

Physical Therapy After Heart Surgery

Helping you regain your mobility

This handout explains why exercise is important after cardiac surgery. It includes the precautions you need to follow during your recovery.

Your doctor will arrange for a physical therapist to see you when it is safe for you to start exercising or moving after surgery. This is usually the day after your surgery, while you are still in the Intensive Care Unit (ICU).

The physical therapist will keep your care team updated about your progress. This will help us decide your discharge date and plan.

It is very important that you get fully involved in the physical therapy program you are given. This program will help you regain your mobility and help you return to your usual living situation as soon as possible.



Your physical therapist will help you plan your home exercise program.

Tell your physical therapist if you have any concerns or any special mobility needs. You and your therapist will work together to create an exercise program that is best for you after your surgery.

Physical Therapy Goals

The goals of physical therapy are to teach you and your family or caregiver how to:

- Move safely to protect your incisions
- Do exercises to strengthen your muscles and manage swelling
- Monitor your activity level so that you exercise at the right level
- Increase your activity slowly and safely when you return home

Precautions

The most common incision used in heart surgery divides your breastbone (*sternum*) down the middle. The bone is then wired back together with stainless steel or titanium wire. This wire will stay in your body for the rest of your life.

Your breastbone will take time to heal. This means you must avoid activities that put stress on your sternum while it is healing.

For 6 weeks after surgery, do NOT:

- Lift, push, or pull anything that weighs more than 10 pounds. (A gallon of water weighs almost 9 pounds.)
- Raise your elbows higher than your shoulders. The only exception is if you raise both arms together in front of your body.
- Reach behind your back.

To help you follow these precautions, your physical therapist will teach you to:

- Get in and out of bed without using your arms
- Stand up from a chair and sit down without putting pressure on your arms
- Safely use your assistive device, such as a cane (if you use one)
- Safely climb stairs without pulling on the railing

If you need help doing any of these things at home, your therapist will also teach your family members or caregiver how to help you correctly.

Exercise in the Hospital

Your therapist will prescribe an exercise program for you to start while you are in the hospital. It is important that you follow the program every day.

Walking and doing your exercises will help:

- Your digestive, *respiratory* (breathing), and *circulatory* (blood vessel) systems recover from surgery
- Lower your risk of having problems such as lung infection (*pneumonia*), swelling, and blood clots
- Increase the amount of oxygen that your heart receives, which will help it heal

- Improve your strength, balance, and energy
- Improve your mood and help you sleep better at night

Bring these things to the hospital to help make physical therapy more comfortable:

- Eyeglasses, if you need them for walking or reading
- Tennis shoes (and orthotics if you wear them) if it is uncomfortable for you to walk in stocking feet
- Sweatpants or shorts and a sweatshirt (or other comfortable top) that closes in the front

Your Exercise Program at Home

When you leave the hospital, keep doing the exercise program that your physical therapist taught you. One of these exercises will be a walking program. Your goal is to be walking **30 to 40 minutes every day** by 6 weeks after your surgery.

To get the best results from your walking program:

- **Warm up before you walk and cool down afterward.** Stretch or do gentle exercises for 5 minutes before and after you walk. This will allow your heart and breathing rates to increase slowly before you walk and decrease slowly afterward.
- **Begin walking often for short amounts of time. Slowly increase your time.**
 - When you first get home after surgery, walk 3 times a day for about 5 minutes each time. This is about the same distance that you walked while you were in the hospital.
 - Every week, increase the time you walk by about 3 minutes.
- **Exercise at a low to moderate level for 6 weeks.** It is important to pace yourself when you resume activity. Slow down or rest if you are working too hard.

Your physical therapist will teach you the best way to monitor how hard your body is working. You might learn to:

- **Take your pulse.** Your pulse tells you how hard your heart is working. It is important that your heart rate does not increase to more than 20 to 30 beats per minute above your resting heart rate.

- **Monitor your rate of perceived exertion (RPE) on a scale of 0 to 10.** When you are exercising, think about how hard you are working, or how much effort it is taking for you to keep doing the activity you are doing. Rate your effort on a scale of 0 to 10, with 0 being lowest and 10 being highest. If you are working between levels 3 and 5, you are exercising at a low to moderate level.
- **Use your breathing to guide how hard you exercise.** You should be able to carry on a conversation while you are exercising. If you are too breathless to talk easily, slow down.
- **Pay attention to your body.** Reduce your exercise level if you:
 - Have a high heart rate (pulse) for 10 minutes after you stop exercising
 - Are breathless for longer than 10 minutes after you stop exercising
 - Have fatigue (extreme tiredness) up to 24 hours after you exercise
 - Have pain in your joints, heels, or calf muscles
 - Have increased swelling in your legs or feet

When to Call

Call your healthcare provider if you:

- Have abnormal heart activity
- Have pain or pressure in your chest, arm, or jaw
- Are dizzy, lightheaded, or feel faint
- Are confused, have blurred vision, or suddenly become clumsy

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Your physical therapist will answer questions you might have during your therapy sessions in the hospital.