



MASSACHUSETTS
GENERAL HOSPITAL

CORRIGAN MINEHAN
HEART CENTER

Guide to Recovering from Your Heart Surgery



Handy Instructions for Everyone: Your Summary

This handout highlights the more detailed **Guide to Recovering from Your Heart Surgery**. **Save this page** somewhere you can see it often (*for example, on your refrigerator door*). Follow these instructions until you see your surgeon at your next visit.

When should I follow up?

- See your surgeon 4-6 weeks after discharge.
- Your next visit is on _____
in the Cox building, 6th floor, Suite 630.
- Call your PCP and your cardiologist to arrange follow up after discharge.

Call the surgeon's office if:

- You have redness, swelling, drainage, or more tenderness at your incision, or it reopens.
- You have a temperature higher than 100.4°F (taken by mouth)
- You have an unusually fast, strong, or odd heartbeat.
- Your legs become swollen.
- You gained 3 pounds or more in a day or 5 pounds or more in a week.

If you have sudden trouble breathing or chest pain, call immediately. If this happens outside office hours, your call will be forwarded to a surgeon who is available.

What activities should I do while I recover?

- Continue using the **blue incentive spirometer** and taking deep breaths.
- **Walk** at least three times a day.
- **Weigh** yourself each morning after you use the bathroom and before you eat or get dressed.

What activities should I avoid while I recover?

Until your surgeon says it's okay to,

- **Don't** take baths or swim.
- **Don't** lift things heavier than a gallon milk jug (about 10 pounds).
- **Don't** drive or ride in the front seat of a car. You can ride in the back seat only.

How should I take care of my incisions?

- Shower every day, washing your incision first. Wash your incision gently and pat it dry with a clean towel.
- Don't put any creams, powders, lotions, or other things on your incision.
- If you have tape-like bandages (Steri-Strips®)
 - They will start to fall off and curl at the edges.
 - Once you are 2 weeks post-op, you may gently remove them.

Who can I call with questions about my medications?

Usually, patients don't need prescription pain medicine for more than 7 days after their surgery. If you feel you do, call your surgeon's office.

If you have any further questions, call the surgeon's office at (617) 724-0800.

How to use this guide

Your heart surgery is behind you, and you are getting ready to leave Massachusetts General Hospital. Now is the time to focus on how you can work with your care team to recover to your fullest. To do that, review this guide with your nurse before you leave and read it as much as you need when you are home. This guide will help you lower your risk for injury and infection. It will also help you live a fuller and healthier life.

You will receive this guide along with your **Post-Hospital Patient Care Plan**. This guide is for all of our patients who have had heart surgery. Along with the information you need to follow titled **Instructions for Everyone**, there is other information (the **Special Instructions**) that you only need to follow if certain instances are true for you. For example, if you had heart valve surgery or if you just quit smoking, there are additional steps you will need to take to be as healthy as possible. **If you need to follow some of the Special Instructions, your nurse or someone else on your care team will check off which sections you need to read.**

At the end of this guide, you will see a page titled **Caring for Yourself After Your Heart Surgery**. Remove this page from the rest of this guide and place it somewhere that you may often see it, like a fridge door or bulletin board. This one page is a summary of the information in this guide. We recommend you read this guide first and then use **Caring for Yourself After Your Heart Surgery** for quick reminders, such as what numbers to call for help.

Congratulations on your discharge from the hospital! The entire staff of the Division of Cardiac Surgery wishes you a good recovery. We appreciate the trust you have placed in us and the opportunity to care for you.

From our hearts to yours,
Best wishes on your healthy new life.

You may need to follow Special Instructions for certain reasons, such as the kind of surgery you had or the medicines you take. Have your nurse check with you before you leave Mass General for which pages of the Special Instructions you should follow.

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your instructions with your care team	All the below sections are checked off for you to read and review with your care team.

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with your nurse which Special Instructions you need to follow before you leave MGH	Before you leave Mass General, discuss with your nurse which of these Special Instructions that you will follow in addition to the instructions above, which apply to all post-op patients.

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Instructions for Everyone: Daily Routine

How will my daily routine change?

