

HEAT-RELATED ILLNESS



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in heat-related illness action.

TOP 3 RECOMMENDATIONS:

Individual: Learn the symptoms of heat-related illnesses

Community: Create a caretaker check list for extreme heat events

Structural: Improve the resilience of infrastructure to adapt to extreme heat

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - [Symptoms](#) of heat-related illnesses
 - [Work-related risk factors](#) of heat-related illness
- To do:
 - Monitor the National Oceanic and Atmospheric Administration's [Weather Radio](#)
 - [Prepare](#) for extreme heat events
 - Find a cool place during heat events and stay hydrated with water
 - Practice [safety precautions when exercising](#) during extreme heat

COMMUNITY: Support your social networks

- Plan outdoor work activities using the Occupational Safety and Health Administration-National Institute for Occupational Safety and Health [Heat Safety Tool](#) app
- Educate employers and employees on steps to [treat workers](#) with heat-related illness
- Encourage coaches and trainers to take the online heat-related illness [training course](#) to understand heat-illness in athletes
- Create a [caretaker check list](#) to care for older adults during extreme heat events
- Never leave a child, dependent adult, or pet in a parked vehicle during extreme heat

STRUCTURAL: Advocate for organizational & policy level change

- Implement heat alert programs to communicate local extreme heat events
- Incorporate [heat acclimatization](#) in heat-related illness prevention programs
- Increase access to [cooling shelters](#), including free transportation
- Encourage municipalities to coordinate with local utility companies to ensure electricity is never shut off during extreme heat events
- Improve the [resilience of infrastructure](#) to adapt to extreme heat
- Plant trees and increase green space to reduce [urban heat island](#) effects

LEAD POISONING



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in lead poisoning action.

TOP 3 RECOMMENDATIONS:

Individual: Take steps to prevent lead exposure

Community: Educate workers on how to prevent take-home lead exposure

Structural: Encourage organizations to adhere to lead exposure limits

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - There is no safe level of lead exposure
 - Sources of lead exposure
 - Occupational and non-occupational lead exposure in adults
 - Health effects of lead exposure
 - Steps to prevent lead exposure
- To do:
 - Test children for lead exposure
 - Avoid lead-based cookware, such as ceramics and enameled cast iron
 - Make your home lead safe

COMMUNITY: Support your social networks

- Educate workers on how to prevent take-home lead exposure and contain lead remediation and renovation work areas
- Supply parents with information on reducing child lead levels
- Encourage primary care providers to review PA's Lead-Free Promise Project Toolkit
- Ask your child's day care center or school facility manager if they regularly test for lead and check the conditions of these locations

STRUCTURAL: Advocate for organizational & policy level change

- Encourage organizations to adhere to lead exposure limits
- Increase home/building lead testing center locations throughout the state
- Subsidize lead remediation costs in environmental justice areas
- Advocate for local governments to require landlords to regularly test rental properties built before 1978 for lead & remediate if necessary (inspired by Philadelphia's Rental Property Lead Certification Law)

OUTDOOR AIR POLLUTION



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in outdoor air pollution action.

TOP 3 RECOMMENDATIONS:

Individual: Take action to reduce everyday air pollution

Community: Educate your social networks on how to reduce vehicle emission pollution

Structural: Increase accessibility to public transportation

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - [Six criteria air pollutants](#) set by the Environmental Protection Agency (EPA)
 - [Pollutant-specific health effects](#), especially the health effects of [ground-level ozone](#) and [particulate matter](#)
- To do:
 - Monitor EPA's [AirNow](#) to get air quality data where you live
 - Check out [local ozone and particulate matter forecasts](#)
 - Follow these tips to [reduce everyday air pollution](#)
 - Review [seasonal tips](#) to improve outdoor air quality

COMMUNITY: Support your social networks

- Educate neighbors, co-workers, & friends on how to [reduce vehicle emission](#) pollution
- Encourage neighbors and campers to consider [natural gas or propane fire pits](#) instead of wood to reduce the release of pollutants that trigger asthma attacks

STRUCTURAL: Advocate for organizational & policy level change

- Advocate for clean energy production from wind and solar sources
- Encourage community development that supports active transportation, such as walking and biking, to lower emissions from cars
- [Increase accessibility to public transportation](#)
- Encourage [electric vehicle](#) use and infrastructure development
- Construct [roadside vegetation barriers](#) to reduce traffic-related air pollution
- Promote [EPA's SmartWay program](#) to reduce transportation emissions
- Educate community planners on the community impacts of outdoor air pollution
- Work with your local municipality's regional planning team to organize tree planting events in urban environments to improve local outdoor air quality

WATER QUALITY



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in water quality action.

