

Breathe Well, Move More, Live Better

How to use breathing exercises and activity to manage your COPD

www.ipcrg.org/copdmagazine

International Primary Care
IPCRG
Respiratory Group

Breathing techniques

Recommended exercises

Instructional videos



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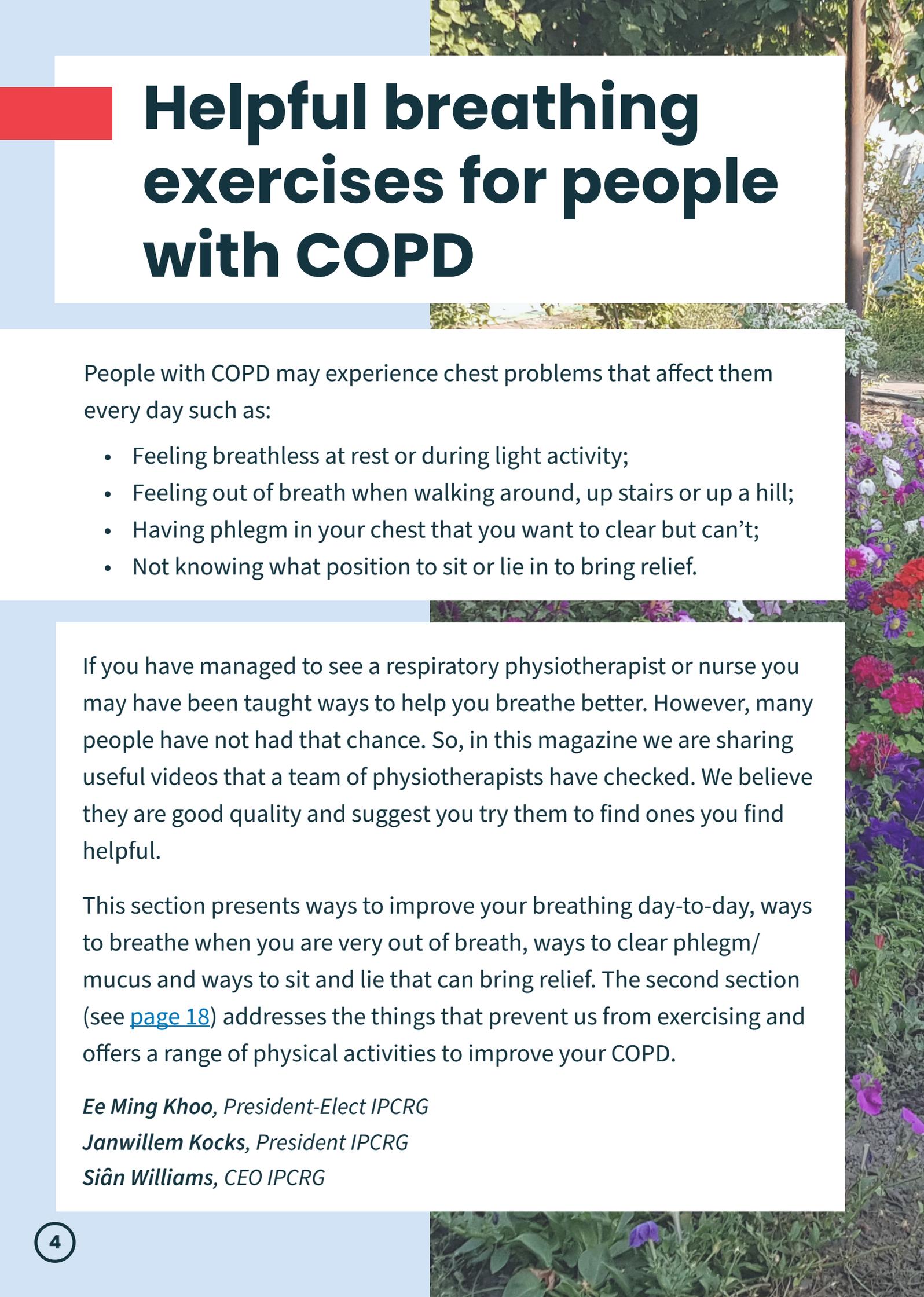
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“

I think that we all need to find our own way of dealing with COPD, according to the sort of person we are and what we can physically manage. What I have learned though is that even a tiny bit of exercise really, really helps

- Jenny P

”



Helpful breathing exercises for people with COPD

People with COPD may experience chest problems that affect them every day such as:

- Feeling breathless at rest or during light activity;
- Feeling out of breath when walking around, up stairs or up a hill;
- Having phlegm in your chest that you want to clear but can't;
- Not knowing what position to sit or lie in to bring relief.

If you have managed to see a respiratory physiotherapist or nurse you may have been taught ways to help you breathe better. However, many people have not had that chance. So, in this magazine we are sharing useful videos that a team of physiotherapists have checked. We believe they are good quality and suggest you try them to find ones you find helpful.

This section presents ways to improve your breathing day-to-day, ways to breathe when you are very out of breath, ways to clear phlegm/mucus and ways to sit and lie that can bring relief. The second section (see [page 18](#)) addresses the things that prevent us from exercising and offers a range of physical activities to improve your COPD.

Ee Ming Khoo, President-Elect IPCRG

Janwillem Kocks, President IPCRG

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General advice on living day to day with COPD

