Malaria testing and shipping procedures

When malaria is suspected, blood smears should be obtained and examined without delay. For routine examination or malaria diagnosis confirmation, please submit blood and blood smears (at least 2 thick and 2 thin blood smears) and an EDTA preserved blood tube to:

Florida DOH, Bureau of Laboratories Department of Parasitology 1217 Pearl St Jacksonville, FL 32202 Tel: (904) 791-1602

or

Miami Branch Laboratory 1325 N.W. 14th Avenue Miami, FL 33125 Tel: (305) 324-2432

Type of Sample Required:

Blood smears from venous blood should be prepared as soon as possible after collection. Anticoagulants added to the venous blood specimen can interfere with parasite morphology and staining characteristics making identification difficult. <u>Capillary blood samples are preferable.</u>

In some cases, when species identification cannot be made by microscopic examination, analysis by polymerase chain reaction (PCR) is helpful. Approximately 3-5 ml blood sample collected in Vacutainer® EDTA tubes prior to anti-parasitic therapy is needed for PCR testing.

- Whenever possible, collect specimens before any treatment is initiated.
- o Since the parasitemia may fluctuate, multiple smears might be needed.
- Thick and thin smears should be prepared as soon as possible after collection.

Detailed instructions on to prepare thick and thin blood smears are described at: http://www.dpd.cdc.gov/dpdx/HTML/Frames/DiagnosticProcedures/body_dp_bloodprocess.htm

Shipping:

- 1. Place labeled tube of anticoagulated (EDTA) blood in enough absorbent material to contain any leakage, and place in a sealed plastic bag or 50 ml screw cap centrifuge tube.
- 2. Pack this bag or container in a box, cushioned so that the blood tube doesn't break.
- 3. Include information: (Important)
 - a. Submitter's name, address and phone number
 - b. Physician's name, address and phone number
 - c. Patient's name, travel history (places and dates) and treatment information
 - d. Specimen collection date
 - e. What tests are requested and what organisms are suspected

The laboratory requisition form can be found at: <u>http://www.doh.state.fl.us/lab/doh_form.pdf</u>

Ship via courier or overnight delivery to permit optimum recovery of parasites; refrigeration during shipment (preferably at 4°C) may be necessary and should be discussed beforehand with the receiving laboratory. Also make sure to notify DOH parasitologists of specimens that need to be prioritized and specimens that need to be processed during weekends.