Fact Sheet: Strep A, Necrotizing Fasciitis

Flesh-Eating Bacteria

What is Strep A Necrotizing Fasciitis (flesh eating bacteria)?

Strep A is a bacterium often found in the throat and on the skin. People may carry Strep A in the throat or on the skin and have no symptoms of illness. Most infections are relatively mild illnesses such as "strep throat," or impetigo. Occasionally these bacteria can cause severe and even life-threatening diseases.

Severe, sometimes life-threatening, Strep A may occur when bacteria get into parts of the body where bacteria usually are not found, such as the blood, muscle, or the lungs. Two of the most severe, but least common, forms of invasive GAS disease are necrotizing fasciitis and streptococcal toxic shock syndrome. Necrotizing fasciitis (occasionally described by the media as "the flesh-eating bacteria") is a rapidly progressive disease which destroys muscles, fat, and skin tissue. STSS results in a rapid drop in blood pressure and organs (e.g., kidney, liver, lungs) to fail. STSS is not the same as the "toxic shock syndrome" due to the bacteria *Staphylococcus aureus,* which has been associated with tampon usage. While 10-15% of patients with invasive Strep A die from their infection, approximately 25% of patients with necrotizing fasciitis and more than 35% with STSS die.

If you're healthy, have a strong immune system, and practice good hygiene and proper wound care, your chances of getting necrotizing fasciitis are extremely low.

How is Strep A spread?

These bacteria are spread through direct contact with mucus from the nose or throat of persons who are infected or through contact with infected wounds or sores on the skin. Ill persons, such as those who have strep throat or skin infections, are most likely to spread the infection. Persons who carry the bacteria but have no symptoms are much less contagious. Treating an infected person with an antibiotic for 24 hours or longer generally eliminates their ability to spread the bacteria. However, it is important to complete the entire course of antibiotics as prescribed. It is not likely that household items like plates, cups, or toys spread these bacteria. Clothing, blankets, dust, and hard surfaces do not appear to play a significant role in transmission.

How common is invasive Strep A?

About 9,000-11,500 cases of invasive Strep A occur each year in the United States, resulting in 1,000-1,800 deaths annually. STSS and necrotizing fasciitis each comprise an average of about 6%-7% of these invasive cases. In contrast, there are several million cases of strep throat and impetigo each year.

Why does invasive Strep A occur?

Invasive Strep A infections occur when the bacteria get past the defenses of the person who is infected. This may occur when a person has sores or other breaks in the skin that allow the bacteria to get into the tissue, or when the person's ability to fight off the infection is decreased because of chronic illness or an illness that affects the immune system.

Who is most at risk of getting invasive Strep A?

Few people who come in contact with Strep A will develop invasive Strep A, or "Flesh Eating Bacteria". Most people will have a throat or skin infection, and some may have no symptoms at all. Although healthy people can get invasive Strep A, people with chronic illnesses like cancer, diabetes, and chronic heart or lung disease, and those who use medications such as steroids have a higher risk. Persons with

skin lesions (such as cuts, chicken pox, surgical wounds), the elderly, and adults with a history of alcohol abuse or injection drug use also have a higher risk for disease.

What are the early signs and symptoms of necrotizing fasciitis (flesh eating bacteria)?

- Skin wound/lesion – red, warm to touch, swollen, tender, muscle pain, rapid change including drainage. See healthcare provider.
- May include Flu like symptoms – sore throat, fever, chills, muscle ache, diarrhea, nausea and vomiting. See healthcare provider.

How is invasive Strep A treated?

Strep A infections can be treated with many different antibiotics. For necrotizing fasciitis, high dose penicillin and clindamycin are recommended. For those with very severe illness, supportive care in an intensive care unit may also be needed. For persons with necrotizing fasciitis, early and aggressive surgery is often needed to remove damaged tissue and stop disease spread. Early treatment may reduce the risk of death from invasive group A streptococcal disease. However, even the best medical care does not prevent death in every case.

What can be done to help prevent Strep A infections?

The spread of all types of Strep A infection can be reduced by good hand washing, especially after coughing and sneezing and before preparing foods or eating. Persons with sore throats should be seen by a doctor who can perform tests to find out whether the illness is strep throat. If the test result shows strep throat, the person should stay home from work, school, or day care until 24 hours after taking an antibiotic. All wounds should be kept clean and watched for possible signs of infection such as redness, swelling, drainage, and pain at the wound site. A person with signs of an infected wound, especially if fever occurs, should immediately seek medical care. It is not necessary for all persons exposed to someone with an invasive Strep A infection (i.e. necrotizing fasciitis) to receive antibiotic therapy to prevent infection. However, in certain circumstances, antibiotic therapy may be appropriate. That decision should be made after consulting with your doctor.

What is Campbell County Memorial Hospital doing to prevent transmission?

In addition to strict hand washing practices before and after any patient contact, Campbell County Memorial Hospital adheres to a comprehensive personal protective equipment (PPE) standard. All patient rooms, operating rooms and equipment are thoroughly disinfected according to CDC protocols and endorsed by the Association for the Healthcare Environment, a professional organization of the American Hospital Association.

Regarding patients affected by invasive Strep A – Necrotizing Fasciitis

CCMH did treat three patients who tested positive for Strep A. Due to HIPAA regulations we cannot identify these patients.