

Bioaerosol Sampling



Bioaerosol Contamination

Bioaerosol contamination is a growing concern in today's indoor environments. Because bioaerosol contamination may be hard to detect by sight or smell, a thorough evaluation may be necessary to positively confirm its presence and initiate an investigation into the possible source.

Evaluation may involve the collection of bulk air and/or wipe samples followed by analysis at a qualified environmental microbiology laboratory.

Samples are collected using a variety of sampling techniques.



Principle of Sampler	Flow Rate Operation	(L/min)	Contaminants	Sampler Advantages	Sampler Limitations	See Page
BioSampler	Collection into swirling liquid.	12.5 (sonic flow).	Fungi (viable & total), endotoxins, and bacteria.	<ul style="list-style-type: none"> Sampling time up to 8 hours. High collection efficiency. Reduces particle bounce and re-aerosolisation; preserves viability. Use of non-evaporating liquids. 	<ul style="list-style-type: none"> Less efficient collection of hydrophobic bacteria & spores. Water-based collection liquids. 	80
IOM with Multidust Foam Disc	Filtration using porous foam disc & membrane filter.	2	Fungi (viable & total) and bacteria.	<ul style="list-style-type: none"> Bioaerosols defined by different size fractions (inhalable, respirable). Personal bioaerosol sampling. Economical. Better micro-organism survivability. 	<ul style="list-style-type: none"> Dessication. Breaking/deformation. Limited viability with standard filters. 	
BioStage Single-stage Impactor	Impaction onto agar	28.3	Fungi (viable) and bacteria.	<ul style="list-style-type: none"> Easy-to-use. Organisms remain intact and viable. Cost-effective. Time-proven collection method. Meets NIOSH Methods 0800 and 0801. 	<ul style="list-style-type: none"> Particle blow off/bounce. Particle impaction. Short sample times. 	79
Surface Swab Kit	Wipe sample	N/A	Fungi (viable & total) and bacteria.	<ul style="list-style-type: none"> Easy-to-use. Fast sampling. Non-destructive. Characterises source contamination. 	<ul style="list-style-type: none"> Samples must be handled aseptically. Multiple samples should be taken. Re-aerosolisation of microbes. 	91



Support, Knowledge, Choice