

POMONA VALLEY HOSPITAL

MEDICAL CENTER

REHABILITATION SERVICES

— *Next Steps & Beyond* —

CARDIOVASCULAR REHABILITATION

# Cardiac Home Exercise



Pomona Valley Hospital Medical Center  
Collaborative Program Provided by

Rehabilitation Services and the Stead Heart & Vascular Center

# CARDIAC HOME EXERCISE

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The First Step After Your Cardiac Event or Procedure

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# CARDIAC HOME EXERCISE

## The First Step After Your Cardiac Event or Procedure

The American Heart Association, American College of Cardiology, and Medicare all agree that participation in outpatient cardiovascular rehabilitation maximizes recovery after a cardiac event and helps prevent re-hospitalization.

Before enrolling in a clinic-based cardiovascular rehab program, however, it is recommended that you first begin to increase your physical activity at home while under the supervision of your physician. This booklet will provide basic exercise guidelines to assist you in this important step until you return for cardiovascular rehabilitation.

If you have any questions regarding these guidelines, call your physician or Cardiovascular Rehabilitation at Pomona Valley Hospital Medical Center (PVHMC) at 909.865.9810.

### RISK FACTORS CONTROLLING YOUR HEART HEALTH

Before discussing the role of exercise, a review of cardiovascular risk factors that apply to you is important. The medical community recognizes ten risk factors that contribute to coronary artery disease as listed below. You can assume responsibility for your heart health by acting to control the seven “modifiable” risk factors. Check those that apply to you.

#### PRE-DETERMINED RISK FACTORS:

- Being male over age 45
- Being female over age 55
- Family history of premature heart disease

#### MODIFIABLE RISK FACTORS:

- Tobacco use
- Abnormal lipids
- Sedentary lifestyle
- Being overweight
- High blood pressure
- Stress
- Diabetes

Our “Talking Hearts” Program offers risk reduction education and support. See page 10 for details.

#### FOR THE DURATION —

During the cardiac home exercise phase of recovery, it is important to note the following:

#### WHEN TO GET HELP —

Notify your physician if you have:

- ♥ Incisional discomfort which is increasing in intensity
- ♥ Signs of incisional infection: redness, swelling, pain, feels warm to the touch, drainage of pus from incisions
- ♥ New swelling in the ankles, feet or both legs accompanied by weight gain of more than 2 pounds and sometimes accompanied by unusual shortness of breath

#### CALL 911 —

If you experience any of the following symptoms which you cannot manage:

- ♥ Chest pressure, tightness, heaviness, fullness or any discomfort from the waist up (often in the shoulders, jaw, arms, between the shoulder blades, in the abdomen or throat) lasting more than 30 seconds or that increases with exertion and is not related to body position or posture
- ♥ Unusual shortness of breath
- ♥ Feeling faint
- ♥ Any of the above symptoms accompanied by unusual sweating or nausea

## BENEFITS OF EXERCISE

Exercise is a vital component of a healthy lifestyle. Properly done, it has valuable benefits you cannot afford to pass up.

1. A stronger more efficient heart
2. Lungs that become more efficient
3. Strengthened muscles
4. Loss of body fat
5. Stronger bones, tendons, and cartilage
6. Improved digestion and regularity
7. Improved lipid profile
8. Better self-image
9. Improved blood sugar control
10. Improved blood pressure

## GENERAL DOS AND DON'TS

- ♥ One of the best mental exercises you can do for yourself is to get up and get dressed each day. To avoid over doing it, alternate your activities with proper rest.
- ♥ As your stamina, duration and intensity of exercise increases, you should include a 5–10 minute warm-up and 5–10 minute cool-down period before and after exercise.
- ♥ Arm activity creates more heart work than leg activity. Thus, during recovery avoid vigorous arm and shoulder activities. Particular activities to avoid include those in which your arms are raised above your shoulders, such as washing windows, hanging laundry and painting.
- ♥ Avoid "muscle building" activities such as heavy lifting, pushing or pulling, push-ups, straining to open a window or jar lid or to have a bowel movement, as they increase your heart's work and blood pressure.
- ♥ Do not exercise for at least one hour after eating a meal. This places an increased demand on your heart.
- ♥ Do not exercise for several hours following moderate consumption of alcohol. Alcohol can dilate blood vessels which may lower blood pressure and cause dizziness. Alcohol taken with certain medications can cause similar reactions.
- ♥ Decrease exercise intensity and duration during very hot, humid or cold days.
- ♥ Avoid outside exercise during ozone alerts or when air quality is poor. Exercise away from busy streets.
- ♥ Do not exercise when ill (cold, flu, fever, excessive fatigue). When resuming exercise after illness, begin at a low level and increase gradually.
- ♥ Do not shower until completely cooled off and heart rate has returned to resting state.
- ♥ To avoid stress on the circulatory system, dizziness and/or fainting, avoid saunas and hot whirlpools until told otherwise by your physician.
- ♥ Replace lost body fluids with plenty of water or diluted juice. If you have congestive heart failure, check with your physician about fluid consumption.
- ♥ If your doctor alters your medication or adds a new medication, ask what affects the medication will have on your exercise heart rate. Some medications significantly lower resting and exercise heart rates while others significantly increase these rates.

