Facts for your Pediatrician

SOUTHWEST PENNSYLVANIA ENVIRONMENTAL HEALTH PROJECT

What to share with your pediatrician if your child is exposed to shale gas development at school

Significant emissions are generated by shale gas drilling, processing, and transport. Research confirms that the particles and chemicals being released during these activities have the potential to be dangerous to our health. And there is growing evidence that emissions *are currently causing health effects* in residents living nearby. As a parent, you are standing on solid ground when you say you're concerned that your child may be reacting to contaminants in your air or water. Included in this flyer is a list of articles that present this information. Your pediatrician might want to see the research.

What's around you?

Your child spends about half of his/her waking hours at school. If you are concerned that he or she is reacting to contaminants, try to find out what kind of activity is going on within a couple of miles of your school as well as your home.

Emissions can travel over long distances. Emissions from major polluters, like processing plants or large compressor stations during a blowdown (an especially large release of gasses and chemicals, can travel more than two miles. But the closer you are to any emission source, the higher your level of exposure. Also the terrain matters. So if you're in a valley you might have higher exposures than if your house or school were in a flat location.

Frequently cited air emissions include particulate matter; carbon monoxide; and volatile organic compounds (VOCs) such as formaldehyde, benzene, toluene, and methylene chloride. FracFocus (fracfocus.org) is a database into which industry operators report the chemicals they use in hydraulic fracturing. Many states, including Pennsylvania, require this chemical disclosure, some do not. The FracFocus registry lists hundreds of chemicals used in the hydraulic fracturing process. Industry operators do not have to report chemicals they consider "trade secrets."

Things you may want to bring to a pediatric appointment

- Any medical reports you have for your child
- Water or air testing reports, if you have any
- The list of articles on shale gas emissions and health effects
- If you keep notes or a health diary as noted above, it's worth bringing them to your appointment

What are the health concerns you have about your child?

Write down your health concerns. Shale development emissions are not constant; they can come and go. Sometimes they may be more intense than others. Certain weather conditions will keep the 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. The changing exposures

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can result in varying health effects. Headaches, rashes or asthma attacks, for instance, may appear and then resolve and not appear again for days, weeks or months. Reactions may happen for two weeks straight and then never again. These are common patterns seen near shale gas extraction and processing sites. They are important to note.

Keeping a health diary on your child can help you track his/her symptoms and note whether those symptoms seem to occur when there are environmental contamination signs like a flare, outdoor odor, new construction, blowdowns, or major maintenance. Research

has documented health effects in many systems of the body, including ears, nose and throat; eyes, skin; lungs; and nervous system. In addition, your child's doctor should know that some of the chemicals used and the emissions produced have potential long-term effects such as heart disease and cancer.

Sources

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