ACHIEVING A CLIMATE FOR HEALTH

Philanthropy to Promote Health and Justice through the Challenges of Climate Change

JUNE 2015

Health & Environmental Funders Network

ecoAmerica
start with people

"Climate change is the biggest global health threat of the 21st century. . . The impacts will be felt all around the world — and not just in some distant future but in our lifetimes and those of our children."

— The Lancet, 2009

"Since 2007, I have described climate change as the defining issue for public health in this century. Today, I would add that it is one of the greatest opportunities we face to improve human health."

— Dr. Maria Neira, Director, Department of Public Health and Environment, World Health Organization

"You can certainly see health effects from climate change. Diseases such as malaria and dengue fever are spreading. Air pollution has caused an increase in asthma and respiratory illnesses. Heat waves and severe weather patterns have caused flooding and forced hospitals to close. Superstorm Sandy caused several hospitals to completely lose power and evacuate people. There's credible evidence of significant climate change that will impact our ability to provide quality health care."

— Kathy Gerwig, Vice President of Employee Safety, Health, and Wellness, Kaiser Permanente

"By educating physicians and other medical professionals on the negative health effects that global climate change can bring, we can be better prepared to provide patients with the best possible care."

— Dr. Cecil B. Wilson, MD, Former President, American Medical Association

"Climate change is one of the most serious public health threats facing our nation. The evidence has only grown stronger that climate change is responsible for an increasing number of health problems, including asthma, diarrheal disease and even deaths from extreme weather like heat waves. Yet few Americans are aware of the very real consequences of climate change on the health of our communities, our families and our children."

— Dr. Georges Benjamin, MD, Executive Director, American Public Health Association

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The **Health & Environmental Funders Network** is a network of foundations and donors investing at the intersection of health and the environment. HEFN is the go-to place for grantmakers interested in environmental health and justice issues, providing members with information, learning and networking opportunities, and support for funder collaboration. *www.HEFN.org*

ecoAmerica grows the base of popular support for climate solutions in America with research-driven marketing, partnerships, and national programs that connect with Americans' core values to shift personal and civic choices and behaviors. MomentUs is ecoAmerica's newest initiative. *www.ecoAmerica.org* *www.MomentUs.org*

MomentUs has launched **Climate for Health**, a national initiative led by a diverse network of health leaders from across the health sector who are committed to advancing climate solutions to protect the health and well-being of Americans. *www.ClimateforHealth.org*

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FOREWORD

The health community has become increasingly aware of the health implications of climate change. As global warming emissions trap heat in the atmosphere, a cascade of health impacts occurs. Health is threatened by heat waves, extreme weather events, shifts in vector-borne and climate-sensitive diseases, and disturbances to many natural and human systems critical for healthy living. In addition, the same forces driving climate change — including the burning of fossil fuels — are themselves responsible for significant health impacts.[1] Experts warn that climate change is one of the biggest (if not the biggest) threats to human health facing our nation and the world. At the same time, public health leaders are articulating solutions that could improve the health of people and the planet in this era of climate change.

"Philanthropy has a unique and critical opportunity to transform health in the United States and around the world by addressing climate change."

Philanthropy has a unique and critical opportunity to transform health in the United States and around the world by addressing climate change. Philanthropy can improve public understanding of and action on the links between climate and health. It can strengthen risk assessment and preparedness, bolster public health infrastructure, and broaden engagement in this work. It can elevate the voices, priorities, and leadership of the health sector and affected communities in climate and energy policy discussions, to strengthen climate solutions and speed transitions to cleaner energy.

There is currently a mismatch between the scale of the problem and the level of philanthropic support to address it. The understanding of climate change as a major health issue is relatively nascent. Unsurprisingly, investment in critical health-focused climate work is just beginning, with little recognition so far of the potential benefits climate solutions hold to support healthier people, communities, and environments.

It's time for funders to begin to address issues and opportunities at the nexus of climate change and health. The values, experience, and capacity of health philanthropy could dramatically improve population protection and galvanize action to reduce future harm. Environmental philanthropy could dramatically strengthen strengthen support for solutions by investing in health and community engagement. Bringing diverse philanthropic interests together around a shared stake in a climate for health holds the potential to catalyze transformative social change.

EXECUTIVE SUMMARY

Many people still think of climate change as a purely environmental issue. Yet the implications of climate change extend well beyond the environment, threatening the health of people, communities, agriculture, and economies everywhere.

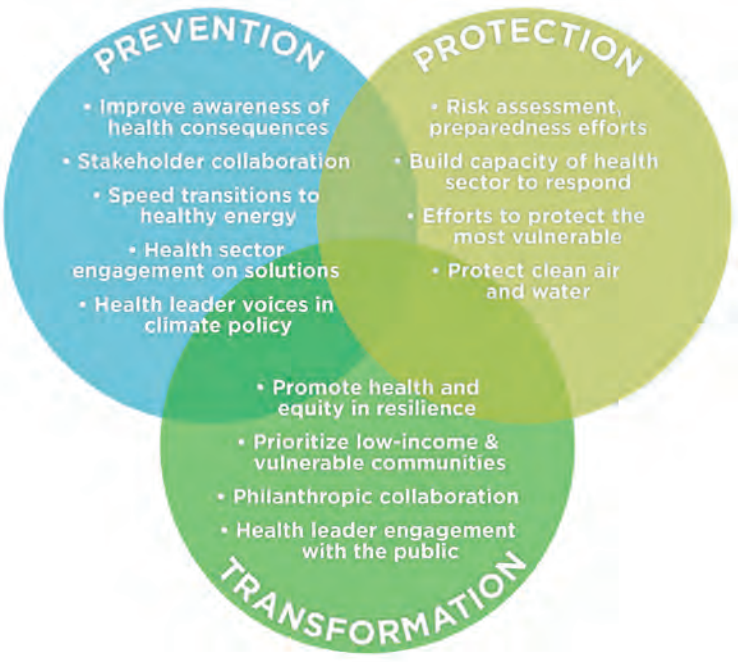
The same activities that cause climate change are having direct impacts on health, including respiratory, cardiovascular, neurodevelopmental, and other health problems.

Compounding this harm are the health impacts of climate change itself. Climate change produces changes in weather and increases in the frequency and severity of extreme weather events, which in turn can cause injury and increase the spread of infectious disease. Climate change already is worsening air quality and increasing the incidence and severity of respiratory diseases such as asthma. Climate change is impacting many natural and human systems that are critical for supporting human health, such as agriculture, infrastructure, and the economy.

While climate change presents serious challenges for health, it also represents a historic opportunity for philanthropy to make a positive, even transformational, difference in what people experience in the years and decades to come. Taking action now could improve health and reduce harm in the near term, diminish the severity of future threats, and realize major health and community benefits.

As public health scenarios illustrate[2], what philanthropy and its grantees do next in this era of climate change could result in dramatically different societal outcomes over the next fifteen years. **Foundations and donors committed to healthier people and places are uniquely positioned to support a "climate for health," with grants focused on protection, prevention, and transformation.**

This report is designed to introduce grantmakers to issues and opportunities that lie at the intersection of climate change and health. It provides a brief review of climate change basics and the impacts of climate change on health, as well as a review of the landscape of philanthropic opportunities, from reducing climate health threats to accelerating climate solutions to collaborating to build climate resilience and transform communities. These examples, highlighted in blue throughout the report, are intended to illustrate a variety of groups and tactics. The examples are not intended to be a comprehensive list of all organizations working on an issue, nor are they intended as recommendations for funding.



Philanthropy's opportunities for action in this realm include:

PROTECTION Start protecting people now: With health-threatening climate changes already emerging, philanthropy can help communities and society prepare for and protect people from a variety of climate impacts. By focusing on protection, philanthropy can help reduce harm from climate impacts that are emerging or under way, including by concentrating protective measures on the most vulnerable.

Protection activities may include strengthening risk assessment and preparedness efforts at the community and regional levels, building the health sector's capacity to respond to climate impacts, and dedicating resources to those most vulnerable to climate impacts, such as children, older adults, low-income communities, and communities of color.

PREVENTION Reduce long-term harm: Society has a pivotal opportunity to reduce the severity of future climate change and prevent catastrophic threats to health. Broad societal engagement, including action by the health sector to focus the public and policy makers on the health stake in climate solutions, is urgently needed to accelerate society away from activities that worsen climate change. Philanthropy can energize the climate change prevention agenda with health priorities and voices bolstering work to lessen climate risk for current and future generations.

Prevention activities may include improving understanding of the health consequences of fossil fuel use, bolstering clean energy and energy-efficiency efforts, and bringing together health advocates and energy advocates to make a stronger case for clean energy and climate solutions.

