

FIGURE 8.1. Shortness of Breath Cycle for COPD and Asthma Patient Handout

Shortness of Breath Cycle for COPD and Asthma

Many people with COPD or asthma experience a shortness of breath cycle. In this cycle, shortness of breath from COPD or asthma leads to worry and panic, which in turn worsens shortness of breath. Here are the steps that often occur: Shortness of breath leads to . . .

- Worry (e.g., about breathing, passing out, dying), leading to . . .
- Anxiety or panic physical reaction, leading to . . .
- Increased breathing rate, leading to . . .
- Less effective (i.e., rapid, shallow) breathing, leading to . . .
- Increased oxygen use by, and less oxygen available for, muscles, leading to . . .
- More shortness of breath . . .
- And the cycle continues.

You can stop the shortness of breath cycle by following these steps:

1. When you first notice shortness of breath, STOP your activity.
2. Rest. Sit down or lie down, if possible.
3. Relax. Use diaphragmatic breathing or pursed-lip breathing techniques.
4. Reassure yourself. Tell yourself calming thoughts about your symptoms.
5. If possible, measure and record your peak flow and follow your action plan.
6. Take medications, if appropriate, following your PCP's recommendations.
7. After your breathing improves, gradually resume activity, in a paced manner.

Note. COPD = chronic obstructive pulmonary disease; PCP = primary care provider.

FIGURE 8.2. COPD Assessment Questions

Sample Assessment Questions for COPD

Breathing Symptoms and Peak Flow

- How often do you have trouble breathing or feel you cannot get enough air?
- What kinds of activities lead to feeling out of breath?
- What affects your breathing the most (e.g., physical activity, stress, emotions)?
- What is your average peak flow? What is your best and worst peak flow?

Medications

- What medications do you take for COPD? When do you take them?
- Do you use oxygen at home for COPD?
- What side effects do you notice (e.g., tremor, anxiety, headache, shortness of breath)?
- Do you sometimes forget to take your medications or choose not to take them?
- Have you ever had treatment or medication for anxiety or depression?

Work, Social, and Family Functioning

- How has COPD changed what you do at work?
- Are you having trouble getting things done around the house? How so?
- What has changed, if anything, about what you do for fun? With friends?
- Describe what you do in a typical day.
- How has your family responded to your COPD? How has COPD affected your relationships?

Emotional and Cognitive Factors

- What changes have you seen in your mood as your COPD has gotten worse?
- How has your mood been lately? Have you been feeling more down or sad?
- How often do you feel worried or stressed?
- What goes through your mind when you have trouble catching your breath?
- What do you do when you feel you are having trouble getting enough air?

Health-Related Behaviors

- Do you smoke? What are your thoughts about quitting?
- What forms of exercise or physical activity are you getting?
- Do you believe you are being exposed to indoor air pollutants at work or home?

Interventions to Date

- Do you practice any form of relaxation (e.g., imagery, pursed-lip breathing, diaphragmatic breathing)?
- Have you ever participated in a pulmonary rehabilitation program?

Note. COPD = chronic obstructive pulmonary disease.

FIGURE 8.3. Pursed-Lip Breathing Patient Handout

Pursed-Lip Breathing for Asthma and COPD

Pursed-lip breathing is one of the simplest ways to control shortness of breath in COPD and asthma. It provides a quick and easy way to slow your pace of breathing, making each breath more effective. Please note that this breathing technique *should not replace* the use of medications prescribed by your primary care provider for asthma or COPD but can be used in conjunction with them.

What Does Pursed-Lip Breathing Do?

- Improves ventilation and releases trapped air in the lungs, decreasing the feeling of breathlessness
- Helps keep the airways open for a longer time and prolongs exhalation to slow the breathing rate
- Helps improve breathing patterns by moving old air out of the lungs and allowing new air to enter the lungs
- Causes general relaxation and allows you to better control your symptoms

When Should I Use This Technique?

- During the difficult part of any activity like bending, lifting, or climbing stairs
- When you are finding yourself anxious or breathless
- Practice four to five times a day at first so you can get the correct breathing pattern

How Do I Use This Technique?

