TEST

Stool ova and parasites exam

A stool ova and parasites exam checks a stool sample for intestinal parasites and their eggs or larvae.

WHAT IT MEASURES
Parasite eggs, larvae, and organisms seen in stool

SAMPLE
Stool

FASTING NEEDED?
No

HOW LONG IT TAKES
About 5-10 minutes per sample

RESULTS IN
Usually 1-3 days; varies by laboratory

USED FOR
Diagnosing intestinal parasite infections

MAIN LIMITATION
Parasites may be missed because shedding is intermittent

Overview

A stool ova and parasites exam looks for intestinal parasites in a sample of your stool. "Ova" means eggs. The laboratory may also look for larvae, which are immature worms, and single-celled parasites called protozoa.

The sample is usually examined under a microscope. It may be concentrated or treated with special stains to make parasites easier to see. Exactly which methods are included differs between laboratories.

This test can identify a wide range of parasites, but it is not the best test for every parasite. Antigen tests, molecular tests such as polymerase chain reaction (PCR), blood tests, or other collection methods may be more suitable in some situations.

Why the test is ordered

The exam may help find the cause of diarrhea or other digestive symptoms when an intestinal

parasite is possible. Your healthcare professional may consider it based on your symptoms, exposures, travel, and overall health.

Reasons for ordering the test may include:

The test is not routinely useful for every brief episode of diarrhea. Many short illnesses are caused by viruses or bacteria rather than parasites.

- Diarrhea that continues longer than expected
- Recent travel or residence where particular parasites are common
- Drinking untreated water or possible exposure to contaminated food
- Contact with someone who has a confirmed parasitic infection
- A weakened immune system with ongoing digestive symptoms
- Unexplained abdominal discomfort, bloating, or weight loss alongside relevant exposure

Who should have the test

You may be offered this test if your symptoms and exposure history suggest an intestinal parasite. It may be especially relevant after international travel, untreated water exposure, or persistent diarrhea.

People with weakened immune systems may need broader testing because some parasites can cause more serious or prolonged illness in this setting. The laboratory may need to use special stains or molecular tests for organisms such as Cryptosporidium , Cyclospora , or Cystoisospora .

A standard stool ova and parasites exam may not be the right first test if one particular infection is suspected. For example, a tape test is generally better for pinworm, while some infections may require an antigen test, PCR, blood test, or specialized stool method.

How to prepare

You do not need to fast. You can usually eat and drink normally, including coffee, unless you are having another test with separate instructions.

Tell the healthcare professional who ordered the test about medicines and supplements you take. Antibiotics like amoxicillin or doxycycline , antiparasitic medicines, bismuth products, mineral oil, and some antidiarrheal medicines may affect what can be found. Recent contrast material containing barium, used for certain imaging tests, can also make microscopy difficult.

Do not stop prescribed medicine unless the healthcare professional responsible for it tells you to. The laboratory may instead adjust the timing of collection or choose another test.

You will usually receive a clean collection container and possibly one or more vials containing preservative fluid. Read the instructions before collecting the sample because handling and storage requirements differ.

What happens during the test

You collect stool into a clean, dry collection device. Avoid letting it touch toilet water, urine, cleaning products, or toilet paper. These can dilute or contaminate the sample.

Use the scoop supplied with the kit to transfer stool into the container. If the kit has a vial with a fill line, do not add more than instructed. Close it firmly and label it as directed.

A watery or loose sample should be delivered promptly because fragile forms of some parasites can break down. A preservative may protect the sample if immediate delivery is not possible. Follow the kit's storage instructions rather than refrigerating or freezing it automatically.

You may be asked for two or three samples collected on separate days. Parasites and their eggs may not appear in every bowel movement.

Understanding your results

Results are generally reported as either no parasites seen or as the name of an organism found. This test does not have a universal numerical reference range.

A positive result means the laboratory identified a parasite, egg, or larva. The meaning depends on the organism and whether it fits your symptoms. Some protozoa can live in the bowel without causing illness, so finding one does not always explain why you feel unwell.

Some parasites look very similar under a microscope. For example, microscopy may not reliably separate disease-causing Entamoeba histolytica from closely related species that usually do not cause illness. An antigen or molecular test may be needed for confirmation.

A negative result means no parasite was found in that sample. It does not completely rule out infection. The organism may not have been shed that day, may have broken down before examination, or may require a test not included in the standard exam.

