

Teaching Resources for Air Quality and Climate Change

Companion document to MDHHS-Pub-2064, “Let’s Learn About the Air Quality Index” poster. The poster may be ordered at the [MDHHS Clearinghouse](http://www.healthymichigan.com) (www.healthymichigan.com).



One aspect of climate change is an increasing number of poor air quality days. Poor air quality can affect the health of everyone, but children are especially sensitive to its effects. We all want to continue to provide safe opportunities for children to play but recognize that the challenges of climate change may require some additional creativity and planning.

These resources were compiled and reviewed by members of the Climate Education Action Team (CEAT), staff in the Environmental Health Bureau at the Michigan Department of Health and Human Services (MDHHS), staff from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and Playworks. They aim to accomplish two main objectives:

1. Provide a list of resources that complement and build on the information introduced in the “Let’s Learn about the Air Quality Index (AQI)” poster.
2. Support educators’ efforts to provide safe and stimulating play opportunities for elementary and middle school children on poor air quality days and other days when playing outside is not an option.

MiAir

EGLE’s hub for up-to-date and historical air monitoring data across Michigan. Students can explore AQI scores and pollutant data from air monitoring stations around Michigan. Explore the MiAir dashboards at <https://air-egle.hub.arcgis.com/>.

EGLE Classroom

EGLE maintains a webpage that provides curricula on environmental quality and management, hosts a lending library, maintains a webinar series and hosts monthly office hours so that educators can connect with Environmental Education staff. Explore what’s available at bit.ly/EGLE-Class.

MiTracking

MDHHS's MiTracking Program (bit.ly/MI-Tracking) gathers Michigan-specific environmental and health data and makes them available through the MiTracking Data Portal. Students can find basic information about a range of issues and query local and statewide data and use them to create tables, charts and maps that can be downloaded and printed.

Michigan Climate and Health Adaptation Program (MICHAP)

MDHHS's MICHAP creates educational resources that explain how climate change affects the environment, how those effects impact human health and actions that individuals and communities can take to stay safe. Resources can be found on the bit.ly/MICHAP-Tools page. Topics include heat health, cold health, flood safety, health adaptation planning and wildfire smoke. The Wildfire Smoke page includes a link to an air quality guide for schools, daycares and other outdoor activities (bit.ly/Air-Quality-Guide-for-Schools).

Subject to Climate

The mission of Subject to Climate (subjecttoclimate.org) is to make climate change teaching and learning accessible to all so that the next generation will be inspired to take climate action. Educators will find a wealth of resources including those that have been compiled by Michigan-based educators at the Michigan Climate Education Hub (miclimateducation.org).

Climate Mental Health Network

The Climate Mental Health Network (climatementalhealth.net/education) supports educators in understanding and responding to the youth mental health challenges posed by climate change. The tools and resources — grounded in research and tested across communities — raise climate literacy to better prepare educators to help students navigate their emotional responses in a supportive environment.

Playworks

The mission of Playworks (playworks.org/) is to improve the health and well-being of children by increasing opportunities for physical activity and safe, meaningful play. Playworks hosts a game library (playworks.org/game-library/) that can help educators plan games based on group size, available space and equipment, appropriate ages and developmental skills. Educators can connect with Michigan-based staff at the Recess Lab (recesslab.org) to learn more about possibilities for their own schools. *(MDDHS's recommendation of Playworks as a free resource for educational purposes does not imply endorsement for any commercial products or services).*

Environmental Health Research-to-Action (EHRA)

EHRA (ehra.umd.umich.edu/home) is a community-academic partnership focused on supporting intergenerational leadership in environmental health, community science and policy advocacy. They provide information on various educational opportunities around environmental health and offer some suggested curricula, such as Environmental Health Research-to-Action Foundations lesson plans for grades 6-8 (bit.ly/EHRA-Lessons).