Confidently detect gastrointestinal infections with QIAstat-Dx

Quickly and accurately identify the causative pathogens of gastroenteritis

QIAGEN

Sample to Insight

> "In about one hour we can introduce the treatment. It will change our habits in prescriptions, saving money, saving on antibiotics and treatment side effects."
>
> **Célestin Alexis Agbessi, MD, PhD, Emergency Department, Bichat-Claude Bernard Hospital, Paris, France**

The global burden of gastrointestinal (GI) infections

GI infections contribute significantly to the number of infectious disease illnesses worldwide, especially among young children. While the causative pathogens may differ due to specific risk factors between regions, the greatest impact is still felt in low-income countries.

GI infections can result in diarrheal disease. There were **6.6 billion** incident cases of diarrheal disease globally in 2019 (1).

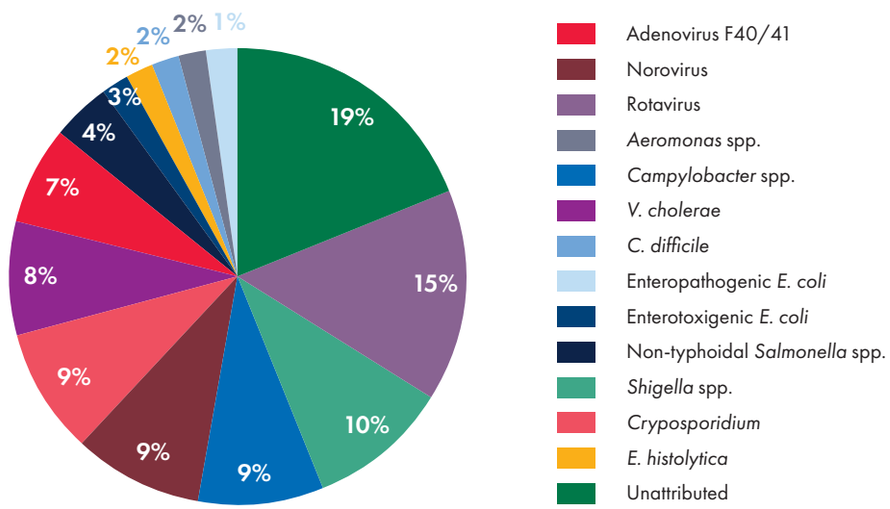
Some GI infections can be life-threatening, especially in immunocompromised or vulnerable patients.

In 2019, **1.5 million** people died from diarrheal disease. **40%** of these individuals were 70+ years old, while **33%** were under 5 years (2).

Similar symptoms, multiple pathogens

Symptoms of GI infection are typically nonspecific and can be overlapping. Diarrhea, nausea, vomiting and abdominal pain could be signals to a long list of causative pathogens. Bacteria, viruses and parasites are all possibilities. Correctly diagnosing patients can help you deliver timely and efficient care.

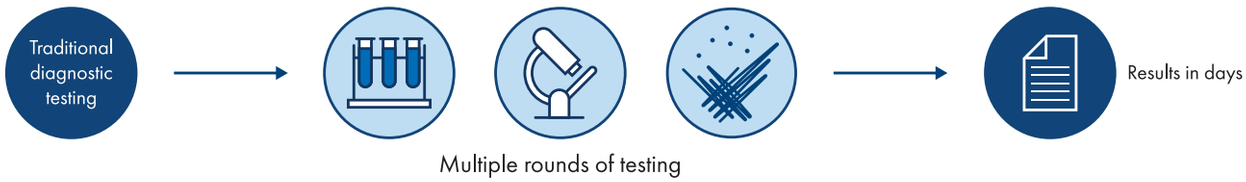
Etiological breakdown of pathogens causing global diarrheal disease deaths in 2019 (3)*



* Based on estimated case numbers. Includes deaths from respiratory infections caused by pathogens linked to both gastrointestinal and respiratory infections (eg., adenovirus).

