

LAB ALERT: Implementation of Viral Molecular Panels at the South Dakota Public Health Laboratory

Date: September 11, 2017

To: South Dakota Public Health Laboratory Clientele

From: South Dakota Public Health Laboratory Client Services

On September 15, 2017, the South Dakota Public Health Laboratory (SDPHL) will begin offering the Respiratory Pathogens Panel (RPP) and the Gastrointestinal Pathogens Panel (GPP). These panels are multiplex nucleic acid amplification tests (NAATs) for the detection of common respiratory (RPP) and gastrointestinal (GIP) pathogens. Results are qualitative and will be reported as “detected” or “not detected”.

Compared to traditional viral and bacterial cultures that usually take three to five days, these highly sensitive molecular panels can reduce turn-around time to one day. Please see the following for specific information regarding the RPP and GIP.

Respiratory Pathogens Panel (RPP)

The RPP detects the following 20 targets:

Viruses:

Adenovirus
Coronavirus HKU1
Coronavirus NL63
Coronavirus 229E
Coronavirus OC43
Human Metapneumovirus
Human Rhinovirus/Enterovirus
Influenza A
Influenza A/H1
Influenza A/H1-2009
Influenza A/H3

Viruses (continued):

Influenza B
Parainfluenza 1
Parainfluenza 2
Parainfluenza 3
Parainfluenza 4
Respiratory Syncytial Virus

Bacteria:

Bordetella pertussis
Chlamydomphila pneumoniae
Mycoplasma pneumoniae

Specimen Requirement: nasopharyngeal swab in at least 300 ul of viral transport medium.

Rejection Criteria: dry swabs or swabs not submitted in viral transport medium.

Gastrointestinal Pathogens Panel (GPP)

The GIP detects the following 21 targets:

Bacteria:

Campylobacter spp.
Plesiomonas shigelloides
Salmonella spp
Yersinia enterocolitica
Vibrio spp.
Vibrio cholera
Enteroaggregative *E. coli* (EAEC)
Enteropathogenic *E. coli* (EPEC)
Enterotoxigenic *E. coli* (ETEC)
Shiga-like toxin producing *E. coli* (STEC) stx1/stx2
E. coli 0157
Shigella/Enteroinvasive *E. coli* (EIEC)

Viruses:

Adenovirus F 40/41
Astrovirus
Norovirus GI/GII
Rotavirus A
Sapovirus

Parasites:

Cryptosporidium
Cyclospora cayetanensis
Entamoeba histolytica
Giardia lamblia

Specimen Requirements: stool in Cary Blair Transport Medium. Raw stool received within two hours of collection will also be accepted.

Rejection Criteria: Stool specimens submitted in any other fixative or transport medium will be rejected. Raw stool will be rejected if received by the SDPHL more than two hours following collection.

Please distribute this Lab Alert to others in your facility that may need this information.

Call the SDPHL at (605)773-3368 if you have any questions or concerns regarding this Lab Alert.