

A GUIDE FOR PATIENTS AND FAMILIES

COPD

Chronic **O**bstructive **P**ulmonary **D**isease

DVD
INSIDE



Featuring

Darrell Green

Football Legend



We help the world breathe®
PULMONARY • CRITICAL CARE • SLEEP



CONTENTS

- 2 Introduction
- 4 How Do Your Lungs Work?
- 6 What is COPD?
- 8 What Causes COPD?
- 11 How is COPD Diagnosed?
- 12 Treating COPD
- 13 Lifestyle Changes
- 16 Medicines for COPD
- 18 Taking COPD Medicines
- 20 Pulmonary Rehabilitation/Physical Activity
- 21 Oxygen for COPD
- 23 Living with COPD
- 24 Tips for Caregivers
- 27 Conclusions
- 28 Resources

Inside back cover:

The *COPD: A Guide for Patients and Families* DVD (15 min) features the stories of 3 COPD patients, with expert commentary from doctors who specialize in lung diseases. Darrell Green shares his own family's experience with COPD.

Copyright 2014
Sunovion Pharmaceuticals Inc.
All Rights Reserved

No part of this book may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopying or recording or by an information storage and retrieval system, without written permission, except when permitted by law.

Manufactured in the United States

Introduction

Breathing is one of those things most people take for granted. But for millions of people, breathing easily is a daily challenge. About 15 million people in the US—and many millions more around the world—have a lung disease called COPD that makes it hard to breathe.

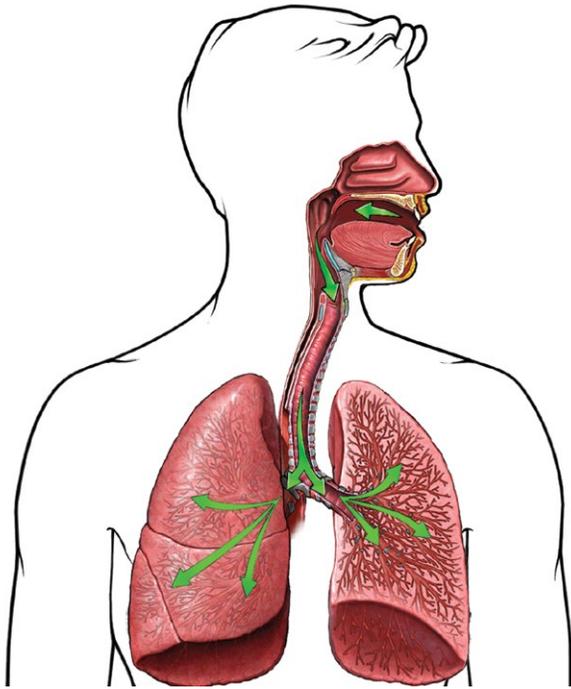
COPD stands for *chronic obstructive pulmonary disease*. It is the third-leading cause of death in the U.S., behind heart disease and cancer. Although it can't be cured, COPD can often be managed.

This booklet will explain what COPD is, and how you and your health care provider can work together to treat this disease. With the help of medicines and by making key lifestyle changes, you can manage your symptoms, stay more active, and improve your health.

A photograph showing four people walking on a grassy golf course. From left to right: a woman in a pink shirt and white pants, a woman in a striped shirt and white pants, a man in a dark shirt and dark pants pushing a golf cart, and a man in a green shirt and khaki pants. They are walking under the shade of a large, leafy tree. The sky is bright and clear.

With the help of medicines and by making key lifestyle changes, you can manage your symptoms, stay active, and improve your health.

