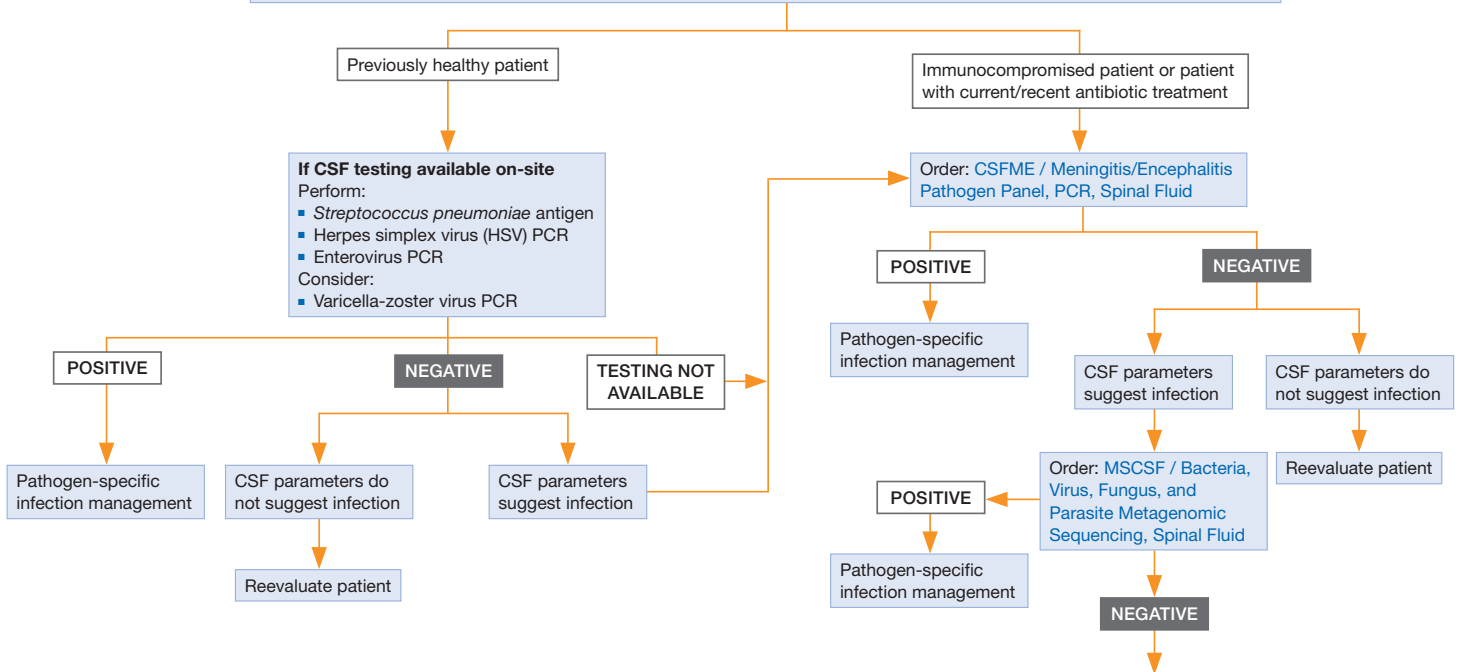


Recommended testing for patients with findings suggestive of acute (<8 days of symptoms) meningitis or encephalitis.
NOTE: Not intended for patients with cerebrospinal fluid (CSF) shunts or possible central nervous system surgical site infections. Infectious Diseases and/or Neurology specialty consultation is recommended.

- Lumbar puncture to obtain CSF. Order the following tests and retain CSF for additional testing:
 - Opening pressure (may not be indicated in neonates/ infants)
 - Cytology, cell count and differential
 - Protein and glucose
 - Gram stain
 - Bacterial culture (aerobic with antimicrobial susceptibility testing)
 - Cryptococcal antigen, if indicated per patient risk factors
 - Blood cultures



Additional testing should be tailored based on clinical presentation, risk factors, CSF parameters, and exposure history.

- If not previously performed, consider:
 - CLFA / *Cryptococcus* Antigen Screen with Titer, Spinal Fluid
 - HSVC / Herpes Simplex Virus (HSV), Molecular Detection, PCR, Spinal Fluid
- Syphilis testing
 - SYPH1 / Syphilis IgG with Reflex, Enzyme Immunoassay, Serum
 - VDSF / VDRL, Spinal Fluid
- Fungal and mycobacterial testing
 - FGEN / Fungal Culture, Routine
 - FS / Fungal Smear, Varies
 - CTB / *Mycobacteria* and *Nocardia* Culture, Varies
 - SAFB / Acid-Fast Smear for *Mycobacterium*, Varies
 - MTBRP / *Mycobacterium tuberculosis* Complex, Molecular Detection, PCR
 - HBRP / *Histoplasma capsulatum*/*Blastomyces* species, Molecular Detection, PCR, Varies
 - HICBL / *Histoplasma*/*Blastomyces* Panel, Spinal Fluid
 - SHSTO / *Histoplasma* Antibody, Serum
 - FUNSF / Fungitell, CSF (1,3-beta-D-glucan)
 - BLAST / *Blastomyces* Antibody by Enzyme Immunoassay, Serum
 - COXIS / *Coccidioides* Antibody with Reflex, Serum
 - CCOC / *Coccidioides* Antibody, Spinal Fluid
 - CIMRP / *Coccidioides immitis/posadasii*, Molecular Detection, PCR

- Vector-borne testing
 - Mosquito-borne pathogens
 - Refer to the [Mosquito-borne Disease Laboratory Testing Algorithm](#) for information
 - Tick-borne pathogens
 - LNBAB / Lyme Central Nervous System Infection IgG with Antibody Index Reflex, Serum and Spinal Fluid (see [Lyme Neuroborreliosis Diagnostic Algorithm](#))
 - LYMPV / Lyme Disease, Molecular Detection, PCR, Varies
 - POWV / Powassan Virus, IgM, Enzyme-Linked Immunosorbent Assay, Serum
 - POWUJ / Powassan Virus, RNA, Molecular Detection, PCR, Urine
 - POWWB / Powassan Virus, RNA, Molecular Detection, PCR, Blood
 - POWVC / Powassan Virus, RNA, Molecular Detection, PCR, CSF
 - POWVS / Powassan Virus, RNA, Molecular Detection, PCR, Serum
 - HRTVC / Heartland Virus, RNA, Molecular Detection, PCR, Spinal Fluid
 - HRTVS / Heartland Virus, RNA, Molecular Detection, PCR, Serum
 - For emerging vector-borne diseases (eg, Jamestown Canyon virus) contact your local public health laboratory for more information
- Neuroimmunology testing (consider if antibody prevalence in epilepsy and encephalopathy [APE2] score is ≥4)
 - ENS2 / Encephalopathy, Autoimmune Evaluation, Serum
 - ENC2 / Encephalopathy, Autoimmune Evaluation, Spinal Fluid
- Parasitic testing
 - FLARP / Free-Living Amebae, Molecular Detection, PCR, Spinal Fluid, Fresh and Paraffin Tissue
 - PTOX / *Toxoplasma gondii*, Molecular Detection, PCR
 - TXMGP / *Toxoplasma gondii* Antibody, IgM and IgG (Separate Determinations), Serum
- Other considerations
 - BRBPS / Broad Range Bacterial PCR and Sequencing, Varies
 - HIVDX / HIV-1 and HIV-2 Antigen and Antibody Diagnostic Evaluation, Plasma
 - JCPCR / JC Virus, Molecular Detection, PCR, Spinal Fluid