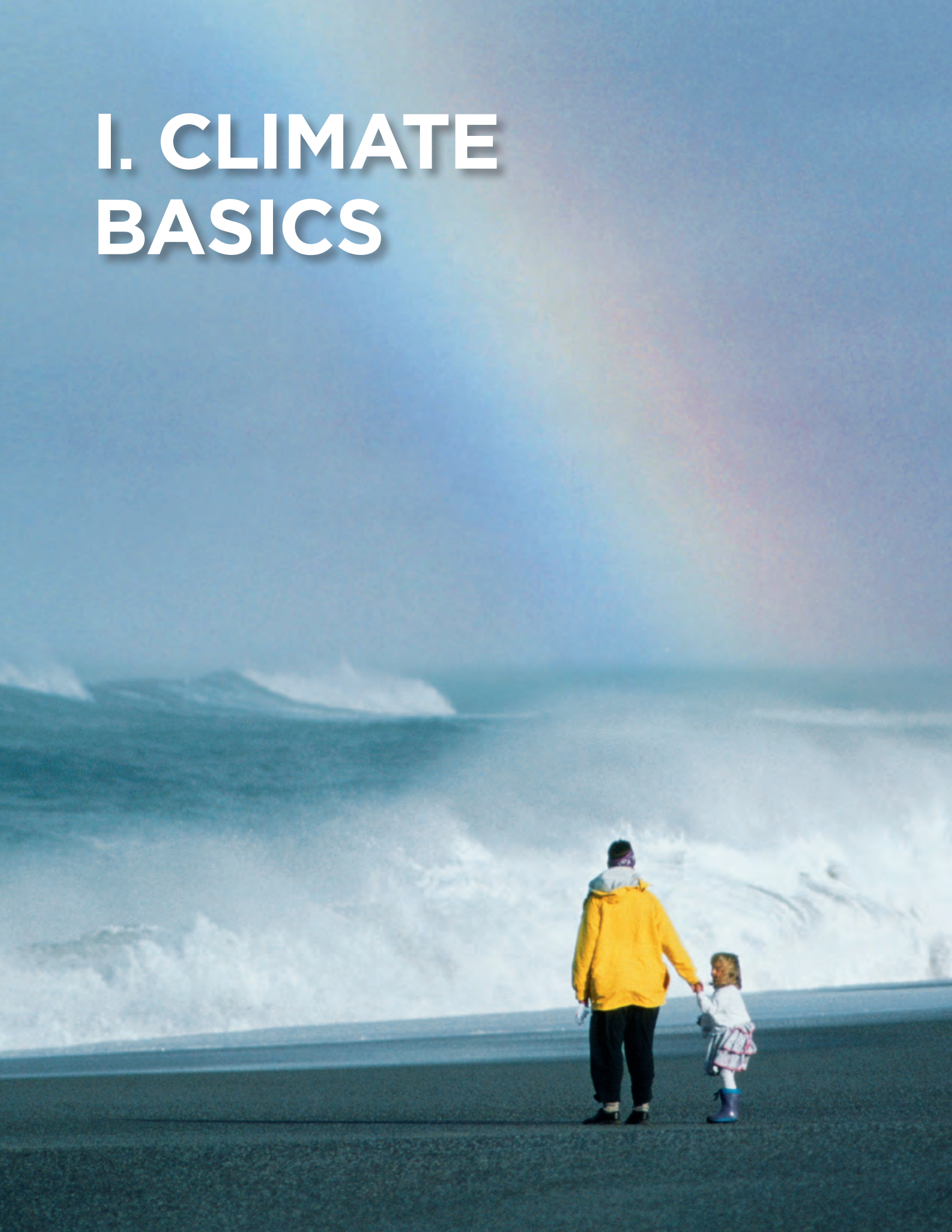
TRANSFORMATION Build resilient and healthy communities: Climate change offers a historic opportunity to align stakeholders who value health, the environment, and communities into a more powerful force for social change. Philanthropy can turn the climate challenge into a catalyst for collaboration that enables transformational shifts toward climate resilience and healthier conditions for all.

Transformation activities may include promoting health-enhancing resilience efforts, prioritizing new investments in overburdened communities, boosting health engagement and co-benefits in climate solutions and economic development, and building philanthropic collaboration and alignment around these transformative goals.

How the funding community responds to this moment will shape health outcomes in the United States and the world in coming decades. Rising to the climate-health challenge will take all kinds of funders, from the most locally focused to global players.

Opportunities to catalyze and grow a climate for health span a range of philanthropic interests, including health care and public health, climate and energy, food and agriculture, community development, environmental health and justice, and smart growth. By bolstering existing efforts, catalyzing projects in new areas, and enabling collaboration and partnership around the health and climate nexus, philanthropy can help ensure a safe, livable, and healthy planet for all.

I. CLIMATE BASICS



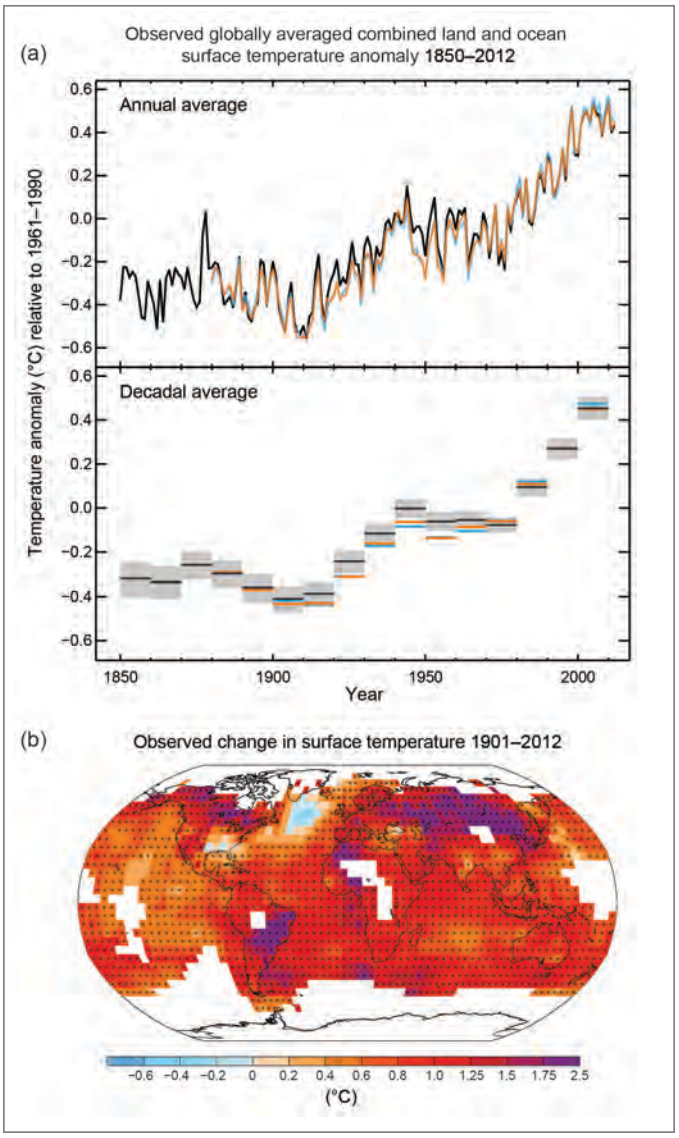


Figure 1: From Climate Change 2013: The Physical Science Basis, Intergovernmental Panel on Climate Change.

Our planet's complex climate system is changing. The atmosphere and oceans are warming, sea levels are rising, and weather and wind patterns are shifting.[3] These climatic changes are creating new challenges and serious risks for humans and ecosystems. Already, many communities are experiencing noticeable impacts of climate change, such as reduced rainfall, declining crop yields, intense storms and heat waves, and shifting disease vectors.[4]

These changes are linked to human activities. Extracting and burning fossil fuels, deforestation, and industrial and agricultural activities are producing greenhouse gases such as carbon dioxide, black carbon, and methane, which concentrate in the earth's atmosphere and prevent heat from escaping.[5] This phenomenon creates a warming effect on the earth and other cascading changes that impact people, plants, wildlife, and ecosystems.[6]

Health outcomes are affected by both the causes and consequences of climate change. For example, reliance on fossil fuels represents dual threats to health. Fossil fuel use produces greenhouse gas emissions that drive long-term climate changes with serious consequences for human health. Fossil fuel use also creates more immediate health impacts stemming from air and water pollution. For example, inhalation of climate-altering pollutants was responsible for more than 7 percent of the global disease burden in 2010.[7]

These are sobering realities that underscore the urgent need for action to protect people and communities. **Tackling climate change and its causes also represents an extraordinary opportunity to protect people in the United States and around the world.**

II. HOW CLIMATE CHANGE AFFECTS HEALTH

Across the globe, climate change is exacerbating existing health problems and creating new ones. Without action, essentials of a healthy life — such as clean air, safe drinking water, food, access to shelter, and social stability — are at risk. In fact, the World Health Organization (WHO) estimates that the direct annual damage costs to health from climate change will be $2 billion to $4 billion dollars by 2030.[8]

> *"Across the globe, climate change is exacerbating existing health problems and creating new ones."*

To understand the health threats of climate change — and to design interventions—it is helpful to understand the pathways through which climate change is connected to health outcomes. This section summarizes the three basic pathways through which climate change affects health, as identified by the international scientific community.[9]

1. ***Direct impacts of climate change*, including temperature changes and more frequent, extreme weather events, threaten health.**
   - **Heat waves, drought, storms, heavy rains, and floods.** Scientists forecast increasing severity and frequency of extreme weather events, from tornadoes and hurricanes to intense heat. Such events can be very dangerous, even deadly, increasing threats of heatstroke, injuries, drowning, hypothermia, infectious diseases, displacement, and mental stress. Extreme weather events can contaminate freshwater supplies and crops, impair health care infrastructure, and damage livelihoods. In the United States, extreme summer-heat events are the leading weather-related cause of death and are increasing.[10]
   - **Air quality.** As temperatures rise and air pollution increases, so do allergic respiratory diseases, asthma, and other health impacts. Ozone, a major toxin in smog, increases as temperatures rise. Increases in forest fires produce additional air pollutants, such as carcinogens and fine particulate matter linked to cardiorespiratory disease and death.[11] In addition, the U.S. Environmental Protection Agency has determined that greenhouse gases are air pollutants that threaten human health.[12]
   - **Ultraviolet radiation.** Higher summertime temperatures and ultraviolet exposures can increase nonmelanoma skin cancers and cataracts.

