My Marvellous Guide to Travelling with Heart Failure

What you need to know



Authored by patients like you



HELPING PEOPLE LIVE BETTER WITH HEART FAILURE

WELCOME TO THE PUMPING MARVELLOUS FOUNDATION



It is important to be prepared when travelling with heart failure and we hope this guide will give you thoughts about how you can plan your trip, whether it be to Brighton or Barbados. We hope this guide resonates with you and helps you make some of those decisions so your trip is safe and organised thoroughly. We have also partnered with "Medical Travel Compared" on the subject of travel insurance, as this component of travelling abroad should never be disregarded; it is important to declare any existing conditions so that the right cover can be arranged.

We hope you find this guide a useful resource for a safe and thoroughly enjoyable trip.

Nick Hartshorne-Evans

CEO, Pumping Marvellous Foundation

PLEASE NOTE: This booklet should not replace and/or substitute the interactions with and advice you are given from your Healthcare Professional. If you have any concerns about your condition then do discuss them with your Healthcare Professional at the earliest opportunity.

Travelling with Heart Failure

If your condition is unstable, or your blood pressure is very high, travel of any kind is best avoided. Heart conditions like any other condition can cause you problems on holiday, so choosing your destination wisely and planning your itinerary with care should help to minimise any potential risks.

Holidays are an important time to allow yourself to rest and relax. If you have recently been unwell, had surgery or have just been discharged from hospital, you should wait until you have made a full recovery and your Doctor has confirmed that you are fit before you travel. Whether your condition is stable or unstable, you should always consult your GP well in advance of departure and ensure you obtain confirmation from your GP that you are fit to travel and, where relevant, fit to fly.

- Prepare carefully for your trip, well in advance, and choose a destination where you are confident in the medical facilities and access to medical treatment
- Check your accommodation and the local facilities are suitable. For example, avoid staying at a hotel situated at the top of a steep hill, miles away from the nearest town
- It is generally not advisable to use spa facilities e.g. baths, saunas, hot tubs or steam rooms if you have high blood pressure, a heart condition, angina or have had a heart attack
- Do not use facilities that involve a sudden change of temperature e.g. a sauna followed by plunging into cold water. If you are planning to use such facilities, please consult your Doctor first
- Do not overexert yourself. Avoid hectic itineraries and, when travelling, use lightweight luggage, preferably on wheels and make use of porters
- Take out adequate travel insurance to cover your condition
- Take sufficient medication for your entire trip
- Take a list of your medications and their dosages



Air Travel

Do not fly if you have recently had a heart attack, stroke, illness or have been hospitalised. Ensure your Doctor deems you fit to travel before you fly.

Always check with your airline on current restrictions regarding the carriage of medicines and GTN sprays in hand luggage.

Air pressure and oxygen levels on board aeroplanes are reduced, but those with well controlled, stable heart conditions should have no significant problems with air travel. The probability of developing a heart problem during a flight is relatively low.

The majority of airline passengers end up sitting in one position for long periods of time. Long periods of immobility can cause reduced flow of blood through the veins and increase the risk of deep vein thrombosis (DVT). People with a history of medical problems are considered to be at an increased risk of DVT when flying. To minimise the risk of DVT, try to mobilise during the flight to improve circulation and walk up and down the aisle of the plane every half hour or so. Keep hydrated. Wearing flight socks or compression stockings can also help reduce the risk of DVT.

Medically Fit to Fly

All airlines have their own guidelines for defining when a patient is medically fit to fly. To avoid problems you must always check with the airline before booking. If you cannot find the information you are looking for on your airline's website, give them a call and they will be able to check with a medical adviser on your behalf. Generally speaking, if you have an existing cardiac or respiratory condition, you are medically fit to fly if you can climb 12 steps and walk 50 metres on a flat surface without experiencing angina or significant shortness of breath.

You are generally unfit to fly if you are in one of the following categories:

- Have trouble breathing when at rest
- Unsatisfactory control of heart failure
- Uncontrolled arrhythmia
- Unpredictable angina

- Haemoglobin levels below 7.5g/dl
- Currently have a transmittable infectious disease
- Experience psychotic illness
- Have recently been hospitalised due to heart failure

Deep Vein Thrombosis (DVT)

There is a common misconception that you are only at risk of a DVT when flying. The fact is that, even in healthy people, long periods of immobility can increase the risk of DVT. Long distance travel (of roughly four hours or more) whether by car, train or aeroplane will increase the risk of blood clots forming in the veins of your legs.

