



Baylisascaris procyonis

Raccoon roundworm

Disease Fact Sheet

What is *Baylisascaris procyonis*?

This large roundworm parasite lives in the intestines of raccoons. The worm does not harm the raccoon, but on rare occasions can cause serious illness in humans. About half of all raccoons tested in Wisconsin have been found to be infected. Raccoons throughout Wisconsin have been shown to be infected with *Baylisascaris procyonis*, but it is more prevalent in the southern portion of the state.

How is this raccoon roundworm spread?

The adult worms shed microscopic eggs that pass in the raccoon's feces. Millions of eggs may be passed each day, which can then survive for months to years in the environment. The parasite is transmitted when the eggs are ingested by another animal. Humans generally become infected by accidentally ingesting eggs from soil, water, hands, or other objects contaminated with raccoon feces.

What are the signs and symptoms of *Baylisascaris procyonis* in humans?

The severity of the disease depends largely on how many eggs are ingested. These eggs hatch into larvae that then cause disease by migrating through the central nervous system, eyes and other organs. Symptoms include nausea, lethargy, liver enlargement, loss of muscle control, coma, blindness or incoordination. Fatalities are extremely rare, but have been reported. No human cases have ever been reported in Wisconsin.

How soon after infection do symptoms appear?

In general, symptoms appear 1 to 3 weeks post-infection, although they may take as long as 2 months. This interval depends on the number of eggs ingested.

Who is at greatest risk for *Baylisascaris procyonis* infection?

Because of young children's tendency to put their fingers or objects into their mouths, such children are at risk if they play in areas that are frequented by raccoons. Hunters, trappers, taxidermists and wildlife rehabilitators are also at increased risk if they handle raccoons or items contaminated with raccoon feces. In general, the risk of acquiring the infection is very low, and requires a substantial exposure to raccoon feces.

How are *Baylisascaris procyonis* infections treated in humans?

No consistently effective treatment regimens are available at this time. Generally, patients are treated with a medication to kill the worms, and with steroids to reduce inflammation caused by the worm infestation. In rare instances when a known significant exposure has occurred, the exposed person can be treated preventively before symptoms begin.

How can I avoid exposure to this parasite?

Do **not** keep raccoons as pets; this is not only dangerous, it is also illegal. Baby raccoons are often infected. Discourage raccoons from visiting your home or yard by eliminating access to food sources like garbage cans and bird feeders. Raccoons may nest in, and defecate on, places like woodpiles, attics, chimneys, sheds and barn lofts. Entrances to these areas can be sealed when the raccoons are away.

When cleaning up contaminated areas:

- Wear disposable gloves to help prevent cross contamination.
- Wear an N95-rated respirator mask if working in a confined space to prevent accidental ingestion of eggs or other harmful materials.
- Avoid stirring up dust and debris. You can lightly mist the latrine area with a little water from a spray bottle to reduce the amount of dust.
- Wear rubber boots that can be scrubbed or cover your shoes with disposable booties that can be thrown away, so that you do not bring eggs into your household.
- Feces and material contaminated with raccoon feces should be removed and burned, buried, or sent to a landfill.

- Most chemicals do not kill roundworm eggs; however, heat kills the eggs instantly.
- Treat feces-soiled cages, traps, decks, patios, and other surfaces with boiling water or a propane torch. (Please contact your local fire department for regulations and safety practices.)
- If you are cleaning an indoor raccoon latrine and are not able to use a propane torch, use a damp (but not wet) sponge to wipe the area with hot soapy water. Rinse your sponge frequently. After you are finished, flush dirty water down the toilet. Place the sponge in a plastic bag and put the plastic bag in the garbage.