

# Pulmonary Rehabilitation

Pulmonary rehabilitation, also called pulmonary rehab, is a program that helps people manage their breathing problems. The main goals are to increase endurance, reduce breathlessness, and improve quality of life. Pulmonary rehab can last 4–12 weeks or more, depending on your condition.

You may need pulmonary rehab if:

- You are recovering from lung surgery.
- You have ongoing (*chronic*) lung problems or a condition that makes it hard to breathe, such as:
  - A disease that causes scars in lung tissue (*interstitial lung disease*), including idiopathic pulmonary fibrosis and sarcoidosis.
  - Chronic obstructive pulmonary disease (COPD).
  - Cystic fibrosis.
  - Diseases that affect the muscles used for breathing, such as muscular dystrophy.

## Benefits of pulmonary rehab

Pulmonary rehab may help you:

- Increase your ability to exercise.
- Reduce breathing problems.
- Quit smoking.
- Learn how to eat a healthy diet.
- Manage a healthy weight.
- Learn how to use oxygen therapy.
- Manage and understand your medicines and treatment.
- Get support from health experts as well as other people with similar problems.
- Manage anxiety and depression.
- Teach your family about your condition and how to take part in your recovery.

## Tell a health care provider about:

- Any allergies you have.
- All medicines you are taking, including vitamins, herbs, eye drops, creams, and over-the-counter medicines.
- Any blood disorders you have.
- Any surgeries you have had.
- Any medical conditions you have.
- Whether you are pregnant or may be pregnant.

## What are the risks?

Generally, pulmonary rehab is safe. However, problems may occur, including:

- Exercise-related injuries.
- Higher risk for heart attack or stroke in some cases, due to certain types of exercise (rare).

## What happens before treatment?

- You may have a physical exam in which your health care provider may:
  - Do blood tests.

- Test how well you can breathe and how your lungs function.
- Test your ability to exercise, such as how long you can walk on a treadmill.
- Your health care providers will work with you to make a treatment plan based on your health and your goals. Your program will be tailored to fit your needs and may change as you make progress.

## What happens during treatment?

### Exercise training

Exercise training involves doing physical activity, such as:

- Stretching routines.
- Strength-building exercises with weights. You will work on becoming stronger in both your arms and legs.
- Aerobic exercises to improve endurance. You may use a stationary bike or treadmill.

Exercise training will vary based on how much activity you can handle, and it will slowly become harder or more intense as you build up your endurance. In most cases, you will have exercise training 3 days a week. After you finish pulmonary rehab, your health care provider will create an exercise program to help you maintain your progress.

### Education

Your rehab team will teach you about your disease and ways you can manage symptoms. You may have one-on-one sessions or group meetings. You may learn:

- How to avoid situations that can worsen symptoms.
- When and how to take your medicines.
- How to prevent lung infections.
- How to quit smoking.
- How to use oxygen therapy.

### Nutrition support

Being overweight or underweight can make it harder to breathe. You may meet with nutritionists to come up with the right diet for you. This may include:

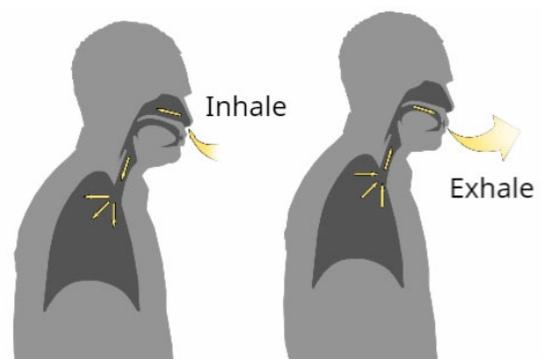
- A healthy eating plan to help you lose weight.
- Adding calorie or protein supplements to help you gain weight or avoid losing weight.

### Breathing training

Breathing exercises can help you better control your breathing by taking deeper breaths, less often. Breathing exercises may include:

- Pursed-lip breathing. During this technique, you will inhale through your nose and exhale for 4–6 seconds through pursed lips (such as a kissing or whistling position).
- Belly breathing (*diaphragmatic breathing*).

During this technique, you place your hands on your stomach and inhale through your nose. As you breathe in, you should feel your belly rise as air fills your diaphragm. Then, you exhale slowly through pursed lips as you feel your stomach falling.



## **Energy conservation training**

Your rehab team will show you how to complete everyday tasks without getting out of breath. This may include techniques for avoiding bending, lifting, or reaching.

## **Counseling**

You may receive individual or group counseling during pulmonary rehab. These meetings can help with any anxiety, depression, or frustrations you may be feeling. Counseling may include:

- Muscle relaxation exercises.
- Techniques for dealing with stress or panic.

Your family members and caregivers may also participate in counseling.

## **What can I expect after the treatment?**

### **Follow these instructions at home:**

- Exercise regularly as told by your health care providers. Your health care providers will create an exercise plan to help you maintain your endurance and your overall health.
- **Do not** use any products that contain nicotine or tobacco, such as cigarettes and e-cigarettes. If you need help quitting, ask your health care provider.
- Take over-the-counter and prescription medicines only as told by your health care provider.
- Keep all follow-up visits as told by your health care provider. This is important.

### **Contact a health care provider if:**

- You have questions about your program.
- You do not notice any improvement in your breathing or endurance.
- You develop new or worse symptoms.
- You have a fever.
- You have shortness of breath or fatigue when exercising.

### **Get help right away if:**

- You have shortness of breath when you are sitting still or lying down.
- You feel dizzy or faint.

## **Summary**

- Pulmonary rehabilitation is a program that helps people manage their breathing problems. Your program will be tailored to you.
- The main goals of pulmonary rehab are to increase endurance, reduce breathlessness, and improve quality of life.
- Once you finish rehab, your health care providers will create an exercise plan to help you maintain your progress.
- **Do not** use any products that contain nicotine or tobacco, such as cigarettes and e-cigarettes. If you need help quitting, ask your health care provider.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.