



Joint Action  
on REspiratory  
Diseases

# **COPD – Self-management guide for patients**

Finnish Lung Health Association is responsible for preparing the material.



Funded by  
the European Union

# TABLE OF CONTENTS

<b>Abbreviations</b> .....	3
<b>Introduction</b> .....	3
<b>1 Chronic obstructive pulmonary disease (COPD)</b> .....	4
<b>2 Self-management</b> .....	5
2.1 COPD medication and inhaler use .....	7
2.2 Smoking and nicotine cessation .....	12
2.3 Physical activity .....	16
2.4 Vaccinations .....	20
2.5 Exacerbation .....	21
2.6 Nutrition .....	23
2.7 COPD Follow-Up Visits .....	25
<b>3 Bibliography</b> .....	28

## Abbreviations

CAT	COPD Assessment Test
COPD	Chronic obstructive pulmonary disease
DPI	Dry Powder Inhaler
HSI	Heaviness of Smoking index
mMRC	Modified Medical Research Council dyspnea scale

## Introduction

Self-management is a crucial part of COPD treatment, and you play a key role in it. Self-management includes using your medication as prescribed, avoiding or quitting tobacco and nicotine products, maintaining a healthy weight, and staying physically active. With the help of health care professionals, you can find the most suitable ways to manage your COPD. Sometimes finding the right solutions for you takes time, so be patient and do your best. This booklet provides general advice for self-management but remember that your physician and other health care professionals will give you individualized guidance and create a treatment plan that is best for you.

# 1 Chronic obstructive pulmonary disease (COPD)

Chronic obstructive pulmonary disease (COPD) is a long-term lung disease that develops slowly over the years. The disease is often, but not always, caused by prolonged smoking.

COPD is characterized by three main components: chronic bronchitis, permanent narrowing of the airways, and emphysema. Generally, the disease manifests in middle-aged or older individuals.

**Emphysema** = Damage of the air sacks in the lungs

**Chronic bronchitis** = Long-term inflammation of the airway

**Obstruction** = Narrowing of the bronchi / airways

The most common symptom of COPD is **shortness of breath on exertion**. Other symptoms include **cough** with or without **mucus**, **wheezing**, feeling of **tightness in the chest**, and general **fatigue**. Symptoms usually appear and gradually worsen over the years, making it difficult to recognize them. Patients with COPD might experience acute exacerbations of the disease and preventing them is one of the main goals of the COPD treatment. Self-management for COPD includes the proper usage of prescribed medication quitting tobacco and nicotine products, increasing physical activity, and maintaining a balanced diet.

## **COPD management aims to:**

- Improve symptoms and quality of life
- Slow the progression of the disease
- Prevent exacerbations
- Reduce mortality

People with COPD often have other diseases (comorbidities) as well. These other conditions may significantly affect the course of the disease. Common comorbidities in COPD patients include cardiovascular diseases, depression, anxiety, osteoporosis, and gastroesophageal reflux. Depression, anxiety, and osteoporosis are underdiagnosed, and they are associated with a poor prognosis. Sleep apnoea and other sleep problems, such as insomnia, are also common in patients with COPD. It is important that you tell health care professionals about your other conditions and report your symptoms, which may not be explained by COPD alone. Different comorbidities should be actively sought, and treated appropriately when present.

## 2 Self-management

Self-management refers to the part of treatment undertaken by the patient, supported and guided by health care professionals. COPD self-management involves changing behaviours or habits that are harmful to the lungs, along with adhering to appropriate medical treatment. Key parts of self-management are quitting smoking, staying physically active, healthy nutrition, taking the right medication correctly, and managing COPD exacerbations.

Selfmanagement of your COPD is easier when you know which symptoms are normal for you and which ones require action. Your personal COPD action plan can help you recognize different symptoms and respond in the right way. Here is a template that you can fill in together with your doctor or nurse. Please note that you need to ask your doctor which medications you can use at each stage.