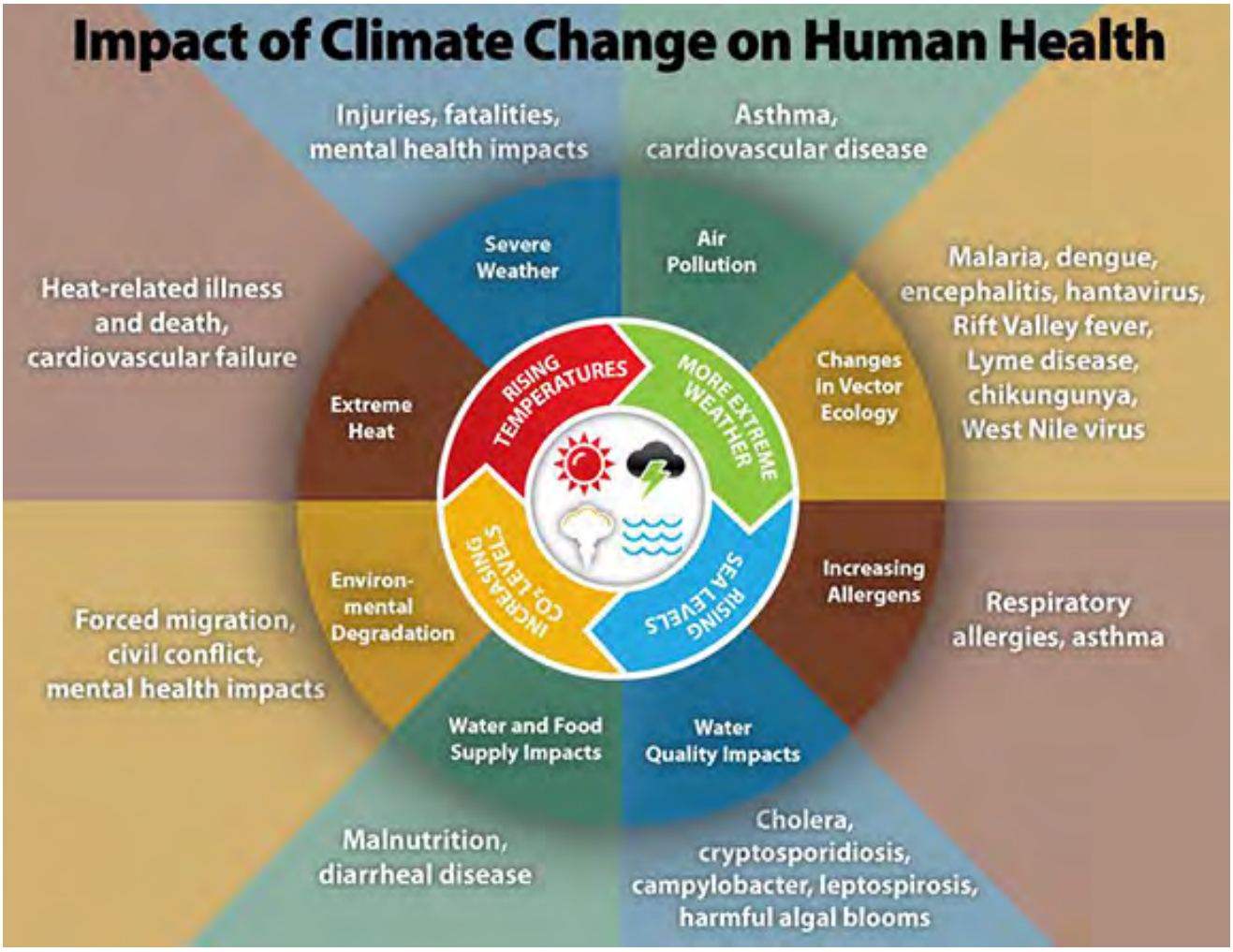


Figure 2: From Centers for Disease Control and Prevention, Climate Effects on Health article

2. *Climate impacts on natural systems* trigger impacts on animals, insects, plants, and ecosystems that can then affect human health.

- **Vector-borne diseases.** As weather patterns change, animals and insects migrate, bringing diseases like Lyme disease, malaria, and dengue fever to new areas. Warming temperatures also allow some insects to breed more rapidly and to survive longer.
- **Food and waterborne infections.** Some pathogens in water and food are climate-sensitive, so changes in temperature and rainfall can increase the incidence of parasitic, bacterial, and viral infections through food and water exposures.
- **Food insecurity.** Environmental stressors like changing growing seasons and increasing droughts can compromise crop yields and nutritional quality. These changes threaten food security as the world's population and its food needs continue to grow.

- **Safe water access.** Changing precipitation and temperature patterns affect sources of water for drinking, cooking, and bathing. Inadequate access to water has serious health consequences, including dehydration. Extreme weather events and warmer weather can contaminate water supplies, concentrating pollutants and spurring toxic algae growth. In North America, already-stressed water resources are projected to become even more stressed with climate change.[13]

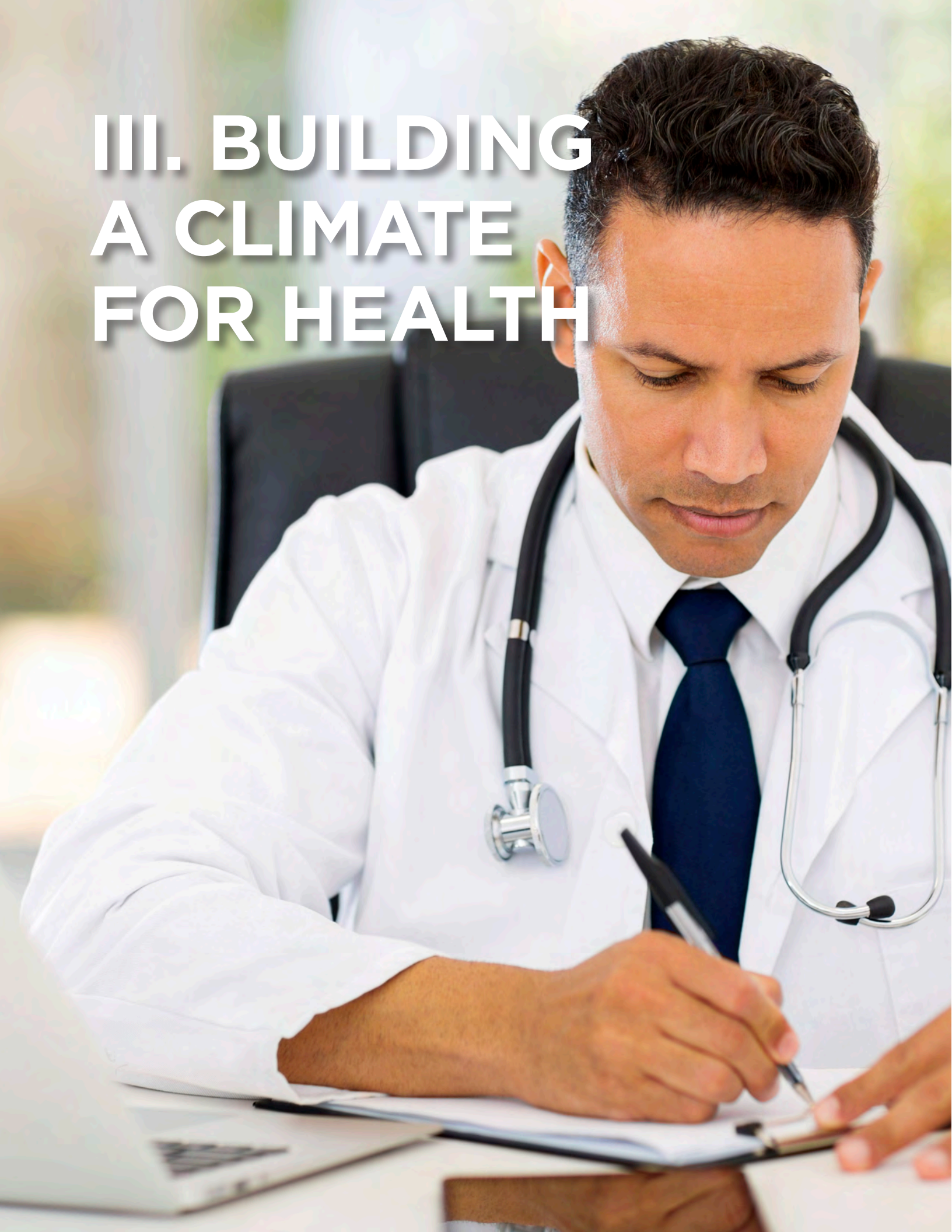
3. *Climate impacts on human systems* have myriad health consequences.

