


FACT SHEET

All-Electric Buildings: A Health Priority for Illinois

Burning fossil fuels for cooking and heating produces pollution that harms Illinoisans, especially children, the elderly, people of color, and low-income households. Illinois can prioritize health by helping residents and businesses make the switch to all-electric appliances.

Cooking with gas pollutes our homes

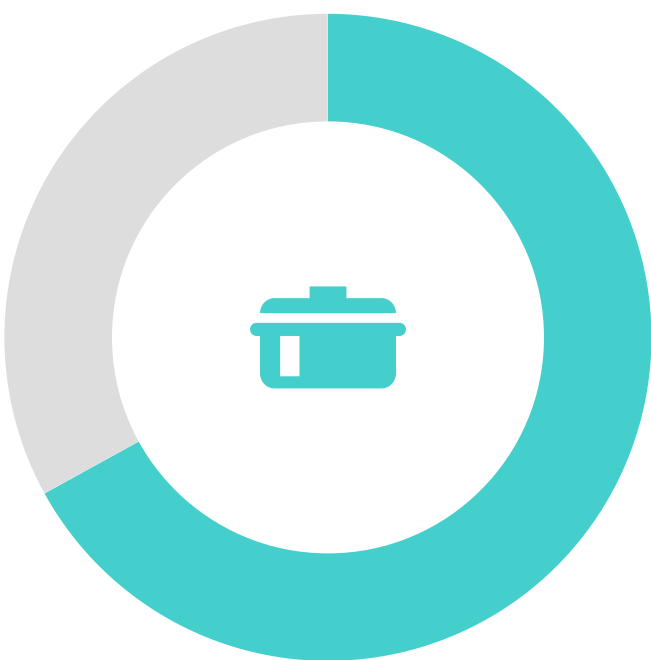
Gas stoves release harmful pollutants like carbon monoxide, nitrogen dioxide, and formaldehyde into the homes where we eat, sleep, work, and play. Everyday kitchen activities like baking a cake or boiling water can create pollution that would be **considered illegal** outdoors. Despite decades of evidence on the health risks of cooking with gas, no standards or regulations exist for indoor air quality.¹



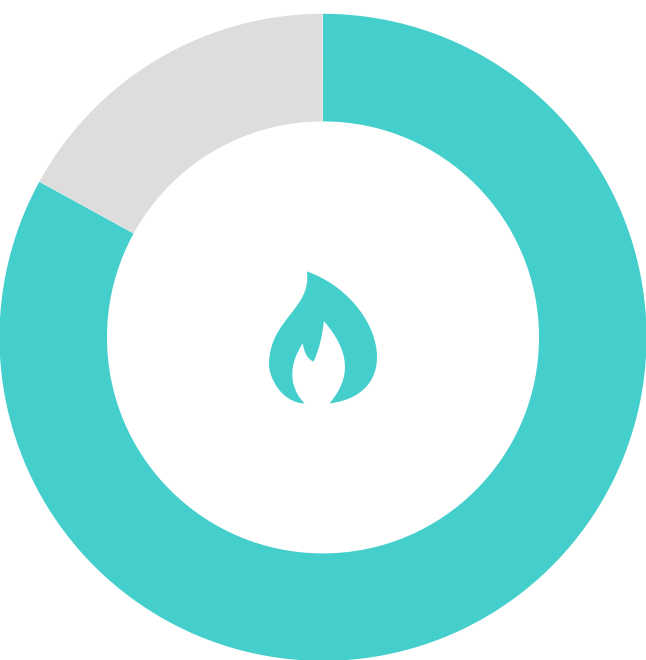
“How can I reduce my health risk?”

Households can reduce their pollution exposure by cooking on back burners, using range hoods, or opening a window. However, gas stoves can leak chemicals, including benzene, a known carcinogen, **even when turned off**. The most effective way to minimize risk is by cooking with electric appliances.

