FAST FACTS

Sarcocystosis

What is sarcocystosis and what causes it?

Sarcocystosis is disease caused by a group of protozoan species called *Sarcocytis* (sar-coe-cyst-is). The life cycle of this parasite is complex, typically involving multiple species of animals or humans.

What animals can get sarcocystosis?

Many animal species can get sarcocystosis, including dogs, cats, cattle, sheep, pigs, mammalian wildlife (e.g., deer, moose, elk), birds (e.g., ducks, geese, chickens) and reptiles. Horses can be severely infected. Opossums can be an important carrier of the parasite. Some psittacine birds (e.g., cockatoos, parrots) can also be severely affected.

How can my animal get sarcocystosis?

Animals get sarcocystosis by ingestion (**oral**). This can either be through eating an infected animal (e.g., predator eating prey) or by ingesting the protozoan eggs (called oocysts or sporocysts) in the environment or feed. Many times feed can become contaminated by infected vermin such as opossums, raccoons or skunks or vectors such as cockroaches.

How does sarcocystosis affect my animal?

Most animals infected with sarcocystosis show no signs of infection.

In horses, the disease (called equine protozoal myeloencephalitis or EPM in horses) frequently involves infection of the nervous system. Signs may include depression, head tilt, seizures, facial paralysis, visual defects, and/or incoordination.

Signs of disease in other animal species may include weight loss, muscle wasting, weakness, muscle tremors or spasms, abortions, and possibly death.

In birds, sudden death most commonly occurs. If signs are seen they may include difficulty breathing, depression or lethargy.

Can I get sarcocystosis?

Yes. People can get sarcocystosis. They acquire the disease by ingesting (oral) the protozoan, most commonly through undercooked meat products. Disease in humans can involve either intestinal infection or muscular invasion by the parasite. Usually the disease resolves on its own with no signs of illness. When illness occurs, signs of muscular disease may include muscle tenderness or painful swelling, muscle weakness, headache, cough, transient itchy rashes. Intestinal symptoms may include fever, chills, sweating, abdominal pain, diarrhea, nausea, vomiting.



Photos (left to right): opossums, Sarcocystis sporocyst, Sarcocystis muscle cyst. Photos from www. cvm.okstate.edu; www.vet.uga.edu and the USDA.

Who should I contact, if I suspect sarcocystosis?

In Animals –

Contact your veterinarian.

In Humans – Contact your physician.

How can I protect my animal from sarcocystosis?

Keep animal feces cleaned from the environment. Do not allow animals to eat raw or undercooked meat products or to hunt wild mammals or birds. Keep dogs, cats and wildlife out of livestock areas. Keep all feed and grain covered to minimize contamination by rodents, insects or other animals.

How can I protect myself from sarcocystosis?

Avoid eating raw or undercooked meat. Cooking to a temperature of 150-160°F for 15 minutes can minimize risk. Freezing meat to -4°F can also help prevent transmission. Use good personal hygiene, such as hand washing, after contact with animals.

For More Information

- CFSPH Technical Fact Sheets. Sarcocystosis. http://www.cfsph.iastate.edu/DiseaseInfo/default.htm
- The Merck Veterinary Manual at http:// www.merckvetmanual.com/mvm/index.jsp?cfile=htm/bc/91600.htm