<https://youtu.be/wwlPor2ci1s>

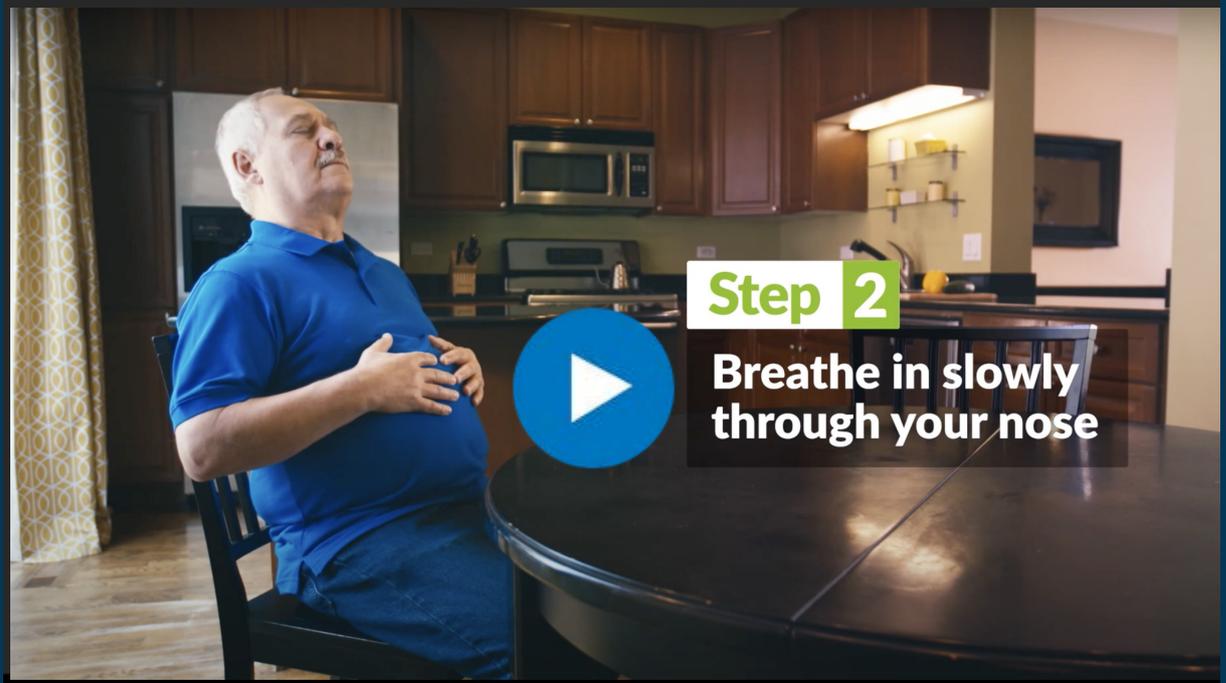
Ways to improve your breathing day-to-day

The most important muscle for breathing is the diaphragm – the big muscle that separates your stomach from your chest where your lungs are. When it is working efficiently, it helps your chest move and lets more air in and out of your lungs.

You can strengthen it using **diaphragmatic breathing**. If this is practised daily, your diaphragm muscle becomes more efficient and breathing in this way becomes natural. If you are confident in how to do it, you can also use diaphragmatic breathing when you are breathless to help you recover more easily. For those of you interested in yoga-based approaches, you can also try **pranayama techniques**.

TOP TIPS

- 1** Practise diaphragmatic breathing regularly throughout the day. After a while it will become easier.
- 2** Place a hand on your belly so you can see and feel it rise. This occurs when you are using the bottom of your lungs and breathing efficiently.
- 3** Start practising it sitting down until you feel confident, then try out other positions such as lying on your side or leaning against a wall.



Belly breathing

<https://youtu.be/wai-GIYGMeo>



Pranayama – Regulation of Breath | Dr. Hansaji Yogendra

<https://youtu.be/ylvNiMU665w?t=38>

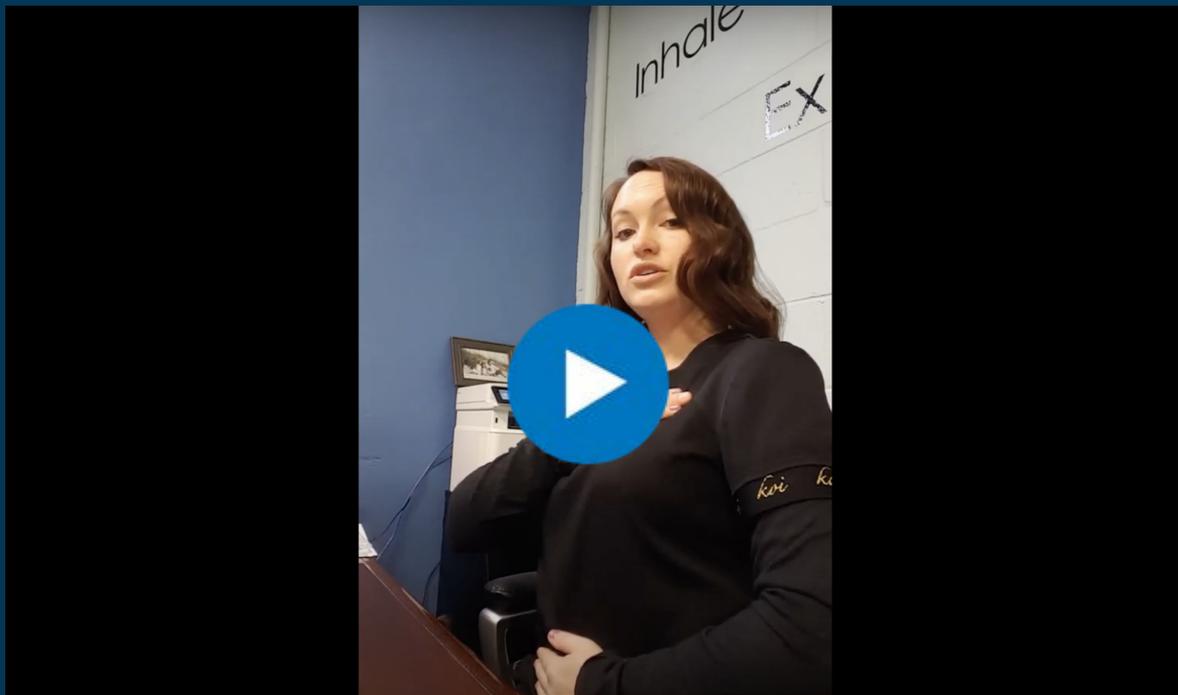
Ways to breathe when you are very out of breath

Our bodies breathe faster and more deeply when we increase activity, such as climbing up stairs or walking up a hill. This is a normal response to activity, but for people with COPD breathlessness can come on sooner and feel more severe. It can also make you feel stressed, which makes your breathing worse.

To help recover your breathing you might find **pursed lip breathing** helpful. When you are feeling stressed, you can also try **breathing in a rectangle**, or try using a **hand-held battery operated fan** which cools your face; some people prefer to use a cool flannel on their face.

TOP TIPS

- 1** Practise these techniques when you are resting to gain confidence, then use them when you are breathless but feel secure in your surroundings.
- 2** Gradually use them with increased breathlessness so that you can use them at any time to control your recovery.
- 3** Combine these breathing techniques with positions that help you recover your breath.



