





Ministry of Health

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Acronyms:

RT	Room Temperature
MDRO	Multi-Drug Resistant Organisms
MRSA	Methicillin Resistant Staphylococcus aureus

1. Purpose

This document describes the procedure detailed of the retention time and storage conditions of different samples submitted for microbiology testing after processing. This is not including virology samples.

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. Retention time: The minimum time required for various laboratory specimens to be retained either in refrigerator, deep freezer or room temperature after processing.

3.2. Non-conformance or Non-conformity is the failure to meet specified requirements.

4. Procedure

4.1. Background:

Retention of samples is often necessary for repeat or additional testing when needed on the retained specimens. This helps to avoid patient inconveniences and tension involved with sample recollection. This is also valuable to the laboratory so that specimens can be retained for public health purposes, for quality control purposes, investigation in case of non-conformance and new test validation.

4.2. Procedural steps:

4.2.1. Microbial cultures are derived from patient specimens and may contain human cells. Therefore, they should only be used for the intended microbiological diagnostic purpose and not anything else.

4.2.2. Most positive cultures can be discarded within 24–48 hours of issuing a final authorized report.

4.2.3. Specified cultures of clinical importance (e.g. blood culture isolates, cerebrospinal fluid isolates, enteric pathogens, multiple antibiotic resistant or meticillin resistant *Staphylococcus aureus*, ‘outbreak’ strains, *M. tuberculosis*, Group A streptococci and unusual pathogens of clinical significance) should be retained for at least seven days.

4.2.4. More detailed information on recommended retention time and condition of microbiology samples, please refer to Annex 8.1.

- 4.2.5. Where isolates have been referred to reference laboratories, they should be retained until receipt of the reference laboratory's final report.
- 4.2.6. Longer retention of the bacterial isolate locally is not recommended due to the potential for hazard.
- 4.2.7. Whenever cultures are stored, lab staff have a duty to ensure that specimens are held safely and securely, to guard against accidental or non-accidental act. Some specimens contain viable organisms deemed hazardous and may need to be stored in secure laboratory premises with restricted and controlled access.
- 4.2.8. An appropriate arrangement and archival system of retained specimens and isolates should be in place inside each lab for biosafety and biosecurity purposes. Each specimen should be labeled with the following:
- Section
 - Isolate Name (When applicable)
 - Test Name
 - Sample Number
 - Specimen type (isolate, smear, etc)
 - Date archived
 - date of disposal
- 4.2.9. Each Type of Specimen/ Test should be in designated shelf#/ Box#/ Slot #/ area in the Refrigerator or Freezer.
- 4.2.10. The lab must consider the storage capacity and availability of ideal storage conditions.
- 4.2.11. Stored samples should be regularly monitored and not kept for longer than necessary since storage space may be limited. Sample freeze/thaw cycles must be monitored, as samples may deteriorate with these conditions.
- 4.2.12. The lab should have policy in place for proper disposal of specimens including any treatment necessary prior to disposal e.g. autoclaving.

5. Responsibilities

5.1. Responsible staff:

- To ensure the adherence to microbiology sample retention policy.
- To ensure the proper training and education for lab staff.

- To facilitate the alternative channels once needed

5.2. Quality manager /officer

- To follow up the implementation of the procedure.
- To monitor the storage condition and retention time regularly.
- To raise non-conformance with corrective action once needed.

5.3. All lab staff:

- To adhere to the microbiology sample retention policy.
- To report any incident.

6. Document History and Version Control

Version	Description	Review Date
1	Initial Release	May 2026

7. References

Title of book/ journal/ articles/ Website	Author	Year of publication	Page
The retention and storage of pathological records and specimens (5th edition)	The Royal College of Pathologist	2015	
Microbiology Lab Specimen Management Manual	Toronto medical laboratories/Mount Sinai hospital, department of microbiology	2003	
Samples retention S.O.P	The Royal Hospital, Department of Laboratory Medicine and Pathology	-	
Policy & Procedure of Laboratory Retention Time and Storage of Samples	Al Masarra hospital, Laboratory department	2020	
Manual of Clinical Microbiology, 11th edition, Chapter 11	James H. Jorgensen et.al	2015	Pages 161

8. Annexes:

8.1.Recommended retention time and condition of microbiology samples & isolates

Type of Sample	Minimum Retention time	Condition
CSF	2 Weeks	Refrigerated
Body Fluids	2 weeks	Refrigerated
Culture swabs	48 hours	RT
Urines	48 hours	Refrigerated
Tissue/ Biopsy	2 weeks	Refrigerated
Stool	48 hours	Refrigerated
Respiratory samples	3 days	Refrigerated
Positive Blood Culture	7 days	RT
ZN stain slides	1 month	RT
Grams stain slides	1 week	RT
Wet Mount	No storage, immediately discard.	
Culture plates with no significant growth	24 - 48 hrs after issuing report	RT
Culture plates with significant growth	48 hrs after issuing report	RT
Referred strains to reference lab	48 hrs after issuing report	RT, Nutrient slant
MDR organisms or Emerging strains	Up to 30 years	≤ -70 freezer in cryo bank
MDR organisms or Emerging strains	Up to 2 years	≤ -20 freezer in cryo bank