



Overview

Science has struggled to keep pace with the rapid expansion of hydraulic fracturing--commonly called fracking--over the last decade. Concerns over environmental impacts and implications for human health have caused several state legislatures and local municipalities to enact stricter regulations of the drilling process, or in an increasing number of cases establish moratoriums until more science is available. Currently, oil and gas fracking wells are active in at least 30 states.

Fracking injects millions of gallons of fluid -- a mixture of water, sand and undisclosed chemicals--into a deep well to fracture the rock and release gas or oil. In some cases, the fluid returns to the surface with new, dangerous chemicals such as [arsenic](#), a known carcinogen.

Legislation

- Ten states have introduced or passed legislation to place a moratorium on fracking, including [Maryland](#), [New Jersey](#) and [Florida](#).
- Several states, including [Montana](#) and [North Carolina](#) have introduced legislation requiring full chemical disclosure, particularly for health professionals.
- Despite New York Governor Cuomo's [ban on fracking](#), the state has disposed of [460,000 tons](#) of fracking waste imported from Pennsylvania. Concurrent [Senate](#) and [Assembly](#) bills have been introduced to prohibit the state from processing fracking waste.

KEY POINTS

- Nearly 700 unique chemicals are used in fracking. The individual impact of these chemicals on human health remains largely unknown, thereby limiting how much health care providers and emergency responders can assist residents living close to drilling sites. ([EPA](#))
- Faulty cement well casings can cause toxic chemicals to leach into the local groundwater. A recent study found that nine percent of wells drilled since 2009 already have structural integrity issues. ([PNAS](#))
- Natural gas and petroleum systems account for 29% of U.S. methane emissions due to leaks. Methane is a potent greenhouse gas that impacts climate change twenty times more than carbon dioxide. ([EPA](#))
- Injecting oil and gas wastewater back underground for disposal has been linked to an increase in earthquake frequency across the country, including 585 quakes greater than magnitude 3 in Oklahoma in 2014, compared with 109 quakes in 2013. ([USGS](#))

Other Resources

- [Science, Democracy, and Fracking: A Guide for Community Residents and Policy Makers Facing Decisions over Hydraulic Fracturing](#)
- FracTracker Alliance [map](#) and data on locations of the 1.1 million active wells.

