

U SC Hospitality, campus eateries, and apartments use either natural gas or electricity to cook food, each of which can create indoor air pollution. Natural gas and propane stoves can release carbon monoxide, nitrogen oxides, and other harmful pollutants into the air, which may be hazardous upon inhalation.

Cooking can also generate unhealthy air pollutants from heating oil, fat, and other food ingredients, especially at high temperatures. Exposure to these can cause or worsen a wide range of health problems such as nose and throat irritation, headaches, fatigue, and nausea. Individuals with asthma, heart, or lung disease may be vulnerable to the harmful effects of indoor air pollution.

VENTILATION

Individuals cooking in kitchens with poor ventilation might be susceptible to unhealthy air. The best way to ventilate the kitchen is to use a properly installed, a high efficiency canopy hood over the stove. A high efficiency exhaust hood has a high air flow rate and low noise. During monthly food safety audits, EH&S verifies hood operation, hood certification, and that accumulated grease is removed.



GAS LEAKAGE

Another potential source of indoor air pollution from gas stoves (or gas appliances) is gas leakage. NOTE: Methane (natural gas) and propane are odorless gases that are odorized with a mercaptan to facilitate detection.

WHAT I CAN DO

- Make sure the exhaust hood vents to the outside.
- While cooking or using a stove, use the exhaust ventilation.
- When possible, cook on the back burners because the range hood exhausts this area more effectively.
- Periodically check pilot lamps on old appliances to ensure that they are lit or replace old appliances.
- Install carbon monoxide (CO) detectors (it's the law!) and test monthly.

Old style gas appliances (e.g., stoves, water heaters, and room heaters) found in some apartments around campus have pilot lamps that are continuously lit. If the pilot lamp is extinguished by accident, this allows odorized gas to escape into a room/area and create (a) a potentially explosive mixture with air and (b) a toxic environment that could easily overwhelm occupants (nausea, headaches, and/or asphyxia may result).

Modern gas appliances have electrostatic igniters that operate when a demand for gas/heat is triggered (e.g., turning on a gas stove, a thermostat drops below an assigned temperature). This obviates the need for a continuously lit pilot lamp and greatly reduces associated risks. However, if gas valves/solenoids are malfunctioning or valves are left ajar, gas leaks might occur.

If a gas leak is detected (i.e., you smell gas), notify others in the area (e.g., office, apartment) and immediately contact DPS at (213) 740-6000.

RESOURCES

- EPA: [Sources of Combustion Products](#)
- [Carbon Monoxide \(CO\) Fact Sheet](#)

