

From: O'Shea, Jennifer <joshea@aga.org>
Sent: Friday, May 3, 2024 2:15:28 PM
To: Leadership Team <LeadershipTeam@aga.org>
Subject: New Study: NO2 exposure and health outcomes from gas stoves

To: AGA Communications and Marketing Committee
Re: New Study: NO2 exposure and health outcomes from gas stoves

A new [study](#), “Nitrogen dioxide exposure, health outcomes, and associated demographic disparities due to gas and propane combustion by U.S. stoves,” was released on May 3, 2024. We have reviewed the study and below you will find AGA’s media statement, along with detail about the inaccuracies in the study.

FROM AGA PRESIDENT AND CEO KAREN HARBERT:

“Despite the impressive names on this study, the data presented here clearly does not support any linkages between gas stoves and childhood asthma or adult mortality,” **said AGA President and CEO Karen Harbert**. “The two major cited studies used to underpin the Stanford analysis directly contradict the conclusions they have presented. In short, the interpretation of results by Kashtan *et al.* are misleading and unsupported.”

BACKGROUND:

A new study by Kashtan et al. estimated the number of childhood asthma cases and adult deaths due to natural gas use based largely on two published meta-analyses. A meta-analysis is a statistical combination of results from multiple studies addressing a similar research question. The conclusions of this new Kashtan study rely on two major meta-analyses, **neither of which support the study’s claims**.

- Kashtan *et al.* based their asthma analysis on a large 2024 meta-analysis by Puzzolo *et al.* published in *The Lancet* in February of this year, that focused on cooking or heating with natural gas and several health conditions. Puzzolo *et al.* found no association between cooking and heating with natural gas (vs. electricity) and childhood asthma.
- Kashtan *et al.* based their mortality analysis on estimates of nitrogen dioxide (NO₂) exposure from natural gas stove use and a 2018 meta-analysis by Atkinson *et al.* on long-term outdoor NO₂ concentrations and mortality. Atkinson *et al.* cautioned against concluding that outdoor NO₂ concentrations can increase the risk of dying because there were very small risk estimates, the study results were heterogeneous, and body mass index (a measure of body fat) and smoking – two key health confounders – were not always appropriately accounted for in underlying studies.

Find more detail [here](#).

In Case You Missed It

On May 2, AGA [released a statement](#) about a recent [major study](#) published in The Lancet medical journal and funded by the World Health Organization (WHO): “Estimated health effects from domestic use of gaseous fuels for cooking and heating in high-income, middle-income, and low-income countries: a systematic review and meta-analyses.”

The study conducted an extensive meta-analysis and examined the health risks of cooking or heating with natural gas compared to other fuels and electricity. **It found no significant association between natural gas and asthma, wheeze, cough or breathlessness, and a lower risk of bronchitis when compared to electricity.**

Additional material related to the benefits natural gas provides to customers and communities can be found [here](#).

Jennifer O'Shea | Vice President, Communications

[American Gas Association](#)

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7023 | joshea@aga.org

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to more than 74 million customers throughout the nation.