## My COPD action plan

My symptoms	My plan
<p><b>Normal for me</b></p> <ul style="list-style-type: none"> <li>• I have my usual amount of cough/phlegm.</li> <li>• I can do my daily activities</li> </ul>	<p><b>Fill this section with your doctor/nurse</b></p> <ul style="list-style-type: none"> <li>• Medication/s for COPD:</li>   <li>• Reliever inhaler:</li>   <li>• Oxygen prescription:</li> </ul>
<p><b>I am unwell</b></p> <ul style="list-style-type: none"> <li>• I cough more than usual</li> <li>• I feel more short of breath</li> <li>• I need my reliever medication more often</li> <li>• I am more tired than normal</li> <li>• I have difficulties with my daily activities</li> </ul>	<p><b>Fill this section with your doctor/nurse</b></p> <ul style="list-style-type: none"> <li>• I will use my reliever inhaler more:</li>   <li>• Consult your doctor about the possible need for a course of corticosteroids or antibiotics</li> </ul>
<p><b>I am very unwell</b></p> <ul style="list-style-type: none"> <li>• I am getting worse despite extra medications (including increased reliever, prednisolone, and/or antibiotics)</li> </ul>	<p>Discuss your symptoms with your doctor today</p>
<p><b>Emergency</b></p> <ul style="list-style-type: none"> <li>• I have sudden shortness of breath</li> <li>• I have used my reliever but it does not improve my symptoms</li> <li>• I feel scared</li> <li>• I am unusually confused and drowsy</li> <li>• I have a chest pain</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Call ambulance!</b></li> <li>• <b>Continue using reliever until ambulance arrives</b></li> <li>• <b>Try familiar breathing techniques</b></li> </ul>

Source: Lung Foundation Australia. COPD Action plan. Based on COPD-X Plan: Australian and New Zealand Guidelines for the Management of COPD; Australian Therapeutic Guidelines. Visit [www.copdx.org.au](http://www.copdx.org.au) for further details.



## 2.1 COPD medication and inhaler use

Bronchodilator medications **improve** airflow and reduce shortness of breath, especially during exertion. The greatest benefit comes from taking long-acting medication **regularly** to prevent symptoms. This also reduces the risk of COPD exacerbations. In addition, a short-acting bronchodilator might be needed to relieve the symptoms if they appear despite the long-acting medication. Some patients benefit from regularly taken inhaled steroids in preventing exacerbations. The need for inhaled corticosteroids is determined by the treating physician.

Studies show that using proper inhaler technique is linked to better symptom control, fewer side effects from medication, and fewer exacerbations. Breathing technique must be correct so that the medicine reaches the bronchial tubes. It is important to know whether your inhaler is aerosol or powder form because it affects the technique, how to take the medicine. The instructions given here are general in nature. Ask professionals for more detailed instructions of the use considering your specific inhaler and tell them if you have any doubts of your technique.

## Dry powder inhaler (DPI)

- 1 Check the dose counter. If it is empty, it indicates zero or it is red and you must buy new one.
- 2 Take the cap of the inhaler
- 3 Shake the inhaler to mix the medicine if it's necessary.
- 4 Load a dose.
- 5 Cough gently if you have mucus in your airways.
- 6 Breathe out lightly but do not breathe into the device, as the powder inside your inhaler might become wet.
- 7 Put the mouthpiece between your teeth and close your lips tightly around it.
- 8 Breathe in strongly and deeply through your mouth.
- 9 Remove the inhaler from your mouth.
- 10 Hold your breath for five to ten seconds.
- 11 Breathe out slowly through your nose. If you must take another dose, **start from step 3**.
- 12 Put the cap back on your inhaler.

## non-DPIs “Sprays” (Metered-Dose Inhalers, Soft Mist Inhalers)

Using a holding chamber may make the inhalation technique easier, help the medicine reach your lungs, and reduce the side effects of the medicine. Discuss with your doctor / nurse which is the best way for you to take your medicine.

### When using holding chamber

- 1 Check the dose counter. If it is empty, it indicates zero or it is red. You must buy new one.
- 2 Shake the inhaler to mix the medicine.
- 3 Take the cap of the inhaler.
- 4 Cough gently if you have mucus in your airways.
- 5 Attach the inhaler into backpiece of the holding chamber.
- 6 Put the mouthpiece tightly to your mouth and close lips around it to ensure an effective seal.
- 7 Exhale and then press the dose **once** at the beginning of a slow inhalation. Breathe in and out through the chamber for five breaths keeping lips sealed around chamber mouthpiece. **If you must take another dose, start from step 6.**
- 8 Remember to wash the holding chamber weekly according to the instructions if you use them regularly. The chamber should be replaced annually.

## If you are not using holding chamber

1

Check the dose counter. If it is empty, the counter will be red or display zero doses.

2

Shake the inhaler to mix the medicine.

3

Take the cap of the inhaler.

