

# 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](http://www.cdc.gov/parasites/baylisascaris) and click "Resources for Health Professionals" or contact Parasitic Diseases Inquiries at 404-718-4745, or [parasites@cdc.gov](mailto:parasites@cdc.gov)

Center for Global Health  
Division of Parasitic Diseases and Malaria

