

The Long Road to Your Home

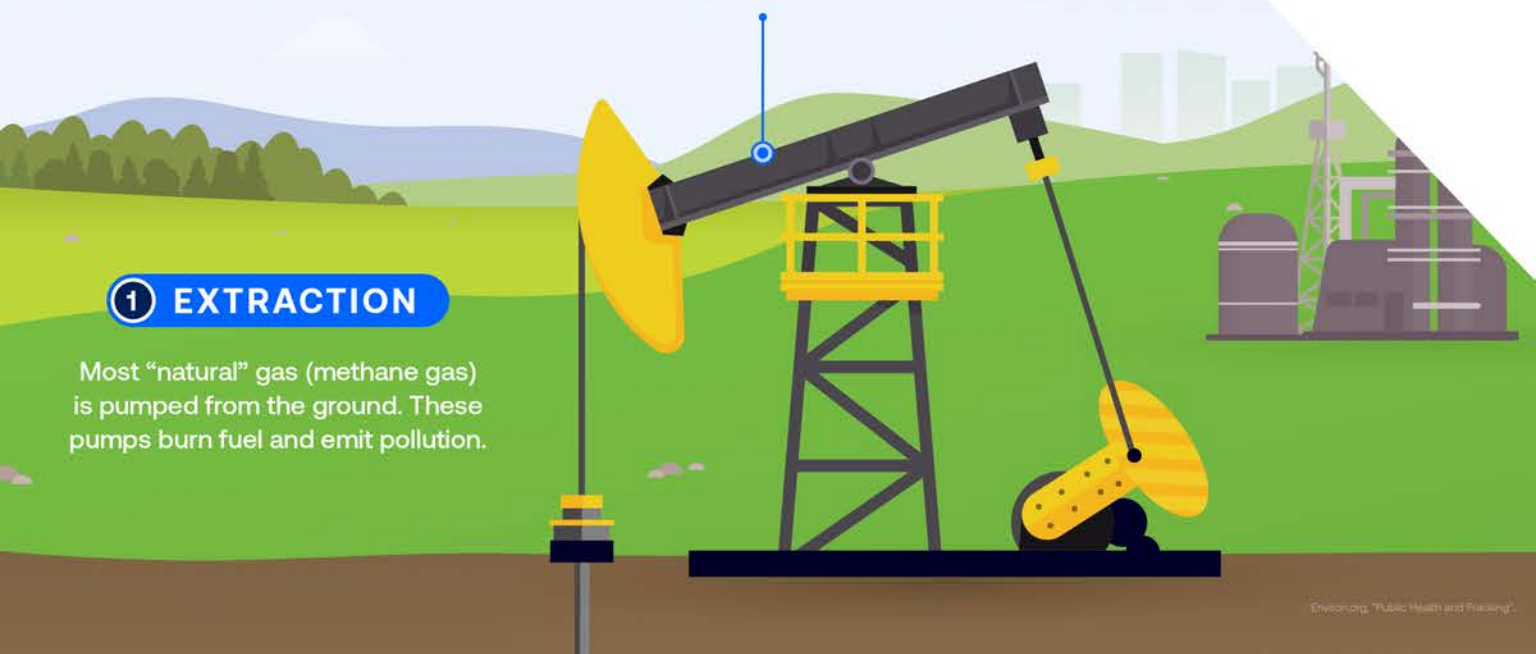
How "Natural" Gas Threatens Health at Every Stage of its Journey

Extracting gas often uses hydraulic fracturing ("fracking"), which is linked to an array of health problems including childhood cancer, birth defects and respiratory issues.¹



1 EXTRACTION

Most "natural" gas (methane gas) is pumped from the ground. These pumps burn fuel and emit pollution.