4

Cough gently if you have mucus in your airways.

5

Breathe out lightly but do not breathe into device.

6

Tilt your head straight. You can gently lift your chin up.

7

Put the mouthpiece of your inhaler into your mouth above your tongue.

8

Close your lips tight around the mouthpiece.

9

Breathe slowly and deeply in through your mouth, and at the same time press the trigger of your inhaler. Continue to inhale for three to five seconds to ensure the medicine reaches your lungs.

10

Remove the inhaler and hold your breath up to five to ten seconds.

11

Breathe out slowly through your nose. **If you must take another dose, start from step 5.**

## Oral Care

If you use **inhaled corticosteroid medication**, you have a higher risk of tooth decay. Therefore, it is important to rinse your mouth with water after using inhaled corticosteroid. Rinsing is not necessary after using quick-relief medications. If you take inhaled corticosteroid medication in the morning and evening and usually brush your teeth at the same time, brush your teeth before taking the medication. Brush your teeth with fluoride toothpaste.

1. Take your medication.
2. Rinse your mouth with water and gargle.
3. Spit out the water.
4. If desired, take a xylitol product.



## 2.3 Smoking and nicotine cessation

Quitting tobacco and nicotine products are one of the most crucial aspects of self-management for COPD. **Quitting improves the prognosis of the already diagnosed disease.** Here are a few health-related changes that occur when you quit using tobacco and nicotine products.

- Carbon monoxide disappears from your body in one day, and nicotine in two days.
- Your sense of smell and taste improves within a few days.
- Cough and mucus start to disappear within 1–2 months.
- Your lung function improves significantly in 2–3 months.

Quitting the use of tobacco and nicotine products is not easy, but it is possible. Use the questions below to reflect on your own tobacco and nicotine dependence. Remember to seek support from **health care professionals** to help you quit. Sometimes people who are in a same situation can also help. You can try to find peer groups from social media, different non-governmental organizations or ask for help from a friend.

### Learn from earlier attempts!

Have you tried to quit before? If so, you can reflect on what you learned from those attempts. Did you know that many people must try several times before they succeed? Turn your previous quitting attempts into a resource. Planning helps – prepare and succeed!

You can reflect on your addiction with the following questions. Take enough time to address each issue. You can think about things calmly over two or three weeks or tackle one issue weekly. The most important thing is to move determinedly towards your goal – a smoke-free and nicotine-free life.

1. **Is your addiction physical, psychological, social, or a mix of all these?** You can measure physical addiction with, for example, with the Heaviness of smoking -index (HSI). It is also suitable for measuring dependence on other nicotine products. Psychological dependence is seen in the use of tobacco or nicotine products in certain situations or emotional states. Situations can include driving, being with certain people, or experiencing strong positive or negative emotions. Social dependence is a form of psychological dependence where the use of tobacco or nicotine products is strongly linked to social situations. In these situations, the use of products creates a sense of belonging and community among users.

## HSI

### Assess your dependence on nicotine

Use the calculator below to assess how dependent you are on smoking.

#### 1. How soon after waking up do you smoke your first cigarette?

- a) Less than 6 minutes (3 points)
- b) Within 6–30 minutes (2 points)
- c) Within 31–60 minutes (1 point)
- d) After 60 minutes (0 points)

#### 2. How much on average per day do you smoke?

- a) Less than 10 (0 points)
- b) 11–20 (1 point)
- c) 21–30 (2 points)
- d) more than 30 (3 points)

#### Add up your scores for the two questions. Interpretation of results:

0–1 points = low dependence

2 points = moderate dependence

3 points = strong dependence

4–6 points = very strong dependence



Source:

Heatherton TF, Kozlowski LT, Frecker RC, Rickert W, Robinson J. Measuring the heaviness of smoking: Using self-reported time to the first cigarette of the day and number of cigarettes smoked per day. *Addiction* 1989;84:791-800.

The higher your score, the greater your physical nicotine dependence, and the more likely you are to benefit from using nicotine replacement products or prescription medications to support cessation

**2. Are you worried about withdrawal symptoms?** The most common withdrawal symptoms, such as sleep difficulties, irritability, and anxiety, last from a few days to two weeks. Did you know that you can also suffer from withdrawal symptoms while using? Strong nicotine dependence can wake you up at night with withdrawal symptoms. Once you get rid of nicotine for good, sleep difficulties will also ease. Nicotine replacement therapy and smoking withdrawal medications reduce these symptoms and help to quit, especially, if you are highly or moderately dependent on nicotine. Ask advice and/or prescription for them from your doctor or nurse. If you use nicotine replacement therapy, make sure you use the products correctly.