Children living in a home with a gas stove are **42% more likely** to experience asthma symptoms.¹



67%
*of Illinois homes
use gas for
cooking.²*



83%
*of Illinois homes
use fossil fuels for
heating.²*

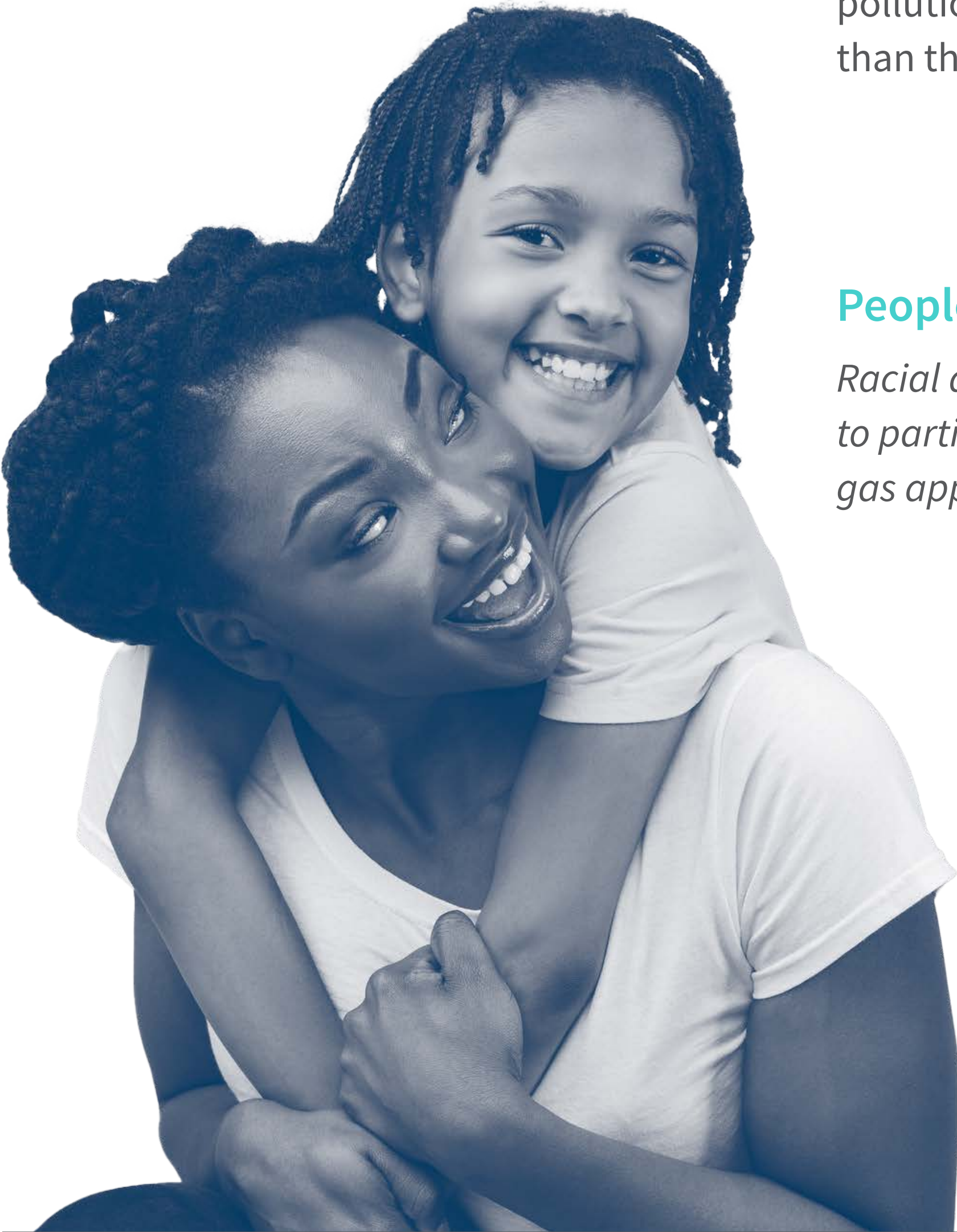
Fuel-burning appliances pollute outdoor air

