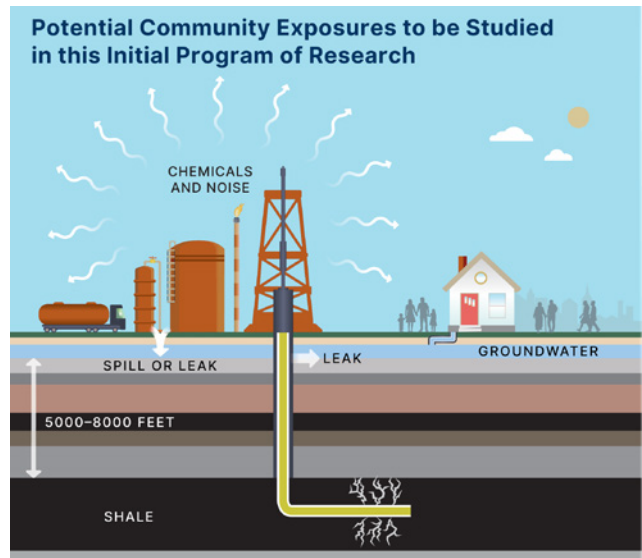


Researching Community Exposures Associated with Unconventional Oil and Natural Gas Development

THE RESEARCH PROGRAM

HEI Energy is launching a new research program to improve understanding of exposures that come directly from the development of oil and natural gas from shale and other unconventional resources (UOGD) across the United States. Five new studies are being funded that will produce data and tools for use in policymaking and environmental health research.



Air Quality and Noise

HEI Energy is funding three air quality and noise research studies to assess potential links between community exposures and specific UOGD processes. The research consists of two components:

Modeling Exposure: Developing and evaluating a new model that will predict chemical emissions and their effects on the quality of air that people breathe. The model can be applied anywhere in the United States. As UOGD emissions inevitably change over time, the model will be able to account for and reflect corresponding changes in exposure.

Measuring Exposure: Monitoring air quality and noise to improve the understanding and quantification of potential short- and long-term human exposures in multiple regions of the United States. The air quality monitoring data will also be useful for model evaluation and refinement.

Research Team Leaders:

Jeffrey Collett, Colorado State University
Meredith Franklin, University of Toronto, Canada
Lea Hildebrandt Ruiz, University of Texas at Austin

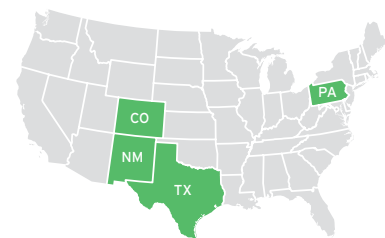
Water Quality

HEI Energy is funding two water quality research studies that combine existing data and statistical modeling to understand potential links between UOGD and contamination of surface water and groundwater. The research will contribute to a better understanding of the nature, extent, and frequency of potential exposures related to UOGD's effects on water quality.

Research Team Leaders:

Jennifer Baka, The Pennsylvania State University
Joseph Ryan, University of Colorado, Boulder

Study locations for HEI Energy's initial program of exposure research



HEI Energy's Mission: Provide high-quality, impartial, and policy-relevant science on the potential human population exposures and health effects from development of oil and natural gas from shale and other unconventional resources (UOGD) across the United States.

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