Harvey A. Friedman Center for Aging

INSTITUTE FOR PUBLIC HEALTH AT WASHINGTON UNIVERSITY

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# **Climate Change & Population Aging**



The population of older adults is rising remarkably. According to the Administration on Aging, by 2040, the population of people who are ages 65 and older will be about 81 million, which is double the number of the older adult population in 2000.<sup>1</sup>Simultaneously, changes to our climate are having detrimental effects not only on the environment, but on all populations.

### Why should older adults support climate change and environmental advocacy?

# Climate change is a very serious problem affecting society today.

Glaciers are shrinking, river and lake ice is melting earlier, plant and animal habitat ranges are changing, and trees and flowers are blooming earlier. Additionally, longer, and more severe heat waves are occurring. Droughts, wildfires, and extreme rainfall are occurring at a faster rate than previously predicted by scientists.<sup>2</sup>



### Climate change disproportionately affects the health of older adults.

According to the World Health Organization, climate change impacts our health in many ways including increased illness and death from extreme weather events, the reduction in food production, increases in vector and water borne diseases, and mental health issues. Additionally, climate change is negatively affecting social determinants for health, such as equality, access to health care and social support. Health risks caused by climate change are disproportionately felt by certain populations such as women, children, ethnic minorities, disadvantaged communities, displaced persons, older populations, and people with chronic health conditions.<sup>3</sup>

Climate change strengthens the health risks associated with aging, particularly impacting older adults who have impaired temperature regulation and reduced respiratory and immune functioning. The natural decline in the body's ability to regulate temperature is exacerbated by rising temperatures and more frequent heatwaves, making older people more susceptible to heat-related illnesses like heatstroke and dehydration.<sup>4</sup>Air pollution resulting from climate change such as higher levels of ground-level ozone and particulate pollution worsens respiratory conditions in older adults, harming their lung functioning and increasing their vulnerability to conditions like asthma and Chronic Obstructive Pulmonary Disease (COPD).<sup>5</sup>

# Older people may be highly susceptible to mental health impacts caused by climate change disasters.

Cognitive difficulties during heat waves can contribute to anxiety and panic among older individuals and extensive media coverage of extreme weather events and disruptions to social support networks can heighten this anxiety level. They can also experience posttraumatic stress disorder (PTSD), depression, and insomnia during heatwaves and other extreme weather events.<sup>8</sup>Additionally, temporary shelters can be crowded, noisy, and unfamiliar, which can be overwhelming, disorienting and confusing for older people with cognitive disorders, and losing treasured family memorabilia can be particularly distressing to older adults making them feel disconnected to their loved ones.<sup>6</sup>

# Older people can be more affected by climate change because of where they live.

A high number of low-income older people live in areas that can be detrimentally impacted by climate change. These places include large metropolitan cities that are affected by "urban heat island effect" – pavement and buildings absorb and retain heat, causing higher temperatures and heatrelated illness and mortality during heatwaves.<sup>9</sup> Approximately 12,000 people die of heat-related causes annually in the U.S. and 80% of these deaths occur in people over the age of 60.<sup>10</sup> Older people are might also be dealing with health conditions that affect their physical, sensory, and cognitive abilities. The National Council on Aging mentions the following reasons why adults ages 60 and older might have a harder time dealing with or surviving a climate change event:<sup>6</sup>

- Some medications used to treat chronic conditions disrupt body temperature regulation or fluid balance, and can suppress thirst, making older adults more vulnerable during heat waves.<sup>7</sup>
- Often, older people depend on caregivers and medical delivery systems, whose services can be negatively affected during climate disasters.
- Older people have less muscle and body tone, which can limit agility and mobility.
- Cognitive impairments can affect the person's ability to assess risks, plan responses, and execute protective behaviors.
- If an older person is dependent on life-sustaining equipment, it may not be available, or might require power supplies that may not be available at temporary shelters.
- Social determinants of health can exacerbate the impact of climate change disasters.<sup>6</sup>

Older adults are also part of the population living in coastal regions prone to climate change-related events, such as hurricanes and floods, making them particularly vulnerable.

Hurricane Katrina claimed the lives of 986 people of which 49% were victims 75 years and older.<sup>12</sup>



Photo - Robert Sullivan/AFP/Getty Images

The Chicago heat wave of 1995 claimed the lives of 735, mostly older adults and poor people.<sup>11</sup>



Photo - Walter Kale/Chicago Tribune

### Evacuations due to climate change disasters can have detrimental effects on older people.

There are several reasons why older people may not be well prepared to evacuate their homes during weather-related disasters.<sup>13</sup>

- **Evacuation can be expensive** for older adults on a fixed income, which will affect their ability to afford transportation, food, and housing, and access to emergency supplies during evacuations.
- **Chronic Health Conditions** may cause older people to rely on medical equipment that requires electricity. Also, reduced access to daily dietary rituals and medication can cause older adults to worry about breaking routines and being away from needed equipment.
- For older people with limited mobility, the risk of falling is a challenge, and convincing them to swiftly move out of their homes and into an unfamiliar living situation can be a deterrent to evacuating.

