

Baylisascaris Infection

This program is presented by the Centers for Disease Control and Prevention.

Baylisascariasis is a parasitic disease caused by the roundworm, *Baylisascaris procyonis*. Raccoons are the predominant hosts, but the parasite can also infect other animals, including dogs, and can cause a rare, yet severe infection in humans.

Welcome to CDC Audio Rounds. I'm Amanda Burke, a health communications specialist at the Centers for Disease Control and Prevention.

Baylisascariasis is typically transmitted when raccoons shed roundworm eggs in their feces. The eggs become infectious two to four weeks after being shed. People are infected when they ingest infectious eggs from contaminated soil, fingers, or other objects, OR, by inhaling aerosolized eggs. Raccoons with *Baylisascaris* roundworms are found throughout the United States, with a higher prevalence of infected raccoons in the Midwest and Northeast, and on the West Coast.

Children and developmentally disabled persons who are more likely to put dirt or animal waste in their mouths are at higher risk of infection. Hunters, taxidermists, and wildlife handlers who have contact with raccoons and their habitats may also be at risk.

Symptoms of *Baylisascaris* infection may appear within one week of exposure and can include nausea, lethargy, and loss of coordination. Clinical presentations vary depending on the dose and location of migrating larvae and include neural larva migrans, when the central nervous system is affected; ocular larva migrans, when the eye is affected; and visceral larva migrans, when the liver and lungs are affected. Visceral larva migrans may present with rash, abdominal pain, hepatomegaly, or pneumonitis.

Diagnostic findings include eosinophilic pleocytosis, peripheral eosinophilia, and *Baylisascaris procyonis*-specific antibodies in serum and CSF. Serologic testing is available at CDC for persons with suspected exposure and clinically consistent illness. In cases of neural larva migrans, deep white matter abnormalities may be present on an MRI.

Treatment of *Baylisascaris* infection is most successful when administered within three days of exposure. Because of the severity of the infection, albendazole should be given immediately if there is a high suspicion of exposure. If albendazole is not readily available, mebendazole or ivermectin may be used. Corticosteroids can help reduce inflammatory reaction. Some indications for immediate treatment include known oral exposure to raccoon feces, suspected oral exposure in an area with documented raccoon infection, and *Baylisascaris* eggs in the feces of the implicated animal.

To prevent *Baylisascaris* infection, advise patients on these strategies:

- Do not feed or adopt wild animals;
- Discourage raccoons from living near the home;
- Avoid contact with raccoon feces; and
- Use appropriate protection when working in contaminated areas.

For more information, please visit www.cdc.gov/parasites/baylisascaris.

For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.