- **Poor nutrition.** As rising energy and food prices compromise food access, poor nutrition will increase. Climate change is also projected to have substantial negative impacts on individuals' calorie availability and to increase childhood undernutrition.
- **Occupational health problems.** Globally, more than half of work hours are spent in outdoor jobs, like in agriculture and construction. Workers' health and incomes are threatened by climate-linked heat exhaustion, heatstroke, and increased exposure to vector-borne diseases.
- **Infrastructure disruptions.** Roads, buildings, and facilities critical to health care and health access are all vulnerable to heavy downpours, flooding, sea level rise, and extreme heat.
- **Displacement of populations.** Rising sea levels, extreme weather events, droughts, and other climate events may displace many people and force them to migrate to new locations.[14] Displaced people often encounter numerous health threats, such as malnutrition, foodborne and waterborne illnesses, stress, and diseases related to overcrowding.[15]
- **Mental health and violence**. Direct and indirect consequences of climate change, from extreme weather events to displacement, can create significant mental stress and exacerbate preexisting mental health problems.[16] Populations already vulnerable to poverty, violence, and conflict may be particularly impacted by climate change and its disruptive effects on communities, institutions, and and support systems.

In addition, *conventional air pollution represents a fourth pathway of harm*. Resulting from fossil fuel use, conventional air pollution directly affects health and contributes to climate change and its health impacts.

- **Particle air pollution**. Toxins in the air — including from mobile sources (cars, trucks, buses, trains, planes, and ships), stationary sources (factories, refineries, and power plants), and fires (indoor cooking fires and wildfires) — are linked to respiratory problems, heart and lung disease, low birth weight, and early mortality.
- **Ground-level ozone pollution (smog)**. Ozone pollution, which increases with rising temperatures, is linked to asthma, bronchitis, and emphysema.[17]

III. BUILDING A CLIMATE FOR HEALTH



This section introduces philanthropic opportunities to build a climate for health. The opportunities and examples referenced are illustrative and are offered as ideas for exploration rather than as funding recommendations.

PROTECTION

Philanthropy, particularly foundations and donors prioritizing health and social equity, could play a critical role in helping prepare communities and society for health-impacting climate changes that are already under way. *Such work is often referred to as climate adaptation. Through a health lens, however, the imperative is greater than merely adapting. Forthcoming hazards create an urgent need to activate population protection for everyone, particularly the most vulnerable.*

At the time of this report, the landscape of philanthropic action explicitly addressing climate impacts on health is just emerging. However, many foundations are already deeply engaged in addressing preexisting conditions of community vulnerability that will be further challenged by climate change. Additionally, many foundations already are investing in efforts to achieve health, environmental, and equity goals. This existing landscape may provide important considerations and new partners for population protection from climate change.

This section introduces grantmaking opportunities to address and reduce climate change–related health harm.

A. Strengthen Risk Assessment and Preparedness Efforts

Increasing knowledge is often a first critical step toward protecting people from a health hazard. In fact the Intergovernmental Panel on Climate Change's 2014 report cites public health interventions and preparedness plans as essential to limiting health risks associated with climate change.[18] There is much that can be done to prepare for and manage health risks associated with climate change, such as mapping a community's vulnerabilities and strengthening its early-warning response systems.

U.S. cities in the Midwest and Northeast, for instance, are expected to face more heat waves, which may be particularly dangerous for older and poor people without air conditioning. In coastal cities, emergency evacuations, flooding, power outages, and rising sea levels are of particular threat. In the Southwest, rising temperatures and declining rainfall may worsen water shortages and poor communities' access to drinking water.[19]

Understanding the unique climate threats facing each particular region and analyzing each region's existing assets and vulnerabilities are critical for safeguarding the health of residents.

Cities and towns that develop strong preparedness plans will be better situated to protect residents from health-related harm.

Philanthropy has already begun to help in these efforts. For example the Bullitt Foundation's president co-chaired a Seattle Green Ribbon Commission, which helped the city understand its climate change risks and develop a plan to address them.[20] The Barr Foundation and six other foundations (Boston Foundation, Chorus Foundation, Grantham Foundation, Henry P. Kendall Foundation, Bank of America Foundation, and Ruth Lilly Philanthropic Foundation) have supported Boston's Green Ribbon Commission, bringing business, institutional, and civic leaders together to develop climate change strategies to increase energy efficiency, reduce emissions, and prepare for extreme weather and higher sea levels.[21] In California the San Diego Foundation identified climate change as an overarching frame for improving people's health and environmental quality. The foundation leveraged its financial and social resources to help cities throughout the region assess, mitigate, and prepare for local risks related to climate change.[22]

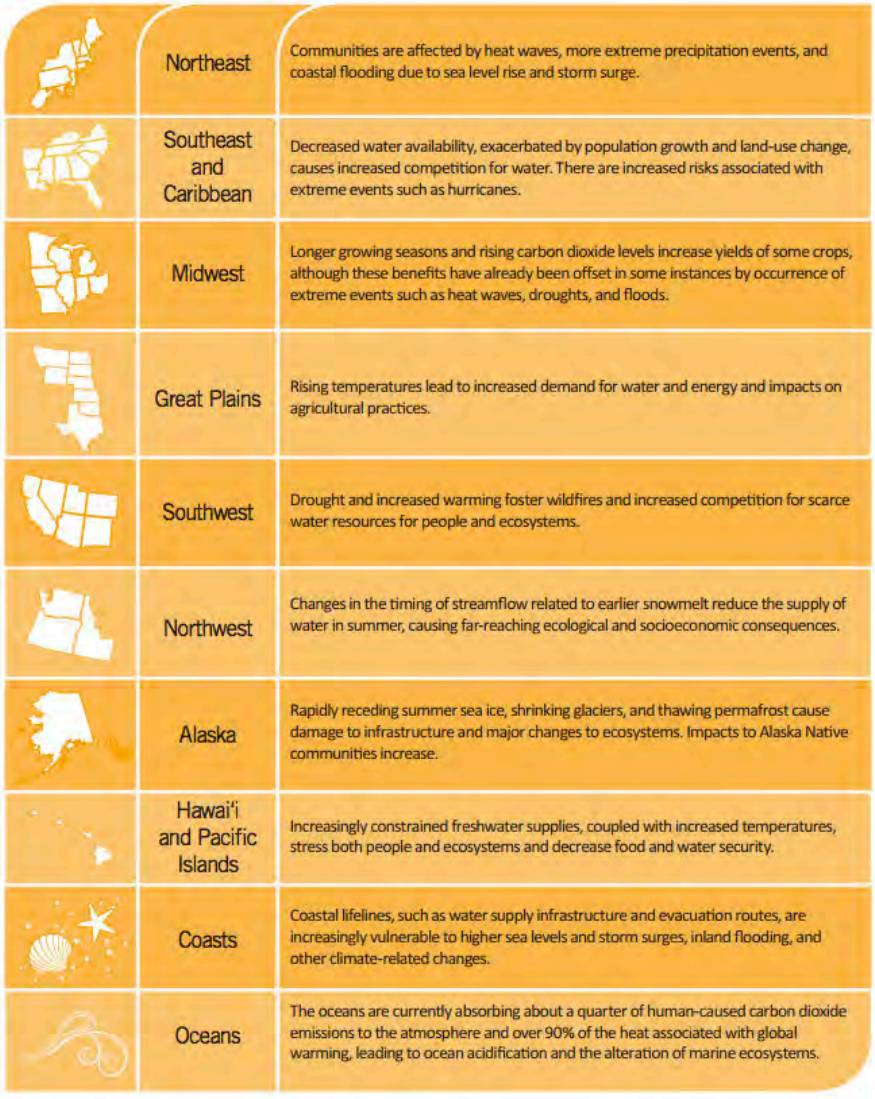


Figure 2: From National Climate Assessment, U.S. Global Change Research Program.

While these initiatives represent exciting progress, far too many places and institutions have not assessed their vulnerabilities to climate change, much less developed plans to prepare for and manage its impacts. **Philanthropy can help more communities and health care institutions get informed and prepared for the impacts that people and communities are likely to experience.** Foundations and their grantees may also help leverage other sources of support for this work — for instance, by encouraging nonprofit hospitals to include climate change in the community health needs assessment and benefits work now required by the Patient Protection and Affordable Care Act.[23]

CAPACITY BUILDING OPPORTUNITIES

- Research
- Hospitals & health care
- Public health infrastructure
- Community education & training
- Connections to existing resources

B. Build the Capacity of the Health Sector to Respond to Climate Impacts

Often, an assessment of community risks from climate change will illuminate gaps and vulnerabilities within the health sector and health-supporting systems in a community. Capacity building is then needed to strengthen the people and institutions likely to be called upon to respond to health and community needs related to climate change.

Research is one area of opportunity for capacity building. One U.S. interagency report concluded that more research is needed to deepen understanding of the human health impacts of climate change, including in "basic and applied science, technological innovations and capacities, public health infrastructure, and communication and education."[24]

Hospitals and other health care facilities have important steps to prepare for conditions that might hit vital systems such as electricity, water, sewer, transportation, and communications. Philanthropy can help build that capacity within health care. For example, philanthropy can catalyze more widespread use of resources, such as toolkits for health care facilities that explain how to manage climate-related risks to their systems.[25]

Public health infrastructure will be on the front lines of many aspects of climate change, including surveillance and tracking of emerging disease patterns to early-warning systems; emergency response services such as cooling centers during heat waves; and inspections of food, water, and housing safety. Raising awareness about climate change risks among health sector leaders and supporting or leveraging investment in public health infrastructure can boost preparedness and population protection. Furthermore, philanthropic support to national associations serving public health agencies and officials can also help spread knowledge and build capacity.

