

14 October, 2015

President Barack Obama
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

VADM Vivek H. Murthy
U.S. Surgeon General
Tower Building
Plaza Level 1, Room 100
1101 Wootton Parkway
Rockville MD 20852

Cc: EPA Administrator Gina McCarthy
Secretary of the Interior Sally Jewel
Secretary of Energy Ernest Moniz

Dear President Obama and Surgeon General Murthy,

We, the undersigned health experts and scientists, write to share our new major compilation and analysis of scientific, health, and investigative media findings related to the impacts of unconventional oil and gas development, particularly high volume hydraulic fracturing (HVHF or “fracking”). We represent Physicians for Social Responsibility and 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, significant climate impacts, induced seismicity, and negative community impacts. As more and more millions of Americans live and work in close proximity to fracking, the potential exposures and risks of serious health consequences are alarming. Given the significant evidence of harm, we ask that you acknowledge the health risks of fracking, and we request a meeting with both of you to discuss our findings and how we can work together to protect the public health and safety of Americans.

Our new report, *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, Third Edition*,² 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, and cases of drinking water sources contaminated by drilling activities, as well as waste disposal, are now proven.** Among the many studies and data are hundreds of cases of water contamination in Pennsylvania, thousands of spills and leaks in Colorado, and many instances of surface and groundwater contamination in other states including Ohio, North Dakota, Texas, and West Virginia. Furthermore, the disposal of fracking wastewater remains a problem without a safe, viable solution.

- **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 Pennsylvania study 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. Other studies link fracking to high-risk pregnancy, pre-term birth, and low birth weight in infants.
- **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, and burning more methane, instead of displacing other fossil fuels, primarily 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 community 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.

Beyond the individual studies included in our Compendium, this comprehensive look offers an overarching perspective on the accumulating impacts of unconventional oil and gas development. When considered in its totality, the evidence shows that New York State was right to conclude 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 fracking have been published, which predominantly find risks and 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, which is only beginning to catch up to the rapid expansion of fracking and its related operations,

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 are urging states to enact moratoria on fracking. In the interests of public health, we ask that you acknowledge the overwhelming scientific evidence demonstrating public health risks. We would greatly appreciate the opportunity to meet with both of you to discuss the science and many cases of contamination and health problems with which we are familiar, and how we can work together to protect the American people.

Sincerely,

Physicians for Social Responsibility

Concerned Health Professionals of New York