

CHANGE IS IN THE AIR

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**AIR POLLUTION AND RESPIRATORY INFECTIONS
SUCH AS COVID-19**

EHP has been taking an active look at the connection between air pollution and respiratory infections such as COVID-19. What we're finding is a stronger relationship than you might imagine. As our blog post "[Air Pollution and Respiratory Infections: Q&A](#)" notes, if you've been exposed to air pollution and you contract a respiratory infection, your symptoms may be more severe.

"A number of scientific studies have shown a link between air pollution and respiratory infections," said EHP's public health nurse **Sarah Rankin**, MPH, RN. "These studies show that being exposed to air pollution may aid in making a respiratory infection worse. It might also increase your chances of getting a respiratory infection in the first place."

Naturally, at EHP, we want to offer ways you can help to protect your health and your family's health from the effects of pollution in your air. The Q&A blog post talks about how you can monitor the air in and around your home and suggests steps you can take to reduce pollution there. Along those lines, EHP has produced [a short video](#) explaining how to make an affordable and effective air filter using a box fan and a HEPA-certified furnace filter. This DIY fan/furnace filter can help to make your home's air cleaner.

If you want to take a deeper dive into the science behind the relationship between air pollution and respiratory infection, you might be interested in EHP's review of the studies mentioned above. "[Air Pollution and Respiratory Infections: Reviewing the Science](#)" looks at more than two dozen research studies that tackle the issue from the standpoint of disease severity, hospitalizations and emergency room visits, and deaths during pandemics, including COVID-19.

Feel free to contact EHP for more information on air pollution and its affect on your health and well-being.

A NOTE FROM EHP'S EXECUTIVE DIRECTOR

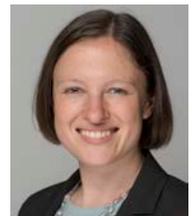
I am both thrilled and honored to be stepping into some big shoes here at EHP. Over my first three months on the job, I have felt incredibly lucky to have the support of such a strong, capable team. During that time, we have been working together to examine our organizational skills and fine-tune our program offerings.

To that end, I am excited to announce that we are welcoming two additional team members to the organization: Patrick Dooling, our Deputy Director who will oversee smooth daily operations, and Nathan Deron, our Environmental Data Scientist who will ensure clear translation of our data into actionable information for our stakeholders.

Despite staff transitions and a global pandemic, EHP continues to offer our expertise on issues that impact public health. From the bottom of my heart, I thank you for your warm welcome and continued support of EHP.



Alison L. Steele
Executive Director



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NEW HANDOUTS

[Air Pollution and Respiratory Infections: Reviewing the Science](#) – May 2020

Long-term exposure to air pollution contributes to the development of a number of chronic cardiac and respiratory illnesses, which increase the severity and risk of dying from respiratory infections. The science is clear that air pollution (like particulate matter, nitrogen dioxide, and ozone) is a strong driver of disease, both infectious and non-infectious.

[Asthma and Shale Gas Development](#) – April 2020

Asthma attacks may be triggered by indoor and outdoor air pollution, stress, and other physical and environmental factors. Research suggests that exposure to air pollution, especially early in life, may play a role in actually developing the disease. Both air quality impacts and social/psychological effects are serious public health concerns for asthma patients living near to shale gas development.



[Health Outcomes Associated with Exposure to Shale Gas Development from Peer-Reviewed Epidemiological Literature](#) – February 2020

This handout presents epidemiological studies that have found statistically significant associations between exposure to shale gas development and adverse health outcomes.

FRACKLAND TOUR: VIRTUAL EDITION

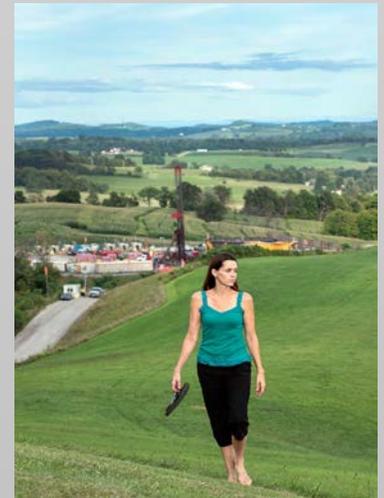
Shale gas development has expanded rapidly in Pennsylvania and now is embedded in many communities. This buildout concerns not just well pads and gas extraction, but moving the gas, processing it into its component parts, refining it at petrochemical plants, and producing plastics.

Lois Bower-Bjornson has lived through this development, witnessing the impacts on lives in her community. Her desire to learn about the issues and educate current and future generations led her to initiate Frackland Tours in Washington County, PA. The tours consist of presentations on pollution and health impacts followed by a physical tour of shale gas infrastructure in Washington County. Along the way, many impacted residents share their stories on how their lives and health have been impacted.

The Frackland Tours illustrate the density of gas infrastructure on the ground and put a human face on the health impacts and quality of life issues that accompany shale gas development. Now, in a webinar, we are able to take you on a virtual Frackland Tour.

