

Baylisascaris Infection • Provider Fact Sheet

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.

How is baylisascariasis transmitted?

- Raccoons infected with *Baylisascaris* roundworms shed parasite eggs in their feces.
- Eggs become infectious 2-4 weeks after being shed. People become infected by:
 - Ingesting infectious eggs on contaminated fingers, soil or objects
 - Inhaling aerosolized eggs.

Where is *Baylisascaris* found?

- Infected raccoons are found throughout the United States, with higher prevalence in the Midwest, Northeast and West Coast.
- Cases of human baylisascariasis have been documented in California, Illinois, Louisiana, Massachusetts, Michigan, Minnesota, Missouri, New York, Oregon and Pennsylvania.

Who is at risk?

- Young children and developmentally disabled persons who may be more likely to put contaminated dirt or animal waste in their mouths
- Hunters, taxidermists, and wildlife handlers who have contact with raccoons and their habitats.

What are the clinical manifestations?

- Symptoms may appear as soon as 1 week post-exposure and may include:
 - Nausea
 - Lethargy
 - Loss of coordination
- Clinical presentations vary depending on the amount and location of migrating larvae and include:
 - Neural larva migrans, often with acute eosinophilic meningoencephalitis
 - Ocular larva migrans, which may present as diffuse unilateral subacute neuroretinitis
 - Visceral larva migrans, often with rash, abdominal pain, hepatomegaly, and pneumonitis.

Diagnosis of baylisascariasis

- Diagnosing baylisascariasis can be difficult. Diagnostic findings include:
 - Eosinophilic pleocytosis
 - Peripheral eosinophilia
 - Deep white matter abnormalities on MRI
 - *B. procyonis*-specific antibodies in serum and CSF
- Serologic testing is available at CDC for patients with suspected exposure and clinically consistent illness.



Treatment for baylisascariasis

- Treatment is most successful when administered within 3 days of exposure.
- Albendazole (25-50 mg/kg per day by mouth for 10-20 days) should be administered immediately if high suspicion of infection is present.
- Indications for immediate treatment may include:
 - Known oral exposure to raccoon feces
 - Suspected oral exposure in an area with documented raccoon infection
 - *Baylisascaris* eggs in the feces of the implicated animal(s)
- If albendazole is not immediately available, mebendazole or ivermectin may be used in the interim. Corticosteroids can also help to reduce inflammatory reaction.

Prevention of baylisascariasis

The best way to prevent infection is to avoid contact with raccoons and their feces. Advise patients on prevention strategies, including:

- 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 the CDC *Baylisascaris* website at www.cdc.gov/parasites/baylisascaris and click "Resources for Health Professionals" or contact Parasitic Diseases Inquiries at 404-718-4745, or parasites@cdc.gov