



Health Professionals Can Play a Role in Electrification



Image credit: unsplash.com/@betofine

Health professionals are trusted and effective messengers. No matter your role or specialty, you likely have patients with negative health outcomes from exposure to harmful air pollutants. In fact, air pollution is the [leading environmental risk factor for early death](#), and burning fossil fuels is responsible for [one in five deaths worldwide](#).¹ Reducing fossil fuel use at home and replacing gas appliances with clean electric alternatives (i.e., electrification) is a direct way to reduce air pollution and improve our climate. Given electrification's tangible public health benefits, this is a natural place for health professionals to join the discussion with patients, colleagues, community members, and policymakers. We've developed three scalable recommendations for engaging in electrification efforts.

Engage in the Conversation

- Stay up to date with the evolving health science on electrification by pursuing [learning opportunities](#), potentially through continuing education.² Ideally, health professionals should be introduced to the climate-health nexus in their [training](#).³
- Join a state, regional, or national health organization engaged in electrification initiatives for ongoing education and networking. Options include [Physicians for Social Responsibility](#), the [Medical Society Consortium on Climate and Health](#), [Climate Health Now](#), and [Climate Code Blue](#), among others.⁴

Become an Advocate

- Within your state, national, or specialty society, help draft and pass a resolution or policy statement acknowledging the health risks of gas appliances and commit to raising awareness of electrification among health professionals. For example, the [Massachusetts Medical Society](#) and the [Washington State Medical Association](#) have adopted policy related to electrification and health.⁵
- Advocate for legislative and regulatory solutions to reduce gas appliance pollution through electrification. For example, consider writing an op-ed or engaging in written or oral public testimony. Your voice can help support standards, codes, guidelines, or ordinances, such as those committing to [all-electric new buildings](#) or [requiring manufacturers to include warning labels on gas stoves](#).⁶
- Play an active role in addressing the health disparities of air pollution from fossil fuel combustion, which disproportionately impacts [overburdened and underserved communities and people of color](#).⁷ Make health equity and social justice a focal point of your electrification advocacy and ensure [culturally competent care](#) in all patient interactions.⁸

Educate Your Patients

- **Ask about gas appliances.** Identify whether your patients use gas appliances that contribute to indoor and outdoor air pollution and resulting health outcomes. Gas appliances may include stoves, fireplaces, water heaters, furnaces, and clothing dryers. For example, indoor pollution from [gas stoves is a known asthma trigger in children](#), and exposure can potentially be assessed through an intake form or screening questions.⁹ This is especially important for visits with high-risk patients including children, low-income individuals, people of color, pregnant women, babies born prematurely, and others with preexisting respiratory or cardiovascular conditions.
- **Recommend reduced exposure.** For people using gas appliances, provide best practices for reducing exposure to air pollutants. For example, suggest increasing ventilation during every cooking event by using an exhaust hood when available and cooking on the back burners where pollutants are more likely to be captured by the exhaust hood. For homes without an exhaust hood, opening nearby windows and using an [air cleaner/purifier](#) with a HEPA filter can decrease indoor pollutant levels.¹⁰ Always encourage the use of carbon monoxide monitors.
- **Encourage electric appliances.** People can take a three-tiered approach to move away from gas in the kitchen. First, households can shift some cooking events from their gas stove to small electric appliances they already own, like microwave ovens, electric kettles, and toaster ovens. Second, households can invest in a low-cost plug-in induction stove. Third, if feasible and appropriate, households can entirely replace their gas stove with a slide-in induction stove. Outside of the kitchen, households can also switch gas-burning space and water heating appliances to electric heat pumps.
- **Support low-income communities and renters.** An increasing number of [incentive or rebate programs](#) will assist low-income households with the cost of switching to electric appliances.¹¹ However, renters may not have the choice to modify their units. Consider writing a letter of medical necessity or reasonable accommodation requesting that renters' property owners take steps to reduce air pollution exposure or replace gas appliances altogether.



Endnotes

- ¹ Jos Lelieveld et al., "Loss of Life Expectancy from Air Pollution Compared to Other Risk Factors: A Worldwide Perspective," *Cardiovascular Research*, Vol. 116, No. 11, 2020: 1910-1917, <https://doi.org/10.1093/cvr/cvaa025>; and Karn Vohra et al., "Global Mortality from Outdoor Fine Particle Pollution Generated by Fossil Fuel Combustion: Results from GEOS-Chem," *Environmental Research*, Vol. 195, 2021: 110754, <https://doi.org/10.1016/j.envres.2021.110754>.
- ² Jay Lemery et al., "Training Clinical and Public Health Leaders in Climate and Health," *Health Affairs*, Vol. 39, No. 12, 2020: 2189-2196, <https://doi.org/10.1377/hlthaff.2020.01186>.
- ³ "Curriculum," Medical Students for a Sustainable Future, 2021, <https://ms4sf.org/curriculum/>.
- ⁴ "Physicians for Social Responsibility," Physicians for Social Responsibility, 2021, <https://www.psr.org/>; "The Medical Society Consortium on Climate and Health (MSCCH)," MSCCH, 2021, <https://medsocietiesforclimatehealth.org>; "Climate Health Now," Climate Health Now, 2021, <https://www.climatehealthnow.org>; "Climate Code Blue," Climate Code Blue, 2021, <https://www.climatecodeblue.org>.
- ⁵ Brita E. Lundberg, "Massachusetts Medical Society: Connection Between Natural Gas Stoves and Pediatric Asthma," Massachusetts Medical Society, 2019, <https://www.massmed.org/Publications/Vital-Signs---Member-Publication/Connection-Between-Natural-Gas-Stoves-and-Pediatric-Asthma/>; "Promotion of Building Electrification to Improve Human Health," Washington State Medical Society, 2021, https://wsma.org/WSMA/WSMA/About/Policies/Whats_Our_Policy/Public_Health/promotion_of_building_electrification_to_improve_human_health.aspx.
- ⁶ Matt Gough, "California's Cities Lead the Way to a Gas-Free Future," Sierra Club, 2021, <https://www.sierraclub.org/articles/2021/07/californias-cities-lead-way-gas-free-future>; and Brady Anne Seals and Andee Krasner, "Health Effects from Gas Stove Pollution," RMI, Physicians for Social Responsibility, Mothers Out Front, and Sierra Club, 2020, <https://rmi.org/insight/gas-stoves-pollution-health>.
- ⁷ "Disparities in the Impact of Air Pollution," American Lung Association (ALA), 2020, <https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities>.
- ⁸ "Cultural Competence in Health Care: Is It Important for People with Chronic Conditions?" Georgetown University Health Policy Institute, 2021, <https://hpi.georgetown.edu/cultural/>.
- 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*, Vol. 42, No. 6, December 2013: 1724-1737, <https://doi.org/10.1093/ije/dyt150>.
- ¹⁰ "Air Cleaner Information for Consumers," California Air Resources Board, 2021, <https://ww2.arb.ca.gov/our-work/programs/air-cleaners-ozone-products/air-cleaner-information-consumers>.
- ¹¹ "Kitchen Electrification Group Resource Directory," Building Decarbonization Coalition Kitchen Electrification Group (KEG), 2021, <https://www.buildingdecarb.org/kitchen-electrification-group-resource-directory.html>.