For the first several weeks after your heart surgery, you may be feeling more tired. Doing simple activities such as brushing your teeth may be more difficult at first. Prepare for this and set aside times during your day to rest.

You may not be able to return to work or do other activities that you enjoy immediately after surgery. Discuss this with your doctor or provider about resuming certain activities.

You will need to get enough rest as well as slowly and safely build back up your activity tolerance over the next 6-8 weeks. Engaging in light daily physical activities is important for your recovery, regaining your normal function, and your overall well-being.

Focus on balancing your day with rest as well as light physical activity (such as walking and gentle chores) for your first few weeks at home.

Sleep is important to your recovery.

Do your best to get a full night's sleep each night. Try to avoid staying up late one night and attempting to catch up on sleep the following night.

If you have trouble sleeping at night:

- You may be taking too many naps during the day. Try resting with a book or doing another resting activity that keeps you alert instead.

- You may be feeling restless because your chest is still sore from surgery. Try sleeping in a reclining chair or propped up with pillows for the first couple of weeks. This will help you not turn side-to-side while your chest is still sore, which may help you sleep more comfortably.
- Take acetaminophen (Tylenol) or your prescription pain medication about 30 minutes before you go to bed. This can help alleviate soreness and allow you to sleep more comfortably.
- If you still have trouble sleeping, call your Primary Care Physician (PCP).

How do I avoid resting too much or sitting for too long?

Long periods of rest can cause stiffness and pain in your lower back, shoulders, and chest.

To help lower your risk of this discomfort:

- When sitting, keep your feet elevated (either reclined or propped up with pillows)
- Limit how much you sit in one place at a time.
 - ☐ For long car rides, try to stop hourly for breaks to get out of the car and walk around.
 - ☐ While watching television, get up and walk during commercials.

Instructions for Everyone: Surgical Cuts (Incision)

How do I care for my surgical incisions?

You may have incisions on your chest, leg, groin, and arm. Wash your incision and inspect them daily.

Check your incisions daily for:

- Redness
- Swelling
- Drainage (blood, pus, other fluid)
- Soreness that worsens
- **If any of these signs appear**, call your surgeon's office immediately.

How to wash your incision:

- It is OK to allow running water over your incisions in the shower (but no tub baths for 6 weeks).
- Use a warm washcloth soaked in gentle, unscented soap.
- Wash your sternal incision before any other area of your body. This lowers the risk of infection.
- Fold up the washcloth into quarters. Gently pat the washcloth from top-to-bottom. Each time you go back to the top of the incision, unfold your washcloth, and use a clean side.
- Use a different, clean wash cloth for each incision (if you have multiple)
- Rinse well and gently pat dry.

Other instructions:

- Try not to touch your incisions when you are not washing them. This includes scratching and picking.
- You may leave your incisions open to air.
- Don't put anything on your incisions unless your provider has instructed you to do so.
- Don't use perfume, lotion, powders, or ointments.

What do I do with my Steri-strips® (adhesive strips)?

- The Steri-strips® on top of your incisions will begin to loosen, curl up and the edges, and may fall off as your incisions heal.
- The sutures under the Steri-strips® are absorbable and do not need to be removed.
- You should gently remove any remaining Steri-strips® **14 days** after your surgery.

What if I have a film over a leg incision?

- Some leg incisions are held together with a skin adhesive that acts like glue and can look like a thin film. The film usually stays in place for 5-10 days before it starts to flake or peel off.
- If it does not peel off after ten days, remove the film yourself.
- Don't scratch, rub, or pick at the film.
- Don't place tape directly over the film.
- Protect incisions from prolonged sun exposure, and don't use a sun lamp for the first 2 weeks.
- Do not apply liquid or ointment medicines to the incision while the film is in place.
- You may wet your incisions in the shower.

What if I have staples?

- Instructions regarding staple removal will be included in your discharge paperwork provided to you on the day of discharge.
- Staples may be removed by your PCP.

Instructions for Everyone: Activity Changes

What can I do while I heal from surgery?

For the first **4 weeks**, focus on taking deep breaths, walking, climbing stairs, and certain light household chores.