TOP 3 RECOMMENDATIONS:

Individual: Learn about the sources and safety of your drinking water

Community: Encourage neighbors with private wells to test their well water annually

Structural: Build green infrastructure to reduce exposure to water pollution

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - Sources and safety of your [drinking water](#)
 - Effects of [drinking water quality on human health](#)
 - If you own a well, learn the basics about [well maintenance](#)
- To do:
 - [Clean, disinfect, and maintain](#) all devices that use water, such as showerheads and portable humidifiers, to prevent exposure to waterborne germs in your home
 - Find the right [home water treatment](#)
 - Review the seven ways to be [#StormwaterSmartPA](#)
 - Use [garden and yard fertilizers](#) only when necessary
 - If you own a well, subscribe to the [Monthly Private Well Owner Tip Sheet](#)

COMMUNITY: Support your social networks

- Promote the [Introduction to Water Quality Standards](#) among environmental groups and the academic community
- Supply schools and child care facilities with the [3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities](#)
- Encourage neighbors with private wells to [test well water](#) annually and take the virtual [Private Well Class](#)

STRUCTURAL: Advocate for organizational & policy level change

- Build [green infrastructure](#) to reduce exposure to water pollution
- Call on all local municipalities to administer storm water management programs
- Expand [Pennsylvania Water Quality Network](#) fixed station water quality sampling stations to less populated, rural locations

CARBON MONOXIDE



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in carbon monoxide action.

TOP 3 RECOMMENDATIONS:

Individual: Learn carbon monoxide (CO) poisoning prevention tips

Community: Educate community members on the state's CO Alarm Standard Act of 2013

Structural: Expand subsidized CO detectors

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - [CO poisoning prevention tips](#), such as check or change the batteries in your CO detector every six months
 - [Symptoms](#) of CO poisoning
- To do:
 - Inspect [oil and gas furnaces](#) yearly
 - Use [generators](#) outside and away from the home when the power goes out
 - [Install CO detectors](#) near all sleeping areas of your home and check regularly
 - Never burn [charcoal](#) indoors or [run vehicles in a garage](#)
 - [Ventilate chimneys and appliances](#), such as dryers and stoves

COMMUNITY: Support your social networks

- Educate business owners, landlords, and community members on Pennsylvania's [Carbon Monoxide Alarm Standard Act of 2013](#), that requires CO detectors in all homes
- Encourage boat owners to install [CO detectors](#)
- Educate ice arena [owners/managers](#) and [customers/employees](#) about action steps to prevent and protect against CO poisoning
- Teach workers exposed to CO in occupational settings the [proper follow-up protocols](#) when CO poisoning is suspected

STRUCTURAL: Advocate for organizational & policy level change

- Require [CO detectors in all school buildings](#) within the state
- Expand subsidized CO detectors to local municipalities with a large proportion of environmental injustice and low income communities
- Incentivize electric and geothermal heating sources that pose no risk of CO poisoning

INDOOR AIR POLLUTION



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in indoor air pollution action.

TOP 3 RECOMMENDATIONS:

Individual: Learn about the types, sources, and health effects of indoor air pollutants

Community: Encourage schools to review the Indoor Air Quality Tools for Schools Action Kit

Structural: Establish health standards for acceptable levels of biological agents

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - [Types, sources, and potential health effects](#) of indoor air pollutants
 - How to manage [asbestos in the home](#)
 - Why indoor air pollution may pose a [greater risk to health](#) than outdoor air pollution
- To do:
 - [Test your home for radon](#) and if levels are high, consult a professional for mitigation
 - [Increase ventilation](#) to lower concentrations of indoor air pollutants
 - Avoid [household products with chemicals](#) that induce adverse health effects
 - Use a high efficiency particulate air ([HEPA](#)) filter in your home to reduce dust, pollen, mold, bacteria, and airborne particles
 - Avoid smoking and vaping in or near the home to eliminate [secondhand smoke](#)
 - When it comes time to replace your stove, choose an electric stove

COMMUNITY: Support your social networks

- Train building maintenance staff on [radon risks](#)
- Encourage landlords/property owners to properly [ventilate all fuel-burning appliances](#)
- If constructing a new home or building:
 - Review the provisions of the [EPA's Indoor airPLUS program](#)
 - Air out building and flooring materials in a well-ventilated space prior to installation
 - Consult with contractors to ensure you use [building materials with low emissions](#)
- Encourage schools to review the [Indoor Air Quality Tools for Schools Action Kit](#)

STRUCTURAL: Advocate for organizational & policy level change

- Require schools to test for [radon](#) and mitigate high levels
- Expand [Pennsylvania's Clean Indoor Air Act](#) to prohibit smoking in casinos
- Establish health standards for acceptable levels of biological agents, such as mold
- Mandate manufacturers to [list all ingredients in consumer cleaning products](#)

VECTOR-BORNE DISEASES



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in vector-borne diseases action.

