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Bibliography on Indoor Air Quality
By Date of Publication

Why haven't we made classrooms safer? (August 13, 2023) Zeynep Tufekci, New York Times. https://eeditionnytimes.pressreader.com/article/283218742701024

ASHRAE's position paper on indoor air quality. (June 30, 2023) American Society of Heating, Refrigeration and Air Conditioning Engineers. https://www.ashrae.org/file%20library/about/government%20affairs/public%20policy%20resources/briefs/indoor-carbon-dioxide-ventilation-and-indoor-air-quality_2023.pdf

Associations between illness-related absences and ventilation and indoor PM2.5 in elementary schools of the Midwestern United States. (2023) Shihan Deng, Josephine Lau, Zhihao Wang, Pawel Wargocki, Environment International, Volume 176, 2023, 107944, ISSN 0160-4120, https://doi.org/10.1016/j.envint.2023.107944.

Study links classroom ventilation, air quality with academic performance. (May 2021) https://phys.org/news/2021-05-links-classroom-ventilation-air-quality.html.

Ventilation rates and absences in offices and schools. (April 29, 2018) Berkeley Lab, Indoor Air Quality Scientific Findings Resource Bank. https://iaqscience.lbl.gov/ventilation-rates-and-absences-offices-and-schools.

Ventilation rates and school performance. (April 29, 2018) Berkeley Lab, Indoor Air Quality Scientific Findings Resource Bank. https://iaqscience.lbl.gov/ventilation-rates-and-school-performance#:~:text=All%20five%20of%20the%20intervention%20studies%20found%20that,with%20increased%20ventilation%20rate%20was%20characterized%20as%20compelling.

Ventilation rates and office work performance. (April 29, 2018) Berkeley Lab, Indoor Air Quality Scientific Findings Resource Bank. https://iaqscience.lbl.gov/building-ventilation-rates-and-office-work-performance.

Ventilation with outdoor air in schools. (April 29, 2018) Berkeley Lab, Indoor Air Quality Scientific Findings Resource Bank. https://iaqscience.lbl.gov/ventilation-outdoor-air.

Ventilation rates and school performance. (April 29, 2018) Berkeley Lab, Indoor Air Quality Scientific Findings Resource Bank. https://iaqscience.lbl.gov/ventilation-rates-and-school-performance-human-performance.

How healthy schools save money: Why healthy schools don't cost — they pay. (April 01, 2017) Spaces4Learning. https://spaces4learning.com/articles/2017/04/01/healthy-schools.aspx

The impact of working in a green certified building on cognitive function and health. Building and Environment. Piers MacNaughton, Usha Satish, Jose Guillermo Cedeno Laurent, Skye Flanigan, Jose Vallarino, Brent Coull, John D. Spengler, Joseph G. Allen, Building and Environment, Volume 114, Pages 178-186, ISSN 0360-1323. https://doi.org/10.1016/j.buildenv.2016.11.041.

Healthy schools, healthy kids. (January 19, 2017) Environmental Protection Agency. https://19january2017snapshot.epa.gov/schools_.html.

Ambient concentrations of metabolic disrupting chemicals and children's academic achievement in El Paso, Texas. (September 1, 2016) International Journal of Environmental Research and Public Health. Authored by Stephanie E. Clark-Reyna, Sara E. Grineski, and Timothy W. Collins. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5036707/.

Associations of cognitive function scores with carbon dioxide, ventilation, and volatile organic compound exposures in office workers: a controlled exposure study of green and conventional office environments (June 1, 2016) Authored by Joseph G. Allen, Piers MacNaughton, Usha Satish, Suresh Santanam, Jose Vallarino, and John D. Spengler. https://ehp.niehs.nih.gov/15-10037/#tab1.

The impact of green buildings on cognitive function. (October 26, 2015) Center for Climate, Health, and the Global Environment, Harvard School of Public Health. (Video) https://www.youtube.com/watch?v=1W2EWPyQbzY.

Study shows classroom air quality affects student performance. (August 28, 2015) College of Engineering and Computer Science, University of Tulsa. https://engineering.utulsa.edu/classroom-air-quality/#:~:text=A%20study%20conducted%20by%20researchers%20from%20TU%E2%80%99s%20Indoor,have%20direct%20impacts%20on%20student%20learning%20and%20performance.

High indoor CO2 concentrations in an office environment increases the transcutaneous CO2 level and sleepiness during cognitive work. (January 2016) Vehviläinen T, Lindholm H, Rintamäki H, Pääkkönen R, Hirvonen A, Niemi O, Vinha J. J Occup Environ Hyg. 2016;13(1):19-29. doi: 10.1080/15459624.2015.1076160. PMID: 26273786. https://pubmed.ncbi.nlm.nih.gov/26273786/.

Effects of classroom ventilation rate and temperature on students' test scores. (August, 2015) Ulla Haverinen-Shaughnessy, Richard J. Shaughnessy. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0136165**.**

Indoor environmental quality in school buildings, and the health and wellbeing of students. (2014) Mari Turunen, Oluyemi Toyinbo, Tuula Putus, Aino Nevalainen, Richard

Shaughnessy, Ulla Haverinen-Shaughnessy. International Journal of Hygiene and Environmental Health, Volume 217, Issue 7, pages 733-739, ISSN 1438-4639, https://doi.org/10.1016/j.ijheh.2014.03.002.

