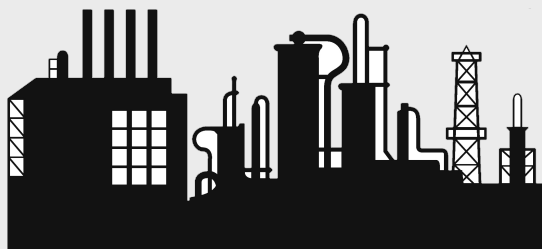


INTRODUCTION

Natural gas compressor stations, located at various intervals along gas pipelines, emit a mixture of chemical toxins into the air that are known to impact human health.

These toxins can be carried downwind from the compressor station to residents in surrounding areas, **impacting people living within a six mile radius of the compressor station.**



Emissions can include nitrogen oxides, carbon monoxide, volatile organic compounds including benzene, toluene, hexane and xylene, formaldehyde and particulate matter.

Emissions occur continuously during normal operations, as hazardous pollutants carried with the gas are vented or leak from equipment. They can also occur during routine maintenance operations such as “blowdowns” when large amounts of chemical contaminants are released into the air intentionally.

There are 58 operational natural gas compressor stations located in New York State.

Each year, these industrial operations release tons of toxic pollutants - made up of 70 different chemicals - into the environment.

These 70 chemicals are linked to 19 of 20 major categories of human disease.

Health care providers practicing in or near areas where compressor stations are operating should be aware of the chemicals being emitted, and the possible health impacts of exposure to those chemicals for their adult and pediatric patients.

The information in this pamphlet is based on the report *Health Effects Associated with Stack Chemical Emissions from NYS Natural Gas Compressor Stations: 2008-2014*, a technical report prepared for the Southwest Pennsylvania Environmental Health Project, a non-profit organization of medical professionals and public health scientists.

To read the entire report, and for more information, please visit

www.EnvironmentalHealthProject-NY.org

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Grassroots Environmental Education, Inc.*

Important Information for Health Care Providers



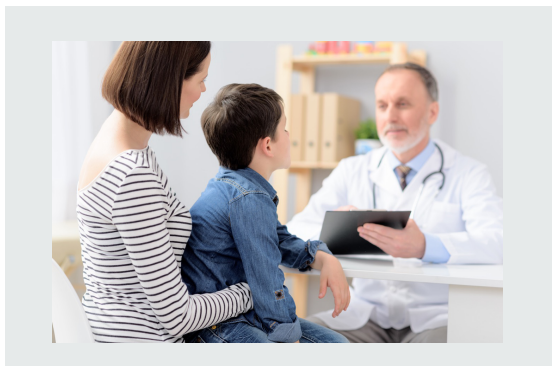
**The natural gas compressor station
in your region could be impacting
the health of your patients.**

SOUTHWEST PENNSYLVANIA
ENVIRONMENTAL HEALTH
PROJECT

WHAT CAN I DO?

Because most environmentally-mediated diseases either manifest as common medical problems or have nonspecific symptoms, environmental factors can be overlooked.

Incorporating an environmental health and exposure history is critical to helping clinicians recognize the impact of potentially hazardous chemicals and pollutants in the environment, particularly in areas where exposures have recently increased due to industrial activity.



In a practical sense, an extensive environmental health and exposure history may be beyond the scope of most health care providers. However, asking a few screening questions may alert you to a possible environmental cause.

As the literature about environmental exposures from chemical toxins increases, one of the recommendations for health professionals working in areas where natural gas pipelines and related infrastructure have been recently built or expanded is to incorporate questions about potential exposures into patient evaluation.

WHAT ARE THE HEALTH IMPACTS?

Emissions from natural gas compressor stations are known to cause both acute and chronic health impacts. Some emissions occur at a relatively steady rate, while others occur in episodic peaks. Weather conditions and wind direction may affect an individual's actual exposure. As a result of these factors, **acute health symptoms may be persistent, episodic or temporary.**

The episodic intense peak exposures, which may last for minutes to several hours, can precipitate acute health symptoms, even though the total emissions averaged over a 24-hour or longer period can appear to be much less.

Exposure to the air contaminants increase an individual's risk for the development of or worsening of pre-existing respiratory or cardiovascular disease. In addition, some of the contaminants have adverse neurologic effects, others are carcinogenic.

As with other air pollution, those at increased risk include:

- children
- developing fetuses
- the elderly
- individuals with chronic respiratory or cardiovascular disease

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Acute health impacts from short-term exposures:

- Headache
- Dizziness
- Fatigue
- Insomnia
- Nausea
- Confusion
- Skin Irritation
- Eye & throat irritation
- Acute respiratory problems
- COPD and asthma exacerbation
- Memory problems
- Acute cardiac events
- Chest pain
- Coughing

Chronic health impacts from long-term exposures:

- Anemia
- Lung and other respiratory cancers
- Leukemia and lymphoma
- Breast and genital cancers
- Bladder and urinary cancers
- Bone cancer
- Lip and other oral cancers
- Endocrine disruption
- Permanent neurological problems