Breaking the Breathlessness Cycle with Pursed Lip Breathing

<https://youtu.be/Q8GH7iKB7N4>



Using a handheld fan to reduce breathlessness

<https://youtu.be/y5tBC5R8DYs>

Ways to breathe when you are very out of breath (continued)

TOP TIPS

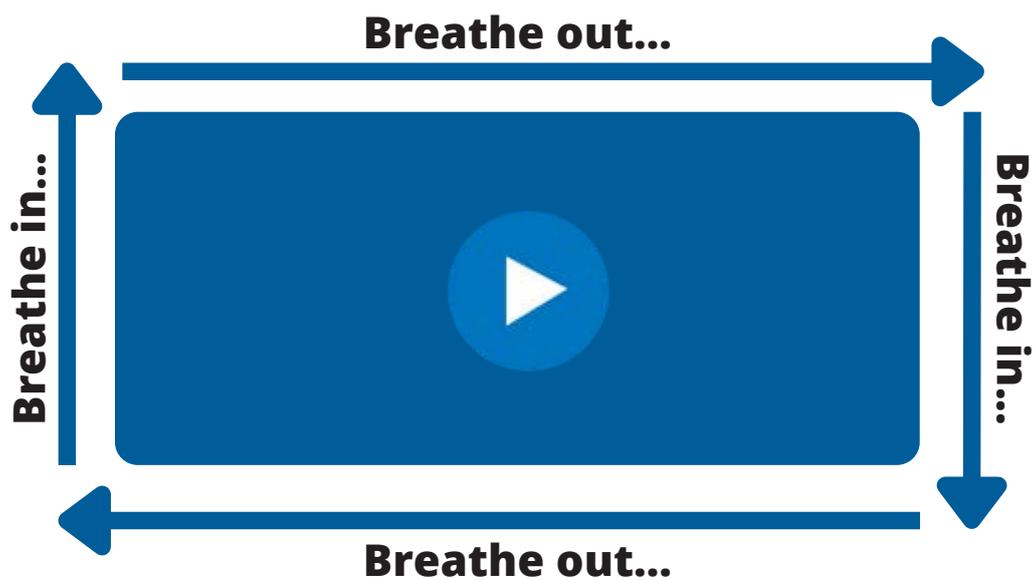
- 4** Remember some breathlessness with activity is good for us, even with COPD. If you can talk in short sentences you are OK; if you have to breathe in between words, stop and have a rest. Choose your own sentence to have a test for this e.g. “I had jam and toast for breakfast”.
- 5** As you learn to assess how breathless you are at any time, you will be able to take action before you become exhausted.
- 6** Research suggests that cooling our cheeks, nose and mouth sends a message to our brain to reduce the feeling of breathlessness, which is why we instinctively try to ‘get some fresh air’ when we feel breathless. A handheld fan, cool flannel, spray of water, an open car window or a standing fan can achieve the same effect.



Breathing rectangle for managing breathlessness

<https://youtu.be/jdwTquTzeWs?t=11>

Breathing in a Rectangle



Adapted from <https://dukinfieldmedicalpractice.co.uk/wp-content/uploads/2020/06/Post-COVID-19-information-pack-5.pdf>
(accessed 27/04/2022)

Ways to clear phlegm/mucus

Many people with COPD have phlegm which makes them cough. Coughing is tiring and increases breathlessness, so it helps to clear the phlegm by bringing it up from your lungs and coughing it into a tissue (or swallowing, if preferred). Think of it as an everyday routine like brushing your teeth rather than waiting for the phlegm to build up.

Try these clearance methods, called **active cycle of breathing (ACBT)** and the **huff cough**. The ACBT is also a useful way to test how clear your lungs are.

TOP TIPS

- 1** If you smoke, seek help to quit. Smoking damages the little hairs called cilia in your airtubes that help sweep the phlegm out of your lungs.
- 2** Drinking plenty of water throughout the day makes phlegm less sticky and easier to cough up.
- 3** Try chest clearance 1-2 times a day, but if you have lots of phlegm you can do it more often. Clearance before bed can help prevent coughing at night.
- 4** Try these exercises while resting in different positions, e.g. lying flat on your side with your head supported by a pillow, or lying down on your side supported by cushions. This is called '**postural drainage**'.



Make sure you are fully on your side. Resting your upper arm on a pillow may also help. Take your inhaler before, and wait 30 mins after eating if you can to avoid feeling sick.

Source:

<https://dukinfieldmedicalpractice.co.uk/wp-content/uploads/2020/06/Post-COVID-19-information-pack-5.pdf>



<https://youtu.be/sawZdkp7QtQ?t=95>

ACBT for Respiratory Illness



How to Cough & Clear Phlegm

<https://youtu.be/bXJkZ5fGU7c>

Ways to sit and lie that can bring relief

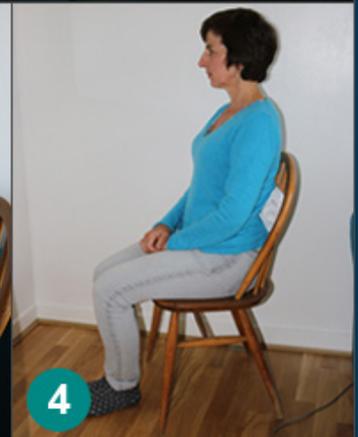
There are lots of ways to sit or stand that bring relief if you are feeling out of breath. Try some of them to see what works for you. These positions help your diaphragm muscle to work better to empty and refill the lungs with air, and also prevent other muscles from overworking which makes breathing less effective.

TOP TIPS

- 1** Give your shoulders a shake and relax them to avoid them hunching up by your ears.
- 2** Try combining ways to sit and lie with breathing techniques such as pursed lip breathing, rectangle breathing or 3:5 breathing.
- 3** Focus on making your breath out longer and longer with each breath. This makes sure that your lungs have plenty of space to receive a deep breath in afterwards.

Breathing control techniques

1. High side lying.
2. Forward lean sitting without pillows.
3. Forward lean sitting with pillows.
4. Upright sitting in chair.
5. Forearm support to assist breathing using trolley.
6. Forward lean standing.
7. Standing with back support.



Photograph Wendy White (permission requested)

Planning, pacing and prioritising

For many people, COPD also stands for “Can Only Plan Daily” because you don’t know how you will feel until you wake up. These are some of the ways to help you manage your day.

