

**Chapter 2.** Knowing your medications

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# **Medication**

Prescription medications help your heart get better and protect you from more harm. People who take their medications over the long term, as prescribed, have fewer additional attacks or heart events and lower their risk of dying from heart disease. If you stop taking your medication without being told by your heart doctor, you will be giving up those benefits.

# **Medications in the hospital**

If you are in the hospital, you are probably taking several medications for your heart. If you arrived at the hospital by ambulance, you might have been given some medications by the paramedics before you even reached the hospital.

- You may have been asked to chew and swallow one or more tablets of ASA (Aspirin) to make your blood less sticky (an "antiplatelet" effect). That helps if a clot has formed in your heart arteries. You may also have been given a stronger antiplatelet medication later.
- Fast-acting nitroglycerin given as a spray or tablet under the tongue opens your heart arteries. You may have been given several doses.
- Blood thinners (anticoagulants) treat any clot that has formed in your heart arteries and keep the clot from getting worse. Blood thinners are injected with a needle into a vein (intravenously) or under the skin (subcutaneously).
- Some kinds of heart attack are treated with a clot-busting drug (thrombolytic), which can dissolve a clot in a heart artery. A clot buster is usually only given when an X-ray of the heart (coronary angiogram procedure) cannot be done right away.
- If you are having a coronary angiogram procedure, you will be given medication to help you relax. It may make you feel sleepy, but you will still be able to wake up easily.

Talk to your pharmacist, nurse practitioner or doctor if you have questions or concerns about any of the medications you have been given in the hospital.

# **Medications when you leave the hospital**

Some of the medications you are prescribed when you leave the hospital must be taken for the rest of your life. It is important to take them exactly as you were told. Stopping your heart medications without being told by your doctor will increase your risk of having another cardiac event and dying. Talk to your pharmacist, nurse practitioner or doctor if you have questions or worries about any medications.



### Main medications used to treat and prevent coronary artery disease

This chart lists the most commonly prescribed heart medications. Here are some tips to help you use the chart:

- Each "class" has many different drugs within it
- Within each class, the generic drug names are listed first
- Following the generic name in brackets are the most commonly prescribed brand names in Canada. The list doesn't include every brand name. If your prescription medication isn't on the list, your healthcare provider or pharmacist are the best sources for more information

Medication class	Effects
Antiplatelet medications ASA (Aspirin, Asaphen, Entrophen, Novasen) Clopidogrel (Plavix) Prasugrel (Effient) Ticagrelor (Brilinta)	<ul> <li>Makes blood less sticky to protect blood vessels and stents from clots.</li> <li>If stents* are placed in an artery, or you have a heart attack (with or without stents) you will take ASA plus another antiplatelet medication (clopidogrel, prasugrel, or ticagrelor) for a period of time.</li> <li>Make sure you know how to take your antiplatelet medications and how long you are supposed to take them (ASA is usually taken for the rest of your life).</li> <li>Do not stop taking your antiplatelet medications unless you are told to do so by your heart doctor.</li> </ul>
Cholesterol-lowering medications ("statins") Atorvastatin (Lipitor) Fluvastatin (Lescol) Lovastatin (Mevacor) Pravastatin (Mevacor) Rosuvastatin (Pravachol) Rosuvastatin (Crestor) Simvastatin (Zocor)	<ul> <li>Slows or stops plaque formation inside blood vessels and stops existing plaques from getting worse. Their effect on plaques is powerful but slow so these drugs must be taken long-term.</li> <li>Usually continued for the rest of your life, regardless of blood cholesterol levels since the effects of statins on plaque formation do not depend only on blood cholesterol levels.</li> <li>Side effects are uncommon and usually minor. People may experience muscle aches or cramps. Talk to your healthcare provider if this happens to you. Muscle aches or cramps from statins usually get better after lowering your statin dose or by taking a different statin medication.</li> </ul>
Beta-blockers Acebutolol (Sectral) Atenolol (Tenormin) Bisoprolol (Monocor) Carvedilol (Coreg) Labetalol (Trandate) Metoprolol (Lopressor, Betaloc) Nadolol (Corgard) Pindolol (Viskazide) Propranolol (Inderal) Timolol (Blocadren)	<ul> <li>Protects the heart from stress and abnormal heartbeats, protects a weakened heart muscle, prevents angina.</li> <li>Will lower blood pressure and slow your pulse — watch for dizziness or feeling faint.</li> <li>May make you feel more tired or fatigued, but this usually gets better with time.</li> <li>Talk to your healthcare professional if you develop trouble breathing, swelling of the feet or ankles, depression or nightmares.</li> </ul>

