



Ministry of Health

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Acronyms:

| | |
|------|-------------------------------------|
| BA | Blood agar |
| CA | Chocolate agar |
| MAC | MaConkey |
| ATCC | American Type Culture Collection |
| H&S | Health and Safety |
| ID | Identification |
| IQC | Internal Quality Control |
| MDRO | Multidrug Resistant Organism |
| MRSA | Methicillin Resistant Staph. Aureus |
| SOP | Standard operating procedure |
| TAT | Turnaround time |
| WHO | World Health Organization |

1. Purpose

The purpose of this procedure is to provide instructions on how to deal with urgent samples received in microbiology lab.

2. Scope

This document is applicable for all medical laboratories under MOH and other collaborative governmental and non-governmental health institutions.

3. Definitions

3.1 Urgent specimens: samples that need to be processed within 1 - 2 hours after sample collection.

4. Procedure

4.1. Clinical background:

Urgent specimens are specimen where results may change patient management (e.g meningitis or Necrotizing fasciitis). Urgent specimens need to be processed within 1 - 2 hours after collection. Result should be available within one to 2 hours and communicated to the ward as soon as is available.

Specimens of high importance to management where an early processing will allow an earlier result to be acted upon or precious unrepeatable specimens the quality of which will diminish too much if left for any longer.

These tests need to be available 24 hours a day and should be processed out of hours as priority.

4.2. Principle:

Most specimens deteriorate if there is a significant delay between sample collection from the patient & processing. The delay will adversely affect test result (e.g. cell count).

4.3. Pre – analytical stage:

4.3.1. Sample

4.3.1.1 The following specimens are processed as urgent ONCE received in the laboratory and result reported immediately:

- Cell count and Direct Smear for Sterile sites (CSF, pleural fluid, pericardial fluid, joint aspirate, etc.)

- Cerebrospinal fluids (CSFs): microscopy and set up for culture, csf cryptococcal antigen
- Cell count for urine
- Direct smear of positive blood culture
- Other requests for STAT processing of specimens must be approved by a Microbiologist

4.3.1.2 The following specimen must be processed out-of-hours as urgent testing

- Cerebrospinal fluids (CSFs): microscopy and set up for culture
CSF: Cryptococcal antigen
Urine microscopy and set up for culture (pediatric)
- Pus samples (not swabs) for microscopy
- Tissues / fluids / aspirates (including ascetic, joint, and CAPD fluid microscopy)
- Corneal scrape
- Throat swabs from cases of possible meningococcal disease
- All specimens from ICU & SCBU wards
- Blood cultures
- Urine pregnancy test from suspected ectopic pregnancy or patient for X-ray
- Catheters
- Deep organ abscesses

4.3.2. Material: NA

4.3.3. Safety precaution:

- All specimens need to be treated as potentially infectious. Standard procedures for handling of biohazard material must be followed at all times. Universal Precautions must be practiced at all stages of these procedures.

4.3.4. Quality control:

- Check the expiry dates of all media, reagents and stains before use.
- All media, reagents, kits, and stains **MUST** be quality controlled before use.
- Identification tests should be run with appropriate controls.

- Record the quality control results in the appropriate QC sheet.

4.4. Analytical stage:

procedure for handling urgent specimens:

- Urgent sample can be ordered 24/7 hours including Holidays
- The Microbiology Lab should be notified by phone about the impending arrival of an urgent specimen.
- Specimens should be hand delivered to the microbiology lab reception.
- When the urgent specimen does not arrive at the Lab within reasonable time, the technologist should track down the specimen by calling the ward to find out where and when the specimen was sent.
- Once received to should be processed as urgent.

4.1.2 Out of hours' samples

Samples listed above should be processed out of hours, other Specimens will be stored in the lab and processed the next morning.

4.5. Post – analytical stage:

4.5.1. Reporting: Phone all result of urgent sample and release it in LIS system with proper documentation

4.5.2. documentation of urgent specimen

All the following information should be documented on the Urgent Specimen Log sheet and released in LIS system:

| Patient details | Date | Test /specimen type | Time requested | Time received | Result | Result informed by | Result informed to | Signature |
|-----------------|------|---------------------|----------------|---------------|--------|--------------------|--------------------|-----------|
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5. Responsibilities

5.1. Laboratory management shall:

- To ensure the implementation of communication of critical results

- To coordinate with end-users for approval of the critical list and its related channels
- To collaborate with concerned department towards achievement of closed loop communication

5.2. Responsible staff shall:

- To ensure the adherence critical result communication procedure
- To facilitate the alternative channels once needed

5.3. Quality manager /officer

- To follow up the implementation of the procedure
- To monitor regularly communication of critical results and raise non-conformance with corrective action once needed.

5.4. All lab staff shall:

- To adhere to the procedure.
- To document communication as recommended
- To report communication failures or incident

6. Document History and Version Control

| Version | Description | Review Date |
|----------------|--------------------|--------------------|
| 1 | Initial Release | May 2026 |
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7. References

| Title of book/ journal/ articles/ Website | Author | Year of publication | Page |
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