



**INTEGRATED PATHOLOGY SERVICE
MICROBIOLOGY DOCUMENT
WEST SUSSEX**

Pathology User Manual Microbiology Investigations Fluids

[PD-MIC-UMFluids]

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Fluid samples (e.g. ascites, pleural and joint fluids)

Please DO NOT inoculate fluid specimens into blood culture bottles unless specifically instructed to do so by a Consultant Microbiologist.

Optimal time and Method of collection

Collect specimens before antimicrobial therapy where possible.

Specimens should be collected into appropriately labelled plain specimen containers using aseptic technique, and transported to the laboratory in sealed plastic bags.

Adequate Quantity and Appropriate Number of Specimens

Ideally, a minimum volume of 1 mL is required.

The number and frequency of specimens collected depend on the clinical condition of the patient.

Optimal transport and storage conditions

Specimens should be transported and processed as soon as possible

Limitations of examination procedure

- Appropriate specimens are often difficult to obtain and incorrect or sub-optimal specimens are often received. Correct specimen collection is important to ensure the optimal yield of any pathogen present.
- Fluids are always preferable to swabs
- Due to the fastidious nature of some of the organisms that may be isolated from this group of specimens the time period between specimen collection and delivery to the laboratory should be kept to a minimum
- It is important to try to avoid contamination with skin flora during specimen collection.
- Specimens such as peritoneal and ascitic fluid, which may contain very low numbers of organisms, are usually received in sufficient volume which increases the likelihood of successful culture. However, fluids such as synovial fluid may be received in much smaller volumes and this may impede the recovery of organisms.

- Previous antimicrobial therapy or presence of antimicrobial substances and cells in the fluid may also affect the recovery of organisms from fluids and aspirates.
- Cell counts cannot be performed on specimens containing a clot as this will invalidate the result. Cell counts from heavily blood stained fluids must be interpreted with caution