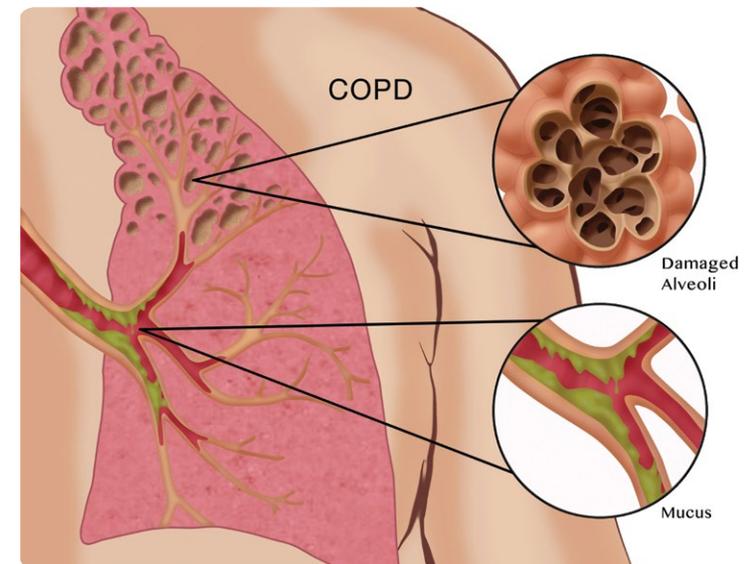
How Do Your Lungs Work?



When we breathe, air travels down the major breathing airway (windpipe) into the lungs. Like the branches of a tree, the windpipe splits into smaller and smaller tubes that end in tiny sacs called *alveoli*.

Each time you breathe in, your airways and air sacs expand (get larger), and when you breathe out, they get smaller. They bounce back to their original shape after being filled with air, just the way a new rubber band or balloon does. This flexibility allows you to move air easily in and out of your lungs.

In people with COPD, however, the air sacs may no longer bounce back to their original shape. The airways may become swollen and thicker than normal. And airways may also get clogged with mucus. All of these changes affect your ability to breathe easily.



What is COPD?

COPD is a condition that makes it harder to get air *out* of your lungs easily. This can lead to feeling short of breath, even when doing normal things such as climbing steps.

There are two main conditions responsible for COPD:

- Chronic bronchitis (a disease mostly of the airways)
- Emphysema (a disease mostly of the air sacs)

These two conditions cause similar symptoms, including:

- Feeling out of breath, especially with activity or exercise
- Coughing
- Wheezing

In addition to these symptoms, people with chronic bronchitis may produce *sputum*, mucus coughed up from the airways.

You may not have all these symptoms; in many people, the only COPD symptom is a morning cough or getting short of breath easily. Sometimes people simply stop doing things that cause them to get out of breath. They may not notice they have a problem with shortness of breath.

Sometimes symptoms become suddenly worse. This is called a “flare-up” or “exacerbation.” Flare-ups may be caused by a cold, pollution, the flu, or some other infection. It’s important to talk to your health care provider about ways to prevent flare-ups, because they may further damage your lungs.



What Causes COPD?

COPD is usually caused by something that bothers, or irritates, your lungs. In the United States, cigarette smoking accounts for 90% of COPD cases.



Other types of irritants can also cause COPD, such as smoke from fires, dust, or breathing in certain types of chemical fumes over a long period of time.

