

TML/MSH Microbiology Department Policy & Procedure Manual	Policy # MI\STER\11\v01	Page 1 of 1
Section: Sterility Testing Manual	Subject Title: Air Sampling	
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AIR SAMPLING

II. Introduction

Air sampling specimens are collected for the purpose of compliance to Clean Air Standard or in case of patient care areas, the Air-Borne Fungal Spore Level. Various apparatus can be used for sampling. The amount of air required to sample will depend on the standard set for the purpose of the particular area. The media used will also depend on the purpose of the area to be measured and the type of organisms to be counted. Culture media that has been subjected to a specified volume of airflow will be submitted to the microbiology lab for incubation and colony count.

II. Procedure

1. Incubate culture media received at 37°C for 48 hours if bacteria count is required. Incubate culture media at 30°C for 7 days if fungal culture is required.
Examples of culture media used:

Type of organism	Media	Incubation
Bacteria	Blood Agar	37°C x 48 hours
Fungi	Inhibitory Mold Agar	30°C x 7days
Bacteria	Trypticase Casein Agar	37°C x 48 hours
Fungi		30°C x 7 days
Fungi	Rose Bengal Agar	30°C x 7 days

2. At the end of the required incubation period, perform a total colony count per media.
3. If air flow rate and sampling time was given, calculate the colony forming units per cubic meter of air sampled as follows:
Flow rate = *a* L/min.
Sampler running time = *b* minutes
Volume of air sampled = *a* x *b* L = *ab*/1000 m³ = *d* m³
Bacterial or mould count = *c* CFU
Total CFU/m³ air sampled = *c*/*d* CFU/m³ air
4. Identify organism only if requested.

TML/MSH Microbiology Department Policy & Procedure Manual	Policy # MI\STER\11\v01	Page 2 of 2
Sterility Testing Manual		

III. Reporting

If airflow rate information is not provided, report as:

“Bacterial colony count at *incubation temperature* is *X* CFU”

“Mould colony count at *incubation temperature* is *X* CFU”

If airflow information is provided, report as per calculated CFU/m³:

“Bacteria colony count *X* CFU/m³”

“Mould colony count *X* CFU/m³”