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Section 08
Health and Safety

Climate Health + Safety

In Albert Lea

+3-5°F

Increase in temperature by 2050

+25% more

Air conditioning demand by 2050

+12-15 days

Longer allergy season by 2050

Health and Safety

Why Health and Safety Are Important

There is a strong relationship between human health and environmental health. From the air we breathe to the water we drink and use, life here on Earth depends on the natural resources and the environment around us. This link between the environment and human health is a critical consideration of the impacts of climate change. As outlined in the City's Climate Risk and Vulnerability Assessment, changes in climate, such as higher average temperatures and increased storm frequency and intensity, can intensify public health stressors. These climate change impacts endanger public health and safety by affecting the air we breathe, the weather we experience, our food and water sources, and our interactions with the built and natural environments. As the climate continues to change, the risks to human health continue to grow.

The health of our environment affects our public health, and agencies should promote it as such. There is a direct relationship between climate action and community health because the health of our environment affects public health.

Equity Considerations—Vulnerable Populations

Climate change impacts the health of all community members, however, people within our communities are differently exposed to hazards and some are disproportionately affected by the risks of climate change. According to the National Climate Assessment, greater health risks related to climate impacts can be experienced by some populations in our communities including children, older adults, low-income communities, and some communities of color. Others, like children, older adults, low-income communities, some communities of color, and those experiencing discrimination are disproportionately affected by extreme heat and weather events, and many have increased health and social vulnerability which decreases their access to resources that can help them avoid the risks of climate change.

According to the National Climate Assessment (https://nca2018.globalchange.gov/chapter/14/):

> Additional populations with increased health and social vulnerability typically have less access to information, resources, institutions, and other factors to prepare for and avoid the health risks of climate change. Some of these communities include poor people in high-income regions, minority groups, women, pregnant women, those experiencing discrimination, children under five, persons with physical and mental illness, persons with physical and cognitive disabilities, the homeless, those living alone, Indigenous people, people displaced because of weather and climate, the socially isolated, poorly planned communities, the disenfranchised, those with less access to healthcare, the uninsured and underinsured, those living in inadequate housing, and those with limited financial resources to rebound from disasters.

Climate Change Considerations

Climate Hazards

Climate stressors include increases in the frequency and intensity of poor air quality days, extreme high temperature events, heavy rainfalls, extended pollen seasons, changed distribution of disease carrying pests.

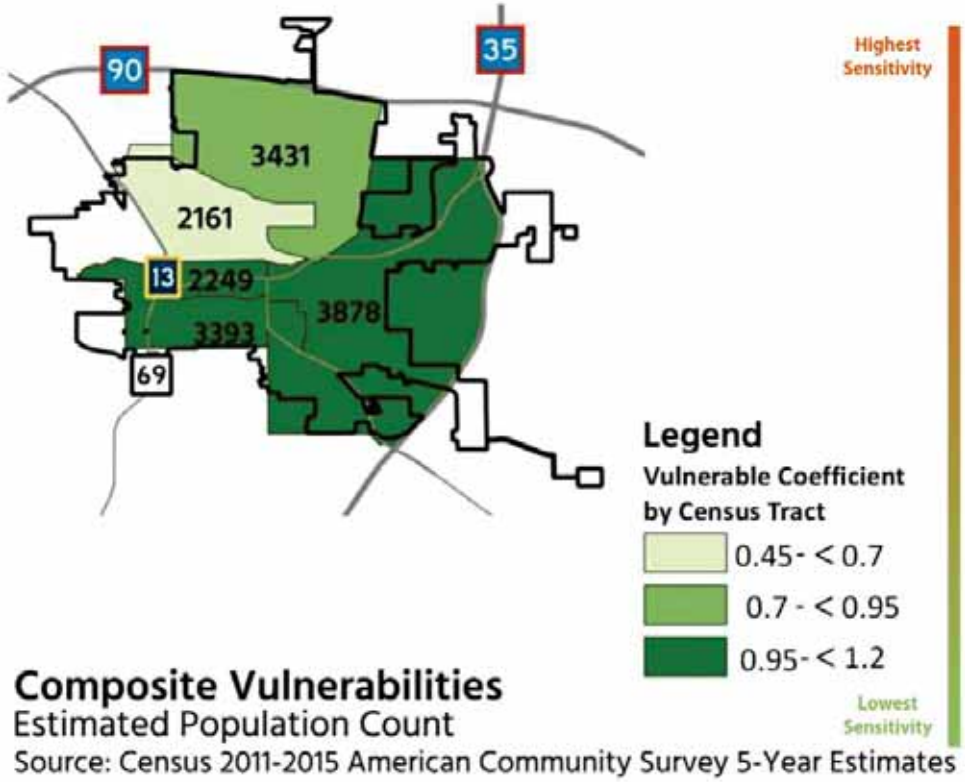
Opportunities

Strategies which improve community connectedness, mobility, community resilience through healthy lifestyles frequently coincide with climate mitigation measures such as improved pedestrian safety and low income home weatherization.