Interpretation varies by laboratory, age, sex, pregnancy status, medicines, immune health, travel history, symptoms, and clinical context.

What affects the results

Several factors can change the result even when the laboratory performs the exam correctly:

Travel destination and exposure history do not alter the sample itself, but they help the laboratory and healthcare professional decide which organisms and additional tests to consider.

- Intermittent shedding: Parasites or eggs may be present in one bowel movement but absent from the next.
- Collection timing: Fragile protozoa can lose their recognizable shape if an untreated sample sits too long.
- Too little stool: A very small sample may not contain enough material to find an organism.
- Contamination: Toilet water, urine, soil, or cleaning chemicals can damage or obscure the sample.
- Incorrect preservative use: Overfilling a vial can leave too little preservative to protect the stool.
- Recent treatment: Antibiotics, antiparasitic medicines, or bismuth may reduce or obscure organisms.
- Barium or oily products: Recent barium contrast, mineral oil, or oily laxatives can interfere with the view under a microscope.
- Laboratory method: Not every laboratory uses the same concentration methods, stains, or parasite-specific tests.

Accuracy and limitations

The chance of finding a parasite depends on the organism, the number of samples, how quickly they are preserved, and the experience of the person examining them. Because shedding can be intermittent, examining more than one properly collected sample may find infections missed by a single sample.

The test can say no parasite was seen when one is present. This is more likely with low numbers of organisms, delayed delivery, recent treatment, or parasites that require special testing.

A result can also be misleading when harmless organisms are found but do not explain the symptoms. Less commonly, food material, pollen, yeast, or other debris can resemble parasite structures. Experienced laboratory staff use shape, size, stains, and internal features to reduce

this risk.

PCR and antigen tests may be better at detecting certain common protozoa and can help distinguish similar-looking species. However, a traditional microscopic exam can detect a broader selection of unexpected parasites when performed carefully. No single method finds every intestinal parasite.

Risks and complications

Collecting stool does not cause physical injury. The main concern is contact with germs in the sample, so close the container securely and wash your hands well with soap and water afterward.

Preservative liquid should not touch your skin, eyes, or mouth. Follow the kit instructions if a spill occurs.

What happens next

If a parasite is found, the next step depends on the exact organism, your symptoms, and your health. Some findings may need treatment, while organisms considered harmless may not.

A negative result may end the investigation if your symptoms are improving and the likelihood of a parasite is low. Routine follow-up may include another stool sample or a more targeted antigen, PCR, blood, or imaging test if symptoms continue.

Contact a healthcare professional promptly if you develop blood in the stool, persistent vomiting, worsening abdominal pain, fever with significant illness, or signs of dehydration such as very little urine or difficulty keeping fluids down.

Seek emergency care for fainting, confusion, severe weakness, or other signs of severe dehydration. These symptoms require assessment regardless of whether stool test results are available.

Common questions

Can I drink coffee before the test?

Yes. Fasting is not needed, so coffee does not usually affect the exam. Follow separate instructions if other tests are being done.

Does the time of day matter?

Usually not. Collect the sample when you have a bowel movement, but deliver an untreated watery sample as quickly as instructed.

Can I exercise beforehand?

Yes. Exercise does not usually affect whether parasites can be seen in stool.

Can I collect the sample directly from the toilet?

Do not collect it from toilet water. Use the collection device supplied by the laboratory, a clean disposable container, or another method described in your kit.

Why do I need more than one sample?

Parasites may not be released in every bowel movement. Samples collected on separate days can improve the chance of finding them.

Can I take my usual medicines?

Do not stop prescribed medicines on your own. Tell the healthcare professional or laboratory about antibiotics, antiparasitic medicines, bismuth, mineral oil, antidiarrheal medicines, and recent barium contrast because these may affect collection timing or interpretation.

Sources

- Centers for Disease Control and Prevention. DPDx: Stool Specimens-Specimen Collection .
- Centers for Disease Control and Prevention. DPDx: Stool Specimens-Microscopic Examination .
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- Garcia LS, Arrowood M, Kokoskin E, et al. Practical Guidance for Clinical Microbiology Laboratories: Laboratory Diagnosis of Parasites from the Gastrointestinal Tract . Clinical Microbiology Reviews . 2018;31(1):e00025-17.