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Urine viral cultures: Changes to testing procedures

To Health Care Providers:

Changes to urine viral culture testing at the Public Health Laboratories (PHL) have been implemented. Previously, all requests for cytomegalovirus (CMV) culture on urine were inoculated into tube cultures in addition to the more sensitive and rapid CMV early antigen detection (EAD) shell vial culture. Tube cultures allow isolation of several different viruses in addition to CMV. On review of 12 months of urine viral cultures done at the PHL, there was no occasion where CMV was isolated from urine in tube culture where it did not also appear in the CMV EAD shell vial. In addition, when viral culture is requested on urine without any specific request for CMV culture, the most common virus isolated in tube cultures is still CMV.

As a result of these observations, the following modifications to urine viral culture processing have been made:

- When cytomegalovirus (CMV) culture is requested on urine, it will only be tested for CMV by early antigen detection (EAD) shell vial. Tube cultures are less sensitive, take longer to isolate the virus, and it is very unlikely that another virus will be isolated when CMV infection is clinically suspected.
- When routine viral culture is requested on urine, CMV EAD shell vial will be inoculated to allow more sensitive and rapid detection of CMV, which is the most common virus detected in urine. In addition, the routine tube cultures will continue to be inoculated to allow isolation of other culturable viruses.

For Further Information:

- Virus Detection Laboratory, **416-235-5731**
- Dr. Jonathan Gubbay, Medical Microbiologist, **416-235-6258**
- PHL HELPLINE at **1-800-640-7221**
- Ontario Agency for Health Protection and Promotion website: www.oahpp.ca