- Relax your neck and shoulder muscles and breathe in (inhale) slowly through your nose for two counts, keeping your mouth closed. Do not take a deep breath; a normal breath will do. It may help to count to yourself, "Inhale, one, two."
- Pucker or purse your lips as if you were going to whistle or gently flicker the flame of a candle.
- Breathe out (exhale) slowly and gently through your pursed lips while counting to four. It may help to count to yourself, "Exhale, one, two, three, four."

Note. COPD = chronic obstructive pulmonary disease.

FIGURE 8.4. Resources for Patients With COPD: Websites, Mobile Applications, and Books

Type	Location	Description
Websites	National Heart, Lung, and Blood Institute (https://www.nhlbi.nih.gov/health/copd)	This website gives detailed information on COPD, including risk factors, overview of disease and treatments, and strategies for better managing COPD. It contains fact sheets in English and Spanish.
	American Lung Association (https://www.lung.org/)	This website offers information on a number of lung diseases, including COPD. It contains disease information, management tools to assist in coping with COPD, and tobacco cessation information and support, as well as links to an online support community for COPD patients and information and links to the American Lung Association's Lung Helpline (1-800-LUNGUSA).
	Global Initiative for Chronic Obstructive Lung Disease (https://goldcopd.org/)	This website offers medical information on COPD, a questionnaire for individuals to assess their risk for COPD, and a COPD informational guide for patients and their families.
	National Lung Health Education Program (https://nlhep.org/)	This website offers patient information on COPD diagnosis and treatment. It contains information on the anatomy of normal and obstructed airways, as well as tobacco cessation resources and information on spirometry testing.
Mobile application	myCOPDTeam (https://www.mycopdteam.com/)	This mobile app and website provide a social network for online peer support for individuals with COPD (MyHealthTeams Inc., 2020, 2.0.8 edition).
Books	<i>COPD: Answers to Your Most Pressing Questions About Chronic Obstructive Pulmonary Disease</i> (Mahler, 2022)	This patient education book provides answers to commonly asked questions about COPD. It includes information on the symptoms and causes of COPD, evidence-based treatments, strategies for management, guidance for smoking cessation, and the impact of COVID-19 on COPD, among other topics. Each chapter contains a patient vignette.
	<i>Live Your Life With COPD: 52 Weeks of Health, Happiness, and Hope</i> , 2nd ed. (J. M. Martin, 2020)	This patient education book, written by a respiratory therapist, provides a guide to living with and managing COPD. It provides information on a variety of topics, including medications, relaxation strategies, breathing techniques, and working with your physician, among others.

Note. COPD = chronic obstructive pulmonary disease.

FIGURE 8.5. Handout for Asthma Assessment Questions

Sample Assessment Questions for Asthma

Breathing Symptoms and Peak Flow

- How often do you notice symptoms of worsening asthma?
- What affects your breathing the most (e.g., physical activity, stress, allergens)?
- Do you monitor your peak flow at home? How often?
- What is your average peak flow? What is your best and worst peak flow?
- Has your peak flow dropped below 80% of personal best since your last medical visit? What did you do?

Medications

- What medications do you take for asthma? When and how often do you take them?
- How long does it take you to go through a rescue inhaler?
- What side effects do you notice when you take your medication (e.g., tremor, anxiety, nausea, headache)? Have you stopped taking any regular doses for any reason?

Medical System Use

- When was your last hospitalization for asthma? How many have you had?
- How many visits have you had to the emergency room for asthma in the past year?
- What is your best estimate of how many primary care visits you have made in the past year? (Note: Obtain this through review of medical record, if available.)

Work, Social, and Family Functioning

- How has asthma changed what you do at work?
- Are you having trouble getting things done around the house due to breathing problems?
- What has changed, if anything, about what you do for fun? With friends?
- Describe what you do in a typical day.
- How many days of work/school have you missed due to asthma in the last year?
- How has your family responded to your asthma? How has asthma changed your relationships?
- What would you like to do that you can't do now or as well because of your asthma?

