

Fracking Studies Overwhelmingly Indicate Threats To Public Health

A comprehensive new look at a wide range of research concludes that fracking inevitably pollutes water and air and harms people.

Naveena Sadasivam, InsideClimate News, 10-16-15

The vast majority of studies conclude that fracking worsens air quality, contaminates water sources and harms public health, according to a new review of scientific literature.

More than 15 million Americans live within a mile of a fracking site that has been drilled in the past 15 years. Numerous studies in the past decade have indicated that natural gas drilling and fracking are inherently dangerous, posing threats to the air and water and to residents living close by, according to the report's authors.

A compendium of fracking research published this week by Concerned Health Professionals of New York and Physicians for Social Responsibility, two public health nonprofits, includes reviews of more than 500 fracking-related studies and concludes that there is "no evidence that fracking can be practiced in a manner that does not threaten human health."

"For years we heard stories. ... Now that anecdotal evidence is being confirmed by scientific evidence," Kathleen Nolan, a pediatrician and bioethicist in New York and one of the authors of the report, said in a conference call. "There's just no justification to exposing people to these risks."

The studies in the compendium cover a wide range of impacts including the fracking process' contribution to accelerating climate change, worsening air pollution, causing earthquakes, contaminating water sources and endangering public health. Also reviewed were studies related to the social effects of increased gas drilling on communities, the impact of inflated reserve estimates on the economy and the risks to investors. The authors used research covering all oil and gas activity, from production to distribution, transport and waste disposal.

Scientific studies establishing a connection between oil and gas drilling and poorer health were scant until the last few years, and it is difficult to prove that fracking or gas drilling releases contaminants that harm people's health. But over time, in disparate studies, researchers were able to identify the chemical compounds in fracking fluids and emissions, show that residents were exposed to those chemicals and then establish that this led to higher rates of premature births, low birth weights and other negative health effects.

The report published this week is the third edition of the compendium and includes peer-reviewed articles, government reports and original research by investigative journalists, including some by InsideClimate News. In 2014, nearly 200 studies on fracking were published, and in the first six months of 2015, more than 100.

"The information is being developed so rapidly, and [the compendium] allows, in one place, to look at the information," said David Brown, an environmental public health scientist at Southwest Pennsylvania Environmental Health Project, a nonprofit assisting Pennsylvanians whose health has been affected by gas drilling. "It allows you to look between studies and see where it overlaps."

The natural gas industry has often questioned the science that ties fracking to negative health effects and has

emphasized the uncertainty in scientific research.

Brown said it was "disingenuous" to require that researchers conclusively prove that a specific pollutant from a well site was causing a particular illness. That level of detail is unimportant in making policy decisions, he said. He cited decisions by the Environmental Protection Agency to reduce lead emissions before the levels of lead that caused health effects were fully known.

"At some point, somewhere, we have to stop," Brown said. "There are people living near these sites, and there are enormous numbers of adverse health outcomes."

Along with the release of the compendium, the Concerned Health Professionals of New York and Physicians for Social Responsibility are calling on President Barack Obama and Surgeon General Vivek Murthy to recognize the risks of fracking.

The groups also urged that the governors of Pennsylvania and Maryland ban the practice indefinitely. Maryland Gov. Larry Hogan, a Republican, instituted a 2½-year moratorium in June. State officials are working on standards under which fracking might proceed.

Pennsylvania has been the heart of the fracking boom since it took off in 2008 in the Northeast. The state has more than 7,700 active gas wells and has issued about 4,000 citations for violations in the past 7 years. Pennsylvania's residents have lodged hundreds of complaints with the state health and environment departments about breathing difficulties, asthma, skin problems, headaches and nosebleeds.

In New York, where fracking is already prohibited, the organizations that produced the compendium asked that natural gas infrastructure such as pipelines and compressor stations be forbidden to expand. Energy companies in the state have submitted proposals to expand pipeline networks and build a new terminal to import and export natural gas.

"Natural gas infrastructure contributes to climate change not only directly but also by furthering availability and consumption of fossil fuel," the groups wrote in a letter to Democratic New York Gov. Andrew Cuomo. They also said adding natural gas infrastructure was counterproductive to the state's goal of reducing greenhouse gas emissions 80 percent by 2050.