Indiana Department of Health

Mike Braun
*Governor*

Lindsay M. Weaver, MD, FACEP
*State Health Commissioner*

September 10, 2026

JAM #668
Dr. Ryan Apple, Superintendent
Lanesville Community Schools
2725 Crestview Ave.
Lanesville, IN 47136

Dear Dr. Apple:

The purpose of this letter is to report on the results of our indoor air quality evaluation of Lanesville Community Schools conducted August 31st. This evaluation was conducted at the request of a concerned citizen to address health concerns of the occupants that may be related to indoor air quality of the school.

The Indiana State Department of Health's Microbiological Laboratory incubated and counted the fungal and bacterial units. The colony forming units per cubic meter of air (CFU/M3) were computed taking the fungal or bacterial counts and dividing by the total volume of the sampled air. The indoor fungal (mold) concentrations were lower than the outdoor concentration. The only exception was the sample taken in Room 20 which showed a fast-growing fungal growth that covered the petri dish. This is not necessarily representative of an abundance of spores but can be caused by a single fast-growing spore. The bacterial concentration in Room 133 was higher than the outdoor concentration. Bacteria can occur from a variety of sources including mold after water damage, bedding from live animals in classrooms, and is naturally shed by people. We did not see any sources for the bacteria and feel it is what is naturally shed by the occupants. The reported bacteria concentrations are within the range we typically see indoors in classrooms. Please refer to Table 1 for further details. There are no limits established as an acceptable concentration of fungal or bacterial counts indoors. There are guidelines that recommend lower fungal concentrations indoors than outdoors. Bacteria can come from a variety of sources.

The Carbon dioxide (CO2) levels inside were measured with a range of 1192 to the highest 4260 parts CO2 per million parts of air (ppm) measured in room 20. The School Indoor Air Quality rule, 410 IAC 33-4-2 states "(a) "Outdoor Air shall be supplied to classrooms when occupied. (b) Carbon dioxide concentrations in the breathing zone shall never exceed 700 ppm over the outdoor concentration", in this case giving a limit of 1115 ppm. ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) recommends 15 cfm (cubic feet per minute) of outdoor air per person for classrooms.

The outdoor relative humidity was measured at 61 percent (%) and the indoor relative humidity had a range of 48 to 54 %. 410 IAC 33-4-4 sets the maximum relative humidity level in air-conditioned schools at 65% during periods of student occupancy. In the US EPA's publication "Mold Remediation in Schools and Commercial Buildings" they recommend maintaining a relative humidity level below 60% but ideally 30 – 50% if possible. Studies have shown that low relative humidity can cause dryness and irritation of the respiratory tract making individuals more susceptible to infections while high relative humidity levels can promote the growth of allergens such as dust mites or mold.

Based on sample results and our visual inspection we note the following:

1) We did not see any visible signs of mold growth in the building, and our sample results did not indicate that there was an issue with mold growth.
2) We did see that the ventilation unit was actively being repaired in Room 119, which may have contributed to a slightly elevated fungal concentration compared to the other rooms sampled.
3) 410 IAC 33-4-2(b) states "carbon dioxide concentrations in the breathing zone shall never exceed 700 ppm over the outdoor concentration", The carbon dioxide concentration in all rooms measured were above the allowed limit. We recommend checking the dampers and investigating the possibility of increasing the outdoor air supplied to the rooms, so the carbon dioxide concentration remains below the limit.
4) 410 IAC 33-3-1(b) states "The IAQ coordinator's contact information shall also be published: (1) on the school or state agency's website; and (2) in the school or state agency's handbook" When searching the Corporation's website,

we did not locate the contact information for the IAQ Coordinator. That information should be added to the website.

410 IAC 33 requires you to respond within 60 days of any actions you take based upon this report.

The School Indoor Air Quality rule 410 IAC 33-6-2 requires this report, within 5 working days of receipt, to be posted for 14 days both at the school building stated in the report, and on the school's website, where it is accessible to students, parents, and employees. The rule also requires your response to this report to be posted within 5 working days of sending the response to us. That too is to be posted for 14 days. Please respond back providing the links where these are posted on the website.

Individuals experiencing health problems should seek medical advice from a physician. If you have questions, I can be reached at 317.682.9033.
Sincerely,

Judith Magaldi

Judith Magaldi
Indoor Air Industrial Hygienist
Indiana Department of Health
Indoor Air Section, Environmental Public Health

Enclosure

# TABLE 1
## Lanesville Community School Corporation

## Computed Microbiological Air Sample Results
### Taken August 31, 2026

| Sample | Location | Occupants | Temp °F | RH % | CO2 ppm | Fungal cfu/m3 | Bacterial cfu/m3 |
|---|---|---|---|---|---|---|---|
| 1 | RM 119 | 23 | 77 | 51 | 2444 | 2040 | 140 |
| 2 | RM 122 | 26 | 74 | 52 | 1192 | 240 | 80 |
| 3 | 133 | 25 | 73 | 54 | 2441 | 580 | 580 |
| 4 | 136 | 4 | 73 | 50 | 2748 | 220 | 60 |
| 5 | 128 | 27 | 72 | 53 | 3412 | 140 | 100 |
| 6 | 107 | 22 | 70 | 48 | 1874 | 100 | 80 |
| 7 | 112 | 4 | 72 | 50 | 1741 | 80 | 60 |
| 8 | 40 | 28 | 71 | 54 | 2800 | 40 | 0 |
| 9 | 20 | 18 | 71 | 49 | 4206 | - | 0 |
| 10 | Outdoor | - | 89 | 61 | 415 | 2580 | 240 |

**Notes:**

**%--------- percent**

**ppm ------ parts per million**

**CFU/M$^3$—colony forming units per cubic meter of air**