More than 17 million homes and commercial buildings in Illinois' region burn fuels — including gas, oil, propane, wood, and biomass — in furnaces, water heaters, and other appliances.³ These appliances are a significant source of outdoor air pollution that **cost Illinois \$12.6 billion in health impacts every year**.⁴ On-site air pollution from appliances is linked to asthma, cardiovascular disease, cancers, birth defects, and approximately 1,120 early deaths per year in Illinois.⁴

| APPLIANCE POLLUTANT | ALSO FOUND IN | LINKED TO CANCER | LINKED TO CARDIOVASCULAR DISEASE | LINKED TO RESPIRATORY ILLNESS |
|---------------------|-----------------------|------------------|----------------------------------|-------------------------------|
| Carbon monoxide | Car exhaust | | × | |
| Nitrogen dioxide | Power plant emissions | × | × | × |
| Ozone | Smog | | | × |
| Particulate matter | Wildfire smoke | × | × | × |
| Benzene | Cigarette smoke | × | | |
| Formaldehyde | Pesticides | × | | × |

Electrifying buildings advances health equity

Converting to clean, all-electric appliances can make the biggest difference for Illinois' most vulnerable populations, who currently face disproportionate health impacts from fossil fuel pollution.



Children

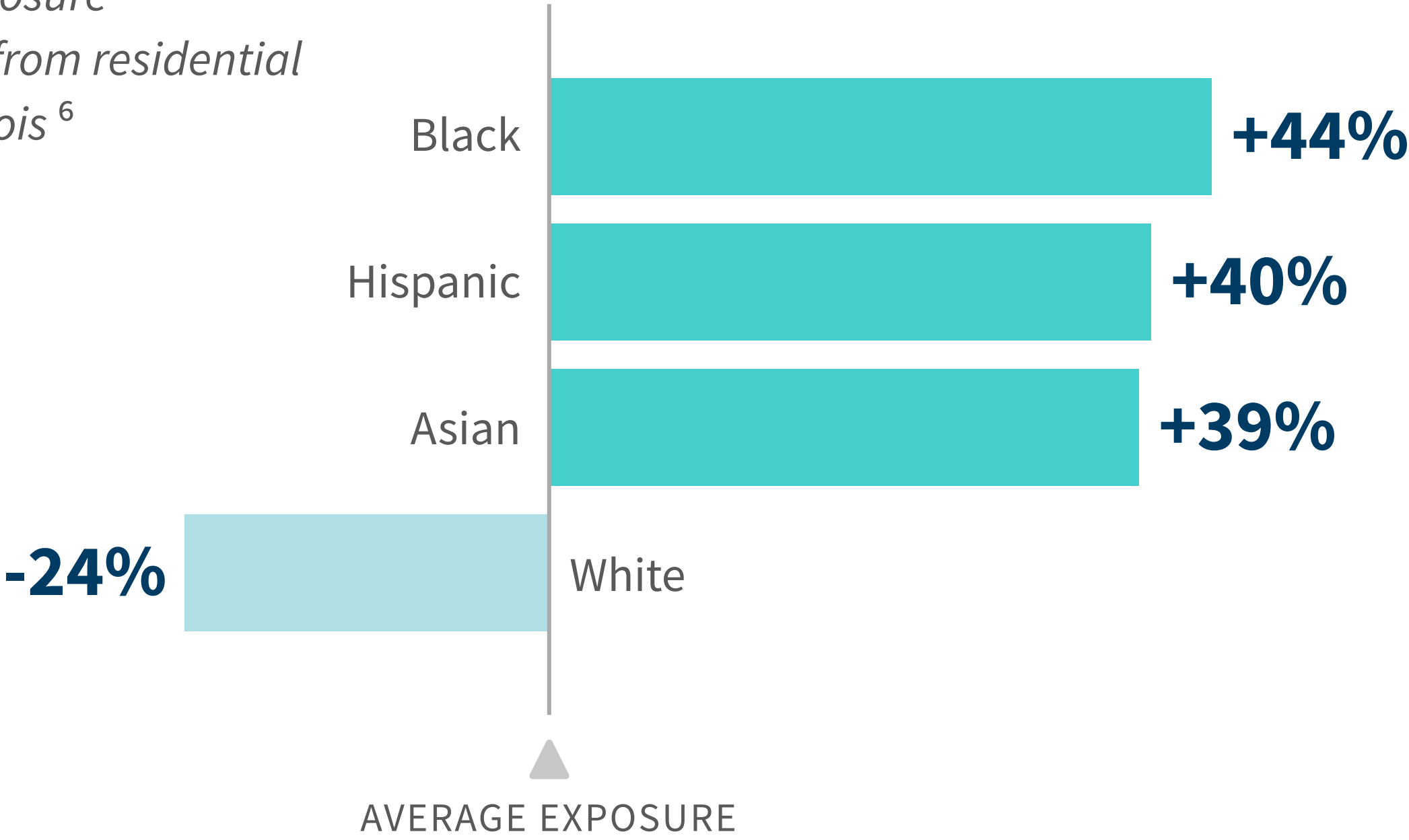
Developing lungs are particularly vulnerable to air pollution. Nationwide, estimated childhood asthma risk from exposure to gas stoves is similar to that of secondhand smoke.⁵