Physical withdrawal symptoms start 2–12 hours after you quit. They peak within 1–3 days and usually disappear in 3–4 weeks.



3. **Think about how your previous life situation has influenced your thoughts on tobacco and nicotine products.** What could help you succeed now?
4. **In preparing to quit, it is important to identify and prepare for risk situations. Consider the following:**
  - a. In what situations is the risk of relapse the greatest?
  - b. How could you reduce the risk of relapse?
5. **Now it's time to decide on a quit date.** Write down in your calendar when you plan to use tobacco or nicotine products for the last time. Choose a realistic date. Not too far in the future, but not tomorrow either, so you have enough time to prepare.
6. **Relapse can be part of the change process.** Don't get discouraged if you relapse. Continue your nicotine-free journey as soon as possible and focus on the future.
7. **Here are a few tips to overcome tobacco and nicotine cravings. The worst nicotine craving usually lasts only a few minutes:**
  - a. Try to think beyond the nicotine craving. Think about the feeling when you have successfully overcome the craving!
  - b. Prepare in advance for nicotine cravings. Have something small and healthy to eat at home, in your pocket, or in your bag. The worst craving can subside with strong-tasting lozenges or gum.
  - c. Do something that activates your body: take a break for exercise, solve a puzzle, colour a picture in a colouring book, or take a 10-minute walk outside.

## 2.3 Physical activity

For individuals with COPD, maintaining a physically active lifestyle is very important. Studies have shown that **physical activity is associated with a better prognosis for COPD**. It also supports your general health. Prolonged time spent sedentary should be avoided. Through regular physical activity and exercise training your overall physical and functional capacity increases and it gets easier to manage different chores of everyday life. In other words, physical activity can help you keep doing the things you love as well. Furthermore, physical activity is also an effective means of clearing mucus from your airways.

On the contrary, if you start to avoid physical activity due to discomfort or even fear caused by experiencing shortness of breath or excess mucus in the airway, your functional capacity will decrease, which then provokes more symptoms and even greater feelings of discomfort. This may lead to a vicious cycle. It is possible to exercise regularly if you remember to adjust the pace with your condition and disease severity. **It is very important that you recognize the differences between shortness of breath and normal breathlessness.**

**Shortness of breath:** It feels that you can't get enough air into your lungs. It might feel like your chest is tight, you're gasping for air or you're working harder to breathe. It may worsen even after you stop physical activity and does not go away within a few minutes.

**Normal breathlessness:** It feels like you must breathe faster and deeper. It starts during exercise but goes away within a few minutes after you stop and your body recovers. Breathlessness is normal, and desirable when exercising. You may get out of breath more easily with faster movements or, for example, going up a steep hill if you haven't exercised for a long time.



Weekly physical activity recommendations for adults explain how much activity you need for good health. If you have not been physically active lately, you can start slowly and add new habits to your routine one step at a time. Remember, every step and every movement counts!

What?	How much?
Restorative sleep	Sufficiently
Breaks to sedentary behaviour	Whenever possible
Light physical activity	As often as possible
Moderate physical activity <b>OR</b> Vigorous physical activity	At least 2 h 30 min per week <b>OR</b> At least 1h 15 min per week
Muscle strengthening and balance activities	At least 2 times per week

It doesn't matter what type of exercise you engage in; **the most important thing is to find a form of exercise you enjoy.** Physical activity can include everyday activities such as gardening, walking, or cycling instead of driving. Even short bouts of physical activity during the day can promote your health. For example, brisk walking is an excellent form of exercise for someone with COPD. By engaging in activities enhancing your mobility, you can start noticing how breathing gets easier as your chest gets more flexible. The more regular and progressive exercise training is, the bigger the benefits. You can ask your physiotherapist for advice or for a possibility to engage in a pulmonary rehabilitation program.

Cold and freezing temperatures can irritate your lungs even if your COPD is well controlled. You can try placing a scarf over your mouth and nose and breathe through it. For example, tube scarves work well for exercising. If you don't like using scarves, remember to breathe through your nose, as it warms the air before it reaches your airways and may reduce irritation.