If you have an applicable condition then your airline or travel agent should supply you with a MEDIF form which both you and your GP should fill out.

The medical definition of DVT is:

Any blood clot (thrombosis) in a deep vein, most commonly the thigh or leg. The clot can break off and travel to the lungs where it can cause a pulmonary embolism (blood clot within the lung arteries). This can cause respiratory distress or collapse.

Deep vein thrombosis is sometimes called the 'economy class syndrome'. Even in young, healthy travellers, long stretches of time spent immobilised in the cramped seat of an aircraft with very low humidity sets the stage for formation of a blood clot in the leg.

DVTs should not be confused with thrombophlebitis, which is when blood clots form within inflamed superficial or varicose veins in the legs. DVTs are a much more serious type of clot forming within the deep veins of the legs. You would be forgiven for thinking that a DVT affecting the leg is not a serious medical problem. However, as outlined above, clots in the legs can break off and travel to the lungs where they can cause a potentially life-threatening Pulmonary Embolism (PE).

Low molecular weight Heparin injections are sometimes recommended for those at high risk of developing DVT. If indicated, this will be prescribed by your GP or hospital specialist.

Am I at risk?

You may be at greater risk of DVTs and PE if you:

- Have a family history of clotting
- Have had clots previously
- Are pregnant
- Have recently given birth
- Have had recent surgery
- Have circulation problems
- Have paralysis of the lower limbs
- Are being treated for heart failure
- Are over 40
- Are taking the contraceptive pill
- Are on hormone replacement therapy
- Have a blood disease
- Are obese
- Have a diagnosis or history of cancer
- Have had a stroke



What are the symptoms?

DVT symptoms include:

- Swelling, pain, tenderness and redness (particularly behind/below the knee or the back of your leg). This will be significantly different from the general ankle swelling experienced by a lot of people.
- Symptoms only occurring on one leg (this is not always the case)
- Increased pain when moving your foot upwards
- Symptoms occurring up to 4 weeks after travelling

PE symptoms include:

- Breathlessness
- Chest pain
- Collapse
- Loss of consciousness

If you experience any of these symptoms seek immediate medical advice.

Reducing the risk prior to leaving

- The first step in reducing your risk is to consult a GP or healthcare professional for advice. This is especially important if you fall into any of the at risk categories mentioned previously.
- Travel agents or airlines should be able to supply you with literature explaining DVTs and steps you can take to avoid them.
- Buy some compression stockings. You can find these in most pharmacies and at the airport.
- If you are pregnant or have recently given birth, consult your antenatal nurse, midwife or other healthcare practitioner for tips specifically for you.



Reducing the Risk On Board

Here are some things you can do to reduce the risk of developing DVTs:

- Consider wearing in-flight circulation socks.
- Keep the space in front of your feet free to enable you to exercise your legs and feet.
- Stay mobile.

Consider booking an aisle seat so that you are free to mobilise. If you cannot get up and walk around then follow the advice in your in-flight safety manual and do some lower limb exercises.

- Bend and straighten your legs, feet and ankles as often as possible during your journey.
- Drink plenty of water (being mindful of keeping to the limits of fluid intake as advised by your heart failure team) and avoid dehydration and excess coffee or alcohol.

What is the treatment?

If you suspect that you have developed or are developing a DVT, seek immediate medical advice or head to the nearest Emergency Unit. Generally speaking DVTs and PEs are treated with anticoagulant medications (blood thinners). These include drugs like Heparin, Warfarin and other oral anticoagulants.

- Avoid sleeping pills.
- If you are totally immobile ask your companion to massage your legs to increase circulation.
- Recline as far as possible.
- Forcefully press the balls of your feet against the floor. This will improve your circulation.
- Do breathing exercises to improve your circulation.
- Wear loose-fitting clothing.

Jet Lag

What is it?

The world is divided into 40 time zones, depending on the time of year, and jet lag is a condition that develops when you cross several time zones quickly, e.g. on a long haul flight.

Our natural 'bodily rhythm' responds to our regular exposure to hours of daylight and darkness, so when you cross a time zone rapidly and the hours of daylight become unfamiliar, we become out of sync. All our natural patterns are tied in to our body clock, so eating, sleeping, body temperature, digestion, toiletry functions, blood pressure and even hormone regulation takes time to readjust. Your body is jet lagged.

