# What Is Infective Endocarditis?

Infective (bacterial) endocarditis (IE) is an infection of either the heart's inner lining (endocardium) or the heart valves. Infective endocarditis is a serious — and sometimes fatal — illness. Two things cause it to occur: bacteria and a weakened heart.

Men, women and children of all racial and ethnic groups can get it. In the United States, the most recent national data indicates up to 28,000 hospital discharges related to IE occurred in 2009.

Healthy tricuspid valve

Below: closeup of a tricuspid valve damaged by infective endocarditis
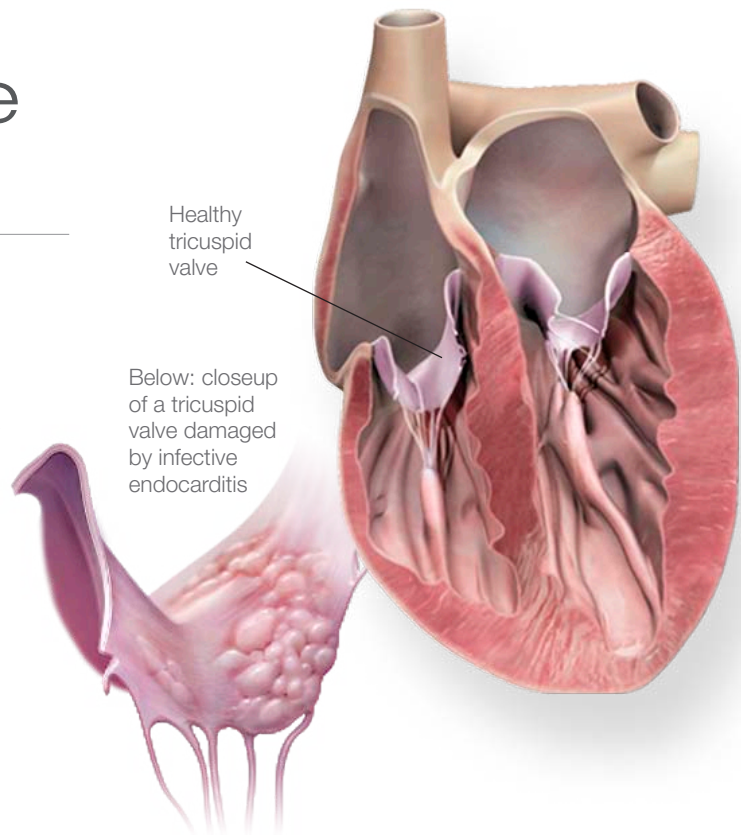
What's the role of bacteria?

Certain bacteria normally live on parts of your body. They live in or on the:

• mouth and upper respiratory system.

• intestinal and urinary tracts.

• skin.

Bacteria can get in the bloodstream. This is called bacteremia. These bacteria can settle on abnormal heart valves or other damaged heart tissue. If this happens, they can damage or even destroy the heart valves.

The heart valves are important in guiding blood flow through the heart. They work like doors to keep the blood flowing in one direction. If they become damaged, the results can be very serious.

A brief bacteremia is common after many invasive procedures (medical procedures that break the skin). Certain surgical and dental procedures are examples.

Not all bacteria cause endocarditis, though. Only certain kinds do.

What's the heart's role?

People with normal hearts rarely get endocarditis. Those who have certain heart conditions are at risk for developing endocarditis when a bacteremia occurs.

Heart conditions that put people at higher risk for IE include:

• artificial (prosthetic) heart valves or heart valves repaired with artificial material

• a history of endocarditis

• some kinds of congenital heart defects

• abnormality of the heart valves after a heart transplant

People who've had endocarditis before are at high risk of getting it again. This is true even when they don't have heart disease.

(continued)

How can infective endocarditis be prevented?

Not all cases can be prevented. That's because we don't always know when a bacteremia occurs.

For patients whose heart conditions put them at the highest level of risk for developing infective endocarditis, the American Heart Association recommends antibiotics before certain dental procedures. However, for most patients, antibiotics are not needed.

The American Heart Association has created an endocarditis wallet card in English and Spanish. People who have been told that they need to take antibiotics should carry it. You can get it from your doctor or on our Web site, **heart.org**. Show the card to your dentist or physician. It will help them take the precautions necessary to protect your health.

You can also take steps to reduce your risk of IE. For example, keeping your mouth clean and healthy may reduce the chance of a bacteremia developing.

Patients whose heart conditions put them at risk for infective endocarditis may reduce the risk by practicing good dental hygiene and, in some cases, taking antibiotics prior to dental procedures.

HOW CAN I LEARN MORE?

1. **Talk to your doctor, nurse or other healthcare professionals.** If you have heart disease or have had a stroke, members of your family also may be at higher risk. It's very important for them to make changes now to lower their risk.

2. Call **1-800-AHA-USA1** (1-800-242-8721), or visit **heart.org** to learn more about heart disease.

3. For information on stroke, call **1-888-4-STROKE** (1-888-478-7653) or visit us at **StrokeAssociation.org**.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your healthcare provider.

For example:

What conditions do I have that put me at risk for endocarditis?

Should I take antibiotics when I see the dentist?

My Questions:

We have many other fact sheets to help you make healthier choices to reduce your risk, manage disease or care for a loved one. Visit **heart.org/answersbyheart** to learn more.
Knowledge is power, so Learn and Live!

American
Heart
Association®