TOP 3 RECOMMENDATIONS:

Individual: Learn the signs and symptoms of Lyme disease and West Nile Virus

Community: Learn how to perform a tick check to remove ticks from yourself and others

Structural: Advocate for additional state-level tick and mosquito surveillance funding

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - [Types of vectors](#) in Pennsylvania that transmit diseases to humans
 - Signs and symptoms of [Lyme disease](#) and [West Nile Virus](#)
 - Ways to [prevent bug bites](#)
- To do:
 - Use the U.S. Environmental Protection Agency's [insect repellent search tool](#)
 - Identify Pennsylvania [counties with West Nile Virus](#)
 - Check state-level [tick distribution maps](#)
 - Read Pennsylvania's [2019 Lyme and Other Tickborne Diseases Surveillance Report](#)
 - If you have a [septic tank](#), inspect and repair your septic tank to keep mosquitoes out

COMMUNITY: Support your social networks

- Learn how to perform a [tick check to remove ticks](#) from yourself and others
- Implement [tick and mosquito workplace controls](#) to prevent exposure at work
- Teach employees at risk of tick exposure, such as those in wildlife management and landscaping occupations, how to use the [Tick Bite Bot](#) to remove attached ticks
- Encourage neighbors, friends, and family to [protect their yards from ticks](#) with landscaping techniques, such as removing tick-prone [Japanese barberry bushes](#)
- Learn about [tick and mosquito prevention at camp](#)
- Supply educators with materials to [teach children about the risks of ticks](#)
- Report [dead bird sightings](#) and [mosquito concerns](#) in your community

STRUCTURAL: Advocate for organizational & policy level change

- Advocate for global access to clean water and sanitation to control vector-borne diseases
- Advocate for additional state-level tick and mosquito surveillance funding
- Require Pennsylvania state parks to post [signage on tick and mosquito prevention](#)

ENVIRONMENTAL JUSTICE



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in environmental justice action.

TOP 3 RECOMMENDATIONS:

Individual: Learn about what environmental justice (EJ) is

Community: Encourage friends and family to invest in local businesses

Structural: Support policy changes that reduce environmental exposure inequities

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - What [EJ](#) is and where EJ areas are located in the state via Pennsylvania Department of Environmental Protection's [EJ Areas Viewer](#)
 - Demographic and environmental information in your area via [EJScreen](#)
- To do:
 - Research corporations' environmental practices prior to supporting them
 - Connect with leaders and residents in EJ areas to learn about their concerns, needs, and priorities to amplify their efforts with your own
 - Sign up to receive DEP's [Environmental Justice newsletter](#)

COMMUNITY: Support your social networks

- Encourage friends and family to invest in local businesses owned by marginalized groups
- Share the [Healthy Community Design Checklist](#) with neighbors to learn how to include health in the community planning process
- Share the [Pediatric Environmental Health Toolkit](#) with pediatric healthcare professionals
- Amplify the voices of EJ area communities by donating to or volunteering for organizations advocating for EJ, such as the [UrbanKind Institute](#) and [Philly Thrive](#)

STRUCTURAL: Advocate for organizational & policy level change

- Assure that the voices of marginalized communities are included in environmental health decision-making
- Incorporate EJ into your organization's mission to prioritize EJ initiatives
- Include EJ in school curriculum to create empowered & equipped community members
- Increase state funding to grassroots and local EJ organizations
- Support policy changes that reduce environmental exposure inequities, such as changes in municipal zoning regulations

PFAS

(PER- & POLY-FLUOROALKYL SUBSTANCES)



Putting Environmental Health Data into Action

Read and click on the links below to learn about ways to engage in PFAS action.

TOP 3 RECOMMENDATIONS:

Individual: Learn what PFAS are and what they are used to make

Community: Share information about PFAS with your friends and family

Structural: Advocate for additional state funding for PFAS research

INDIVIDUAL: Learn, act, and protect yourself

- To learn:
 - [What PFAS are](#) and what they are used to make
 - [Ways PFAS enter your body](#) and impact health
 - If you own a private well, learn about [testing and treating PFAS in your well](#)
- To do:
 - If you rely on public drinking water, find out if PFAS are in your drinking water by reaching out to your local water utility
 - If you own a private well, [test your well](#) for PFAS
 - Review and use this list of [PFAS-free products](#)
 - If you are concerned about PFAS exposure, consult your doctor and [guidance](#) from the National Academies of Sciences, Engineering, and Medicine

COMMUNITY: Support your social networks

- Ensure employers of occupations such as chemical manufacturing workers, firefighters, and ski wax technicians are aware of [worksite PFAS exposure](#)
- Share information you learn about PFAS with your friends and family
- If someone you know is concerned about breastfeeding, assure them that the benefits of breastfeeding outweigh any potential risks of PFAS exposure through breast milk

STRUCTURAL: Advocate for organizational & policy level change

- Require safety data sheets to report whether firefighting foams contain PFAS
- Encourage Pennsylvania to apply for the [Emerging Contaminants in Small or Disadvantaged Communities Grant](#), which serves to address PFAS and other emerging contaminants in drinking water, specifically in small or disadvantaged communities
- Advocate for additional state funding for PFAS research and mitigation