

Gas stoves produce dangerous amounts of air pollutants, including nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), that often exceed outdoor ambient air standards. Even when turned off, gas stoves leak cancer-causing benzene into our homes. These pollutants can have lasting and damaging effects on the human body. Children, low income folks, and Black & Latine communities are among the most vulnerable.

NOx

- Decreased cognitive functioning
- Respiratory infections
- Asthma

PM

- Aggravates asthma & stunts lung development
- Heart attacks, arrhythmias, congestive heart failure
- Ischemic stroke, developmental delay

CO

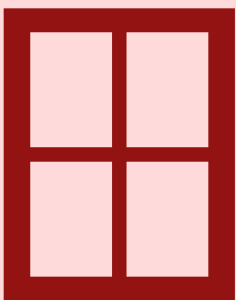
- Fatigue, impaired vision, dizziness, nausea
- Chest pain
- Death

Benzene

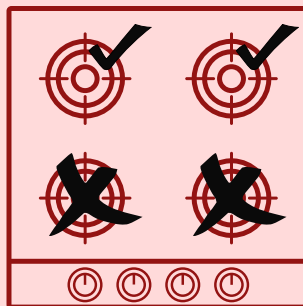
- Acute neurological effects (Headaches, confusion)
- Convulsions & irregular heartbeat
- Cancer (leukemia)



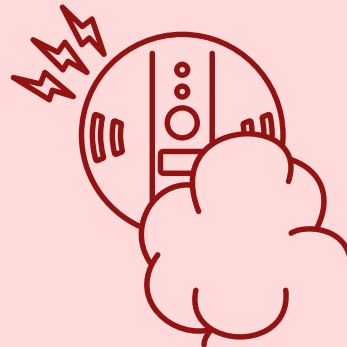
To reduce your risk of exposure, ventilation is key. Any action that increases air flow, from opening a window to using an exhaust hood, will help reduce the concentration of air pollutants in your home. Try any of the mitigation strategies presented below. If possible, switching from a gas stove to an electric, induction stove will address the root cause of the fossil fuel air pollution.



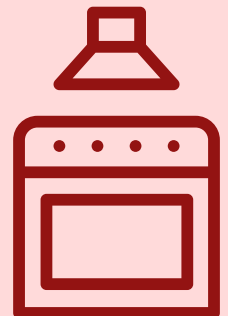
OPEN A WINDOW



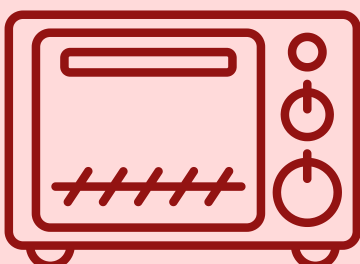
COOK ON THE BACK BURNERS



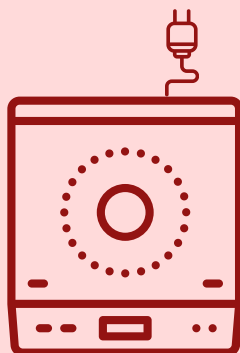
INSTALL & MAINTAIN CO DETECTOR



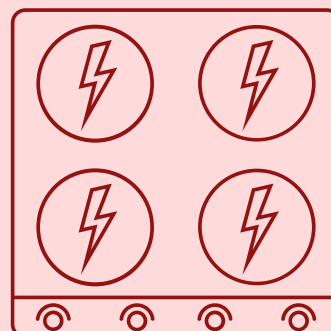
USE AN EXHAUST HOOD



USE ELECTRIC APPLIANCES LIKE A TOASTER OVEN



TRY A PLUG-IN INDUCTION BURNER



SWITCH TO AN ELECTRIC, INDUCTION STOVE

Learn more on PSR's Solutions webpage:



References

1. Nigel Bruce and Kirk R Smith, *WHO IAQ guidelines: household fuel combustion – Review 4: health effects of household air pollution (HAP)*, 2014, <https://www.who.int/airpollution/guidelines/household-fuel-combustion/evidence/en/>.
2. U.S. Environmental Protection Agency. (2016). *Integrated Science Assessment for oxides of nitrogen—Health criteria (EPA/600/R-15/068)*. https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=526855&Lab=NCEA
3. U.S. Environmental Protection Agency. (2020c). *Carbon monoxide's impact on indoor air quality*. <https://www.epa.gov/indoor-air-quality-iaq/carbon-monoxides-impact-indoor-air-quality>
4. U.S. Environmental Protection Agency. (2020b). *Particulate matter (PM) pollution: Health and environmental effects of particulate matter (PM)*. <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>
5. "NAAQS Table," US Environmental Protection Agency, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>
6. "Nitrogen Dioxide & Health," California Air Resources Board, <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>
7. Singer BC, Pass RZ, Delp WW, Lorenzetti DM, Maddalena RL. Pollutant concentrations and emission rates from natural gas cooking burners without and with range hood exhaust in nine California homes. *Building and Environment*. 2017;122:215-229. doi:10.1016/j.buildenv.2017.06.021
8. Garcia E, Berhane KT, Islam T, McConnell R, Urman R, Chen Z, Gilliland FD. Association of Changes in Air Quality With Incident Asthma in Children in California, 1993-2014. *JAMA*. 2019 May 21;321(19):1906-1915. doi:10.1001/jama.2019.5357. PMID: 31112259; PMCID: PMC6537847.
9. Weiwei Lin, Bert Brunekreef, and Ulrike Gehring, "Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children," *International Journal of Epidemiology*, Volume 42, Issue 6, (December 2013): 1724–1737, <https://doi.org/10.1093/ije/dyt150>.
10. T.M. Michney, and L. Winling. "New Perspectives on New Deal Housing Policy: Explicating and Mapping HOLC Loans to African Americans." *Journal of Urban History* (2019): DOI: 10.1177/0096144218819429
11. R.A. Mohl. "The Expressway Teardown Movement in American Cities: Rethinking Postwar Highway Policy in the Post-interstate Era." *Journal of Planning History* 11 (2012): 89–103.
12. J. Greer. "The Home Owners' Loan Corporation and the Development of the Residential Security Maps." *Journal of Urban History* 39 (2013): 275–296
13. Gary Adamkiewicz et al., "Moving Environmental Justice Indoors: Understanding Structural Influences on Residential Exposure Patterns in Low-Income Communities," *American Journal of Public Health*. 2011, <https://www.ncbi.nlm.nih.gov/pubmed/21836112>.
14. Diana Hernández and Stephen Bird, *Energy Burden and the Need for Integrated Low-Income Housing and Energy Policy*, *Poverty Public Policy*, November 2010, p. 6, <https://www.ncbi.nlm.nih.gov/pubmed/27053989>.
15. Nadia N Hansel et al., "A Longitudinal Study of Indoor Nitrogen Dioxide Levels and Respiratory Symptoms in Inner-City Children with Asthma," *Environmental Health Perspectives* Volume 116 Number 10, October 2008, p. 1430, <https://ehp.niehs.nih.gov/doi/10.1289/ehp.11349>.