Education and training for health care professionals, similarly, could boost their readiness to respond effectively to emerging or incoming climate change–related health problems.[26]

Philanthropy also could help connect more stakeholders with the climate preparedness efforts of the Centers for Disease Control (CDC) and its Climate-Ready States and Cities Initiative, a program supporting cities and states in managing health effects of climate change.[27] Building relationships between philanthropy and government funders like the CDC could strengthen the collective impact of health sector capacity building.

C. Concentrate Efforts Where Protection Is Needed Most

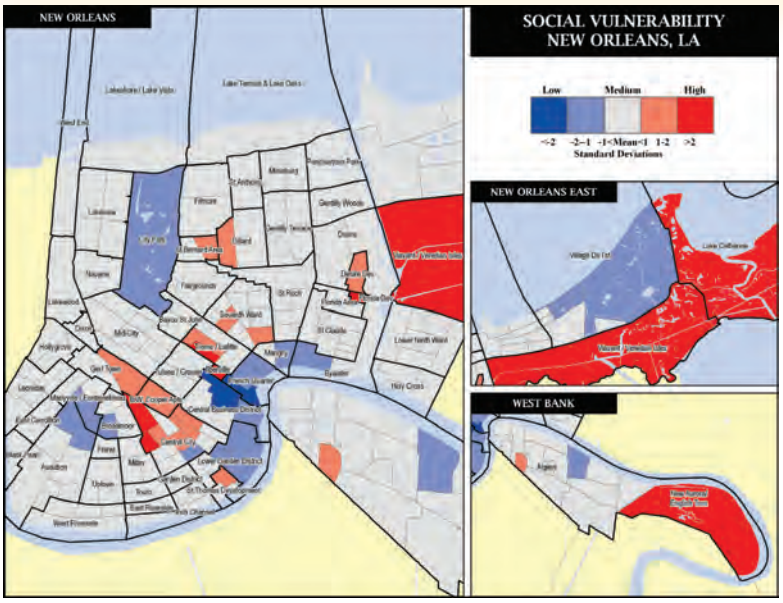
Prioritizing climate preparedness action for particularly vulnerable populations and communities can yield especially big payoffs.

Children, older people, and people with illnesses or disabilities all have heightened vulnerability to the impacts of climate change. Conditions like extreme heat and poor air quality can be especially dangerous for seniors and people who have weakened immune systems. These groups may be least able to evacuate in an emergency and people dependent upon electricity to deliver medical treatment (such as dialysis) or for refrigeration of medicines are at an increased risk. Children are likely to suffer more adverse health effects from climate change because of their physical, physiologic, and cognitive immaturity.[28] The prospect of increasingly severe climate changes may have the largest impact on today's children over their lifetimes, as well as on future generations.

Low-income communities and communities of color may also be particularly hard-hit. New, climate-related health challenges pose greater difficulties to people with inadequate access to critical resources such as income security, healthy food, quality health care, and healthy housing. Furthermore, new health threats have greater negative implications for those already affected by other health stressors, such as poverty, exposure to violence, and polluted environments.

HAZUS-MH APPLICATION: HURRICANE WIND AND FLOOD

Social Vulnerability: New Orleans, Louisiana



DATA AND ANALYSIS DISPLAYED:

- Levels of social vulnerability by political subdivision (ward) and census tract
- Social vulnerability a function of:
  - Income
  - Employment status
  - Age and gender
  - Race/ethnicity

Figure 3: Federal Emergency Management Agency Map of Social Vulnerability in New Orleans

Philanthropy can play a critical role in attracting attention to and concentrating assistance in areas where it may be needed most. One ripe opportunity is to improve information about climate-vulnerable populations. For instance, an academic consortium is mapping climate vulnerabilities in the urban northeastern United States.[29] And the Federal Emergency Management Agency has developed maps of social vulnerability to aid evacuation and rescue efforts in future weather-related emergencies.[30]

Much work is needed to turn information into protection and resilience building for vulnerable populations.

One early leader in this arena is the Kresge Foundation. Its climate initiative provides grants to nonprofits serving low-income, urban communities to elevate their voices and influence in climate-resilience planning and policies.[31]

D. Protect People's Clean Air and Water

Clean air and water are health necessities. They are fundamental to a community's quality of life, economy, agriculture, and ecosystems. Air quality, water quality, and water access already are being negatively impacted by climate change's causes and consequences. Philanthropic focus on air, water, and health is a critical priority for climate protection and is particularly important for the health of children, older people, and low-income communities.

Water

Climate change impacts water quantity and quality. More than 250 million people in the United States depend on lakes, rivers, streams, and groundwater for their drinking water.[32] These water sources, often already stressed by pollutants, are further affected by climate-linked events like warming temperatures and diminished rainfall. Half a million Toledo, Ohio, residents experienced a water ban in 2014 when warming waters in Lake Erie contributed to dangerous growth of poisonous algae.[33]

In other places, **extensive droughts have increased water scarcity and with it health and equity concerns**. As with water quality, climate change may worsen existing water scarcity problems. In California, for instance, many children already have insufficient access to enough drinking water in their public schools; severe droughts in 2014 left hundreds of San Joaquin Valley households with no tap water. [34] [35]

A number of foundations are already **prioritizing water protection and access issues.** The San Francisco Foundation, for instance, has supported advocacy to protect drinking water sources for Bay Area residents.[36] The Park Foundation funds regional and national groups helping communities exercise their rights to protect and manage drinking water. Foundations often find that water is a promising focal point for public engagement, as well as a focus for collaboration that can successfully bridge health, conservation, and economic interests. Recent philanthropic work on water could become a useful base from which to address climate, health, and water issues. Joining forces across areas of expertise may become an increasingly important strategy to safeguard water supplies and safety in the face of climate change.

Air

Like water, air quality is an area of growing concern and action. **Poor air quality from fossil fuel pollution is linked to a host of respiratory illnesses, cardiovascular diseases, cancer, and other conditions.** Climatic changes further threaten the quality of air and the health of those who breathe it: rising temperatures increase pollen and ozone, and drought-related forest fires create more fine particulate-matter pollution.

Numerous foundations are focused on **reducing health hazards from air pollution.** The Heinz Endowments, for example, has funded a variety of efforts to address environmental health hazards from air pollution in Pennsylvania. The Endowments recently invested in a "Breathe Project" in the Pittsburgh region to reduce pollution health risks. This includes the development of several Breathe Cams that provide high-resolution panoramas of Pittsburgh's skyline and general air quality data, as well as extensive pollution mapping identifying "hot spots" and exposure gradients.[37]

The California Wellness Foundation has supported a range of efforts to improve health by improving air quality in the Golden State, from public policy to improve air quality in the San Joaquin Valley to regional asthma management and prevention work.

For funders dedicated to the health of people and communities, focusing on air and water as essentials for healthy living will become an increasingly important part of climate preparedness and population protection. Prior philanthropic experience in environmental health and conservation provides considerable knowledge, useful models, and potential partners for future work to protect people through climate challenges.

PREVENTION

If protecting people facing imminent harm is a worthy investment, the biggest returns are likely to lie in diminishing the magnitude of that harm. Serious climate changes have already been triggered by greenhouse gases emitted to date. But people can still dramatically reduce the extent, severity, and impacts of climate change in coming years and decades. Elements of the climate solutions agenda could also offer immediate health benefits to communities, which makes mobilizing around the nation's health stake in climate solutions even more critical.

Accelerating climate solutions may be one of the most significant disease-prevention opportunities for health-focused philanthropy. *Philanthropy focused on the health-climate nexus offers opportunities to environmental funders as well; boosting the engagement of groups prioritizing health and community welfare offers great potential to scale and sustain ground-up public will for climate solutions. This section introduces a range of opportunities to advance a health-focused climate solutions agenda.*

A. Improve Awareness of the Health Consequences of Fossil Fuel Use and Other Climate Change Drivers

Fossil fuels are at the center of climate and health concerns. The world's dependence on oil, coal, and gas — for transportation, heating, manufacturing, and agriculture — has fueled economic progress and profit, but at a high health cost.[38] **There is great potential return on philanthropic investment in reducing fossil fuel pollution, as suggested by various studies of specific fossil fuel–related health costs:**

- A Harvard public health study estimated costs to the American public of the life cycle of coal at one-third to one-half of a trillion dollars annually.[39]
- A National Research Council study on the hidden costs of energy reported $120 billion in damages — mostly health damages — passed on to the American public in 2005 from fossil fuel energy, not counting damages related to climate change. The NRC report also noted that renewable energy creates dramatically lower externalized health costs.[40]
- A study of six U.S. climate change–related events from 2000 to 2009 concluded that they were responsible for $14 billion in health costs and lives lost.[41]

The full tally of health costs of fossil fuels would be staggeringly high if it accounted for health costs across all populations and all diseases associated with oil, coal, and gas, and if it counted damages

from all pollution from the fuels' full life cycles (extraction, transportation, combustion, and disposal), as well as health damages from climate changes driven by the fuels' greenhouse gas emissions.

Philanthropy can advance climate solutions efforts by funding research to improve awareness about the health benefits of reducing energy pollution. For instance, research grants may focus on analysis of the global health impacts of air pollution attributable to fossil fuels. Or research may make clearer the health stakes at an individual or community level. The New York Community Trust, for instance, has supported research documenting the impacts of urban air pollution on New York City families as well as the health and economic benefits of improved air quality.[42] [43]

Environmental health philanthropy has been working to **expand research, policy work, and communications about connections between environmental conditions and health.** Such experience could be a significant asset to future work on fossil fuel pollution, climate change, and health.

