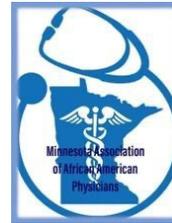


CLIMATE JUSTICE & PUBLIC HEALTH IN MINNESOTA

Equitable Solutions to the Climate Crisis



Health Professionals for a Healthy Climate



Structural Racial Inequities in Minnesota

The Minnesota House Select Committee on Racial Justice¹ affirms that “government sanctioned policies and practices have facilitated an unequal playing field and created barriers for BIPOC communities.” They note the “Minnesota Paradox,” in which white people in Minnesota experience a high quality of life, while Black, Indigenous, and people of color (BIPOC) face persistent racial disparities. Minnesota has some of the largest achievement and economic gaps by race, ethnicity, and socioeconomic status in the nation.² These gaps are evident in unemployment, income, wealth, arrest and incarceration rates, homeownership, educational achievement, and healthy food access.^{3 4}

Compared with white Minnesotans, Minnesotans of color experience a shorter lifespan; higher rates of infant and maternal mortality; and higher incidence of heart disease, cancer, asthma, diabetes, and other diseases.⁵ Racial disparities in life expectancy in Minnesota are stark: the average life expectancy for a white Minnesotan is 81 years, compared with 74 years for Black Minnesotans, and only 61 years for American Indians.⁶ Black and American Indian infants are twice as likely to die before their first birthday than white infants.⁷

Relative to white Minnesotans, Minnesotans of color are more likely to live in areas with poor air quality⁸ and polluting industries.⁹ The Minnesota Pollution Control Agency (MPCA) has identified areas of environmental justice (E) concern in

Minnesota. These areas include communities with 50% or greater people of color, with more than 40% of households having an income less than 185% of the federal poverty level, federally recognized tribal areas, and areas with higher air pollution and exposure to polluting industries.¹⁰

Disproportionate Climate Impacts

Climate change is a public health crisis that requires urgent global and local action to mitigate the worst effects of our changing climate. Fossil fuel pollution is responsible for an estimated 8.7 million premature deaths every year. Fine particulate pollution alone is linked to 350,000 premature deaths annually,¹¹ and a higher proportion of these deaths affect people of color.

The effects of climate change such as extreme heat, severe storms and flooding, wildfires, drought, vector-borne diseases, and air pollution are increasingly impacting the physical and mental health of Minnesotans.⁴³ While everyone’s health is affected by climate change, structural racism, multigenerational trauma, and underlying socioeconomic conditions place BIPOC, low-income communities, and other disadvantaged groups at highest risk from climate change, with fewer resources to adapt to and recover from climate events.

Extreme weather events.

Climate change is disrupting normal weather patterns, and impacts such as extreme heat, drought, flooding, severe storms, and rising sea level can destabilize communities, increase economic stress and poverty, reduce access to essential healthcare, and increase risk for mental health concerns. Living in poverty, living in an area of concentrated poverty and/or racially segregated housing, having an underlying chronic health condition or disability, language barriers, housing instability, being unemployed, or having lower levels of education are factors that limit resilience when extreme weather events occur.¹²

BIPOC communities are disproportionately affected and have fewer resources to recover from extreme weather events.^{13 14} Social conditions, including inadequate infrastructure, inadequate urban planning, urban drainage, land use, water absorbent surfaces, sewage and waste systems, building codes, toxic waste sites, and social protection, can exacerbate climate impacts.¹⁵ Families with children living in poverty are especially vulnerable to disasters like flooding. Seven Minnesota counties have over 20% of children living in poverty, including Mahnomon County, with the highest rate in the state at nearly 33%.¹⁶

Air pollution.

Air pollution, especially fine particulates, from the burning of fossil fuels, industrial emissions, and the increasing incidence of wildfires contribute to respiratory problems, chronic health conditions, and decreased life expectancy. Exposure to air pollution has been linked to hypertension,¹⁷ myocardial infarction,¹⁸ atrial fibrillation,¹⁹ asthma exacerbations,²⁰ decreases in lung function,²¹ cerebrovascular ischemic stroke,²² chronic kidney disease,^{23 24} and reduced birth weight.²⁵ In Minnesota, communities with higher percentages

of low-income people, people of color, and Indigenous people are exposed to higher and even unsafe levels of outdoor air pollution.²⁶ With climate change we are seeing more extreme heat days, which increases air pollution, especially ground level ozone, which is linked to asthma and allergy exacerbations,²⁷ adding increased health burden to communities already experiencing higher rates of asthma.

