

## WHAT ARE THE DANGERS?

Pollution from gas cooking can increase the risk of having asthma and can worsen existing respiratory conditions in both children and adults.

A 2013 meta-analysis of 41 studies found that children living in a home with a gas stove have a 42% increased risk of having had asthma symptoms within the past 12 months.



Source: Brady Seals and Andee Krasner, Health Effects from Gas Stove Pollution, Rocky Mountain Institute, Physicians for Social Responsibility, Mothers Out Front, and Sierra Club, 2020, <https://www.psr.org/wp-content/uploads/2020/05/health-effects-from-gas-stove-pollution.pdf>

# Gas Stoves: Health Impacts on Children



## WHICH GROUPS ARE MOST VULNERABLE?

Children are most affected by indoor air pollution, in part because they have developing lungs and immune systems. Those with asthma, heart disease or lung conditions are also at greater risk.



## HOW DOES COOKING WITH GAS CREATE INDOOR AIR POLLUTION?

Burning gas releases toxic pollutants, including nitrogen dioxide (NO<sub>2</sub>). Since most of us spend the majority of our time indoors, indoor air quality is important to our health.

## HOW CAN I MAKE COOKING SAFER?

Switching to electric or induction ovens and stoves is an excellent way to minimize indoor air pollution.

Homes with electric stoves have levels of NO<sub>2</sub> that are about half of those in homes with gas stoves.

If cooking with gas is unavoidable, proper ventilation is important. High efficiency fans with hoods can be helpful if properly vented to the outdoors. However, fans vary widely in effectiveness. Opening doors and windows can also increase ventilation.



Studies have shown that an increase of just 15 parts per billion (ppb) of NO<sub>2</sub> is associated with a higher risk of wheezing in asthmatic children.

Gas cooking frequently exceeds recommended NO<sub>2</sub> limits set by California and the US for outdoor NO<sub>2</sub> exposure. World Health Organization indoor guidelines are also frequently exceeded.

Research by the US EPA has also linked NO<sub>2</sub> to diabetes, poorer birth outcomes, premature mortality, cardiovascular effects, and cancer.

Measured NO<sub>2</sub> Emissions from Gas Stoves & Ovens

