
What is infective endocarditis?

Infective endocarditis is an infection of the:

- Lining of the heart, or
- Valves of the heart, or
- Blood vessel

It is not common, but it can cause serious heart damage. It is also called bacterial endocarditis.

What causes it?

Infective endocarditis is caused when bacteria (germs) enter the heart through the bloodstream. Germs normally live in certain parts of our body. When germs get into the bloodstream, they can stick to heart tissue or valves.

- These tissues give germs a surface to attach and grow.
- After heart surgery or heart catheterization (heart cath), germs can stick to areas where there are patches, valves or artificial devices.

What are the possible symptoms?

Your child may have 1 or more of these:

- Chills or fever that does not go away after 2 to 3 days
- Tiredness or weakness that does not improve
- Joint or muscle aches and pain
- Night sweats
- Nausea (upset stomach) or vomiting (throwing up)

How is it diagnosed?

If the doctor thinks your child may have infective endocarditis, the doctor may have your child get:

- Blood tests to find out if there are germs in your child's bloodstream. These tests are called blood cultures.
- An echocardiogram, also called an echo. This is a test that takes pictures of the heart using sound waves.

What is the treatment?

If your child has infective endocarditis, the doctor will talk with you about specific treatment. This may include:

- A hospital stay.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

Infective endocarditis, continued

- Treatment with intravenous (I.V.) antibiotics. Your child may also need to take oral (to swallow) antibiotics for several weeks.
- Surgery, if needed, to repair any damage to the heart.

Can it be prevented?

Not all cases of infective endocarditis can be prevented. Germs always live and grow inside the mouth, on the skin and in other areas of the body.

Some children may need to take antibiotics **before** they have certain treatments. This includes treatments or procedures that involve:

- Teeth and gums (dental)
- Airway and lungs (respiratory tract)
- Muscles and bones (musculoskeletal system)
- Infected skin

All children who have had heart surgery need to take antibiotics before these treatments and procedures for at least 6 months. Your child's cardiologist (heart doctor) will talk with you about how long your child will need to do this.

Based on American Heart Association (AHA) guidelines, only children with high risk heart disease need antibiotics before treatments and procedures for longer than 6 months. This includes those who have:

- An artificial heart valve.
- Had endocarditis in the past.
- Congenital heart disease for these 3 conditions:
 - Cyanotic (blue) congenital heart disease that has not been fully repaired yet. This includes children with shunts and conduits.
 - A congenital heart defect that has been repaired with a new valve or other device. This includes repairs done by surgery or a catheter. These children are at risk for 6 months after the surgery or procedure.
 - A congenital heart defect that has been repaired, but that still has a defect at or close to the repair site. This includes repairs done with a patch, valve or other artificial device.
- A heart transplant with heart valve disease.

Antibiotics are no longer routinely used for heart patients who have procedures on their stomach, intestines, kidneys or bladder.

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Infective endocarditis, continued

How do I get antibiotics for my child before a procedure?

Your child's dentist, pediatrician or heart doctor can give you a prescription for antibiotics.

- Your child should swallow the antibiotic before the procedure as directed by your child's doctor or dentist.
- Before the procedure, tell your child's dentists or doctors what type of heart problem your child has.
- Also make sure your child's dentists and doctors know about any allergies your child has.

How else can I help my child?

You help when you practice good health habits, such as:

- Having your child and everyone in your family wash their hands often during the day. This includes after using the bathroom, after changing a diaper and before eating. You may also use an alcohol-based gel or foam if you do not see dirt on your hands.
- Having your child brush and floss their teeth each morning and before bed. Make sure your child gets regular dental check-ups.

Talk with your child's heart doctor if you have any questions about whether or not your child needs antibiotics. Talk with your child's pediatrician or heart doctor if you have questions or concerns about how your child looks or feels.

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.

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