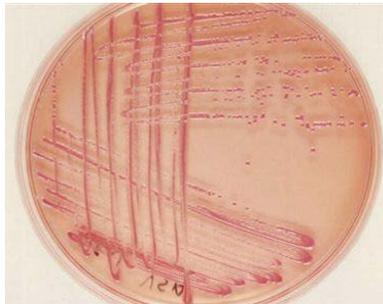




Infectious Diarrhoea Update



Yersinia enterocolitica



Salmonella sp. gram stain

Culture for infectious diarrhoea is not usually indicated

Routine testing for enteric pathogens in cases of infectious diarrhoea (> three loose, watery or unformed faeces motions in 24 hours) is not usually indicated. A laboratory diagnosis is useful for people who:

- may have an infection that could benefit from specific therapy,
- are at risk of severe complications,
- are at risk of spreading infection, or
- are involved in an outbreak and may have a common source of infection.

A single faeces specimen is sufficient for testing

Where an investigation is undertaken bacterial culture is the first step and includes testing for *Salmonella sp*, *Shigella sp*, *Yersinia sp*, *Campylobacter sp*, and, when clinically indicated, enterohaemorrhagic *E. coli* O157 and *Vibrio sp*. A single specimen per episode of diarrhoea for bacterial culture is sufficient. A recent review of faeces culture ordering over a three week period showed that nearly 11% of patients were submitting multiple unnecessary faeces specimens.

Rotavirus and Norovirus

In children under the age of six viral causes of infectious diarrhoea should be considered and rotavirus testing ordered if indicated. A single specimen of faeces is sufficient.

If Norovirus is suspected regional public health should be informed so an outbreak number can be obtained. Testing will not take place without an appropriate outbreak number (unless the patient wishes to pay for testing).

C. difficile

If the patient has indicators for *C.difficile* infection, a single liquid faeces specimen should be submitted. The specimen will be tested by a highly sensitive screening method and confirmed by molecular methods.

Parasites

Testing for giardia and cryptosporidium is indicated only when a person has diarrhoea for longer than seven days, recent attendance at a childcare centre, is immunocompromised or following overseas travel. A single specimen is sufficient due to the high sensitivity of modern antigen testing technologies.

Testing for ova and cysts is rarely indicated and is only appropriate for people with diarrhoea who have recently travelled to countries with poor food or water sources, recently immigrated, are immunocompromised or have persistent diarrhoea with eosinophilia. These details should be provided in clinical details.

Best Practice

Aotea Pathology is committed to high quality testing, and our processes reflect the 2008 Best Practice Advisory Centre NZ (BPAC) guidelines for the investigation of Infectious diarrhoea reiterate the above:

- ✓ Laboratory investigations are not routine for people with infectious diarrhoea
- ✓ Testing for giardia and cryptosporidium should only be requested if there are risk factors
- ✓ Testing for ova and cysts is rarely indicated
- ✓ If laboratory testing is indicated, faecal culture is the first-line test
- ✓ When faecal culture testing is requested, a single stool sample should be tested

In line with national and international best practice recommendations from 17 February 2014 only one faeces sample per diarrhoeal episode will be cultured.

Exceptions would be made where a specific bacterial pathogen is suspected and symptoms are ongoing or where patients require clearance before returning to work. In these situations, the laboratory request form should clearly state relevant clinical details, including an indication of which pathogen is suspected.

Further information is available on our website www.apath.co.nz. Or you can contact:

Mackenzie Nicol
Head of Department, Microbiology
Ph 04 3815900 ex 798
mnicol@apath.co.nz

Dr Mark Jones
Clinical Microbiologist
Ph 027 471 5565
mjones@apath.co.nz