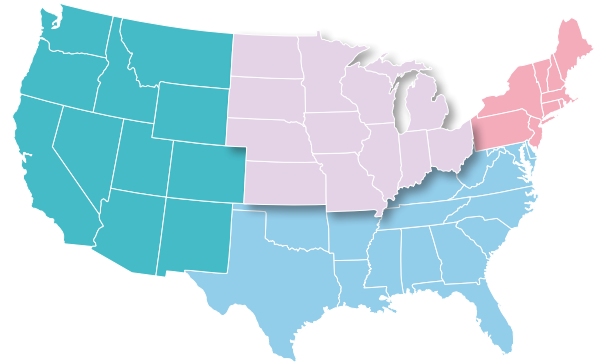


# Focus on the Midwest

**An equitable transition away from fossil fuels to clean energy sources will improve health, save lives, and promote equity.** Momentum for action on climate change is growing, and promising climate solutions are available to protect Midwestern residents from the health crisis of climate change.



## Climate change is harming the health of residents in the Midwest.

Climate change is impacting Midwestern residents' health and livelihoods by worsening several climate-sensitive hazards that are common to the region, including more intense weather events, drought, extreme heat, and devastating flooding.

- **Drought:** Drought is affecting states across the Midwest, with parts of **Nebraska, South Dakota, Kansas, Missouri,** and **Iowa** facing extreme drought conditions in summer 2022.<sup>1</sup> Drought worsens air and water quality; increases lung, heart, and infectious diseases; and harms mental health.<sup>2-5</sup> Drought particularly harms rural and Indigenous communities.<sup>6,7</sup>
- **Extreme weather:** Extreme weather events, including heavy rainfall, heat waves, drought, and floods, are increasing in frequency.<sup>8</sup> Each can have significant impacts on communities and individuals' lives, but occurring together their impacts are magnified. From January to August 2022, there were five separate billion-dollar weather and climate events in the Midwest region. In June 2022, a derecho caused significant damage in **Michigan, Illinois, Indiana, Wisconsin,** and **Ohio.**<sup>8</sup> In July 2022, extreme rainfall events occurred in **Illinois** and **Missouri,** with the St. Louis region receiving the highest 24-hour rainfall amount in recorded history.<sup>9</sup>
- **Heat:** Across the region, temperatures continue to exceed historic averages, with the Northern hemisphere having its sixth-warmest year on record.<sup>10</sup>

## The majority of voters in all Midwestern states are worried about climate change.

The majority of voters in the Midwest region believe that climate change is happening, and are worried about it.<sup>11</sup> Across the Midwest, the number of voters worried about climate change increased significantly since 2020 in all but one state. Voters in the region are broadly supportive of climate policies, with over 70% expressing support for policies such as providing tax rebates for electric vehicles and solar panels and expanding research on renewable energy. Across the Midwest region, over half of voters believe Congress and local governments should do more on climate change.<sup>11</sup>

## States across the Midwest are taking action on climate change.

Climate solutions are available today that will protect our health by ending our dependence on fossil fuels and slowing climate change. States across the Midwest are working together to transition to clean and renewable energy and prepare communities to withstand harms related to climate change. These efforts will improve health now while creating a safer, healthier future.

- **Decarbonizing the energy sector:** In 2021 **Illinois** passed the Climate and Equitable Jobs Act (CEJA) with bipartisan support.<sup>12</sup> The law requires Illinois to achieve a 100% zero-emissions power sector by 2045, and supports investment in renewable energy sources, creating economic and career opportunities in the clean energy sector. The CEJA reinvests in communities that have been disparately impacted by environmental injustices. The Illinois law provides a model of inclusive climate policy making, serving as one example for the region. In 2021, the **Nebraska** Public Power District, the state's largest electric utility, adopted a goal of being net-zero carbon by 2050. Nebraska Public Power

District serves most Nebraska counties including many of the state's rural areas.<sup>13</sup> The Public Power District is a publicly owned utility whose board members are elected by community residents. This movement towards net-zero energy reflects the wishes of the voting public—an encouraging sign.

- **Investing in climate resilience:** Lawrence, **Kansas**<sup>14</sup> and Ann Arbor, **Michigan**<sup>15</sup> developed climate action plans to accelerate short- and long-term sustainability strategies. Ohio is implementing efforts to improve water quality and reduce climate change impacts on Lake Erie.<sup>16</sup> In **Minnesota**, a statewide Climate Action Framework<sup>17</sup> outlines a comprehensive vision across multiple sectors for attaining the state's 2050 carbon neutrality goal and enhancing climate resilience and equity across the state.