Planning

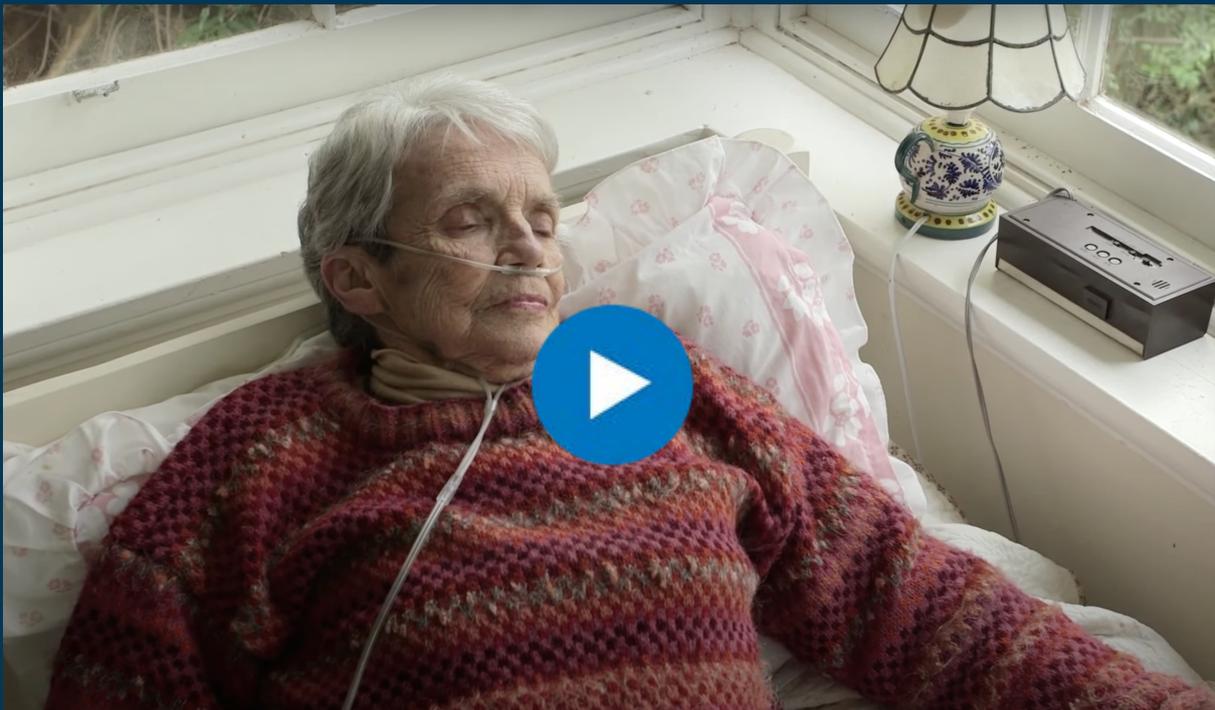
Making a plan of the activities we need to do during the day. This includes all the tasks we need to do like shopping, laundry and attending appointments, but should also include some exercise and things we enjoy, like seeing friends.

Pacing

Budgeting our energy so we don’t become exhausted. Pacing is used in many long-term conditions. It breaks up our activities into smaller parts, and enables us to spread them out over our day or week. When managing breathlessness it is also very important to plan periods of activity and periods of rest to avoid becoming over-tired.

Prioritising

Deciding what is most important for you to do. This can include thinking about when to ask for help from others or modifying what you had intended to do in your plan. To live well with COPD it is important to prioritise some of our energy for exercise. Structured activity, like going for a walk or doing gentle exercise in the home, helps our bodies experience breathlessness in a controlled way. This increases our fitness and makes it less daunting when we become breathless doing daily activities.



Managing Your Fatigue and Energy Conservation

Watch this video where people with chronic lung disease describe the impact of COPD on their energy levels and share some top tips for conserving energy during daily tasks

<https://youtu.be/n4yjIweil4E>

Getting active - what can you do?

Being active is good for everyone, but it is particularly important for people with COPD - it helps us breathe better, feel less tired so we can do more, and stay independent.

The more we do, the more we are able to gain pleasure in our life, keeping our mood up and motivating us. We need to keep our muscles strong, which helps our breathing, balance and completing daily tasks. As we age, our muscles and bones can lose strength. To prevent this, try to sit less and do more on your feet.

Did you know that people with COPD can spend 80% of their waking day sitting down? Every moment that reduces your time sitting will help. You don't have to lift weights or go running. Everyday activities, like hanging up the laundry or walking the dog, can build muscle and improve your breathing. Even breaking up prolonged sitting with a few minutes of gentle movement improves overall activity levels.

This magazine presents lots of examples of activities to help you find the ones that work for you. Remember, some activity is better than none.

The activities in this magazine will help you build up to a recommended 150 minutes of moderate intensity activity per week and strength building two days a week, leaving us breathing better, doing more and feeling good. Wherever you start from, moving more or keeping moving is a vital part of living with COPD. Include a gentle warm-up, strength training, aerobic activity, balance and flexibility exercises.

As you learn to assess how breathless you are at any time, you will be able to take action before you become exhausted. Use this Scale of Breathlessness which you may hear called the Borg scale. Try to keep yourself at level 3. At this level of breathlessness, you should still be able to speak a sentence like "I had jam on toast for breakfast" but at a slower pace than usual. At this level, you will build muscle and improve breathing without making yourself too uncomfortable.

Scale of Breathlessness



"I could do this all day"

Light



"I can feel the effort but I can keep going"

Moderate



"I'm struggling to catch my breath, this is tough"

Strong



"I feel like I'm going to die"

Severe



Adapted from Hareendran et al. 'Proposing a standardized method for evaluating patient report of the intensity of dyspnea during exercise testing in COPD' (2012) https://www.researchgate.net/figure/ersions-of-the-modified-Borg-scale-used-to-evaluate-dyspnea-A-Reprinted-from-Am-Rev_fig2_228089364 (accessed 26/04/2022)