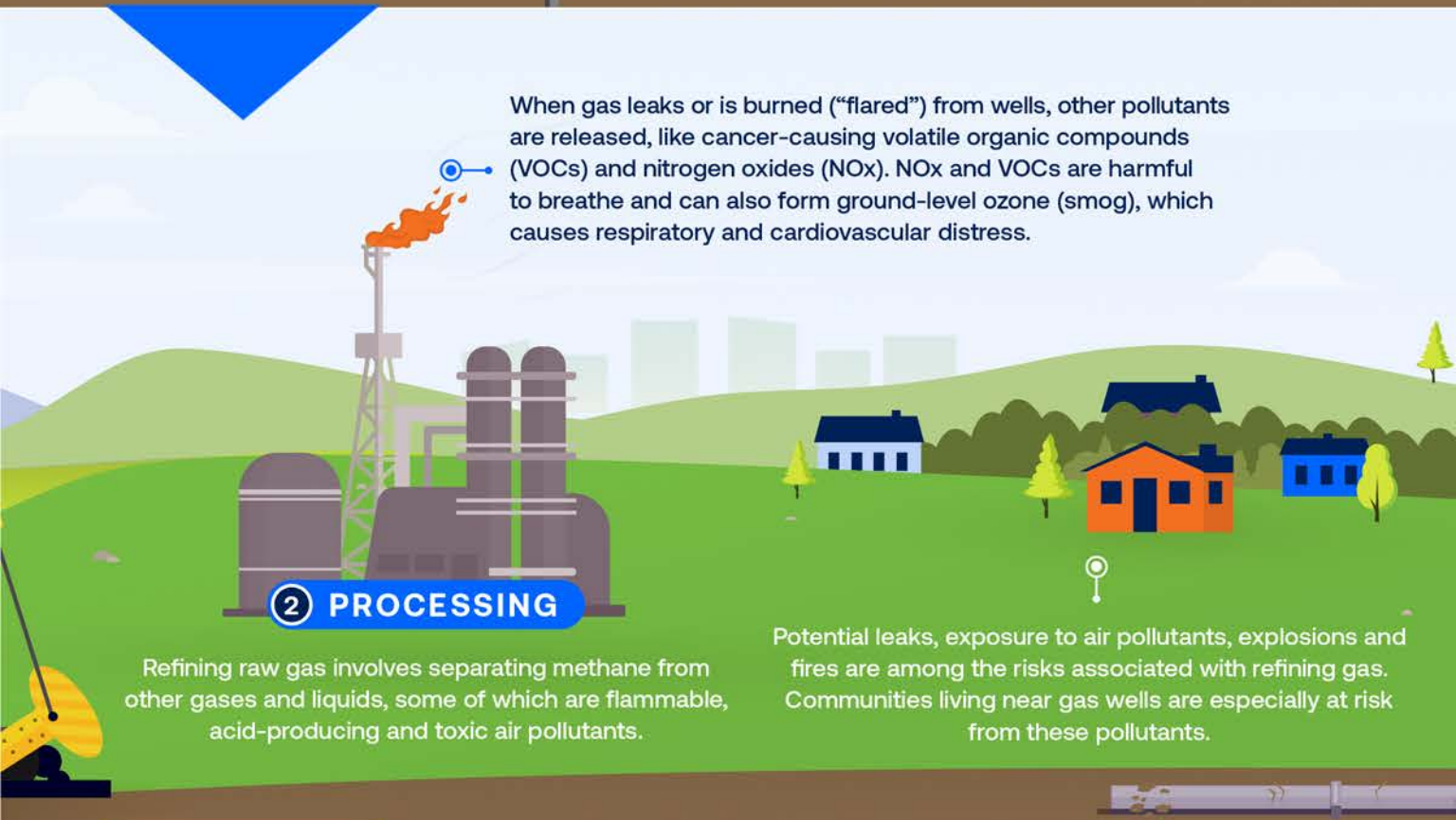
Environ.org, "Public Health and Fracking"

When gas leaks or is burned ("flared") from wells, other pollutants are released, like cancer-causing volatile organic compounds (VOCs) and nitrogen oxides (NOx). NOx and VOCs are harmful to breathe and can also form ground-level ozone (smog), which causes respiratory and cardiovascular distress.

2 PROCESSING

Refining raw gas involves separating methane from other gases and liquids, some of which are flammable, acid-producing and toxic air pollutants.