Emotional and Cognitive Factors

- Describe how your mood has been lately.
- How often do you feel anxious or panicky? When does this occur?
- What goes through your mind when you have an asthma attack?
- What do you do when you feel you are having trouble breathing?

Health-Related Behaviors

- Do you smoke? What are your thoughts about quitting?
- What forms of exercise are you getting? Are your symptoms worsened by exercise? Has your PCP advised you to use your inhaler or take other steps prior to exercising?
- What triggers have you identified (e.g., animals, mold, pollens, pollution, cold air, foods)? Which ones do you have most trouble avoiding?

Interventions to Date

- Are you monitoring your peak flow? How often?
- Do you have a written asthma action plan? Please describe it to me. When do you use the action plan?
- What kinds of problems do you have with following the plan?
- Do you practice any form of relaxation (e.g., visualization, imagery, diaphragmatic breathing)?

Note. PCP = primary care provider.

FIGURE 8.6. Asthma Monitoring Form Patient Handout

Asthma Monitoring Form

Instructions: Please record your peak flow numbers in the spaces provided for each date. Rate your asthma symptoms of coughing, wheezing, and shortness of breath (SOB) on a scale of 0 to 3 (0 = no noticeable symptoms, 1 = mild, 2 = moderate, 3 = severe). List any activities that you restricted because of your symptoms. List any exposure to potential triggers or factors that worsen your asthma. Finally, record the number of puffs of your quick-relief ("rescue") inhaler (bronchodilator) you used to control your symptoms.

[illegible]

FIGURE 8.7. Asthma Allergen and Exposure Checklist Patient Handout

Factors That May Worsen Asthma

Some people with asthma find that their symptoms are worsened or triggered by identifiable factors or situations. Sometimes these are allergies; other times they are simply sensitivities or reactions to environmental factors. Please review the following list of factors that may worsen asthma and check the items that you believe might affect your symptoms. If you are unsure about a given item, place a question mark on the line.

____ Pets or other animals
____ Pollens
____ Mold
____ Dust mites
____ Dust
____ Cockroaches
____ Airborne chemicals

____ Sulfites in food or beverages
____ Tobacco smoke
____ Outdoor air pollution
____ Wood fire smoke
____ Physical exercise
____ Cold air
____ Other (List: _____)

FIGURE 8.8. Resources for Patients With Asthma: Websites, Mobile Applications, and Books

Type	Location	Description
Websites	National Heart, Lung, and Blood Institute (https://www.nhlbi.nih.gov/health/asthma)	This website offers patient information on asthma, including specific symptoms and diagnosis, medications, treatment options, and self-management materials. It also includes an asthma action plan and asthma wallet card to assist patients in tracking information such as medications, peak flow, and their doctor's contact information. Patient education materials are available in English and Spanish.
	American Lung Association (https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma)	This website offers patient guidance on managing asthma and living a healthy life, including information on understanding asthma medications, creating an asthma management plan, monitoring asthma control, and reducing exposure to asthma triggers.
	United States Environmental Protection Agency (https://www.epa.gov/asthma)	This website aids patients in noticing asthma triggers while gaining control and reducing exposure to those triggers. It also contains basic asthma information and information on how to improve asthma health in communities and schools. Some resources are available in Spanish.
	Centers for Disease Control and Prevention (https://www.cdc.gov/asthma/)	This website offers tools for asthma control, such as asthma action plans and information on the National Asthma Control Program. Patient education materials cover information on symptoms and management, use of inhalers, and avoidance of triggers. Materials are available in multiple languages.
Mobile applications	Ask Me, AsthMe! (https://apps.apple.com/app/ask-me-asthme)	This mobile app provides asthma education for pediatric patients and families. The app provides a place to keep a log of asthma symptoms and triggers. It is available in English and Spanish (New York City Health and Hospitals Corp.: Ask Me, AsthMe! 2021, 1.1.2 edition).
	AsthmaMD (https://www.asthamamd.org/)	This app provides patients with tools to log asthma symptoms, triggers, and medications. Data shown in graphs can be shared with their provider (Mobile Breeze: AsthmaMD. 2017, 3.35 edition).
Book	<i>Asthma for Dummies, Pocket Edition</i> (Berger, 2010)	This brief patient education book provides an overview of asthma symptoms and diagnosis as well as key aspects of asthma management, including self-monitoring, appropriately using medications, and avoiding allergens and other asthma triggers.

