



FLINT

Exercise Guidelines

Signs and symptoms of overexertion

Stop exercising if you experience an event that needs to be reported to a staff person such as:

- ◆ Extreme shortness of breath
- ◆ Nausea
- ◆ Dizziness
- ◆ Heart rate above “target heart rate range”
- ◆ Chest pain or discomfort
- ◆ Leg pain or muscle cramps
- ◆ Unusual fatigue

Additional Diabetic Exercising Guidelines

- You cannot exercise if it has been less than 1 hour since a meal.
 - You cannot exercise if your blood sugar is over 250 or if your blood sugar is less than 80.
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STRETCHING OUT TO BREATHE EASIER

When the lungs have to struggle to work properly, people start to use the muscles in the chest, neck, and shoulders to assist lung function, explains Dr. Schachter. “This tends to tighten up the upper body and robs strength from the other functions of these large muscles,” he says. “This can be felt when a person raises his or her hands to hang curtains or use a hair dryer. If these and similar activities cause a person to feel short of breath, it is because the shoulder muscles needed for these tasks are already working hard to help the lungs.” Flexibility exercises can help uncramp, or loosen up, the muscles that have become involved in assisted breathing.

THE GOALS OF PULMONARY REHAB

It is especially important for people with COPD to see a clinician before beginning an exercise program. A carefully monitored exercise program for people with COPD is typically provided in an 8 to 10 week session at a pulmonary rehabilitation center. A therapist develops an extensive cardiopulmonary profile and devises a safe and effective program for each person. "The goals are very different from those you'd find at an elite health club," says Dr. Schachter. "We are not training people for a triathlon. The goals are to build muscle to improve oxygen delivery, to reduce the risk of cardiac disease, and to increase stamina."

Studies have shown that rehabilitation programs can provide important benefits for people with COPD. Researchers at the University of Connecticut School of Medicine reported that COPD patients showed a measurable increase in fitness after participating in just 12 exercise sessions over a 6 week period. Training included cardiovascular (using a treadmill, stepper, and stationary bicycle), flexibility, and muscle-strengthening exercises. After 6 weeks, there was an average increase of 30% in exercise capacity in those who participated in the sessions. Notably, the people with the lowest fitness levels at the beginning of the study showed the most improvement, says Dr. Schachter. "In other words, it is never too late to get in shape."

When people with COPD start exercising in a pulmonary rehab program, they are carefully monitored for pulmonary and cardiac changes. "We can track your heart rate and, most importantly, we can follow the oxygenation of your blood," says Dr. Schachter. "People with COPD may desaturate, or experience a drop in blood levels of oxygen, from the stress of the exercise."

After performing an extensive cardiopulmonary workup, clinicians develop a general idea of a person's current exercise capacity. The person remains closely supervised during pulmonary rehab sessions. For example, if a person starts to feel breathless, oxygen usually is administered while the individual continues exercising, which extends the period of time a person is able to exercise."

Many programs also provide psychological support in the form of individual and group therapy and most programs include an educational component with lectures on nutrition and lifestyle changes. To find the nearest program, call the respiratory therapy department of a local hospital and ask if they offer a pulmonary rehab program or if they know of any in the surrounding community.

After rehab is over, the exercises should be continued at home. Many people augment their programs by incorporating daily walks into their activities or by joining a traditional gym, notes Dr. Schachter. "Keep in mind that people with COPD will not be monitored at a regular gym. However, it is hoped that after three to four months in a structured program, they will have learned what their limits are and how to use the equipment in a way that best suits their needs."

What happens if a person doesn't continue to exercise after pulmonary rehab? "If people stop exercising, they will retain some benefits for a while, but over time, they will lose these improvements as well as the increased endurance that they have worked so hard to acquire," says Dr. Schachter. "Even without a formal program, people can maintain benefits from a single course of rehab for as long as a year with some unsupervised maintenance exercises," he adds.



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THE DO'S & DON'TS OF EXERCISE

DO:

Remember to warm-up gradually, such as using the NuStep or SciFit at a low level for 10 minutes. Exercising with cold muscles increases the chance of pain, soreness and injury.

DO:

Remember to adjust (increase or decrease) your workloads as tolerated, according to your level of exertion and heart rate range. Ideally, workloads should be gradually increased over time.

DO:

Cut back on workloads on days that are "Bad Breathing Days" or when recovering from a respiratory infection.

DO:

Use your fast acting bronchodilator before exercising and always take your medications at the same time each day.

DO:

Tell us if you are not satisfied with any part of your program or have needs you feel are not being met.

DO:

Wipe down each piece of exercise equipment with the wipes provided throughout the gym.

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DON'T:

"Race" to be here on time. Don't try to attend on extreme weather days or poor driving conditions. It is better to call to say you'll be late or unable to attend due to poor driving conditions than to stress out.

DON'T:

Smoke before exercising if you are still a smoker. Stop smoking should be your #1 priority.

DON'T:

Exercise when you are overly fatigued or think you are coming down with a respiratory infection. This may further decrease your resistance and may place an unnecessary strain on your lungs and heart.

DON'T:

Come to Rehab with a respiratory infection. If you have been on antibiotics due to a respiratory infection, you may return to Rehab once you are feeling better and have used antibiotics for 3 days.

DON'T:

Exercise immediately after eating a large meal. Digestion requires diversion of blood flow to the stomach and intestines. Therefore, you need to allow time for adequate digestion (one to two hours) before exercising.

DON'T:

Drink caffeinated beverages before exercising. Caffeine may increase your heart rate significantly and increase the likelihood of heart rhythm irregularities.

DON'T:

Drink alcoholic beverages during exercise. Alcohol can reduce the pumping ability of your heart, causing muscles to be sluggish.

DON'T:

Wear heavy or tight waist clothing during exercise. Heavy clothing reduces the body's ability to dissipate heat and tight clothing around the waist restricts movement of the diaphragm.

DON'T:

Abruptly stop taking your medications unless you are directed to do so by your physician. Inform staff of any changes or additions to your current medications so we can update your file.

DON'T:

Allow unanswered questions to impede your progress. We are always available to discuss any concerns and or questions you may have. If we don't have an immediate answer, we will do our very best to investigate and get the information for you!