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Medication class	Effects
Angiotensin converting enzyme (ACE) inhibitors Benazepril (Lotensin) Captopril (Capoten) Cilazapril (Inhibace) Enalapril (Vasotec) Fosinopril (Vasotec) Fosinopril (Monopril) Lisinopril (Prinivil, Zestril) Perindopril (Coversyl) Quinapril (Accupril) Ramipril (Altace) Trandolapril (Mavik)	<ul> <li>Makes it easier for the heart to pump blood, lower blood pressure, protect a weakened heart muscle.</li> <li>Protects the kidneys in people with diabetes or kidney disease.</li> <li>Usually continued for the rest of your life if you have coronary artery disease for protection of the heart and blood vessels.</li> <li>Will lower blood pressure — watch for dizziness or feeling faint.</li> <li>Talk to your healthcare professional if you develop a dry cough or tickle in the throat after starting an ACE inhibitor.</li> <li>Seek medical attention right away if you develop swelling of the face, mouth, or throat</li> <li>You will need blood tests after starting an ACE inhibitor to check your kidney function and potassium. Avoid potassium supplements and salt substitutes unless prescribed by your healthcare provider.</li> </ul>
Angiotensin receptor blockers (ARBs)Azilsartan (Edarbi)Candesartan (Atacand)Eprosartan (Atacand)Ibesartan (Avapro)Irbesartan (Avapro)Losartan (Cozaar)Olmesartan (Olmetec)Telmisartan (Micardis)Valsartan (Diovan)	<ul> <li>Makes it easier for the heart to pump blood, lower blood pressure, protect a weakened heart muscle.</li> <li>Protects the kidneys in people with diabetes or kidney disease.</li> <li>Usually taken for the rest of your life if you have coronary artery disease, for protection of the heart and blood vessels.</li> <li>Will lower blood pressure — watch for dizziness or feeling faint.</li> <li>You will need blood tests after starting an ARB to check your kidney function and potassium. Avoid potassium supplements and salt substitutes unless prescribed by your healthcare provider.</li> </ul>
<b>Nitroglycerin/nitrates</b> spray (Nitrolingual) Nitroglycerin tablets (Nitrostat) Nitroglycerin patch (Nitro-Dur) Isosorbide dinitrate (Isordil) Isosorbide mononitrate (Imdur)	<ul> <li>Opens heart arteries to prevent or treat heart pain.</li> <li>Make sure you know how to use your fast-acting nitroglycerin and always keep it handy. Turn to page 25 for more information on how and when to take nitroglycerin.</li> <li>Nitroglycerin patch, isosorbide dinitrate, and isosorbide mononitrate provide a more long-lasting nitroglycerin effect than fast-acting spray or tablets.</li> <li>Nitroglycerin and nitrates interact with drugs like sildenafil (Viagra), vardenafil (Levitra), and tadalafil (Cialis). Do not take any of these drugs without first talking to your healthcare provider.</li> </ul>

\* Stent is a small structure used to open up blood vessels in the heart that have been narrowed by plaque buildup.

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### When and how to take nitroglycerin (tablets or spray)

Nitroglycerin is used to relieve chest pain from **angina** that you may experience as a result of blockages in your heart arteries.

If you have chest pain or discomfort that you think is due to your heart, **stop** whatever you are doing and sit or lie down.

Place one tablet or give 1 spray **under** the tongue, and leave it there.

- **Do not** chew or swallow the tablet, or inhale or swallow the spray.
- If the pain or discomfort is **not** relieved after 5 minutes, repeat the dose.
- If the pain or discomfort continues after 2 doses (10 minutes), use a third dose and **immediately** call your local emergency number to take you to the nearest hospital. **Do not** drive yourself and **do not** delay.

Carry a supply of nitroglycerin with you **at all times**. Make sure a family member knows where the nitroglycerin is stored. If you forget or lose your nitroglycerin, it can be purchased at any pharmacy without a prescription.

You may experience a headache or dizziness after taking your nitroglycerin. This is a common side effect and will only last for a short time.

Do not store nitroglycerin in your car or in another place that may get very hot or very cold. Nitroglycerin will not work if it has gotten too hot or too cold.

#### Special instructions for nitroglycerin tablets

- Keep the tablets in the original small brown glass bottle and keep the lid closed tightly. When you get a new bottle, remove the seal and cotton so the tablets will be ready to use when you need them.
- Store the tablets in a cool dry place, **not** in the bathroom medicine cabinet or on top of the refrigerator.
- When away from home, carry a small number of tablets in a brown glass bottle in your pocket or purse (but only use bottles made for carrying nitroglycerin tablets).
- When you use a nitroglycerin tablet, place it under your tongue. **Do not** swallow the tablet, or it will not work.
- If you have moved some tablets to a different container, replace them after 3 months.
- Only use bottles specially made for storing nitroglycerin tablets.
- A tingling or burning sensation does not mean that the tablet is working.

