# ANTHRAX

# **Patient Information Fact Sheet**

# >What is anthrax?

Anthrax is a bacterial disease that affects livestock and is occasionally transmitted to humans. It occurs mainly in countries where animals are not vaccinated. Human anthrax has three forms depending on the route of infection: cutaneous (skin), gastrointestinal, and inhalation. All forms of anthrax can be fatal if left untreated. Bacterial spores can be produced and stored in a dry form for decades. In this form, they may be used in biological warfare as an aerosol. In 2001, the spores were mixed with a fine powder and sent through the mail; this has created a concern that further attacks by terrorist groups are possible.

#### >How do you contract anthrax?

Anthrax is generally transmitted to humans by handling/eating products from infected animals. *Cutaneous anthrax* is the most common form. It is usually contracted when anthrax spores enter a cut or abrasion on a person's skin.

# >What are the symptoms of anthrax?

An itchy bump develops into a black sore. The person may develop headaches, muscle aches, vomiting and fever. *Gastrointestinal anthrax* is contracted by ingesting meat from an infected animal. Symptoms include bloody diarrhea, loss of appetite, nausea, fever, and stomach cramps. *Inhalation/pulmonary anthrax* is the rarest and most severe form of anthrax. Infection occurs when a person inhales anthrax spores. Symptoms are flu-like but rapidly progress (with 3–5 days) to severe breathing problems and shock.

The incubation period is a few hours to 60 days, but most cases occur within the first 48 hours of exposure. Anthrax is diagnosed by microscopic examination of infected tissues.

A vaccine is available for those people who are occupationally at risk, such as slaughterhouse workers. The vaccination is not recommended for travelers or the general public. Anthrax outbreaks are rare even in developing countries but travelers should nevertheless avoid contact with untreated wool, hides, and animal skins. Ensure that meat is well cooked and comes from a safe source.

# How is anthrax treated?

Antibiotic treatment is effective if it is started promptly (as long as new drug-resistant strains have not developed). Anthrax can be treated with a 60-day course of either **ciprofloxacin** (Cipro) or **doxycycline** (Monodox, Vibramycin).

# >Further information

MASTA Travel Health: www.masta-travel-health.com Centers for Disease Control and Prevention: www.emergency.cdc.gov/agent/anthrax/needtoknow.asp

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