## PRECAUTIONS FOR INDIVIDUALS WITH DIABETES

1. Check with your doctor before starting any exercise program.
2. Generally, exercise when your glucose level is between 100 and 250 mg/dl. Do not exercise if it is over 250 mg/dl. Note: Some individuals on insulin require a higher pre-exercise glucose level (around 150 mg/dl) to prevent hypoglycemia during exercise.
3. Exercise 1.5 hours following a meal, or consume a piece of fruit or juice before exercise of 30 minutes or more. It is a good idea to exercise the same time of day each day.
4. Avoid late night exercise, since hypoglycemia can occur 4-6 hours after exercise.
5. Be aware that exercise may produce symptoms similar to low blood sugar, such as sweating, fatigue, weakness, hunger, or dizziness.
6. Take good care of your feet. Check your feet before and after exercise. It is important to keep feet clean and dry. Take care of blisters and cuts promptly. Wear shoes that fit well and break in new shoes gradually. See your doctor if infection occurs.
7. Wear a diabetic ID bracelet or chain.
8. Carry a fast-acting carbohydrate such as glucose tablets or lifesavers.
9. If you suffer from retinopathy, avoid activities such as jumping, running, and heavy lifting. Check with your doctor for specific exercise guidelines.

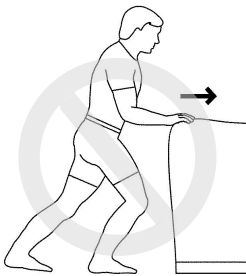
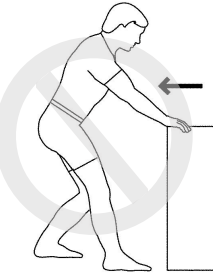
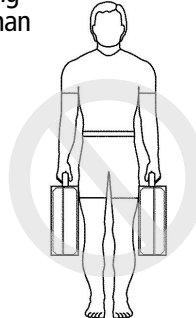
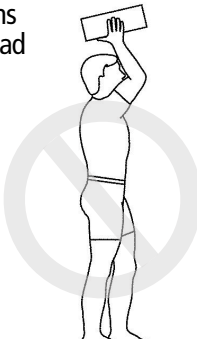
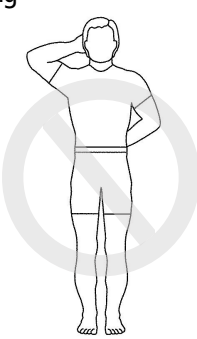


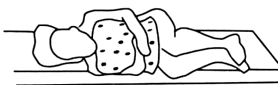
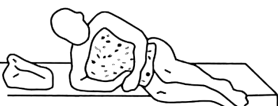
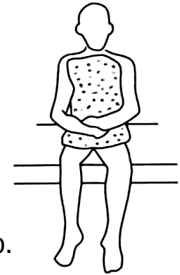
## GUIDELINES FOR THE FIRST THREE MONTHS

Exercise during this period will be geared to improve range of motion, cardio-respiratory fitness, and maintain muscle tone following your hospital procedure.

### STERNAL PRECAUTIONS AFTER CARDIAC BYPASS SURGERY

Generally, the precautions shown below need to be followed for three months following surgery. However, refer to your physician for full release before lifting and/or resuming prior activities (cycling, swimming, golf, etc.).

<p>No pushing</p> 	<p>No pulling</p> 	<p>No lifting more than 10 lbs.</p> 
<p>No arms overhead</p> 	<p>No reaching behind your back</p> 	<p><u>Exceptions to the rule:</u> You may raise one arm at a time for activities of daily living such as:</p> <ol style="list-style-type: none"> <li>1. Washing your hair</li> <li>2. Brushing your teeth</li> </ol>

<p><i>Getting out of bed — Do not pull up on side rails using your arms</i></p>		
 <ol style="list-style-type: none"> <li>1. Hug a pillow. Log roll onto your side.</li> </ol>	 <ol style="list-style-type: none"> <li>2. Move your feet off the bed. Gently use your elbow to raise your body to a sitting position.</li> </ol>	 <ol style="list-style-type: none"> <li>3. Sit on the side of the bed before standing up.</li> </ol>
<p><b>Getting back into bed —</b></p>		
<ol style="list-style-type: none"> <li>1. Hugging a pillow, sit near the top 1/3 of the bed.</li> <li>2. Lie on your side. Lift your legs onto the bed with your knees bent.</li> <li>3. Roll onto your back. Scoot up or down using your legs (no arms).</li> </ol>		

## A PROGRESSIVE WALKING PROGRAM

Walking is an excellent form of exercise. It will strengthen your heart and lungs, increase circulation and the efficiency of oxygen utilization in your large muscle groups. Walk slowly, gradually increasing the amount of time and/or distance. Unless otherwise directed by your physician, follow the schedule below. A log to record your progress is provided on the next two pages.