Will I be jet-lagged?

When we travel long distances, the chances are we will be exposed to stressful, crowded conditions and lack suitable time periods to eat and sleep. All these things take their own toll on the body and can unfortunately add to the effects of jet lag. The effects can also be increased with the number of time zones being crossed and the age of the traveller. Do not worry too much as jet lag will not cause any serious lasting effects and within a few days you should be back to a normal rhythm. Jet lag is worse when you travel from west to east as the body finds it easier to adjust entering into a shorter day rather than a longer one.

If you are travelling long distance the probability is that you will experience jet lag to some degree. Sadly, frequent flyers or those who consider themselves very fit will not be immune to the effects either. Jet lag will probably not affect young children and babies as badly as adults and those over 50, but there are things you can do to prepare yourself and minimise the effects.



Top Tips for Beating Jet Lag

1. TOP UP ON SLEEP

Make sure you get your rest in the days leading up to your flight. If you are travelling overnight, try and sleep on the plane. It all helps towards keeping you awake and getting accustomed to local time once you arrive.

2. STOP OVER

If flying long-haul and you are not too worried about getting to your destination as fast as possible, include a stopover in your journey. Try to make your stopover long enough to get some sleep or have a shower.

3. PRE-EMPT THE TIME CHANGE

If you are flying east, try getting up and going to bed a little earlier for the few days before you travel. If you are going west, try getting up and going to bed a little later.

4. FLY ON DESTINATION TIME

When you board the plane, change your watch to the local time at your destination. During the flight eat, drink and sleep at times similar to those of your final destination if possible.

5. PLAN YOUR MEDICATION

If you take medication at regular intervals, get advice from your GP about what to do when crossing time zones. This is especially important for Insulin users.

6. KEEP HEALTHY

Be sure to stay hydrated and active. Ideally, drink something at hourly intervals. Drink plenty of water (being mindful of keeping to the limits of fluid intake as advised by your heart failure team) and avoid alcohol. If possible walk around the cabin, employ the seated exercises suggested to you by the airline and stretch.

7. TAKE ACTION

When travelling east, try to catch a flight arriving early in the morning. When you get to your accommodation try to get some sleep straight away in order to go through the day as normally as possible. Be careful not to sleep for too long though as you will make your adjustment harder.

8. LIGHTEN UP

Exposure to daylight is helpful in tricking the brain to beat jet lag. If you arrive at your destination during the day, try to spend some time outside in the daylight.

9. TAKE IT EASY

Give yourself a break! Crossing each time zone will take a day to recover from, so take it easy when you arrive. Try and avoid strenuous activity or operating machinery until at least the next day.

10. USE CAUTION

There are supplements that some passengers and airline staff use to help them beat the effects of jet lag, but you must always be very careful of taking anything. Seek advice from your GP or healthcare professional before buying or ingesting anything.

Other general advice

Plan your trip ahead of time and allow plenty of time for transport so you are not rushed.

Use bags and suitcases with wheels so that you do not have to carry heavy luggage.

Inform the airline if you think you are likely to require assistance at the airport during check in, transit and luggage collection.

Medication

You should carry enough to cover you at the very least from check-in to baggage collection. If any of your medication is in liquid form be sure to have confirmed with the airline that you can carry it with you. Remember no more than 100ml of any liquid can be taken onto a flight. If possible take a tablet alternative to liquid medication in order to avoid any carry-on issues or refrigeration problems. If your medication requires refrigeration be sure to contact your accommodation to make necessary arrangements.

It is always a good idea to contact your airline in advance to advise them of any medical supplies you will be bringing as there are some airline restrictions that may apply. If you need to store medical supplies in a suitcase, it is advisable to label the case as containing medical supplies in order to avoid its disappearance. It may be necessary for you to carry supporting documentation from your Doctor or other healthcare professionals. For the most up-to-date information contact your departure airport and airline or visit their website.

Always check with your airline on current restrictions regarding the carriage of medicines.

If you do need to take equipment on board, it is a good idea to fill out an ABTA form and send it to your airline and airport in advance.

Always ensure you have sufficient medication to last your entire trip and perhaps a little more.

