MAYO CLINIC LABORATORIES

Test Definition: PINW

Pinworm Exam, Perianal

Overview

Useful For

Detection of the eggs of *Enterobius vermicularis* on the skin of the perianal folds

Special Instructions

- Pinworm Collection Instructions

Method Name

Microscopic

NY State Available

Yes

Specimen

Specimen Type

Varies

Specimen Required

Specimen Type: Perianal

Container/Tube:

Preferred: ParaClick Pinworm Paddle

Acceptable: SWUBE disposable paddle or similar method of collection

Specimen Volume: Entire specimen

Collection Instructions: See Pinworm Collection Instructions

Forms

If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:

-Microbiology Test Request (T244)

-Gastroenterology and Hepatology Test Request (T728)

Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Ambient (preferred)	10 days	
	Refrigerated	10 days	

Clinical & Interpretive

Clinical Information

Enterobius vermicularis, also known as pinworm, is a common intestinal nematode with a worldwide distribution. In the United States, pinworm infection is the most common helminth infection of humans and is most frequently found in young school-age children. Transmission is by the fecal-oral route. Individuals become infected when inadvertently ingesting pinworm eggs from the environment (eg, contaminated objects and surfaces). The eggs then hatch in the small intestine, and the adults reside in the lumen of the cecum. Gravid adult females migrate to the perianal area during the night and deposit large numbers of eggs in the perianal area, using a glue-like substance to promote adherence anal skin folds.

Most infections are asymptomatic. When present, the most common symptom is nocturnal pruritus ani (nightly anal itching) from the host inflammatory reaction to the eggs and associated adhesion. With itching, the eggs contaminate the fingers of the host and then spread into the environment to infect others. Autoinoculation is also common. Heavy infections may be associated with irritability, difficulty sleeping, abdominal pain, nausea, and vomiting. Ectopic migration of the adult female worm may also lead to vulvovaginitis, salpingo-oophoritis, peritonitis, and, possibly, appendicitis.

Pinworm infection is best diagnosed through identification of eggs, and occasionally adults, obtained from the perianal skin folds. This is classically accomplished via collection with clear adhesive cellophane tape, but commercially available perianal collection devices facilitate this collection and provide a safer and more reliable means of collection and examination. To collect eggs with the pinworm paddle, the adhesive side of the paddle is pressed firmly and repeatedly to the perianal region and then returned to its plastic tube for safe transportation to the laboratory. The specimen should be collected first thing in the morning, before the patient bathes or defecates. When the paddle arrives in the laboratory, it is placed on a glass slide and examined using a light microscope for eggs and adult worms. Care must be taken when collecting and examining the specimen, as pinworm eggs are infectious within 4 to 6 hours of being laid. Repeat testing may be recommended to increase the sensitivity of detection in cases of light infection.

Several agents are effective in treating pinworm infection (pyrantel pamoate, mebendazole), and good personal hygiene will prevent transmission of the eggs.

Reference Values

Negative (reported as positive or negative)

Interpretation

Positive results are provided indicating the presence of eggs of *Enterobius vermicularis*.

Cautions

Although adult pinworms and eggs can occasionally be observed in stool specimens, examination of feces is not the optimum method for detecting those parasites.

Clinical Reference

1. Global Health, Division of Parasitic Diseases: Parasites-Enterobiasis (also known as Pinworm Infection). Centers for Disease Control and Prevention; Updated September 9, 2024. Accessed April 23, 2026. Available at www.cdc.gov/pinworm/about/?CDC_AAref_Va

2. Mayo Clinic: Pinworm infection. Mayo Clinic; Updated December 16, 2025. Accessed April 23, 2026. Available at www.mayoclinic.org/diseases-conditions/pinworm/symptoms-causes/syc-20376382

Performance

Method Description
The adhesive paddle is firmly pressed against right and left perianal folds first thing in the morning. The paddle is examined microscopically for the presence of pinworms and eggs.(Garcia L, ed. Diagnostic Medical Parasitology. 6th ed. ASM Press; 2016)

PDF Report
No

Day(s) Performed
Monday through Friday

Report Available
1 to 4 days

Specimen Retention Time
7 days

Performing Laboratory Location
Mayo Clinic Laboratories - Rochester Main Campus

Fees & Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification
This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information
87172

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value

PINW	Pinworm Exam, Perianal	675-9

Result ID	Test Result Name	Result LOINC® Value
PINW	Pinworm Exam, Perianal	675-9