Check with your doctor *before* you:

- Return to work.
- **Try doing more exercise beyond walking.** This includes activities like golf, biking, jogging, swimming, contact sports, sit-ups, push-ups, lifting weights and heavy gardening.

Don't do any activities that involve pulling or pushing for the next 6-8 weeks. This includes lawn work, moving furniture, vacuuming, and using your arms to reposition yourself in or push yourself up from chairs or beds.

What items can I still lift and carry?

For the first 6 weeks after your surgery, try to limit how often you lift and carry things that weigh more than a few pounds. You should not lift anything over 10 pounds (about a gallon of milk) during this time. This includes children, grocery bags, suitcases, and briefcases.

Additionally, do not open windows that are stuck, unscrew stuck jar lids, or push open heavy doors. Avoid any activity that will stress or twist your chest ***until you've had your follow-up appointment*** with your surgeon, and you are cleared for these activities.

What household chores can I do?

You should not rush back to doing all your usual household chores when you first go home. During the first few weeks, if you are feeling up to it, you may do some of the easier light chores. Below are examples of what is appropriate to do if you have the energy, and what to generally avoid as you recover.

OK to do if you have the energy

- ✓ set or clear the dining table
- ✓ make minor household repairs
- ✓ light dusting or polishing furniture
- ✓ pot or tend to small plants
- ✓ wash or dry dishes
- ✓ fold laundry
- ✓ feed pets
- ✓ cook a meal
- ✓ load the dishwasher
- ✓ load the washing machine

Avoid doing for the first 6 weeks

- ✗ mopping
- ✗ scrubbing
- ✗ weeding
- ✗ lifting /carrying items more than 10lb

How do I practice taking deep breaths safely?

For the first few weeks after discharge, continue using the **blue incentive spirometer** you used at the hospital. Instead of trying to raise the basket as high as you can, focus on keeping it up for as long as you can by taking deep, long breaths. Keep the spirometer in a convenient location and use it at least **six times** throughout the day. **If you are using oxygen therapy, check with your doctor for how to continue this.**

You can climb stairs after surgery.

Climbing stairs requires more energy than walking. Before leaving the hospital, the nursing and physical therapy staff will practice climbing stairs with you and ensure that you will be able to safely climb stairs at home.

At first, it may be beneficial for you to arrange your day so that you can go up and down the stairs less often. However, if you have an upstairs bedroom, you do not need to change where you sleep.

Follow these tips to use stairs safely:

- When you climb stairs, take your time, and go slowly.
- Don't use the handrail to pull yourself up the stairs. Only use it for balance.
- Feel free to pause and rest at the mid-point of a flight of stairs, or whenever you feel tired.

When can I drive again?

- If you had surgery via sternotomy (incision down the middle of chest/breastbone):
after your post-operative visit at 4 weeks.
- If you had surgery via thoracotomy (incision on the side of your chest/rib cage):
2 weeks.

The reason to delay driving post-operatively is to protect your safety. You may have changes in your vision, concentration, reflex/reaction time, and shoulder and arm flexibility following surgery. All these things can hinder your ability to drive safely.

In addition, you should sit in the **back seat of a car** until after **week 4**. If you were to be involved in a car accident and the air bags go off, they can injure and disrupt the alignment of the healing bone in your chest.

Always wear your seatbelt when riding in a car.

When can I resume sexual activity?

You may resume sex when you feel physically and emotionally ready to do so. However, you must continue to avoid bearing weight with your arms and avoid situations where there is stress or pressure on the chest and arms for **6 weeks**.

The work of sexual activity has been compared to the work involved in climbing two flights of stairs. When you can comfortably climb two flights of stairs without shortness of breath or fatigue, you may try resuming sexual activity.

What if I feel chest pain?

If you feel chest pain during physical activity, stop that activity and rest. You will need to know if the pain you are feeling is related to your heart. You can tell that your chest pain is **not** related to your heart if:

- You can point to the exact spot where it hurts or it is tender to soft pressure, like poking with a finger.
- You can lower your amount of pain or tenderness by changing position or taking a deep breath.

Call your surgeon's office (617-724-0800) if you have questions about chest pain that you may be having.

Instructions for Everyone: Medicine Questions

Where will I get my prescriptions?

