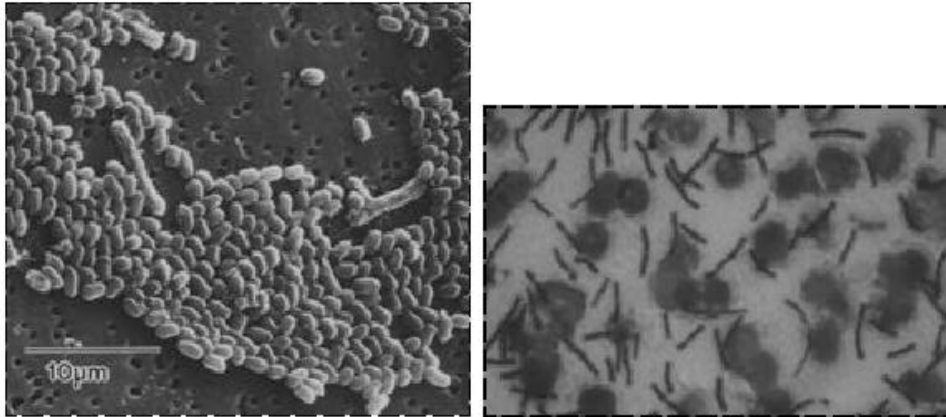

FREQUENTLY ASKED
QUESTIONS ABOUT

ANTHRAX



Photos of anthrax from Textbook of Military Medicine, Walter Reed Army Medical Center.

This information sheet has been prepared to provide you with information about bacillus anthracis, also known as Anthrax. Additional information may be obtained from the websites contained at the end of this sheet.

WHAT IS ANTHRAX?

Anthrax is a bacteria that occurs naturally in the soil, and is sometimes found in both wild and domesticated animals. The animals sometimes infected include sheep and cattle.

HOW IS ANTHRAX TRANSMITTED?

There are three basic forms of anthrax transmission: a cutaneous form (on the skin); an inhaled form (from breathing in the spores); and an injected form (from swallowing the anthrax spores).

The cutaneous version of anthrax is the most common, and is frequently called ‘wool-sorter’s disease.’ It gets on the surface of the skin, and then enters through cuts, cuticle tears, or sores on the skin. This version usually produces sores that have a very dark (sometimes black) center. The sores most commonly appear on the hands, arms, face, and neck. It is readily treatable with antibiotics like penicillin.

The inhaled version of anthrax rarely occurs naturally, though it is possible in wool processing centers. Initial symptoms of inhaled anthrax may resemble a cold, which then leads to severe breathing problems and shock. While it is the most dangerous way to contract anthrax, it is not contagious, which means it cannot be spread from one person to another. This form of anthrax is also very treatable with antibiotics if treatment starts before breathing problems begin.

The final method of anthrax transmission into the intestinal system can occur as a result of a person being exposed to anthrax, not washing their hands, and then eating. Consuming contaminated food is also a possible source, though rare in industrialized countries. It is characterized by nausea, vomiting, fever, and abdominal pain. It is also treatable with antibiotics, and is not as deadly as inhaled anthrax.

IS THERE A VACCINE?

There is a vaccine available for anthrax, however it is not recommended for the vast majority of people. It is usually only given to veterinarians, wool processors, and others with known occupational exposure (including some military). The reasons for this are that the vaccine requires 6 doses administered over an 18-month period. Instead of trying to vaccinate a large number of people who do not have occupational exposure, the US healthcare system is set up to recognize people potentially infected and start them on preventive antibiotics to help keep them from actually contracting the disease.

SHOULDN'T I JUST TAKE ANTIBIOTICS IN CASE I AM EXPOSED?

While taking antibiotics regularly may sound like a good idea, it can cause lots of other problems. First of all, antibiotics only work on bacteria. This means that things like the common cold and influenza (the flu) cannot be treated with antibiotics (they are caused by viruses, not bacteria). In addition, indiscriminate use of antibiotics can actually make you more susceptible to other diseases. The human body has an ability to fight off a number of diseases on its own. However, indiscriminate use of antibiotics can allow other bacteria to become resistant, which will make them harder to treat. Indiscriminate use of antibiotics in the past few decades has already led to multi-drug resistant strains of a number of diseases. If you think you may have been exposed to a disease, consult your physician and let him/her make the decision as to whether or not you should be on antibiotics.

HOW IS ANTHRAX DIAGNOSED?

Anthrax infection is most often diagnosed by isolating the actual bacterium from samples of blood, skin lesions, or respiratory secretions. It can also be diagnosed by measuring specific antibodies within people suspected of having the disease.

Screening can often be performed with nasal and skin swabs, but these will only reveal possible exposure to anthrax. Exposure does not mean a person is infected, or will become infected. It simply means the person has come in contact with one or more anthrax spores. Since it takes thousands of spores to cause inhalation anthrax, exposure to only one (or a few) does not mean a person is at imminent risk of the disease. Preventive antibiotics will often be used in those known to have been exposed.

WHERE CAN I GET MORE INFORMATION?

There are a number of sources for information about anthrax. However, the reader should use caution about obtaining information from websites or printed material that are not known to be reputable and reliable. There are a number of websites containing only partial (or in some cases completely inaccurate) information. The following websites are recommended for additional information:

http://www.cdc.gov/ncidod/dbmd/diseaseinfo/anthrax_g.htm

<http://jama.ama-assn.org/issues/v281n18/ffull/jst80027.html>

<http://www.cdc.gov/mmwr/PDF/RR/RR4915.pdf>

http://www.usps.com/news/2001/press/pr01_1010tips.htm



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