



PINWORM

WHAT IS PINWORM?

A pinworm (“threadworm”) is a small, thin, white roundworm (nematode) called *Enterobius vermicularis* that sometimes lives in the colon and rectum of humans. Pinworms are about the length of a staple. While an infected person sleeps, female pinworms leave the intestine through the anus and deposit their eggs on the perianal (surrounding) skin.

WHO CAN GET PINWORM?

Pinworm infestation occurs worldwide and affects persons of all ages and socioeconomic levels. It is the most common worm infestation in the United States. Pinworm infestation occurs most commonly among: school-aged and preschool-aged children, institutionalized persons, and household members and caretakers of persons with pinworm infestation.

Pinworm infestation often occurs in more than one person in household and institutional settings. Child care centers often are the site of cases of pinworm infestation.

WHAT ARE SYMPTOMS OF PINWORM?

Pinworm infestation (called enterobiasis or oxyuriasis) causes itching around the anus which can lead to difficulty sleeping and restlessness. Symptoms are caused by the female pinworm laying her eggs. Symptoms of pinworm infestation usually are mild and some infected people have no symptoms.

HOW IS PINWORM SPREAD?

Pinworm infestation is spread by the fecal-oral route, that is by the transfer of infective pinworm eggs from the anus to someone’s mouth, either directly by hand or indirectly through contaminated clothing, bedding, food, or other articles.

Pinworm eggs become infective within a few hours after being deposited on the skin around the anus and can survive for 2 to 3 weeks on clothing, bedding, or other objects. People become infected, usually unknowingly, by swallowing (ingesting) pinworm eggs that are on fingers, under fingernails, or on clothing, bedding, and other contaminated objects and surfaces. Because of their small size, pinworm eggs sometimes can become airborne and ingested while breathing.

HOW IS PINWORM DIAGNOSED?

Itching during the night in a child’s perianal area strongly suggests pinworm infestation. Diagnosis is made by identifying the worm or its eggs. Worms can sometimes be seen on the skin near the anus or on underclothing, pajamas, or sheets about 2 to 3 hours after falling asleep.

Pinworm eggs can be collected and examined using the “tape test” as soon as the person wakes up. This “test” is done by firmly pressing the adhesive side of clear, transparent cellophane tape to the skin around the anus. The eggs stick to the tape and the tape can be placed on a slide and looked at under a microscope. Because washing/bathing or having a bowel movement can remove eggs from the skin, this test should be done as soon as the person wakes up in the morning before they wash, bathe, go to the toilet, or get dressed. The “tape test” should be done on three consecutive mornings to increase the chance of finding pinworm eggs.

Because itching and scratching of the anal area is common in pinworm infestation, samples taken from under the fingernails may also contain eggs. Pinworm eggs rarely are found in routine stool or urine samples.

HOW IS PINWORM TREATED?

Pinworm can be treated with either prescription or over-the-counter medications. A health care provider should be consulted before treating a suspected case of pinworm infestation.

Treatment involves two doses of medication with the second dose being given 2 weeks after the first dose. All household contacts and caretakers of the infected person should be treated at the same time. Reinfection can occur easily so strict observance of good hand hygiene is essential (e.g. proper handwashing, maintaining clean short fingernails, avoiding nail biting, avoiding scratching the perianal area).

Daily morning bathing and daily changing of underwear helps remove a large proportion of eggs. Showering may be preferred to avoid possible contamination of bath water. Careful handling and frequent changing of underclothing, night clothes, towels, and bedding can help reduce infestation, reintroduction and environmental contamination with pinworm eggs. These items should be laundered in hot water, especially after each treatment of the affected person and after each usage of washcloths until infestation is cleared.

DID MY PETS GIVE ME PINWORM/ CAN I GIVE IT TO MY PETS?

No. Humans are considered to be the only hosts of *E. vermicularis* which is also known as the human pinworm.

CAN I GET IT FROM SWIMMING POOLS OR CO-BATHING?

Pinworm infestations are rarely spread through the use of swimming pools. Pinworm infestations occur when a person swallows pinworm eggs picked up from contaminated surfaces or fingers. Although chlorine levels found in pools are not high enough to kill pinworm eggs, the presence of a small number of pinworm eggs in thousands of gallons of water (the amount typically found in pools) makes the chance of exposure unlikely.

During this treatment time and two weeks after final treatment, it is a good idea to avoid co-bathing and the reuse or sharing of washcloths. Showering may be preferred to avoid possible contamination of bath water. Careful handling and frequent changing of underclothing, night clothes, towels, and bedding can help reduce exposure, reinfection, and environmental contamination with pinworm eggs. These items should be laundered in hot water, especially after each treatment of the affected person and after each usage of washcloths until pinworms have been cleared.



WHEN SHOULD I STAY HOME FROM WORK, SCHOOL, OR CHILDCARE?

YOU SHOULD NOT ATTEND WORK, SCHOOL, OR CHILDCARE IF ONE OF THE FOLLOWING APPLIES:

- You have been diagnosed with pinworm and have not been treated.