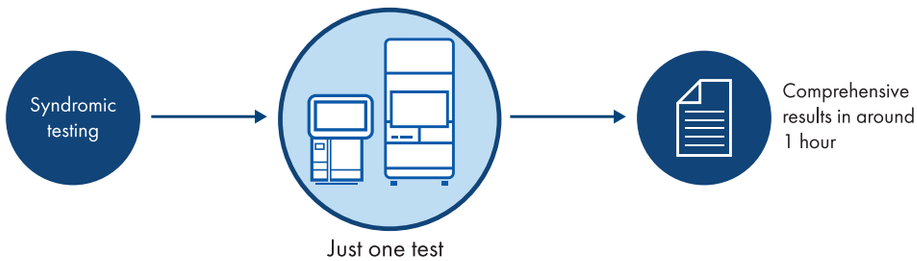
Traditional lab methods are slow and cumbersome

Diagnosing GI infections using traditional methods often involves many time-consuming tests that require specific expertise, including stool culture and microscopy. As a result, the time to diagnosis may be 1–2 days or more and the diagnostic yield is often too low.



Deliver accurate results faster with QIAstat-Dx

In contrast, a multiplex syndromic panel test provides results for several different bacterial, viral and parasitic pathogens in around an hour. This faster, more sensitive approach can significantly improve diagnostic yield (4–6), improve patient management (6) and support antimicrobial stewardship efforts (5*, 7).



- Higher sensitivity and specificity compared to conventional stool culture (4–6)
- Provides a faster diagnosis (8), resulting in better clinical outcomes and infection prevention (6)
- Minimizes misdiagnoses due to overlapping clinical symptoms (9), detecting co-infections better than standard lab testing (5, 10)
- Reduces extra diagnostic testing by 2.4% and enables earlier patient discharge (11), decreasing hospital costs (10, 11)
- Enables evidence-based use of antibiotics (5*, 7)

Unless otherwise stated, data cited pertains to the use of a device from another manufacturer.
* Study performed using the QIAstat-Dx Gastrointestinal Panel (Cat. No. 691411).

QIAstat-Dx Gastrointestinal Panel 2

For quick and accurate detection of gastrointestinal infections

Forget slow traditional methods. With QIAstat-Dx, you can detect and differentiate 22 bacterial, viral and parasitic targets in about an hour.

This updated version of our panel includes targets for Shiga-like toxin-producing *E.coli* (STEC) stx1 and stx2 †. This information can be used to determine the risk of certain patient populations to hemolytic uremic syndrome and can help you better monitor your patients.

- Get comprehensive results fast
  - Support timely clinical decision-making and rapid therapeutic intervention
- Set up your tests quickly and easily
  - All-in-one assay cartridges require less than one minute hands-on time
  - Just 200 µL liquid transport medium with no precision pipetting required
- Receive supportive information
  - Easily access Ct values and amplification curves for all detected pathogens

Bacterial

- *Campylobacter* (*C. jejuni, C. upsaliensis, C. coli*)
- *Clostridium difficile* (toxin A/B)
- Enteroaggregative *E. coli* (EAEC)
- Enteroinvasive *E. coli* (EIEC)/*Shigella*
- Enteropathogenic *E. coli* (EPEC)
- Enterotoxigenic *E. coli* (ETEC) *lt/st*
- *Plesiomonas shigelloides*
- *Salmonella* spp.
- Shiga-like toxin-producing *E. coli* (STEC) *stx1/stx2* (including specific identification of *E. coli* O157 serogroup within STEC)
- *Vibrio vulnificus*
- *Vibrio parahaemolyticus*
- *Vibrio cholerae*
- *Yersinia enterocolitica*

Viral

- Adenovirus F40/41
- Astrovirus
- Norovirus (GI, GII)
- Rotavirus A
- Sapovirus (GI, GII, GIV, GV)

Parasitic

- Parasitic
- Cryptosporidium
- Cyclospora cayetanensis
- Entamoeba histolytica
- Giardia lamblia

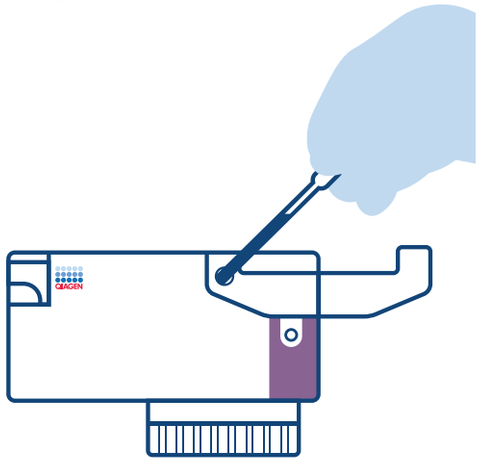
- *Cryptosporidium*
- *Cyclospora cayetanensis*
- *Entamoeba histolytica*
- *Giardia lamblia*

† The stx1 and stx2 toxin genes of STEC are reported separately by the QIAstat-Dx Gastrointestinal Panel 2.

