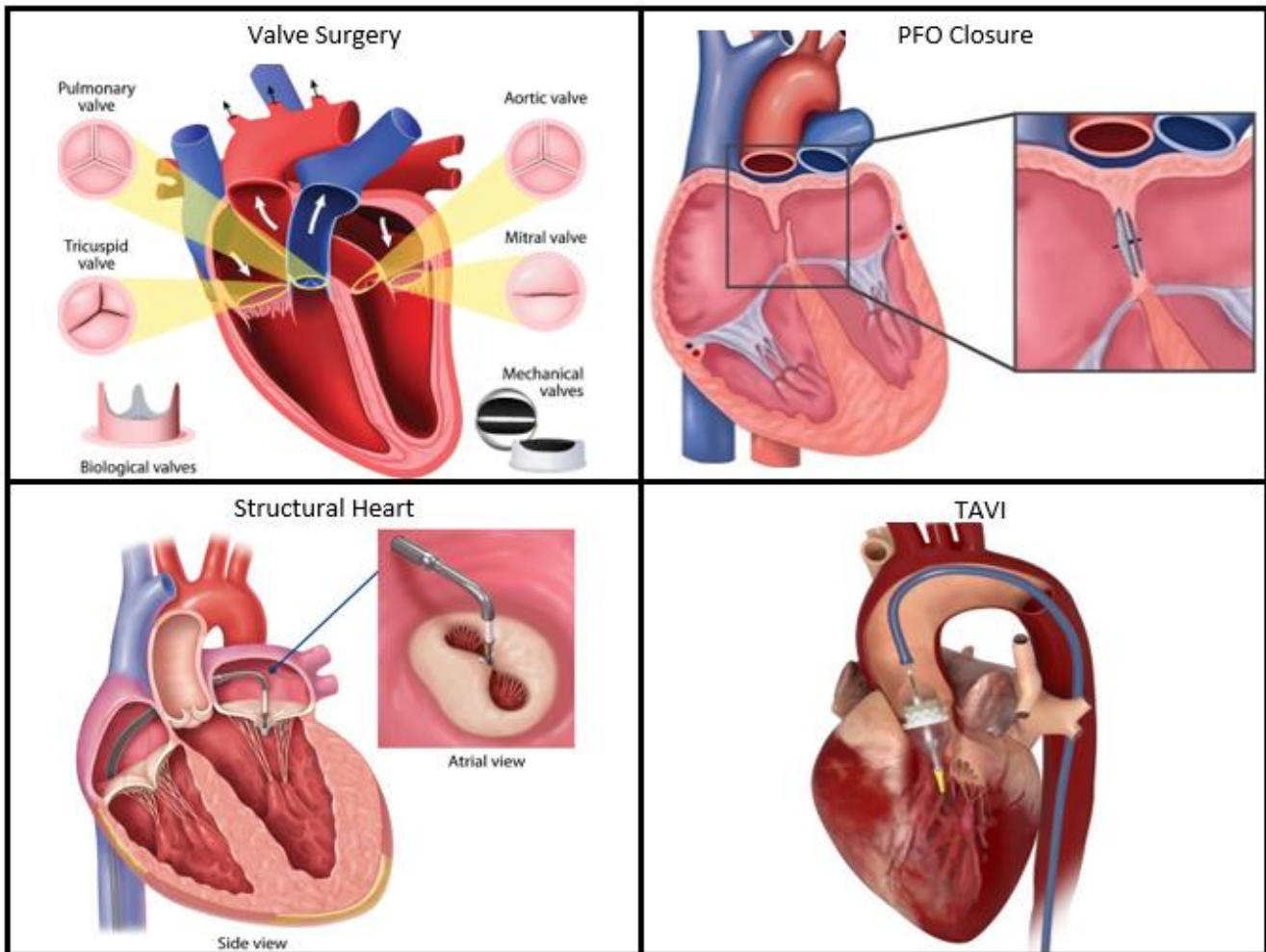


Endocarditis



Information for people at high risk of Endocarditis

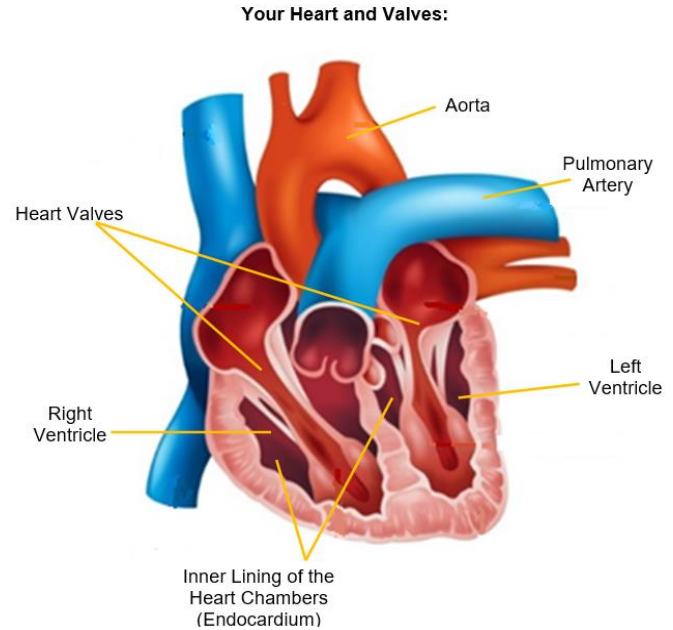
March 2023



What is Endocarditis?