It is wise to carry a list of your medications including both the generic and brand names of each along with their respective dosages. Keep the list separate from the medications. If necessary, keep instructions on how to administer your medication to you should you be rendered incapable.

It is wise to check with the embassy of the country you are planning to visit in case your medication includes an illegal ingredient.

Dos and Don'ts

- DO Make sure you have enough medication to cover your holiday plus a little extra
- DO Make sure you have enough medical supplies to cover your holiday plus a little extra
- DO Carry at least a day's worth (plus travelling time) of medication and medical supplies with you
- ✓ DO Check with your airline for restrictions
- DO Check your destination embassy for possible illegal ingredients or restricted medications via the embassy webpage
- DO Advise your airline in advance of any medical equipment you are taking
- DO Carry with you your medical ID card if you have an implanted device such as pacemaker or defibrillator

- ✓ DO Take supporting documentation with your medication
- DO Write out your medication names, dosages and instructions on administering them
- DO Write out your personal GP or healthcare professional's information
- ✓ DO Take out travel insurance that covers your condition
- DO obtain a letter from your GP and receive prior clearance before flying from the airline
- × DON'T forget to make arrangements for refrigeration
- × DON'T Leave any medication in direct sunlight
- × DON'T Take any unnecessary medication during a flight



Official Airline Regulations for Medication

Generally speaking, here are medication guidelines for air travel. These guidelines were set by the US and adopted by the UK, Europe and Canada.

The 3-1-1 rule

The carriage of liquids onto a plane in hand luggage is still restricted worldwide due to liquid explosives still being a threat. Therefore the 3-1-1 rule applies to liquids in hand luggage.

- 3.4 ounce (100ml) quantities of liquids, gels and aerosols must be placed in one quart-sized, zip-topped clear plastic bag
- One bag per passenger. The bag MUST be screened.

Permitted medications

The following medications are permitted:

- All prescription and over-the-counter medications (liquids, gels and aerosols). This includes eye drops, saline solution (for medical purposes) and petroleum jelly.
- Liquids (including water and fruit juice), liquid nutrition or gels for passengers with a disability or medical condition.
- Life-support and life-sustaining liquids (e.g. blood, blood products, bone marrow and transplant organs).
- Medical or cosmetic augmentations (including mastectomy products, bras containing liquid and prosthetic breasts).
- Frozen items (must be frozen solid when screened) needed to cool any medication or equipment. If partially melted, slush or have any liquid at the bottom, they must meet the above rules.

You may take liquid medications over 100ml if they are declared to a Transportation Security Officer. A declaration can be made in writing, verbally or by a companion. Any liquid medications that are declared should be kept separate from all other property when screened at security.

Visual Screening of Medication

To have your medication and medical equipment visually screened instead of going through the scanners you must follow these guidelines:

- You must ask for the visual screening process before x-ray scanning begins.
- If you are planning to undergo visual screening make sure all your medication and supplies are separated in bags before you approach the body scanners for the Security Officers on the other side.
- Request the visual inspection and immediately hand the bags to the security personnel.
- You will be asked to remove, display and re-package your own medication and supplies to avoid any unintentional damage.
- If some of your medication or supplies fail to pass the visual inspection they will go through the X-ray screening process. If you refuse, you cannot take them through security with you.



Diabetes and Insulin

You should notify a Security Officer if you have diabetes and are carrying Insulin with you. Any Insulin must be clearly labelled and identified. All medication must be screened. The following diabetic medication is allowed:

- Insulin
- Dispensers that are already loaded with Insulin
- Vials and boxes of vials, jet injectors, epipens, biojectors and infusers
- Preloaded syringes
- An unlimited number of unused syringes providing they are alongside injectable medication
- Lancets, blood sugar monitors, test strips, testing solutions and alcohol swabs

- Insulin pump and supplies (including cleaning solutions, batteries, tubing, needles, catheters and infusion kits) proving they are accompanied by Insulin
- Glucagon emergency kit
- Urinary test strips
- Unlimited used syringes as long as they are in a hard surfaced transportation container
- Hard surfaced disposal containers for syringes and testing strips

If you wear an Insulin pump you can ask for the pump to be visually inspected and have a full body pat down by an officer rather than go through the metal detector screening. Be sure to tell the Security Officer that the pump cannot be removed because it is attached via a needle inserted under your skin.

