

Infectious **diarrhea testing**

Gastric distress? Take action
and consider testing for infection

Lack of a specific diagnosis can hinder appropriate treatment—**get the insight you need**

When a patient presents with diarrhea, determine quickly whether it's caused by infection from bacteria, virus, or a parasite.

A growing problem that may require testing

- In the U.S.: 200-400 million episodes of diarrheal illness annually, nearly 2 million hospitalizations¹
- For some pathogens, an organism-specific diagnosis is required¹
- Inflammatory diarrhea may be more severe and require more than simple hydration for the patient
- Early diagnosis of an acute episode of diarrhea can lead to alleviation of symptoms and prevent secondary transmission

Viral or bacterial infection?³

Viral infections are the most common cause of acute diarrhea.

- Vomiting is more suggestive of viral illness or illness caused by ingestion of a preformed bacterial toxin

Bacterial infections are more often associated with travel, comorbidities, and foodborne illness.

- Symptoms may include fever, tenesmus (urgency to evacuate the bowels), and grossly bloody stool



Testing from Quest Diagnostics helps you know the cause and what to treat.

IDSA suggested tests for diagnosing cause(s) of infectious diarrhea¹



Community-acquired or traveler's diarrhea
(especially if accompanied by significant fever or blood in the stool)

Salmonella

Shigella

Campylobacter

E coli O157:H7

(if blood in stool, also test for Shiga toxin and refer isolates if toxin positive)

C difficile toxins A/B + GDH² or the *C diff* Toxin PCR*

(if antibiotics or chemotherapy taken in recent weeks)



Nosocomial diarrhea
(onset >3 days in hospital)

C difficile

Toxin A/B + GDH² or the *C diff* Toxin PCR*

(in suspect nosocomial outbreaks, patients with bloody stools, and infants, also add tests for community-acquired or traveler's diarrhea)



Persistent diarrhea
>7 days (especially if immunocompromised)

Consider parasites:

Cryptosporidium

Cyclospora

Isospora belli

(e.g., O&P exams, antigen tests)

Consider performing inflammatory screen (qualitative fecal lactoferrin)

If HIV-positive, consider adding:⁺

Microsporidia (gram-chromotype)

M avium complex

+ consider also tests for community-acquired or traveler's diarrhea

*Notes for *C difficile*:

- Toxin testing is most important clinically but is hampered by lack of sensitivity. To overcome, consider a 2-step method that uses EIA detection of glutamate dehydrogenase (GDH).
- Polymerase chain reaction (PCR) testing appears to be rapid, sensitive, and specific.

Other IDSA recommendations for the diagnosis of diarrheal illnesses also include:¹

- Fecal lactoferrin testing can help document inflammation
- Seafood or seacoast exposure: culture for *Vibrio* species
- Persistent abdominal pain and fever: culture for *Yersinia enterocolitica*
- Right-side abdominal pain without high fever but with diarrhea: culture for Shiga toxin-producing *Escherichia coli* (STEC) O157
- There are a variety of tests for parasitic causes of diarrhea, including fluorescence, EIA, acid-fast stains, and other special stains

Other tests to consider:

H pylori (Stool Antigen, Urea Breath); Qualitative Fecal Lactoferrin

Get the infectious disease tests you need to accurately diagnose infectious diarrhea and other GI distress, so you can treat and manage your patients.

Bacteria, virus, or parasite?

We'll help you determine the cause

Quest Diagnostics infectious diarrhea testing options can help you arrive at a differential diagnosis efficiently, so effective treatment can begin sooner.

| Quest | Quest Test Code* | CPT Code(s)** |
|--|------------------|------------------------|
| Bacteria | | |
| Campylobacter, Culture | 4475 | 87046 |
| Campylobacter Antigen | 16302 | 87449 |
| Clostridium difficile Toxin B, Qualitative Real-Time PCR | 16377 | 87493 |
| Clostridium difficile Toxin/GDH with Reflex to PCR | 91664 | 87449, 87324, 87493 |
| Escherichia coli O157, Culture and Serologic Confirmation | 8631 | 87046 |
| Fecal Lactoferrin, Qualitative, Stool | 10156 | 83630 |
| Helicobacter pylori Antigen, EIA, Stool | 34838 | 87338 |
| Helicobacter pylori, Urea Breath Test | 14839 | 83013 |
| Helicobacter pylori, Urea Breath Test, Pediatric | 92491 | 83013 |
| Salmonella/Shigella/Campylobacter, Culture and Shiga Toxin with Reflex to E. coli, Culture | 10108 | 87045, 87046, 87427 |
| Salmonella and Shigella, Culture | 10019 | 87045 |
| Shiga Toxins, EIA with Reflex to E. coli O157, Culture | 30264 | 87427, 87046 |
| Vibrio, Culture | 4489 | 87046 |
| Yersinia, Culture | 4487 | 87046 |
| Viruses | | |
| Adenovirus, Qualitative Real-Time PCR | 16046 | 87798 |
| Norovirus, EIA, Stool | 15544 | 87449 |
| Norovirus RNA, Qualitative Real-Time PCR | 19098 | 87798 |
| Rotavirus Antigen Detection | 706 | 87425 |
| Parasites | | |
| Cryptosporidium Antigen | 90389 | 87328 |
| Cryptosporidium Antigen DFA | 37213 | 87015, 87272 |
| Cyclospora and Isospora Examination | 10018 | 87015, 87207 |
| Entamoeba histolytica Antigen, EIA | 34964 | 87337 |
| Giardia Antigen, EIA, Stool | 8625 | 87329 |
| Giardia Antigen with Reflex to Ova and Parasites | 17297 | 87329, 87177, 87209 |
| Giardia and Cryptosporidium Antigen Panel | 39480 | 87015, 87272, 87329 |
| Ova and Parasites, Stool, Concentrate and Permanent Smear | 681 | 87177, 87209 |
| Ova and Parasites, Stool, Concentrate and Permanent Smear, 2 Specimens | 6653 | 87177 (x2), 87209 (x2) |
| Ova and Parasites, Stool, Concentrate and Permanent Smear, 3 Specimens | 6652 | 87177 (x3), 87209 (x3) |

*Test codes may vary by location. Please contact your local laboratory or go to QuestDiagnostics.com/TestCenter for more information.

**The CPT codes provided are based on American Medical Association guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed. Reflex tests will be performed at an additional charge.



For more information, speak with your Quest Diagnostics sales representative or visit QuestDiagnostics.com

References

- Guerrant RL, Van Gilder T, Steiner TS, et al. Practice guidelines for the management of infectious diarrhea (IDSA guidelines). *Clin Infect Dis*. 2001;32:331-350.
- Clinical practice guidelines for *Clostridium difficile* infection in adults: 2010 update by the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA). *Infect Control Hosp Epidemiol*. 2010;31(5):431-455.
- Barr W, Smith A. Acute diarrhea in adults. *Am Fam Physician*. 2014;89(3):180-189.

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