

How to Talk with Pediatric Health Professionals

TOP CONCERNS OF LIVING NEAR SHALE GAS DEVELOPMENT (SGD)



AIR QUALITY

SGD emits toxic substances into the air that we breathe and absorb into our skin



WATER QUALITY

Wastewater and chemical spills release toxic pollutants into our drinking water



NOISE & LIGHT

Unnatural noise, light, and vibration from SGD can be disturbing and harmful



SOIL

Hazardous pollutants associated with SGD can settle to the ground and contaminate soil



STRESS

Health effects and disturbances can cause uncertainty and stress

If you are a parent or guardian, you may be unsure about how to talk with your pediatrician, school nurse, school counselor, or administrator if you believe your child has been or may be exposed to pollution from shale gas development (SGD). Here is some guidance on how to do so.

Significant emissions are generated by SGD, and residents near this type of infrastructure may be exposed to higher concentrations of air pollution.¹ Research shows that people living near SGD may experience a wide range of significant health issues, including cardiovascular and respiratory complications, birth impacts, and increased hospitalizations.²

WHY ARE CHILDREN MORE VULNERABLE?³

- **Children accumulate more toxic substances in their bodies than adults.** Due to growth and development, children don't clear these substances from their bodies as efficiently or as quickly as adults.
- **Children have higher breathing rates.** When exposed to air contaminants, children breathe in more toxic substances per pound of body weight than adults.
- **Children spend more time engaged in vigorous activities outside.** They breathe in more toxic substances than they would if they were sitting still.
- **Children's brains are still developing.** Toxic agents used in SGD are known to interfere with brain development.

WHAT ARE COMMONLY REPORTED SYMPTOMS?⁴



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- Sleep disruption
- Stress/anxiety
- Inability to concentrate



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- Headache
- Itchy/painful eyes
- Sinus problems



Created by Binpodo from the Noun Project

- Shortness of breath
- Cough
- Wheezing
- Sore throat



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- Fatigue
- Drowsiness
- Nausea
- Skin rashes and irritation

If you or your child experiences these symptoms, consider talking to a trusted health professional or a school nurse, principal, or child care provider, as symptoms may be from exposures to SGD.

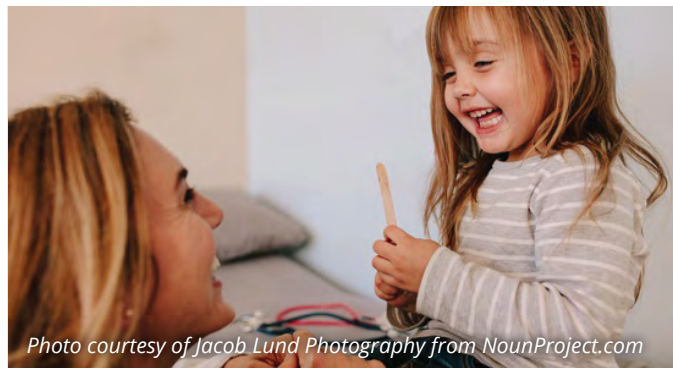
WHAT HEALTH CONCERNS DO YOU HAVE ABOUT YOUR CHILD?

It's important to write down your health concerns. Emissions from SGD are not constant. They can come and go depending on a variety of factors such as the weather, what's going on at the facility, and how close you are to it. Sometimes the symptoms may be more intense than others. Certain weather conditions can keep emissions close to the ground, lingering near your house or school. Other times the emissions are quickly dispersed by breezy, sunny weather and are carried up and away. Changes in environmental factors may result in varying health effects.

WHAT'S AROUND YOU?

Children typically spend about half of their waking hours at school. If you are concerned that your child is reacting to contaminants, try to find out what kind of shale gas activity is near your home, school, or day care. Harmful emissions from SGD can pollute air, water, and soil in the surrounding areas. Data shows that there are currently over 3.1 million U.S. students going to school within half a mile of an active oil and gas well.⁵

It's important to identify what types and how many shale gas facilities are located nearby and if related diesel truck traffic uses roads in the same vicinity. You can check locations of oil and gas facilities at oilandgasthreatmap.com/threat-map.



THINGS TO BRING WITH YOU WHEN VISITING A HEALTH PROFESSIONAL

- Any medical reports you have for your child
- Water or air testing reports, if you have any
- A list of nearby pollution sources
- A health diary of any symptoms your child has been experiencing

EXAMPLE	
Date	4-12-23
Symptom(s) Intensity*	shortness of breath - 4- headache - 9
Duration	6 hours
Notes	strong odor before symptoms started sunny clear day lots of heavy truck traffic

*On a scale of 1-10, how severe is the symptom?
1 being slight to 10 being worst ever.

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¹ Gonzalez, D. J. X., Francis, C. K., Shaw, G. M., Cullen, M. R. Baiocchi, M., Burke, M. (2022, February 1). Upstream oil and gas production and ambient air pollution in California. *Science of The Total Environment*, 806, Part 1. <https://www.sciencedirect.com/science/article/pii/S0048969721053754>

² Environmental Health Project. (2023, May). *Health Impacts of Shale Gas Development: A Collection of Research*. https://www.environmentalhealthproject.org/_files/ugd/a9ce25_feddf7415ba4d3b894e94821aa40aab.pdf

³ Webb, E., Moon, J., Dyrszka, L., Rodriguez, B. J., Cox, C., Patisaul, H. B., Bushkin, S., London, E. (2018). Neurodevelopmental and neurological effects of chemicals associated with unconventional oil and natural gas operations and their potential effects on infants and children. *Reviews on Environmental Health*, 33(1), 3-29. <https://www.degruyter.com/document/doi/10.1515/reveh-2017-0008/html>

⁴ U.S. Environmental Protection Agency. (2022, August 5). *About the State School Environmental Health Guidelines*. <https://www.epa.gov/schools/about-state-school-environmental-health-guidelines#importance>

⁵ Earthworks, FrackTracker Alliance. (2023, March 22). *The Oil & Gas Threat Map*. <https://oilandgasthreatmap.com/threat-map/>

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