LET'S TALK HEALTH & CLIMATE COMMUNICATION GUIDANCE FOR HEALTH PROFESSIONALS







ACKNOWLEDGEMENTS

THIS GUIDE IS BROUGHT TO YOU BY

ecoAmerica building climate leadership



AUTHORS

Kirra Krygsman Meighen Speiser

CONTRIBUTORS

Cyndy Merse Sabine Marx Jennifer Tabola

SPECIAL THANKS

ecoAmerica is grateful to the John D. and Catherine T. MacArthur Foundation for its generous support.

We would also like to extend our thanks to the entire Climate for Health Leadership Circle for their contribution to the work of engaging their peers and the public to elevate climate solutions as a health priority.

Suggested citation

ecoAmerica: 2016. Let's Talk Health and Climate: Communication Guidance for Health Professionals, Climate for Health, Washington, D.C. ABOUT THIS GUIDE

Let's Talk Health and Climate: Communication Guidance for Health Professionals is designed to be useful for experienced and novice climate change and health communicators alike. This guide synthesizes the latest academic research and message testing on climate communications from across the social sciences into a practical guide to support meaningful discussion of climate change and health with individuals and groups. More than 20 sources went into this project.

REVIEWERS

Laura Anderko, *PhD, RN, Professor and Endowed Chair, Georgetown University*

David T. Dyjack, DrPH, CIH, Executive Director, National Environmental Health Association

Howard Frumkin, *MD*, *DrPH*, *Dean*, *University of Washington* School of Public Health

Tracy Kolian, MPH

Jay Lemery, *MD, Associate Professor of Emergency Medicine,* University of Colorado School of Medicine

Frank Loy, Former Under Secretary of State for Global Affairs

Edward Maibach, MPH, PhD, Director, Center for Climate Change, Communication George Mason University

Leyla Erk McCurdy, PHD Phil., Consultant, Health and Environment

Jerome A. Paulson, MD, FAAP

Mona Sarfaty, *MD*, *MPH*, *Director*, *Climate and Health Program*, *George Mason University*, *Center for Climate Change Comm*.

Kathy Sessions, Director, *Health and Environmental Funders Network*

Lise Van Susteren, MD, Psychiatrist, Private Practice

Catherine Thomasson, *MD, Executive Director, Physicians* for Social Responsibility

CONTENTS

HEALTH & CLIMATE

How Climate Change Impacts Health	6
Research on Awareness & Attitudes	8

COMMUNICATING ON HEALTH & CLIMATE 10

Successful Messages	10
Embrace & Replace: Words + Phrases	11
Key Talking Points	12
15 Steps: How to Create Your Own Message	14

PUTTING IT ALL TOGETHER 16

A Sample Speech	16
How Health Professionals Can Engage	18

REFERENCES

20

GREETINGS HEALTH PROFESSIONALS AND LEADERS,

Now is the time for health professionals to elevate our climate leadership throughout our organizations, communities, and nation. Health can be a game-changing driver for climate solutions.

The 2015 Lancet Commission Report, the American Public Health Association, and an ever-growing number of health professionals concur—climate change represents the biggest public health threat facing America and the world. The impacts are widespread and are beginning to manifest now.

Many Americans also report a general sense that climate change can be harmful to health, though few understand the types of harm or who is likely to be affected. Only 27% of Americans can accurately name one or more specific type of health harm caused by climate change, and only 25% can identify any disproportionately affected populations.

The growing realization of the impacts of climate change among health professionals, the need to convey this information to the public, and the fact that Americans report that they trust health professionals more than any other source for information present a rare opportunity. The health and medical community is uniquely positioned to advance the message that climate solutions are a health priority and will provide enormous health benefits.

At the same time, climate change is a complex and frequently political issue. There are few resources to guide health professionals in productive engagement. This guide is meant to be a helpful step forward in closing that gap. This guide combines values, communications (how to talk), and messaging (specific talking points) in a single resource. This, combined with all the resources in ecoAmerica's Climate for Health program, can help make health professionals as adept at talking about climate change as they are at addressing America's health challenges.

Thank you for your efforts to help solve the climate change challenge and protect the health of current and future generations. We welcome your comments and input as you put this guidance into practice.

Jenniper HA Jason

Jennifer Tabola Director Climate for Health



Climate for Health is a national initiative to build climate leadership among health professionals and institutions and to encourage and enable them to become active in publicly promoting climate solutions. The initiative is led by a diverse *network of health leaders* from across the health sector representing health care, public health, clinical and medical institutions, academia, and associations. Health professionals who seek to make a positive impact through climate solutions receive support, inspiration, and resources to strengthen their efforts. Within and beyond the sector, health leaders can collectively influence our communities to care for our climate as part of caring for our health.

Health professionals have a responsibility to help the public prepare for the health risks posed by our changing climate and to promote climate solutions that also deliver health benefits (referred to as co-benefits). By *joining Climate for Health*, you can learn more about these risks and benefits. You can also learn what steps can be taken within your own organizations to reduce the causes and impacts of climate change. The initiative provides a wealth of resources to guide you on the path to a positive future: toolkits, tips, and networking opportunities that will help you and your staff advance climate solutions and engage your patients, colleagues, and communities to do the same.

We all need to work together to empower and inspire our organizations, other health leaders, and the nation to take action on climate change.

