



Microbiology Specimen Collection for AMR Surveillance in Adults

Which samples should I send?

Sepsis or Severe febrile illness

For **all** patients:

Blood culture
 Urine
 Sputum
 CSF
 Other relevant cultures (e.g. pus, throat swab)

For **selected** patients:

Malaria RDT
 Viral workup (e.g. dengue RDT)

Meningitis

For **all** patients:

Blood culture

 CSF if no contra-indications

For **selected** patients:

Malaria RDT
 TB microscopy / culture
 Viral workup (e.g. JEV)
 Fungal workup

Pneumonia

For **all** patients:

Blood culture

 For **selected** patients:
 Sputum sample

- If productive cough

 Tracheal aspirate

- If intubated

 Broncho-alveolar lavage

- If severe and intubated

When should I send a blood culture?

Always send a blood culture in case of clinical suspicion of sepsis, meningitis, pneumonia
 Take the blood culture before the first dose of antibiotic

Sepsis or Septic shock

Dysregulated host response to infection
No consensus about gold standard of diagnosis of sepsis

- SIRS (below) is non-specific
- Two points in qSOFA (below) is predictive of outcome

Meningitis

Sudden onset fever and signs of meningism:

- *Classical signs: Headache, Stiff neck, Fever and chills, Vomiting, Photophobia, Confusion, Seizures, History of ARI, Drowsiness*
- *Less common: Focal neuro signs*

Severe pneumonia

Cough and at least one other respiratory symptom

- *New focal chest signs*
- *One systemic feature (sweating, fever, shivers, body aches, fever)*

Systemic Inflammatory Response Syndrome (SIRS)

2 or more of:

- Body temperature >38 or <36 °C
- Heart rate >90 beats/min
- Respiratory rate >20 breaths/min or PaCO₂ < 32 mmHg
- WBC >12,000 or <4,000 mm³ or >10% immature neutrophils

qSOFA score

2 or more of:

- Respiratory rate of 22 breaths/min or greater
- Altered mentation (GCS <15)
- Systolic blood pressure of 100 mmHg or less

How should I send my sample?

Blood cultures

8-10ml volume into aerobic and 8-10mL into anaerobic
See blood culture collection instruction



CSF

Send 3 tubes
 1ml CSF in each tube

 NB: sufficient volume is critical



General specimen pot

Pus
 Sputum / ET asp. / BAL
 Sterile fluids (e.g. pleural, peritoneal, joint fluid)
 Faeces
 Tissue / Biopsy
 Urine (specify type of sample)



General swab

Ear, Eye, Throat
 Urethra, Skin, Wound



ACORN