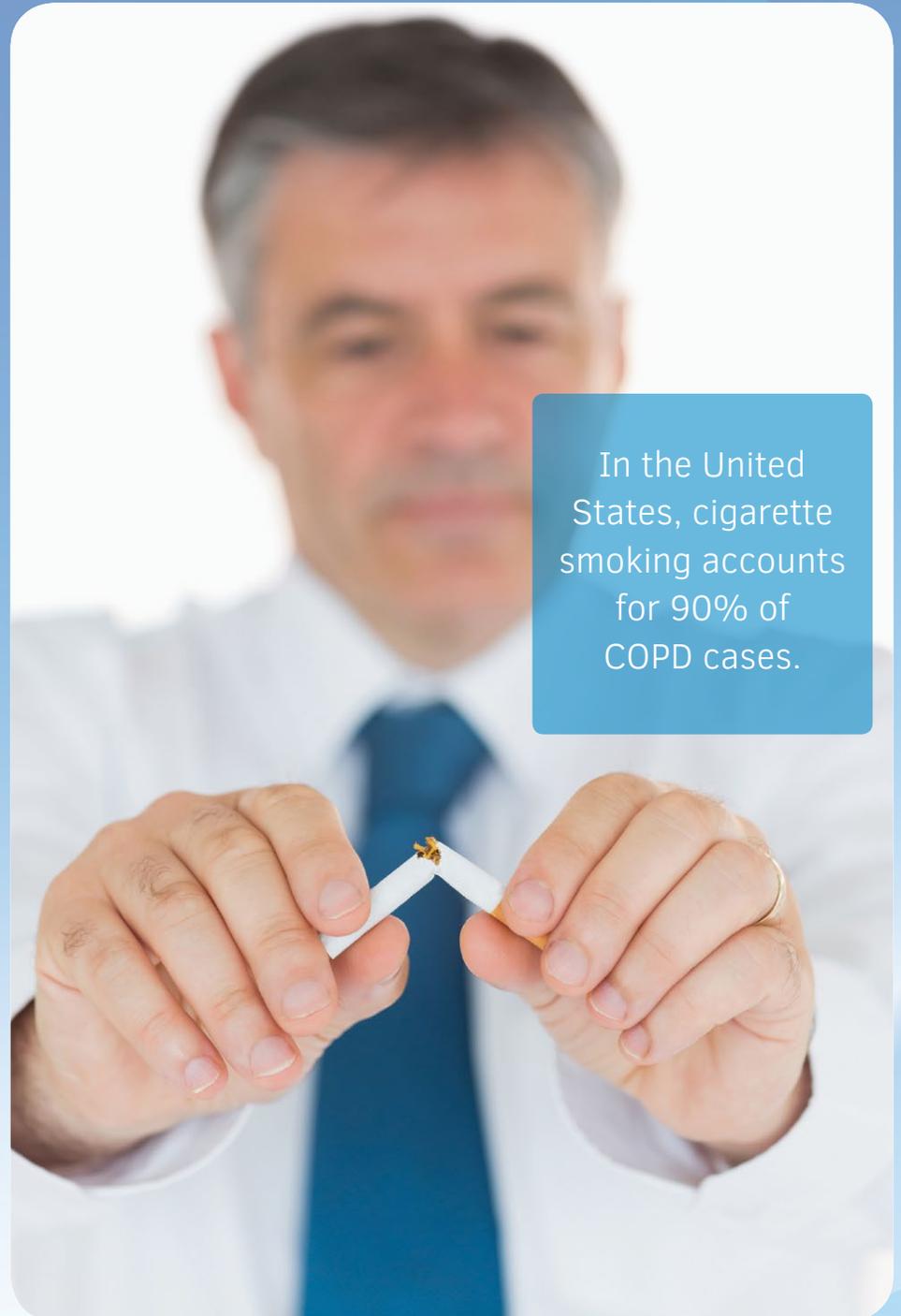
This long-term lung irritation can cause swelling, which can lead to:

- Narrowing of the airways
- Extra mucus, which can clog the airways
- Damage to the airways and air sacs

Genetics also play a role: some people inherit genes that put them at higher risk for getting COPD, whether they smoke or not.



In the United States, cigarette smoking accounts for 90% of COPD cases.





How is COPD Diagnosed?

Many kinds of diseases or health problems can cause coughing, wheezing, or feeling out of breath. COPD can have symptoms similar to other conditions. That's why it's important to talk to your health care provider if you have any symptoms.

In order to diagnose COPD, your health care provider will take a detailed medical history and do a complete physical exam. He or she may also:

- Order breathing tests, such as spirometry
- Measure the oxygen in your blood
- Order a chest x-ray or CT ("CAT") scan



Treating COPD

COPD cannot be cured. But even though you may have regular problems as a result of COPD, there are various treatments that may help you feel better!