Lateral Raises

COPD Exercise Class

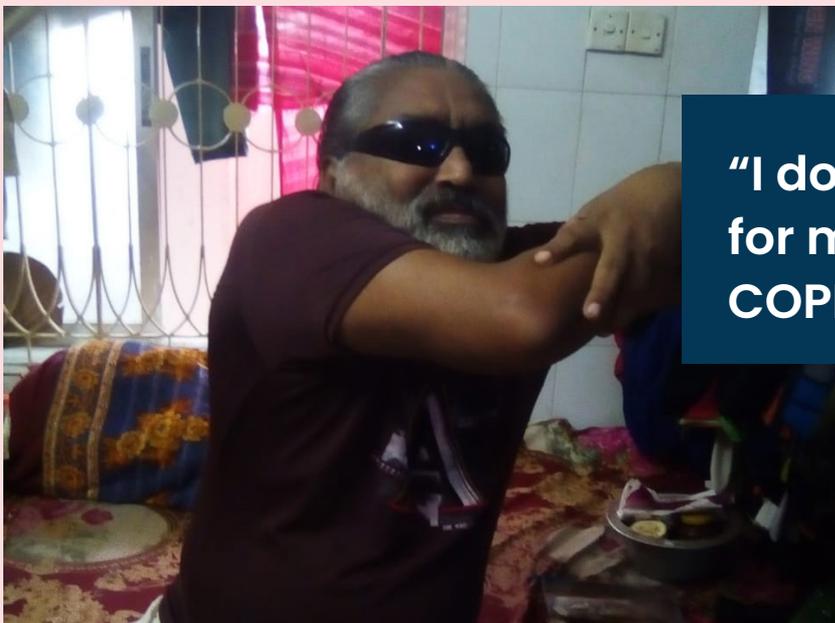
This shows the range of movement you might want to include in your plan.

<https://youtu.be/l349JvH3aq8>

What stops you being active and what can you do about it?

People with COPD often find it hard to be active. These are some of the problems they tell us they face. Do any of these apply to you? Click on a quote to find some solutions!

Click on any that you agree with to find some solutions:



"I don't think exercise is for me because I've got COPD"

1

2

**"It's too hot/cold/wet/
windy to exercise"**



**"I know I should, but I
don't"**

3

4

**"I don't like doing things
on my own/I don't like
doing things in groups"**



“I don’t think exercise is for me because I’ve got COPD”

Being active is all part of living with COPD, and any activity is better than none. Gardening, carrying groceries, or taking your dog for a walk all count. Even getting up to get a drink during the advert break while watching TV has a positive impact.

Starting small and building up the time you spend being active is the key to success. It is good to do a variety of activities. This magazine is all about giving you ideas from the worldwide COPD community.

It is good to plan rest days as well as activity days - there is no right or wrong number of days at the beginning. Over time, you should aim to increase the total time you are active and try to do something every day. People living with COPD experience ‘good days and bad days’. After a couple of bad days or an exacerbation, you will need to start small again and build up. Don’t be disheartened - perseverance is the key to staying active with COPD.



“

I have been using inhalers for COPD over a few years without remarkable improvement, however, this exercise programme helped me to get back my normal life again.

”

“It’s too cold/hot/ wet/windy”

If it’s cold outside, wear a hat, gloves and warm socks and shoes. Being active warms us up so wear clothes with zips that can easily be undone to cool down or done up to get warmer.

On a hot day, try to be active earlier in the morning, or in the evening after it has cooled down. Open your windows to get a breeze, draw the curtains to provide shade, or put on a fan if you have one. If the air quality is poor, it may help to wear a mask. Wear light clothing and keep hydrated by drinking water. A handheld battery-operated fan can also be helpful.

If it’s too wet or windy for you outside, stay indoors. Look at examples of indoor activity to inspire you! Many walking sports can be adapted for the indoors.



10-minute Indoor Walking Workout

https://youtu.be/bO6NNfX_1ns



Living Better with COPD

https://youtu.be/_SFx6f63LJo

“I know I should, but I don’t”

The most important thing is to find something you like doing and can fit into your day.

Lots of smartphones now have a step counter on them. See if yours does and aim to increase the number of steps you take a day. You can also buy step counters (“pedometers”).

Find someone to exercise with, as you can support each other.

Be kind to yourself and remember that any time spent not sitting is good for your health. 30 minutes of exercise per day may seem off-putting, but it doesn’t have to be done all at once - you can do it in smaller blocks of 5 or 10 minutes at a time.

Many people find an exercise diary helpful. Use this diary, or a similar one, to keep track of time you have spent active, then over weeks and months you will see the improvement. Remind yourself of the scale on [page 19](#) to assess your breathlessness.

Use an exercise diary to track your daily activity

Date	Feeling before	Activity	Duration	Scale of breathlessness	Comments
17/4	😊 😐 😞	Gardening	15m	2	
18/4	😊 😐 😞	Indoor walking video	30m	3	Raining outside
19/4	😊 😐 😞	Walk around park	45m	4	Tiring but felt good
20/4	😊 😐 😞	Walk around park	35m	3	Walked faster than yesterday
21/4	😊 😐 😞	Hanging up laundry	15m	5	Sore legs from previous day
22/4	😊 😐 😞	Food shopping	25m	3	Heavy bags meant I walked slower
/	😊 😐 😞				
/	😊 😐 😞				
/	😊 😐 😞				
/	😊 😐 😞				

“I don’t like doing things on my own/I don’t like doing things in groups”

Making a commitment to do something with someone else can help motivate you. If you don’t feel confident on your own, there may be groups doing walking, dog walking or cycling. There may be dancing, singing, or Tai Chi groups, many of which now meet online. Your GP/ family physician may know what’s available.

If you want to be active outside on your own, make sure you tell someone where you’re going, bring your phone with you, and arrange to call someone when you get back safely.

If you enjoy team sports, find out if there are any local “walking sports” groups - see [page 34](#) for examples. On the other hand, many walking sports can also be adapted for solo use.



How different activities can help you

Different activities benefit your breathing and wellbeing in specific ways. It is important to incorporate a range of activities/exercises for good all-round health. For example:

- Repetition: keeping with a light level of breathlessness for more than 30 minutes will help you to build long term stamina for everyday life activities such as walking, shopping.
- Strength: short repetition of strenuous movement will help you with power effort such as climbing stairs & carrying groceries.
- The muscles in our shoulders help us to breathe and to lift our arms, which we need to do for everyday activities like hanging out the washing or hammering a nail. It's worth practising how to control your breathing so that you can still lift your arms. Try moving your arms above your shoulders when walking or dancing, assess your breathlessness and see if you can find a way that works for you.
- Exercising in a still position will strengthen your core muscles and your balance while experimenting with very few breathing limitations. You can do lots of different strength training exercises seated.
- Think positively: there is always a way to do what you want to do. If you face difficulties, rest, pause, identify the problem and plan a way around or seek help if you don't see a solution.



