

# **Climate Change and Health Talking Points**

### What Does Climate Change Have to Do With Health?

## Climate change is real and is largely caused by humans.

How do we know? The warming of the planet is definite. Since the turn of the 20<sup>th</sup> century the global average temperature has risen, sea levels have increased, the oceans have warmed and become more acidic, land and sea ice has melted and the atmospheric carbon dioxide level has increased.

Human activity is largely the cause of climate change.

- According to a report released by the National Academy of Sciences and the Royal Society "scientists know that recent climate change is largely caused by human activities from an understanding of basic physics, comparing observations with models, and fingerprinting the detailed patterns of climate change caused by different human and natural influences."
- Human activities, mainly the extraction and burning of fossil fuels, have released a massive amount of carbon dioxide into the atmosphere, altering the Earth's natural carbon cycle.

#### • Climate change is bad for us and our community in a number of ways.

Climate change could lead to higher temperatures and carbon dioxide levels, more extreme weather events, increasing sea levels, and other ecosystem changes. These effects pose direct and indirect threats to human health and the elderly, children, the poor, and the chronically ill are particularly vulnerable. Potential effects include:

- Heat-related illness Rising temperatures could lead to more extreme and frequent heat waves, increasing risk of exhaustion, heat stress and stroke, and death.
- Respiratory illness Climate change could lengthen pollen season, increasing
  pollen allergenicity burden; higher carbon dioxide concentrations could increase
  allergen-producing weeds, grasses; climate-related drought and wildfires could

- increase particulate matter exposure; elevated ozone gas concentrations are connected to asthma events, increased hospital admissions, coughing and throat irritation.
- Vector- and water-borne disease Climate change-related heavy precipitation could lead to more cases of giardia and cryptosporidium. Precipitation and temperature change could facilitate the spread of vectors into new areas, such as tick vectors into northern North America, elevating Lyme disease risk.
- Food insecurity and water scarcity Food production could be affected by drought, extreme weather, pollution, threatening crop yields in some areas.
   Water supplies could dwindle under drought conditions. Malnutrition, diarrheal disease could result. Flooding could compromise drinking water supplies.
- We need to start taking action now to protect the health of our community's most vulnerable members — including our children, our seniors, people with chronic illnesses, and the poor — because our climate is already changing and people are already being harmed.
  - Physicians and the health care sector must implement environmentally sustainable and energy-efficient practices. Hospitals, clinics, and small practices can reduce energy use; encourage their employees to take public transportation, carpool, and walk or bike to work; reduce waste by encouraging recycling, and other strategies to reduce their greenhouse gas emissions. (see ACP's Greening the Health Care Sector guide)
  - Physicians should become educated about the health effects of climate change and how to prepare for and respond to existing and future challenges that climate change poses to their community. Physicians should seek out continuing medical education courses on climate change and health.
    - Localize the issue. Climate change impact will differ from region to region. Coastal settlements may experience more flooding; Midwestern cities are expected to experience more extreme heat as well as higher ground-level ozone concentrations. Learn how climate change may affect your region by consulting the Third National Climate Assessment found in the Resources section.
  - Physicians, both individually and collectively, are encouraged to advocate for climate change adaptation and mitigation policies and communicate about the health cobenefits of addressing climate change.
- Taking action creates a "win-win" situation for us because, in addition to dealing with climate change, most of these actions will benefit our health too.

The Lancet Commission on Health and Climate Change states that "tackling climate change could be the greatest global health opportunity of the 21<sup>st</sup> century." iii

- For example, switching from dirty fuel-generated electricity to renewable sources could lower air pollution and reduce the risk of respiratory cardiovascular illness.
- Using active transportation like walking or cycling driving to make short errand trips could improve cardiovascular health.
- Reforestation or installing green roofs reduces the urban heat island effect, lessening health-related illness risk.

#### **More Resources**

Yale Program on Climate Change Communication. http://climatecommunication.yale.edu/

Health and Environmental Funders Network/EcoAmerica: Achieving a Climate for Health: Philanthropy to Promote Health and Justice through the Challenges of Climate Change. http://ecoamerica.org/wp-content/uploads/2015/06/eA Health Climate Philanthropy HEFN 2015.pdf

**Third National Climate Assessment:** Resource for information on the historic and projected impacts of climate change as well as additional information on how climate change will affect human health. http://nca2014.globalchange.gov/

**The U.S. Global Change Research Program.** The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. https://health2016.globalchange.gov/

**Health Care Without Harm:** Provides resources and guidance on making the health care sector more environmentally sustainable. <a href="https://noharm-uscanada.org/">https://noharm-uscanada.org/</a>

**Lancet Commission on Health and Climate Change:** Health and climate change: policy responses to protect public health, 2015. http://www.thelancet.com/commissions/climate-change-2015

<sup>&</sup>lt;sup>i</sup> Talking points in **bold** from Maibach E, Nisbet M, Weathers M. (2011) Conveying the Human Implications of Climate Change: A Climate Change Communication Primer for Public Health Professionals. Fairfax, VA: George Mason University Center for Climate Change Communication.

http://www.climateaccess.org/sites/default/files/Maibach\_Conveying%20the%20Human%20Implications%20of%20Climate%20Change.pdf

<sup>&</sup>quot;National Academy of Sciences and the Royal Society. Climate Change: Evidence & Causes. 2014. Accessed at https://royalsociety.org/~/media/Royal\_Society\_Content/policy/projects/climate-evidence-causes/climate-change-evidence-causes.pdf

Watts N et al. Health and climate change: policy responses to protect public health. *Lancet.* 2015. Vol. 386, No. 10006, p1861–1914.