

# Raccoon Roundworm Infection

## *Baylisascariasis*

### What is baylisascariasis and what causes it?

Baylisascariasis (bay-liss-AS-kuh-RYE-a-sis) is a disease caused by a parasite, a roundworm commonly found in raccoons, *Baylisascaris procyonis* (bay-liss-AS-kuh-ris pro-sigh-OH-nis). Raccoons are the primary host for the life cycle of the worm but other animal species can be affected. *B. procyonis* is found in the U.S. and Europe.

These worms have different lifespans. Adult worms infest the intestines of raccoons and dogs. These adult worms lay millions of eggs, which are shed in the animal's feces. Eggs are incidentally ingested, (fecal contamination of hands, food, etc.). Once ingested, the eggs hatch into a young (larval) worm which migrate through various areas and organs of the host (animal or person). This causes damage to various body tissues such as the liver, heart, lungs, brain, and eyes.

### What animals get baylisascariasis?

Over 90 species of mammals, including raccoons, dogs, rabbits, rodents, birds, and non-human primates can become infected with *B. procyonis*.

### How can my animal get baylisascariasis?

Animals become infected by ingesting the *B. procyonis* eggs found in the environment or by eating an animal that is infested with the roundworm larvae.

### How does baylisascariasis affect my animal?

Raccoons usually show no sign of illness when infested with *B. procyonis*. Signs in other mammals or birds vary with the migration of the larval worms. Intestinal infestation is usually not fatal, while migration to the brain or spinal cord usually results in death. If the later occurs, signs may include incoordination, circling, and tremors. The disease can be fatal in animals other than dogs and raccoons.

### Can I get baylisascariasis?

Yes. Although rare in people, cases that have occurred have been severe. People become infected by oral ingestion of *B. procyonis* eggs. This can occur following contact with soil, water, or inanimate objects (fomites) contaminated with the roundworm eggs (items fecally contaminated by raccoons or dogs).

Symptoms vary depending on the number of eggs ingested and what part of the body is affected.

Large numbers of eggs can cause serious disease and symptoms can include nausea, tiredness, liver enlargement, loss of coordination and muscle control, coma, and blindness.

### Who should I contact, if I suspect baylisascariasis?

**In Animals** – Contact your veterinarian immediately.

**In Humans** – Contact your physician immediately.

### How can I protect my animal from baylisascariasis?

Keep pets away from raccoons, their feces, or areas contaminated by their feces. Monthly heartworm preventatives may decrease the risk of infection in dogs.

### How can I protect myself from baylisascariasis?

Avoid contact with raccoon feces or contaminated areas. This is especially important for young children who are most at risk. Proper hand washing is important; wash your hands after contact with any animal or after working in soil. Take steps to control raccoon populations to decrease the risk of exposure.

### For More Information

CFSPH Technical Fact Sheets. Baylisascariasis at <http://www.cfsph.iastate.edu/DiseaseInfo/default.htm>

CDC website. Baylisascariasis at <http://www.cdc.gov/ncidod/dpd/parasites/baylisascaris/default.htm>

