

**NEW TEST: MENINGITIS/ENCEPHALITIS BY  
BIOFIRE FILM ARRAY**

**NOTIFICATION DATE: 4/4/2023  
EFFECTIVE DATE: 4/17/2023**

**New Tests Name- MENINGITIS/ENCEPHALITIS BY BIOFIRE FILM ARRAY**

**EXPLANATION:** Detection and identification of specific agents of meningitis and/or encephalitis and results are meant to be used in conjunction with other clinical, epidemiological, and laboratory data.

Testing should be considered for patients with signs/symptoms of meningitis and/or encephalitis. This test is not intended for use with CSF collected from indwelling medical devices (e.g., shunts). The Test is not useful for monitoring treatment of infections.

The BioFire ME Panel is intended to be used in conjunction with standard of care culture for organism recovery, serotyping, and antimicrobial susceptibility testing. See limitations below.

Pathogens detected by this assay include:

**Bacteria:**

- *Escherichia coli K1*
- *Haemophilus influenzae*
- *Listeria monocytogenes*
- *Neisseria meningitidis (encapsulated)*
- *Streptococcus agalactiae*
- *Streptococcus pneumoniae*

**Viruses:**

- Cytomegalovirus
- Enterovirus
- Herpes simplex virus 1
- Herpes simplex virus 2
- Human herpesvirus 6
- Human parechovirus
- Varicella zoster virus

**Yeast:**

- *Cryptococcus neoformans/gattii*

**METHOD:** Multiplex nested qualitative PCR.

**REFERENCE VALUES:** See Laboratory Report

**SPECIMEN REQUIREMENTS:** minimum of 0.5ml of CSF

**SPECIMEN REJECTION CRITERIA:** Receipt beyond stability period, received in improper transport medium/device, and prior testing within 7 days. CSF collected from indwelling medical devices (e.g., shunts).

**SPECIMEN STABILITY INFORMATION:**

Ambient: 24 hours

Refrigerated: 7 days

**DAYS TEST SET UP:** Sunday-Saturday

**QUESTIONS ABOUT THIS TESTING**

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**Limitations:**

1. Only E. coli stains possessing the K1 capsular antigen will be detected by the BioFire ME panel.
2. Only encapsulated strains of N. meningitidis will be detected by the BioFire ME panel.
3. Patients with a suspicion of cryptococcal infection and a negative cryptococcal PCR result should be tested for cryptococcal antigen.
4. Viral shedding into the CSF often occurs in cases of zoster. Detection of VZV in CSF may not indicate the cause of CNS disease in these cases.
5. Herpesviruses can exist in latent forms that may be reactivated during infection by other pathogens, including agents not detected by the BioFire ME panel that may cause meningitis/encephalitis. When detected by the BioFire ME panel, herpesvirus results should be considered as the probable cause of meningitis/encephalitis only in appropriate clinical context and following expert consultation.
6. Enterovirus can cross-react with human rhinoviruses. Human rhinoviruses are genetically like enteroviruses and can be shed from the respiratory tract of healthy individuals or those with symptoms. Rhinoviruses are rarely present in the human cerebrospinal fluid and are not recognized cause of meningitis.