

14 October, 2015

The Honorable Tom Wolf  
Governor  
Commonwealth of Pennsylvania  
225 Main Capitol Building  
Harrisburg, Pennsylvania 17120

Dear Governor Wolf,

In May, members of Philadelphia Physicians for Social Responsibility and Physicians, Scientists, and Engineers for Healthy Energy met with Secretary Karen Murphy and Physician General Rachel Levine to share our public health concerns about high volume hydraulic fracturing. Since that time, an updated compilation and analysis of scientific, health, and investigative media findings related to the impacts of unconventional oil and gas development or “fracking” has been released. Based on that analysis, we urge you to enact a moratorium on fracking as the most responsible action in light of significant evidence of harm to public health and communities. We represent Physicians for Social Responsibility both nationally and in Pennsylvania, as well as Concerned Health Professionals of New York. Having closely followed and researched this issue for years, we have seen alarming trends emerge in the data, including serious health impacts, dangerous air pollution, water contamination, high levels of radiation, induced seismicity, and negative community impacts.

Our new report, *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, Third Edition*, compiles and offers concise summaries of the evidence pertaining to the impacts of drilling, fracking, and associated infrastructure. It is organized by seventeen themes, and is designed to be accessible to policymakers, researchers, journalists, and the public. It offers a unique birds-eye view of the growing body of evidence, which includes more than 500 peer-reviewed scientific papers, as well as numerous government reports and findings from investigative journalism.

Among the trends we discuss in our report, please especially note these:

- **Fracking threatens drinking water. Cases of drinking water sources contaminated by drilling activities, as well as waste disposal, are now proven.** These include research studies conducted in Pennsylvania addressing the pathways of contamination and hundreds of documented drinking water contamination cases.
- **Dangerous, toxic air pollution occurs at levels known to have health impacts.** Rural areas with extensive fracking have seen precipitous declines in air quality, with known toxins such as benzene and formaldehyde raising the risk of asthma, respiratory illnesses, and cancer.
- **Public health problems associated with drilling and fracking, including occupational health and safety problems, are increasingly well-documented.** For instance, a study in Pennsylvania found that drilling and fracking activities are associated with increased rates of hospitalization, including a 27 percent increase in cardiology hospitalizations in heavily drilled counties of the state. Another study in southwestern Pennsylvania found that self-reported skin conditions and upper respiratory conditions are more prevalent in households near gas wells. Other studies have linked fracking to high-risk pregnancy, pre-term birth, and low birth weight in infants, including in Pennsylvania.
- **To avoid the irreversible effects of climate change, almost all of the natural gas that could be extracted by fracking must stay underground and never be leaked to the atmosphere or combusted.** Recent research and modeling demonstrate that more natural gas, and thus more of

the potent greenhouse gas methane, is leaking from well sites, pipelines, and compressor stations than previously thought. Burning more methane, instead of displacing other fossil fuels, increasingly displaces cleaner solutions, such as solar, wind and energy efficiency.

- **Growing evidence shows that regulations are simply not capable of preventing harm.** Well integrity failures, air pollution, cumulative impacts, and a range of environmental and other stressors cannot be adequately mitigated to avoid public health and climate impacts.

Notably, our findings align with the significant public health and environmental risks that led New York State to declare a ban on hydraulic fracturing. 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...” (Findings Statement, p. 5). We ask that you and your agencies review the New York State Departments of Health and Environment findings. Furthermore, since New York State released its review on December 17, 2014, more than 100 new peer-reviewed studies on the impacts of drilling and fracking have been published, which predominantly find risks and adverse impacts. In sum, there is no evidence to show that fracking can be practiced safely under any regulatory framework.

The medical and scientific communities also remain concerned about the many uncertainties and data gaps that remain. Many of the chemicals residents and workers are exposed to are associated with long-term health problems such as cancer that, due to long latency periods, may not have manifested. We are still lacking long-term, comprehensive studies of health and community impacts, which are necessary to reveal the full impacts of fracking. In many cases, lack of transparency, non-disclosure agreements, and an atmosphere of industry secrecy and intimidation have impeded the progress of scientific inquiry.

Given the rapidly accumulating evidence of fracking’s grave harms to health, its irreversible contamination of water, air, and land, and the emerging conclusion that there is not a safe way to conduct fracking and related processes, we call on you to enact a moratorium on fracking to protect public health until such problems can be resolved.

Sincerely,

**Physicians for Social Responsibility  
Philadelphia**



Walter Tsou, MD, MPH  
President Emeritus

**Physicians for Social Responsibility**



Barbara Gottlieb  
Director, Environment & Health

**Concerned Health Professionals of NY**



Kathleen Nolan, MD, MSL - CoFounder

Cc: Dr. Rachel Levine, Pennsylvania Physician General  
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