Endocarditis is an infection of the lining of your heart and valves. This lining is called the endocardium. This can lead to serious problems, including damage to the valves.

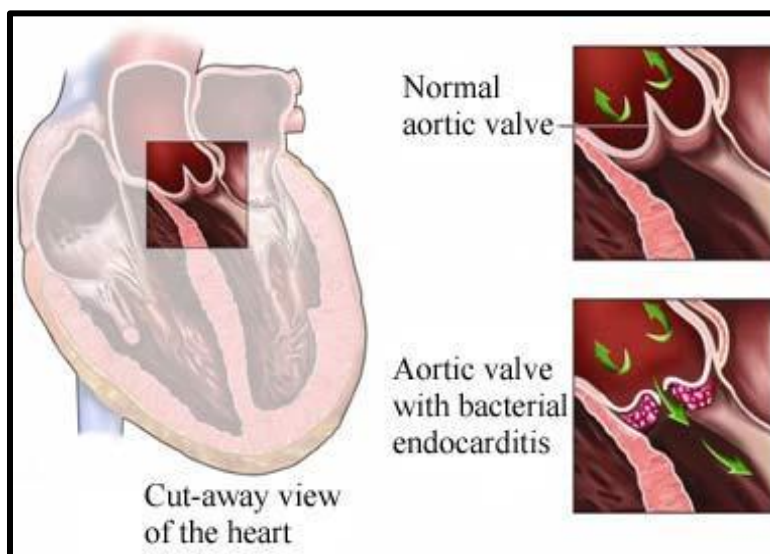
Endocarditis is a serious infection that can be life-threatening. Early diagnosis and treatment can decrease the risk.



What causes Endocarditis?

It is normal for bacteria to be found in the mouth, bowel, bladder, and on the skin. Sometimes, the bacteria can find their way into the blood and travel to the heart. The endocardium is normally smooth, and the bacteria is unable to stick to the heart and valves.

Bacteria can stick to valves that are not smooth. This could be in people born with abnormal valves, or who have damaged valves. Bacteria are also more likely to stick to valves or other heart structures that have been repaired or replaced.



Who can get Endocarditis?

Endocarditis is rare in people who don't have a heart condition, or other risk factors. The main groups at risk are:

- 1) People who are born with certain heart conditions, like abnormal heart valves or other heart defects.
- 2) People who have had rheumatic heart disease.
- 3) People who have had endocarditis before.
- 4) People who have had surgery or a procedure to repair or replace a heart valve, or other structure.
- 5) People with pacemakers or implanted defibrillators.
- 6) People who inject intravenous drugs.
- 7) People with weakened immune systems. This includes those on certain medications, getting chemotherapy, and older individuals.
- 8) People with certain types of long-term intravenous catheters, like those used for dialysis or for giving medications.

What can happen to people with Endocarditis?

Endocarditis can cause illness and damage to the heart and other organs. Clumps of bacteria can form an infected growth called a vegetation. These vegetations can:

- Damage or destroy heart valves.
- Break off and travel to other areas of the body. It can travel to the brain causing a stroke. It could also travel to the lungs or other organs, such as kidneys or spleen. This can lead to organ failure and other problems.
- Spread the infection throughout the body, that can cause a life-threatening medical emergency.

Endocarditis Treatment

Endocarditis treatment includes antibiotics that will help fight the infection.

- Antibiotics are needed for at least 6 weeks to kill the bacteria causing the infection. You may need to stay in the hospital so that you can receive antibiotics.
- In many cases, surgery will also be needed to remove the infected tissue and repair the damaged heart structures.



Endocarditis Prevention



It is important for you to continue to take care of your heart. One of the most important ways to do this is by keeping your teeth and gums healthy!

You may need antibiotics before certain procedures to help decrease your risk of endocarditis. This includes certain types of dental work.

You are at the highest risk for endocarditis in the first 3-6 months after your valve or heart structure procedure. During this time, you should avoid professional dental cleanings. After 3-6 months, regular cleanings are recommended.



What can you do to prevent Endocarditis?

