19.6: Stool Specimen Collection

Stool samples are collected from patients to test for cancer, parasites, or for occult blood (i.e., hidden blood). Follow specific instructions from the laboratory for collecting the sample.

The Guaiac-Based Fecal Occult Blood Test (gFOBT) is a commonly used test to find hidden blood in the stool that is not visibly apparent. As a screening test for colon cancer, it is typically obtained by the patient in their home using samples from three different bowel movements. Nurses may assist in gFOBT specimen collection during inpatient care.

Before the test, the patient should avoid red meat for three days and should not take aspirin or nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, for seven days prior to the test. (Blood from the meat can cause a false positive test, and aspirin and NSAIDS can cause bleeding, leading to a false positive result.) Vitamin C (more than 250 mg a day) from supplements, citrus fruits, or citrus juices should be avoided for 3 to 7 days before testing because it can affect the chemicals in the test and make the result negative, even if blood is present.

To perform a gFOBT in an inpatient setting, perform the following steps.

- Verify the patient has not consumed red meat for three days, has not taken aspirin or NSAIDs for seven days prior to the test, and has not had vitamin C greater than 250 mg daily for the past 3-7 days because these substances can affect the results.
- Explain the procedure to the patient. Instruct them to flush the toilet before defecating to remove any potential chemicals and to not place toilet paper in the toilet after defecating. Request they notify you when they have had a bowel movement.
- Review the manufacturer’s instructions because different test kits may have different instructions. Contact the laboratory with any questions.
- Label the card with the patient’s name and medical information per agency policy. Open the flap of the guaiac test card.
- Apply nonsterile gloves. Use the applicator stick to apply a thin smear of the stool specimen to one of the squares of
filter paper on the card. Obtain a second specimen from a different part of the stool and apply it to the second square of filter paper on the card. (Occult blood isn’t typically equally dispersed throughout the stool.)

- Place the labeled test card in a transport bag and send it to the laboratory for analysis.
- If you are working in an agency where nurses apply the guaiac developer solution to the card, allow the specimen to dry for 3 to 5 minutes. Open the reverse side of the card and apply two drops of guaiac developer solution to each square. A blue reaction will occur within 60 seconds if the test is positive. The absence of a blue color after 60 seconds is considered a negative test.
- Document the date and time of the test and any unusual characteristics of the stool sample.¹ ²