**Communication Materials on Climate Change, Health, and Populations of Concern**

***Summary Points from the U.S. Climate and Health Assessment***

# Background

In April 2016, the United States Global Change Research Program (USGCRP) released a new assessment report about a growing threat to public health: climate change. Drawing upon decades of research on the physical science of climate change, [*The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*](https://health2016.globalchange.gov/) presents information on the increased risks that climate change poses to human health.

The U.S. Climate and Health Assessment significantly advances what we know about the impacts of climate change on public health. It also highlights factors that make some individuals and communities especially vulnerable to these threats.

During public forums, scientific conferences, webinars and meetings, as well as in public comments submitted during the development of the U.S. Climate and Health Assessment, the U.S. Environmental Protection Agency (EPA) received multiple requests for summary materials that would help communicate the message that certain populations are disproportionately vulnerable to the health impacts of climate change. In response to these requests, EPA has summarized information from the U.S. Climate and Health Assessment focusing on impacts of climate change on the health on **eight populations of concern**:

* Communities with environmental justice concerns
* Indigenous peoples
* Pregnant women
* Children
* Older adults
* Occupational groups
* People with pre-existing health conditions
* People with disabilities

For each of these groups, EPA has compiled a suite of communication materials for use by stakeholders who are looking for concise, accurate language to aid conversations with their constituent groups on climate and health impacts. Communication materials specific to each of the populations listed above, as well as general summary messages on climate change, health, and populations of concern, can be found here: <https://www.epa.gov/climate-impacts/climate-change-health-and-populations-concern>.

# How to Use These Materials

Public health workers, local and state government officials, educators, advocacy organizations, and community leaders have a critical voice in communicating important health information to the people who need it the most.

In response to request from stakeholders, EPA has prepared materials to help communicate key messages on the impacts of climate change on human health. These materials cover **general information about climate change, health, and populations of concern**. Information on a specific population can be found at <https://www.epa.gov/climate-impacts/climate-change-health-and-populations-concern>.

These communication materials, derived from the U.S. Climate and Health Assessment, include:

* Frequently Asked Questions about the assessment and populations of concern.
* An introductory paragraph about environmental health risks to populations of concern.
* Key points about environmental health risks to populations of concern.
* Shorter messages about environmental health risks to populations of concern.

Because the availability of good information leads to better public health and environmental protection, these materials are designed to be used or modified to inform conversations about climate change and health impacts to vulnerable populations. For questions or assistance, please email [climatehealth@epa.gov](mailto:climatehealth@epa.gov).

# Electronic and Print Resources

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| \\betfilesrv02\redirected$\HaiglerP\Desktop\health-factsheet.jpg | Eight **Factsheets** onClimate Change, Health, and Populations of Concern (two to four pages) is available in web and print formats, in English and Spanish. | <https://www.epa.gov/climate-impacts/climate-change-health-and-populations-concern> |
|  | Eight **customizable PowerPoint templates** with talking points can be used at conferences and meetings as a standalone presentation or added to existing slides. |
| *C:\Users\acrimmin\AppData\Local\Temp\wzd29d\EJ-climate-health-LinkedIn-550x375.jpg* | Eight sets of **High Resolution Images** can be compelling when paired with other outreach materials. Images are sized for various uses and platforms. |
|  | A **clickable map** with examples of state-by-state health impacts and resources to prepare and respond to climate threats | <https://www.epa.gov/climate-impacts/climate-change-and-human-health-risks-your-state> |
| A **ten-question interactive online quiz-** challenge your friends on social media! | <https://www.epa.gov/climate-impacts/quiz-how-much-do-you-know-about-health-impacts-climate-change> |
| **Climate Change Impacts Website** | <https://www.epa.gov/climate-impacts> |
| **cover.jpg** | **U.S. Climate and Health Assessment Chapter 9: Populations of concern** | <https://health2016.globalchange.gov/populations-concern> |

**Frequently Asked Questions**

**What is the U.S. Climate and Health Assessment?**

The U.S. Climate and Health Assessment provides a comprehensive, evidence-based, and, where possible, quantitative estimation of observed and projected climate change related health impacts in the United States. The assessment was developed with contributions from more than 100 federal experts, affiliates, and academics to inform public health officials, urban and disaster response planners, decision makers, and other stakeholders within and outside of government who are interested in better understanding the risks climate change presents to human health.