#### Special instructions for nitroglycerin spray

- Make sure you 'prime' the spray by spraying into the air as directed when you purchase it or when it has not been used for several days or more.
- Do not shake the canister before using or you may not get a full dose.
- Do not inhale or swallow the spray, or it will not work.
- Most people find nitroglycerin spray easier to use than tablets. However, people who have trouble pushing the button on the spray bottle may prefer to use tablets.

Some people have angina whenever they are **active or exercise**. A small number of people with angina are told by their doctor to take nitroglycerin 5-10 minutes before they start each exercise session. Speak with your pharmacist or other healthcare provider if using nitroglycerin before exercising is right for you

**Do not** take sildenafil (viagra or revatio), vardenafil (levitra), or tadalafil (cialis or adcirca) without talking to your healthcare provider first. **Do not** use nitroglycerin (tablet, spray or patch) for 24 hours after taking sildenafil or vardenafil and do not use nitroglycerin for 48 hours after taking tadalafil. Talk to your pharmacist or other healthcare provider for more information.

# Other medications that may be prescribed for people with coronary artery disease

The following medications are only prescribed for some people, for certain conditions.

Class	Effects
<b>Calcium channel blockers</b> Amlodipine (Norvasc) Diltiazem (Cardiazem, Tiazac, Tiazac XC) Felodipine (Plendil) Nifedipine XL (Adalat XL) Verapamil (Isoptin, Isoptin SR, Verelan)	Lowers blood pressure, prevents heart pain. Some will slow the heart rate (pulse)
Diuretics (water pills) Chlorthalidone Ethacrynic acid (Edecrin) Furosemide (Lasix) Hydrochlorothiazide Indapamide (Lozide) Metolazone (Zaroxolyn)	Helps the kidneys make more urine. Some will lower blood pressure. Some will help with ankle swelling and water in the lungs.
<b>Aldosterone antagonists</b> Eplerenone (Inspra) Spironolactone (Aldactone)	Protects a weakened heart
<b>Other cholesterol-lowering medications</b> Bezafibrate (Bezalip) Ezetimibe (Ezetrol) Fenofibrate (Lipidil) Gemfibrozil (Lopid) Niacin	Helps to improve your lipid levels
<b>Cardiac glycosides</b> Digoxin (Lanoxin, Toloxin)	Controls heart rate (pulse), helps with symptoms of heart failure (weakened heart)
<b>Antiarrhythmics</b> Amiodarone (Cordarone) Sotalol	Prevents and treats abnormal heart beats
<b>Anticoagulants</b> Apixaban (Eliquis) Dabigatran (Pradaxa) Rivaroxaban (Xarelto) Warfarin (Coumadin)	Prevents clot formation and treats abnormal clots

\* Commonly prescribed examples of each class are listed in the chart. Not all examples are included. May be subject to change.

Talk to your pharmacist, nurse practitioner or doctor if you have questions or concerns about any medications.

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# Other prescription medications, natural and alternative therapies, and non-prescription (over-the-counter) medications

#### What if I am taking medications not listed here?

Some medicines and treatments can stop your heart medications from working properly and can cause other health problems. Tell your doctor and pharmacist about all the medications you are taking to make sure they are all safe for you. This includes:

- Prescription medications for other conditions
   or illnesses
- Medications for any purpose that you buy without a prescription (non-prescription or over-the-counter medications)
- Inhalers
- Creams and ointments
- Herbal and natural health products
- Traditional medicines
- Alternative therapies

- Vitamins or mineral supplements
- Sample medicines a doctor might have given to you for free

If you have questions or concerns about any of your medications, talk to your pharmacist, nurse practitioner or doctor.

#### What do I need to know about non-prescription (over-the-counter) medications?

Medicines you can buy without a prescription include painkillers, allergy medications, antacids, cold and flu products, vitamins and mineral supplements. Some of these can cause serious problems for people with heart disease.

# What do I need to know about alternative therapies?

Some examples of alternative therapies include:

- Herbal medicine
- Natural health products
- Traditional medicines and therapies

# Safety tip

Some non-prescription products and therapies can cause serious problems for people with heart disease. Always check with your doctor, nurse practitioner or pharmacist before taking any non-prescription medications or alternative therapies.

The government does not control or regulate

alternative medicines and therapies as strictly as prescription medications. So we don't always know if they are safe or useful for you — or if they are changing the effectiveness of your heart medications.



# **Managing your medications**

#### **Filling your prescriptions**

Here are some tips to make sure you do not miss any doses:

- Fill the prescriptions you have been given at your local pharmacy right away. Sometimes, the hospital can fax your prescription to your pharmacy, so you can pick up your medications on the way home.
- Order all your prescriptions from the same pharmacy so that the pharmacist knows all the medications you are taking.
- Order your refills a few days early to make sure the pharmacy has your medications when you need them. Some prescriptions can be renewed by a phone call from your pharmacy to your doctor or nurse practitioner.
- Know how many refills are left on your prescriptions so you don't run out. Follow up with your doctor or nurse practitioner to get new prescriptions when you need them.

