

Molecular Amplification for Detection of Stool Pathogens

To: Clients of UR Medicine Labs

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Compared to traditional culture, antigen detection and microscopy for laboratory diagnosis of infectious diarrhea, molecular amplification methods are generally more sensitive and provide quicker time-to-results. Indeed, culture and identification of bacterial pathogens from stool specimens requires 48-72 hours, whereas, results of testing by molecular amplification are available in <24 hours.

Starting October 5, we will implement the BD MAX™ (Becton Dickinson & Co.) system for the detection of enteric bacterial and parasite pathogens in stool specimens by PCR. Final test results will generally be available in <24 hours from specimen receipt. The following test panels will be available for ordering by providers.

The BD MAX™ Enteric Bacterial Panel detects the following organisms (genes): *Salmonella* species (surface protein antigen O, *spaO*), *Shigella* species (invasive plasmid H antigen, *ipaH*), *Campylobacter* species (elongation factor, *tuf*) and Shiga Toxin (*stx* 1 and 2). In E-Record order “Bacterial GI PCR Panel”; this replaces “Aerobic Culture” on stool specimens. Test results will indicate the presence or absence of organism specific nucleic acid.

<https://www.testmenu.com/rochester/Tests/690225>

The BD MAX™ Enteric Parasite Panel detects the following organisms (genes): *Giardia lamblia* (SSU rRNA), *Cryptosporidium* species (specific DNA fragment), and *Entamoeba histolytica* (SSU rRNA). In E-Record order “Parasite GI PCR Panel”; this replaces “Cryptosporidium and Giardia Antigen by EIA”. Test results will indicate the presence or absence of organism specific nucleic acid. <https://www.testmenu.com/rochester/Tests/690212>

Note that there is no change in specimen collection or transport requirements compared to current recommendations for stool specimens. Refer to the UR Medicine Labs Test Menu for further details. www.testmenu.com/rochester

For additional information contact Dr. Hardy by any of the methods listed above.