United States Environmental Protection Agency

Climate Change and the Health of People with Disabilities

Understanding the threats that climate change poses to human health can help us work together to lower risks and be prepared.
Climate change threatens human health, including mental health, and access to clean air, safe drinking water, nutritious food, and shelter. Everyone is affected by climate change at some point in their lives. Some people are more affected by climate change than others because of factors like where they live; their age, health, income, and occupation; and how they go about their day-to-day life.

People with disabilities are a broad and diverse community, and their needs differ depending on individual circumstances like their age or ability to live independently within their communities. In general, however, climate change-related health impacts may affect people with disabilities more than others. People with disabilities often face barriers in accessing healthcare services and in receiving timely public health or emergency information in an accessible format. Additionally, many people with disabilities experience high rates of social risk factors that contribute to poor health, such as poverty, unemployment, and lower education. For example, people with disabilities are twice as likely to be unemployed than those without disabilities. People with limited incomes may not be able to afford air conditioning in their home during heat waves, increasing their risk of heat stroke.

What is climate change and why does it matter for health?

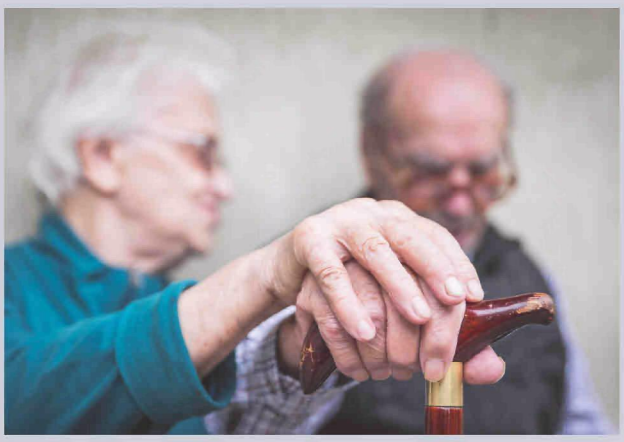
We've all heard of it, but what exactly is climate change? Greenhouse gases act like a blanket around Earth, trapping energy in the atmosphere. Human activities, especially burning fossil fuels for energy, increase the amount of greenhouse gases in our atmosphere and cause the climate to warm. **Climate** is the typical or average weather for an area. **Climate change** is any change in average weather that lasts for a long period of time, like warming temperatures. Climate change affects the food we eat, the air we breathe, and the water we drink. It also leads to extreme weather events, like flooding, droughts, and wildfires. All of these impacts affect human health.

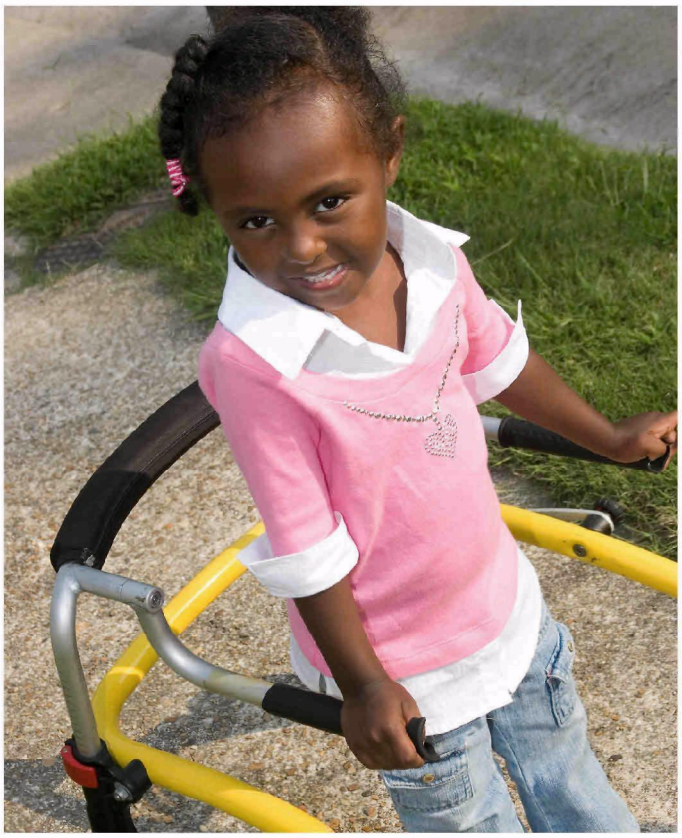
People with disabilities and their families, neighbors, or caregivers can start taking steps now to protect themselves against the negative impacts of climate change. For example, social connections, especially through faith-based organizations, family networks, and work connections, can help people with disabilities plan ahead for and cope with extreme weather events. Community members can also take part in local decision-making, especially emergency and urban planning. Discussions like these raise awareness and can help communities address the needs of all residents.