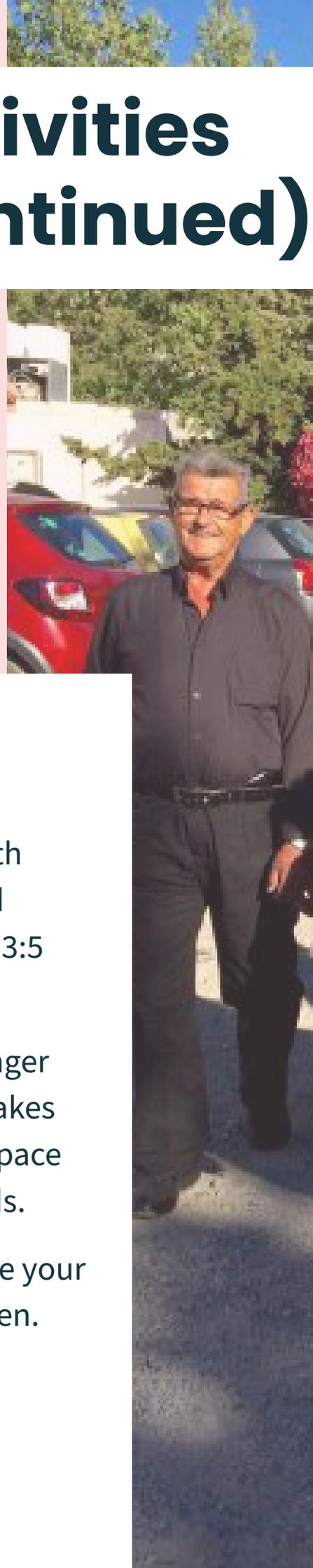
Photo credit: Lung Australia



How different activities can help you (continued)

TOP TIPS

- 1** Exercise at your own pace
- 2** Try combining ways to sit and lie with breathing techniques such as pursed lip breathing, rectangle breathing or 3:5 breathing.
- 3** Focus on making your breath out longer and longer with each breath. This makes sure that your lungs have plenty of space to receive a deep breath in afterwards.
- 4** You can also do these activities inside your home or outside, such as in the garden.





Sports gallery

If you have always enjoyed team sports, see if there are any local walking sports groups near you. You might find the sport you love, or be inspired to try a new one. Take a look at the videos below to get a sense of how they have adapted the pace, but ask around to see what is available locally. During the COVID-19 pandemic some of them have continued to meet online and people have practised skills in their gardens, yards or indoors.

Some sports like golf are great walking sports. Maybe you're a swimmer, or would like to take up swimming. See what groups are available at your local swimming pool:



**Golf Adapted
for COPD**

1

<https://youtu.be/10P3wbE0cJk>



Remote Walking Football Team

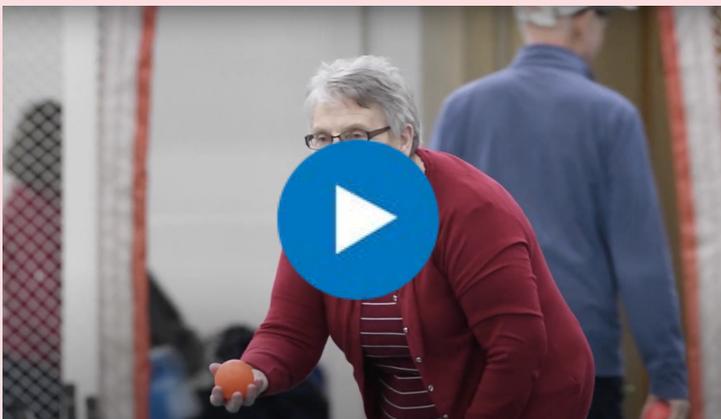
2

<https://youtu.be/kD4f73niGjg>

3

Walking Netball

<https://youtu.be/qzQfnnv7sFPg>



Walking Cricket

4

<https://youtu.be/auDMFd9Y8bk>

Singing and Dancing

Maybe you're not a "gym person" and prefer to keep active and meet people through singing or dancing? Both are good for your breathing, and keep your body and mind active. Take a look at the videos that show sessions specifically for people with COPD. Maybe you could join in? Or, see if there is a group available locally for people with COPD or online if you'd prefer to stay home.



Singing Lessons for COPD

1

<https://youtu.be/S43cTh-xjCg>

2

"Singing Makes Me Feel Better"

<https://youtu.be/jaJ-7Lz3JaE>





Dance Easy: Seated Dances

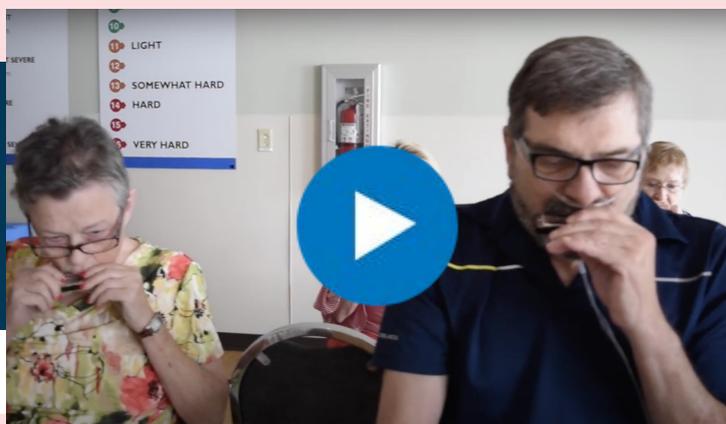
3

<https://youtu.be/yROs5CVuli0>

4

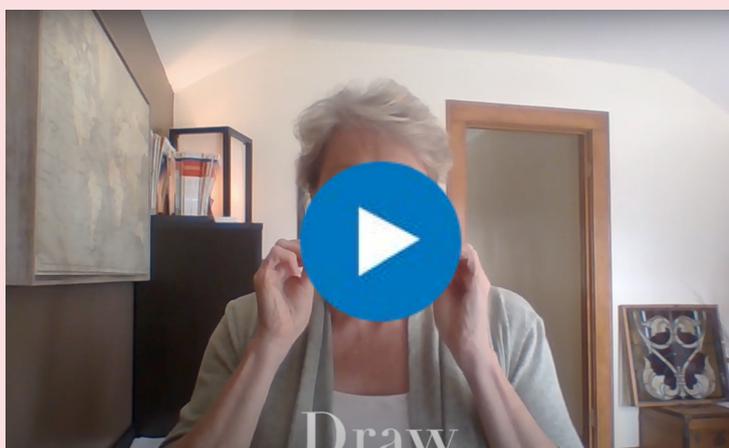
Harmonicas for Health

https://youtu.be/DOO_-M1qhzc



In the USA there are harmonica groups set up for people with COPD to help breathing control and are also a great way to learn a new skill and meet people.