Join us and fellow health leaders at ClimateforHealth.org.

PARTNERS













American Academy of Pediatrics







US Climate & Health Alliance

HEALTH & ENVIRONMENTAL FUNDERS NETWORK



Trust for merica's Health





eorge Mason University enter for Climate Change Communication

Related programs for leaders in other fields:



Community leaders



Faith leaders



Higher education leaders



Business leaders

HOW CLIMATE CHANGE IMPACTS HEALTH

The same pollution that causes climate change can have direct and profound impacts on human health, ranging from acute to chronic and even fatal. Climate change also threatens the systems and natural cycles on which healthy life depends— from infrastructure and the economy to water supplies and agriculture. The figures below and to the right, with key definitions, illustrate the many ways climate change impacts human health, both acutely and long-term.^a

Exposure Pathways: Links, routes, or pathways through which people are exposed to climate change impacts that can affect human health.

Climate Drivers: Changes in climate that directly or indirectly affect human health due to increased concentrations of GHGs (greenhouse gases).

Social + Behavioral Vulnerability: Although climate change affects all Americans, certain people and communities are more vulnerable⁶ to the resulting health impacts (referred to as populations of concern).

- **Children** are disproportionately affected by changes in their environment, primarily due to physiological and developmental factors that are tied to their growing minds and bodies.
- **The elderly and the sick** are at much greater risk of dying during heat waves because they are more sensitive to extreme temperatures. Pre-existing health conditions also make them more susceptible to cardiac and respiratory impacts triggered by air pollution. Additionally, these groups may be least able to evacuate in an emergency situation.
- Low-income and some communities of color are more likely to be disproportionately impacted by climate change due to existing health disparities (e.g., higher rates of asthma) and geographic location (e.g., living in flood-prone areas). Limited access to healthy food and quality healthcare, as well as a limited ability to evacuate during or relocate after a severe weather event, heighten concerns about environmental justice.

EXPOSURE PATHWAYS	CLIMATE DRIVERS	SOCIAL + BEHAVIORAL VULNERABILITY	
 Extreme heat Poor air quality Reduced food & water quality Changes in infectious agents Population displacement 	 Increased temperatures Precipitation extremes Extreme weather events Sea level rise 	 Age & gender Race/ethnicity Income Housing & infrastructure Education Discrimination Access to care & community health Pre-existing health conditions 	
HEALTH IMPACTS + OUTCOMES			
 Asthma Respiratory allergies Vector-borne diseases (Lyme, malaria, Zika, etc.) 			

HEALTH IMPACTS + OUTCOMES (both acute + long-term)

AIR POLLUTION

- Higher levels of air pollution, coupled with rising temperatures, may trigger respiratory diseases such as asthma and chronic lung disease.⁵
- Higher levels of ground-level ozone may result in increased hospital admissions and emergency room visits for asthma, as well as increases in premature deaths.

CHANGES IN VECTOR ECOLOGY

• Changing weather patterns and the resulting migration of animals and insects are likely to spread vector-borne diseases such as Lyme¹ disease, malaria, dengue fever, and Zika virus disease to new geographical areas.

INCREASING ALLERGENS

• Higher levels of pollen, as well as longer pollen seasons, may aggravate asthma and allergy symptoms.⁵

WATER QUALITY

• Rising sea levels, droughts, and extreme weather events may contaminate¹⁸ water supplies and limit access to safe water sources.

WATER & FOOD SUPPLY

- Changing temperatures and rainfall patterns are likely to increase the number of food and water-borne infections, such as diarrheal disease.¹⁸
- Changing growing seasons and more frequent droughts pose threats to food security, including lower crop yields and poorer nutritional quality of the food supply.²⁰

INFRASTRUCTURE DEGRADATION

• Changing weather patterns and more severe extreme weather events may impact a community's infrastructure, leading to forced migration and climate refugees, civil conflict, and mental and emotional distress.

EXTREME HEAT

- Periods of extreme heat result in higher rates of death from heat stroke, cardiovascular disease, and respiratory disease,¹⁵ as well as increased hospital admission rates for heart-related illnesses, including kidney problems and cardiac dysrhythmia (irregular heartbeat).
- Rising temperatures and extreme heat may have a negative impact on people suffering from depression and other mental illnesses, leading to higher rates of stress and suicide.
- Psychiatric medications can increase individuals' sensitivity to heat or sun, making it difficult for them to regulate their body temperature.³

SEVERE WEATHER

• More frequent and severe extreme weather events, such as heat waves, droughts, and floods, may increase rates of heatstroke, drowning, infectious diseases, injury, and mental stress, among others.²

MENTAL HEALTH

• Direct and gradual physical impacts of climate change on the environment, society, and infrastructure can lead to trauma, shock, stress, anxiety, depression, and other mental health impacts.³

a. Figure 1. The information is adapted from the Centers for Disease Control and Prevention's (CDC) *Impacts of Climate Change on Human Health* and the U.S. Global Change Research Program's *The Impacts of Climate Change on Health in the United States: A Scientific Assessment.* For more information on the health impacts of climate change, visit the National Climate Assessment's chapter on Human Health, the CDC's Climate and Health Program, or the American Public Health Association.

