

Ascariasis

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Female



Male

What is ascariasis ?

Ascariasis is a type of roundworm infection. Ascariasis infection begins when you swallow roundworm eggs. Ascariasis is the most common human worm infection in people worldwide, it is estimated that there are 4 million cases in the United States at any time



Most recorded cases of ascariasis disease in the US are in rural areas of the southeastern United States. An estimated 807 million–1.2 billion people in the world are infected with *Ascaris lumbricoides* (sometimes called just *Ascaris* or ascariasis). Infections commonly occur in tropical and sub-tropical areas of the world, including in sub-Saharan Africa, the Americas, China and east Asia. Ascariasis eggs can be present in food or drink, or in the soil in which food has grown



Eating food grown in contaminated soil can expose you to infection. You may also become infected if you touch contaminated soil with your hands and then eat without first washing them. Contaminated soil or stools can also contaminate the water, making it possible to develop a roundworm infection by drinking contaminated water.



Most infected people have mild cases with no symptoms. But heavy ascariasis infestation can lead to serious symptoms and complications. Ascariasis, hookworm, and whipworm are parasitic worms known as soil-transmitted helminths. It's estimated that about a quarter (24%) of the world's population currently has a soil-transmitted worm infection



The larvae and adult ascariasis worms live in the small intestine and can cause intestinal disease. These worms are parasites that use your body as a host to mature from larvae or eggs to adult worms (see ascariasis lifecycle in Figure 7 below). Adult ascariasis worms, which reproduce, can be more than a foot (30 centimeters) long.



ascariasis occurs most often in children in tropical and subtropical regions of the world — especially in areas with poor sanitation and hygiene.

Ascariasis infection is more common in warm climates. Eggs are passed in the stool of infected animals or human and contaminate the soil. Ingestion of contaminated soil then leads to ascariasis infection.



Ascariasis (*Ascaris lumbricoides*) infection is one of the most common intestinal worm infections. It is found in association with poor personal hygiene, poor sanitation, and in places where human feces are used as fertilizer. The geographic distributions of *Ascaris lumbricoides* are worldwide in areas with warm, moist climates and are widely overlapping. Infection occurs worldwide and is most common in tropical and subtropical areas where sanitation and hygiene are poor



- Ascariasis caused by pig ascariasis (*Ascaris suum*) is found in association with pigs. People who raise pigs or use raw pig manure as fertilizer may be at risk for infection with *Ascaris suum*. Contact with pigs should be investigated as a potential cause upon diagnosis of ascariasis.



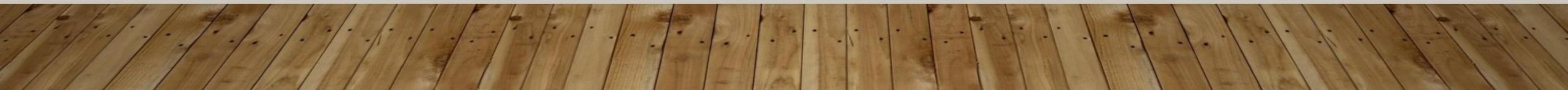
Ascaris parasites live in the lumen of the small intestine and Ascaris eggs are passed in the feces (poop) of infected people. If an infected person defecates outside (for example, near bushes, in a garden, or in a field), or if the feces of an infected person are used as fertilizer, eggs are deposited on soil. The eggs can then mature into a form of the parasite that is infective. Ascariasis is caused by ingesting eggs. This can happen when hands or fingers that have contaminated dirt on them are put in the mouth, or by consuming vegetables or fruits that have not been carefully cooked, washed, or peeled.



People infected with ascariasis often show no symptoms. If symptoms do occur they can be light and include abdominal discomfort. Heavy worm infections can cause intestinal blockage and impair growth in children. Migrating adult worms may cause symptomatic occlusion of the biliary tract (biliary ascariasis) or oral expulsion. Other symptoms such as cough are due to migration of the worms through the body. During the lung phase of larval migration, pulmonary symptoms can occur (cough, dyspnea [shortness of breath], hemoptysis [coughing up blood], eosinophilic pneumonitis – Loeffler's syndrome).



Humans can also be infected by pig roundworm (*Ascaris suum*). *Ascaris lumbricoides* (human roundworm) and *Ascaris suum* (pig roundworm) are indistinguishable. It is unknown how many people worldwide are infected with *Ascaris suum*. Ascariasis caused by *Ascaris suum* is found in association with pigs. People who raise pigs or use raw pig manure as fertilizer may be at risk for infection with *Ascaris suum*. Many infected pigs do not have any symptoms at all and people may not be aware that their pigs are infected. Contact with pigs should be investigated as a potential cause of ascariasis upon diagnosis in humans.



The standard method for diagnosing ascariasis is by identifying *Ascaris* eggs in a stool sample using a microscope. Because eggs may be difficult to find in light infections, a concentration procedure is recommended.

Ascariasis is treatable with medication prescribed by your health care provider.



Thank You