

PA House Environmental Resources and Energy Committee

Hearing on HB170 to expand setback distances between residents and fracking infrastructure.

October 30, 2023

Thank you for holding this hearing and allowing me to testify remotely.

My name is Ned Ketyer. I live in Peters Township, Washington County in SW PA.

I'm a pediatrician who retired from patient care in 2017.

I'm a member of the American Academy of Pediatrics Council on Environmental Health & Climate Change and the Pennsylvania Chapter of the AAP.

I am currently President of Physicians for Social Responsibility Pennsylvania (PSR PA), which is a non-profit organization comprised of health providers, public health experts, and other champions for the health of all communities by advocating for socially and environmentally just actions.

Since 2015, I have served as Medical Advisor for Environmental Health Project (EHP), a non-profit organization which defends public health in the face of oil and gas development.

I left my busy pediatric practice in 2017, several years after surviving kidney cancer and developing a still-unexplained neurologic condition that left me permanently disabled. During my time in practice, and in the subsequent years away from the office working with EHP and PSR PA, I've met residents — too many to count — whose physical and mental health have been damaged because of fracking. I've listened to their stories, examined their children in the office, visited their homes, met in parks and meeting halls, talked on the telephone and on Zoom. For every adult who has experienced a health impact, you can be sure there are also children in the family who don't have a voice who are suffering as well, or a farm animal that has been sickened, or a family pet that has died unexpectedly.

If you don't believe that people get sick when they live and work near fracking operations, then you really need to get out more. Go to the counties where fracking operates, listen to the stories of people — husbands and wives, mothers and fathers, grandparents who have lived on the land for generations, ex-industry workers — listen to them and then try to talk yourself into believing fracking has nothing to do with it.

If there is any doubt in your minds that fracking threatens the health, safety, and well-being of residents living nearby, just remember that it is they — citizens of Pennsylvania, your constituents — who deserve the benefit of the doubt and not the shale gas industry. Read the studies, and when you hear the industry try to cast doubt on the science, remember that the

industry hasn't earned the benefit of the doubt. Pennsylvania residents who live near fracking and have seen their property contaminated and their health decline have earned that benefit.

Today — 20 years into the Marcellus Shale fracking boom — there are dozens of epidemiologic studies and hundreds of other peer-reviewed scientific and medical research papers showing harm to peoples' physical and mental health, the health of the environment, and to the planet's climate system. There are also hundreds more government reports and media investigations linking fracking to prenatal harm, respiratory impacts, cancer, heart disease, mental health problems, and premature death. All of this information is compiled in the fracking science Compendium. The 9th edition was published last week by PSR and Concerned Health Professionals of New York. I've included the link here and urge you to download and read it. (I am proud to be a peer reviewer for the last 4 editions.) (<https://concernedhealthny.org/compendium/>)

There is a common thread that holds these studies and reports and investigations together: The association between proximity to fracking activities and health damage. By now it's clear that a 500 foot buffer from homes, childcare centers, schools, businesses, hospitals, and nursing homes is way too small. Increasing the distance between the activity and where people (especially children) live, work, learn, and play is only one step, but an important one, to protect the health of Pennsylvanians from dangerous fracking emissions consisting of fine particulate matter (PM2.5), volatile organic compounds (VOCs like benzene, toluene, and formaldehyde), ozone-forming nitrogen oxides, heat-trapping methane, radon gas, and many other toxics.

In August, the University of Pittsburgh and the PA Department of Health released results of three epidemiological studies, all conducted in SWPA, confirming previous studies showing that living near fracking sites is hazardous to health. The studies came about only after impacted residents traveled to Harrisburg in 2019 and demanded from Governor Wolf and legislators a scientific investigation into why so many children in SWPA were developing rare and often deadly childhood cancers, including the extremely rare and brutal bone cancer of youth, Ewing sarcoma.

