

# ENVIRONMENTAL EQUITY



Federal health and environmental regulatory agencies define *environmental equity* as the fair treatment and meaningful involvement of all people—regardless of race, color, national origin, or income—in the development, implementation, and enforcement of environmental laws, regulations, and policies.<sup>1</sup> Environmental equity is a major theme of environmental health in all focus areas. Environmental health practitioners utilize health, demographic, and environmental monitoring data to ensure the protection of populations most vulnerable to the impacts of adverse environmental exposures.

Among the most vulnerable populations are children and pregnant women. Eliminating adverse exposures in utero and among children under age 12 continues to be a high public health priority. Adverse exposures during early development can prompt more serious health consequences than exposures during adulthood, and these consequences may be irreversible. For example, children under age six exposed to lead may suffer lifelong developmental and neurological effects. Similarly, in utero exposure to heavy metals (e.g., mercury) in seafood may lead to low birthweight, neurological problems, and other adverse outcomes.

Environmental health practitioners also work to ensure that other vulnerable populations, including the elderly and those with preexisting conditions (e.g., asthma, chronic respiratory disease, etc.), are protected from environmental exposures. These populations are at far greater risk of adverse health impacts related to environmental exposures (e.g., air pollution) than otherwise healthy populations.

Ensuring environmental equity is of particular importance as it relates to communities' physical infrastructure and to the presence of hazardous waste sites across the United States. In fact, low-income and minority populations disproportionately live near the most dangerous hazardous waste sites in the country and are also more likely to live in communities with substandard public utilities.

The water crisis in Flint, Michigan, that began in April 2014 is a recent example of an environmental emergency created by poor government decisionmaking. The city of Flint switched its water source, as a cost-savings measure, without ensuring appropriate water treatment. The improperly treated water corroded lead water pipes, causing the heavy metal to leach into tap water and resulting in

dangerously high levels of lead exposure for thousands of local children, especially those in disadvantaged neighborhoods.<sup>2</sup>

A key facet of environmental equity is ensuring that all people have a voice in the decisions that might affect their health. As one example, to address American Indian/Alaska Native inequities, the tribal leaders of today report that many of their communities are exercising sovereignty by recognizing their own unique resiliency and commitment towards self determination to restore health and well-being. This work is hindered, though, by the existing burden of health and economic disparities and underfunded and underdeveloped public health systems. The Tribal Advisory Committee—an advisory body convened semiannually by the Centers for Disease Control and Prevention as part of the agency’s tribal consultation responsibilities—continues to prioritize the need for increased funding to address environmental public health inequities to achieve parity with other US public health efforts. Specifically, tribal leaders request direct funding to tribes and/or accountability measures enforced as funding is distributed within each respective state boundary.

*For more information, visit:*

#### Agency for Toxic Substances and Disease Registry

- Assessment of Chemical Exposure (ACE): <https://www.atsdr.cdc.gov/ntsip/ace.html>
- Brownfields/Land Re-use Action Model: <https://www.atsdr.cdc.gov/sites/brownfields/model.html>
- Principles of community engagement: [https://www.atsdr.cdc.gov/communityengagement/pdf/PCE\\_Report\\_508\\_FINAL.pdf](https://www.atsdr.cdc.gov/communityengagement/pdf/PCE_Report_508_FINAL.pdf)
- Social Vulnerability Index (SVI): <https://svi.cdc.gov/>
- Toxicological Profile and Health Assessment Toolkit (TopHAT): <https://trainex.org/offeringslist.cfm?courseid=428>

#### American Public Health Association

- Health equity website: <https://www.apha.org/topics-and-issues/health-equity>

#### Centers for Disease Control and Prevention (CDC), National Center for Environmental Health

- Healthy Homes and Childhood Lead Poisoning Prevention Program’s Environmental Justice – FAQs: [http://www.cdc.gov/HealthyHomes/EJ/EJ\\_1page\\_English.pdf](http://www.cdc.gov/HealthyHomes/EJ/EJ_1page_English.pdf)
- Drinking Water Advisory Communication Toolkit: <http://www.cdc.gov/healthywater/pdf/emergency/drinking-water-advisory-communication-toolbox.pdf>
- Information by location: <https://ephtracking.cdc.gov/InfoByLocation/>
- National Environmental Public Health Tracking Network: <https://ephtracking.cdc.gov/showHome.action>

- Protocol for Community Excellence in Environmental Health (PACE EH): [http://www.cdc.gov/nceh/ehs/CEHA/PACE\\_EH.htm](http://www.cdc.gov/nceh/ehs/CEHA/PACE_EH.htm)

National Association of County and City Health Officials

- Policy statement on environmental justice: <http://www.naccho.org/uploads/downloadable-resources/00-07-Environmental-Justice.pdf>

## References

1. U.S. Environmental Protection Agency. Environmental Justice. 2017. Retrieved from: <https://www.epa.gov/environmentaljustice> on April 18, 2017.
2. Mona Hanna-Attisha, Jenny LaChance, Richard Casey Sadler and Allison Champney Schnepf. Elevated blood lead levels in children associated with the Flint drinking water crisis: a spatial analysis of risk and public health response. *American Journal of Public Health*. 2016;106:283-290.