Vector-borne & waterborne diseases.

The incidence of vector-borne diseases, which spread from animals such as mosquitos and ticks to humans, is increasing. Common vector-

borne diseases in Minnesota include Lyme disease, human anaplasmosis, and West Nile virus. People at highest risk for vector-borne diseases are older adults and those with impaired immune systems.²⁸ People of color may be more vulnerable to neglected infections of vector-borne diseases due to lack of health insurance and reduced health care access. In addition, increased flooding and extreme rain events are expected to increase exposure to waterborne pathogens that cause gastrointestinal illness and diarrhea. Low-income families living in housing with

substandard water, sewer, and drainage systems are at increased risk of exposure to waterborne pathogens.²⁹

Mental health.

According to a 2016 report by the U.S. Global Change Research Program, the social and ecological consequences of climate change negatively impact mental health and are exacerbated by social and behavioral factors, putting some populations at high risk for severe impacts.³⁰ The stress and trauma experienced by survivors of extreme weather events puts them at higher risk for depression, generalized anxiety, and post-traumatic stress disorder. Communities of color are particularly susceptible to adverse

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effects on mental health due to climate stressors. Intergenerational trauma from violence and poverty causes persistent psychological distress, and continued exposure to violence, poverty, and racism creates ongoing trauma.^{31 32}

Food security.

Climate change is expected to disrupt components of food production and distribution and impact food safety and nutritional quality. Disruptions in food production from drought or flooding could reduce access to essential commodities and increase food prices, resulting in greater impacts on people living in urban areas with limited access to grocery stores and Indigenous people whose access to wild and cultivated traditional foods is critical to local economies and culture.³³ Intense rain events, drought, and adverse effects from warmer temperatures also affect the financial viability of the farming economy and the health and mental health of Minnesota farmers.³⁴

Chemical disasters.

Location of toxic waste and industrial sites in low income and communities of color places the health of these communities at risk from routine chemical emissions, as well as from extreme weather events that could release toxic substances into water, air, or soil, causing both acute and cumulative health impacts.³⁵ More than 5.1 million people of color in the U.S. live in neighborhoods with hazardous waste facilities. Minnesota neighborhoods close to hazardous waste sites have 34.4% people of color versus 10.3% people of color in neighborhoods without such sites.³⁶ Phillips neighborhood in Minneapolis and North Minneapolis are two examples of communities where large numbers of EPA designated hazardous chemical reporting facilities are located.^{37 38} The safety of these Minnesota communities could be at risk if climate disasters occur.

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Climate Justice Policy Proposals for Minnesota^{39 40}

Given the opportunities and challenges that Minnesota faces in moving to a carbon-free, healthy, and just economy and society, we recommend that Minnesota prioritize adoption of policies that address underlying racial and social inequities and set goals to move our state to a carbon-free economy that provides clean/green jobs, supports healthy and vibrant communities, and protects public health. We recommend adoption of best practices in partnership with Minnesota's most impacted Environmental Justice communities to create specific, long-term projects to remediate existing environmental damage and invest in best available infrastructure and technology to support clean air, water, soil, and healthy housing in these communities. Policies should also support state, local, tribal, and community level adaptation plans and investment in climate resilient infrastructure to assure that Minnesotans can adapt to future changes in our climate and leave no community behind in the process.

1. CLIMATE HEALTH AND EQUITY POLICY RECOMMENDATIONS TO ADDRESS SYSTEMIC INEQUITIES AND CLIMATE RESILIENCE

1.1 Prioritize investment in communities most affected by the climate crisis and ensure that all state policies prioritize ending racial, economic, and gender inequalities. Address underlying inequalities that create social vulnerability to create healthy communities that have access to green space, healthy and affordable food, well-paying green jobs, and affordable, quality, culturally grounded health and mental health services.

