

How Fracking's Impacts on Health and Wellbeing Became an Explosive Debate

A decade ago, the United States ranked third in the world in the production of natural gas, far behind its competitors of Russia and Saudi Arabia. Now, the nation leads the world in natural gas output. What changed? Fracking. This process, which consists of drilling deep into oil-rich shale and releasing a cocktail of water and chemicals to force natural gas to the surface, has completely revolutionized America's capacity to produce natural gas since it became commercially viable in the 1990s. However, the process is controversial, with fracking wells upending lives, causing health problems, and contaminating the water supply.

Currently, there are active fracking sites in more than 20 states. One of the biggest sources of natural gas is from the Marcellus Shale formation, which stretches through the Appalachian Basin from New York to West Virginia and Ohio. It was one of the first shale formations to be utilized for natural gas extraction, after the Barnett shale formation in Texas. Between 2005, when the first well in the region was established, and 2007, almost 400 wells had sprung up in the area. With the potential for significant economic benefits, many landowners were encouraged to sign contracts which allowed for natural gas companies to set up fracking wells or build pipelines on their property.

However, despite the initial enthusiasm surrounding the process, "fracking has been linked to preterm births, high-risk pregnancies, asthma, migraine headaches, fatigue, nasal and sinus symptoms, and skin disorders over the last 10 years," according to Environmental Health News. Beyond human health implications, the process has also been connected to contamination of water, earthquakes, and climate change. These issues are often caused due to exposure to the cocktail of chemicals used to push the natural gas out of the shale. And, as NRDC senior scientist Miriam Rotkin-Ellman notes, "While industry continues to try to sweep the impacts of fracking under a rug, the science keeps revealing serious health threats—for workers, families living nearby and entire regions with heavy oil and gas activity."

The stories of those impacted by fracking are personal and profound. From families who can light their tap water on fire to a woman who found barium and arsenic in both her drinking water and bloodstream, people who live in states with fracking wells are paying the price for the lack of regulations on the industry. As the NRDC notes, "Over the years, Congress has granted the oil and gas industry unprecedented exemptions from parts of our nation's most basic protective laws, including the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act." This means that fracking companies can act with little consideration for their neighbors. Consequently, the people who are most impacted by Pennsylvania's 10,000 active fracking wells are the ones who will receive few benefits from the boom in the natural gas industry.

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