Pitt's cancer study failed to show a correlation between fracking and Ewing sarcoma, even though new cases keep showing up in frackland communities. But the study did show that living within 1 mile of one or more fracked gas wells was associated with a 5-7 times higher risk of children developing another rare and serious childhood cancer: lymphoma. Kids who lived the closest had the highest risk. But this finding shouldn't surprise you. Previous studies have shown similar linkages between fracking and pediatric cancer in Pennsylvania, including a 2022 study from Yale University that showed the risk of young children developing acute

lymphoblastic leukemia was 2-3 times higher if they lived within 2 km (1.2 miles) of a fracked gas well compared to kids living further away.

The Pitt researchers also looked at abnormal birth outcomes for babies living near fracking operations. Again, their study was consistent with previous studies conducted in Pennsylvania showing a link between living close to fracking and low birth weight and intrauterine growth retardation. That association was seen in PA up to 10 miles from fracked gas wells, compressor stations, and landfills accepting fracking waste. This finding tells us there is something about fracking (perhaps exposure to endocrine disrupting chemicals used in fracking or the stress associated with living near fracking, or both, or something else) that interferes with normal fetal growth and development.

Pitt also looked at proximity to fracking wells and asthma. As a pediatrician who cared for countless kids with breathing problems like asthma, the results were a bombshell, even though they are backed up by previous research. The Pitt researchers discovered that adults and children with a diagnosis of asthma had 4-5 times the chance of having a severe asthma attack if they lived within 10 miles of one or more fracked gas wells compared to people who lived further away. In many cases, these Pennsylvanians required emergency room visits, breathing treatments, powerful steroids, and hospitalizations. Please keep in mind that no one in Washington County (where I live) lives more than 10 miles from a fracked gas well or another fracked gas facility. Most people in fact live much, much closer.

Epidemiological studies like these are designed to show correlations between 2 events (say, fracking and health impacts) rather than revealing the exact culprit. They don't provide absolute certainty. But there are some things we do know beyond a reasonable doubt — knowledge that should compel this body, Governor Shapiro, and state agencies to expand the distance between where fracking operates and where Pennsylvanians live and work.

For example:

— It's a fact that fracking scars the landscape and degrades the environment. You can see it from Space on Google Earth or on a tour of Pennsylvania's fracklands.

— We know for certain that fracking pollutes the air, the water, and the soil that all of us share and depend on, a direct violation of Article 1 Section 27 of the PA Constitution.

— We know beyond a reasonable doubt that fracking in PA endangers wildlife, aquatic creatures, farm animals, and family pets.

– We know that fracking accelerates climate change. Instead of a “bridge fuel”, fracked methane is a bridge on the highway to climate catastrophe.

– And finally, there is no denying that fracking is making Pennsylvanians — pregnant women and children, the elderly, and industry workers especially — sick.

Pennsylvanians don’t need any more studies to expect action in Harrisburg. You don’t need to wait for more studies to adopt health-protective policies for the sake of Pennsylvania’s parents, grandparents, and children.

Push back the setbacks. Way back. The science and, frankly, common sense, overwhelmingly scream that a 500 foot setback is too close. In fact, you should also agree that 2,500 feet also is too close. Environmental Health Project advises:

– A minimum of 3,300 feet (approximately 1 kilometer or 0.6 miles) between smaller shale gas facilities (eg. small well pads) and homes.

– A distance of 6,600 feet (approximately 2 km or 1.2 mi) between larger facilities (large well pads, gas processing plants, and compressor stations) and homes.

– A distance of 6,600 feet between any shale gas facility and places like schools, childcare centers, hospitals, nursing homes, and buildings housing vulnerable populations.

Based on the growing mountain of objective research, that’s still too close, in my opinion. But changing the rules on setbacks should at least start there... and then move it back further. Protect the health of the people who sent you here and deserve the benefit of the doubt, not the industry that keeps you misinformed and from doing what is right for the people of this commonwealth.

References:

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– Physicians for Social Responsibility Pennsylvania

<https://www.psrpa.org/>

– Environmental Health Project

<https://www.environmentalhealthproject.org/>

– EHP position statement on setback distances:

https://www.environmentalhealthproject.org/files/ugd/a9ce25_6e404d6e33594312abc9d51317908d47.pdf?index=true

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