

Indoor Air Quality Report of Findings



Prepared for:

School District of Lancaster

1020 Lehigh Ave

Lancaster PA 17602

Attn: Matt Shields

March 16, 2026

Prepared by:

Airborne Contamination Identification
Associates, Ltd.

Randall R. Leaman

“A Certified Indoor Air Quality Professional”

3430 Woodbridge Circle

York, PA 17406

717-767-1850 Office

717-767-1860 Fax

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Data Collected



- * Dates Sampled: March 12, 2026
- * Samples Collected by: Kyle B. Leaman
- * Sample Location: School District of Lancaster, Hamilton Elementary, 1300 Wabank Rd, Lancaster, PA
- * Equipment Used: Met One Model GT-526S Particle Counter Bio Test RCS Portable bio-aerosol Sampler. Vulcain SafetyPalm.

Guidelines for Evaluation of Airborne Microbial Contamination of Buildings



IAQ Evaluation	Category of Contamination	Bacteria CFU's/m ³	FUNGI CFU's/m ³
Excellent	Very Low	<100	<50
Good	Low	<500	<200
Marginal	Intermediate	<2,500	<1,000
Poor	High	<10,000	<10,000
Very Poor	Very High	>10,000	>10,000

By Brian Flanigan, PhD (Citing Wanner, et al, 1993) as presented to the International Conference on Fungi and Bacteria in Indoor Air Environments – Health Effects, Detection and Remediation; October 6-7, 1994

Table: Levels of Microbial Contamination of air and dust in naturally ventilated homes and non-industrial indoor work environments.

American Industrial Hygiene Association (AIHA), *The Synergist*, Geoffery Clark, *The Synergist*, 2001, updated 2003, and Godish 2001 (section).



Type	Normal Background*	Possible	Probable
Air Samples from Residential Buildings	<500 cfu/m ³	500-1,000 cfu/m ³	>1,000 cfu/m ³
Air Samples from Commercial Buildings (filtered HVAC system)	<250 cfu/m ³	250-1,000 cfu/m ³	>1,000 cfu/m ³
Bulk Samples	<10,000 cfu/g	10,000-100,000 cfu/g	>100,000 cfu/g
Swab Samples	<10,000 cfu/in ² <1,500 cfu/cm ²		>10,000 cfu/in ² >1,500 cfu/in ²
Tape Samples	NSFM, NSFC 1-5% <10,000 spores/in ²	5-25%	25-100% >10,000 spores/in ²

The table list mold spore levels considered to be a normal background, possible contamination, and probable contamination for a variety of sample collection methods.

- Types and relative proportions of fungal spores should be similar to outdoors.
- NSFM = no significant fungal material
- NSFC = no significant fungal contamination
- Cfu/m³ = colony forming units per cubic meter
- Cfu/g = colony forming units per gram of dust or material
- Cfu/in² = colony forming units per square inch of surface

“ Worldwide Exposure Standards for Mold and Bacteria”
 By Robert C. Brandys, PhD, MPH, PE, CIH, CSP, CMR
 Gail M. Brandys, MS, CSP, CMR

Data Collected



Location	3.0 Micron	5.0 Micron	10.0 Micron	RH%	Temp °F	Co/Co ²	Evaluation	Fungi CFU M ³
1- 114	1,280	670	220	19%	65°F	0/361	Good	188
2- 119	960	390	190	15%	68°F	0/384	Very Good	50
3- 15	590	190	60	14%	70°F	0/376	Good	113
4- Art	80	10	0	12%	70°F	0/359	Excellent	39
5- Outside Air	1,850	690	170	30%	39°F	0/366	N/A	476

NOTES: Above particle counts are pieces per cubic foot of air. The Fungi counts are in colony forming units per cubic meter of air. Locations with carbon dioxide levels with 700 ppm above outside air should have the ventilation checked to ensure proper amount of outside air is being introduced.

Recommendations



Based on the laboratory analysis of air samples collected throughout Hamilton Elementary, the results indicate that indoor airborne fungal concentrations are within normal and acceptable ranges when compared to outdoor conditions. All occupied areas tested showed significantly lower mold spore concentrations than the outdoor air sample, which is the industry benchmark for evaluating indoor air quality. Additionally, the types of fungi identified indoors were consistent with naturally occurring outdoor organisms, with no evidence of unusual amplification or indoor growth conditions.

No widespread or systemic indoor mold issue was identified in any of the sampled classrooms. These findings indicate that at the time of sampling, the building despite its age and lack of central air conditioning in most areas, is not exhibiting conditions typically associated with unhealthy indoor fungal exposure. A trace presence of *Trichoderma* was identified in the art room. While this organism can be associated with moisture in some cases, it was detected at very low levels and does not, by itself, indicate a significant indoor air quality concern. As a precaution, a limited visual inspection of that area is recommended.

It is also important to note that the school has implemented HEPA-filtered air purifiers in all classrooms, which are highly effective at reducing airborne particulate, including mold spores, and likely contributing positively to the overall indoor air quality.

Regards,
Randall R. Leaman C.I.A.Q.P
Certified Indoor Air Quality Professional since 1996

Airborne Contamination Identification Associates Ltd.

Sampling Photos



1- 114



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Sampling Photos



3- 15



4- Art

Sampling Photos



5- Outside Air