If you are going home, talk to your provider about where you would like your prescriptions to be sent upon discharge. You will need to pick them up at the pharmacy on your way home. Refills can be transferred to ExpressScripts if that is how you typically prefer to get your medications.

If you are going to a rehab facility, you will receive information about your prescriptions upon discharge from there.

How do I take my medicine safely?

The medicine prescribed to you and listed on your discharge instructions **are the only medications you should take at home.** Follow administration instructions on the medicine bottles.

If you were taking other medications before surgery that you did not receive in the hospital, **your provider will indicate on your discharge instructions** whether it is recommended that you continue taking them.

Often, the doses of your medications have changed. Ensure that you are taking your medication as prescribed upon discharge from the hospital. *Review these carefully.*

If you have any questions about medications, ask your nurse or provider prior to discharge. After discharge, do not hesitate to call with questions.

If you forget to take a pill, do not take two the next time. Just continue your normal schedule.

Can I take over-the-counter (OTC) medications or supplements?

Talk to your pharmacist or doctor before taking any OTC medications or supplements. Some OTC medications can change how your prescribed medicines work. This is especially important if you are taking blood thinners (anticoagulants).

You should discuss all medications – cold remedies, vitamins, pain relievers, laxatives, and herbal remedies – with your pharmacist.

What if I run out of medication?

If you see that your medication bottles are running low, **call your PCP or cardiologist to renew the prescription.** Typically, your MGH provider will write 1 month's worth of prescriptions with 2 refills. After 3 months, you must get refills from your PCP or cardiologist.

When traveling, take an extra supply of medication with you. If you travel by plane, **do not check your medication in your suitcase that may get lost or delayed** – keep them in your carry on.

What if I need help with my pain?

Typically, patients do not need prescription pain medication for more than 10 days after surgery. Massachusetts state law does not allow your MGH provider to write for prescription medication for longer than 7 days' duration. If you feel that you need more after 7 days, call your surgeon's office for further guidance.

Instructions for Everyone: Walking Routine

How can I get the best out of walking?

Walking helps improve your circulation, your strength, and your mood. Walk daily, slowly building on your distance and speed.

Before you start, keep in mind:

- In the first 6 weeks after your surgery, your exercise should feel comfortable. You should not overwork yourself.
- As you start and finish your walks, take a few deep breaths with your incentive spirometer.
- If you take your dog on your walks: Have a partner hold the leash if your dog is larger or tends to pull on the leash. It is possible that your chest healing could be disrupted from a dog pulling on a leash that you're holding.

What to wear:

- Comfortable shoes
- Soft, absorbent socks
- Clothes that are comfortable and loose fitting
- **Women:** wear a surgical or sports bra

Where to walk indoors

You may prefer to avoid outdoor walks when the weather is too hot/humid, cold, rainy, or windy.

Try these indoor options:

- Gyms often have indoor walking tracks.
- College campus
- Mall

A walking plan to start with:

The following plan is a good place to start to improve your walking.

Week	Walk time	# of walks per day
Week 1	5-10 minutes	3 - 4
Week 2	10-15 minutes	2 - 3
Week 3	20 minutes	1 - 2
Week 4	25-30 minutes	1

- It is important that you listen to your body. If you feel that you can do more, try it. If you feel too tired to keep walking, stop.
- If you have difficulty with longer walks, break it up with shorter distances and rest breaks.

Special Instructions: About Smoking

I quit smoking or using tobacco for my heart surgery. What do I need to know?

If you smoke, the single most important thing you can do for your heart **is to stop**.

It is understood that your first try to quit smoking is when it is the hardest. Being in the hospital has given you a good start. Read below for more information about the help you can get while you're admitted to MGH, and how you can continue to abstain from smoking after you are discharged.

There are resources available to you after you have been discharged.

- Call 1-800-QUITNOW to reach your state's smoking cessation helpline. It is a free and private (confidential) phone counseling service that can help you quit.
- MGH Community Health Associates – Living Tobacco Free: 781-485-6210.
- MGH Smoke Free Support Service: 617-724-2445
- Visit Becomeanex.org
- Talk to your PCP about behaviors and medications that can help you

Marijuana & THC Use

- Smoking or Vaping of any kind should **not be done following your heart surgery**; this includes marijuana.
- Currently there is no data regarding oral THC/marijuana use following heart surgery, so we are unable to provide any recommendations for its use.

