

Supplementary text 2: Case definition based on cerebrospinal fluid indices for meningitis (Boon et al 2004)

Viral meningitis:

Lymphocytes 10 – 2000 mm³
Normal glucose and protein
Negative Gram stain

Bacterial meningitis:

Polymorphs 1000 – 5000 mm³
Low glucose and normal/elevated protein
Positive Gram stain

Tuberculous:

Polymorphs/lymphocytes/mixed 50 – 5000 mm³
Low glucose and elevated protein
Gram stain may be negative

Fungal:

Lymphocytes 50 – 500 mm³
Low glucose and elevated protein
Gram stain may be positive or negative

Malignant:

Lymphocytes 0 – 100 mm³
Low glucose and normal or elevated protein
Negative Gram stain

Clinical presentation – combination of pyrexia, headache, neck stiffness. The severity of symptoms varies with the causative organism, as does the presence of other features – for example, skin rash.

Gold standard case definition – cases confirmed by CSF culture from lumbar puncture showing combination of features consistent with particular cause including elevated cell count and alternations in glucose/protein levels.