Ways to treat COPD include:

- Lifestyle changes, especially quitting smoking and being physically active
- Medicines
- Pulmonary rehabilitation
- Oxygen



Lifestyle Changes

Quit Smoking

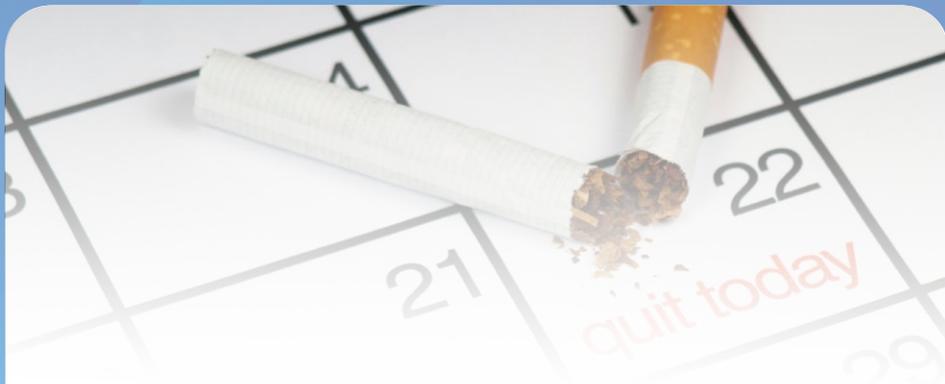


Smoking is a very difficult habit to kick, because nicotine is so addictive. But if you have COPD and smoke cigarettes, quitting smoking is the best thing you can do for your health. By quitting, you can reduce further damage to your lungs.

Talk to your health care provider about ways to boost your chances of quitting for good. Once you've decided to quit, consider joining a group for support (organizations listed at the back of this booklet can help you find a group in your area).

When support programs are combined with drug treatment, such as nicotine replacement therapy or non-nicotine medications, success rates are higher.





Whether you quit in a program or do it on your own, pick a quit date within 2 weeks of your decision.

If you have tried to quit before and are still smoking, don't be discouraged! Many ex-smokers made many attempts to quit before they were successful. Tell your family and friends about your plan to quit, and ask for their support. If there are other smokers in your household, encourage them to quit *with* you, or at least not to smoke around you.

Many types of quit-smoking treatments are available, including:

- Support groups
- One-on-one counseling
- Pills (both prescription and over-the-counter)
- Nicotine patches
- Nicotine lozenges or gum
- Nicotine inhalers or sprays



Nicotine products may help reduce cravings and make it easier to quit. Talk to your health care provider about these options before choosing one. (Electronic cigarettes, or e-cigarettes, do not produce smoke but still contain nicotine, known to be an addictive substance. E-cigarettes' use as a possible aid to smoking cessation has not been well-studied or established.)

Immunizations

Another way to possibly lower your risk of COPD complications is to get a flu shot every year. Flu (influenza) can be very serious for people with COPD. It can lead to pneumonia and even death. Getting your flu shot every year can cut in half your risk of serious illness from COPD.

A different vaccine can help protect you from some common types of bacteria that can cause pneumonia. Ask your health care provider about whether this vaccine would be right for you.

Medicines for COPD

Many medicines for COPD are available. If you have symptoms, consider talking to your health care provider about using one of these medicines.

Medicines may reduce symptoms, help your ability to exercise, reduce the number and severity of “flare-ups,” and improve overall health.

There are two basic kinds of COPD medicines:

- Long-acting medicines (usually taken daily)
- Fast-acting medicines (some are used as “rescue” medicines to treat a flare-up)

Your health care provider will make sure you know which types of medicines you need.