Have a go by following this instructional video:



Harmonicas for Health 2

5

<https://youtu.be/jlDDK72mRi8>

Mind and body exercise

If you like calming activities, you might like yoga, Pilates, Tai Chi or Qigong (pronounced “chee-gong”) which strengthen your breathing, heart and leg muscles and also calm your mind and body.

They combine different postures, breathing techniques, meditation, concentration, and gentle movements. Find a few minutes each day to practise - you don't need any special equipment.

Qigong and Tai chi are done standing or seated and there is good evidence they help people with COPD breathe better. Yoga can be used for mindfulness, reducing stress and improving posture which is important for people with COPD. Qigong can be easier to learn than Tai Chi. Pilates and yoga may be done sitting or lying down. You can set your own pace or degree of difficulty.



Qigong for Healthy Lungs

1

<https://youtu.be/UjX41RktA3Q>

2 Tai Chi for COPD

<https://youtu.be/RBkbwcNEXl4>





YogaBreathe

3

<https://youtu.be/Gi8-STWh9sw>

4

Slow Flow Yoga for people living with COPD

<https://youtu.be/YeleQGkMjrU>



Yoga: Alternate Nostril Breathing

5

<https://youtu.be/8VwufJrUhic>



Staying safe

If you are already quite active, congratulations! Try to increase what you do, or vary it to improve your strength and fitness. Share your enthusiasm with others in your community: it's great to hear about people living well with COPD.

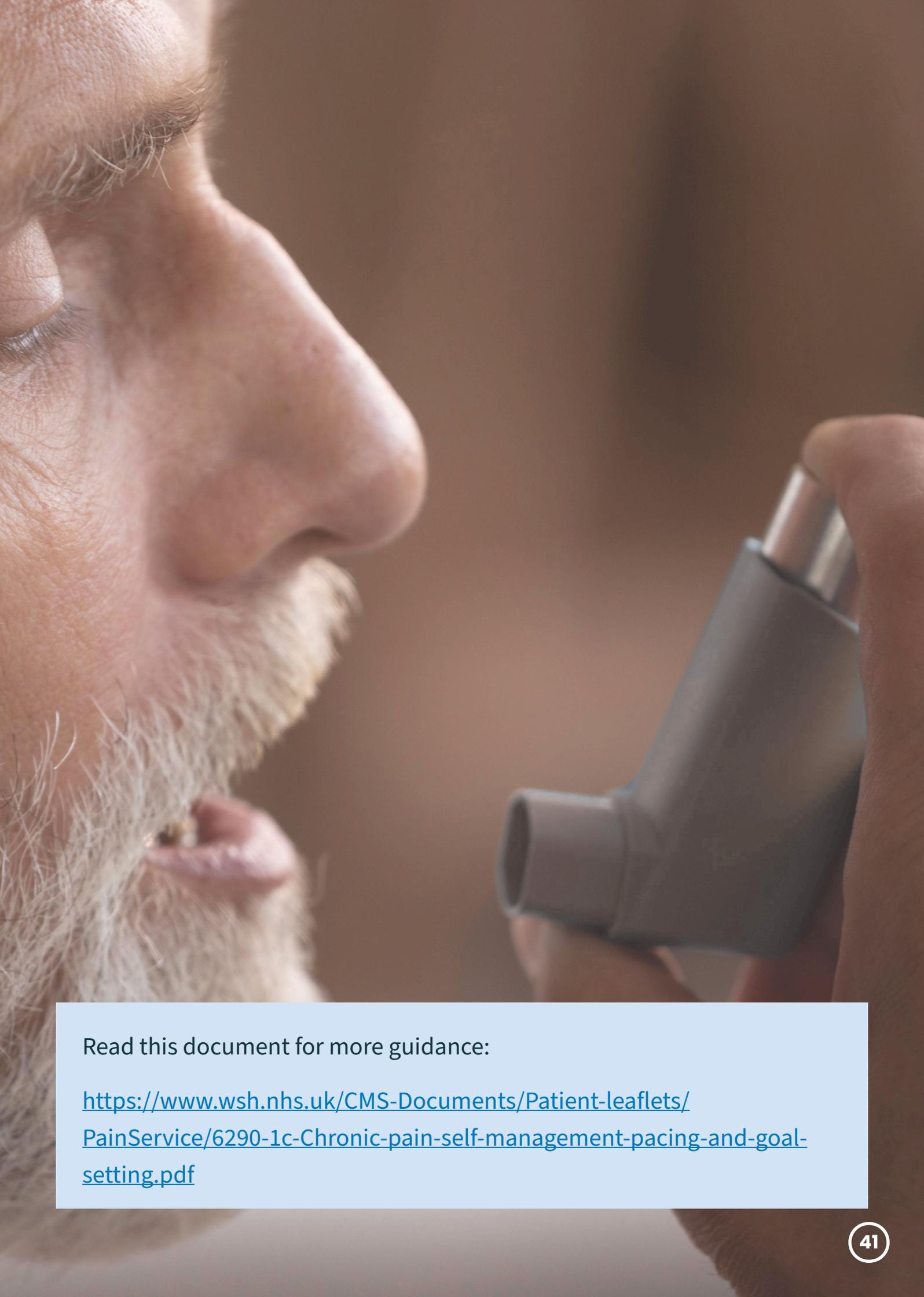
Everyone has their limits. Stop if you have chest pain, joint pain or feeling dizzy or if you are so breathless you can't speak in short sentences. If this happens again, talk to your GP/family physician/nurse/respiratory physiotherapist.

Taking your medicines

Continue taking your regular medication to stay well. If you have emergency medication like a short acting reliever inhaler, keep it to hand in case you can not regulate your breathlessness. Remember any other emergency medicine you might have like a GTN spray. If advised by your health care professional to take your inhaler before you start, do this before your exercise. If you are exercising on your own, keep your phone nearby and tell somebody that you will call them when you have finished.

