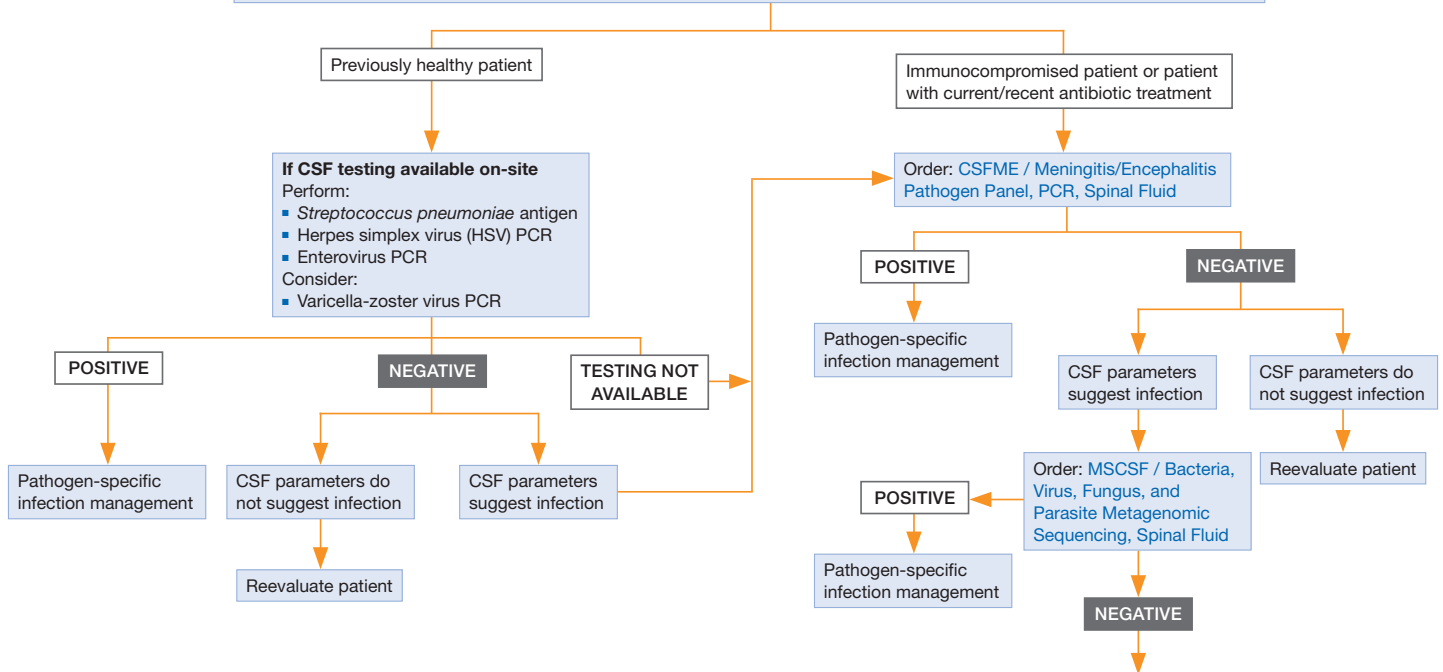


Recommended testing for patients with findings suggestive of acute (<8 days of symptoms) meningitis or encephalitis.  
**NOTE:** Not intended for patients with cerebrospinal fluid (CSF) shunts or possible central nervous system surgical site infections. Infectious Diseases and/or Neurology specialty 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
  - NSAIIP / Neurosyphilis IgG Antibody Index with VDRL, Serum and 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
  - HIBC / *Histoplasma*/*Blastomyces* Panel, Spinal Fluid
  - HISER / *Histoplasma* Antibody Complement Fixation and Immunodiffusion, 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
    - POWW / Powassan Virus, IgM, Enzyme-Linked Immunosorbent Assay, Serum
    - POWVU / Powassan Virus, RNA, Molecular Detection, PCR, Urine
    - POWWB / Powassan Virus, RNA, Molecular Detection, PCR, Blood
    - POWWC / 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  $\geq 4$ )
  - 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
  - TXPAB / *Toxoplasma gondii* Antibody, IgM and IgG, Serum
- Other considerations
  - BRBPS / Broad Range Bacterial PCR and Sequencing, Varies
  - JCP/PCR / JC Virus, Molecular Detection, PCR, Spinal Fluid