<b>Week</b>	<b>Activity</b>
1	Walk 5 minutes at a leisurely pace 2-4x/day
2	Walk 7 minutes at a leisurely pace 2-4x/day
3	Walk 10 minutes at a leisurely pace 2x/day
4	Walk 15 minutes at a leisurely pace 2x/day
5	Walk 20 minutes at a leisurely pace 2x/day

## RATE YOUR EXERCISE EXERTION LEVEL

The preferred guide for determining your level of exertion is by measuring it on the Borg Perceived Exertion Scale. You should begin walking at 2 (light) and gradually progress to the 3 (moderate) to 4 (somewhat hard) range as tolerated.

<b>BORG PERCEIVED EXERTION SCALE</b>	
(How hard you are working)	
0	Nothing at all
0.5	Very, very light
1	Very light
2	<b>Light</b>
3	<b>Moderate</b> <b>TARGET RANGE</b>
4	<b>Somewhat hard</b>
5	Hard
6	
7	Very hard
8	
9	
10	Very, very hard (maximal)

# PROGRESSIVE WALKING LOG

Date		Weight	Duration How long?	Perceived Exertion How hard are you working?	Comments Problems?
	a.m.				
	p.m.				
	a.m.				
	p.m.				
	a.m.				
	p.m.				
	a.m.				
	p.m.				
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	p.m.				
	a.m.				
	p.m.				



PROGRESSIVE WALKING LOG

Date		Weight	Duration How long?	Perceived Exertion How hard are you working?	Comments Problems?
	a.m.				
	p.m.				
	a.m.				
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## RANGE OF MOTION AND TONING EXERCISES

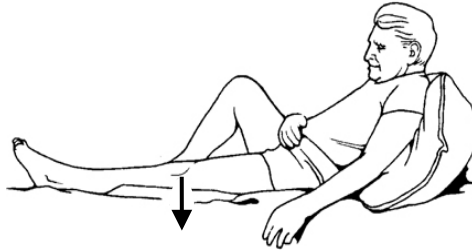
These exercises will help preserve your range of motion and muscle tone until you are able to progress your exercise program.

### 1. Ankle Pumps



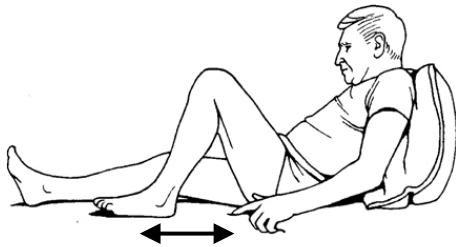
Sit with knee bent or lie with your legs straight out. Pump your foot up and down.

### 2. Quad Sets



Tighten the muscle on top of your thigh forcing the back of your knee down. Hold 10 seconds. Repeat 10 times.

### 3. Heel Slides



Lie on back with legs straight. Slide one heel up toward buttocks. Return to start position. Repeat with other leg.

### 4. Hamstring Sets



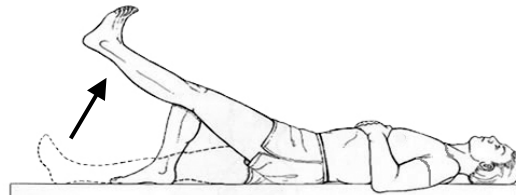
Lie with one knee bent to 30°. Without moving leg, tighten muscles on back of leg, trying to push heel down into bed.

### 5. Glut Sets



Lie on your back. Squeeze buttocks together. Hold 10 seconds and then repeat.

### 6. Straight Leg Raises



Lie on back with one knee bent. Keeping the other leg straight, raise it to the level of the bent leg. Return to start position.

## CARDIOVASCULAR REHABILITATION — THE NEXT STEP IN YOUR RECOVERY

Cardiovascular Rehabilitation is for any patient who has experienced:

- ♥ Heart attack
- ♥ Coronary bypass surgery
- ♥ Angioplasty or stent placement
- ♥ Angina
- ♥ Heart valve repair or replacement
- ♥ Heart and/or lung transplant
- ♥ Heart failure
- ♥ Peripheral Artery Disease (PAD)
- ♥ Ongoing heart related post COVID-19 symptoms

### WHY IS IT IMPORTANT?

- ♥ To help patients learn how to reduce their risk of another coronary event.
- ♥ To provide monitored and clinically supervised rehabilitation exercise in a safe and fun environment.