Depending on your condition, you may need to use both types. Different COPD medicines work in different ways. Here are the main types:

- *Beta-agonists*, available in short and long-acting versions (inhaled)
- *Anticholinergics*, available in short- and long-acting versions (inhaled)
- *Steroids* (inhaled or pill)
- *Phosphodiesterase-4 inhibitors* (pill)
- *Theophylline* (pill)

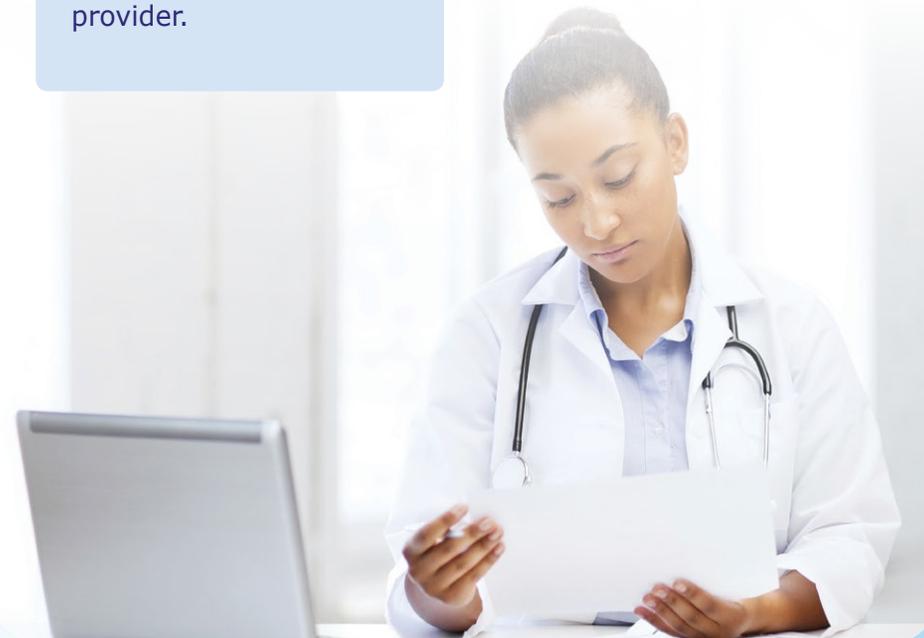
Medicines are usually tried in a step-wise manner, depending on how controlled your COPD is. Work with your health care provider to find the right medicine, or combination of medicines, for you.

Remember that—whether you can feel it or not—your medicines may help manage your COPD. Take your

medicines every day, exactly as prescribed, and tell your health care provider if you have any side effects.

Frequent Rescue Use?

If you find you are using your rescue medicines more frequently, talk to your health care provider.



Taking COPD Medicines

How you get COPD medicine into your body can be as important as the medicine itself!

Most COPD medicines are inhaled, however, some are taken in the form of pills.



Most COPD medications are inhaled.



There are three ways a medicine can be inhaled:

- *Metered-dose inhalers (MDIs)*. These consist of a small canister with a mouthpiece. When a spacer is used, it stores the medicine for several seconds to allow you time to breathe in fully. Inhalers differ in design and how they are used. Be sure you receive, read, and follow instructions on how to use your inhaler.
- *Dry-powder inhalers*. These devices deliver medicine as a dry powder, instead of a spray.
- *Nebulizers*. These are electric or battery-powered machines that turn your COPD medication into a mist or spray, which is then inhaled through a mask or mouthpiece. Most units are small enough to be carried in a purse or backpack.



You and your health care provider can discuss which is best for you.

Pulmonary Rehabilitation/ Physical Activity

Pulmonary rehabilitation can help you be more active with less shortness of breath. Pulmonary rehab programs may also reduce anxiety or mood problems, reduce how often exacerbations occur, and possibly prolong life.

Even though COPD can make it harder to be active, it's still important to exercise. Getting more physically fit can

help you breathe and move more easily. Ask your health care provider to recommend a program of physical activity that is right for you, or for a referral to a pulmonary rehab program.



Even if you can no longer do activities outside, you may benefit from exercises done in your home. Ask your health care provider to refer you to a physical therapist who can help with this.