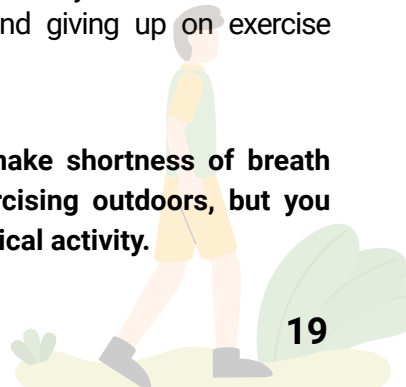


## Tips for Increasing Physical Activity

Here are some tips to make increasing physical activity feel easier:

- **Daily outdoor activity:** Decide to go outside every day for at least for a moment. Take a walk around the block or do some yard work. When going outside feels particularly challenging, remember that minute by minute adds up and can improve your exercise tolerance. It is important to start at a slow pace. Over time, you can increase the distance and pace, and you may find that you enjoy being outside or walking for longer periods.
- **Starting a new physically challenging hobby:** Starting a new hobby can be challenging, especially if you haven't been very active before. Think about is there a particular type of exercise you enjoyed doing when you were younger. Could you start doing it again? Or would you prefer trying something new?
- **Solo or group exercise:** Do you prefer exercising alone or in a group? Some people find solo exercise more suitable, while others enjoy group activities. Do you have a friend who could join you? Remember, the most important thing is to find the type of exercise you enjoy the most.
- **Making walks more enjoyable:** Does walking feel boring? You can call a friend, listen to music or an audiobook through headphones while walking. This way, the walk happens almost effortlessly. Sometimes inviting a friend to join you for a walk can be a pleasant option.
- **Every minute counts:** Remember that every minute of exercise or physical activity is beneficial for your health. Start with one form of exercise, and once it becomes a routine, you can add another way to be active. Don't overdo it all at once to avoid getting tired and giving up on exercise altogether.

**Different weather and climate conditions can make shortness of breath occur more easily. You don't have to stop exercising outdoors, but you might need to decrease the intensity of your physical activity.**



## 2.4 Vaccinations

For people with COPD, it is very important to receive the recommended vaccinations according to relevant local guidelines. These vaccinations are important for people with COPD to help prevent exacerbations, hospitalizations, and other serious illnesses:

- The influenza vaccine is recommended **every year**.
- The COVID19 vaccine is recommended **every year**.
- One dose of the pneumococcal vaccine\* is recommended.
- The RSV vaccine\*\* is recommended for individuals over 50 years old and/or those with chronic heart or lung disease.
- The Tdap/dTPa\* vaccine is recommended for individuals who were not vaccinated during adolescence.

\*The pneumococcal vaccine provides protection against severe infections caused by the *Streptococcus Pneumoniae* bacteria, such as pneumonia, meningitis, and sepsis.

\*\*The RSV vaccine provides protection against severe diseases caused by the respiratory syncytial virus, such as pneumonia and severe lower respiratory tract infections.

\*\*\* Tdap/dTPa vaccine protects against tetanus, diphtheria, and pertussis (whooping cough).

Follow local vaccination campaigns and ask health care professionals about vaccinations so they can advise you further.





## 2.5 Exacerbation

In a COPD exacerbation, symptoms worsen significantly compared to their usual level, typically lasting from a few days to two weeks. Shortness of breath and cough increase and sputum may change colour. Exacerbations can be triggered by respiratory infections, air pollution or neglect or discontinuation of medication. Exacerbations, especially those requiring hospitalization, worsen the quality of life, reduce functional capacity, and negatively affect the prognosis of the disease. It is important for you to know how to prevent exacerbations. Here are some preventive ways:

- Quit smoking.
- Use medications as prescribed by the doctor – ask doctor to check them, if you get an exacerbation.
- Maintain physical activity.
- Get vaccinated against influenza, pneumococcal disease, COVID-19, and RSV (Respiratory syncytial virus)
- Recognize the increase in symptoms early, before they deteriorate too severe.
- Ask for help to manage possible anxiety, depression, or social problems.