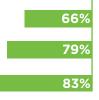
RESEARCH ON AWARENESS & ATTITUDES

The following information from recent polls highlights levels of awareness and concern about climate change and health among the public and health professionals, as well as opportunities for deepening awareness and changing attitudes and behaviors.

AMERICAN PUBLIC ON HEALTH AND CLIMATE

Americans place a high priority on health, spending about **17.1%** of the country's gross domestic product (GDP) directly on health.¹⁶

Americans are concerned about pollution's impact on health.



worry about environmental pollution impacting their family's health.¹¹

agree that keeping their communities free of toxic chemicals and pollutants is a personal right. $^{\rm 17}$

agree that clean air is a personal right that should be available to all people.¹⁷

However, Americans are not making the connection between climate and health.



25%

report being affected by longer and more severe allergy seasons; however, only **49%** of Americans said that climate change is to blame.¹⁷

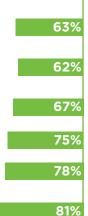
recognize that climate change is affecting human health.⁹ Probing further, fewer than **5%** of Americans correctly identified health impacts of climate change, with two exceptions: **14%** identified respiratory problems (including asthma and other lung diseases), and **6%** identified illness, injury, and death caused by extreme weather.

There is an opportunity to help Americans understand the same pollution that compromises respiratory health also drives climate change.

58%

believe that if the U.S. took steps to prevent climate change it would improve individual health^{b,4,8} (**71%** Democrat, **62%** Independent, and **43%** Republican).⁴

Americans feel a moral obligation to fight climate change and support a range of personal and civic solutions.



believe we have a moral responsibility to create a safe and healthy climate for ourselves and our children (**73%** Democrat, **67%** Independent, and **50%** Republican).⁴

were either already talking or willing to talk with their doctor about preparing for or protecting against harm from climate change.¹⁷

would support initiatives meant to prepare health facilities for extreme weather events.¹¹

believe it is their personal responsibility to do something about climate change.¹¹

believe it is the Environmental Protection Agency's (EPA's) responsibility to do something about climate change.¹¹

believe that companies that contribute to pollution have a responsibility to do something about climate change.¹¹

HEALTH PROFESSIONALS ON HEALTH CLIMATE CHANGE

Americans trust their doctors and other health professionals as sources of credible information on climate change. Health care providers and public health officials have the potential to reach and motivate a vast and diverse population of Americans to protect their health.^{7,10} The combination of trust and reach, whether it's public health officials engaging communities or the doctor-patient relationship, presents a unique opportunity for health professionals to leverage their leadership and educate the public about climate change and health. But do they have the necessary knowledge, concern, and motivation?

TABLE 1. HEATH PROFESSIONALS' ATTITUDES ON CLIMATE¹⁷

	Healthcare Professionals (%)	General Public (%)
Solving climate change now will cost less money than if we wait until later. ^c	73	61

Engage in the behaviors below^a

Turn up the thermostat in the summer to save energy.	87	70
Eat vegetarian.	54	39
Use public transportation.	46	32
Bike instead of using a car.	33	22

Health Professionals

Understand that taking early action, whether it is to prevent disease or address climate change, produces the greatest health benefits.⁴

Are more likely than the general public to engage in climate-friendly behaviors.

Support these local community measures •

A community-wide energy savings program.	78	71
Annual disaster preparedness training program.	77	69
Update building codes to increase energy efficiency.	75	69
Create alternatives to driving.	74	62

Show strong support for community -level preparedness measures.

PHYSICIAN SPECIFIC^F

- 64% think climate change is directly relevant to direct patient care.¹²
- Climate-related problems appeared in their own patients most frequently as air pollutionrelated increases in severity of illness (asthma, pneumonia, chronic lung disease, cardiovascular disease) and increased care for allergic symptoms of exposure to plants or molds.^{12, 13}
- 64% indicate physicians have a responsibility to bring the health effects of climate change to the attention of their patients.¹⁴
- **76%** agree that physicians should take a leadership role in encouraging offices, clinics, and hospitals to be as environmentally sustainable as possible.¹⁴

c. Percentage represents sum of "agree" and "strongly agree" with the statement.

d. Percentage represents sum of "always" and "sometimes" with the statement.

e. Percentage represents sum of "definitely support" and "somewhat support" with the statement.

f. George Mason University-led surveys of more than 2,000 physician members of three medical societies, representing lung and critical care specialists, allergists, and African American physicians.

SUCCESSFUL MESSAGES

Why this message works:

Puts people first

and conveys climate action as a moral responsibility to protect families' health

Addresses climate-related health impacts but moves quickly to solutions.

The solutions presented are accessible, available here and now, and part of a feasible plan for the present and the future.

Uses **visual language** so the audience can see themselves in the solutions.

> Introduces the **health benefits of solutions**, including support for healthy lifestyles.

Cites a **trusted messenger** with a key fact about pollution in the air we breathe. The following message offers effective ways in which you can communicate about climate and health. You can use phrases, whole sentences, or the message in its entirety for a successful message. See the annotations to the left explaining why this message works.⁹

Our families' health matters. When the American Lung Association tells us that toxic pollution in the air we breathe is affecting the health of nearly half of all Americans, we need new solutions. Kids seem to carry inhalers almost as often as lunch boxes. Seniors are stuck inside when weather shifts dramatically to extreme heat or freezing cold. Thankfully, we have a plan for a healthier future....

