

Pathology and Laboratory Medicine Memorandum

To: Physicians and Health Service Directors, Central Zone
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Subject: **Change to ordering of Fecal Occult Blood (FOB) testing in Central Zone**

During the fourth wave of the COVID-19 pandemic, Fecal Occult Blood (FOB) testing had been suspended in Central Zone. This will now be reintroduced with appropriate utilization criteria. **Effective May 10, 2022** requests for FOB testing will be **restricted to those where the result is deemed essential to clinical management. Requests must have specific reasons written next to this test on the requisition.**

Central Zone laboratories offer guaiac FOB testing (gFOB) that detect heme while the Nova Scotian Colon Cancer Prevention Program (CCPP) uses fecal immunochemical tests (FIT) that detects globin for screening. (<https://ns.211.ca/services/nova-scotia-cancer-care-program/colon-cancer-prevention-program/>). Compared to FIT, gFOB is much less accurate for the detection of colorectal neoplasia and is also susceptible to dietary interferences. gFOB is however relatively more sensitive than FIT to detect upper gastrointestinal bleeding (UGIB), but its utility for this is considered 'off-label'.

Clinical Utility of gFOB

- The sensitivity of the gFOB for detecting GI bleeding is generally between 30% -60% depending on whether there is a lower or upper GI bleed, respectively.
- The laboratory gFOB test should not be requested for patients who are at risk of or suspected to have colon cancer. Refer to the CCPP in these cases.
- The best diagnostic tools when UGIB is suspected are a good history, physical examination and visual inspection of the stool.
- If a gFOB result is still required for patient management, the patient must be provided with the collection instructions and a completed NSH/IWK requisition along with the collection slide.

The following limitations also need to be considered before requesting laboratory gFOB testing:

1. False-positive results can occur via a variety of mechanisms including swallowed blood from GI sources, GI inflammatory conditions, medications (aspirin, NSAIDs), alcohol, ingestion of meats and fruits or vegetables that contain peroxidase.
2. False negatives can result from slow or intermittently bleeding lesions, lower GI tract lesions, or high doses of vitamin C ingestion.
3. False positive results may lead to inappropriate consultations, unnecessary procedures, hence increase in direct and indirect healthcare costs.

In this context, laboratory gFOB testing should not be used for determining the need for endoscopy.