B. Speed Transitions to Green and Healthy Energy

Transitioning from dirtier to cleaner, greener, and healthier sources of energy would yield major health benefits. Accelerating this transition could reduce the looming health risks of climate change, potentially even preventing the more catastrophic climate change scenarios.

With philanthropy's help, encouraging progress has been made on two essential elements of this transition: using energy more efficiently (that is, using less energy to provide the same service)[44] and expanding the supply and use of clean energy. However, progress toward efficient and clean energy is far from the levels required for meaningful climate change reduction. Philanthropic help is needed to speed transitions to cleaner energy.

There are important returns on investment for grantmaking in **energy efficiency**. The Energy Foundation's Clean Energy Stories project highlights gains from energy-efficiency work, including reduced greenhouse gas emissions, improved local air quality, more affordable energy, and lower energy burdens on low-income families. For instance, Asheville, North Carolina replaced its street lamps with energy-efficient LED lighting, which reduced municipal energy demands, lowered emissions, and catalyzed a savings of $450,000 annually.[45] **Energy retrofits**, such as insulating and weatherizing housing, can improve the health and well-being of occupants. Energy-efficiency studies have found a benefit-cost return of up to 4:1, with the most benefits related to health and well-being.[46]

Similarly, **replacement of fossil fuels with cleaner renewables** is critical to both climate change solutions and realizing big health benefits. A Stanford University study projects that a move to full reliance on currently available wind, water, and solar technologies would prevent sixty-two thousand premature deaths from air pollution and save $510 billion in health costs annually, in addition to climate cost savings.[47]

Numerous funders are already doing relevant grantmaking on this critical issue. Several climate-focused philanthropies are partnering through the Energy Foundation to support market development and policies for energy efficiency and renewable energy. Place-focused funders are supporting community-grounded organizing for clean energy and economic development. The New World Foundation, along with the Chorus Foundation, New York Community Trust, Blue Moon Fund, and Energy Foundation have funded Appalachian groups to extend their organizing around local impacts of mountaintop-removal coal mining into advocacy for cleaner energy, healthier jobs, and regional economic opportunity.

A growing number of foundations and donors also are leveraging their resources — beyond grant dollars — to help accelerate the clean energy shift. By spring 2015, more than sixty-five foundations, led by the Wallace Global Fund and the Rockefeller Brothers Fund, had joined the Divest-Invest initiative and pledged to shift their investments from fossil fuels into cleaner energy.[48]

C. Boost Health Sector Engagement on Climate Solutions

Climate change is a health issue, and climate solutions require health action. The public health, medical, and health care communities need greater capacity to engage and contribute, as do other key institutions like local and state governments and colleges and universities. **Boosting engagement of health-committed stakeholders could increase the priority given to climate solutions efforts, as well as improve the quality of solutions adopted.**

Government funders like the Centers for Disease Control and the National Institutes of Health are already supporting research on climate and health and are supporting planning and preparedness efforts in state and local health agencies. Government agencies, particularly those at the local or state levels, may also be well placed to act as conveners, bringing together regional health and other stakeholders.

Philanthropy could also help **leverage support for public spending, complement publicly funded efforts** with funding for additional research or communications, or boost engagement of additional health stakeholders such as:

- **Public health groups**, like the American Public Health Association and the Public Health Institute, which offer resources for public health professionals working on climate and health.
- **Medical associations**, like the National Medical Association, which found in polling of its African American physician members that strong majorities already see climate change impacting their patients and favor the medical society's engagement in climate solutions advocacy.[49] Likewise, the American Nurses Association and Alliance of Nurses for Healthy Environments have developed resources and positions on climate, health, and energy issues.
- **Health and climate support groups**, like the Health Care Climate Council, Practice Green Health, Health Care Without Harm, the MomentUs Climate for Health initiative, and other groups, which work with hospitals and health care institutions on climate-health work spanning everything from energy use in operations to policy leadership.

D. Promote Connection and Collaboration among Stakeholders Already Working on the Issue

Philanthropy could help scale the collective impact of many climate-health stakeholders by **strategically and authentically connecting existing constituencies, capacities, and campaigns.** Some funders have connections to campaigns to promote national and state climate action plans, defend air pollution standards, and expand requirements for energy efficiency and renewables. Others have long-standing relationships with health, public health, environmental health and justice, community economic development, and other organizations recognizing their stake in clean energy and a stable climate. Philanthropy could strengthen the movement for climate solutions by drawing together more of its diverse grantees already concerned about fossil fuel impacts on their health, communities, and local environments. For example:

- **Environmental health and justice funders** have been supporting work in many communities coping with dirty-energy impacts, including the impacts of coal mining in Appalachia, oil

spills near coastal communities, smog in cities and valleys, and shale gas drilling near homes and farms.

- **Health grant makers** have built capacity among researchers, health care professionals, and community groups concerned about asthma and other energy pollution–related illnesses.
- **Environmental and sustainable agriculture funders** have been supporting organizing in opposition to the Keystone XL Pipeline.

Peoples Climate March NYC
Photo credit: Heather Craig
survivalmediaagency.com

Philanthropy could significantly strengthen climate solutions by broadening efforts across this landscape and by helping connect them around the shared health stake in reducing fossil fuel pollution and greenhouse gas emissions. Such opportunities include:

- **Connecting local, regional, national, and global efforts.** Grants can help build relationships among groups sharing concerns about fossil fuel pollution while focusing on different levels, from local to global. Support from funders like the Chorus Foundation and the Overbrook Foundation helped grassroots and national groups join forces in the 2014 People's Climate March and subsequent organizing, including the Climate Justice Alliance and the Building Equity for Alignment and Impact Initiative.
- **Connecting communities affected by fossil fuel infrastructure.** An expanding number of communities are being affected by fossil fuel transportation via railroads, pipelines, and highways. They often are spontaneously organizing to address concerns about air pollution, water contamination, spills, derailments, explosions, and impacts on land. Foundations assisting communities in infrastructure-focused organizing could strengthen their individual and collective efforts by helping groups convene, connect, and collaborate.
- **Connecting campaigns across fuel sources.** Clusters of foundations and grantees have mobilized around specific fuels (coal, oil, or gas) to address their adverse impacts on health, communities, local environments, and global climate change. Coal, oil, and gas are not identical in their life cycle impacts, economic stakeholders, or regional implications, but their cumulative impacts on people and the planet are similarly unsustainable. Connecting organizing efforts across fossil fuels could dramatically expand the reach and force of the climate solutions movement.
- **Connecting to the sustainable agriculture movement.** Philanthropy supporting shifts to more sustainable (and less

fossil fuel–intensive) agriculture, local and regional food systems, and improved access to healthy foods has helped build a diverse movement of stakeholders. There is an opportunity to connect climate with food and farms, issues that have wide appeal and resonance across groups.

Opening Faith Rally for the Peoples Climate March
Photo credit: Emma Cassidy survivalmediaagency.com

E. Empower Health Voices to Support Climate and Energy Policy

There is climate and energy policy work to do at all levels, and health voices and perspectives are sorely needed. Too often, coalitions supporting important policy work are not broad or powerful enough. While environmental campaigning is important, progress has been slow, partisanship high, and constituencies pushing for change insufficient. **A collective health force that represents the entire health sector is needed to achieve meaningful progress on climate solutions.**

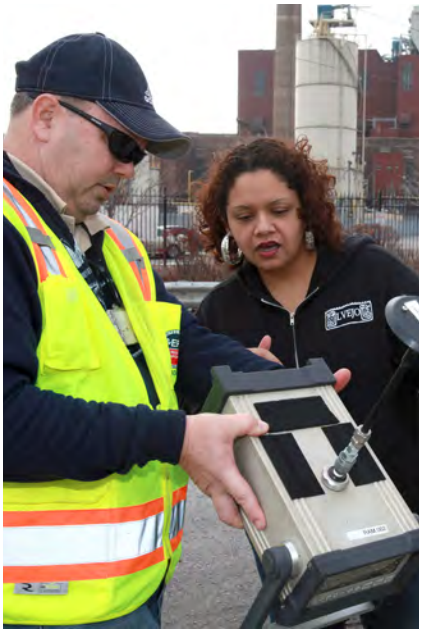
This is especially important given the fact that climate and energy policy approaches are not equal in their impacts and benefits. Without health voices at the table, policy approaches may reflect global environmental or business priorities and result in political compromise or market-based industry incentives that are suboptimal for health and equity. Philanthropy has an important role to play in **ensuring that climate and energy policies adequately prioritize needs of vulnerable populations and strategically maximize health and community benefits**.[50]

There are many opportunities for philanthropy to accelerate climate and energy policy solutions and to improve their health and community benefits.

- **Get climate and health on the agenda**. In many policy processes, key expertise in either climate change or health — or both — is missing. Philanthropy can help elevate attention paid to issues at the climate-health nexus — for instance, by encouraging inclusion of health experts in climate policy work and by encouraging attention paid to climate change in health policy work.
- **Support health-focused groups already engaged in policy.** National climate and energy funders are supporting health advocates, such as the American Lung Association, that are working to strengthen clean air and power plant regulations by highlighting connections to health concerns such as asthma and other respiratory and cardiovascular illness. Academics are undertaking policy-relevant research on climate and health; professional associations are developing positions and statements. Numerous health, social justice, and environmental

health groups are undertaking work on climate and energy policy, often with little or no foundation support. There is also an opportunity to connect advocates working on climate mitigation with a health lens with those working on climate adaptation with a health lens.

