AGA Response to The Weather Channel Video about Natural Gas Cooking
December 10, 2020

The Weather Channel recently released a video titled “Gas Stoves Could Complicate Coronavirus Infections, Experts Say,” with a number of inaccurate claims about the health impacts of natural gas appliances. Outlined below are the claims made in the video and responses to each.

Claim: Gas Stoves Could Complicate Coronavirus Infections, Experts Say

Response: Statements attributed to “experts” may, at best, represent a very narrow slice of the public health community and are not supported by the overwhelming majority of that community. They do not reflect consensus of public health experts upon which national policy depends.

Claim: Gas stoves send damaging pollutants into the air like nitrogen dioxide, carbon monoxide, formaldehyde and more.

Response: While combustion emissions from gas ranges, ovens, and cooktops can contribute to some degree to emissions of recognized pollutants there are no documented risks to respiratory health from natural gas stoves from the regulatory and advisory agencies and organizations responsible for protecting residential consumer health and safety.

• The Federal Interagency Committee on Indoor Air Quality (CIAQ) has not identified natural gas cooking emissions as an important issue concerning asthma or respiratory illness.
• The U.S. Consumer Product Safety Commission and EPA do not present gas ranges as a significant contributor to adverse air quality or health hazard in their technical or public information literature, guidance, or requirements.

Claim: When cooking with a gas stove at home, those pollutants send a cocktail similar to car exhaust into the air.

Response: The association of gas stove combustion emissions with car tailpipe emissions is sensational and uncalled for. There is no evidence that any emissions from gas stoves exceed the regulated safety thresholds.

• Residential gas cooking appliances represent a minor source of NO2. The principal source of indoor NO2 is polluted outdoor air that migrates indoors from vehicle and other sources.
• Federal health and safety agencies do not identify specific health or safety issues concerning NO2 emissions from residential gas cooking appliances that would require removing or altering these appliances or their use as a mitigation approach.
• All certified gas appliances must meet emission limits set by the Z21/83 standards committee using its American National Standards Institute (ANSI) approved standards procedures. Studies show that gas ranges produce considerably less than the allowable maximum in the standard.
Claim: Scientists say increased exposure to air pollutants can make COVID-19 infections worse, leading to a higher risk of death. (the innovation/cell press)

Response: The connection between air pollution and COVID-19 symptoms and outcomes is currently being evaluated by the public health community, but no substantive evidence has been presented that combustion emissions from natural gas cooking appliances contribute to these alleged effects.

- Air pollution effects on to COVID-19 symptoms and outcomes have not been studied sufficiently relative to other environmental conditions or underlying health conditions to support any conclusive statements to date.
- The cooking process itself has the potential to create a large amount of emissions that is independent of the source of heat, whether it is an electric or gas cooking appliance.
- Anyone who has burned a meal or inhaled the smell of baking bread has experienced some of the cooking process emissions that can temporarily impact indoor air quality (IAQ).

Claim: Gas stoves have also been linked to increased asthma diagnoses in children (immunology and allergy clinics of north America)

Response: The association between the presence of a natural gas cooking appliance and increases in triggering asthma in children is not supported by data-driven investigations covering actual appliance usage, emission rates, exposures and the control of other factors that are well established for contributing to asthma and other respiratory system threats.

- Claims that children in homes with gas stoves have an increased risk of asthma symptoms frequently reference a “meta-analyses” of literature that emphasizes the simple presence of a gas appliance, not appliance usage or other exposure-related factors.
- Current U.S. federal agency involvement on the subject does not identify a connection between cooking with natural gas stoves and the risk of triggering asthma development or direct association with asthma attacks.

Claim: Experts recommend switching to an electric appliance if possible.

Response: Switching to electrical or other appliances is not a useful strategy to address indoor air quality because the emissions of concern are dominated by the smoke and grease that comes from cooking, regardless of the energy source used in conventional residential appliances.

- Indoor air quality studies have consistently found that emissions from the cooking process—not solely from the burner or heat source operation—represent the chief source of concern with respect to indoor air quality for various classes of pollutants such as particulate matter and volatile organic compounds.