People of color

In Illinois, people of color are exposed to 39% more outdoor particulate matter pollution from residential gas appliances than the Illinois average.⁶

People of color are at higher risk

Racial disparity in exposure to particulate matter from residential gas appliances in Illinois⁶



Low-income households

Smaller living spaces, older appliances, and poor ventilation can expose low-income households to higher concentrations of pollution from fossil fuel appliances.

Elderly people

Exposure to air pollution from fossil fuel appliances can increase the risk of cardiovascular and respiratory illnesses that older adults are most susceptible to, as well as dementia and Alzheimer's.

Take action

Accelerating the transition to clean, electric appliances will deliver significant health benefits by reducing Illinois residents' exposure to indoor and outdoor air pollution. Policymakers and regulators can help advance this goal in several key ways:

- ▶ **Incentivize electric appliances** through point-of-sale rebates and accessible tax credits.
- ▶ **Require health warning labels** for gas stoves.
- ▶ **Phase in code requirements** prohibiting on-site combustion of fossil fuels in new buildings.
- ▶ **Support a planning process** to scale down the utility gas system while protecting customers and utility workers.
- ▶ **Educate residents** about the importance of proper ventilation and safer cooking techniques for gas stoves as they wait for healthier options.

Learn more

Gas Stoves are a Health and Climate Problem, RMI, 2023, rmi.org/gas-stoves-health-climate-asthma-risk

What is the Health Impact of Buildings in Your State?, RMI, 2021, rmi.org/health-air-quality-impacts-of-buildings-emissions

All-Electric Homes: A Health Professional's Guide, RMI, 2023, rmi.org/all-electric-homes-a-health-professionals-guide

NOTES

1. Lin et al., 2013, bit.ly/429HskH
2. US Energy Information Administration, 2020, bit.ly/44A8GT6
3. US Energy Information Administration, 2020, bit.ly/44A8GT6; US Energy Information Administration, 2018, bit.ly/3NCTFTT
4. Data for 2017. RMI, 2021, bit.ly/3HKBRcC
5. RMI, 2022, bit.ly/3pgDgkw
6. RMI analysis of supplemental data from Tessum et al., 2021, bit.ly/44w9FDX