

May 2009

## **Malaria**

### **- Real-time PCR now available**

To Health Care Providers:

While thick and thin smears still remain our standard diagnostic test for malaria, a real-time multiplex polymerase chain reaction (PCR) assay for detection of malaria organisms is now available at the Public Health Laboratory in Toronto. This procedure offers an enhancement to our current malaria diagnostic services by providing definitive speciation of malarial parasites infecting humans. This real-time PCR assay has undergone multi-centre validation, external quality assurance, is able to speciate malaria organisms, and has proven to offer superior analytical sensitivity to standard microscopy in certain cases.

PCR testing is performed on the EDTA blood (purple top) specimen received as part of the routine malaria specimen submission.

Real-time PCR assay will not be performed on specimens that can be diagnosed using standard microscopy. This assay will be performed on blood specimens in the following circumstances:

1. The specimen tests negative for malarial organisms by microscopy but clinical history and symptoms strongly suggest malaria infection.
2. Or following consultation with the Medical Microbiologist or the Head Technologist in the Parasitology Laboratory.

Health care providers are encouraged to contact the Medical Microbiologist for interpretation guidance on the real-time PCR result. The turn-around time for real-time PCR is typically 24 hours.

### **For Further Information:**

- Dr. Dylan Pillai, Medical Microbiologist at **416-235-6548**
- Parasitology Laboratory at **416-235-5722**
- Public Health Laboratory Helpline **1-800-640-7221**
- For the Specimen Collection Guide and previous Labstracts refer to the Ontario Agency for Health Protection and Promotion website: [www.oahpp.ca](http://www.oahpp.ca)