## How to recognize an exacerbation?

- The most obvious sign is the sudden worsening of symptoms (this is different from a sudden and brief worsening of symptoms during physical activity):
  - Increased shortness of breath
  - Worsening of cough
  - Increased mucus production, and the mucus may change colour

## How to treat an exacerbation?

- Increase the use of your medication as directed by the doctor – Take short-acting bronchodilator more often than usually and possibly start a course of oral corticosteroid and or antibiotic, if prescribed by your doctor.
- Adjust physical activity with your symptoms and condition.
- Use airway clearance techniques familiar to you. For example, PEP (Positive Expiratory Pressure) or other breathing manoeuvres, at least 2-3 times per day to remove phlegm from your airways
- If symptoms worsen or become severe – for example, if you have continuous severe shortness of breath, difficulty sleeping, or otherwise feel that home treatment is insufficient – seek medical attention. Remember that urgent visit at nearest emergency room may be needed, so do not prolong it.





## 2.5 Nutrition

Malnutrition and weight loss are relatively common in individuals with long advanced COPD. **Breathing requires more energy than usual in people with COPD, which may be one reason for weight loss. A person with COPD may also experience a reduced appetite, which contributes to weight loss.** Malnutrition and weight loss negatively affect the prognosis of the disease, so it is important to pay attention to adequate and varied nutrition upon receiving a COPD diagnosis. Malnutrition is associated with poorer lung function and exercise tolerance, lower quality of life, and a higher risk of hospitalization and death. On the other hand, while mild overweight is not harmful, significant obesity often increases COPD symptoms. The ideal is to try to reach a normal weight and maintain it. If you need nutritional support, you can ask a nurse or a nutritionist for help.

**Here are a few tips to help you achieve a more varied diet. If you have lost weight and are underweight, these tips can help you gain weight to healthy level, promoting your health and aiding in the treatment of your condition:**



**Maintain a regular meal rhythm:** Eat every 3-4 hours, planning your meals so that hunger does not catch you by surprise. Do not eat too big meals at a time. A good meal rhythm consists for example, of breakfast, lunch, dinner, and an evening snack. If necessary, have a healthy snack between breakfast and lunch or between lunch and dinner. Avoid snacking constantly between meals.



**Eat enough vegetables, berries, and fruits:** Aim to eat about 500 grams of vegetables or fruits throughout the day. You can distribute this amount across each meal. If you suffer from malnutrition or weight loss, you can add oil or an oilbased dressing to salads and vegetables.



**Consume enough fibre:** Fiber keeps you feeling full for much longer and is good for your digestion. Women need at least 25 grams a day, and men should aim for 35 grams. You can get fibre from fruits, berries, vegetables, and whole grain products like bread, rice or pasta.



**Pay attention to protein sources:** For adults, a good amount of protein is about 1.5 grams per kilogram of body weight. Your exact needs can vary depending on your gender, age, and weight. Favor chicken, fish, and plant-based proteins, and consume red or processed meat in moderation. Choose low-fat sources of protein.



**Pay attention to the quality of fats:** Avoid animal-based, saturated fats and prefer soft vegetable fats like oils (olive, canola), nuts and seeds. COPD patients might need more fats than in a normal diet. Because of that, it is necessary to pay attention to the quality of fats and avoid getting too much saturated fat, which is bad for your cardiovascular health



## 2.7 COPD follow-up visits

COPD patients are advised to have an annual follow-up visit with a health care professional. Depending on local practices, you may visit either a doctor or a nurse. If your COPD is not well-controlled, you can discuss with your doctor whether you need more frequent follow-up visits.

During the follow-up visits, a health care professional will assess your COPD control. Your possible COPD symptoms will be evaluated by using CAT-Test (COPD Assessment Test) or mMRC-test (modified Medical Research Council dyspnea scale) as well as the number of exacerbations and oral corticosteroid courses, and possible emergency visits. The doctor may have instructed you to perform PEF monitoring before the visit. It is also recommended to check lung function by performing spirometry. Based on this assessment, the doctor may change your medication if needed. The following list of matters is also being covered during the follow-up visit:

- Inhalation technique
- Medication usage amounts
- Whether special reimbursement for COPD medication is valid
- Check if the self-care instructions are still up to date
- The status of tobacco and nicotine product use

Remember to prepare carefully for the visit so you can bring up necessary issues. You can write down how often you have had exacerbations, if you have needed oral corticosteroid or antibiotic courses and if you have any questions in mind.

