



# Necrotizing Fasciitis (also known as Flesh-Eating Disease)

## What is necrotizing fasciitis?

Necrotizing fasciitis (*neck-roe-tie-zing fa-shee-eye-tis*) 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 18 hours. Necrotizing fasciitis kills about 20 to 30 percent of those who get it.

## What are the symptoms of the disease?

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.

Most often, there is sudden onset of pain and swelling with redness at the site of the wound. Fever may also occur. The pain is commonly far greater than you would expect from that kind of 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.

## What causes it?

Necrotizing fasciitis is caused by a number of different bacteria. One of these is the Group A streptococcus. These bacteria are found on the skin or in the nose and throat of healthy people. Many people carry these bacteria but don't get sick; however, these bacteria can also cause strep throat, scarlet

fever, skin infections, and rheumatic fever. Researchers do not fully understand why Group A streptococcus bacteria, on rare occasions, cause necrotizing fasciitis. These bacteria make poisons that destroy body tissue directly, as well as causing the body's immune system to destroy its own tissue while fighting the bacteria.

## How is it spread?

The Group A streptococcus is normally passed from person to person through close personal contact such as kissing, or sharing drinking cups, forks, spoons or cigarettes. Those at highest risk of getting it from an infected person are:

- Persons living in the same household;
- People who sleep in the same house; or
- People who have direct contact with the infected person's mouth or nose secretions.

## How can it be prevented?

There is no vaccine to prevent Group A streptococcal infections. Antibiotics are recommended for close contacts of cases of necrotizing fasciitis caused by Group A streptococcus (for example, persons living in the same household). Since this severe form of streptococcal infection can progress so rapidly, the best approach is to get medical attention as soon as symptoms occur. Remember - an important clue to this disease is very severe pain at the site of infection.

It also makes good sense to always take good care of minor cuts to reduce the chance of infection getting into the tissues under the skin. If you have a small cut or wound, wash it well in warm soapy water, and keep it clean and dry with a bandage.

### How is it treated?

Antibiotics are an important part of the treatment for these infections. 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 in order to work. Surgery, combined with antibiotics, is the usual treatment. However, researchers are investigating other methods that can be used to supplement antibiotics and surgery.

### What are your chances of getting it?

Your chances of getting necrotizing fasciitis caused by Group A streptococcus are very low. Normally in BC, about 2 or 3 people out of 1 million get it every year. Even for those who have close, prolonged contact with a person with necrotizing fasciitis, the chance of getting it is very low.

Some people are known to have a higher risk of getting the disease. Injecting drugs that are not prescribed by a doctor is the biggest risk factor. Other risk factors include:

- Skin wounds (burn, trauma, surgery);
- A weakened immune system due to disease or medical treatment. Other chronic disease (e.g., chronic heart, lung or liver disease, alcoholism, diabetes);
- Recent close contact with a person who had necrotizing fasciitis caused by Group A streptococcus; or
- If you have chickenpox.

A recent chickenpox infection can greatly increase the risk of getting necrotizing fasciitis. So even though chickenpox does not account for very many cases,

streptococcus skin infections are a complication of chickenpox. Everyone who has not had chickenpox or chickenpox (varicella) vaccine should get the chickenpox vaccine. See HealthLink BC File [#44b Chickenpox Vaccine](#) for information about the chickenpox vaccine.



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