COPD Advise Phase Script—Chapter 8

It's great that you have already quit smoking. Congratulations! Staying tobacco-free is the number one thing you can do to help manage your COPD. Based on the other information you shared with me this morning, I think there are several more areas we could focus on that would help you feel and function better. One area is your physical activity. As you've had more trouble with your breathing symptoms, you've cut back on your physical activity. That makes sense in the short term because it doesn't feel good to be short of breath. Unfortunately, in the long term, the inactivity leads your body to become more deconditioned and out of shape. This makes it even harder in the future to do activities you'd like to do and worsens your breathing problems. If you'd like, we could work with your medical providers to help you develop and stick with a plan for gradually increasing your physical activity levels. A second area that really stood out in our discussion was your description of what happens when you notice your breathing symptoms worsening. You become worried that you won't be able to breathe and that you may pass out. This anxious thinking then worsens your breathing in a vicious cycle. I could teach you some breathing strategies to help control your breathing and promote relaxation. Are you interested in focusing on either or both of those options?

COPD Agree Phase Script—Chapter 8

It sounds like you're not too interested in working toward increasing your activity level or in making changes in how you manage your anxiety and breathing. You are concerned, though, about conflicts with your husband over sharing the household responsibilities, as you've been able to do less around the house. We can certainly focus on this. Learning new ways to communicate and negotiate responsibilities that have changed because of your COPD sounds important to you. Why don't we start there? Later, as your communication improves, you may find that you'd also like to focus on one of the other areas we discussed.

Asthma Advise Phase Script—Chapter 8

I'm concerned by a few things you mentioned this morning. One is that you feel your asthma is getting worse. You've had more flare-ups and have been to the emergency room twice in the last two months, and you feel your asthma is getting out of control. Although Dr. Vasquez wants you to check your peak flow reading each morning, this is hard for you to remember. And you're not quite sure how to adjust your medications at home when you do get a peak flow reading that seems low or when you notice your asthma symptoms worsening. On the positive side, you're doing a great job remembering to use your daily asthma control inhaler.

Based on what you've shared, I have a couple of recommendations. The first is that we set up an appointment with Dr. Vasquez to develop a written home action plan. Here is an example of the form she uses with most of her patients [show blank action plan]. If you'd like, I can attend the appointment too, so that the three of us are on the same page. Dr. Vasquez will set guidelines for when you should take certain steps, such as using additional medication or going to the emergency room, based on your symptoms or peak flow readings.

My second recommendation is that you and I work together to help you stay on track with daily checks of your peak flow, since Dr. Vasquez really thinks it is important in getting your asthma under control. We can develop some ways to help you remember to monitor each morning and tackle any other barriers that might be getting in the way. What do you think about these options?

Asthma Agree Phase Script—Chapter 8

Dr. Vasquez really wants you to monitor your peak flow every day. She and I both believe this is critical in helping keep you out of the emergency room, but it sounds like you really don't want to focus on this right now. You say you've done it before for a few weeks and didn't find it helpful and that you find it hard to remember to do it. What you're really concerned about is how your asthma has gotten in the way of being active, such as riding bikes and playing with your kids.

In many ways, these two goals are linked. Regularly checking your peak flow can help you take your medications in a way that will keep your asthma under control. This will help you do more of what you want to do, like being active with your kids. For now though, why don't we begin by working on some ways for you to be more active with your kids, even if you're not ready today to commit to checking your peak flow every day. Then later, when you're ready, we can shift our focus back to the peak flow monitoring, perhaps coming up with some ideas on how to make it easier for you. How does that sound to you?