Medications that can help you quit:

- Nicotine replacement therapies (NRTs) can include patch, gum, lozenge, or inhaler. Health insurance plans cover at least one of these options. Call your insurance company to discuss your options.
- Your PCP can discuss other medications that may be available.

If there are others in your life who smoke:

- Remember, there is **no** safe level of smoke exposure. Breathing in any amount of smoke can damage your heart.
- Make both your home and car smoke-free. This includes basements, attached porches, and attached garages, too.

The following tips can help you succeed:

- Follow the plan from your smoking counselor and/or your cardiac team.
- Make a firm rule that your house and car are smoke-free zones. Do the same for your workspace as much as possible.
- Think about the triggers for why and when you smoke. Often, knowing these helps you develop a plan for quitting by avoiding the triggers.
- Take quitting one day at a time. It will be difficult, but rather than thinking about the difficulty in the long term, focus on getting through the day without a cigarette.

Special Instructions: Valve Surgery

For tissue or mechanical valve surgery:

What should I do if I had heart valve surgery?

If you have had a valve replacement of any kind, you will need to take steps to lower your risk for infection in your heart (endocarditis). This will mean taking preventative antibiotics prior to any dental or invasive procedure. Discuss this with your dentist, your PCP, and your cardiologist.

How do I prevent an infection of my heart valve?

- Clean all cuts and scrapes carefully to lower your risk of infection with soap and warm water.
- Tell your dentist that you have had heart valve surgery. **You will need to take antibiotics an hour before any dental visit from now on, including regular dental cleanings.**
- If you need to have other invasive procedures, you may require antibiotics. Ensure you discuss this with your dentist, PCP, cardiologist, and any other doctor that you see.
- It is important that you seek medical attention if you are having fevers, as it could indicate an infection that requires treatment.

For mechanical valve surgery:

You will be taking a blood thinner, such as **warfarin (Coumadin®)** for life to prevent blood clot formation.

- Follow specific directions provided to you in your discharge instructions packet.
- If you are taking warfarin, it is important to keep your ingestion of leafy greens consistent, as they can interfere with how your warfarin works. Changes in your pattern of eating leafy greens can change your warfarin dosing.
- If you are taking warfarin, you will need to get your blood drawn often to check your INR (a blood level that evaluates the ability of your blood to clot, to check if warfarin is working)
- Discuss timing of blood draws with the provider who will be managing your warfarin dosing.
- Call your doctor if you notice any of the following signs of bleeding:
 - Nose bleeds
 - Bleeding gums
 - Throwing up blood
 - Dark brown urine
 - Black/tarry stools
 - Bleeding from small cuts that does not stop
 - Unexplained bruising
 - Headache, weakness

- Ask your nurse for a booklet with more information about warfarin (Coumadin®)

You can apply for a **medical alert bracelet** at your Pharmacy to wear and notify others that you take blood thinners.

Special Instructions: Surgery with implanted graft material

Extra care needs to be taken to prevent infection of your surgically implanted graft material (e.g., aortic replacement)

If you have had any graft material placed during surgery, you will need to take steps to lower your risk for infection around your heart. **This will mean taking preventative antibiotics prior to any dental or invasive procedure.** Discuss this with your dentist, your PCP, and your cardiologist.

How do I prevent an infection?

- Clean all cuts and scrapes carefully to lower your risk of infection with soap and warm water.
- Tell your dentist that you had surgery with implanted graft material. **You will need to take antibiotics an hour before any dental visit from now on, including regular dental cleanings.**
- If you need to have other invasive procedures, you may require antibiotics. Ensure you discuss this with your dentist, PCP, cardiologist, and any other doctor that you see.
- It is important that you seek medical attention if you are having fevers, as it could indicate an infection that requires treatment.

