Specimen collection

Successful laboratory investigations

* Advance planning
* Collection of adequate and appropriate specimens
* Sufficient documentation
* Biosafety and decontamination
* Correct packaging
* Rapid transport
* Choice of a laboratory that can accurately perform the tests
* Timely communication of results

1. **Blood**

Blood for smears: make smear

Do not refrigerate (can alter cell morphology)

Blood Collect within 10 minutes of fever Collect into bottle with infusion broth, Store at 4oC if can’t reach laboratory in 24h.

1. Serum :Venous blood in sterile test tube

* let clot for 30 minutes at ambient temperature
* glass better than plastic

Place at 4-8oC for clot retraction for at least 1-2 hours Centrifuge at 1 500 RPM for 5-10 min, separates serum from the clot

Transport :4-8oC if transport lasts less than 10 days ,Freeze at -20oC if storage for weeks or months before processing and shipment to reference laboratory

Avoid repeated freeze-thaw cycles

1. Cerebrospinal fluid (CSF)

Collection :Lumbar puncture

transport at 4-8oC (if up to 48hrs or -70oC for longer duration

1. Stool samples: Freshly passed stool samples

Use sterile or clean container

do not clean with disinfectant

1. **swabs**

Rectal swabs ,Throat swab, Nasopharyngeal swab

1. **Sputum**

**Transport media**

**A. Transport medium 199 (contain tissue culture)**

It is widely used for collection and transport of clinical specimens

**B. PBS-Glycerol transport medium (contain phosphate-buffered saline)**

Provides longer-term stability of specimens where cooling is not immediately possible; it is suitable for egg inoculation but not suited for tissue culture inoculation.

NOTE : Antibiotics and antifungals add to transport medium to reduce the risk of bacterial and fungal contamination