Types of disabilities

Approximately 1 in 5 people in the United States has a disability. This includes about half of all American adults 65 and older and about 17% of Americans age 21-64. Disabilities can occur in one or more areas related to:

- **Communication** (seeing, hearing, or speaking), which can include people who are deaf, hard of hearing, blind, low vision (visual impairment), or have speech or language disorders
- **Cognitive functioning** (ability to plan, comprehend, and reason), which can include people with Down Syndrome, Traumatic Brain Injury (TBI), Alzheimer's disease, or dementia
- **Physical functioning** (limited or no ability to walk, climb stairs, or lift or grasp objects)





Extreme events

Climate change will increase the frequency or intensity of some extreme events, such as extreme heat events, flooding (related to heavy rains, hurricanes, and coastal storms), droughts, and wildfires. During heat waves, certain risk factors can make some people with disabilities especially susceptible to heat-related illness and death. These include having dementia, depending on others for assistance in activities of daily living, having limited mobility (especially if confined to bed), or not having access to transportation.

These factors can also increase health risks during hurricanes and severe storms. People with disabilities have had high rates of illness, injuries, or death from these types of events. For example, almost half of deaths from Hurricane Katrina were people over age 75 (even though they only represented less than 6% of the population in the area), with over 10% of total deaths occurring in nursing homes. Most of those individuals had medical conditions and disabilities that made them vulnerable.

If an extreme event requires evacuation, people with disabilities have high risk of both physical and mental health impacts. People with disabilities may have reduced ability to receive or act upon emergency information or instructions, or to communicate their needs in an emergency or evacuation situation. Messages about extreme weather or other emergency information (such as a warning to boil contaminated water) are not always designed or delivered in a way that reaches individuals with disabilities, like those who have hearing loss, low vision, or reduced mental capacity.

People with disabilities may also face additional physical challenges associated with evacuations which can make health impacts worse, especially if local emergency response plans do not adequately anticipate and address the special needs of these populations. Examples from Hurricane Katrina include the inability to meet demand for wheelchair-accessible transportation, challenges associated with maintaining adequate supplies of prescription medication or access to necessary medical equipment like oxygen, and a lack of evacuation shelters with appropriate facilities, equipment, and trained staff to meet the various needs of people with disabilities. Extreme events can also cause power outages that can affect electrically-powered medical equipment and elevators, leaving some people with disabilities without treatment or the ability to evacuate.

This fact sheet is based on "The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment." To explore the full report, go to:

https://health2016.globalchange.gov

Learn More

Centers for Disease Control and Prevention, Disability and Health: Emergency Preparedness
http://www.cdc.gov/ncbddd/disabilityandhealth/emergencypreparedness.html

Climate Change: Human Health
http://www3.epa.gov/climatechange/impacts/health.html

Climate Change: What You Can Do
http://www3.epa.gov/climatechange/wycd/

Ready.gov: Individuals with Disabilities and Others with Access and Functional Needs
https://www.ready.gov/individuals-access-functional-needs

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