Special Instructions: Blood Thinners (Anti-Coagulants)

For all taking blood thinners:

- Follow specific directions provided to your discharge instructions packet.
- Tell all your medical providers (including dentists) that you are taking a blood thinner.
- Apply for a **medical alert bracelet** at your local Pharmacy to notify others that you are taking a blood thinner.
- Call your doctor if you notice any of the following signs of bleeding:
 - Nose bleeds
 - Bleeding gums
 - Throwing up blood
 - Dark brown urine
 - Black/tarry stools
 - Bleeding from small cuts that does not stop
 - Unexplained bruising
 - Headache, weakness

For those taking anti-coagulations such as apixaban (Eliquis®) or rivaroxaban (Xarelto®):

- These drugs do not require as much monitoring as warfarin, however you should still have consistent follow up with your PCP and cardiologist.
- You should have blood tests yearly with your PCP/cardiologist.

For those taking warfarin (Coumadin®):

- If you are taking warfarin (Coumadin®), it is important to keep your ingestion of leafy greens consistent, as they can interfere with how your Coumadin works. Changes in your pattern of eating leafy greens can change your Coumadin dosing.
 - You will require frequent follow up with the provider that will be managing your warfarin dosing.
 - You will need to get your blood drawn often to check your INR (a blood level that evaluates the ability of your blood to clot, and thus the extent to which warfarin is working).
 - Discuss timing of blood draws with the provider who will be managing your warfarin dosing.
- **Ask your nurse for a booklet with more information about warfarin (Coumadin®)**

Special Instructions: Water Pills (Diuretics)

What if I am taking water pills (diuretics)?

If you are prescribed these, take your water pills at the same time every day.

You will also need to check your weight and keep your diet low in salt (sodium).

How do I monitor my weight?

- Weigh yourself daily.
- Record the weights in a diary.
- Do it the same way each time:
 - Use the same scale.
 - Wear the same amount of clothing.
 - Do at the same time each day.
- *It is best to weigh yourself in the morning after using the bathroom but before having breakfast or getting dressed.*

If your weight goes up by either amounts below, call your doctor to adjust your medicine:

- | | |
|------------------------------------|--------------------------------|
| • 3 pounds or more in a single day | • 5 pounds or more over a week |
|------------------------------------|--------------------------------|

How do I keep my diet low in salt (sodium)?

Both your food as well as your drinks should have little salt in them.

- Have no more than **140 mg of salt** (sodium) per serving of any food or drink.
- Aim for a diet with no more than **1500mg of salt** each day.
- Do not keep the saltshaker on the table.
- You can get more help with changing your diet by talking to a registered dietician. A member of your care team can refer you or you can contact outpatient services from our **Department of Nutrition and Food Services** at **617-726-2779** once you leave Mass General.

Special Instructions: Heart Failure

What do I need to do for my heart failure?

Your heart can't pump as well as a healthy heart. To stay healthy, it is important to ensure that fluid is not building up around your heart or lungs.

To do this, **eat a diet low in salt, limit your fluid intake, and weigh yourself daily**. By weighing yourself daily, if fluid is starting to build up, you can catch it early and contact your cardiologist or primary care physician.

How do I monitor my weight?

- Weigh yourself daily.
- Record the weights in a diary.
- Do it the same way each time:
 - Use the same scale.
 - Wear the same amount of clothing.
 - Do at the same time each day.
- *It is best to weigh yourself in the morning after using the bathroom but before having breakfast or getting dressed.*

If your weight goes up by either amounts below, call your doctor to adjust your medicine:

- | | |
|------------------------------------|--------------------------------|
| • 3 pounds or more in a single day | • 5 pounds or more over a week |
|------------------------------------|--------------------------------|

How do I keep my diet low in salt (sodium)?

Both your food as well as your drinks should have little salt in them.

- Have no more than **140 mg of salt (sodium)** per serving of any food or drink.
- Aim for a diet with no more than **1,500 mg of salt** each day.
- Do not keep the saltshaker on the table.
- You can get more help with changing your diet by talking to a registered dietician. A member of your care team can refer you or you can contact outpatient services from our **Department of Nutrition and Food Services** at **617-726-2779** once you leave Mass General.

Are there any other guides I can read for my heart failure?

Your nurse will give you a guide on heart failure, **Caring for Your Heart: Living with Heart Failure**. Review this with your nurse and use it at home.

Notes