Oxygen

Anyone travelling with or needing medical Oxygen must:

- Check with your Doctor prior to travel if it is safe to disconnect you from your supply.
- Contact the airline in advance (and mention it again at check in) for supplemental Oxygen on board if required.
- If needed, make sure that any local suppliers provide you with Oxygen at stopovers and your final destination.
- Make arrangements for any canisters left at the departure gate to be removed.
- Make the same arrangements for both the outgoing and incoming flights.

Medical Oxygen and respiratory equipment or devices are allowed, but will be screened. If you are connected to Oxygen:

- Inform security personnel if you cannot be disconnected from your Oxygen device.
- If you cannot be safely disconnected, ask security for the visual inspection process.
- If you can be disconnected, you will be responsible for that.
- Once disconnected, your equipment will be screened.

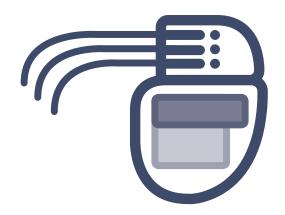
If someone else carries your Oxygen supply:

- They will not get through security without a valid boarding pass or valid gate pass.
- They may accompany you to or meet you at the gate providing they have a valid gate pass.



Implanted Medical Devices

- Advise security staff that you have an implanted medical device, and they will help keep the process discreet for you.
- If you have a pacemaker or implantable cardioverter-defibrillator (ICD) it is recommended that you carry a Pacemaker ID card. Show security personnel your ID card and ask for a pat down rather than going through the metal detector.
- Advise Security Officers where your implanted device is located.
- If you have been advised that the metal detector (or handheld metal detector) may affect your electrical implant, be sure to tell security and they will pat you down instead.
- If you need advice regarding your implanted medical device, contact your device manufacturer's patient helpline or your local pacing service who will be able to answer any questions you have.



Climate

If you have had a heart attack it is not advisable to travel to countries that experience extreme temperatures.

Extremes in temperature, too hot or too cold, can have an adverse impact on how the body functions and may affect the stability of your cardiac or respiratory condition. Increasing the risk of chest pains (angina), worsening heart failure, and other medical problems.

If you are in cold climates, and do have to venture outside, be sure to wrap up warm with several layers of clothing. Layers will help to trap heat and keep your body temperature stable, reducing strain on the heart. Make sure you wear gloves, a scarf and a hat to minimise heat loss. Do not drink alcohol in the cold weather.

Exertion is obviously a potential threat for those with heart conditions and the cold weather can cause you to overlook possible sources of exertion. Be sure to identify potential threats, such as shovelling snow or pushing a car. Simply walking in the snow can cause potentially dangerous levels of exertion.

Very hot weather conditions can cause dehydration and heat exhaustion. Excessive heat and humidity can upset the body's natural cooling process and can, furthermore, have a negative impact on your heart and circulatory system.

Excessive perspiration results in a loss of bodily fluid, which in turn reduces our total blood volume. This means your heart has to pump even harder to get the smaller volume of blood to your working muscles, skin and the other body parts. If too much fluid is lost, our internal body temperature will rise and if left untreated this can be life-threatening. It is therefore essential to reduce any strain on your heart in hot weather by keeping hydrated (avoid caffeine and alcohol), and wearing light, comfortable clothing.



Altitude and Depth

If you intend to travel to high altitudes, please check with your Doctor to make sure you will be able to cope. You may require an adjustment to your medication for the period of travel. Always discuss your travel plans with your Doctor or healthcare professional prior to departure. Blood pressure tends to increase at higher altitudes as the heart is forced to work harder. So please consult your Doctor and make sure they are informed of your travel plans and deems them to be safe for your situation.

High altitudes are best avoided

Altitude forces the heart to work harder. Where a healthy heart can respond to the demands, someone with a history of heart problems, heart failure or valve disease may struggle to cope. If you are in a location 2,000 metres (about 6,500 feet) or more above sea level, you should expect to find physical activity more difficult.

AVOID travelling to high altitudes (above 2000 metres) – there is less oxygen in the air which therefore puts stress on your heart and can bring on chest pain, breathlessness, dizziness or blackouts.

If you have recently recovered from a heart attack or heart surgery it would be preferable to choose a low-lying destination.

If you are contemplating diving, it is essential that you have a thorough check-up with your GP. When signing up for a diving course you will most likely be asked to complete a medical form confirming any pre-existing conditions. When answering "yes" you will be required to visit your GP and complete a PADI (Professional Association of Diving Instructors) medical statement. This will confirm if you are fit to dive.