Ending Option A

...We can use safe, clean energy, like wind and solar, that helps make every breath we take a healthy one. We can walk or bike more often to improve our fitness while cutting down on pollution. And we can make our cities more sustainable so that we can live our best lives. We can care for our climate to care for our health.

Ending Option B

...We can move away from the dirty fuels that make us sick and shift toward safe, clean energy, like wind and solar. Each breath we take should be a healthy one. Let's address this problem now, because caring for ourselves means caring for our climate.

POWERFUL FACTS FROM TRUSTED MESSENGERS

Here are a few powerful facts about climate and health that you can use in your communications. Remember to keep up with current events and research for fresh facts and figures:

- According to the American Lung Association, the toxic chemicals in the air we breathe are affecting the health of nearly half of all Americans.
- According to the Centers for Disease Control and Prevention (CDC), health impacts from climate change and ozone pollution will result in significant increases in acute respiratory symptoms, asthma, weather-related hospital admissions for children and the elderly, and premature deaths.
- The World Health Organization estimates climate change is already causing over 150,000 deaths annually.
- According to a 2016 report published by the U.S. Global Change Research Program (USGCRP), many of the expected health impacts due to climate change will affect the low-income, very old, the very young, the disabled, and the uninsured.

EMBRACE & REPLACE: WORDS + PHRASES

Creating your own message has powerful benefits, but so does having access to words, phrases, and messages that have been proven effective. The key words and phrases on this page should help you successfully create your message on climate change and health.

Embrace	Replace	Because
Damage to the climate	Climate change, climate crisis, climate risk, global warming	"Damage" implies human causation, which can be prevented or protected against. Others terms are too polarizing.
Local/locally made clean energy, home- grown energy, clean energy, made right at home	Renewable energy, green energy, domestic energy	"Local" folds in community empowerment without directly stating it. Homegrown implies wind and solar. "Clean" introduces health and positions oil, coal, and gas as "dirty."
Better for families, our children, and future generations	Better for us, better for you	Referencing future generations and families moves thinking beyond self, builds inclusiveness (not everyone has children), and activates collective agency.
Good for, city or state, good for people	Good for the country	Americans are more tuned in to local communities and personal well-being.
Dirty fuels, out-of-date fuels, outdated fuels	Dirty energy, fossil fuel energy	Pair "dirty" with "fuel" to tie your message to oil, coal, and gas that need to be burned (evoking purity and health concerns). References to old vs. new work with those who can be persuaded.
Today, we use/We have used dirty fuels	Today, we rely on fossil fuels/We have relied on dirty energy	"Use" empowers choice—to use clean energy. "Rely" implicitly puts blame on the audience and makes them defensive versus open to solutions.
We need to create rules to curb pollution and to impose fines on businesses that pollute	Government taking steps to curb pollution	"Rules" and "fines" are tangible and thus seem more plausible. Creating rules empowers people to make change.
We can	We should	"We can" is positive, it empowers, and it has multiple meanings, like can-do attitude, collective action, and choice.
Health specific key v	words and phrases	
[A trusted health organization] stated as a messenger	Scientists agree	Americans think "science" is debatable but trust the American Lung (or Heart) Association on pollution and health. See pg. 15 for more examples of trusted health organizations.
We have a plan for a healthier future	A treatment plan	Solution language that mimics healthcare language, such as "prescription" or "treatment," implies cost. A plan alone is concrete enough to gain support.
Air we breathe	Threats to the air Threats to the environment	"Air we breathe" is more visual and connects more closely with our primary health needs.
Walking and biking improves fitness and reduces pollution	Walk and bike (alone)	Walking and biking for fitness is more universal/compelling than for recreation.
Live our best lives	Don't endanger our health by burning fuel	Alarming language is scary. A hopeful visual is more motivating.
Care for ourselves to care for the climate/ Care for our health	Our prosperity depends on [our action]	Directly connects health benefits with climate solutions to form a win-win scenario.
Wind and solar energy	Natural fuels	Coal and oil are considered by some to be "natural fuels."
Create healthy and safe communities, protect our families'/ children's health	Stop/mitigate/slow down climate change	Focusing on positive outcomes and personal benefits motivates people to act.

KEY TALKING POINTS

You can make a difference with your colleagues and patients and in your community on health and climate. These talking points provide a starting point. Tailor and use them in your conversations, speeches, and writing to build support for climate solutions.

- I'm a health professional because I care about the health of everyone in our community. I want to heal people, but it's even more important to prevent the causes of illness and injury.
- Healthy people and healthy communities require clean air and water to grow healthy food and prevent respiratory disease and other illnesses. We have a fundamental right to clean air and water.
- 3. Fossil fuels damage our climate and are dangerously unhealthy. We know these dirty fuels pollute our air and water. The toxic pollution we're adding to the atmosphere is not going away. The pollution is steadily building up to dangerous levels.
- 4. Each breath we take should be a healthy one, and caring for ourselves means caring for our climate. We can prevent further climate change and protect our health at the same time.
- 5. If we stop pollution from fossil fuels, we stop climate change and improve our health.
 - We reduce diseases, illness, and injury brought on by pollution and severe weather.
 - We slow the rising temperatures that are changing weather patterns and causing more intense storms and heat waves, all of which impact food prices and create health threats.