### WHAT ARE THE COMPONENTS?

#### Supervised Exercise —

Cardiovascular rehabilitation provides patients with an individualized exercise plan closely supervised by experienced exercise physiologists, physical therapists and physical therapy assistants. Patients use advanced telemetry equipment designed to monitor vitals while they advance through a progressive exercise program. This popular program is offered in the cardiovascular rehab gym at Pomona Valley Hospital Medical Center.

#### Education —

Weekly "Talking Hearts" educational materials include:

- ♥ Exercise Basics
- ♥ Stress Management
- ♥ Weight Management
- ♥ Diabetes Management
- ♥ Heart-Healthy Eating
- ♥ High Blood Pressure and Stroke
- ♥ Cardiovascular Disease and Treatment Options
- ♥ Overview of Cardiovascular Medications with a Pharmacist

#### Multidisciplinary Staff —

Medical Director ..... Oversees the medical aspects of the program

Clinical Exercise Physiologist ..... Performs evaluations, oversees all exercise, provides education

Physical Therapist/PT Assistant ... Provides orthopedic expertise and support

### WHEN AND HOW DO I SIGN UP?

After you have been home from the hospital for two weeks, contact us at **909.865.9810** to register for Cardiovascular Rehabilitation. Our expert staff will guide you through the process of getting started.

### WHAT'S NEXT AFTER REHAB?

When you have completed your monitored Cardiovascular Rehabilitation Program, our independent "Exercise for Life" Wellness Program gives you the option of continuing your exercise routine on a long term basis in our cardiovascular exercise gym.

## LONG TERM GUIDELINES

Use the guidelines below to assist you in establishing the frequency, intensity and duration of your ongoing exercise program. Consider joining our independent “Exercise for Life” Wellness Program located at PVHMC to continue your exercise routine in a medically supervised environment alongside former cardiac patients.

## SPECIFICS AND SEQUENCE OF YOUR EXERCISE ROUTINE

1. **WARM-UP** — Begin walking or cycling slowly and gradually progress the speed or intensity over five minutes to your normal workout intensity.
2. **CARDIOVASCULAR EXERCISE** — This consists of exercise using the large muscle groups continually over a period of time — usually at least 20-30 minutes, and up to 60 minutes. Forms of exercise may include walking, cycling, swimming, dancing, and use of newer forms of equipment such as elliptical trainers.

For weight management, duration of exercise is more important than intensity. If physically able, and with your doctor’s permission, accumulate up to 60 minutes of moderate intensity exercise. This can be broken up into 10 minute intervals throughout the day.

3. **COOL-DOWN** — This should be the same process as warm-up, but in reverse. Gradually reduce exercise intensity over five minutes until you are exercising at a very low level. Doing so will allow you to recover from the exercise bout more quickly and safely.
4. **RESISTANCE TRAINING (or strength training)** — This type of exercise includes the major muscle groups and should be done at least twice a week, on non-consecutive days. Begin low and slow, using weights that are light enough to allow you to complete 10 repetitions comfortably. Perform 1-2 sets of repetitions with at least 30 seconds in-between sets. Gradually increase to 15 repetitions. When this becomes too easy, increase the weight slightly and begin again with 10 reps.

### 5. LEAD A MORE ACTIVE LIFESTYLE

- ♥ If safe, park further away from your destination and walk.
- ♥ Try low impact group exercise classes.
- ♥ Consider aquatic aerobics if you are very overweight or have arthritis.
- ♥ Join a fitness program with professional staff certified by a reputable organization.
- ♥ Strive for at least 150 minutes/week of moderate intensity physical activity as recommended by the American Heart Association.

## 6. KEEP COMFORTABLE AND SAFE WHILE EXERCISING

In warmer weather —

- ♥ Exercise in the early morning or early evening.
- ♥ Drink plenty of fluids.
- ♥ Wear a hat.
- ♥ Use sunscreen and lip protection.

In cooler weather —

- ♥ Wear thin layers of clothing – remove layers as needed.
- ♥ Layers made of polyester will wick moisture away from the body, instead of absorbing it like cotton. This may minimize the risk of hypothermia.

Footwear —

- ♥ Wear a comfortable walking or running shoe with good shock absorbency.
- ♥ Get a new pair every 9–12 months.

Safety —

- ♥ Carry a cell phone and ID
- ♥ Exercise with a companion and during daylight hours.
- ♥ Avoid secluded areas.
- ♥ Carry an attention-getting device.

For questions about Cardiovascular Rehabilitation, call PVHMC Rehabilitation Services at **909.865.9810**.





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MEDICAL CENTER  
REHABILITATION SERVICES

*Expert care with a personal touch*

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