- **Diversify grantees and expand the base.** There is a largely untapped base of support for health-protective climate and energy work extending far beyond traditional environmentalist groups. Numerous polls and research find:
    - Support for strong climate action within the rising American electorate, including among unmarried women, young people, and people of color;[51]
    - Concern with and motivation on the impacts of climate change driven by personal and family health within groups historically less active in the traditional environmental movement, including moderate conservatives, Asian Americans, African Americans, and Americans in occupations such as nursing, teaching, and public administration; and
    - A consistently high priority placed on health by most voters.



Kimberly Wasserman, North America 2013 Goldman Prize Recipient
http://www.goldmanprize.org/recipient/kimberly-wasserman/

Foundations can help bring many more voices and assets into policy action by **funding organizations and civic participation work in communities and among the rising majorities.** Early entrants in this space include the Solidago Foundation's Powering Change initiative with other funder partners[52] and the New World Foundation's Climate Action Fund.[53]

This multi-voice strategy was put into action when environmental justice groups in California that had built grassroots capacity around health and justice fights connected with climate campaigners and helped mobilize statewide civic muscle to defeat oil industry–funded challenges to California's climate action legislation.[54]

Foundations and donors committed to health, equity, and community development could significantly strengthen actions to reduce threats from climate change, expand engagement and boost the voices of impacted communities and health stakeholders, and maximize societal benefits of climate policy and energy transitions.

TRANSFORMATION

Protecting people from climate change and its causes is critical. So is preventing greater future harm by accelerating climate solutions. However, ***by working together and collaborating across issues, philanthropy can do even better and have a transformational impact on communities and health outcomes for generations to come.***

Articulating the potential for a better future is especially important in the context of the sobering realities of climate change. The future is influenced by major forces, but it is not predetermined. A public health report highlighted the fact that climate change is a major force to be reckoned with, outlining three possible scenarios of future health outcomes:

- *A "zone of conventional expectation" reflecting current trends and likely outcomes;*
- *A "zone of growing desperation" in which worrisome trends get much worse; and*
- *A "zone of high aspiration," in which a critical mass of stakeholders pursues visionary strategies and achieves surprising success.*[55]

Philanthropy has an unprecedented opportunity to help society rise to the "zone of high aspiration," *with visionary strategies aligning diverse interests around climate resilience, health, equity, thriving communities, and a new economy. This agenda would include action on the population protection and risk prevention strategies outlined earlier. It would also broaden the context for collaboration into climate-conscious strategies for sustaining economies, cleaner energy, healthy eating, and livable communities.*

This section introduces philanthropic opportunities for transformative action on health and climate change.

A. Promote Health and Equity in Resilience

Resilience was one of eight areas flagged for priority action by the UN Secretary General for Climate Summit 2014.[56] Thirty-four states and numerous municipalities across the United States have developed climate action plans, many including resilience goals.[57]

The term resilience refers to preparing for and adapting to forthcoming climate changes. It includes many of the measures noted in the "Protection" section of this report. There is much that philanthropy can do to **infuse key values such as health, equity, and economic development into the resilience agenda.** Some initial steps include:

- Articulating resilience as a goal;
- Launching conversations on what community resilience would entail; and
- Supporting health, equity, and community interests in developing work plans.

As with climate and energy policy, climate resilience plans are susceptible to the priorities of those at the table and those with the most influence, and they may not prioritize health outcomes, equity, community interests, or areas of most need. Philanthropy has an important role to play in **elevating health and equity priorities and in encouraging strategies for resilience that maximize societal benefit.** In the climate change era, the ability to sustain health for all could be an important resilience guidepost.

B. Prioritize Low-income Communities and Vulnerable Populations

Disproportionately big returns from investments may be found by **focusing on communities and populations facing forthcoming climate change threats on top of preexisting socioeconomic challenges, indoor and outdoor environmental hazards, and other health vulnerabilities.** The potential benefits include reducing the health burden created by higher levels of fossil fuel pollution, prioritizing access to healthy jobs, and the economic opportunity benefits of climate-friendly investments.

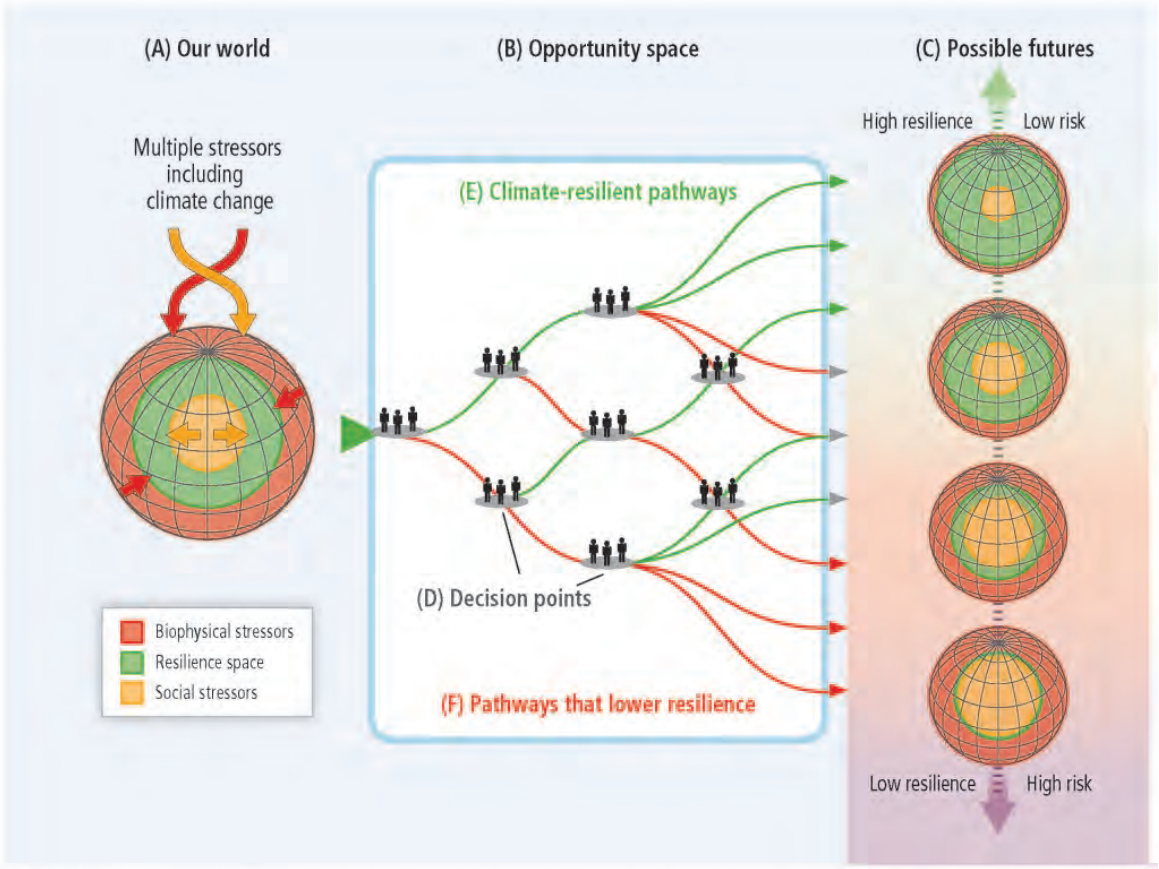


Figure SPM.9 | Opportunity space and climate-resilient pathways. (A) Our world [Sections A-1 and B-1] is threatened by multiple stressors that impinge on resilience from many directions, represented here simply as biophysical and social stressors. Stressors include climate change, climate variability, land-use change, degradation of ecosystems, poverty and inequality, and cultural factors. (B) Opportunity space [Sections A-2, A-3, B-2, C-1, and C-2] refers to decision points and pathways that lead to a range of (C) possible futures [Sections C and B-3] with differing levels of resilience and risk. (D) Decision points result in actions or failures-to-act throughout the opportunity space, and together they constitute the process of managing or failing to manage risks related to climate change. (E) Climate-resilient pathways (in green) within the opportunity space lead to a more resilient world through adaptive learning, increasing scientific knowledge, effective adaptation and mitigation measures, and other choices that reduce risks. (F) Pathways that lower resilience (in red) can involve insufficient mitigation, maladaptation, failure to learn and use knowledge, and other actions that lower resilience; and they can be irreversible in terms of possible futures.

Figure 4: From Climate Change 2014: Impacts, Adaptation, and Vulnerability, Intergovernmental Panel on Climate Change.

A first step might involve ensuring that **climate preparedness** includes and benefits communities and neighborhoods with high need. Some climate funding already is being targeted to overburdened communities. California's climate laws, for example, require the state to target some of its investment in implementing its landmark climate legislation enacted by AB32 in neighborhoods with high levels of air pollution and poverty.[58]

Foundation support could help prioritize climate-conscious strategies for low-income and overburdened communities by targeting **improvements in planning, public health, social services, health care access, and other measures that bolster protection against climate change threats.** Funding efforts to build social cohesion is also a protective strategy; one study of a Chicago heat wave found fewer fatalities in close-knit neighborhoods.[59]

Resilience and community transformation opportunities also extend to health-centered community development. For instance, research supported by the William and Flora Hewlett Foundation profiled California communities reducing greenhouse emissions and improving climate adaptation through work ranging from tree planting, community gardens, and solar retrofits to advocacy around transportation and green energy.[60] The Kresge Foundation has begun funding work to improve the climate resilience of low-income urban communities by supporting community-based nonprofits in local and regional climate-resilience planning.