<b>mMRC-test (modified Medical Research Council dyspnea scale)</b>	
<b>What best describes your health now?</b>	<b>Points</b>
I only get shortness of breath with really heavy exercise.	0
I get shortness of breath when hurrying on level ground or walking up a hill.	1
On level ground, I walk slower than people my age because of shortness of breath, or I have to stop for breath when walking at my own pace.	2
I stop for breath after walking about 100 meters or after a few minutes on level ground.	3
Because of shortness of breath, I cannot leave the house, or I get short of breath when dressing or undressing.	4

<p>0-1 point: Minor shortness of breath</p> <p>2 or more points: Significant shortness of breath</p>
--

Source: Global Initiative for Chronic Obstructive Lung Disease. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. Updated 2014. Chapter 2: diagnosis and assessment. Page 13. Table 2.4. Modified Medical Research Council Questionnaire for Assessing the Severity of Breathlessness.

**CAT-test (COPD Assessment Test)**

Mark in each sentence the number of points that best describes your condition at this time. Choose only one answer for each sentence.

I never cough	0	1	2	3	4	5	I cough all the time
I have no phlegm in my lungs	0	1	2	3	4	5	My lungs are full of phlegm
My chest doesn't feel tight at all	0	1	2	3	4	5	My lungs are full of phlegm
When I walk up a hill or climb one flight of stairs, I am not breathless	0	1	2	3	4	5	When I walk up a hill or one flight of stairs I am very breathless
I can easily do my daily activities	0	1	2	3	4	5	I barely can do my daily activities
I am confident leaving my home despite my lung condition	0	1	2	3	4	5	I am not at all confident leaving my home because of my lung condition
I sleep deeply.	0	1	2	3	4	5	Because my lung function I can't sleep deeply
I have lots of energy	0	1	2	3	4	5	I never feel full of energy

Count your points. If you get more than 10 points, your COPD may not be well controlled, and you may benefit from discussing it with your doctor.

Source: The COPD Assessment Test was developed by a multi-disciplinary group of international experts in COPD supported by GSK. GSK activities with respect to the COPD Assessment Test are overseen by a Governance Board that includes independent external experts, one of whom chairs the Board.

### 3 Bibliography

Bourbeau, J. & Bartlett, S. Patient adherence in COPD. *Thorax*. 2008;63(9):831

Effing, T., Vercoelen J., & Bourbeau J. Definition of a COPD self-management intervention: International Expert Group consensus. *Eur Respir J*. 2016;48(1):46-54

Heatherton TF, Kozlowski LT, Frecker RC, Rickert W, Robinson J. Measuring the heaviness of smoking: Using self-reported time to the first cigarette of the day and number of cigarettes smoked per day. *Addiction* 1989;84:791-800.

Heikkinen, K., Kaistila, T., Knaapi-Junnila, S., Kukkonen, M., Pohju, A., Siltanen, H., & Juusela, M. 2018. Self-management counselling for people with chronic obstructive pulmonary diseases -Clinical Practice Guideline. NRF, Nursing Research Foundation. <https://www.hotus.fi/keuhkohtaumatautia-sairastavan-omahoidon-sisallot-hoitosuositus>

Food-Based Dietary Guidelines in Europe. WHO. Updated January 2024. [https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/topic/food-based-dietary-guidelines-europe\\_en](https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/topic/food-based-dietary-guidelines-europe_en)

Global Initiative for Chronic Obstructive Lung Disease. Global strategy for prevention, diagnosis and management of COPD: 2024. Report. 2024. (Referred March 5, 2025). Available online at: <https://goldcopd.org/2025-gold-report/>

Global Initiative for Chronic Obstructive Lung Disease. Global strategy for prevention, diagnosis and management of COPD: 2026 Report. 2026. (Referred February 23, 2026). Available online at: <https://goldcopd.org/2026-gold-report-and-pocket-guide/>

Chronic Obstructive Pulmonary Disease. Current Care Guidelines. Working group set up by the Finnish Medical Society Duodecim and the Finnish Respiratory Society. Helsinki: The Finnish Medical Society Duodecim, 2020 (referred March 3, 2025). Available online at: [www.kaypahoito.fi](http://www.kaypahoito.fi)

Prevention and treatment of tobacco and nicotine dependence. Current Care Guidelines. Working group set up by the Finnish Medical Society Duodecim and the Finnish Association for General Practice. Helsinki: The Finnish Medical Society Duodecim, 2022 (referred December 3, 2026). Available online at: [www.kaypahoito.fi](http://www.kaypahoito.fi)

Zwerink, M., Brusse-Keizer, M., van der Valk, P. et al. Self-management for patients with chronic obstructive pulmonary disease. *Cochrane Database Syst Rev* 2014;3:CD002990