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Startling Facts About Indoor Air Quality in Schools

- One (1) out of every five (5) Americans either attends or works at a K-12 school.
<https://nces.ed.gov/pubs2020/2020024.pdf>
- There are currently no federal regulations to routinely inspect schools for pollution. And only a dozen states have very modest requirements—the rest have none.
www.cnn.com/2012/01/14/health/school-indoor-air-pollution/index.html.
- Studies show that one-half of our nation's 115,000 schools have problems linked to indoor air quality (IAQ).
https://www.epa.gov/sites/default/files/2014-05/documents/chpac_indoor_air_report.pdf
- Indoor air can be two to five times—and occasionally more than one hundred times—more polluted than outdoor air.
<https://epa.gov/sites/default/files/2015-09/documents/backgrounder.pdf>.
- One third (1/3) or more of U.S. schools have serious mold, dust, and other indoor air problems.
www.cnn.com/2012/01/14/health/school-indoor-air-pollution/index.html
- Emerging scientific research indicates that an indoor CO₂ level of 1000 parts per million (ppm) is the upper limit for effective learning in occupied classrooms.
<https://ehp.niehs.nih.gov/1104789/>
- Students who attend schools in areas with outside air pollution fail standardized tests twice as often as students who attend schools with clean outside air.
<https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2011.0077> (Abstract only)
- Researchers have repeatedly found an increase in performance of between five (5) and 17 percentile points when students study in non-polluted buildings.
<http://escholarship.org/uc/item/5sw56439#page-9> .
- Good indoor air quality can help ensure a healthier learning environment and higher classroom performance for students and school staff, improving concentration and attendance.

Olson, S.L. and Kellum, S., 2003. The impact of sustainable buildings on educational achievements in K-12 schools. *Leonardo*, 2, pp. 1-14.

<http://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=11c498c34bf3d8638ee5d24b61341c6b6b2b5afd>

- Properly-managed ventilation and filtration systems can effectively reduce mold, particulate matter (PM), infectious disease, carbon monoxide poisoning, and harmful levels of carbon dioxide while attaining some energy efficiency.
<https://doi.org/10.1016/j.envint.2023.108127>.
- Indoor air pollution has been demonstrated to have an adverse impact on public health. Symptoms such as eye, nose, throat and skin irritation, headaches, fatigue and shortness of breath, sinus congestion and coughing, dizziness and nausea are commonly attributed to poor indoor air quality. Individuals with asthma, allergies, and respiratory conditions are particularly susceptible.
<https://epa.gov/sites/default/files/2015-09/documents/backgrounder.pdf>.
- Children may be more susceptible to indoor pollutants than the general population.
<https://doi.org/10.1542/peds.113.S3.1037>

Additional Information and Resources can be found at <https://www.epa.gov/iaq-schools>.