

October 14, 2015

The Honorable Larry Hogan
Governor of Maryland
100 State Circle
Annapolis, Maryland 21401

Dear Governor Hogan,

As health professionals who have closely followed the literature and first-hand accounts of the health effects of unconventional oil and gas development, commonly referred to as “fracking”, we write to urge your review of the most recent compilation and analysis of scientific, health, and investigative media findings relating to this practice. Serious risks to public health are emerging, along with unacceptable rates of air, water, and soil contamination, induced seismicity, and community disruption. Given that much of the new data emerged after the completion of the Maryland Marcellus Shale Advisory Commission process, which was initiated in 2011, we ask that your administration reconsider previous recommendations and legislation that would move our state forward with a regulatory framework that allows fracking to begin.

The new report compiled by Concerned Health Professionals of New York and Physicians for Social Responsibility, *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, Third Edition*, offers concise summaries of the growing body of evidence pertaining to the impacts of drilling, fracking, and associated processes and infrastructure. It is organized into seventeen themes, and includes more than 500 peer-reviewed scientific papers, as well as numerous government reports and findings from investigative journalists. It provides vital information for policymakers, researchers, journalists, and the public.

Several key findings merit specific attention:

- **Drinking water contamination from drilling and fracking-related activities has now been definitively documented**, including in our neighboring state of Pennsylvania, where the state’s Department of Environmental Protection has documented at least [260 cases](#) in which oil and gas activity contaminated the water supply for homes and businesses.
- **Dangerous levels of air pollution are being documented, including in people’s homes, at levels known to have adverse health effects.** Rural areas valued for their previously clean air have seen precipitous declines in air quality, raising the risks of respiratory and cardiac illnesses, adverse birth outcomes and cancer.
- **Negative health outcomes are now appearing in the medical literature with strong associations to drilling and fracking operations.** Earlier this summer, a study comparing hospitalization rates in several northeastern Pennsylvania counties with and without fracking activities found a 27 percent increase in cardiology hospitalizations in the heavily drilled counties. This month, a study from Johns Hopkins University’s Bloomberg School of Public Health reviewed data on over 9,000 pregnancies in Pennsylvania between 2009 and 2013 and found there was a 40 percent increase in the likelihood of a woman giving birth prematurely if she lived in the most active regions of drilling and production activity, compared to those living in the least active regions.

- **Occupational health and safety risks are significant and likely under-reported.** The occupational death rate among oil and gas industry workers is seven times higher than among workers in general in the U.S. Benzene, a cancer-causing chemical for which there is no known safe level of exposure, has been found in the urine of workers. Silicosis death rates from exposure to silica dust are now rising again, reversing a decade-long decline. Healthy young men are dying suddenly after acute exposures to volatile hydrocarbons from production tanks. The list of hazards is long and industry actively fights attempts to make regulations more stringent.
- **Contrary to perceptions a few years back, it is now clear that unconventional gas development is counterproductive to efforts to reduce greenhouse gases.** Fugitive methane leaks from well sites, pipelines, and compressor stations negate any potential climate benefits from decreased carbon dioxide production at end-use. Furthermore, fracked gas displaces cleaner energy solutions, such as solar, wind and energy efficiency, which have been shown to create far more jobs.
- **Growing evidence demonstrates that regulations are simply not capable of preventing harm.** Well integrity failures, air pollution, water and soil contamination, cumulative impacts, and a range of other stressors that negatively impact communities cannot be adequately mitigated. No set of regulations has been shown to adequately protect public health and the environment.

The emerging data shows a clear pattern of harm, yet the full extent of the risks remains unknown. Community residents and workers are exposed to many chemicals associated with long-term health problems such as cancers and neurologic disorders; however, due to long latency periods, these illnesses may not yet be detectable. Furthermore, lack of transparency, non-disclosure agreements, and an atmosphere of industry secrecy and intimidation have impeded the ability of scientists and health professionals to study and fully document harmful exposures. Despite these data gaps, the preponderance of evidence suggests that fracking would bring significant harms to our state.

When the body of information provided in the Compendium is considered in its totality, including the over 100 peer-reviewed studies that have come out in 2015, it is clear that New York State was right in concluding that “Even with the implementation of an extensive suite of mitigation measures considered... the significant adverse public health and environmental impacts from allowing high-volume hydraulic fracturing to proceed under any scenario cannot be adequately avoided...” [[New York State Department of Environmental Conservation, Findings Statement, June 2015, p.5](#)]

The conclusion of the Compendium itself summarizes our position clearly:

“All together, findings to date from scientific, medical, and journalistic investigations combine to demonstrate that fracking poses significant threats to air, water, health, public safety, climate stability, seismic stability, community cohesion, and long-term economic vitality. Emerging data from a rapidly expanding body of evidence continue to reveal a plethora of recurring problems and harms that cannot be averted or cannot be sufficiently averted through regulatory frameworks. In the words of esteemed pediatrician Jerome Paulson, MD, there is “no evidence that...fracking can operate without risks to human health.... Any claims of safety are based on wishful thinking.”

In the absence of any credible evidence that a regulatory approach can adequately protect public health and the environment, we, as health professionals, must oppose any efforts to begin fracking in Maryland. We cannot sit by silently while Maryland residents are forced to become subjects in a large-scale public health experiment, as has happened in other states. You are uniquely positioned to lead Maryland away from this dangerous and unethical practice and to accelerate the transition to a renewable-energy based economy. We urge you to act now to protect the health of Maryland residents and the beauty of our state.

Respectfully,

*Concerned Health Professionals of Maryland
Concerned Health Professionals of New York
Chesapeake Physicians for Social Responsibility
Physicians for Social Responsibility*