**How did the public contribute to this assessment?**

Public input was gathered via a public forum and formally solicited through a Federal Register Notice requesting author nominations, scientific literature, and comments on an early outline followed by a 60-day public comment period on the draft report. The National Academies of Science conducted a formal scientific peer review of the draft report and held meetings open to the public.

**What is “vulnerability” in the climate and health context?**

Vulnerability is the tendency or predisposition to be adversely affected by climate-related health effects. It encompasses three elements: exposure, sensitivity or susceptibility to harm, and the capacity to adapt or respond to a climate change threat. While all Americans are affected by climate change, some groups are disproportionately vulnerable to climate health impacts. This relates to environmental justice[[1]](#footnote-1) because certain communities that already experience multiple, disproportionate environmental health burdens are also disproportionately affected by climate change.

**Which vulnerable populations does the U.S. Climate and Health Assessment focus on and what are some examples of what makes these populations disproportionately affected by the health impacts of climate change?**

***Communities of Color, Low Income, Immigrants, and Limited-English-Proficiency Groups.*** These groups are identified as having environmental justice concerns because they share similar characteristics that contribute to their increased vulnerability to the health impacts of climate change. This includes an increased risk of exposure given their higher likelihood of living in risk-prone areas (such as urban heat islands, isolated rural areas, or coastal and other flood-prone areas), areas with older or poorly maintained infrastructure, or areas with an increased burden of air pollution. These groups of people also experience relatively greater incidence of chronic medical conditions, such as cardiovascular and kidney disease, diabetes, asthma, and COPD, which can be exacerbated by climate-related health impacts.

***Indigenous Peoples in the United States*.** Because of existing vulnerabilities, Indigenous people, especially those who are dependent on the environment for sustenance or who live in geographically isolated or impoverished communities, are likely to experience greater exposure and lower resilience to climate-related health effects.

***Pregnant Women*.** Exposure to climate-related health threats, like extreme weather events and worsened air quality, may lead to adverse pregnancy and newborn health outcomes, including low birth weight, preterm birth, dehydration and associated renal failure, diarrhea, and respiratory disease. Pregnant women with severe hurricane experiences may be at significantly increased risk for post-traumatic stress disorder (PTSD) and depression.

***Children*.** Climate change—interacting with factors such as economic status, diet, living situation, and stage of development—will increase children’s exposure to health threats. Children are vulnerable to adverse health effects associated with environmental exposures due to factors related to their immature physiology and metabolism, their unique exposure pathways, their biological sensitivities, and limits to their adaptive capacity. Children have a proportionately higher intake of air, food, and water relative to their body weight compared to adults. They also share unique behaviors and interactions with their environment that may increase their exposure to environmental contaminants.

***Older* *Adults***. The nation’s older adult population (ages 65 and older) will nearly double in size from 2015 through 2050. Between 1979 and 2004, deaths from heat exposure were reported most commonly among adults aged 65 and older. The need to evacuate an area during or after extreme events can pose increased health and safety risks for older adults, especially those who are poor or reside in nursing or assisted-living facilities. Air pollution can also exacerbate asthma and COPD and can increase the risk of heart attack in older adults, especially those who are also diabetic or obese.

***Occupational Groups***. Outdoor workers are often among the first to be exposed to the effects of climate change. Climate change is expected to affect the health of outdoor workers through increases in ambient temperature, degraded air quality, extreme weather, vector-borne diseases, industrial exposures, and changes in the built environment. An increased need for complex emergency responses will expose rescue and recovery workers to physical and psychological hazards. The incidence of heat illness among active duty U.S. military personnel is several-fold higher than the summertime incidence in the general U.S. population (147 per 100,000 among the military versus 21.5 per 100,000 in the general population per year).

***Persons with Disabilities***. An increase in extreme weather can be expected to disproportionately affect populations with disabilities, who experience higher rates of social risk factors—such as poverty and lower educational attainment—that contribute to poorer health outcomes during extreme events or climate-related emergencies. Persons with disabilities often rely on medical equipment (such as portable oxygen) that requires an uninterrupted source of electricity.