6. Some people are more vulnerable to the health impacts of climate change, including children, the elderly, the sick, low-income, and some communities of color. Our efforts to stop pollution help all of these groups live longer, healthier lives.



7. It is up to us, as respected community leaders, to lead on climate and health. We need to understand the various ways climate change impacts health so that we can then speak with authority to our patients, communities, peers, and local leaders on the climate-health connection and the benefits of stopping climate pollution.^h

POINTS AND COUNTERPOINTS ON HEALTH AND CLIMATE

1. "Climate change does not affect me."

The causes and consequences of our changing climate are impacting personal and public health now, across the nation, and this will accelerate if we don't curb carbon pollution. Americans are suffering from a higher frequency and intensity of diseases, illness, injury, and other health impacts brought on by pollution and severe weather. Our communities are experiencing notable climate impacts, including rising temperatures, irregular rainfall patterns, higher produce prices, and intense storms and heat waves, all of which result in impacts to health. Climate change affects us all because it affects the world our children will live in. Of all the things we'd love to leave our children and future generations, a healthy place for them to raise children of their own may be the most important.

2. "There is nothing I can do to stop climate change."

In nearly every aspect of our daily lives, we can do something to prevent climate change. From saving energy at home to recycling, eating local fresh food, driving fuel-efficient cars, walking and biking more, and taking public transportation, we can reduce energy consumption and emissions that damage our climate, and protect and enhance our health at the same time. In addition, we can leave our children and future generations a healthier community where the air is clean and the water is safe by using affordable solar and wind energy to power our homes and businesses.

3. "I am more concerned about my (family, health, job) right now."

We all have a variety of pressing daily concerns that compete for our time. However, when the American Lung Association (or the American Heart Association) tells us that toxic pollution in the air we breathe is affecting the health of nearly half of all Americans, we have a problem. We all want to live in the best place for our families. We need to take steps toward a healthier future. Let's ensure our families have clean air, clean water, and safe communities to live in, now and in the future, by moving away from the dirty fuels that make us sick and shifting toward safe, clean energy, like wind and solar. Let's make every breath we take a healthy one. Caring for our climate is caring for ourselves, family, and health.

4. "Why should we lead when other countries aren't?"

America has always been a yes-we-can kind of place. We led the way into space and to cell phones and the Internet. Today, the next big thing is clean energy: affordable, local wind and solar power made here and now. In fact, since 2013 America has more than doubled the supply of solar energy.¹⁹ America has solved great challenges before, and we can lead again with innovations that fuel a cleaner, safer, and healthier world for our families.

5. "Why should I do something when our government isn't?"

We see climate change occurring here, in our backyards, and we can't wait for politicians in Washington to solve our problems. Right now, in our own communities, we can reduce pollution and improve our health by producing and using clean energy. We can protect our cities by leaving dirty fuels behind. We can let our local leaders know we support climate solutions. A community with sustainable solutions is the place I want to call home.

15 STEPS: HOW TO CREATE YOUR OWN MESSAGE

The following steps offer **a sequential process** to create and deliver effective climate change communications that resonate with your audience.

Start with people, stay with people

If you want your audience to care about climate change, then show you care about them. Start from their perspective, not yours. Do your homework to understand their concerns and priorities. This will allow you to relate to them and gain their trust. Infuse your entire communication with tangible human and health connections. Move from people to climate, not the other way around, and keep going back to people.



Connect on common values

Once you understand your audience's priorities, concerns, and values, you can open their hearts and minds by talking about those values, and showing you share and honor them. Common values such as family, community, choice/freedom, health, and fairness are powerful motivators and connectors. Find ways to connect shared values to caring for our climate and health. Affiliation or "tribal" connectors, such as being fellow health leaders, organization members, or citizens, are also helpful.

Acknowledge ambivalence

People approach climate from different perspectives and have different levels of concern—and we all have other priorities. Don't be self-righteous. Respect their viewpoints and allow them their own space. A simple line like "Some of us are more worried about how climate change affects health than others..." allows a person to be comfortable and listen with an open mind.



Make it real

Many Americans still think of climate change as a distant concern. By focusing on local realities people can see with their own eyes (simple, irrefutable facts about changing seasons or record weather), you can make it real and relevant for them, as well as connect to real-life examples of health-related impacts. Focus on the facts and realities, but don't argue about the science of climate change. Use a light hand with one or two examples and then pivot quickly to solutions.

Emphasize solutions

Many people don't realize we've developed solar and wind energy systems that cost less than cheap natural gas. Clean transportation and energy storage systems are just around the corner. We've also created policies that are proven to reduce carbon pollution while accelerating economic growth. A number of health, nature, and security co-benefits accompany the energy solutions. Using tangible, local examples, point out how climate solutions are accessible, are available here and now, and are creating safe and healthy communities that protect our families' health.

Inspire and empower

Americans are repeatedly told—and therefore believe—that they don't and can't make a difference in climate change, when the exact opposite is true. Almost everything we do, from what we drive to what we eat to how we talk about climate change, affects the people around us. The positive choices we make help further protect personal and public health. Encourage your audience to adopt a can-do attitude. America can lead on climate, and so can your state, town, family, and you!

