BD MAX™ enteric solutions

"We chose the BD MAX™ Enteric Bacterial Panel on the BD MAX™ System because of its syndromic and operational advantages for regional stool pathogen detection."[6]

Simplify gastroenteritis testing with enhanced accuracy and sensitivity[1-4]

The BD MAX™ enteric solutions offer targeted syndromic panels that provide timely and accurate detection of the most common bacterial, viral and parasitic pathogens responsible for infectious diarrhoea.[3-5]

BD

Are you optimising your gastroenteritis testing?

1.7 billion cases globally
of childhood diarrhoea disease[7]

Diarrhoea disease is the
2nd leading cause of death
in children under 5 years of age[7]

Globally, norovirus resulted in a total of
$4.2 billion
in direct health system costs[8]

Gastrointestinal infections challenge the healthcare system, creating a major burden for the hospital, both operationally and financially.

Traditional diagnostic methods such as culture, microscopy and immunoassays can take up to 3-5 days to identify the causative agents of infection, potentially impact laboratory workflow, budget, clinical decision-making and patient outcomes:

- Delayed results[3]
- Difficulty growing certain organisms on culture media[9]
- False negative results due to subjective interpretation of microscopy and poor sensitivity of immunoassays[10]

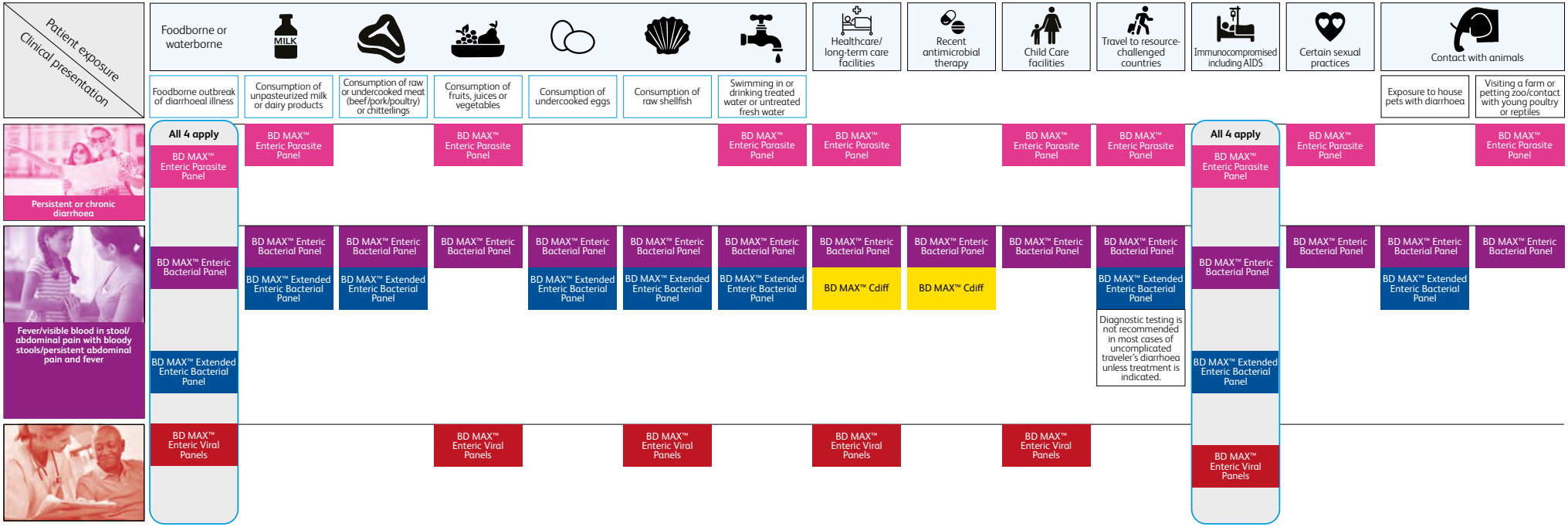
This could lead to less effective clinical decision-making, inappropriate antibiotic treatment, unnecessary patient isolation and extended hospital stays.[3]

Transitioning from culture to molecular testing can significantly improve the sensitivity, specificity, time to results and total cost of your laboratory's gastroenteritis testing.[2,11]

The BD MAX™ enteric solutions allow for testing of a specific class of enteric pathogens following IDSA guideline-based patient exposure, risk factors and clinical presentations

IDSA Guidelines reinforce the importance of determining a specific diagnosis which can benefit a patient with infectious diarrhoea by:[12]

- Directing appropriate therapy
- Allowing the judicious use of antimicrobial agents
- Improving patient satisfaction



The BD MAX™ enteric solutions allow for the rapid detection of the most common pathogens responsible of infectious diarrhoea

- Provide results for up to 24 specimens in 3 hours*
- Decrease hands-on time for laboratory technicians versus traditional methods[2]
- Implementation of timely and accurate detection of organisms can improve patient management and antimicrobial stewardship[3]