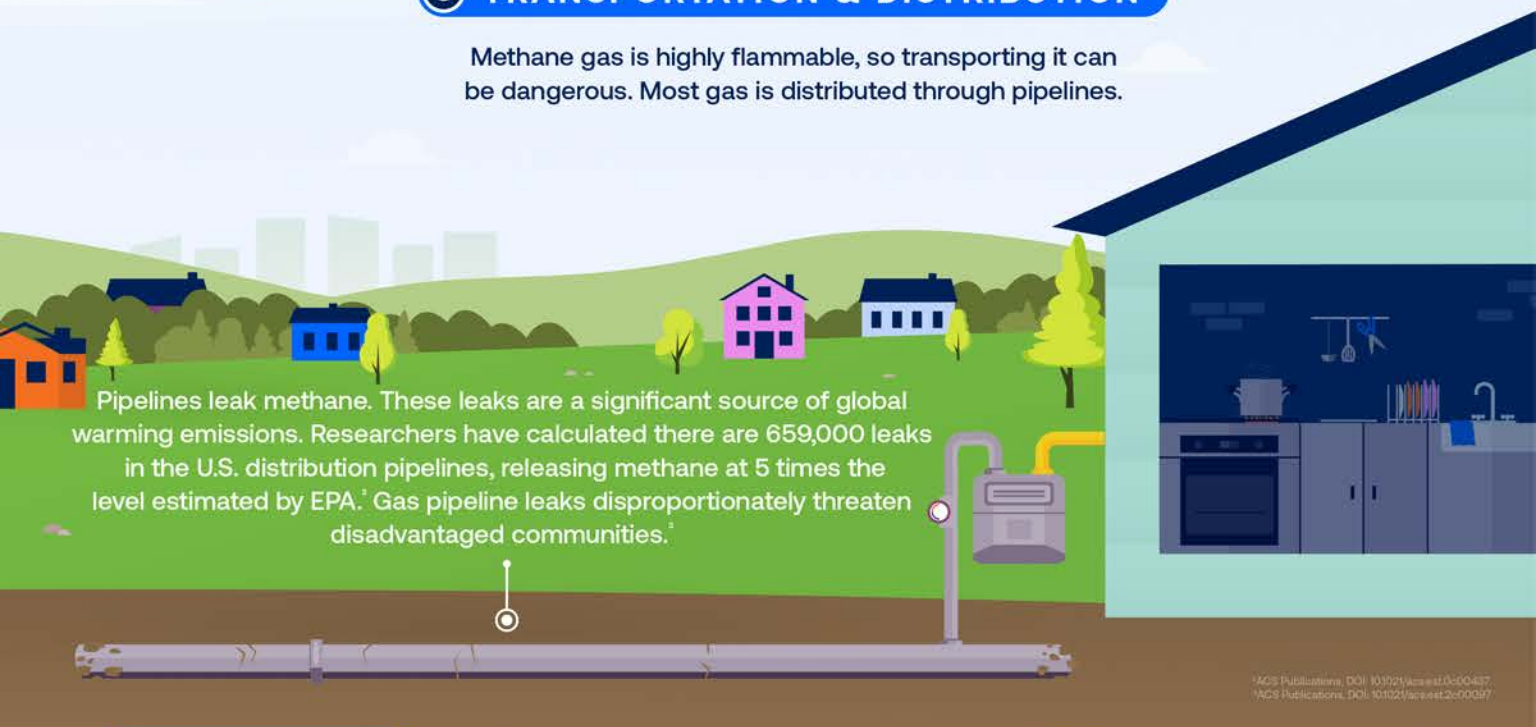
Potential leaks, exposure to air pollutants, explosions and fires are among the risks associated with refining gas. Communities living near gas wells are especially at risk from these pollutants.



3 TRANSPORTATION & DISTRIBUTION

Methane gas is highly flammable, so transporting it can be dangerous. Most gas is distributed through pipelines.

Pipelines leak methane. These leaks are a significant source of global warming emissions. Researchers have calculated there are 659,000 leaks in the U.S. distribution pipelines, releasing methane at 5 times the level estimated by EPA.² Gas pipeline leaks disproportionately threaten disadvantaged communities.³



²ACS Publications, DOI: 10.1021/acs.est.0c00437
³ACS Publications, DOI: 10.1021/acs.est.2c00097

Methane is a powerful climate pollutant. Its heat-trapping capacity is more than 80 times that of carbon dioxide.⁴ At every stage of this process, methane escapes into the atmosphere. Climate change is a health emergency.⁵

A recent study identified at least 21 different hazardous air pollutants in consumer-grade gas.⁶

Natural gas is also burned in power plants to create electricity, which then emits dangerous air pollution.⁷

Burning gas produces carbon monoxide and nitrogen oxides, respiratory irritants that cause airway inflammation, coughing, wheezing and increased asthma attacks. Because natural gas is highly flammable, burning it in your home carries safety risks.

4 IN YOUR HOUSE

Many home appliances burn gas, including clothes dryers, furnaces, ovens, stoves and water heaters.⁸



Learn more and take action at Lung.org/healthy-efficient-homes

¹Lung.org, "Healthy Efficient Homes" ²ACS Publications, DOI: 10.1021/acs.est.0c00437
³Lung.org, "What Makes Air Unhealthy" ⁴Lung.org, "Methane Gas Pollution Blog" ⁵Lung.org, "Climate Change"