

Change in Methodology for Malaria (Plasmodium spp.) Investigation

Beginning in May 2024, a nucleic acid amplification test (NAAT) using a loop mediated isothermal amplification (LAMP) method will be employed at LifeLabs as the initial screening tool for the detection of malarial parasites, replacing the existing method of microscopic examination of thick and thin films. The new assay is a Health Canada approved molecular test that allows for rapid detection of Plasmodium spp. DNA in venous EDTA whole blood samples. Given its superior sensitivity, the LAMP assay is a more effective screening tool than microscopy and published data indicates that a negative LAMP assay is sufficient to exclude a diagnosis of malaria. As LAMP assays do not speciate or provide parasitemia levels, microscopic examination will be performed for samples that yield a positive LAMP test and the current process of forwarding these samples to Public Health Ontario for confirmation will remain in place.

Changes to Handling: With the above changes, 2 LAVENDER top tube (EDTA) will now be required, 1 will be used to prepare blood smears while 1 will be used for the LAMP testing.

Process Map