BD MAX™ Enteric Bacterial Panel

Among reported outbreaks of bacterial diarrhoea, four of the major pathogens isolated are ***Campylobacter* spp.**, ***Salmonella* spp.**, ***Shigella* spp.**, and **Shiga toxin** producing ***E. coli.*** Of these, non-typhoidal *Salmonella* species are the leading cause of **hospitalisation** and death among **foodborne** bacteria.[5]

BD MAX™ Extended Enteric Bacterial Panel

Some pathogens are seasonally and regionally implicated in bacterial gastroenteritis. Therefore, an extended panel is also available which will include the above-mentioned bacterial targets plus ***Vibrio, Yersinia, enterotoxigenic E. coli*** and ***Plesiomonas.***
This test should be ordered with Enteric Bacterial Panel when additional food or waterborne bacteria are suspected. Alternatively, this panel may be ordered for every stool specimen if extended coverage is desired.[1]

BD MAX™ Enteric Parasite Panel

The most common parasites in developed countries are ***Giardia lamblia, Cryptosporidium spp.*** and ***Entamoeba histolytica.***[4]
Using microscopy, pathogenic *E. histolytica* cannot be differentiated from the non-pathogenic species *Entamoeba dispar* which is essential for treatment decisions and public health information.[10]

BD MAX™ Enteric Viral Panels

Globally, norovirus is estimated to be the most common cause of acute gastroenteritis. It is responsible for 685 million cases every year, 200 million of these cases are among children younger than 5 years old.[13]
For a nosocomial outbreak situation, we offer a targeted viral panel for both **norovirus and rotavirus** with extended coverage for **adenovirus, sapovirus** and **astrovirus**.

BD MAX™ Cdiff

Clostridioides difficile is recognised as the primary pathogen responsible for antibiotic-associated colitis and for 10%–20% of cases of nosocomial antibiotic-associated diarrhoea.[14]
These test results should be used in conjunction with clinical diagnosis.

Streamlined integration into existing workflow with the BD MAX™ System

The BD MAX™ System offers you a fully integrated, automated real-time PCR platform with a broad menu of molecular IVD and open-system tests.[15]

Snap

Assemble unitised reagent strips with ready-to-use reagents

Less than **1.5 minutes** hands-on time per sample[2,16]

Load

Load Sample Buffer Tubes, Racks, and PCR cartridges.

24 patient results in **2 to 3 hours,** on average*[2]

Go

Come back in an average of 2.5 hours for results.*

*Assay times may vary.

96 samples per **8 hour shift**[2]

Performance for gastroenteritis testing[1-3]

A single unpreserved soft to diarrhoea stool specimen can be used to test across BD MAX™ enteric solutions.

Catalogue number	Assay Name	Sample Type	Targets
442963	BD MAX™ Enteric Bacterial Panel	• Unpreserved soft to diarrhoea stool • Cary-Blair preserved stool	• *Salmonella spp.* • *Campylobacter spp.* • *Shigella spp.* (including enteroinvasive Escherichia coli [EIEC]) • Shiga toxin 1 (stx1) / Shiga toxin 2 genes (stx2) genes
443812	BD MAX™ Extended Enteric Bacterial Panel	• Unpreserved soft to diarrhoea stool • Cary-Blair preserved stool	• *Plesiomonas shigelloides* • *Vibrio spp.(V. vulnificus, V. parahaemolyticus, and V. cholerae)* • Enterotoxigenic *E. coli* (ETEC) • *Yersinia enterocolitica*
442960	BD MAX™ Enteric Parasite Panel	• Unpreserved soft to diarrhoea stool • 10% formalin fixed stool • FecalSwab™ preserved stool (Cary-Blair)	• *Giardia lamblia* • *Cryptosporidium (C. hominis and C. parvum)* • *Entamoeba histolytica*
443985	BD MAX™ Enteric Viral Panel	• Unpreserved soft to diarrhoea stool • Cary-Blair preserved stool	• Norovirus GI & GII • Rotavirus A • Adenovirus F40/41 • Sapovirus (genogroups I, II, IV, V) • Human Astrovirus (hAstro)
443987	BD MAX™ Enteric Viral Panel-NR	• Unpreserved soft to diarrhoea stool • Cary-Blair preserved stool	• Norovirus GI & GII • Rotavirus A
442555	BD MAX™ Cdiff	• Unpreserved soft to diarrhoea stool	• *Clostridioides difficile toxin B gene (tcdB)*

For more information about BD MAX™ Molecular Diagnostic System, please visit:

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CE The BD MAX™ System, BD MAX™ Enteric Bacterial & Extended Enteric Bacterial Panels, BD MAX™ Enteric Viral Panel, BD MAX™ Enteric Viral Panel-NR, BD MAX™ Enteric Parasite Panel and BD MAX™ Cdiff are in vitro diagnostic medical devices bearing a CE mark.

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