

Pulmonary Rehabilitation

Outpatient pulmonary rehabilitation is a program where you will begin an exercise program in a safe, monitored environment while learning more about how to manage your condition. Physical activity is important, because being out of shape can actually make the symptoms of your lung disease worse. If you don't get enough physical activity, you may have more shortness of breath. This will cause you to become even less active. Studies show that people who are physically active feel better, even with lung disease.

Do Importance of exercise and common goals

- Reverse/minimize the effects of deconditioning;
- Improve strength and flexibility of peripheral muscles (the arms and legs);
- Improve stability of core muscles (trunk and abdominals);
- Improve level of fitness/aerobic capacity;
- Learn pacing strategies and acclimate to shortness of breath.

How does deconditioning occur? What will you see at pulmonary rehab?

Deconditioning is a downward spiral of declining physical function that has to be interrupted to break the cycle. Often times a person begins to do less after an illness or when noticing that they feel short of breath with a particular activity. Over time, doing less leads to the ability to be able to do less, and the individual finds they feel short of breath with minor exertion or even personal care. This cycle eventually leads an individual to doing only those things that do not provoke shortness of breath and this may be activity that involves little outside the home.

What will you see at pulmonary rehab?

You may encounter a number of healthcare professionals, many of whom are experts in the field of pulmonary rehab. These may include physical therapists, respiratory therapists, nurses, physicians, nutritionists, exercise physiologists and mental health professionals.

What should you expect to do if you have a physical therapy evaluation?

The purpose of the exam is to establish a baseline level of function that involves looking at your pattern of breathing, ability to cough effectively and clear congestion, and adhere to a program of airway clearance if needed. Your posture, strength, range of motion and flexibility will be assessed, along with balance, sensation, and walking pattern.

There needs to be an assessment of aerobic capacity, and that usually means a self paced 6 minute walk test. This test also serves as an outcome measure for a comparison of improvement or deterioration in the future. Generally, recommendations will be made about the adequacy of a current exercise program if it exists, or whether that individual needs to begin a supervised exercise program.

Exercising with chronic lung disease

Participation in a structured exercise program can improve the level of physical function to make daily activities easier. Regardless of current level of function, most people can improve their ability to

participate in a form of aerobic exercise.

While being generally active is important, your exercise program needs to be different from the activity associated with doing errands, grocery shopping, going to appointments, or other daily tasks. In order to improve your exercise capacity, certain principles of exercise training are important:

Frequency: 3-5x/week

Intensity: Find a "sustainable challenge." You should be reaching into your reserve capacity and working at a level beyond what you do during most daily activities

Type: need to utilize a type of exercise that is meaningful to your daily function/life demands

Time: need to try to achieve 20 minutes or more of aerobic type exercise; cumulative intervals are fine, keeping rest periods short. This is a progressive increase in time, working toward continuous exercise, if possible.

What constitutes aerobic exercise?

Aerobic exercise is any type of exercise that incorporates large muscle groups moving repetitively over time; for example, walking, cycling, marching, swimming or recumbent style trainers.

Consider what kinds of activities you'd like to improve and try to do those types of movements during exercise. For example, if you want to be able to walk with less fatigue, it is best to walk as part of your exercise program. Other forms of exercise can also be beneficial, however.

Importance of using supplemental oxygen for those who require it

Everyone needs to have enough oxygen to support exertion or exercise. Running a low level of oxygen puts a strain on the heart that over time can lead to elevated pressures in the heart and lungs. This may eventually cause the pump action of the heart to be less efficient. Every muscle in the body uses oxygen to work, and a low oxygen level can cause fatigue and lead to an inability to do enough exertion. Think of oxygen as the energy that lets the body do any level of work or exercise. Low oxygen levels can also decrease one's ability to think clearly.

Why might you need assistance in starting or establishing an exercise regimen?

It can be difficult to carry out an exercise program when you have trouble breathing, and there is often some degree of feeling anxious about getting short of breath with exertion. That doesn't mean that exercise is bad for you. Supervised exercise can provide assurance to you.

What happens when you stop?

In a supervised pulmonary rehabilitation program, each individual is assisted in being successful with an ongoing exercise program at home. It is essential to continue after the structured program ends. Gains start to dwindle right away if you stop exercising, but all is not lost. You just have to resume and possibly take a couple of steps backwards till you build up your endurance again.

If you stop exercising for several weeks, you will have to start again at a much lower intensity or perhaps in intervals, and work your way back up.

What about breathing exercises?

There are no specific general breathing exercises that will improve your breathing capacity. Having the ability to relax is important and should ease some of the effort you feel. A therapist can help you to learn to pace yourself with exertion.



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