#### Climate Change and Environmental advocacy is good for older adults

Older adults can be activists in climate change initiatives – they often have more time to volunteer and have lived experience and expertise to contribute. Encouraging environmental activism among older people can tackle urgent social challenges at the same time - fostering increased social inclusion and engagement among older adults, while also benefiting local communities and addressing the escalating issue of climate change and its impacts.<sup>14</sup>

There are personal benefits by being involved in environmental action such as health benefits from increased physical activity, enhanced self-efficacy and well-being, feelings of improving the world and positively influencing the future, and helping to model resiliency to others.<sup>14</sup>

The Aging and Climate Change Clearinghouse also mentions that spending time in nature by clearing trails, testing streams, or cleaning up nature preserves, improves health. For many older people, environmental volunteering is a perfect activity after a lifelong pattern of spending time outside. Environmental activism also promotes intergenerational relationships by bringing people of different ages together to work towards one goal. Research shows that "intergenerational relationships improve the mental health of older adults, build community, and help to prevent ageism."<sup>15</sup>

- **Socially isolated older people**, particularly those living alone, and/or without a family members or friends nearby, who are caregivers or for whom English is not their primary language, may not have a support system for evacuation, which can increase feelings of vulnerability.
- Home Vulnerability Fear Concerns about potential property damage or looting can cause older people to resist leaving their homes during disasters.
- Many older people put their trust in past experiences and believe that if a particular disaster hasn't occurred before, it is unlikely to happen now, or they were fine staying home in past weather disasters.

# How can Older People Prepare for climate change's health impacts?

The Environmental Protection Agency (EPA) recommends the following steps that older people, their families and their caretakers can take to decrease the health impacts of climate change:

**Stay cool and hydrated.** Drink enough water, wear loose, light-colored clothing, and stay in air-conditioned spaces when temperatures rise. Make plans to stay with a friend or family member or a cooling center if you don't have an air conditioner or if your power goes out during a storm.

**Stay informed about air quality**. Use AirNow to check local air pollution levels in your area to help make informed choices about outdoor activities. Prevent bites. Use insect repellents to help avoid tick and bug bites.

**Make a plan.** Create an emergency supply kit with first aid supplies, legal documents, food, water, a flashlight and spare batteries, medication, and medical supplies. Set up a support network and keep family, friends, and caretakers updated on your whereabouts. Have a plan for emergency shelter, and transportation during extreme weather. Local senior services agencies may provide shelter and transportation resources during extreme weather. Your local emergency management office may be able to provide assistance during an emergency if you are disabled.

# How can older adults become involved in climate change advocacy?

The lifelong experiences of older people offer valuable insights for addressing climate change challenges and using their professional expertise in areas like policymaking, advocacy, and research can be very helpful. Also, older adults can think about the impact on future generations, which can encourage multigenerational collaboration with knowledge-sharing across different age groups.<sup>16</sup>Older adults can be encouraged to be involved in environmental initiatives by offering them effective training and linking climate change organizations with organizations that focus on older people.<sup>14</sup>

#### Older activists can help to create a better world not only for themselves but also for future generations.

Climate activism is a way for older people to "give back." Research shows that older people experience "generativity - the need to promote the wellbeing of younger generations." Volunteering to help environmental issues is one of the best ways to help protect the health of the earth for the next years, decades and centuries.<sup>15</sup>

# The following climate change action resources can help you get started volunteering for environmental causes.

- <u>CITRA's Retirees in Service to the Environment (RISE) Program</u> is an environmental education and leadership training program for adults over 60. RISE seeks to create a new pool of environmental volunteers to address pressing environmental issues and to provide new opportunities and roles for retirees to engage with their communities.
- <u>The Aging and Climate Change Clearinghouse</u> teaches older people to use their skills and identify opportunities, provides information on getting involved in climate change action and environmental volunteering, and shares stories from older adults who are working on climate change.
- <u>The Third Act</u> is an organization that encourages people over 60 to use their life experiences, skills, and resources to act on climate change and ensure a safe planet for future generations. Join a Working Group volunteer-led groups organized by geographic location that work together on campaigns.
- <u>Growing Greener</u> connects population aging and climate change and engages and empowers older adults to harness their time, experience and talent in combating the climate crisis.
- <u>Elders Climate Action</u> mobilizes older people throughout the US to address climate change to protect the wellbeing of future generations. They inform, inspire, and engage people to take action. Go to their website to sign up for their newsletter, action alerts and more.



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