Travel Insurance

If you are planning a holiday, ensuring you have travel insurance is an absolute must! If you were to go away without cover, and the worst should happen, you could run into bills costing tens of thousands of pounds. Making sure you have the right cover for your condition, and at an affordable price, will give you and your family peace of mind.

Using a specialist travel insurance comparison site, such as **www.medicaltravelcompared.co.uk**, can help as they are designed specifically for people with pre-existing medical conditions, including heart conditions. By answering a few quick questions online, they'll compare quotes from over 40 insurance providers, so you don't have to. Whether you're struggling to get cover based on age or medical history, or perhaps you're looking for a better quote, they can help you find the right cover.



Travel Insurance Tips

- Most insurance companies will need to know if you have ever been diagnosed with or treated for a heart or circulatory condition so make sure you declare full details about your condition
- Travel insurance doesn't have to be prohibitively expensive because of your condition, comparing prices from specialist providers can help you save time and money
- Your holiday destination will have a bearing on your insurance premiums healthcare costs can vary wildly for different countries
- If you are planning to take a few trips across a year, getting an Annual Multi Trip policy could be more cost-effective for you
- If you do take out an Annual Multi Trip policy, try and start your policy as soon as possible, you'll only be covered for cancellation from your policy start date!
- Make sure your cancellation cover is enough to cover any flights and accommodation you have booked
- Rather than looking for the cheapest policy, check the cover you'll be getting do you need cover for your baggage? Your gadgets? Are you covered for going on a cruise? Will you be covered if your airline fails?
- If you have already taken out your policy and your medical condition changes, or worsens before you go away, be sure to tell your insurance provider
- Keep a note of your policy details when you go away including their emergency phone number so you can get the help you need quickly

Medical Travel Compared provides you with a choice of quotes from up to 40 insurance companies for your travel insurance needs. They specialise in travel insurance for people with existing medical conditions. For every policy taken out by using the unique link below, the Pumping Marvellous Foundation will receive a donation to help the charity with achieving its goals.



Other "Marvellous Guides" available in the series:

HOPE - My Marvellous Guide to Being Told You Have Heart Failure Designed for newly diagnosed people with heart failure

My Marvellous Guide to Caring for Heart Failure Patients A marvellous guide to help people who care for people managing heart failure

My Marvellous Guide to Having a Cardiac Device Fitted To enable people to make an informed decision about having a cardiac device.

My Marvellous Guide to Having an Echo Everything you need to know about having an echo scan on your heart

My Marvellous Guide to Medicines for Heart Failure Our guide that explains how the various medicines work that you are likely to be prescribed with heart failure

My Marvellous Guide to PPCM (Peripartum Cardiomyopathy) Designed for mums diagnosed with PPCM

My Marvellous Guide to Travelling with Heart Failure Ideal for people wanting some help with going on holiday with heart failure

My Complete Marvellous Guide to Heart Failure

My Marvellous Big Pocket Guide to Heart Failure All you need to know about managing your heart failure better

My Marvellous Guide to Using GTN A simple guide to helping you take GTN spray or tablets

My Marvellous Guide to 'Walking a Day in My Shoes' Marvellous guide for people wishing to inform their families about heart failure

Heart Failure in Lights A great tool to help you manage your symptoms

My Appointment Diary Help in managing your heart failure

Pregnancy & Your Heart Designed for pregnant mums

Marvellous tools to help manage your heart failure with your Doctor or Nurse

So why have I got heart failure

A comprehensive set of marvellous guides to the reasons why you may have heart failure

Marvellous Map of Heart Failure

A map of how to navigate your way around the NHS with heart failure

All guides are written by patients and clinically validated for accuracy by leading UK heart failure specialists. To access go this link; http://pumpingmarvellous.org/heart-failure-patient-academy/heart-failure-toolkit

If you have any concerns or questions, get in touch with **Pumping Marvellous Foundation.**



Another Midi Toolkit by The Pumping Marvellous Foundation Crowdsourced information from REAL patients.

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Contact Us

B

01772 796542

- www.pumpingmarvellous.org
- hearts@pumpingmarvellous.org
- PMTVLive



- @pumpinghearts
- f
- heart failure aware
- help for hearts (closed support group)

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