Oxygen for COPD

Oxygen therapy can be used if COPD makes it hard to get enough oxygen into your blood. (Being short of breath does not always mean your oxygen level is low.) Some people's oxygen level gets lower at night or when they are exercising. Many people need oxygen 24 hours a day.

For those with low oxygen levels, oxygen can improve sleep, mental functioning, and ability to exercise. Your health care provider can talk to you about whether you need oxygen and, if so, how much you need.

If oxygen is prescribed, you can get it several ways: in oxygen tanks, liquid oxygen systems, or a *concentrator* (an electric-powered device that collects oxygen from air). Portable, lighter-weight oxygen tanks are available to help you remain active away from home.



Your medical team or oxygen company will teach you how to use an oxygen delivery system.





Living with COPD

The more you learn about COPD, the better you can handle it! You might want to consider joining a COPD support group, to meet other people who have COPD and can understand what you're going through. Having COPD can be exhausting, both physically *and* emotionally. If you aren't feeling like yourself—if you are feeling anxious or “blue”—tell your health care provider.

Here are some other tips for living well with COPD:

- If you smoke, stop!
- Keep up your overall health by eating a healthy diet
- Remain as physically active as possible
- Wear clothes and shoes that are easy to put on
- Visit or go out during the part of the day when you feel your best



Tips for Caregivers

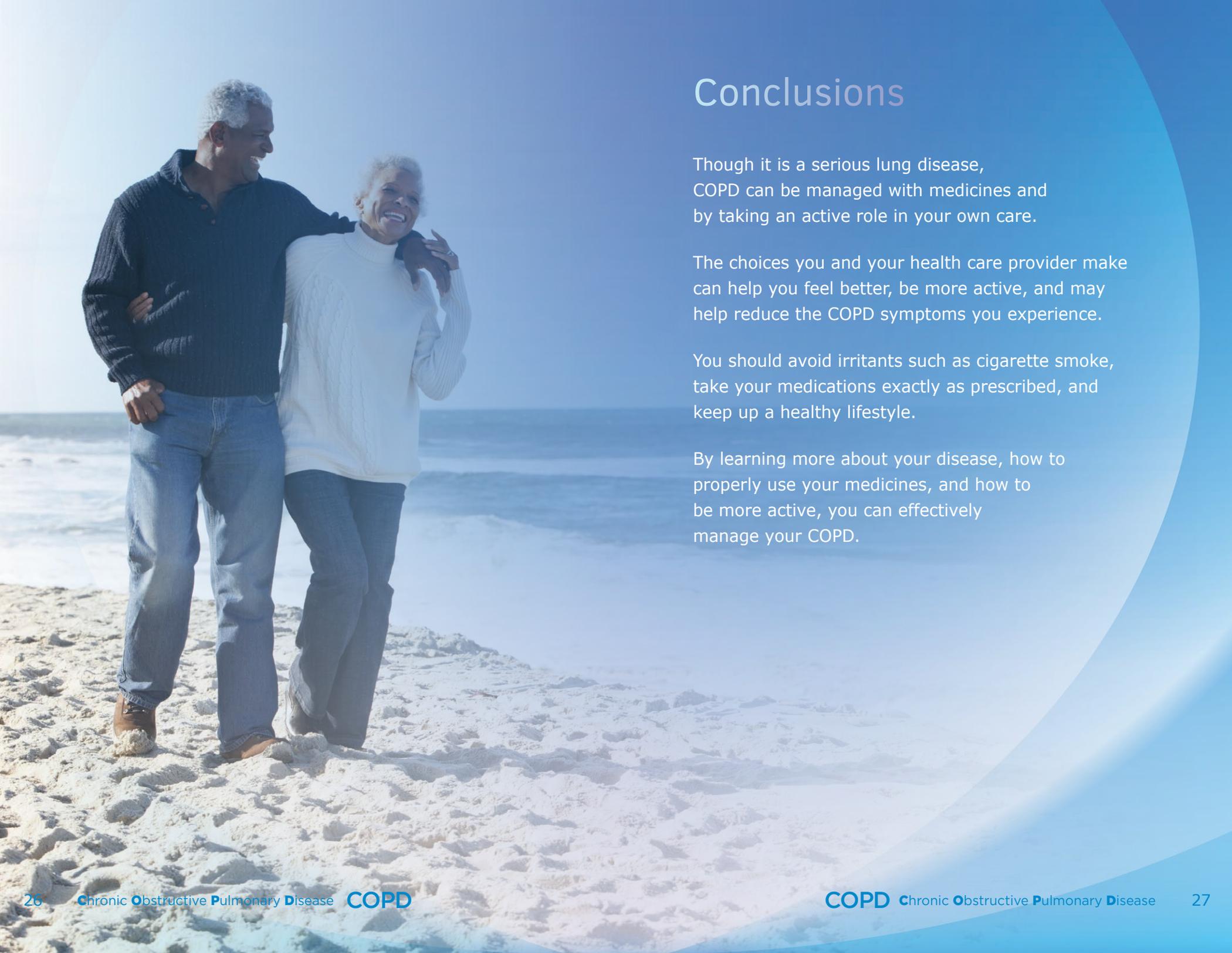
When a loved one has COPD, it's normal to want to do everything you can to help. There are many ways you can help, including:

