

Necrotizing fasciitis (flesh-eating disease)

What is necrotizing fasciitis?

Necrotizing fasciitis is more commonly known as “flesh-eating disease.” It is a very severe bacterial infection that spreads quickly through the tissue (flesh) surrounding the muscles. In some cases, death can occur within 12 to 24 hours. About 1 in 4 people with necrotizing fasciitis die from it.

Necrotizing fasciitis may start from an infection in a minor cut or bruise. It may follow a chickenpox infection. Sometimes there is no obvious skin wound or injury.

What are the symptoms of the disease?

Most often, there is sudden onset of pain and swelling with redness at the site of a wound. Fever may also occur. The pain is often far greater than expected from the wound or injury. The pain can sometimes occur at a distance from the wound. It can spread quickly up the affected arm, leg or other body part. This kind of infection can cause gangrene, the death of tissue in a part of the body.

What causes necrotizing fasciitis?

Necrotizing fasciitis is caused by a number of different bacteria. One of these is Group A Streptococcus (GAS). These bacteria are found on the skin or in the nose and throat of healthy people. Many people carry these bacteria but do not get sick. These bacteria can also cause strep throat, scarlet fever, skin infections and rheumatic fever. It is not fully understood why GAS bacteria sometimes cause necrotizing fasciitis. However, these bacteria make toxins that destroy body tissue

directly. The bacteria also cause the body's immune system to destroy its own tissue while fighting the infection.

For more information on GAS, visit [HealthLinkBC File #106 Group A streptococcal infections](#).

How is it spread?

GAS bacteria, a common cause of necrotizing fasciitis, are spread by contact with saliva or mucus from the mouth, nose or throat of an infected person. The infected person may or may not have symptoms. When an infected person coughs or sneezes, the bacteria spread through droplets in the air. You can become infected when you breathe in these droplets or touch your eyes, nose or mouth after touching contaminated objects. The bacteria can also spread through close personal contact. For example, kissing or sharing drinking cups, forks, spoons or cigarettes.

You are at higher risk of GAS infection if you:

- Live in the same household as an infected person
- Share the same bed or have sexual contact with an infected person
- Have direct contact with an infected person's mouth or nose secretions, or a skin wound
- Share a needle used for injecting drugs with an infected person

Can necrotizing fasciitis be prevented?

There is no vaccine to prevent GAS infections or necrotizing fasciitis. Antibiotics are

recommended if you have close contact with someone who has necrotizing fasciitis caused by GAS bacteria (for example, if you live in the same household). Necrotizing fasciitis can progress rapidly, so you should get medical attention as soon as symptoms occur. Remember, an important clue to this disease is pain far greater than expected from the wound or injury. Always take good care of minor cuts to reduce the chance of infection. If you have a small cut or wound, wash it well with warm soapy water, and keep it clean and dry with a bandage.

How is necrotizing fasciitis treated?

Antibiotics are an important part of the treatment for necrotizing fasciitis. However, antibiotics on their own are not usually enough. This is because necrotizing fasciitis cuts off the blood supply to body tissue and the antibiotics must be carried by blood to the infected site to work. Surgery, combined with antibiotics, is the usual treatment.

What are my chances of getting necrotizing fasciitis?

Your chances of getting necrotizing fasciitis caused by GAS bacteria are very low. In B.C., about 4 people out of one million get it every year. Even if you have close contact with a person with necrotizing fasciitis for a long time, the chance of getting it is very low.

Some people have a higher risk of getting the disease. Injection drug use is the biggest risk factor. Other risk factors include:

- Skin wounds (burn, trauma, surgery)
- A weakened immune system due to disease or medical treatment
- Chronic diseases such as heart, lung or liver disease, complications from alcohol use disorder or diabetes
- Recent close contact with a person who had necrotizing fasciitis caused by GAS bacteria
- Chickenpox

A recent chickenpox infection can greatly increase the risk of getting necrotizing fasciitis. Although chickenpox does not account for very many cases, streptococcus skin infections can be a complication of chickenpox. Anyone who has not had chickenpox or the chickenpox (varicella) vaccine should get the vaccine. For information about the chickenpox vaccine, visit [HealthLinkBC File #44b Chickenpox \(varicella\) vaccine](#).



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