Focus on personal benefit

Even as they spend money on fossil fuel energy that could be used for vacations, education, healthier food, or a bigger savings account, most Americans actually think action on climate change comes with a cost, and a strain on their wallets. Let them know we can save money by saving energy, be healthier by eating locally grown food and biking or walking instead of driving, and protect and promote the well-being of our families and communities by reducing carbon pollution. When people realize they will gain benefits from climate solutions, they are more willing to participate.

End with your "ask"

Encourage your audience to turn the information and understanding they have gained into action. Give them a clear call to action or a set of actions that link to the solutions you discussed. Remind and show them how behavior change is easier and more affordable than they think.

9

Sequence matters

Research reveals that you can take the same set of six facts, arrange them in different ways, and end up with very different results. Follow steps 1 - 8 in order for maximum effectiveness. If you start with negative and impersonal points, it's very hard to get back to the positive, personal, and relevant.

Describe, don't label

Jargon and labels confuse people and sometimes bring up negative associations. Avoid terms like "mitigation," "adaptation," or complex health terminology not used by the general public. Statements like "We need to slow and stop the pollution that is changing our climate and affecting our health, and prepare for those changes we can't prevent" are clearer and less divisive. The most persuasive language is vivid, familiar, and descriptive.

Have at least 1 powerful fact from a trusted messenger One or two facts with emotional power add significant weight to a message. Highly trusted messengers or organizations lend credibility and importance. Use at least one memorable and relevant quote or fact from someone your audience trusts and perceives as unbiased, such as the CDC or the National Climate and Health assessment report.

Ditch doom and gloom

Americans are overwhelmed by negative information on climate, causing them to disengage. Advocates have tried to evoke stronger emotional responses by portraying climate change in dire terms, but this strategy can backfire and lead to fatalism and emotional numbing. The same holds true when discussing the health impacts of climate change. Discuss only one or two climate impacts and how they are connected to health, but don't over-emphasize them at the expense of common values, solutions, benefits, and personal empowerment.

Use stories to strengthen engagement Stories help make your message relevant and vivid. They form a connection with audiences, allowing you to create empathy and open people to new perspectives. Deepen your message by weaving in your personal story—how you became concerned about climate change, for instance, or an account of how you've seen climate solutions benefit a person or community that your audience relates to. Avoid using overly forceful or scary language in your storytelling. You want your audience to be inspired to take action, not left feeling powerless or turned off.

14

Stay above the fray

Focus on the big picture. Don't get caught in a trap of preaching, nitpicking about details, or getting sidetracked by an individual in the audience who tries to poke holes in your message. Avoid demonizing opponents, blaming, and arguing, which distract from your point and cause you to lose your audience. Trade blame for a focus on choice and solutions.

Message discipline is critical

Stay on your talking points. Repeat key points. Refrain from explaining the same thing in different ways—this can be more confusing than enlightening. Follow the steps outlined in this guide. Be consistent across all messaging platforms, but be sure to tailor to your audience.

impacts and connecting them to real-life experiences. Other topics could include severe heat events and their impact on the elderly, the homeless, and outdoor recreation.

PUTTING IT ALL TOGETHER: A SAMPLE SPEECH

The following is a hypothetical example of using the 15 steps to craft a message on climate and health: Health leader Jamie Young's speech to the city council of Cullman, Alabama.
Good afternoon. Thank you for the opportunity to speak before the council. I have participated in and been a sponsor of Cullman's health expo for the last 10 years. It's wonderful to see how our community comes together to learn about and celebrate health and wellness.
Given your investment in the health expo, and the great attendance, I know we all agree that our families' health and well-being are of utmost importance. We want to ensure our families and future generations have clean air to breathe, healthy food to eat, and clean water to drink. That is why I am speaking before you today.
As you are aware, Cullman is experiencing higher levels of air pollution, the highest in recent history. At the same time, increasing numbers of children in our community have asthma and are experiencing asthma-related symptoms. Asthma rates have doubled to 15% of children in the last 10 years (higher than the national average of around 9%), and the number of days we're seeing symptoms has quadrupled. When the American Lung Association tells us the toxic chemicals in the air we breathe are affecting the health of nearly half of all Americans, we know we
have a problem. I realize there may be differing opinions in this room on what is causing our city's air pollution problems, and to what degree the damage to our climate is to blame, but I do know that we all want to protect the health of our families.
Over the last several weeks, I have treated dozens of families with at least one child or family member experiencing asthma or asthma-related symptoms. Ten-year-old Scott stands out in particular. His asthma became so bad he had to quit his baseball team as their star pitcher and now rarely has any activity outside. Our air pollution makes it hard for him to breathe. Sadly, he is not alone.

Fortunately, we have the power to reduce the pollution that is causing these elevated asthma levels. There are solutions, here and now, that can help us achieve a cleaner, safer place for our families to live. We can start by promoting our many commuting options, from public transit to carpooling. We can require that our public transit systems pollute less. We can make the transition to clean energy. And we can push for stricter fuel efficiency and emissions standards statewide.

The good news is there are already leaders in the community whoare taking action. For example, our local hospital has instituted a carpooling program for its employees, and the city's bus system is transitioning its fleet to run on cleaner fuel. This is just the beginning. Through actions like these, we not only can ensure our families have cleaner, healthier air to breathe but also can helpthem, and our public health department, save money on health care-related expenses.

