

#### Minnesota Statewide Health Assessment

Module 1 | Nature







ST. CATHERINE health.state.mn.us UNIVERSITY

### Agenda

- State Strengths
- Climate
- Air Quality
- COVID-19 influence on nature

#### State Strengths

State strength	Agreed or strongly agreed	Neutral	Disagreed or strongly disagreed
Access to parks and trails	92.2%	5.4%	2.4%
Access to lakes and rivers	86.1%	10.4%	3.6%
Availability of farmers markets	80.1%	12.0%	7.8%
Availability of home garden or community gardens	67.5%	21.5%	11.0%

Not all populations could access this survey, so respondents are not a representative sample of the state.

#### Climate

- Many climate changes have occurred over the past several years
- Many health effects have surfaced due to those changes - Some populations are more vulnerable

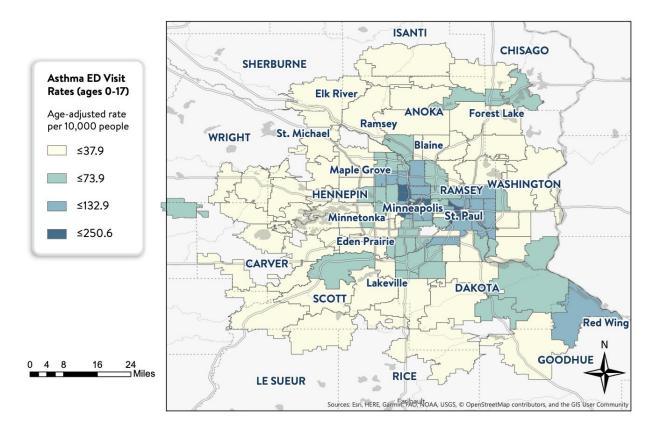
Minnesota warmed by 3.0° F between 1895 and 2020. Annual precipitation increased by an average of 3.4 inches.<sup>250</sup>

## Climate

- The effects of climate change are widespread and impact our well-being.
- In 2020, three sectors were responsible for 74% of greenhouse gas emissions: transportation, electrical utility, and agriculture. (Minnesota Pollution Control Agency, 2020)
- Minnesota's greenhouse gas emissions have fallen 23% since 2005. Changes in economic sectors related to the COVID-19 pandemic also caused greenhouse gas emissions in the state to drop significantly in 2020. (Minnesota Pollution Control Agency & Minnesota Department of Commerce., 2023)



- Poor outdoor air quality leads to negative health outcomes
- Disproportionate health impacts for vulnerable populations
- Increases in air alerts impact populations with conditions such as asthma
  - In Minnesota, one in 24 children (4.2%)269 in ٠ 2020 and one in 11 adults (8.8%) in 2021 had active asthma 270
  - Overall, the rate of asthma in Minnesota is • low. However, people who identify as American Indian, Black, and as multiracial non-Hispanic are consistently more likely to have asthma than white people in Minnesota.271



Twin Cities metro asthma emergency department visit rates by ZIP code, 2016-2020

#### **Indoor Air Quality**

- There are many indoor air pollutants that impact our health, such as asbestos, carbon monoxide, dust mites, formaldehyde, lead etc.
- Some air pollutants are naturally occurring and some are human made
- We benefit from active work to eliminate these pollutants from our indoor environments (homes, schools, and workplaces).



#### Water

- Clean water is essential for not only human life but wildlife as well
- Threats to clean water access impact health significantly
  - Nitrogen
  - Lead
  - Per- and polyfluoroalkyl substances
  - Arsenic

# In Minnesota,

**1.1 million** people rely on private wells and are responsible for testing and maintaining them.<sup>277</sup>

### Conclusion

- MN has many natural strengths
- Climate and air quality have impacts on many aspects of our health

- The pandemic brought positive and negative impacts on the environment
- Once the restrictions ended many of the impacts disappeared

 Q: How did the pandemic impact the amount of time you spent outside? Was it more or less than usual?







# For any addition questions ask:

Dr. Susi Keefe (MPH Director) email: <a href="mailto:slkeefe162@stkate.edu">slkeefe162@stkate.edu</a>

Audrey Hanson, MPH (SHA Project Manager) email: <u>Audrey.Hanson@state.mn.us</u>

Kaitlin Corey (MPH student) email: <u>kncorey484@stkate.edu</u>