

Labstract – June 2011

Parvovirus B19 IgG and IgM serology - Change in testing methodology

To Health Care Providers

Effective immediately the Public Health Ontario (the new operating name for the Ontario Agency for Health Protection and Promotion) public health laboratories (PHL) will replace its current enzyme immunoassay (EIA) test for the qualitative detection of IgG and IgM antibodies to Parvovirus B19 in human serum with a qualitative chemiluminescent immunoassay (CLIA) test.

Specimen requirements for the new test have not changed. Either human serum (preferred) or plasma may be used as well as the anticoagulants citrate, EDTA and heparin. Whole blood should be allowed to clot, and the serum separated from the clot as soon as possible. Serum separator tubes (SST) are acceptable with the gel sedimented. Haemolysed, icteric, lipemic or microbially contaminated sera are not recommended for testing.

Turnaround time for a negative result is within two (2) working days and for a positive result within three (3) working days.

The new Parvovirus B19 IgG assay has a reported sensitivity of 99.5 percent and a specificity of 99.1 percent.

The new Parvovirus B19 IgM assay has a reported sensitivity of 93.0 percent and a specificity of 99.2 percent.

When requesting serologic testing for Parvovirus B19, please indicate if:

- Sample is for diagnosis, in which case both IgG and IgM will be tested
- Sample is for immunity, in which case only IgG will be tested

Please also include any relevant clinical signs, symptoms and history suggestive of Parvovirus B19 infection. If date of birth is not indicated, greater than 12 months of age will be assumed.

For further information:

- Public Health Ontario (PHO) Customer Service Centre toll free at **1-877-604-4567** or **416-235-6556**
- For the PHO Specimen Collection Guide and previous Labstracts, refer to <http://www.oahpp.ca/publichealthlaboratories.php>
- To subscribe to future PHO Labstracts, please e-mail labstracts@oahpp.ca