- **Always** tell your doctor, nurse practitioner and dentist about your replaced or repaired heart valve or heart structures.
- **Ask** your doctor, nurse practitioner, dentist, or nurse if you need antibiotics before a procedure. Find out the type and amount of antibiotics you may need to take to prevent infection.
- **Carry** the device wallet card that was given to you.
- **Take** good care of your teeth and gums. Brush your teeth at least twice a day with a soft brush. See your dentist every 6 months for professional cleaning. **See your dentist right away for toothache, or any signs of tooth or gum infection.**
- **Twice** a year, if you have dentures, you should have checkups to make sure that your gums are healthy, and your dentures fit properly.



It is a good idea to have a medical alert device for patients to indicate prior heart valve repair or replacements, or who are born with certain heart defects. This will help medical staff identify that you are at an increased risk.

This does not guarantee that you will never develop endocarditis.

Signs and Symptoms of Endocarditis

Early recognition and treatment for endocarditis is key. It is important to look for any possible signs or symptoms of endocarditis.

Call your Family Doctor/Nurse Practitioner right away if you have:

- Fatigue or weakness
- Shortness of breath
- Fever or chills
- Night sweats
- Cough that will not go away
- Loss of appetite or unexplained weight loss
- Aching joints and muscles
- Swelling of feet, legs, or belly
- Red skin spots on the palms of the hands or soles of the feet
- Small dark lines under the fingernails
- Dark yellow or red urine
- New heart murmur

**If you cannot get an appointment right away, please go to the nearest Emergency Department.*



Go to the Emergency Department, or Call 911 if You Have:

- Headache and confusion
- Sudden weakness in the face or limbs
- Sudden shortness of breath

If you have questions about any of this information, please write them down and feel free to ask your nurse or doctor.

If you have a general health question or concern, and have nowhere to turn, call [Telehealth Ontario, 1-866-797-0000](tel:1-866-797-0000). They can provide experienced health advice 24 hours a day, 7 days a week. It is confidential and there is no need to provide your health insurance number.



St. Mary's General Hospital
911 Queen's Blvd.
Kitchener, ON, Canada
N2M 1B2
Tel: 519-744-3311



Taking Care of your Valve Wallet Card

Name: _____ Procedure Date: _____

Drug Allergies: _____

Cardiac Implant Position:

- Aortic Valve Mitral Valve Tricuspid Valve Pulmonic Valve
- Atrial Septum Left Atrial Appendage

Type of Cardiac Implant:

- Surgical Tissue Valve Surgical Mechanical Valve Surgical Valve Repair
- TAVI Valve ASD Closure Device LAA Closure Device Mitral Clip

Endocarditis Prophylaxis Duration: _____

The holder of this card may require prophylactic antibiotic therapy for the prevention of endocarditis.

Dental procedures for which prophylaxis is recommended:

All dental procedures such as professional teeth cleaning and other dental work that involves manipulation of gingival tissue or the peri-apical region of teeth, or perforation of the oral mucosa.

Dental procedures for which prophylaxis is NOT recommended:

Routine anesthetic injections through non-infected tissue; taking dental radiographs; placement of removable prosthodontic or orthodontic appliances; adjustment of orthodontic appliances; placement of orthodontic brackets; and shedding of deciduous teeth and bleeding from trauma to the lips or oral mucosa.

Antibiotic prophylaxis is NOT recommended for other diagnostic or therapeutic procedures, including routine colonoscopy, gastroscopy, procedures of the urinary tract (unless active infection) or respiratory tract.

Please discuss the need for antibiotics with your doctor or dentist.



Recommended Antibiotic Prophylactic Regimens for Dental Procedures:



Regimen - Single Dose 30 - 60 minutes before procedure	
Oral Agent	
Amoxicillin	2 grams
UNABLE TO TAKE ORAL MEDICATION	
Ampicillin	2 grams IM or IV
<i>OR</i>	
Cefazolin or Ceftriaxone	1 gram IM or IV
ALLERGIC TO PENICILLINS OR AMPICILLIN- ORAL REGIMEN	
Cephalexin* †	2 grams
<i>OR</i>	
Azithromycin or Clarithromycin	500 milligrams
<i>OR</i>	
Doxycycline	100 milligrams
ALLERGIC TO PENICILLINS OR AMPICILLIN AND UNABLE TO TAKE ORAL MEDICATION	
Cefazolin or Ceftriaxone †	1 gram IM or IV
IM—intramuscular; IV—intravenous * Or other first or second-generation oral cephalosporin in equivalent dosing † Cephalosporins should not be used in an individual with a history of anaphylaxis, angioedema, or urticarial with penicillin or ampicillin. Clindamycin is no longer recommended for antibiotic prophylaxis	

Adapted from: Prevention of Infective Endocarditis: Guidelines from the American Heart Association (2021) <https://www.ahajournals.org/doi/10.1161/CIR.0000000000000969#d1e2047>