Is CO2 an indoor pollutant? Direct effects of low-to-moderate CO2 concentrations on human decision-making performance (December 1, 2012) Usha Satish, Mark J. Mendell, Krishnamurthy Shekhar, Toshifumi Hotchi, Douglas Sullivan, Siegfried Streufert, and William J. Fisk. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3548274/.

Wireless indoor environmental quality (IEQ) monitoring in classrooms and laboratories (VOC's, CO, CO2, and T). (August 22, 2012) American Chemical Society meeting, Philadelphia. http://analyzersource.blogspot.com/2012/04/wireless-indoor-environmentalquality.html.

Air pollution and detrimental effects on children's brain. The need for a multidisciplinary approach to the issue complexity and challenges. (August 12, 2012) Lilian Calderón-Garcidueñas,[1] Ricardo Torres-Jardón,[2] Randy J. Kulesza,[3] Su-Bin Park,[4] and Amedeo D'Angiulli. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4129915/.

Ventilation rates in schools and pupils' performance. (February 2012) Zs. Bakó-Biró, D.J. Clements-Croome, N. Kochhar, H.B. Awbi, and M.J. Williams. Building and Environment, Volume 48: Pages 215–223. ISSN 0360-1323. https://doi.org/10.1016/j.buildenv.2011.08.018.

Are schools making kids sick? (January 14, 2012) David S. Martin. CNN Health. https://www.cnn.com/2012/01/14/health/school-indoor-air-pollution/index.html.

Ventilation rates and health: multidisciplinary review of the scientific literature. (June 2011) J. Sundell, H. Levin, W. Nazaroff, W. S. Cain, W. J. Fisk, D. T. Grimsrud, F. Gyntelberg, Y. Li, A. K. Persily, A. C. Pickering, J. M. Samet, J. D. Spengler, S. T. Taylor, & C. J. Weschler. Indoor air, Volume 21(3), pages 191–204. https://pubmed.ncbi.nlm.nih.gov/21204989/.

Air pollution around schools is linked to poorer student health and academic performance. (May 20, 2011) Michigan News, University of Michigan. http://ns.umich.edu/new/releases/8398-air-pollution-near-michigan-schools-linked-topoorer-student-health-academic-performance.

Association between substandard classroom ventilation rates and students' academic achievement. (April 2011) U. Haverinen-Shaughnessy, D. J. Moschandreas, R. J. Shaughnessy. Indoor Air, Volume 21(2), pages 121-31. doi: 10.1111/j.1600-668.2010.00686.x. Epub 2010 Oct 28. PMID: 21029182. https://pubmed.ncbi.nlm.nih.gov/21029182/.

A preliminary study on the association between ventilation rates in classrooms and student performance. (December 2006) R J Shaughnessy, U. Haverinen-Shaughnessy, A. Nevalainen, D. Moschandreas. Indoor Air, Volume 16 (Issue 6), pages 465-468. https://pubmed.ncbi.nlm.nih.gov/17100667/.

Associations between classroom CO_2 concentrations and student attendance in Washington and Idaho (October 2004) D. G. Shendell, R. Prill, W. J. Fisk, M. G. Apte, D. Blake, and D. Faulkner. Indoor Air, Volume 14 (Issue 5), pages 333-341. https://pubmed.ncbi.nlm.nih.gov/15330793/.

Associations between indoor CO2 concentrations and sick building syndrome symptoms in U.S. office buildings: an analysis of the 1994-1996 BASE study data. (December 2000) . M. Apte, W. Fisk, and J. Daisey. Indoor Air, Volume 10 (Issue 4), pages 246-247. https://pubmed.ncbi.nlm.nih.gov/11089329/.

Association of ventilation rates and CO2 concentrations with health and other responses in commercial and institutional buildings. (December 1999) O. Seppänen, W. J. Fisk, and M. J. Mendell. Indoor Air, Volume 9 (Issue 4), pages 226-252. https://pubmed.ncbi.nlm.nih.gov/10649857/.

Indoor environment in schools—pupils' health and performance. (1996) A. N. Myhrvold, E. Olsen, and O. Lauridsen. Indoor Air, Volume 4, pages 369–371. The Seventh International Conference on Indoor Air Quality and Climate. https://www.aivc.org/resource/indoor-environment-schools-pupils-health-and-performance-regard-co2-concentrations.

Mental performance by secondary school pupils in relation to the quality of indoor air. (1996) G. Smedje, D. Norback, C. Edling. Indoor Air, 1996, pages 413-19. Proceedings of the 7th International Conference on Indoor Air Quality and Climate–Nagoya, Japan. https://www.semanticscholar.org/paper/Mental-performance-by-secondary-school-pupils-into-Smedje-Norb%C3%A4ck/9f4ba8b8db2abf591b22b39e6bc3d9057f512787.