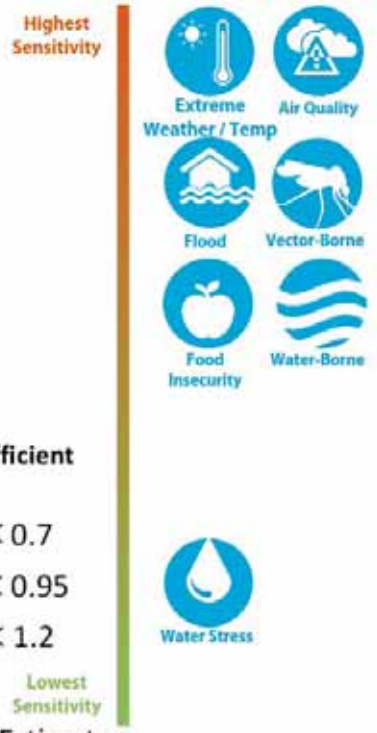
Albert Lea Vulnerable Populations Risk Sensitivity Chart

The map below provides a composite mapping of all vulnerable populations identified in the City's Climate Vulnerability Assessment. It should be noted that it is possible for individuals to be members of more than one vulnerable population. For example, an individual may be both an adult over age 65 as well as an individual living below 200% of poverty level. This composite view of vulnerable populations is also useful in identifying those climate risks which may be most impactful to the most vulnerable individuals. As indicated in the map below, the census tracts can be ordered from fewest instances of population vulnerability to most instances of population vulnerability (Total Population Vulnerability). The Vulnerability Coefficient represents the ratio of total instances of population vulnerabilities to the total population within the census tract where higher numbers represent a higher prevalence of vulnerabilities within the census tract population.

Vulnerable Population Distribution Within Community



Albert Lea Climate Risk Sensitivity Summary



Prioritizing Risk and Vulnerable

Climate change impacts will affect everyone and City policies and actions should consider climate adaptive needs of the entire community. As with all planning efforts climate adaptation benefits from analysis in order to assist in establishing priorities for initial efforts. An effort to structure a prioritization should not be seen as an attempt to discard the need to address climate impacts for any population within the City - whether or not it is defined as one of the "vulnerable" populations . Prioritization, however, may be necessary to ensure the greatest impact and effectiveness of limited City resources.

Based on the above review the City's adaptive efforts may be most effective by prioritizing strategies which address the climate risks of Extreme Temp/Weather, Air Quality Impacts, Flood risks, Vector-Borne Diseases, and Food Insecurity. Particular attention should be paid to strategies which are most effective for those in Economic Stress, Older Adults, Disabled individuals, and At-Risk Workers.

Strategies Supporting Sector Goals

As indicated in the introduction, the Climate Action Plan is intended to be a 9 year plan to be updated at the completion of that time. Consequently, the goals and strategies outlined in this section are intended to be achieved by 2030 (or earlier) unless otherwise noted.

Implementation of actions are anticipated to be initiated over 3 phases: phase 1 within 1-2 years, phase 2 within 2-7 years, and phase 3 within 4-8 years of CAP approval.

1. **Strategy HS-1:** Educate, engage, and empower the public on health and safety risks of climate change impacts.
2. **Strategy HS-2:** Assist the City's extreme heat, flooding, storm, and vector borne disease vulnerable population in preparing for and mitigating climate change impacts.
3. **Strategy HS-3:** Establish and update plans to address climate risks and impacts.
4. **Strategy HS-4:** Strengthen community response capacity and support networks.

1 Strategy HS 1:

Educate, engage, and empower the public on health and safety risks of climate change impacts.

	Actions	Implementation Phase
HS-1-1	Identify current efforts and programs in place to engage the business and health care community in developing emergency response plans and business continuity plans. Review and expand efforts and programs to assure climate change impacts and risks are incorporated.	1
HS-1-2	Increase outreach to diverse populations about climate change and health, natural hazards, and emergency preparedness via broadcast, print, bus ads, social media, and other forms of communication in multiple languages and accessible to individuals with disabilities to ensure that emergency preparedness planning reaches all City residents	1
HS-1-3	Give city and county elected officials and staff tools (e.g. webinar trainings on emergency preparedness, facilitation guides, and other materials in multiple languages) to have dialogues about emergency preparedness within neighborhoods and to create local resilience strategies such as an Adopt-A-Neighbor campaign or hosting an OEM CERT-like training session in their community.	1
HS-1-4	Deploy point-in-time alert systems (e.g., RAVE, Nixle) to notify people of extreme weather events, periods of dangerous cold, and heat waves and refer them to resources on symptoms and prevention of climate-related illness.	2
HS-1-5	Coordinate with Freeborn Public Health to educate public, healthcare, and public health professionals about health risks posed by climate change, including potential changes in air quality and impacts on mental health.	2

2 Strategy HS 2:

Assist the City's extreme heat, flooding, storm, and vector borne disease vulnerable population in preparing for and mitigating climate change impacts.

