive for a long time, start with short daily amounts and increase this as your body allows and you feel more confident.

Remember not to sit for hours. A regular break from

sitting every hour is healthy.

How hard (intensity)? - Progress slowly to a relatively moderate-intensity activity. When doing moderate intensity activity you will feel warm, mildly out of breath and mildly sweaty. The 'talk test' is a simple way to measure moderate intensity. This means that you can still talk, but not sing, during the activity. Getting out of breath when increasing your activity level is a normal body response to exercise. Monitor your improvement over time by keeping a track of breathing comfort levels during activity.

How often (frequency)? –If you aim to do 30 minutes per day then do this at least 5 times per week so that you reach the 150 minutes total per week. Distribute the sessions over the week and aim to have no more than 2 consecutive days without physical activity. When you start any new activities make sure you give your body enough time to recover and adapt between sessions..



Muscle Strengthening and Flexibility

Activities that promote strengthening and flexibility are vital for a complete physical activity programme. Being stronger and more flexible makes it easier to carry out aerobic activities, such as brisk walking or swimming. It also makes people feel and look better. Some people, with COPD, find yoga stretches that are performed in harmony with breathing very beneficial. Balance training in Tai Chi, yoga and pilates can also boost your confidence and reduce your risk of falls. Visit the 'Strength and flexibility' section at www.prescription4exercise.com for some simple video exercises that you can do at home.

*See [prescription4exercise.com](http://www.prescription4exercise.com) for video examples of **strengthening and flexibility** exercises you can do at home

Safety considerations

- If you have led a very sedentary lifestyle, begin by doing low intensity exercise of short duration, e.g. 10 minutes.
- Stop exercising if you feel dizzy, sick, unwell or very tired.
- See a doctor if you are having chest pain, black outs or breathlessness on mild exertion.
- Avoid physical activity if your breathlessness is severe and uncontrolled by your medicines at rest.
- Always have your reliever inhaler with you when you exercise.
- Do a gentle warm up.
- Avoid physical activity if your breathlessness is severe and uncontrolled by your medicines at rest. You may need to be reviewed by your healthcare professional.

If you have any other long term health conditions ask your healthcare professional and/or visit www.prescription4exercise.com for additional useful safety considerations

References

1. Waschki et al. Physical Activity is the Strongest Predictor of All-Cause Mortality in Patients with COPD. *Chest*, Aug 2011 vol 140 number 2 331-342
2. Lacasse Y et al. Pulmonary rehabilitation for chronic obstructive pulmonary disease. *Cochrane database of systematic reviews (online)* 2022:CD003793

Further reading

- Start Active, Stay Active - a report on physical activity for health from the four home countries * Chief Medical Officers. UK Department of Health, July 2011. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_128209
- ACSM's Guidelines for Exercise Testing and Prescription, American College of Sports Medicine, 2009
- Swedish National Institute of Public Health. Physical Activity in the Prevention and Treatment of Disease. Professional Associations for Physical Activity, Sweden, 2010. COPD. 271-281. www.lyss.se

Visit www.prescription4exercise.com to learn more about physical activity and how it can prevent and treat many long term conditions.

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