

HEALTH RISKS/HARMS OF MODERN GAS EXTRACTION



THERE IS AMPLE CAUSE FOR PUBLIC HEALTH CONCERNS

It should be understood that, while most of the published literature about public health harms from gas/oil extraction have focused on areas where hydrofracking occurs, most of the very **same risks are associated with *any* gas/oil development – because no matter how the extraction takes place:**

- The same basic problems exist at the well site (most groundwater contamination incidents are due to cement well casing failures – a commonly-acknowledged industry dilemma – or to *surface* activities);
- Similar chemical-laden processes may be used to perforate the wellbore (vertical well “stimulation” or horizontal “fracking”); and
- The same type of infrastructure is used to bring the product to market (wastewater disposal, tank batteries, onsite flaring, dehydration/compression/refrigeration plants, gathering lines and larger pipelines, tanker trucks/cars), all of which can leak, explode, or otherwise produce **ongoing air/water/soil/noise pollution that impacts health... up to 24/7 for years** (unlike the actual drilling and fracking, which are temporary).

Fracking *intensifies* some of these troubles dramatically – and the intensity of the industrialization this brings to areas of denser populations has created far more health problems than before. The gas & oil industry, too, has been given “deep discount” exemptions to several major federal environmental laws over the years [see <http://tinyurl.com/loopholes-for-polluters>], such that many health-impacting toxins you would *expect* to be prohibited are in many cases allowed. (And developers seek to work “under the radar” on *regulated* pollution levels by building many smaller facilities rather than larger ones – in the aggregate, *at least as* adverse to public health.)

Notably, *Concerned Health Professionals of NY* has compiled/updated a **Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction)** [<http://concernedhealthny.org/compendium/>]. This consists of summarizations of key studies detailed in articles from peer-reviewed medical or scientific journals; investigative reports by journalists; and reports from or commissioned by government agencies (matched by a citation database of hundreds of peer-reviewed articles) – ***the vast majority of which report on serious public health and safety problems and risks***. “Readers will notice the ongoing upsurge in reported problems and health impacts” – ***despite repeated denials from industry, even yet, that “there is no evidence” of such***.

“Despite this emerging body of knowledge, industry secrecy and government inaction continue to thwart scientific inquiry, leaving many potential problems—especially cumulative, long-term risks—unidentified, unmonitored and largely unexplored. This problem is compounded by non-disclosure agreements, sealed court records, and legal settlements that prevent families and their doctors from discussing injuries and illness. As a result, no quantitative and comprehensive inventory of human hazards yet exists. ... In the words of esteemed pediatrician Jerome Paulson, MD, there is “no evidence that...fracking can operate without risks to human health. Any claims of safety are based on wishful thinking.”

Studies have shown relationships between gas & oil activities and **low infant birth weights, prematurity, deaths; lowered fertility; increased cancer rates in young children; and increased hospitalizations** overall. [See <http://www.einpresswire.com/article/277887528/pennsylvania-study-links-fracking-to-health-hazards-in-fetuses-infants-and-young-children>]

For a compilation of people's stories of harms of all kinds that have befallen them and their loved ones, animals, and property, as well as G&O workers when on the job, see the LIST OF THE HARMED (a gamut of health problems, fire/accident effects, compromised water supplies, lost pets/livestock, plus financial losses, property/peace of mind gone, wildlife driven away, etc., **affecting over 16,700 people**): <https://pennsylvaniaallianceforcleanwaterandair.wordpress.com/the-list/>

Some recurring health issues noted: epileptic attacks, headaches, nausea, dizziness, swollen throats, nosebleeds, eye problems, short breath, chronic cough, rashes, blackouts, autoimmune diseases; burns from explosion-caused fires; worker injuries/deaths; animals nonbreeding/sickened/dead.

FURTHER FAR-REACHING IMPACTS:

Impacts of gas drilling on human and animal health

[From: <http://www.ncbi.nlm.nih.gov/pubmed/22446060>]

*"Because animals often are exposed continually to air, soil, and groundwater and have more frequent reproductive cycles, animals can be used as sentinels to monitor impacts to human health. This study involved interviews with animal owners who live near gas drilling operations. The findings illustrate which aspects of the drilling process may lead to health problems and suggest modifications that would lessen but not eliminate impacts. **Complete evidence regarding health impacts of gas drilling cannot be obtained due to incomplete testing and disclosure of chemicals, and nondisclosure agreements.**"*

Practice lays waste to land

[From: <http://www.dentonrc.com/local-news/special-projects/gas-well-drilling-headlines/20110331-practice-lays-waste-to-land.ece>]

*"Ross and other farmers find it hard to reconcile Texans' storied love of the land with the growing practice of spreading tons of drilling mud and other toxic waste across it, a process euphemistically called 'landfarming.' As the state's permits for natural gas drilling in the Barnett Shale region soar, more and more parcels of the Texas prairie are being turned into dumping grounds for disposing of the industry's waste... About 1.2 barrels of solid waste are created with each foot drilled, according to the American Petroleum Institute. ...**Millions of gallons of toxic waste are spread on the land, sometimes overflowing into waterways, sometimes becoming airborne** and blowing across the prairie. 'These people believe what they're told - that this waste is safe,' Ross says. 'Now their crops won't grow.'"*

MORE HEALTH-RELATED INFO ON CAIA'S WEBSITE:

health links: <http://integrityandaccountability.org/resources.html#human-health>

fire/earthquake/other risks: <http://integrityandaccountability.org/resources.html#earthquakes>

air/water/soil pollution: <http://integrityandaccountability.org/resources.html#water>