

Typical Indoor Mould Samples For Laboratory Analysis

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Types of Samples

- **Surface (Source) Samples**
 - Tape-lift Samples
 - Swab samples
 - Bulk samples
 - Dust samples
- **Air Samples**
 - Non-viable (Total counts)
 - Viable counts

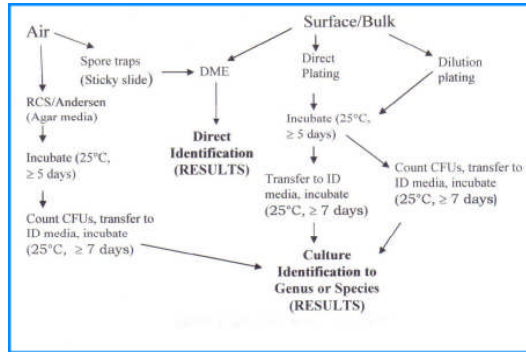


Figure 1. A flowchart summarizing possible methods of analyses for various types of samples.



Figure 4. Mouldy ceiling wood. Use tape lift or contact plates (or swabs) to sample visible mould like this.

Type of Sample	Where/when to Use	Advantages	Disadvantages
Tape-lifts	On flat, dry surfaces with visible or suspected of mould growth. Useful for mould confirmation and identification.	No special equipment, easy to take, inexpensive, gives quick accurate results, can be cultured for speciation if necessary.	Difficult to take on wet or uneven surfaces. Not suitable for quantification.
Swabs/wipes	On flat or irregular, dry or wet surfaces. Can be used inside of drain pans, standing water and humidifiers.	No special equipment, easy to use and fairly inexpensive. Mould and bacteria analysis is possible from the same swab. Quantification possible.	Samples only a small area and hence may require many samples to be taken. May be less efficient for sampling if quantification is required.
Bulk materials (pieces of drywall, carpet, insulation material, etc.)	Suitable for materials that are porous and too moist for a tape-lift or swabs.	Allows determination of microbial diversity and dominant mould(s) on the sample and if the moulds are actively growing.	Involve destructive sampling. May not always be easy to collect depending on material sampled.
Vacuum dust	Suitable for carpets, upholstered furniture and mattresses with a musty or mouldy odour.	Allows effective sampling of carpets, upholstered furniture and mattresses without destruction.	May require special equipment, often difficult to get enough dust for analyses.
Air samples (Air-O-Cell, Allergenco, Micro5, Cyclex-D, RCS, Andersen)	Taken before and after mould remediation. Non-viable suitable for background counts. Viable taken if speciation is required.	Can reveal presence of hidden mould. For non-viable analyses, results can be obtained within a few hours. Viable samples allow speciation.	Require special equipment. Not suitable for detecting moulds that do not easily become airborne.

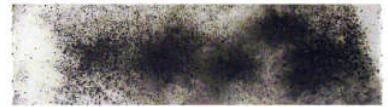


Figure 5. Tape-lift Sample.

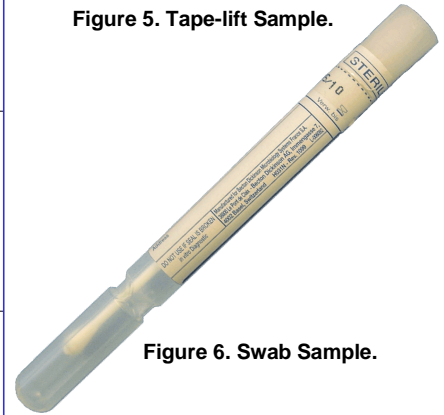


Figure 6. Swab Sample.



Figure 7. Air-O-Cell Cassette commonly used for non-viable air samples.

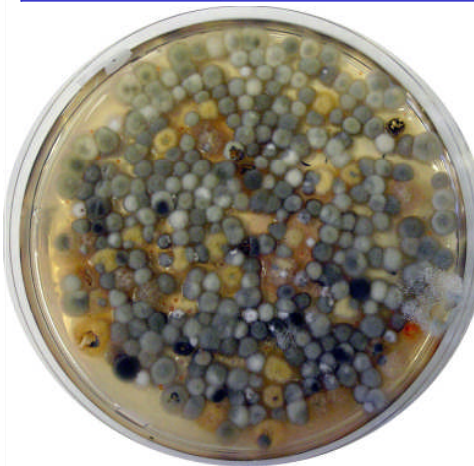


Figure 2. A viable air sample taken with an Andersen N6 Single Stage Sampler. Notice the colony forming units (CFU) on the Petri-dish.



Figure 3. Viable air samples on agar strips taken with a Reuter Centrifugal Sampler (RCS).

For all your analytical requirements, please contact:

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 Fax: (905)290-8329

How to Collect and Ship Samples

- Collect suitable and adequate samples for the kind of analysis required
- Put each sample in its own bag and label (do not mix samples)
- Fill out a Chain of Custody form with sample details and clearly indicate the type of analyses required
- Samples for culture analysis and those that may deteriorate during shipping should be sent by overnight courier under cool conditions
- Samples for non-viable analysis can be sent at room temperature
- Air samples should be handled with care to avoid damage