Redefining ease of use

Save time and reduce the risk of contamination with our intuitive QIAstat-Dx cartridges. Running a test requires minimal training and there's no precision pipetting involved.

- Less than one-minute hands-on time for fast setup
- Minimal handling and enclosed cartridge design minimizes chances of contamination
- Room temperature stable for low-cost cartridge storage



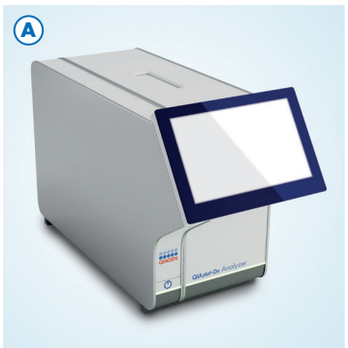
The QIAstat-Dx Gastrointestinal Panel 2 runs on both our modular QIAstat-Dx Analyzer and our higher-throughput QIAstat-Dx Rise. Whether your lab wants to perform just a couple of QIAstat-Dx Gastrointestinal Panel 2 tests per day – or dozens – you can be confident you can stay in control of your testing.

Ⓐ QIAstat-Dx Analyzer

- Up to 4 samples at once
- Up to 84 samples / day ‡

Ⓑ QIAstat-Dx Rise

- Up to 16 samples at once, with random access capabilities
- Up to 160 samples / day §



Expanding diagnostic capabilities

- Real-time PCR for comprehensive, accurate results
- Ct values provide insights on coinfection and offer additional information to clinicians
- Amplification curves may help monitor sample quality

Ordering Information – Instruments

Product	Contents	Cat. no.
QIAstat-Dx Analyzer 1.0	Instrument consists of one each of the Operational Module and Analytical Module.	9002824
QIAstat-Dx Analytical Module	One each of module containing hardware and software for sample testing and analysis.	9002814
QIAstat-Dx Operational Module	One each of module to enable interaction with the Analyzer.	9002813
QIAstat-Dx Rise Base	One each of system to enable interaction with up to eight Analyzer Modules, multi-test front drawer to accept up to eighteen assay cartridges and waste drawer for automatic removal of spent assay cartridges.	9003163

Ordering Information – Assay

Product	Contents	Cat. no.
QIAstat-Dx Gastrointestinal Panel 2	Six individually packaged cartridges containing all reagents needed for sample preparation and multiplex RT-real time PCR plus internal control, including six transfer pipettes	691412

References:

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4. Yalamanchili, H. et al. (2018) Gastroenterol Hepatol, **14**(11):646–652.
5. Castany-Feixas, M. et al. (2021) Eur. J. Clin. Microbiol. Infect. Dis. **40**(10), 2153–2160.
6. Macfarlane-Smith, L. et al. (2018) Gastrointes. Infect. **34**(1), 19–2.
7. Axelrad, J. E. et al. (2019) J. Clin. Microbiol. **57**(3), e01775-18.
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10. Goldenberg, SD. et al. (2015) J Infect. **70**, 504–11.
11. Beal, S. G. et al. (2018) J. Clin. Microbiol. **56**(1), e01457-17.

Confidently detect gastrointestinal infections with QIAstat-Dx –
learn more at **www.qiagen.com/qiastat-dx**

‡ Capacity when the QIAstat-Dx Analyzer is equipped with four Analytical Modules.
§ Capacity when the QIAstat-Dx Rise is equipped with eight Analytical Modules.
QIAstat-Dx Analyzer, QIAstat-Dx Rise and QIAstat-Dx Gastrointestinal Panel 2 are intended for in vitro diagnostic use.

Ordering	**www.qiagen.com/shop**
Technical Support	**www.support.qiagen.com**
Website	**www.qiagen.com**