### Climate change and mental health in the Midwest:

While home to some of the largest cities in the United States, the Midwest remains a largely rural region. Compared to urban populations, rural communities have higher rates of depression and suicide.<sup>18</sup> Droughts, floods, and other extreme weather events in the region have caused increased stress and mental health challenges due to the significant impacts of climate change for people whose livelihoods are connected to agriculture and natural resources.<sup>19</sup> Several barriers exist for rural communities, such as those in the Midwest, to access mental and behavioral health services. Solutions will need to take into consideration existing barriers, such as far geographic distances to access mental health services, financial limitations, and community stigma against mental health treatment.

Several national and regional coalitions, such as the U.S. Climate Alliance and We Are Still In, provide opportunities for state leaders to learn from one another and work together to advance climate solutions. Programs and policies in the Midwest can serve as examples for local and state governments across the U.S. For more information on climate policy solutions that can protect health and equity, read the **2022 Lancet Countdown U.S. Policy Brief**.

---

The *Lancet* Countdown U.S. Brief is supported by a diverse group of health experts from over 80 U.S. organizations. This document is supported by data and recommendations from the **2022 Lancet Countdown U.S. Policy Brief** and global report, and prior years' reports. Additional region-specific information was obtained from the Fourth National Climate Assessment. The Midwest region includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

## References

- 1 Map Archive: U.S. Drought Monitor. National Drought Mitigation Center. <https://droughtmonitor.unl.edu/Maps/MapArchive.aspx>.
- 2 Vins H, Bell J, Saha S, Hess JJ. The mental health outcomes of drought: A systematic review and causal process diagram. *International Journal of Environmental Research and Public Health* 2015; **12**: 13251–75.
- 3 Sugg M, Runkle J, Leeper R, et al. A scoping review of drought impacts on health and society in North America. *Climatic Change* 2020; **162**: 1177–95.
- 4 Jalalzadeh Fard B, Puvvula J, Bell JE. Evaluating changes in health risk from drought over the contiguous United States. *International Journal of Environmental Research and Public Health* 2022; **19**: 4628.
- 5 Wang Y, Xie Y, Dong W, Ming Y, Wang J, Shen L. Adverse effects of increasing drought on air quality via natural processes. *Atmospheric Chemistry and Physics* 2017; **17**: 12827–43.
- 6 *Lancet* Countdown, 2021: 2021 *Lancet* Countdown on Health and Climate Change Policy Brief for the United States of America. Salas RN, Knappenberger P, Hess JJ. *Lancet* Countdown U.S. Policy Brief.
- 7 Tribal Nations. National Integrated Drought Information System. <https://www.drought.gov/tribal>.
- 8 U.S. billion-dollar weather and climate disasters. NOAA National Centers for Environmental Information (NCEI). 2022. DOI:10.25921/STKW-7W73.
- 9 US Department of Commerce N. July 26th, 2022 Historic Flash Flooding in the St. Louis Metro Area. <https://www.weather.gov/lxjuly262022Flooding>.
- 10 Assessing the Global Climate in 2021. NOAA National Centers for Environmental Information, 2022 <http://www.ncei.noaa.gov/news/global-climate-202112>.
- 11 Marlon J, Neyens L, Jefferson M, Howe P, Mildenerberger M, Leiserowitz A. Yale Climate Opinion Maps 2021. Yale Program on Climate Change Communication. 2022; published online Feb. <https://climatecommunication.yale.edu/visualizations-data/ycom-us>.
- 12 Climate and Equitable Jobs Act. Illinois Department of Commerce & Economic Opportunity. 2022. <https://www2.illinois.gov/dceo/CEJA/pages/default.aspx>.
- 13 About Us. Nebraska Public Power District. <https://www.nppd.com/about-us>.
- 14 Climate Action and Adaptation Plan and Greenhouse Gas Reduction. City of Lawrence, Kansas. <https://lawrenceks.org/sustainability/greenhouse-gas>.
- 15 The A2 Zero Carbon Neutrality Plan. A2 Climate Partnership. <https://www.a2cp.org/a2-zero-carbon-neutrality-plan>.
- 16 About Project Clean Lake. Northeast Ohio Regional Sewer District. <https://www.neorsd.org/community/about-the-project-clean-lake-program>.
- 17 Climate Action Framework. State of Minnesota. <https://climate.state.mn.us/minnesotas-climate-action-framework>.
- 18 CDC. Suicide in Rural America. Centers for Disease Control and Prevention. 2018; published online Jan 12. <https://www.cdc.gov/ruralhealth/Suicide.html>.
- 19 USGCRP. Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. Washington, DC, USA: U.S. Global Change Research Program, 2018.