### Taking your medications as prescribed

Your healthcare team has chosen your heart medications and set the doses carefully to treat your coronary artery disease, protect your heart muscle and prevent serious problems in the future. Most people need to take their heart medications for the rest of their lives. If you stop taking them without your doctor knowing, you risk serious damage to your heart and health. It is very important to take your medications exactly as you have been told.



#### This means:

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- Take each medication at the same time(s) each day, at the dose you have been prescribed
- Never share your medications with anyone else
- **Do not** change how you take your medications on your own. Talk to your doctor, nurse practitioner or pharmacist first.

#### If you have trouble remembering to take your medications, there are several things you can do:

- Buy a pill organizer from your pharmacy. They have a separate spot for you to put your pills for each day. Some have spots for different times of the day. A quick look can tell you if you have forgotten a pill or need to take one.
- Ask your pharmacy if you can get your medication in blister packs, also called bubble packs. Some pharmacies prepare these with enough medication for a week or more. Each pill is placed in a bubble, which is marked for a certain time of day. Just push the pill out of its bubble when you need to take it. Make sure you know how to push it out of the bubble and make sure you are strong enough to do it.
- Keep your medications out in the open where you can see them to remind you to take them (but away from children and pets).
- Set a reminder on your watch or phone or use a smartphone app.

## **Dealing with side effects**

Medications can cause side effects. Some side effects are mild, but others can be more serious. You need to learn the most common side effects of each medication you take so you will know if they happen. If you take a medication that makes you sleepy or dizzy, don't drive or do other activities that may not be safe. If you are having a problem with side effects, talk to your pharmacist, nurse practitioner or doctor.

### Watching out for interactions with food and alcohol

Ask your pharmacist about the effect of alcohol and food on your medications.

- Grapefruit and grapefruit juice change the way some medications work, including some statins.
- Make sure you know which medications need to be taken with food and which should be taken on an empty stomach.
- Don't drink alcohol if you have problems with dizziness or light-headedness or if your medication makes you sleepy. It is usually safe to drink a small amount of alcohol with most medications, but check with your pharmacist first if you are not sure.

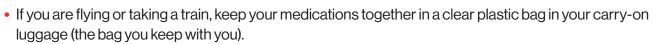
## Storing and getting rid of medications

- Keep all medications in safe containers, out of reach of children and pets.
- Do not store medications in warm or humid places, such as the bathroom or on top of the refrigerator.
- Take your old and unused medications back to the pharmacist. Do not put them in the garbage or down the sink or toilet.



### **Travelling with medications**

- Check with your healthcare provider before you travel. You may need to get prescription refills or tests before you leave or while you are away.
- Make sure you have enough medication for the whole trip with some extra doses in case you are late getting home.
- Keep your medications in their original labeled containers. Ask your pharmacist for smaller containers if you need them.



- If you are driving, keep your medications cool and dry. Do not leave them in the glove compartment or in a hot car.
- Refilling your prescriptions while you are away:
  - In Canada: ask for your refill to be switched or transferred from your home pharmacy or go to a walk-in clinic for a new prescription. Your medications may cost more if you are not in your home province.
  - Outside Canada: it can be hard to fill a prescription. Plan ahead to avoid this problem.

### **Your medication list**

Make a list of all your medications and always carry the list with you. Your pharmacy can print a list for you or use the chart on page 31. A full list includes your prescription and non-prescription medications, vitamins, supplements and herbal and alternative products. This is especially important if you take antiplatelet or anticoagulant medications, since they may affect whether certain medical procedures can be done safely.

Make sure all your healthcare providers — doctors, dentists, pharmacists, massage therapists, physiotherapists, nurse practitioners and naturopaths — know all the medications you take. Also, a MedicAlert ID bracelet will list your illnesses or conditions if you are hurt and can't speak.

# **Travel tip**

Planning a trip? Check your insurance. It may be hard to get travel insurance after a cardiac event. Travelling without insurance can be very costly if you need medical care during the trip.





# **Worksheet: My medications**

List all your medications in the chart — following the example below.

Take this chart to your doctor's appointments in case your prescriptions are changed.

Name	Medication class	What is it for?	When to take, how to take and how many?	What are the side effects (when do l call the doctor)?		
Example: Lipitor	Cholesterol- lowering medication ("statin")	Slows or stops plaque formation inside blood vessels and stops existing plaques from getting worse.	Evening (9pm), every day. 1 pill with water, on empty stomach.	Muscle cramps or aches — uncommon		
Pharmacy name: _		Telephone:				
Ask your pharmacist for a list of your medications. Or take a picture of your pill bottles on your cell phone, print it out and leave copies in handy places.						

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