

Management Strategies for Patients/Clients

What is Chronic Heart Failure (CHF)?

Chronic Heart Failure (CHF) usually develops gradually. It is a condition in which the heart does not pump as strongly as it should. The body does not get the right amount of blood and oxygen it needs to work efficiently. The weakened pumping action may cause a backup of fluid (congestion) in the lungs and other parts of the body. An abnormal build up of fluid in the lungs is known as **pulmonary edema**. Without a proper oxygen supply and with congestion, you may feel tired and short of breath at times. There are some other symptoms of CHF that you may have experienced.

Pulmonary Edema

When the left side of the heart is not pumping effectively, pressure builds up in the heart. Blood in the pulmonary veins (the pathway from the lungs to the heart) gets backed up. Accumulation of excess fluid raises pressure in the pulmonary veins and eventually in the lung tissue. As a result of the backup and increased pressure, fluid passes out of the blood vessels into the little sacs of the lungs (the alveoli). The alveoli are the sites where normally, oxygen and carbon dioxide exchange places in the blood. As fluid builds up, the lung tissue becomes waterlogged.

Proper treatment of underlying cardiac problems can help prevent pulmonary edema.

If not treated promptly, acute pulmonary edema can be fatal. Effective treatment usually involves restoring adequate heart function. With proper therapy, people who have survived an episode of acute pulmonary edema can lead a reasonably active life.

What are the causes and symptoms of Heart Failure

Causes

Heart Failure has many causes:

- long-standing impaired blood flow to the heart for some time (this may or may not produce chest pain or angina)
- heart muscle damage from a previous heart attack
- long-standing high blood pressure
- a heart valve that is not working properly (heart valve disease)
- an infection causing inflammation of the heart muscle
- excessive use of alcohol or drugs
- a disease of the heart muscle itself from an unknown cause

Symptoms

When the heart doesn't pump well and congestion occurs, you may experience some of these symptoms:

- shortness of breath while lying down, or waking up in the middle of the night short of breath

- swollen ankles and/or legs
- sudden weight gain
- tiredness and/or loss of energy
- loss or change in appetite

Other medical problems may cause all of these same symptoms. A physical exam along with special tests is needed to diagnose heart failure and determine its causes.

• Shortness of breath

Shortness of breath is caused by fluid build-up in your lungs. You may:

- ♥ feel as though you are not getting enough air
- ♥ have problems breathing when you lie flat
- ♥ feel more short of breath when you exert yourself or exercise
- ♥ have a dry hacking cough or be unable to catch your breath at night or wake up in the middle of the night short of breath

• Swollen ankles and legs

Swollen ankles and legs happen because there is too much fluid in the tissues of your body. This is known as edema. You may notice that:

- ♥ your shoes are tighter
- ♥ you have more swelling in your feet and legs in the evening

• Sudden weight gain

Sudden weight gain occurs when your kidneys save extra water and salt because of sluggish circulation. This extra water is translated into a gain in body weight. One litre of water weighs about 2 pounds (approximately 1 kg). You may notice that:

- ♥ rings on your fingers feel smaller
- ♥ your shoes or clothes feel tighter
- ♥ your waist belt feels tighter

• Tiredness/loss of energy

Tiredness and/or loss of energy is due to slow removal of waste products from your body and slow delivery of oxygen to muscles. You may:

- ♥ tire more easily
- ♥ need more rest periods during the day

• Loss/change in appetite

Loss or change in appetite happens when your body has less energy to digest food and there is too much fluid in your tissues. You may feel:

- ♥ bloated after eating very little
- ♥ nausea, with abdominal pain and/or tenderness

Factors that increase symptoms

Be aware that certain factors may cause symptoms of heart failure to get worse. Some of these factors are:

- ♥ high salt foods or beverages
- ♥ medications that cause salt and water to be retained
- ♥ fast heart rhythms

- ♥ a cold or the flu
- ♥ excessive fluid intake

How can I prevent or control Heart Failure?

There is no cure for heart failure, but by learning more about your illness and taking an active role in managing your health you can manage your Heart Failure by working in partnership with your healthcare team. Consider using the Heart Failure 'Health Tracker' to monitor your progress. You can take this 'Health Tracker' with you when you visit your doctor(s). Other important things you can do include:

Adopt healthy habits

Examine your lifestyle and habits. Healthy habits help to reduce your chance of illness. Eating to optimize your health by limiting salt and fluid intake, including both activity and rest into your daily routines and other habits are wise choices to adopt and can help you manage Heart Failure.

- **Low sodium diet**

Limit the amount of sodium (salt) you eat. Salt is like a sponge, it keeps extra fluid in your body. Your heart has to work harder to pump this extra fluid.

By decreasing your intake of salt, you can help your body lose the extra fluid. Tips for reducing salt intake are provided in your patient education booklet.

- **Monitor fluid intake**

With CHF, you may retain fluid in your body. To help avoid this, you may need to limit the amount of fluid you drink during the day.

- **Weigh yourself regularly**

Fluid build-up in your body shows on your scale as weight gain. A sudden weight gain when you have been eating normally may be an early sign of fluid build-up. If your weight increases more than 2 pounds (1 kg) in 2 days, or 5 pounds (3 kg) in a single week, call your nurse or doctor.

- **Know about alcohol**

If you drink alcohol, you may have to severely reduce your intake or you may have to abstain from alcohol completely, since alcohol impairs heart function. It is recommended that you drink no more than one standard drink per day.

- **Be smoke free**

Smoking, or exposure to second-hand smoke, makes the heart work harder and decreases the amount of oxygen carried in the blood. Nicotine injures the lining of the arteries and increases the build up of fat deposits in that area.