Health benefits: Create healthy, economically sustainable communities to reduce social vulnerability and provide the basis for BIPOC families to thrive and remain resilient in coping with our changing climate.

1.2 Support community wealth creation and eradicate poverty by creating equitable access to well-paying jobs that support a green economy; assuring a just transition for fossil fuel workers; creating access to financial incentives and supports for Black, Indigenous, People of Color (BIPOC)-owned businesses and for increasing homeownership for BIPOC households; and expanding career pathways into well-paid health professions for under-represented populations. Promote and enforce economic development and education policy recommendations of the *House Select Committee on Racial Justice: Report to the Legislature*.⁴¹

Health benefits: Facilitate pathways for higher education and wealth creation for BIPOC individuals to create the economic opportunities needed for healthy and stable families.

1.3 Protect Indigenous Minnesotans by upholding the state of Minnesota's treaty responsibilities in all state decisions, public processes, and policies; and by protecting the land, native foods, and the cultural heritage of Indigenous Minnesotans.

Health benefits: Remove roadblocks to creating sustainable food systems, healthy soil and water, and maintaining critical cultural practices to support healthy Indigenous communities.

1.4 Protect lands and local agriculture through reforestation, carbon sequestration, and regenerative agriculture to include policies that disincentivize industrial agriculture, and support current and emerging farmers in adopting practices that sequester carbon, increase biodiversity, minimize chemical use, promote healthy soil, contribute to local living economies, and promote regional collaboration among farmers to ensure food security and ecological integrity.

Health benefits: Sustainable food systems reduce carbon pollution and contribute to healthy air, soil and water, which are critical components of a healthy environment.

1.5 Invest in Resilient Communities. As recommended by *Adapting to Minnesota's Changing Climate* report, create a Climate Resilient Communities Division within the MPCA, a Resilient Communities Grant Program, a Climate Resilient Communities Fund, and continue to identify Minnesota's climate vulnerabilities and map small-area climate hazards and population adaptive capacity.⁴²

Health benefits: Identifying and financially supporting communities at highest risk for harm from climate events will build community-centered resilience and support healthier communities.

2. CLIMATE HEALTH AND EQUITY POLICY RECOMMENDATIONS TO MITIGATE DISPROPORTIONATE CLIMATE IMPACTS

2.1 Decarbonize all sectors of the Minnesota economy by 2050 in an equitable way. Build a clean energy carbon-free economy by establishing greenhouse gas emission goals aligned with the recommendations of the Intergovernmental Panel on Climate Change (IPCC) and implement policies, programs and incentives that get Minnesota to net zero carbon emissions by 2050 in all sectors of the economy, including: electricity generation; agriculture, forestry, and land use; transportation; residential and commercial buildings; industrial and waste operations. The following policies are critical in moving Minnesota along a decarbonization path:

- 2.1.1** Pass the Next Generation Climate Act to update MN’s climate goals to achieve zero greenhouse gas emissions by 2050.
- 2.1.2** Require utilities to achieve 100% carbon-free energy by 2040.
- 2.1.3** Invest in energy storage systems to support reliability of a growing renewable energy grid.
- 2.1.4** Expand economic opportunities for EJ communities in the clean energy sector—both in the workforce and as business owners, including investment in job training hubs and small clean energy businesses.

Health benefits: Prevent the worst effects of climate change, which jeopardize individual and community health, disproportionately affecting BIPOC communities.

2.2 Invest in renewable energy and assure equitable, affordable energy and resilient infrastructure in EJ communities. Provide programs, resources and incentives for energy conservation, electrification, weatherization, and equitable access to solar and renewable energy in homes, schools, businesses, and public buildings. Policies should include improved building codes, waste reduction systems, and climate resilient infrastructure. Critical investments in energy efficient buildings and electrification, prioritizing EJ communities:

- 2.2.1** Require 50% GHG reductions by 2035 for existing buildings.
- 2.2.2** Require net zero GHG emissions for new buildings by 2036.
- 2.2.3** Develop other statewide stretch building codes, including energy efficiency and building electrification requirements.
- 2.2.4** Invest in **cost-saving energy efficiency programs**, prioritizing low-income households.
- 2.2.5** Expand opportunities for participation in community solar gardens and affordable solar installation for home owners and for schools and public buildings, prioritizing EJ communities.