- Keep track of medicines, appointments, and treatment schedules.
- Write down questions to ask and also take notes at each medical appointment.
- Watch for signs of mood or personality changes in the person with COPD, and report any concerns promptly to the patient's health care provider.
- Learn all you can about COPD, so you can help your loved one identify signs of an infection or worsening lung condition.

While it might be tempting to suggest your loved one *not* exercise because you see how short of breath they become, exercise is important. Encourage him or her to talk to their doctor about ways to stay active. It's one of the best things they can do.

The added responsibilities and work involved in supporting someone with COPD can be challenging. So you also need to take care of yourself! If you "burn out" or develop your own physical or mental difficulties, you won't be able to care for the person with COPD. Seek professional help if you think you need it. Caregivers can find a wealth of information and support from some of the organizations listed at the back of this booklet.





Conclusions

Though it is a serious lung disease, COPD can be managed with medicines and by taking an active role in your own care.

The choices you and your health care provider make can help you feel better, be more active, and may help reduce the COPD symptoms you experience.

You should avoid irritants such as cigarette smoke, take your medications exactly as prescribed, and keep up a healthy lifestyle.

By learning more about your disease, how to properly use your medicines, and how to be more active, you can effectively manage your COPD.

Resources

American Thoracic Society

<http://patients.thoracic.org/>

American Lung Association

www.lungusa.org

Centers for Disease Control & Prevention

www.cdc.gov/copd

COPD Foundation

www.copdfoundation.org

Global Initiative for Chronic Obstructive Lung Disease

www.goldcopd.com

National Heart, Lung & Blood Institute

www.nhlbi.nih.gov

Smokefree.gov

smokefree.gov

Presenter

American Thoracic Society

Founded in 1905, the American Thoracic Society is the world's leading medical association dedicated to advancing pulmonary, critical care and sleep medicine. The Society's 15,000 members prevent and fight respiratory disease around the globe through research, education, patient care, and advocacy.



We help the world breathe[®]
PULMONARY • CRITICAL CARE • SLEEP

The ATS thanks the following for their contributions to this program:

Suzanne Lareau, MS, RN

College of Nursing
University of Colorado

Linda Nici, MD

Brown University
Providence VA Medical Center

Marianna Sockrider, MD

Texas Children's Hospital
Baylor College of Medicine

Kevin Wilson, MD

Documents and Medical Affairs, ATS Staff
Boston University

Funding Support

Sunovion Pharmaceuticals Inc.

Sunovion is a research-based pharmaceutical company dedicated to discovering, developing and commercializing scientifically advanced therapeutic products that are focused on helping patients suffering from central nervous system and respiratory disorders, as well as other illnesses.