***Persons with Chronic Medical Conditions*.** Preexisting medical conditions present risk factors for increased illness and death associated with climate-related stressors, especially exposure to extreme heat. Hospital admissions and emergency room visits increase during heat waves for people with diabetes, cardiovascular diseases, respiratory diseases, and psychiatric illnesses. Medical conditions like Alzheimer’s disease or mental illnesses can impair judgment and behavioral responses in crisis situations, which can place people with those conditions at greater risk.

**Why were these eight populations chosen as a focus in the U.S. Climate and Health assessment?**

The list of populations was identified to reflect current understanding related to how the health of particular groups of people in the United States are affected by climate change to different extents. These populations of concern are those most commonly identified and discussed in the literature on climate change health impacts on vulnerable populations, though the order in which they are listed is not prioritized. While there are other populations that may be threatened disproportionately by climate change, the authors focused on populations for which there is substantive peer-reviewed literature. As research in this field continues, the list may be revisited in future assessments.

**Summary text**

*The language below can be used or modified for different formats or mediums, to communicate how certain groups of people are disproportionately affected by the impacts of climate change on health.*

**Introductory Paragraph**

The United States Global Change Research Program’s (USGCRP) report, [*The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*](https://health2016.globalchange.gov/), presents information on the increased risks that climate change poses to human health. As the climate continues to change, the risks to human health will grow, exacerbating existing health threats and creating new public health challenges such as those related to elevated temperatures; more frequent, severe, or longer-lasting extreme events; degraded air quality; diseases transmitted through food, water, and disease vectors (such as ticks and mosquitoes); and stresses to our mental health and well-being. While all Americans are affected by climate change, some groups are disproportionately vulnerable to climate health impacts. They include low income populations, some communities of color, limited English proficiency and immigrant groups, Indigenous peoples, children, pregnant women, older adults, certain occupational groups, people with disabilities, and people with preexisting or chronic medical conditions. The U.S. Environmental Protection Agency (EPA) has developed summary materials based on the U.S. Climate and Health Assessment to help strengthen conversations about climate change and health impacts to these vulnerable populations. These outreach and communication materials include factsheets (in English and Spanish), summary key points from the Assessment, a customizable PowerPoint presentation, and high resolution images, and can be found here: <https://www.epa.gov/climate-impacts/climate-change-health-and-populations-concern>.

**Key Points**

* 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 have an effect on human health. The United States Global Change Research Program’s (USGCRP) new report, [*The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*](https://health2016.globalchange.gov/), presents information on the increased risks that climate change poses to human health.
* While all Americans are affected by climate change, some groups are disproportionately vulnerable to climate health impacts. They include low income populations, some communities of color, limited English proficiency and immigrant groups, Indigenous peoples, children, pregnant women, older adults, certain occupational groups, people with disabilities, and people with preexisting or chronic medical conditions.
* Factors that make some individuals and communities especially vulnerable include where they live; their age, health, income, and occupation; and how they go about their day-to-day life.
* The U.S. Environmental Protection Agency (EPA) has developed eight sets of communication materials to help strengthen conversations about climate change and health impacts to these vulnerable populations. Each fact sheet in the series outlines:
  + Factors that can affect someone’s ability to prepare for, respond to, and cope with the impacts of climate change on health
  + Ways that climate change affects the health of populations of concern
  + Resources that people can turn to for more information (including Spanish language resources).
* The findings of the U.S. Climate and Health Assessment strengthen and broaden the scientific foundation for future decision making, allowing individuals, communities, organizations, and governments to proactively manage the health risks of climate change.

**Shorter Messages**

* Understanding the threats that climate change poses to human health can help us work together to lower risks and be prepared. [go.usa.gov/xkspB](http://go.usa.gov/xkspB)
* New EPA fact sheets detail the health impacts of climate change on 8 populations of concern. [go.usa.gov/xkspB](http://go.usa.gov/xkspB)
* Everyone’s health is affected by climate change but some people are affected more than others. Read more: [go.usa.gov/xkspB](http://go.usa.gov/xkspB)
* Some people are more affected by climate change because of where they live, their age, health, income, etc. [go.usa.gov/xkspB](http://go.usa.gov/xkspB)

1. Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Environmental justice will be achieved when everyone enjoys the same degree of protection from environmental and health hazards like climate change. [↑](#footnote-ref-1)