

Preventing infective endocarditis

Information for the public

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About this information

NICE guidelines provide advice on the care and support that should be offered to people who use health and care services.

This information explains the advice about preventing infective endocarditis that is set out in NICE guideline CG64, first published in 2008. In 2016, some changes were made to the wording of the guideline, and we have updated this information to help make it clearer and easier to understand what NICE has said.

Does this information apply to me?

Yes, if you are an adult or child having a dental procedure or certain medical procedures, or a woman preparing for childbirth, and you are at risk of infective endocarditis because:

- you have certain problems affecting the structure of your heart (such as a replacement heart valve or a condition called hypertrophic cardiomyopathy, in which the muscle wall of the heart becomes thickened) or
- you have had infective endocarditis in the past (whether or not you have an underlying heart problem).

No, if you are:

- at risk of infective endocarditis but do not have heart problems (for example, if you inject drugs).

Infective endocarditis

Infective endocarditis is an infection of the lining of the heart, often involving the heart valves. It can affect people who have certain heart problems, such as those who have had a replacement valve or have a condition called hypertrophic cardiomyopathy, in which the muscle wall of the heart becomes thickened (see [am I at risk of infective endocarditis?](#)). It is caused mainly by bacteria, which enter the blood from outside the body. It is a very rare but serious condition.

Your care team

A range of professionals who specialise in different areas of treatment or support may be involved in your care. These could include your GP, practice nurse, dentist, dental hygienist or heart specialist.

Working with you

Your care team should talk with you about infective endocarditis. They should explain any treatments or support you should be offered so that you can decide together what is best for you. Your family, parent or carer may be involved in helping to make decisions depending on your age. There is a [list of questions](#) you can use to help you talk with your care team.

You may also like to read NICE's information for the public on [patient experience in adult NHS services](#). This sets out what adults should be able to expect when they use the NHS.

We also have more information on the NICE website about [using health and social care services](#).

Am I at risk of infective endocarditis?

Only some heart conditions put you at an increased risk of developing infective endocarditis. These include:

- some types of disease affecting the heart valves
- a condition called hypertrophic cardiomyopathy, in which the muscle wall of the heart becomes thickened
- having had infective endocarditis before
- some types of heart problem present from birth that affect the structure of the heart, even if you have had an operation to correct the problem (but if you have a condition called an isolated atrial septal defect, a repaired ventricular septal defect or a repaired patent ductus arteriosus, you are not at increased risk of infective endocarditis)
- having a replacement heart valve.

What do I need to know about reducing my risk?

If you are at increased risk of infective endocarditis, your healthcare professional should give you information about how to prevent it, including:

- the benefits and risks of antibiotics and why antibiotics are not usually recommended to prevent infective endocarditis
- the importance of always looking after your teeth and gums
- symptoms to look out for that might be caused by infective endocarditis and when to seek expert advice
- the need to tell any medical expert you seek advice from about any recent invasive dental treatment you have had

- the risks of having any kind of procedure that involves piercing the skin, including things like body piercing or tattooing as well as medical procedures.

Should I be offered antibiotics?

Your dentist or doctor should talk about the risks and benefits of antibiotics with you, so that you can make the decision about what is right for you together.

You should not usually be offered antibiotics to prevent infective endocarditis if you are:

- having a dental procedure
- having an obstetric or gynaecological procedure (these are procedures on a women's reproductive system, or related to pregnancy and childbirth)
- giving birth
- having a procedure on the bladder or urine system
- having a procedure on the oesophagus (the tube that carries food from your mouth to your stomach) or bowels (the tube that processes food and carries waste out of your body)
- having a procedure on the airways, including ear, nose and throat procedures and bronchoscopy.

If you are having a medical procedure at the site of a suspected infection, for example, in your oesophagus or bowels or in your reproductive or urine system it is usual to be prescribed antibiotics before the procedure. If you are at increased risk of infective endocarditis, the antibiotics should be chosen so that they kill the bacteria that can cause infective endocarditis as well as other types of bacteria. This should help to prevent infective endocarditis as well as treating the suspected infection.

In the past, people at increased risk of infective endocarditis were offered antibiotics when they had certain medical or dental procedures. NICE recommends that people should not usually be given antibiotics before a procedure unless antibiotics are needed to treat a suspected infection at the site of the procedure. This is because medical and dental procedures are no longer thought to be the main cause of endocarditis, and taking antibiotics carries its own risk.

Questions to ask about preventing infective endocarditis

- In the past I have been given antibiotics to prevent infective endocarditis for the same procedure but have not been offered them now. Why has this changed?
- Can you tell me more about infective endocarditis? Is there some written material (like a leaflet) that I can have?
- What can I do to look after my teeth and gums?
- What symptoms should I look out for?
- Who should I contact if I think I have symptoms of infective endocarditis, and what information do I need to give them?
- What should I do if I think I have an infection?
- I've used a chlorhexidine mouthwash (an antiseptic mouthwash that helps to kill bacteria in the mouth) when I have had dental treatment in the past. Is this helpful?

These questions may help you discuss your condition or the treatments you have been offered with your healthcare team.

Sources of advice and support

- British Dental Health Foundation, 01788 539780
www.dentalhealth.org
- British Heart Foundation, 0300 330 3311
www.bhf.org.uk
- Children's Heart Federation, 0808 808 5000
www.chfed.org.uk
- The Somerville Foundation (formerly the Grown Up Congenital Heart Patients Association), 0800 854 759
www.thesf.org.uk

You can also go to [NHS Choices](#) for more information.

NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

Update information

August 2016: Changes have been made to update the text in line with some changes made to recommendations in the guideline about when antibiotics should or shouldn't be offered.

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