The company name, which is representative of the life-affirming energy of the sun and the power of innovation, reflects Sunovion's portfolio of currently marketed pharmaceutical products and pipeline candidates; and serves to emphasize the company's ongoing commitment to improve the lives of patients everywhere.



* is a registered trademark of Sumitomo Dainippon Pharma Co., Ltd.
Sunovion Pharmaceuticals Inc. is a U.S. subsidiary of
Sumitomo Dainippon Pharma Co., Ltd.
©2014 Sunovion Pharmaceuticals Inc. All rights reserved.

Credits

Chronic Obstructive Pulmonary Disease: A Guide for Patients and Families was made possible through the expertise, funding, time and efforts of many contributors. Special gratitude to:

PRESENTER

American Thoracic Society

FUNDING SUPPORT

Sunovion Pharmaceuticals Inc.

CONTRIBUTORS TO THE DVD

Gerard J. Criner, MD, FACP, FCCP

Professor of Medicine
Director, Pulmonary and Critical Care Medicine and Temple Lung Center
Co-Director, Center for Inflammation, Translational and Clinical Lung Research
Temple University School of Medicine
Philadelphia, Pennsylvania

Donald A. Mahler, MD, FCCP

Professor of Medicine
Geisel School of Medicine at Dartmouth College
Hanover, New Hampshire
Pulmonologist and Clinical Researcher
Dartmouth-Hitchcock Medical Center
Lebanon, New Hampshire

Wilson A. Quezada, MD

Assistant Professor of Medicine
Division of Pulmonary and Critical Care Medicine
Columbia University Medical Center
The Allen Hospital
New York City

Each of these physicians received an honorarium for his participation.

SPECIAL THANKS TO

Darrell Green
Football Legend

*family member
impacted by COPD*



DISCLAIMER: This guidebook and DVD program is intended for informational purposes only, with the understanding that no one should rely upon this information as the basis for medical decisions. Anyone requiring medical or other health care should consult a medical or health care professional. Any actions based on the information provided are entirely the responsibility of the user, and of any medical or other health care professionals who are involved in such actions.

The American Thoracic Society (ATS), Sunovion Pharmaceuticals Inc. (Sunovion), producers Conrad & Associates, LLC and Alan Weiss Productions, guidebook author Stephen Braun, and DVD scriptwriter Deborah Gobble, have used reasonable efforts to include timely and accurate information in this guidebook and DVD. The ATS, Sunovion, the producers, and the writers make no representations or warranties, express or implied, regarding the accuracy or completeness of the information provided herein and specifically disclaim any liability, express or implied, in connection therewith.

Photos in this booklet are used for illustrative purposes only. Any person depicted in the licensed material is a model, not an actual patient or health care professional.

Project Manager
Carol Brandenburg
Executive Producer
Conrad & Associates

Guidebook Author
Stephen R. Braun
Medical Writer
www.braunmedicalmedia.com

Guidebook Design
Cinda Debbink
Design Partners
www.dgdesignpartners.com

Program Research and Development
Elizabeth T. Conrad, MD, DABFM

COPD

Chronic **O**bstructive **P**ulmonary **D**isease

A GUIDE FOR PATIENTS AND FAMILIES

DVD
INSIDE

Most people don't think twice about breathing. It's just a normal part of being alive. But about 15 million people in the United States can't take breathing for granted. They have a lung disease called COPD that makes breathing difficult.

Though COPD cannot be cured, it can be managed with medicines and by taking an active role in your own care. The choices you and your health care provider make can help you feel better, be more active, and reduce the COPD symptoms you experience.

This booklet explains COPD, and how you and your health care provider can work together to manage it well. You will learn about:

- Causes of COPD
- How COPD can be treated
- Ways to remain active with COPD



Featuring

Darrell Green

Football Legend



We help the world breathe®
PULMONARY • CRITICAL CARE • SLEEP



PMRC #BRO215-14 9/14