

# Laboratory News

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## New Test Offered for Intestinal Parasites

Dr. Timothy S. Uphoff, Dr. Thomas J. Novicki, Mary E. Stemper, Bronnyn Bulgrin

Beginning April 11, 2022 Marshfield Labs will offer new testing for the two most common intestinal parasites encountered in our population.

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## Change in Testing for Giardia and Cryptosporidium

Marshfield Labs has validated a new method of testing for common enteric parasites. This enteric parasite panel is an automated, FDA cleared, IVD test which uses PCR to amplify and detect *Giardia lamblia*, *Cryptosporidium hominis*, and *C. parvum*. (*Entamoeba histolytica* is also detected but is rarely found in the USA) The new test offers superior performance in comparison with our previous antigen based enzyme immunoassays.

### Test Details

#### EPPNAT – Enteric Parasite Panel, NAT

- **Test includes:** *G. lamblia*, *Cryptosporidium* sp. (detects *C. hominis* & *C. parvum* without differentiation)
- **Specimen Type:** Feces in leak-proof container (no preservatives)
- **Transport Temperature:** 2-25°C
- **Performed:** Monday through Friday at Marshfield only
- **CPT code:** 87505

This test replaces the following tests, which will be retired April 11<sup>th</sup>:

OPRCG – Ova and Parasites, (Giardia/Crypt) Routine  
OPRC - Ova and Parasites, (Cryptosporidium only) Routine  
OPRG - Ova and Parasites, (Giardia only) Routine

## Overview of other Microbiology or Molecular Fecal Testing Available at Marshfield Labs

Test Information – see TRM for further collection and test details

### **SSCSNAT – Fecal Bacteria-only Pathogen Panel, NAT**

**Test includes:** *Salmonella* sp., *Shigella* sp., *Campylobacter* sp. (*C. jejuni* and *C. coli* species only), and Shiga Toxin-producing *Escherichia coli* (STEC)

### **CDNAT – C. difficile Toxin, Nucleic Acid**

**Test includes:** *Clostridium difficile* toxin only

### **PINW – Pinworm**

**Test includes:** Pinworm (*Enterobius vermicularis*) only

### **OPS – Ova and Parasites, Special (Complete)**

*This testing should only be ordered when other causes of diarrhea have been ruled out (i.e. EPPNAT, SSCSNAT, and CDNAT all negative), and the patient has travel history, has eosinophilia, is immune-compromised, or has worms present in stool.*

#### **Test includes:**

Specimen concentration, trichrome stain, and a microscopic examination including a wet mount & trichrome stain for protozoa, worms, and ova. A modified acid-fast stain for coccidia (*Cyclospora* sp., *Isospora* sp., and *Cryptosporidium* sp.) will be performed upon request at the time of test requisition

## Background on Intestinal Parasitic Diseases

In the United States, the most common parasitic causes of gastroenteritis are *Giardia* and *Cryptosporidium*, which are protozoans that cause subacute onset of watery diarrhea and abdominal cramping, usually without fever. The tests with the greatest sensitivity in detecting these pathogens are diagnostic tests that target these two parasites specifically. Marshfield Labs offers such an assay, the Enteric Parasite Panel, NAT (described above). This assay offers superior sensitivity for the detection of *Giardia* and *Cryptosporidium* compared to the traditional ova & parasite (O&P) exam and *Giardia*/*Cryptosporidium* fecal EIA tests.

The yield of the O&P exam in developed countries is historically low. (Beal, SG, Couturier MR, Gander, RM *et al.* 2016. J Clin Lab Anal 30:155). From 2019 to 2021 Marshfield Labs performed over 1,700 O&P exams, 18 (1.1%) of which were positive for pathogenic parasites. Of these, only two samples containing *Ascaris* roundworms were diagnosed by the test of choice, the O&P. The others yielded *Giardia*, *Cryptosporidium*, and pinworm, all of which have superior tests, EPPNAT & PINW, as described above.

### **Questions:**

- Clinical and technical questions or concerns, please call Marshfield Labs- 800-222-5835:
  - Tom Novicki, PhD, DABMM, Clinical Microbiologist