“I want to be more active but I have chronic joint pain”

The principles that apply to breathlessness apply to joint pain too: start off doing a little, then slowly increase activity. It helps to choose something that you enjoy. Like breathlessness, your pain might not reduce but you will find you can do more of the activity.



Read this document for more guidance:

<https://www.wsh.nhs.uk/CMS-Documents/Patient-leaflets/PainService/6290-1c-Chronic-pain-self-management-pacing-and-goal-setting.pdf>

Glossary

- Light physical activity** Activity that does not cause you to start sweating or get breathless. Examples: standing (e.g. preparing food, talking on the phone, doing arts and crafts), walking slowly, putting away the laundry.
- Moderate physical activity** Activity where you are working hard enough to raise your heart rate, start sweating and your breathing needs a bit more effort. Examples: going for a walk, gardening, casual cycling or social dancing.
- Borg breathlessness scale** This scale asks you to rate the difficulty of your breathing at a given time. The scale starts at 0 which is when your breathing is not causing you any difficulty. The highest score on the scale is 10 which is when your breathing is at its most difficult. See our adaptation on [page 19](#).
- Dyspnea** The medical term for breathlessness pronounced “dispnea”
- Strength building** A repeated activity that makes your muscles work harder than usual so that they build the strength and power needed for activities such as climbing stairs or carrying groceries.
- Phlegm/mucus/catarrh** A thick, slimy substance produced by your breathing/respiratory system. This can build up in people with COPD and cause coughing. Phlegm in your chest can be cleared with careful positioning, the active cycle of breathing technique and the huff cough (see [page 13](#)).
- Planning/pacing** Planning is making a plan of activities for the day, balancing exercise, activities we need to do and activities we want to do. Pacing staggers these activities over a time that allows us to manage our breathlessness and avoid becoming over-tired.



Acknowledgements & disclaimer

This resource and each video has been reviewed by a team of practising academics and physiotherapists who support its recommendations.

This material has been developed in consultation with those living with COPD.

Magazine edited and compiled by Joe Casson and Siân Williams.

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Disclaimer

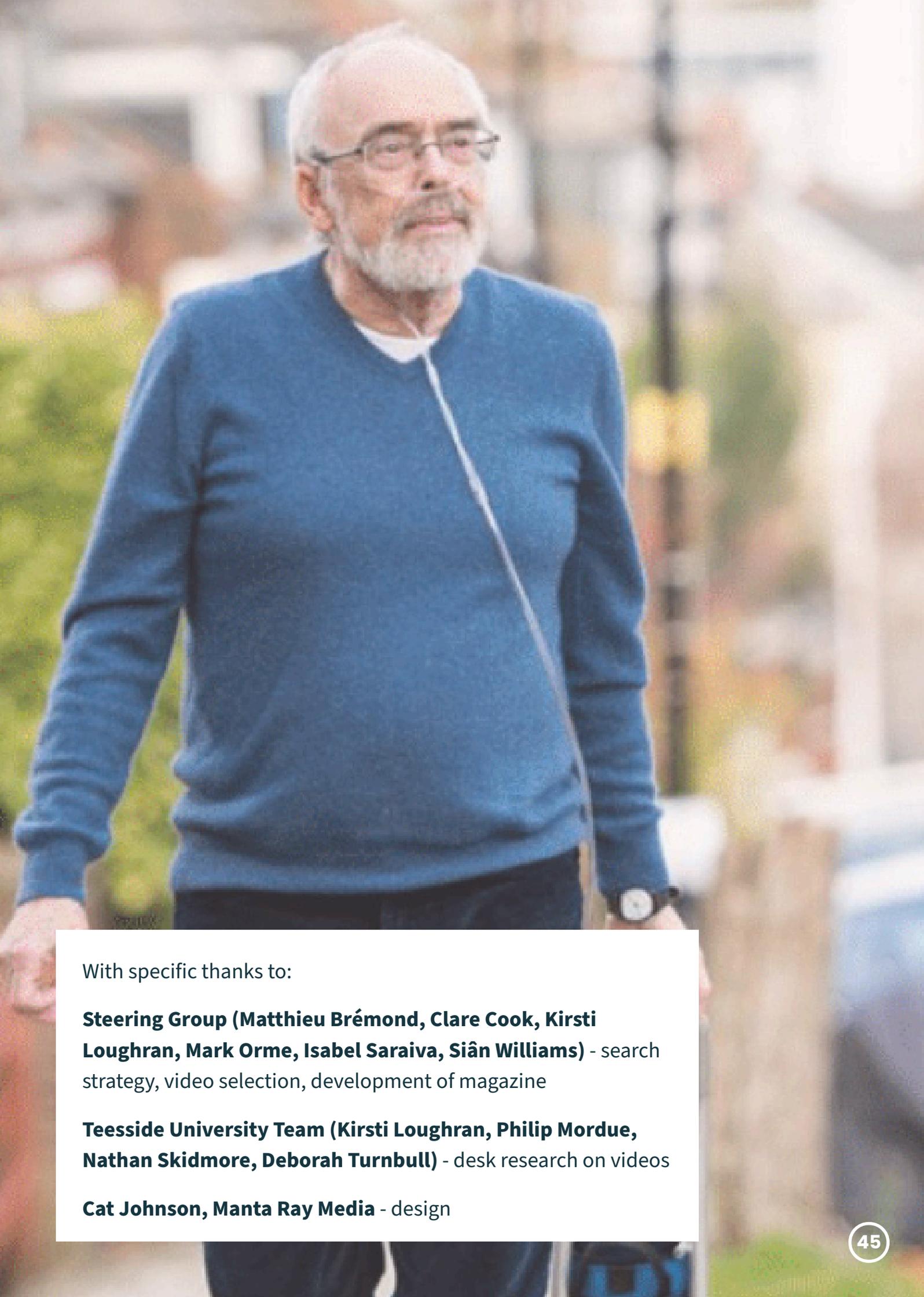
Welcome to this online community resource! We will be developing later editions including our own films. If you want to help us develop these, please contact projectsupport@ipcr.org.

To follow the development of this resource and share it with others, visit <https://www.ipcr.org/copdmagazine>.

The content in this magazine is only for information; it is not medical advice and it should not be relied upon as such. If you have any specific concerns, please speak to your healthcare professional.

IPCRG does not endorse any specific products or services shown in the videos.

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