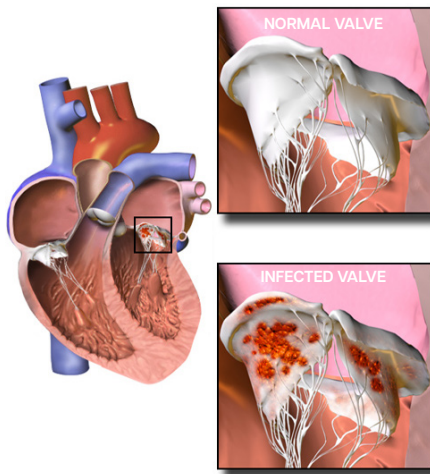


Prevention and early recognition of possible endocarditis



<https://medical-school.uq.edu.au/research/research-groups/infective-endocarditis-queensland-ieq>

If you have been given this form by your doctor or nurse, it is because they have decided that you are at increased risk of developing endocarditis in the future. We would like to explain the condition, how to reduce your risk and when to seek help.



What is infective endocarditis?

Infective endocarditis is an infection of some parts of the inner lining of your heart (the endocardium). This is a dangerous infection and life-threatening infection.

This occurs when bacteria (or less commonly fungi) enters the bloodstream from example a skin or dental wound and travels to the heart. The bacteria then sticks onto a heart valve (part of the inner lining) or artificial material in your heart (artificial valves or wires), and eventually forms clumps of materials called vegetations. Once this happens, it is difficult to clear the bacteria.

Image reference: By Bruce Blaus - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=57340203>

Some serious and life threatening complications can occur if left untreated, including:

- The bacteria damages the valves directly which can lead to leaky valves, dangerous heart rhythms and affect the pumping action of the heart
- Small flecks can come off the vegetations and travel to other parts of the body/organs (called an embolic phenomenon) to cause blockages in the blood vessels or infection to other parts of the body.

Some examples include travelling to:

- the brain to cause a stroke,
- to blood vessels of the heart to cause heart attacks
- kidneys to cause kidney failure
- gut to cause severe pain or bloody diarrhoea

Who is at risk?

- Those who are at risk include those with
- Heart valve abnormalities
- Previous heart operation
- Internal devices including pacemakers and defibrillators

- Previous infective endocarditis
- Frequent injections into veins either recreational drugs or medicinal drugs
- Poor oral and personal hygiene
- Poor immune system

Treatment

This condition is usually treated with antibiotics for long periods of time. Some cases will need open heart surgery to replace the valves and wash out the infection.

How do I suspect if I'm possibly having infective endocarditis?

Symptoms

At times infective endocarditis may be difficult to diagnose and usually requires a blood test to confirm the diagnosis.

Symptoms of infective endocarditis can be quite general and may be experienced over a couple of days or develop over many months.

Symptoms can include:

- fever and chills
- drenching sweats, especially at night

- tiredness
- loss of appetite
- unexpected weight loss
- generalised aching throughout the body/joints/muscles
- fast breathing, breathlessness
- persistent and often dry cough
- Bloody cough
- Purple spots on skin
- Specks of blood under nails without obvious trauma
- Unusual pains without obvious cause
- Stroke (brain event)
- Severe weakness/confusion (delirium) - Septic shock (blood poisoning)

What do I do if I suspect I may have infective endocarditis?

Endocarditis may progress rapidly to septic shock, heart failure or stroke, so see your doctor immediately. If your doctor feels that you may have infective endocarditis, they will often seek expert advice, and have you admitted to hospital for urgent investigations and management.

Your doctor will need to take blood tests (tests to see if there are bacteria in your bloodstream) before you take any antibiotics (antibiotics can hide the presence of bacteria in your blood) to exclude infective endocarditis.

The confirmation of endocarditis is usually by medical imaging techniques such as echocardiography.

Can endocarditis be prevented?

Simple measures can often significantly reduce the risk of bacteria in your blood stream which in turn reduce your risk of developing endocarditis.

Look after your skin

- Breaks or cuts in the skin are the main way bacteria can enter your blood stream.
- **Clean all wounds or cuts immediately.**
- Over the counter antiseptics such as “dettol” or “betadine” are fine.
- If you have a skin condition that causes breaks in your skin, see your doctor about ways to improve your skin. For example, ‘Athlete’s Foot’ or ‘Tinea’ can usually be easily treated with medicated creams, reducing breaks in your skin.

- **Avoid tattoos or body piercings** as these are often performed with poorer antiseptic techniques than standard medical procedures and leave you at risk of bacteria being introduced into your blood stream.

Look after your teeth/gums

- Poor gum/dental hygiene may lead to mouth bacteria being released into the bloodstream
- See a dentist at least twice a year
- Regularly brush and floss your teeth.
- Ensure dentures or dental devices fit properly.
- If you have frequent bleeding from your gums/teeth, please see your dentist soon.
- **Advise your dentist you have an ‘endocarditis risk heart’,** as they may give you antibiotics before completing any dental work.

Look after your bowels

- Diverticulosis sometimes causes release of gut bacteria into the bloodstream.
- To reduce the progression of diverticulosis (which is driven by constipation), aim to have at least 1 to 2 (non-constipated) bowel motions per day.
- **Please see your doctor or a nutritionist for advice if constipation is an issue.**
- Bleeding from bowels may signify cancer, which itself predisposes to endocarditis.
- **Please see your doctor promptly if bleeding from bowels occurs.**

Look after your body

- If you are having an invasive medical procedure (such as bladder catheter, endoscopy) **please advise your specialist you have an ‘endocarditis risk heart’.** Sometimes your specialist may give you antibiotics before the procedure.
- **You have an increased chance of developing infective endocarditis if you inject drugs and don’t use a clean needle or antiseptic technique.** This can allow bacteria to enter your bloodstream.

Please keep these instructions in a safe place.

We suggest familiarising yourself with these instructions yearly.