

REPORT ON THE FIRST 50 PARTICIPANTS

September 2017 Registry Update

Thank you for joining EHP's Shale Gas & Oil Health Registry. This effort will enable selected researchers to view a large set of exposure and health data (without any identifying information) from those of you who live or go to school within 5 miles of unconventional oil & gas development (UOGD). From this data set, researchers will get a detailed, comprehensive look at what residents are experiencing; and that understanding can inform their research. In addition,

80% OF RESPONDENTS SAID THAT THEY ARE CONCERNED ABOUT THE QUALITY OF LIFE IN THEIR COMMUNITY

EHP will evaluate the Registry data and, together with the knowledge we've developed over the past 5 years, will characterize the public health problem produced by UOGD. We can then share that with you, health care professionals, policy-makers and regulators.

Here is some of what your registry responses are telling us.

Exposure: 45% experienced odors; 55% used private well water and 79% had heavy truck

traffic within a mile of their home. 25% live within 2 miles of a compressor station; 21% live within ½ mile of a well pad; 25% within 1-2 miles. Symptoms: Of those reporting new or worsening symptoms since UOGD began: 50% noted fatigue; 70% anxiety; 44% eye symptoms; 29% shortness of breath; 34% cough; 28% nose bleeds.*

How should we think about

these numbers? People who join registries are often particularly concerned

about their health or are symptomatic. They allow us to see what the array of symptoms near UOGD are. Symptoms reported are consistent with what researchers have found; what EHP has documented; and with the known potential health effects produced by identified air and water toxics.

** Not everyone answered every question, so percentages are based on those who answered a given question.*

PARTICIPANTS FROM ACROSS THE COUNTRY

The first 50 participants of the Registry come from seven states. They are:

PENNSYLVANIA
 OHIO
 WEST VIRGINIA
 COLORADO
 TEXAS
 NEW YORK
 MARYLAND

As the registry grows, we will have an even better representation of the country as a whole. In addition, as more people join, we will be able to provide you with region- or state-specific summaries of the health and exposure data we've analyzed.



Encourage your friends, neighbors, and families to join at www.environmentalhealthproject.org/health-effect-registry

WHAT'S IN THE UOGD HEALTH EFFECTS RESEARCH?

Spotlight: Respiratory symptoms

The research on health effects associated with exposure to shale gas infrastructure and emissions has grown tremendously in the past few years. One summary of the state of the research is, "[A review of the human health impacts of unconventional natural gas development](#)," by Shaina L. Stacy (2017). Another is "[Hydraulic fracturing for natural gas: impact on health and environment](#)," by David O. Carpenter (2016). Respiratory symptoms including shortness of breath, cough, throat and sinus irritation, and wheezing are identified by a number of researchers (and have also been reported to the Environmental Health Project's nurse practitioners).

Focusing on respiratory concerns, Michael McCawley published "[Does increased traffic flow around unconventional resource development activities represent the major respiratory hazard to neighboring communities?](#)" which suggested that traffic flow occurring around UOGD is the major respiratory hazard to communities (2017). He says that some, if not all, of the respiratory effects associated with UOGD may be traffic-related, given the 4,000-6,000 vehicles trips to well pads. In 2016, Sara Rasmussen et al., in "[Asthma exacerbations and Unconventional Natural Gas development in the Marcellus Shale](#)," found intensifying mild, moderate, and severe asthma with UOGD exposure. A study,

focusing specifically on the risks of respiratory effects in children, is "[Potential hazards of air pollutant emissions from unconventional oil and natural gas operations on the respiratory health of children and infants](#)," by Ellen E. Webb et al. (2016). They suggest that exposure to UOGD pollutants may lead to adverse respiratory outcomes. The respiratory system is vulnerable in the in-utero, postnatal, infant and childhood periods, placing them at increased risk.

If you are interested in learning more about the existing research on health symptoms and UOGD exposure, please contact Beth Weinberger at bweinberger@environmentalhealthproject.org or call 203.530.3436.

The Environmental Health Project provides individuals and communities with the tools and information needed to understand their environmental and health conditions as potential consequences of shale gas & oil development. For more information about EHP and how we can assist your community, call 724.260.5504 or email info@environmentalhealthproject.org.

For information about the Shale Gas & Oil Health Registry, call Beth Weinberger (724.263.5925) or Jill Kriesky (724.260.5504) or email bweinberger@environmentalhealthproject.org