

# Provincial Laboratory Services



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Health PEI  
One Island Health System

## Fecal Calprotectin

February 25, 2020

*This information applies to: Island Physicians and Nurse Practitioners*

Starting March 1, 2020 Calprotectin testing will be done at the QEH on fecal samples. Calprotectin is a protein released by neutrophils into the stool and is indicative and usually proportional to active inflammation.

### Uses

1. Fecal calprotectin can help differentiate non-inflammatory conditions such as irritable bowel syndrome (IBS) from organic diseases such as inflammatory bowel disease (IBD). Negative results less than 50 mg/kg are highly sensitive and specific for non-inflammatory conditions such as IBS and patients would likely not benefit from further colonoscopy<sup>1</sup>. Patients who experience crampy pain and bloody or watery diarrhea for several days could be considered for testing.
2. For patients with known IBD, levels can correlate with disease severity and response to treatment. Levels should decline with appropriate treatment.

### Sample

Early morning fecal sample preferably at least 1 gram collected in a sterile urine container. Try and avoid stool that is too bloody or watery. The specimen can be kept at room temperature but should be delivered to the lab within 24 hours. The test will be run weekly on Fridays so please do not collect samples on Friday to Sunday. The test is not stat.

### Reporting

1. **Negative < 50 mg/kg.**
2. **Indeterminate 50 to 200 mg/kg.** Borderline results can be seen with early or diminishing inflammation or non-steroidal anti-inflammatory use (NSAID). If symptoms persist the test can be repeated in 4 to 6 weeks and ensure the patient is off NSAID for several days prior to sample collection.
3. **Positive >200 mg/kg.** Higher values correlate with disease severity. Positive results can be seen with inflammatory bowel disease, bacterial infections of the GI tract, colorectal carcinoma and non-steroidal anti-inflammatory use.
4. **Pediatric (<16 YO): Borderline is 50 to 120 mg/Kg and positive is >120 mg/kg.** Please note children under 4 can have normal results >50 mg/kg

<sup>1</sup>Yang et al. Effectiveness and cost-effectiveness of measuring fecal calprotectin in diagnosis of inflammatory bowel disease in adults and children. *Clin Gastro. Hep.* (12) 2014.

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