# HOW OIL AND GAS OPERATIONS IMPACT YOUR BABY'S HEALTH

Air pollutants associated with oil and gas operations are known to cause serious health impacts in pregnant women, babies, and children – as well as other adults.

# **DID YOU KNOW?**

- Children's lungs continue to develop after birth.
- Children breathe faster and spend more time outside than adults.
- Other organs like their brains and reproductive systems are also still developing after birth.
- That makes children particularly vulnerable to air pollution.
- Pregnant women also need clean air.
- If the air you breathe is polluted, that can lead to health problems for your baby.
- Companies are not required to monitor or disclose dangerous air pollution, and government air monitors may not be sited close to natural gas activity.
- As a result, it's hard to find out whether you are breathing these pollutants in your community.

### LOW BIRTH WEIGHT

A Pennsylvania study found that living near natural gas wells was associated with having lower birth weight babies. Low birth weight babies are at increased risk of early death, infections, and learning disabilities.

#### PRETERM BIRTH

In a Pennsylvania study, babies whose mothers lived close to natural gas wells were more likely to be born preterm (before 37 weeks gestation), compared to babies whose mothers lived farther away from gas wells.

## CONGENITAL HEART DEFECTS

In a Colorado study, babies whose mothers had large numbers of natural gas wells within a 10-mile radius of their home had an increased risk of birth defects of the heart, compared to babies whose mothers had no wells within 10 miles of their home.

### HIGH-RISK PREGNANCY

Pregnancies in Pennsylvania among mothers who lived close to natural gas operations were more likely to be labeled "high-risk," a designation that can include high blood pressure or excessive weight gain during pregnancy.

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# WHAT IS HAPPENING TO BABIES IN OIL AND GAS REGIONS?

Preliminary studies have found that living near pollution emitted from oil and gas operations may be harmful to your baby's health.

#### **RASHES**

In Washington County, PA, people living less than 1 km from natural gas wells reported more rashes and other skin problems compared to people living greater than 2 km from wells.



### UPPER RESPIRATORY SYMPTOMS

In Washington County, PA, people living less than 1 km from natural gas wells reported more upper respiratory symptoms like coughing, compared to people living greater than 2 km from wells.

# INCREASED HOSPITALIZATION RATE

A study in Pennsylvania showed that people living in ZIP codes with more gas wells were more likely to be hospitalized with heart problems compared to those living in ZIP codes with fewer gas wells. This study included children.

# FATIGUE, DIZZINESS, VOMITING, HEADACHES, NOSEBLEEDS

Anecdotal evidence and several case reports in many regions have reported this set of symptoms in communities near oil and gas operations.

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www.momscleanairforce.org

### **HOW CAN I PROTECT MY BABY?**

Because the oil and gas industry does not monitor or disclose air pollution, you should document your family's health by writing down your observations. If you notice health problems, contact your local health department and your state environmental agency. Visit your doctor regularly, and discuss these issues with her.

AIR POLLUTANT	OIL AND GAS SOURCE	HEALTH IMPACTS
BENZENE	Occurs naturally in oil and gas; leaks during routine operations of natural gas wells, pipelines, compressor stations; also released by diesel-powered equipment.	Leukemia, asthma attacks, lung infections, low birth weight, headaches, vomiting, dizziness.
DIESEL EMISSIONS	Emitted from generators and trucks associated with oil and gas development. Pumps and compressor stations are often powered by diesel engines.	Asthma attacks, cancer, lung infections, heart disease, premature death.
FORMALDEHYDE	Emitted by compressor stations; created in the atmosphere when oil and gas pollutants, such as benzene, combine with heat and sunlight.	Asthma attacks, cancer.
METHANE	The main component of natural gas. Leaks at every point along the natural gas life cycle. Sometimes is vented deliberately into the air.	A powerful greenhouse gas that contributes to climate change. Health impacts of climate change include heat illness, asthma attacks, vector-borne infection, and disruptions to the global food supply.
PARTICLE POLLUTION	Emitted from generators and trucks used in oil and gas development. Pumps and compressor stations are often powered by diesel engines. Also caused by heavy truck traffic.	Infant death, asthma attacks, low birth weight, heart attacks, stroke, cancer, premature death.
SILICA DUST	Sand is used in the process of hydraulic fracturing, or fracking. As sand is transported to well pads and poured into well shafts, silica dust can get into the air.	Cancer, silicosis.
SMOG (GROUND LEVEL OZONE)	Created when oil and gas pollutants, such as benzene, combine with heat and sunlight in the air.	Asthma attacks, lung infections, impaired lung development.