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Press release: Immediate

Study of Pennsylvania shows that fracking kills babies.

A new study of Pennsylvania Counties published today in the *Journal of Environmental Protection* compares early infant deaths 0-28 days before and after the drilling of fracking wells. It shows for the first time that contamination from fracking kills babies. The Marcellus shale area of Pennsylvania was one of the first regions where novel gas drilling involving hydraulic fracturing of sub-surface rock, now termed “fracking” was carried out. The epidemiological study by Christopher Busby and Joseph Mangano used official data from the US Centre for Disease Control to compare the immediate post-fracking 4 years 2007- 2010 with the pre-fracking period 2003-2006. Results, also presented as coloured county maps, showed a statistically significant 29% excess risk of dying age 0-28 days in the 10 heavily fracked counties of Pennsylvania during the 4-year period following the development of fracking gas wells. Over the same period, the State rate declined by 2%. It is known that the fracking production process releases Radium, Uranium and other naturally occurring radioactive materials from shale strata which then contaminate groundwater.

The Marcellus shale beneath Pennsylvania was one of the first areas where fracking began. Only 44 fracking wells were drilled before 2007, while 2864 were drilled in 2007-2010. In the five heavily-fracked counties in the northeast part of the state, the number of deaths from 2003-2006 vs. 2007-2010 climbed from 36 to 60, a statistically significant rate increase of 66%. The rate in the five counties in southwest Pennsylvania rose 18%, from 157 to 178 deaths, though this increase was not statistically significant.

“A major component of early infant mortality is congenital malformation, e.g., heart, neurological, and kidney defects. These are known to be caused by exposures to Radium and Uranium in drinking water,” said Christopher Busby, “Infant death rates were significantly high in highly-fracked counties in northeast Pennsylvania, those with the greatest density of private water wells, suggesting it is drinking water contamination driving the effect.”

Joseph Mangano added, “These results raise serious questions about potential health hazards of fracking, especially since the fetus and infant are most susceptible to environmental pollutants. This is a public health issue which should be investigated wherever fracking is being carried out or proposed.”

The result is expected to have significant insurance, investment, economic and downstream political implications.

Contact: Dr Christopher Busby +44 7989 428833 email: christo@greenaudit.org

Dr Busby is the Scientific Secretary of the European Committee on Radiation Risk www.ecrr.eu and is Scientific Director of Environmental Research SIA, based in the Latvian National Academy of Sciences, Riga, Latvia. Busby’s CV can be found at: <http://www.llrc.org/llrc/misc/subtopic/busbyCV68.pdf>

Busby CC and Mangano JJ. There’s a world going on underground—infant mortality and fracking in Pennsylvania. *Journal of Environmental Protection* 8(4) 2017. doi: 10.4236/jep.2017.84028 <http://www.scirp.org/journal/JEP/>