

# Preventing infective endocarditis

A patient's guide

## What is infective endocarditis?

Infective endocarditis is rare but potentially life-threatening infection of the lining of the heart which usually affects the heart valves. It affects around 1 person in every 10,000 per year.

It is caused by bacteria in the bloodstream multiplying and spreading across the inner lining of your heart (endocardium). The endocardium becomes inflamed, causing damage to your heart valves.

Your heart is usually well protected against infection so bacteria can pass harmlessly by. But if your heart valves are damaged or you have an artificial valve, it's easier for bacteria to take root and bypass your normal immune response to infection.

Small clumps of bacteria can develop at the site of the infection. There's a risk of these clumps acting in a similar way to blood clots, travelling away from the heart and blocking the blood supply to the organs.

This can cause organ failure or trigger a stroke.

## How bacteria reaches the heart?

There are several ways that bacteria can enter your blood.

- **Mouth:** Everyday activities, such as brushing your teeth or chewing your food, can sometimes allow bacteria to enter the bloodstream but the risk is increased if your teeth and gums are in bad condition because it makes it easier for bacteria to enter into the blood. Good dental hygiene is important in preventing endocarditis.
- **Skin, needles and tubes:** bacteria can spread either from pre-existing skin infections or any medical procedure that involves placing a medical device inside the body. The latter carries a small associated risk of introducing bacteria into your bloodstream.

## **Who is at increased risk of developing endocarditis?**

Although it is possible for anyone to develop endocarditis, the risks are increased in those with certain cardiac conditions including:

- Patients with previous infective endocarditis.
- Patients with surgically repaired valves or implanted prosthetic valves.
- Patients with obstructive hypertrophic cardiomyopathy.
- Patients with percutaneously implanted aortic valve (TAVI)/mitral transcatheter edge-to-edge repair.
- Patients with any type of congenital heart disease (CHD), cyanotic heart disease, CHD repaired with a prosthetic material (surgical or percutaneous techniques).

## **What are the symptoms of infective endocarditis?**

The symptoms of endocarditis can develop rapidly over a few days (acute endocarditis), or slowly over a few weeks or possibly months (subacute endocarditis). The most common symptoms of endocarditis include:

- High temperature and chills.
- Night sweats.
- Shortness of breath especially during physical activity.
- Unexplained weight loss or tiredness.
- Generalised aches and pains.

## **When to seek medical advice?**

Contact your GP as soon as possible if you develop any symptoms of endocarditis, particularly if you're at a higher risk of developing it, such as if you already have a history of heart disease.

A stroke is one of the most serious complications that can develop from endocarditis. If you suspect a stroke, dial 999 immediately to request an ambulance.

If you have an increased risk of developing endocarditis, it's important to limit your exposure to any infection that could trigger it.

### What can you do to reduce risk of developing endocarditis?

#### 1. Practise good oral hygiene

If you're at increased risk of developing endocarditis, it's important that you practise good oral and dental hygiene. Do not let abscesses and gum disease go untreated. Visit your dentist on a regular basis to ensure you maintain good oral health and minimise the risk of bacteria entering your bloodstream through your mouth.

#### 2. Take care of your skin

Regular handwashing will help to prevent bacteria spreading. It's also very

important to wash any cuts or grazes carefully as soon as you notice them to prevent them becoming infected. Contact your GP for advice if you develop the symptoms of a skin infection. Your GP may prescribe antibiotics as a precaution.

Also, avoid any cosmetic procedure that involves breaking the skin, such as body piercing and tattooing. Botox and piercings will also give you an increased risk of endocarditis.

#### 3. Prophylactic antibiotics

Despite the best way of preventing endocarditis is by maintaining good dental hygiene and taking good care of your skin, our patients with the above high-risk factors will be provided with the 'Endocarditis warning card' (PI 229), to present to their relevant dental professionals before they undergo certain dental procedures (ie dental extractions, oral

surgery, procedures involving manipulation of the gingiva or periapical region of teeth or other similar procedures) to obtain prophylactic ("just-in-case") antibiotics (one dose).

The preferred prophylaxis antibiotic and dose:

Give a single dose of amoxicillin 2g oral capsules (if sachets being used – then 1 x 3g sachet)

or a single dose of clindamycin 600mg oral capsules (if penicillin allergic)

Timing: 30 to 60 minutes prior to the dental procedure.

In addition to dental procedures, you might be offered prophylactic antibiotics as a precautionary measure if a medical procedure is taking place at a site in your body where there's a suspected infection, such as your:

- Gullet, stomach or intestines.
- Reproductive or urinary system.

**Further information on prevention of endocarditis:**

[nhs.uk/conditions/endocarditis/](https://nhs.uk/conditions/endocarditis/)

or scan the QR to access patient information leaflet on the Scottish Dental Clinical Effectiveness Programme website:



For further advice please contact cardiac support on 01223 638100 (Monday to Friday 09:00-17:00).





# Royal Papworth Hospital NHS Foundation Trust

A member of Cambridge University Health Partners



Papworth Road  
Cambridge Biomedical Campus  
CB2 0AY



[royalpapworth.nhs.uk](http://royalpapworth.nhs.uk)



01223 638000

## Alternative versions of this leaflet

Large print copies and alternative language versions of this leaflet can be made available on request.



View a digital version of this leaflet by scanning the QR code.

## Royal Papworth Hospital Foundation Trust Membership

Become a member  
Have your say  
Make a difference



Scan the QR code or head to [royalpapworth.nhs.uk/membership](http://royalpapworth.nhs.uk/membership) to find out more.

Author ID: Consultant microbiologist  
Department: Medical biology  
Printed: March 2026  
Review date: March 2028  
Version: 1  
Leaflet number: PI 282

© 2026 Royal Papworth Hospital NHS Foundation Trust