- **Balance activity**

It is important to balance your daily activities with rest periods to help control your symptoms. Some people find if they are too active one day, they are very tired for the next few days. Taking rest periods during the day is helpful. Consider it as a "catch up" time for your heart. Participate in regular physical activity. Regular physical activity may help you to feel better and make

your daily activities easier. A healthcare team member can advise you about the right kind and amount of activity for you.

- **Balance demands of work**

You may have concerns about whether you are able to continue to work full-time or part-time outside the home. This will depend on your symptoms and the type of job you have. Financial concerns or retraining possibilities may also be on your mind. If you are a homemaker, you may also need to take time off. Ask family members, friends and neighbours for help. Talk to your healthcare team about the concerns and challenges you face in this area.

- **Intimate relations**

You and your partner may experience anxiety about sexual activity. This is very common. Intercourse with your partner is not as hard on your heart as you may think. Research shows that sexual activity takes about the same energy as walking up two flights of stairs or walking briskly. Foreplay is a good warm-up for the increased activity of intercourse. This may be a time when you desire sex less. Some reasons for this may be medications you are taking, fatigue or stress. It may be helpful if you and your partner discuss this with your doctor or healthcare team.

- **Manage stress well**

Stress is often a productive part of everyday life. But when stress becomes "distress", it makes your heart work harder. Although stress cannot be eliminated, it can be managed:

- ♥ Learn what triggers stress for you
- ♥ Learn to recognize your symptoms when stressed
- ♥ Set aside time to relax every day
- ♥ Try relaxation techniques and stress management programs
- ♥ Get support from family and friends
- ♥ Talk about your challenges
- ♥ Regular physical activity is a great stress management tool
- ♥ Seek professional help if stress becomes too overwhelming

- **Share your feelings**

When you were diagnosed with heart failure, you may have felt shock, anger, fear, anxiety, loss, or sadness. This is to be expected. Your family and friends may have felt the same way. Sharing your feelings with each other is one way of coping with the changes that are happening. You will need each other for support as you start to look ahead to the future.



Weight Chart

It is important to weigh yourself every day. Weigh yourself first thing in the morning, after emptying your bladder, with the same amount of clothing. Record your weight below.

Call your doctor or nurse if you gain **2lbs or more** overnight or **5lbs or more** in one week.

Day	Weight	Comments
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3		
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Chronic Heart Failure Action Plan

Date: _____

Patient Name: _____

Date of Birth: _____

GREEN ZONE: All Clear

Your heart failure is in good control if:

- ♥ No shortness of breath
- ♥ No swelling
- ♥ No weight gain
- ♥ No chest pain
- ♥ No decrease in your ability to maintain your activity level

Green Zone Means:

- ♥ Your symptoms are under control
- ♥ Continue taking your medications as ordered
- ♥ Continue daily weights
- ♥ Continue to follow a 2-3 gram sodium restricted diet
- ♥ Keep all physician appointments

YELLOW ZONE: Caution

Your heart failure control is decreasing if:

- ♥ Weight gain of 2 or more pounds overnight
- ♥ Increased cough
- ♥ Increased swelling in your legs and/or tummy
- ♥ Increased shortness of breath with activity
- ♥ Decreased ability to breathe when lying flat
- ♥ Increased number of pillows needed to elevate head when lying down
- ♥ Decrease in your ability to maintain your activity level

Yellow Zone Means:

- ♥ Your symptoms may indicate that you need an adjustment of your medications
- ♥ Take diuretic medication as directed:

- ♥ If your symptoms or weight do not improve with extra diuretic medication **CALL** one of the following:

Physician: _____

Nurse: _____

Community Care Nurse: _____

RED ZONE: Medical Alert

- ♥ Unrelieved shortness of breath and/or shortness of breath **at rest**
- ♥ Unrelieved chest pain
- ♥ Wheezing or chest tightness at rest
- ♥ Need to sit in chair to sleep
- ♥ Weight gain of over 2 pounds overnight or more than 5 pounds in one week
- ♥ Confusion

Red Zone Means:

- ♥ You need to be evaluated by a physician right away
- ♥ Go to the nearest emergency room department **OR**
- ♥ Call 911
- ♥ Call your physician immediately if you are entering the red zone

Heart failure action plan prepared by: _____

Signature: _____ RN / Other: _____

Physician Signature: _____

Client Checklist for Chronic Heart Failure

What to expect at each office visit with your family physician:

✓	Physical exam with assessment of neck and heart	✓	Discuss activity level
	Check Blood Pressure		Check heart rate
	Obtain clinic weight and review home weight chart		Review of medications used to manage heart failure
	Review lab work		Check for anxiety, depression, economic concerns
	Discussion regarding sexual function (if applicable)		Initiate or review heart failure 'action plan'

Tests & Measurements that should be done or discussed on a yearly basis, or as recommended by your health care team:

✓	Echocardiogram if symptoms change	✓	Chest X-ray
	ECG		Lab work with any medication additions and/or changes
	Vaccinations: Pneumococcal (once lifetime) Annual influenza vaccine		

What you should know about how to manage heart failure

✓	The causes of heart failure	✓	Signs and symptoms of heart failure such as fatigue, appetite changes, cough, chest pain, breathing difficulties during the day and night, swelling
	Sodium restriction of 2-3 grams per day (1 tsp = 2.4g or 2400mg)		Activity guidelines
	Referral to Heart Function Clinic for education and/or management if difficulty managing symptoms		Smoking cessation
	Alcohol intake		Daily weight measurements
	Medications used to manage heart failure: Why they are prescribed How they work What to monitor		