This webinar was hosted by Southwest Pennsylvania Environmental Health Project (SWPA EHP) and Physicians for Social Responsibility of Pennsylvania (PSR-PA). The webinar is a collaborative effort of Lois Bower-Bjornson, SWPA EHP, PSR-PA, Breathe Project, Earthworks, and Clean Air Council.

A recorded video of the virtual tour can be viewed [here](#).



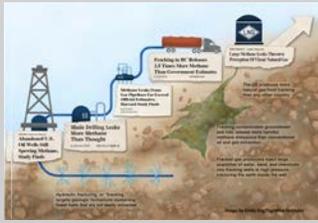
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NEW BLOG POSTS

How Methane Affects Your Health

Methane is the primary component of natural gas, and most natural gas currently produced here is through shale gas development. If you live close to shale gas development, you have a higher risk of experiencing poor health outcomes than if you lived elsewhere. Read more about methane and its effects [here](#).



Why Do Spikes or Peaks in Emissions Matter?

Imagine this: You suffer from a health issue – nosebleeds, headaches, nausea, or even a more serious complication such as asthma – and you suspect this issue has something to do with a nearby shale gas well. You make a complaint to the Pennsylvania DEP, but you receive an unsatisfactory answer. They say the air quality is fine. What’s going on? Read about spikes and peaks in emissions and how they can impact your health [here](#).

Pregnant Women and Fracking: A Case for Special Concern

While pollutants from fracking can be harmful for everyone, those who are more vulnerable to the effects of emissions are even more at risk. The closer an expecting mother lives to shale gas facilities, and the more she is exposed to the harmful substances shale gas development generates, the more likely it is that her baby may be born underweight or with birth defects. Read more [here](#).



EHP'S LETTERS TO THE EDITOR

[Choose better air quality over fossil fuels](#)

May 8 in the Pittsburgh Post-Gazette

[Less exposure to pollution may decrease virus severity](#)

April 3 in the Pittsburgh Post-Gazette

[Industry response to radiation article misleads](#)

March 19 in The Marietta Times

[Consider environment, public health in job creation](#)

February 19 in the Pittsburgh Post-Gazette

[Public health suffers, too](#)

January 9 in the
Observer-Reporter



NEW ENVIRONMENTAL HEALTH CHANNEL STORY

In the early morning hours of September 10, 2018, the residents of Ivy Lane went about their business as usual – sleeping, getting ready for work, reading the news. Around 5 a.m., the neighborhood would be changed forever when a gathering pipeline for natural gas and natural gas liquids in the hillside behind their block exploded.

Read the story of Karen Gdula, an Ivy Lane resident, and her neighbors [here](#).



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NEW STAFF

Alison L. Steele – Executive Director

Alison L. Steele earned her undergraduate degree in Physics from Drew University in Madison, NJ, and her MBA in Sustainable Business Practices from Duquesne University in Pittsburgh. As part of her graduate work, Alison studied sustainability tools and practices used by leading companies in Europe, performed consulting services for large Pittsburgh-area companies, and published research on organizational behavior techniques used to aid adoption of sustainability initiatives. Prior to starting at EHP, she led policy and education efforts at Conservation Consultants, Inc. and developed the company's flagship grassroots community engagement program, which focused on advancing home health and energy efficiency in low-income Pittsburgh neighborhoods. She is currently serving as vice president of the board for the Keystone Energy Efficiency Alliance.



Patrick Dooling – Deputy Director

Patrick Dooling received his BS in Geosciences from Penn State University and MS in Geology from the University of Utah. After studying a wide array of geological sciences including volcanology in Iceland, earthquake geology on major faults in Southern California, and sedimentology in southern Utah, he worked as a petroleum geologist and project manager in Houston, TX. Eager to transition to a career in environmental conservation, Patrick joined the Colorado-based Western Slope Conservation Center in 2016. As Executive Director, Patrick led the organization's efforts to build grassroots support to protect and enhance Colorado's iconic landscapes and watersheds. Patrick is excited to join the EHP team and leverage his nonprofit management and earth science background to protect public health and support the communities of Pennsylvania and beyond.



Nathan Deron – Environmental Data Scientist

Nathan Deron earned his bachelor's degree in Political Science and Sociology at the University of Pittsburgh and his Master's in Public Policy, Management, and Data Analytics from Carnegie Mellon University. While completing his Master's, Nathan worked with the Allegheny County Department of Human Services to investigate novel interventions for frequent utilizers of emergency services in Allegheny County. He also worked with 412 Food Rescue to develop a new model of food recovery to address rural hunger in Greene County, PA. Before attending Carnegie Mellon, Nathan spent three years at City of Asylum working to provide sanctuary to persecuted writers from around the world, including managing the Alphabet City performance venue.



FEATURED RESEARCH REVIEW

[McKenzie et al. \(2017\): Childhood cancer incidence](#)

In this study, Lisa McKenzie and colleagues look at the two most common forms of childhood cancer – acute lymphocytic leukemia (ALL) and non-Hodgkin lymphoma (NHL) – and their association with exposure to shale well pads. Read more about this study [here](#).

EHP defends public health in the face of oil and gas development.

We provide frontline communities with timely monitoring, interpretation and guidance.

We engage diverse stakeholders: health professionals, researchers, community organizers, public servants, and others.

Because knowledge protects health.

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