

GAS STOVES ARE THE FRACKING TAILPIPE IN YOUR KITCHEN, CREATING HARMFUL INDOOR AIR!

"Natural gas" is hazardous to our health throughout its course—all the way from the gas wells and into our kitchens! Nationally, about 38 percent of households use gas stoves for cooking, but in four states—including New York—about 60 to 70 percent of us cook with gas. Changing this will improve our health. Gas stoves pollute indoor air with contaminants that we know lead to health harms:



Combustion of gas by gas appliances creates **nitrogen dioxide**, a respiratory irritant linked to airway inflammation, reduced lung function, asthma, and worsened coughs and wheezing.



Gas appliances are also sources of deadly **carbon monoxide** and the carcinogens **formaldehyde** and **benzene**.



All are invisible at household concentrations: the odorant added to residential natural gas doesn't help us detect them!

The gas delivered to homes is usually around 90 percent methane. Gas stoves emit unburned methane directly into indoor air through leaks, **even when not in use!** This full-time leakage can carry contaminants with it, such as benzene.

Even proper mechanical venting only helps with some contaminants. Venting with range hoods does not completely protect our health (and 90 percent of rental homes in the United States don't have them!) Many range hoods are ductless, recirculating fumes back into our indoor air rather than venting to the outside, and so do little to lower exposures.

Nitrogen dioxide is a hazard we can and must remove from our homes. Mechanical ventilation does not dramatically reduce nitrogen dioxide levels. With gas stoves in use, indoor air can have many times higher levels of nitrogen dioxide than outdoor air. The US EPA regulates outdoor levels, but no agency is tasked with addressing indoor levels. The air inside homes with gas stoves can have concentrations of nitrogen dioxide 50 to 400 percent higher than the air inside homes with electric stoves!

We know more than enough to act. The link between gas stove emissions and respiratory distress in children is supported by studies dating back to the 1970s. Dozens of studies document the link between nitrogen dioxide exposure and asthma. Nitrogen dioxide exposure is also linked to chronic obstructive pulmonary disease and respiratory distress in people not suffering from asthma.

CHILDREN LIVING IN HOMES WITH GAS STOVES HAVE A 42 PERCENT INCREASED RISK OF HAVING CURRENT ASTHMA AND A 24 PERCENT INCREASED RISK OF DEVELOPING ASTHMA DURING THEIR LIFETIME. OVER 18 PERCENT OF CHILDHOOD ASTHMA IN NEW YORK IS ATTRIBUTABLE TO THE USE OF GAS STOVES.

Gas stoves contribute to health injustice and environmental injustice. Asthma is the leading chronic disease among U.S. children, with Black children nearly three times more likely to suffer asthma than white children. Communities of color and low-income communities are disproportionately hurt by gas stove emissions.

We agree with the American Medical Association and the American Public Health Association: both have recognized the links among gas stoves, nitrogen dioxide pollution, and increased respiratory illnesses in children and have called for a **transition away from gas stoves, toward the use of all electric appliances, in all homes.**

THE WHOLE METHANE GAS SYSTEM, INDOORS AND OUT, IS HARMING OUR HEALTH, FROM THE UNHEALTHY INDOOR AIR IT CREATES, TO ITS MAJOR ROLE IN CLIMATE BREAKDOWN. IT'S ALL CONNECTED: METHANE EMISSIONS FROM ALL GAS STOVES IN U.S. HOMES HAVE A CLIMATE IMPACT COMPARABLE TO THE ANNUAL CARBON DIOXIDE EMISSIONS OF A HALF MILLION CARS. CLIMATE CHANGE THREATENS OUR HEALTH IN COUNTLESS WAYS.

TRANSITION TO ELECTRIC CAN CLEAN THIS UP! ALL CAN HAVE HEALTHY HOMES.

All references can be found on pages 95-97 and 560-64 of the 9th edition fracking science Compendium: concernedhealthny.org/compendium/

