

Module 2: Lecture 2

SCRIPT

Slide 1: Welcome to lecture 2 of the Statewide Health Assessment module on environmental health. This lecture focuses on the Opportunity section of the assessment.

Slide 2: This lecture will introduce you to the opportunity section and talk specifics about workplace environments, transportation, and housing. By the end of this lecture you will understand how our opportunities correlate to environmental health.

Slide 3: Opportunity is the inequitable social and economic opportunities that impact our health. For example, housing, income, employment, transportation, and more. These conditions, largely created and shaped by policy decisions made over time, include the schools we can attend, the jobs that are open to us, how we able (or unable) to move around in our communities, and the food that is available to us. Data exposes the inequities through numbers that consistently affect groups more than others and show generations of poor health.

Slide 4: As discussed in the previous lecture, where we live and grow up impacts our health quite a bit, in addition to impacting the opportunities we have in our communities. Whether or not there is equitable access to things such as healthcare, employment, transportation, etc. can lead to either positive or negative health outcomes. Take a look at this table – what do you notice about how Minnesotans view opportunities in MN? The people who participated in this survey have a pretty favorable view of some state strengths. For example, 78.7% agreed that there was an availability of jobs, and 70.1% of survey participants reported that there were social programs for families. Both of these things are essential for positive health, and the survey shows us that of those participants, Minnesota currently gives opportunities at a high rate. Overall, people who took the survey agreed that several strengths support the health of people in Minnesota. However, they noted that those strengths benefit some people and groups more than others, depending on who the people are or where they live. They also noted that some strengths are not available to all people in Minnesota and that many disparities exist. It is also important to note that not all populations could access the survey, the respondents do not represent the state. Why is it important to note this about the survey and its findings?

Slide 5: Our opportunities are interconnected. For example, employment drives income. Housing depends on income, employment, and transportation opportunities. Employment is a large part of many adults' lives for their income and connection to other people, giving a sense of purpose and providing people with opportunities to have health insurance, increasing the chances of improved health. "On average, if we earn more money, our overall health is better. Wealth and the accumulation of income impacts health; research shows people with greater wealth generally live longer and have lower rates of chronic disease." see SHA p. 53 for text/citation Equitable opportunities in employment and the workplace are directly linked to health inequities. In 2018 a study examining workplace environments and health outcomes for white and black workers found that workers identifying as Black reported more stressful work environments and poorer self-reported health outcomes. The study also recommended further research on inequities in perception of the workplace environment and how they contribute to inequitable heart health and mental health outcomes for Black Americans.

Slide 6: Everyone needs access to transportation to fulfill daily activities such as access to food, healthcare, employment, and connections to family and friends. It's also necessary to maintain connections to our family, friends, and communities.

Transportation does not just refer to cars, buses, or trains – it also refers to walking and biking. Miles traveled by vehicle is found to correlate with health – Why do you think that might be? When the number of miles increases so does the amount of greenhouse gases and other emissions (which impacts our environment) – but also we see the number of crashes increase.

Different communities see different travel behavior depending on destination and the transportation options available. Vehicle miles traveled when paired with data about transit ridership, bicyclists, and pedestrians, is a measure that can reveal how the transportation system is serving travelers across the state based on what modes people choose.

Decreasing the time spent in a car and having more options for transit, biking, and walking benefits health, equity, and the environment, giving more incentives for improving cities' availability of transportation that leans away from people relying on personal vehicles.

The pandemic drastically changed travel patterns, with vehicles on roadways dropping by 30-50% in some areas. In 2020 the number of teleworkers increased significantly, jumping from 6.1% in 2018 to 19%. This was a large contributor to the decrease in cars on the roads. Those changes helped improve air quality and lower exposure to transportation pollution-related health risks. Of course, these changes were temporary. In addition, the pandemic decrease in vehicles on the roadways did not mean people were staying inside. Rather, more people were counted walking and biking outside in 2020 than during each of the previous three years.¹⁶³

Slide 7: To set the scene of these maps, disadvantaged communities were identified through US Census tract areas and Justice40 criteria. Criteria include housing burden, energy burden, chronic disease prevalence, low life expectancy, air pollution, and other factors. These criteria are designed to highlight when a community exceeds some threshold that sets it apart nationally. The Justice40 initiative is a Federal initiative with a goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. Areas with lower income and higher percentages of people of color have a disproportionately higher number of pedestrian crashes.

According to an additional report, areas with high poverty rates have 3.9 times as many fatal injury pedestrian crashes per square mile as high-income/low-poverty areas. Areas, where a majority of residents are BIPOC and American Indian have almost nine times as many fatal and injury pedestrian crashes per square mile as the majority white areas. As you can see on the map of the whole state, most areas marked as disadvantaged communities overlap with areas experiencing 1 or more severe non-motorist crashes. [VRUSA - MnDOT \(state.mn.us\)](https://www.vrusa.org/VRUSA-MnDOT-state.mn.us)

What are some reasons that might explain this situation depicted in these two maps? Populations with lower income—including people who identify as BIPOC and American Indian— more frequently live in neighborhoods close to manufacturing and near busy roads and freeways (which serve people who own cars and may live in areas away from those roads and freeways). Heavy traffic can be unsafe and can limit opportunities for walking and physical activity. Residents of high-traffic areas also are exposed to more noise and air pollution than those in lower-traffic areas.¹⁷⁹

Slide 8: A safe and stable home is essential for everyone. If stable housing becomes out of reach, people will live in places that may not meet basic health and safety standards, such as overcrowded areas, impacting mental and physical health directly. Owning your home provides stability and minimizes

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disruptions resulting from unstable housing that can harm health and well-being, such as changing schools and jobs or moving more frequently. Home ownership is not just about our immediate living environment, it is also one of the major ways that people can build wealth.

Homeownership gives people more control over their home environment because it provides stability. One of the largest homeownership gaps in the nation based on race exists in MN as you can see in the table, 77% of white households own their own home, whereas 60% of Asians are homeowners, 50% of Hispanics are homeowners, 49% Native Americans, and just 25% of black people own their own home showing a 52% gap between white and black people owning their homes. The condition and safety of a house can affect people's health at the time of living there and later.

One danger to MN homes is radon, an odorless, colorless radioactive gas that naturally comes from soil, and in the winter, heat systems can draw radon from the soil inside homes. Radon is the leading cause of lung cancer in nonsmokers, and in 2020, 40% of MN homes had elevated levels of radon. The Minnesota Radon Licensing Act was passed by the legislature and signed into law in May 2015. This act gives the Minnesota Department of Health (MDH) the authority to write rules and enforce laws related to the radon industry in the state. This requires buildings to be checked for radon levels and encourages homeowners to check for radon. Renters are not protected in older buildings where high radon levels are often detected because they do not have as much control over where they live, putting them at higher risk.

Slide 9: Environmental opportunities such as workplace environments, transportation, and housing can significantly impact health in MN, as shared in this lecture. In Minnesota, not all people receive equitable opportunities, leading to health inequities and disparities. Given all this information and what you learned from this lecture, how do you think the opportunities and conditions you've experienced have impacted your health?

For any additional questions ask:

Dr. Susi Keefe (MPH Director) email: skeefe162@stkate.edu

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

Kaitlin Corey (MPH student) email: kncorey484@stkate.edu