Today, I encourage each of you to be part of the solution. We can't wait for Washington politicians to solve our problems. Right now, in our own community, we can leave dirty fuels behind. I, along with my public health and healthcare colleagues, am asking you to consider adopting this four-point plan:

- work with the city's energy company to generate 50% clean energy
- 2. transition our light rail to cleaner, more efficient fuels
- 3. push through the proposed bike lane system
- 4. create city programs to educate our citizens on these solutions

A community with sustainable solutions like these is the place we want to call home. Let's work together to protect the health of our children and families, and make every breath we take a healthy one.

- Step 5: Emphasize Solutions

Jamie is showing in this paragraph that solutions are accessible and meaningful. Notice she avoids asking the audience to sacrifice.

Step 10: Describe, Don't Label

Throughout this speech, Jamie uses concrete and descriptive language that is familiar to the audience. She avoids technical terms like "mitigation."

Step 6: Inspire and Empower

Jamie motivates the audience by conveying hope, potential, and ability.

Step 7: Focus on Personal Benefit

Jamie shows the audience that they can enjoy benefits by taking action.

Step 8: End With Your Ask

After building her case, and strong rapport, Jackie ends with a clear and compelling "ask" to make climate solutions part of the city's future. She presents a proposal to make it actionable.

Step 9: Sequence Matters

Jamie has followed steps 1–8 in order, connecting on common values, acknowledging ambivalence, being positive, scaling from personal to planet, emphasizing solutions, and ending with an "ask."

Step 12: Ditch Doom and Gloom

Jamie has chosen only one climate impact to focus on and has moved quickly to discuss positive solutions.

Step 14: Stay Above the Fray

Jamie talks about the big picture and focuses on the common good.

Step 15: Message Discipline Is Critical

Jamie stays on topic and is clear and consistent with her message, which makes is easy for her audience to understand, remember, and share.

HOW HEALTH PROFESSIONALS CAN ENGAGE

WAYS YOU CAN LEAD ON CLIMATE CHANGE SOLUTIONS:

Health professionals have always been on the front lines of caring for patients and advocating for solutions to America's most pressing public health concerns, whether it's polio, AIDS, smoking, or obesity. Health leadership has made a critical difference in advancing solutions in the past and can do so again. With these tips and resources, you can play a vital role in dealing with the causes and consequences of climate change. From increasing awareness and understanding to providing education and advocating for policy support, you can lead by example, help protect the public against climate impacts, and help patients, communities, your colleagues, and policy makers realize that caring about health means supporting climate solutions.

Become climate literate.

- Use this report to increase knowledge about the health impacts of climate change.
- Learn more about how climate change affects health related to your area of expertise, including in specialty areas of practice, by becoming familiar with the related resources available from the National Climate Assessment, CDC, American Public Health Association, American College of Physicians, and American Academy of Pediatrics, among others.

Relate climate to patient and client health.

- Many patients don't realize that the symptoms they are feeling are climate-related. Help them understand how their health conditions are linked to and impacted by climate change, and share ways for them to take action.
- Use this report and the tools offered through Climate for Health to create patient literature, include tips in newsletters, or feature climate in corporate communications and, if relevant, corporate missions.



Be vocal, model leaders within your communities.

- Educate local leaders on the health impacts of climate change and the health benefits of solutions.
- Encourage the broader community to protect and preserve personal, family, and public health through climate preparedness and prevention solutions.
- Collaborate with fellow leaders to create community health preparedness plans for climate-related disasters and impacts.

Learn how the CDC is already helping state and city health departments to investigate, prepare for, and respond to climate-related health effects with its *Climate-Ready States & Cities Initiative.*

• Help create or support climate and health programs and policies locally, regionally, and nationally. To illustrate commitment and authenticity, institute programs and practices within your own organization and personal behavior to reduce your climate impact.

Elevate your voice on climate within your professional community.

- Share successes, ideas, and best practices with your professional associations and colleagues, and encourage them to join in taking a stand on climate.
- Facilitate a presentation or workshop at a regional or national conference, and collaborate with peers to increase the power of your message. Your colleagues will be more effective at making the connection between climate and health when they are given the education, tools, and ability to connect with and inspire their peers.

Take your climate leadership national.

There are many ways to lend your thought leadership and voice to promote climate and health within and beyond your civic or professional communities.

- Submit articles, letters to the editor, op-eds, and white papers on the topic to newspapers, magazines, radio, and TV outlets.
- Offer to be media spokespeople on climate and health.
- Write a climate column for your organization's blog, do podcasts, and/or share up-to-date news on social media.
- Participate in research efforts that get published for national distribution and share your expertise on climate and health through briefings with key leaders and policy-makers.
- Collaborate with colleagues, community, and climate advocates to influence policy design and outcomes.

