# Sterile Fluids & Pus Investigations

**Tests:** Gram Stain, Crystal Microscopy, Culture and Sensitivity (C&S)

**Related investigations:** Ascitic Fluid Investigations; Tissue, Biopsy & Bone Culture; Tissues and Other Specimens Associated with Orthopaedic Implants Culture; Wound Swab Culture; Blood Culture Investigations; Mycobacterial Culture and Other Investigations.

## Specimen type
Sterile fluids, pus, bile, amniotic fluid, bursa fluid, pericardial fluid, synovial (joint) fluid, peritoneal fluid, pleural fluid, surgical drain fluids

## Container
Sterile, CE-marked, leak-proof universal container (25mL)
- Blood culture bottles can also be inoculated with fluids from sterile sites (see Blood Culture page)
- Do not use containers with formalin or any other preservative.
- Do not send flat bottomed 10ml urine containers as they cannot be centrifuged.

## Volume / quantity requirements
- Minimum size: 1 mL
- Maximum size: 25 mL (universal container)
- The number of specimens will depend on the clinical condition of the patient.

## Optimal time and method of collection
- Use strict aseptic technique
- Prior to starting antibiotics where possible
- Collection should take place according to local procedures in specialist centres e.g. theatres, mortuary, etc.

## Transportation
- Place the labelled specimen(s) inside a sealed plastic bag attached to a correctly filled in microbiology request form.
- Transport the specimen to the Microbiology Department at UHND as soon as possible.
- Do NOT use the airtube system.
- Specimens suspected of containing Hazard Group 3 organisms (Salmonella typhi, Salmonella paratyphi A, B and C, Mycobacterium species, etc) must be labelled as high risk and transported accordingly.
- For general transportation information refer to the transport page.

## Storage
Specimens that cannot be transported or processed immediately should be refrigerated (2-8°C)

## Special considerations and limitations
Please note that delays in transport to the laboratory can reduce the recovery rates for important fastidious organisms, e.g. anaerobes.

## Relevant clinical information
- State the symptoms and any presumptive clinical diagnoses
- State if the patient is immunocompromised
- Include details of recent travel history or any medical procedures in another country
- Please include details of recent, current or proposed antibiotic therapy

## Consent information
Healthcare professionals: follow local procedures for obtaining consent from patients

## Biological reference intervals and clinical decision values
Interpretation of results and reporting depends upon many factors including; the clinical information given with the request, growth of normal or colonising flora, growth of potential pathogens, etc.
- All fluid specimens undergo extended culture to ensure recovery of fastidious organisms. The reports will reflect this.

## Availability of testing
Fluid cultures are processed 7 days a week during routine laboratory hours.
- Please contact the laboratory to arrange priority testing during routine hours.
- Urgent requests outside of routine laboratory hours can be arranged for some sterile fluids – refer to out of hours policy
- Urgent gram stain & crystal microscopy results will be released electronically via iSoft and telephoned to the requester within 2 hours of receipt.

## Measured turnaround time
Refer to the Microbiology Turnaround Times page for current information.
- NB: all fluid specimens undergo extended culture to ensure recovery of fastidious organisms. The turnaround times will reflect this.

## Information for patients
Information on this page is intended for clinical staff. Please refer to your healthcare professional if you have any queries regarding your test or visit the NHS Choices website (www.nhs.uk).