Other foundations are helping strengthen **tools for prioritizing action.** The Liberty Hill Foundation in Los Angeles, for example, collaborated with academic and community partners to screen for neighborhoods most burdened by pollution and poverty. With those neighborhoods identified, they focused on "clean up and green up" work and eventually won municipal support for pilot projects to simultaneously improve air quality and economic opportunity in targeted neighborhoods.[61]

Foundations are also funding exciting **intersectional work.** The Kellogg Foundation has supported work in Chicago among city agencies, educators, and community groups to create more green play space on Chicago schoolyards. The shift from blacktop may improve the environment for physical activity, help Chicago's stormwater management problems and neighborhood flooding, and reduce climate change–related heat island effects. The multiple benefits of this project have helped its organizers leverage significant public funding for the project.

C. Elevate Health Leaders to Transform Public Engagement

Throughout recent history, health leaders have brought their leadership forward for meaningful success on social issues and have brought programmatic and policy solutions over the goal line. From smoking laws to clean air and water to removing lead from gasoline and paint, the voices of health leaders have played a transformational role.

Health leaders are also increasingly focused on an array of social determinants of health. By connecting with other sectors such as agriculture, urban design, poverty alleviation, energy, and transportation, health leaders are working to ensure that persistent health issues such as asthma, obesity, and heart disease can be better addressed at their root causes. **They are needed at the table to promote health in climate change and energy policies** as well.

Health leaders are uniquely positioned to build public understanding of the health stakes in climate change, accelerate and inform urgent action on climate solutions, and infuse core values in decision making that will shape living conditions through eras of climate change. Considered the nation's most highly trusted and accessible leaders, they reach a breadth and diversity of Americans. Whether through the critical role of public health, the credible voice of health care professionals, or the health sector's enormous economic heft (representing more than 17 percent of the U.S. gross national product), the health industry's combined influence, reach, and impact can move the needle on climate at a scale on par with the issue's size and urgency.

Opportunities to amplify health leadership in climate change engagement include:

- **Leadership convening and programs**, such as the MomentUs Climate for Health initiative — focused on building and amplifying leadership, constituency engagement, leadership training, sector cohesion, and collaboration within and across sectors;
- **Communication research** to develop and test health-themed messages, talking points, and phrases that are most relevant for health stakeholders and most resonant with the American public;
- **Communication training** for health stakeholders, to empower their leadership and to create a cohesive narrative for higher leverage and efficacy with constituencies;

- **Public education** to educate the public and policy makers on the impacts of climate change on personal, family, and public health and on the related health benefits of climate change solutions; and
- **Public service campaigns and other communication and engagement efforts** to bring the health and climate narrative forward; to elevate health stakeholder leadership in the areas of preparedness, prevention, and transformation; and, where needed, to position health leaders as advocates for specific climate change solutions.

D. Build Philanthropic Collaboration and Alignment to Achieve a Climate for Health

A wide swath of philanthropy shares certain values — such as healthy people and environments, thriving and equitable communities, and the democratic process — but is fragmented across different issue interests, priorities, and geographies. **Climate change creates a transformative opportunity for philanthropic groups to do more together:** collaborate on climate-friendly actions that are win-wins across multiple interests and align around solutions to create a future that can provide everyone with a climate for health.

Many health- and equity-motivated foundations are currently focused on work that's not normally seen as "climate" work but that might be helpful in climate change mitigation, adaptation, and resilience. Likewise, numerous foundations focused on climate and energy work are tackling critical "upstream" threats to health and communities as they work to move the country away from fossil fuels.

There is **great potential for information exchange and development of joint strategies**, but there is still comparatively little communication or collaboration across key interests.

Cross-issue work tends not to happen for a number of reasons. For many organizations — be they involved in health care, food, housing, toxics, poverty, or climate — the work is already preoccupying and stressful. Problems are urgent, needs are great, resources are constrained, and political obstacles are confounding. Add new climate change pressures to this landscape, and the stakes grow higher, but so do the payoffs of enlisting allies, finding efficiencies, and maximizing impact. **Where it is increasingly hard to get any one agenda advanced, it may be more possible to make progress by leaning into a common agenda.**

A second argument for connecting across climate and other interests is to **avoid the real possibility of conflict, competition, or working at cross-purposes.** Even work motivated by similar values can have unintended consequences and adverse impacts. Establishing communication and relationships across interests with similar underlying values can help bring potential problems to light and improve prospects for reducing or resolving them.

The most encouraging argument for exploring connections at the intersection of climate and health is that there are so many possibilities for **achieving additional health and equity** and so much potential for joining forces to help society transform into resiliency and health, for communities, people, and the planet.

Building a climate for health could include the following philanthropic areas:

- **Health improvement and health care:** Healthier people, and those with good access to quality health care, are better able to weather hazards. Health philanthropy's substantial efforts in health care quality, capacity, and access are helping improve health status and the health safety net, both of which can help people thrive in the face of climate change. Engaging the health sector in climate-related work can help prepare it for forthcoming changes. Boosting health work on climate and energy policy could also bring much-needed constituencies, values, and voices into climate solutions efforts.
- **Health impact assessments (HIAs):** Philanthropy has helped advance the development and use of these planning tools for identifying health implications of policy decisions, such as those involving land use. Future HIAs could take climate change–related factors into consideration. Conversely, the tool could also help embed health considerations into decision making around climate and energy.
- **Community health needs assessments and community benefits:** All U.S. nonprofit hospitals are required under the Affordable Care Act to conduct community health needs assessments and to invest in improvement plans at least once every three years. Some foundations are leveraging ACA requirements to engage hospitals in addressing community determinants of health; others support advocacy to create new community benefit funds. Climate change needs could become a new element and useful focus of community assessments and benefits investments.

- **Housing:** Numerous funders are focused on improving health by improving housing conditions, particularly for low-income families. Housing — and the built environment more generally — can be a point of vulnerability or protection in the face of extreme weather and other climate impacts. Improving energy efficiency and renewable energy access for low-income housing could offer significant health, economic, and climate benefits. Similarly, integrating resilience measures into housing could offer significant health and economic benefits. For example, Enterprise has included resilience elements in its "Green Communities Criteria."
- **Active living, transportation, and land use:** This burgeoning arena of public and private investment supports public transportation, bike paths, and improved walkability. These can offer win-wins for climate and health, increasing physical activity, reducing transportation pollution, and reducing greenhouse gas emissions. Additionally, multiple modes of transportation can help communities if evacuation becomes necessary in an emergency. Conversely, transit systems, transportation, the built environment, and the usability of outdoor spaces are all affected by climate and weather events, heightening the stake in climate solutions.

- **Healthy eating, food systems, and sustainable agriculture:** Health depends on healthy food, which depends upon agriculture, which in turn depends on weather and water. Climate change is a threat to funders' investments in expanding food access, promoting healthy eating, and supporting sustainable agriculture. The food movement also could be a powerful force for climate action to protect food, land, water, health, and community prosperity. There are shared interests across sustainable agriculture and climate organizations in shifts away from fossil fuels and toward more local and regional food systems, as well as potential conflicts around transitions to biofuels.
- **Toxic chemicals, environmental health, and environmental justice:** A broad-based, funder-supported movement for environmental health and justice has a big stake in energy and climate solutions, including solutions to community impacts from dirty energy and climate change events. Institutional, economic, and political relationships among fossil fuel and petrochemical industries are another point of intersection. The environmental health and justice field has significant

experience and dynamic constituencies to bring forward in climate and energy work. Shared interests include increasing the health-led push away from fossil fuels and toward climate solutions, with potential conflicts around transitional and long-term energy choices.

- **New economy:** Concerns about fossil fuels, climate change, and economic inequality have already converged into funder interest in greener and healthier economic models and paths. Shared interests with climate work include efforts to move assets and markets away from fossil fuels, such as through the Divest-Invest movement, as well as state and regional planning for future economic and energy development. There is potential for conflict around choices of economic allies in policy work.
- **Civic engagement, civic participation, and money in politics:** Philanthropic communities focused on democracy-enhancing initiatives are improving opportunities for the majorities favoring climate action to participate in the political process, as well as addressing the influence of corporate interests — including fossil fuel interests — in politics and policy. Climate change protection, prevention, and resilience will be particularly helpful for key elements of the rising American electorate, including immigrants, unmarried women, young people, and people of color. Enabling those groups to have full participation and voice in the democratic process — and in climate and energy strategy — will enhance prospects for climate-helpful action over the long run.

CONCLUSION

Many foundations, sectors, and communities have a stake in climate change and its health impacts. Current fragmentation in philanthropy — across issues, approaches, and geographies — obscures shared interest in preparing communities for, and reducing the severity of, the climate-related challenges ahead.

Philanthropy has a significant opportunity to build a climate for health by investing in protection, prevention, and transformation activities in communities throughout the country. Foundations are well placed to support the convening of diverse climate-health stakeholders, including government officials and those focused on specific regions or specific priority issues. Finally, foundations and funder affinity groups have an important opportunity to lead, by building bridges within philanthropy and by strategically connecting philanthropic interests to achieve a climate for health.

"We have an opportunity to ensure the people who will be most affected by climate change are taken care of in this country and throughout the world"

- Julie Trocchio, Senior Director of Community Benefit and Continuing Care, Catholic Health Association (CHA)

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