



DEPARTMENT OF HEALTH

HEALTH AND MEDICAL SERVICES

Community Health Services
Disease Prevention
Family Health
Health Promotion
State Epidemiologist

To: Physicians in Central South Dakota
Date: 21 July 2005
From: Lon Kightlinger, MSPH, Ph.D., State Epidemiologist
RE: **Preventing human exposure to bovine anthrax**

Bovine anthrax has been reported in Sully County. NO HUMAN CASES have been reported. Bovine anthrax is a "normal" enzootic event in South Dakota.

Recommendations for humans:

- All humans involved should wash their hands scrupulously after exposure to the anthrax bovine and other animals in the herd.
- All humans involved should be vigilant for new or unusual skin sores and have them checked by a physician.
- Do not eat the meat of confirmed or suspect cattle.
- If there has been human exposure to the bovine blood or internal organs, the exposed person should consult their physician who may consider antibiotic prophylaxis.
- Antibiotic prophylaxis is not generally recommended for other people associated with a bovine case.
- Local hospitals and clinics should be on 2 week enhanced surveillance for patients with new or unusual skin sores.

Please report any suspect cases to the Dept of Health immediately, or if you have any questions, please call 1-800-592-1861.

The SD Animal Industry Board and local veterinarian are overseeing proper disposal of the dead animals, animal quarantines, animal disease surveillance, and herd vaccination.

Below are some frequently asked questions and answers for your patients.

What is anthrax? Anthrax is a bacterial disease than can infect warm-blooded animals including humans.

Who gets anthrax? Anthrax is primarily an occupational disease. It is occasionally in individuals who are exposed to dead animals and animal products such as wool, hair, and hides.

How is anthrax spread? The spores of the anthrax bacteria can live in the soil for many years. Man may become infected with anthrax by inhaling contaminated soil particles, by contact with infected animal tissue, or by handling wool or hair from diseased animals. Infection of the intestinal tract can occur by eating undercooked meat from diseased animals. Anthrax is not spread person-to-person.

What are the symptoms of anthrax? The symptoms vary depending upon the site of the disease. In skin, a boil-like lesion appears which eventually forms a black center. A swelling of the lymph gland

under the arm may occur. In the lungs, symptoms may resemble the common cold and may progress to severe breathing problems and even death. The symptoms of intestinal anthrax include vomiting, nausea, fever, abdominal pain and diarrhea.

How soon after infection do symptoms appear? The incubation period is usually within 7 days, but may be prolonged up to 60 days.

Is a person able to spread anthrax? There are no reports of spread from human to human.

Does past infection with anthrax make a person immune? A second attack with this disease is unlikely.

What is the treatment of anthrax? Although effectiveness may be limited after symptoms are present, high dose antibiotic treatment with penicillin, ciprofloxacin or doxycycline should be undertaken. All forms of the disease must be treated promptly, and inhalation anthrax is nearly always fatal if not treated before symptoms begin. Individuals with fever or evidence of disease in an area where anthrax cases are occurring should be treated for anthrax until the disease is excluded.

What can be the effect of not being treated for anthrax? The disease could be fatal in untreated cases.

What can be done to prevent the spread of anthrax? Anthrax vaccine is available for people in high-risk occupations, such as military personnel, and individuals who work with imported animal hides, furs, wool, bonemeal, hair and bristles. To prevent anthrax, carefully handle dead animals suspected of having anthrax; provide good ventilation when processing hides, fur, hair or wool; and vaccinate animals.

Can anthrax be used as a biological weapon? Yes, anthrax spores can be used as biological weapon. Please see the South Dakota Department of Health bioterrorism web site at:
<http://www.state.sd.us/doh/Pubs/bio.htm>.

Related links Centers for Disease Control and Prevention, Division of Bacterial and Mycotic Diseases -
http://www.cdc.gov/ncidod/dbmd/diseaseinfo/anthrax_g.htm