Health benefits: Assure that BIPOC communities equitably share in the benefits of clean energy including cleaner air, healthy homes and resilience in the face of future climate events.

2.3 Build accessible and healthy transit systems that include electrification of municipal and school buses, increased mass transit routes, consumer incentives for purchasing electric vehicles, access to EV charging infrastructure in EJ communities, and safe walking and biking routes, particularly in EJ communities that are currently underserved. Critical investments in transportation electrification, prioritizing EJ communities:

- 2.3.1** Develop and implement a zero-emission transition plan for school buses to achieve 100% zero emission buses (ZEB) by 2040, that prioritizes deployment of ZEBs in high air pollution areas.

- 2.3.2** Develop and implement a zero-emission transition plan for Metro Transit buses to achieve 100% zero emission buses (ZEB) by 2040, that prioritizes deployment of ZEBs in high air pollution areas.
- 2.3.3** Reduce vehicle miles traveled (VMTs) 20% by 2050 to protect the health of communities that live in high traffic areas.
- 2.3.4** Offer consumer rebates on purchase of new or used EVs and increase investment in charging infrastructure to reduce air and climate pollution.

Health benefits: Reduced air pollution, resulting in reduced respiratory and other chronic illnesses in BIPOC communities. Accessible and affordable transportation systems will improve the health and economic vitality of BIPOC families and communities.

2.4 Reduce the environmental pollution burden in MPCA-identified environmental justice areas of concern and assure that all communities have access to clean air, soil, and water through cleaning up current pollution sources and consideration of cumulative impacts in siting and permitting of new industrial facilities. Priority policies to reduce environmental pollution burden in EJ justice communities:

- 2.4.1** Identify and invest in clean-up of highest risk industrial and hazardous waste sites.
- 2.4.2** Set a timeline for shutting down the Hennepin Energy Recovery Center.
- 2.4.3** Require the MPCA to consider cumulative impacts before issuing air quality permits for new industrial facilities.

Health benefits: Reducing toxic exposures will improve health and quality of life in majority BIPOC neighborhoods.

2.5 Transition to sustainable agriculture and sustainable, healthy food systems, prioritizing EJ communities. The following policies support recommendation 1.4 and help create equitable access to healthy and affordable food:

- 2.5.1** Require a goal and plan to achieve 30% soil-healthy farming by 2030.
- 2.5.2** Pass and implement the *Headwaters Community Food and Water bill*⁴⁴ to create locally controlled and regenerative food systems that restore the land, build on Indigenous knowledge, reward sustainable practices, enable rural-urban partnerships, and sustain intergenerational leadership.

Health benefits: Local control of agricultural systems will allow BIPOC communities to implement sustainable practices that preserve the land and provide access to healthy food.

2.6 Invest in public health adaptation resources and infrastructure that assure that all communities have the tools and resources to identify, prepare for, and adapt to the unique health impacts of climate change in their communities, including: adequate resources for our public and environmental health systems to protect communities by identifying, preparing for, and responding to the health impacts of climate change; protection of those whose health is most at risk; access to uninterrupted, quality healthcare during and after disasters; and access to mental health services to treat and support individuals who are experiencing psychiatric symptoms, especially those associated with climate-related events. Priority investments in mitigation and adaptation resources for communities at highest risk:

- 2.6.1** Invest in tree planting to mitigate heat island effects in urban areas.
- 2.6.2** Create a Climate Resilient Communities Division within the MPCA, a Resilient Communities Grant Program, a Climate Resilient Communities Fund, and continue to

identify Minnesota's climate vulnerabilities and map small-area climate hazards and population adaptive capacity.

Health benefits: Sufficient health resources to work with affected communities in adapting to climate change will support the delivery of needed services when climate events occur, preventing additional harm to mental and physical health.

CLIMATE JUSTICE & PUBLIC HEALTH IN MINNESOTA: Equitable Solutions to the Climate Crisis is endorsed by

Health Professional for a Healthy Climate
MN Association of African American Physicians
MN Doctors for Health Equity
MN Psychological Association
MN Public Health Association
Twin Cities Medical Society

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