REFERENCES

- Beard, C. B., R. J. Eisen, C. M. Barker, J. F. Garofalo, M. Hahn, M. Hayden, A. J. Monaghan, N. H. Ogden, and P. J. Schramm, 2016: Ch. 5: Vector-borne Diseases. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 129–156. URL
- Bell, J. E., S. C. Herring, L. Jantarasami, C. Adrianopoli, K. Benedict, K. Conlon, V. Escobar, J. Hess, J. Luvall, C. P. Garcia-Pando, D. Quattrochi, J. Runkle, and C.J. Schreck, III, 2016: Ch. 4: Impacts of Extreme Events on Human Health. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 99–128. URL
- Dodgen, D., D. Donato, N. Kelly, A. La Greca, J. Morganstein, J. Reser, J. Ruzek, S. Schweitzer, M.M. Shimamoto, K. Thigpen Tart, and R. Ursano, 2016: Ch. 8: Mental Health and Well-Being. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 217-246. URL
- 4. ecoAmerica: 2015. National Sample. *Common Metrics Climate Study*. September 2015. Washington, DC: Lake Research Partners. Unpublished data.
- Fann, N., T. Brennan, P. Dolwick, J. L. Gamble, V. Ilacqua, L. Kolb, C. G. Nolte, T. L. Spero, and L. Ziska, 2016: Ch. 3: Air Quality Impacts. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. U.S. Global Change Research Program, Washington, DC, 69–98. URL
- Gamble, J. L., J. Balbus, M. Berger, K. Bouye, V. Campbell, K. Chief, K. Conlon, A. Crimmins, B. Flanagan, C. Gonzalez-Maddux, E. Hallisey, S. Hutchins, L. Jantarasami, S. Khoury, M. Kiefer, J. Kolling, K. Lynn, A. Manangan, M. McDonald, R. Morello-Frosch, M. H. Redsteer, P. Sheffield, K. Thigpen Tart, J. Watson, K. P. Whyte, and A. F. Wolkin, 2016: Ch. 9: Populations of Concern. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 247–286. URL
- 7. Jones, J., and Saad, L. 2011: U.S. National Sample. Honesty and Ethics. USA Today and Gallup Poll. Princeton, NJ. URL
- 8. Leiserowitz, A., E. Maibach, C. Roser-Renouf, G. Feinberg, and S. Rosenthal, 2014: *Climate Change in the American Mind*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. *URL*
- 9. Leiserowitz, A., E. Maibach, C. Roser-Renouf, G. Feinberg, S. Rosenthal, and J. Marlon, 2014: *Public Perceptions of the Health Consequences of Global Warming.* Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. *URL*
- 10. O'Hara, B., and Caswell, K. 2013: *Health Status, Insurance, and Medical Services Utilization*. 2010. U.S. Department of Commerce, Economics and Statistics Administration and U.S. Census Bureau. Washington, DC. *URL*
- 11. Perkowitz, R., M. Speiser, G. Harp, C. Hodge, and K. Krygsman, 2014: *American Climate Values 2014: Psychographic and Demographic Insights.* ecoAmerica and Strategic Business Insights. Washington, DC. URL
- 12. Sarfaty, M., B. Bloodhart, G. Ewart, G. D. Thurston, J. Balmes, T. L. Guidotti, and E. Maibach, 2015: *American Thoracic Society Member Survey on Climate Change and Health*. Annals of the American Thoracic Society; 12(2): 274-278
- 13. Sarfaty, M., J. Kreslake, T. Casale, and E. Maibach, 2015: *Views of AAAAI Members on Climate Change and Health*. Journal of Allergy and Clinical Immunology-In Practice. Published online. *URL*
- 14. Sarfaty, M., M. Mitchell, B. Bloodhart, and E. Maibach, 2014: A Survey of African American Physicians on the Health Effects of Climate Change. International Journal of Environmental Research and Public Health. 11(12): 12473-12485.
- Sarofim, M. C., S. Saha, M. D. Hawkins, D. M. Mills, J. Hess, R. Horton, P. Kinney, J. Schwartz, and A. St. Juliana, 2016: Ch. 2: Temperature-Related Death and Illness. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 43–68. URL
- 16. The World Bank: 2015. Health Expenditure, total (% of GDP). World Health Organization Global Health Expenditure database. World Development Indicators. URL
- 17. Tabola, J., M. Speiser, and C. Hodge, 2015: American Climate Values 2014: Health and Climate Highlights. Strategic Business Insights and ecoAmerica. Washington, DC. URL
- Trtanj, J., L. Jantarasami, J. Brunkard, T. Collier, J. Jacobs, E. Lipp, S. McLellan, S. Moore, H. Paerl, J. Ravenscroft, M. Sengco, and J. Thurston, 2016: Ch. 6: Climate Impacts on Water-Related Illness. *The Impacts of Climate Change on Human Health in the United States:* A Scientific Assessment. U.S. Global Change Research Program, Washington, DC, 157–188. URL
- 19. U.S. Energy Information Administration. 2016: Table 1.1.A. Net Generation from Renewable Sources: Total (All Sectors), 2006 February 2016. Electric Power Monthly. Independent Statistics and Analysis, U.S. *Energy Information Administration*. Washington, D.C. *URL*
- Ziska, L., A. Crimmins, A. Auclair, S. DeGrasse, J.F. Garofalo, A.S. Khan, I. Loladze, A.A. Pérez de León, A. Showler, J. Thurston, and I. Walls, 2016: Ch. 7: Food Safety, Nutrition, and Distribution. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. U.S. Global Change Research Program, Washington, DC, 189–216. URL



1730 Rhode Island Avenue NW Suite 200 Washington, DC 20036

870 Market Street Suite 428 San Francisco, CA 94102

202.457.1900 ecoAmerica.org ecoAffect.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 bring about and support change in personal and civic choices and behaviors.

#LETSTALKCLIMATE