	Actions	Implementation Phase
HS-2-1	Seek to reduce exposure to extreme heat and improve stormwater damage by promoting, distributing, or providing installation assistance of shade trees focused on community areas identified as having high heat island impact. Assistance should prioritize vulnerable populations.	1
HS-2-2	Collaborate with Freeborn County and Shell Rock River Watershed District to offer on-site and on-line flood assessments and readiness improvements to residents within flood and flash flood prone areas. (e.g. https://www.cnt.org/tools/my-rainready-home-assessment-tool)	1
HS-2-3	Ensure public safety staff are properly trained to recognize and respond to physical and behavioral signs of heat-related illness	2
HS-2-4	Seek to reduce exposure to extreme heat through distribution of energy-efficient, air conditioning in vulnerable populations with a prioritization in areas of high micro heat island impacts.	2
HS-2-5	Improve the energy efficiency of homes, apartments and commercial buildings to keep interiors cool, improving the comfort and safety of occupants and reducing the need for summer air conditioning. Encourage the planting of trees and vegetation on the south and west sides of homes and buildings to reduce summer heat gain.	2
HS-2-6	Collaborate with community partners to provide flood insurance education to home owners, particularly new home buyers and at-risk home owners. Education should include when insurance is recommended, purposes for flood insurance, and what is typically covered and not covered by insurance.	2

3 Strategy HS 3:

Establish and update plans to address climate risks and impacts.

	Actions	Implementation Phase
HS-3-1	Coordinate with County to incorporate climate change and CAP goals into the County's Community Health Needs Assessment Health Improvement Plan	1
HS-3-2	Coordinate with County, State of Minnesota, Red Cross, and utilities to develop a debris management plan to support response to severe storm events and flooding.	1
HS-3-3	Include a Health and Climate Change Impact Assessment component in all City plans. Develop metrics for reporting on climate related risks and health events	1
HS-3-4	Collaborate with County to ensure Emergency Management Plans include current and projected climate change risks and hazards and prioritize and prepare for responses in the event of climate hazards and extreme weather events.	2
HS-3-5	In collaboration with County, develop a comprehensive heat and flood response plan that incorporates most current climate change impact projections and combines individual strategies into an integrated approach.	2
HS-3-6	Establish guidelines and appropriate requirements for adequate community-safe space within the City's special event permitting process. Community-safe space guidelines and requirements to address climate change impacts such as extreme heat, cold, extreme weather, and poor air quality. Guidelines to ensure that these spaces are accessible and adequate for vulnerable populations.	2

4 Strategy HS 4:
Strengthen community response capacity and support networks.

	Actions	Implementation Phase
HS-4-1	Enhance community networks and connections for those who require special attention during extreme heat and weather events, such as the elderly, homebound, disabled, isolated, or those likely to be in need of financial assistance during or after extreme weather events (heat, cold and heavy precipitation)	1
HS-4-2	Strengthen social connectedness through relationship-building among community members across age, ethnicity, income, and other demographic differences	1
HS-4-3	Support and encourage the expansion of public events that bring communities together in public and private spaces. Explore developing events in collaboration with other regional public agencies and private sponsors	1
HS-4-4	Organize a transportation-assistance program for individuals without access to vehicles. Explore partners such as the County, Cedar Valley Service, and local hospitals.	2
HS-4-5	Expand activity and participatory arts programs for older adults, extracurricular activities for youth social engagement, youth peer mentoring and intergenerational mentoring. Programs should focus on expanding social connectedness within and between demographic cohorts (age and ethnicity)	2
HS-4-6	Expand the use of social media to share information and encourage collaboration and civic engagement. Identify responsible party within city to establish and maintain a social media campaign to include organized and regular climate action plan implementation and/or climate change preparedness communications	2
HS 3-7	After weather-related emergency events, assess response to identify effectiveness, deficiencies and resources needed to build future resilience	2

What You Can Do

You can support the goals of the Health and Safety section of the Albert Lea Climate Action Plan as an individual, household, or a business. Here are just a few things you can do:

- Put together an emergency preparedness kit for your household by visiting https://www.ready.gov/
- Get involved with the Albert Lea Community Emergency Response Team (CERT). Join your neighbors and receive training to prepare for potential disasters.
- Prepare your home for the extremes. Understand the risk of extreme weather, extreme temperatures, flooding or wildfire to your home, and take action to safeguard your home.
- Keep yourself and your family current with physicals, vaccinations and prescribed medications and therapies.
- Plan and rehearse a fire evacuation plan with everyone who lives in your home or apartment.
- Have breathing-protection masks available for you and your family for when air quality alerts are declared.
- Take first-aid and CPR certification training.
- Notice a person who lives alone. Offer to check on them periodically, especially during extreme weather or a natural disaster.
- Notice a person who sometimes lacks transportation to their doctor, shopping or other services. Offer to drive them.
- Notice a person or family who lacks air conditioning in their home or apartment. Offer to have them visit or stay with you during extreme heat events.