THE CLIMATE CRISIS AND YOUR HEALTH:

WHAT YOU NEED TO KNOW



INTRODUCTION



Some issues should rise above the clatter of Capitol Hill discord. Like the air we breathe and the water we drink, they are too fundamental to ignore—and too important to get lost amid partisan squabbling. They are concerns at the heart of the <u>universal human rights</u> we all enjoy.

Public health ranks high among them, and it's threatened in critical ways by the climate crisis.

Climate change will continue to exacerbate existing threats to health and give rise to new ones. And while the movement for solutions may seem in the throes of an especially challenging moment, addressing the crisis' impacts on our current and future well-being is not a political issue, but an ethical and practical one.

CLIMATE CRISIS 101

Carbon pollution from burning fossil fuels is driving climate disruption and warming our planet. It's simple: the more carbon pollution in the air, the more the sun's energy gets trapped as heat. Which means things keep getting hotter. These rising global temperatures disrupt natural systems, leading to more and more extreme weather events like severe droughts, flooding, wildfires, and superstorms, alongside numerous other major impacts that will affect the health and well-being of every person on the planet.

Climate change will not wait for us. It is already affecting our health.



According to the <u>World Health Organization</u>, "Climate change is among the greatest health risks of the twenty-first century. Rising temperatures and more extreme weather events cost lives directly, increase transmission and spread of infectious diseases, and undermine the environmental determinants of health, including clean air and water, and sufficient food."

The impact of the climate crisis on human health is far-reaching, but solutions exist that can help us improve quality of life around the world right now and work toward a healthier, more sustainable future for all.

CHILDREN



When the world gets warmer, the results impact real people's lives. It's a truth that too often gets lost amid data points and science jargon, late-breaking news, and heated political handwringing. But we must not let it.

Real people are suffering *right now* because of our changing climate. And some of us are unfairly impacted more than others.

Those with modest incomes. The elderly. And perhaps worst of all, children.

Kids face unique health burdens because of climate change, <u>according to the American Academy of Pediatricians (AAP)</u>, including "the broad effects of weather disasters, exacerbated allergic and asthmatic diseases, food and water insecurity, and heat-related deaths."

"As climate change accelerates," the 67,000 pediatrician-strong organization writes, "children will continue to suffer disproportionately."

Children are in the crosshairs for a few reasons. Their immune systems are still developing, leaving their rapidly growing bodies more sensitive to disease and environmental pollutants. They breathe, eat, and drink more for their size than

adults, spend more time outdoors, and may not be emotionally mature enough to understand some of the things happening around them.

You might say it's a perfect storm.

MATURAL DISASTER AND MENTAL HEALTH

Children are especially vulnerable to both the immediate and long-term impacts of climate-fueled natural disasters.

The imminent threat to children from extreme weather is clear:
They're smaller and less physically capable than adults. They spend more time outside, increasing their exposure to dangerously high heat and more. They often rely on others for decision-making and care, leaving them especially vulnerable during the chaotic aftermath of emergencies like flash flooding.

But they can experience unique mental health concerns too.

THE SAME POLLUTION CAUSING CLIMATE CHANGE AGGRAVATES RESPIRATORY CONCERNS LIKE ASTHMA AND ALLERGIES

Burning fossil fuels pollutes our air directly with irritants like particulate matter and soot. And as greenhouse gases accumulate in the atmosphere and average temperatures rise, they also contribute to higher levels of ground-level ozone that can cause acute and long-term respiratory problems.

Moreover, rising global average temperatures are leading to longer pollen seasons in many places and – when combined with stronger rainfall events, flooding, and higher humidity – create the perfect environment for mold to flourish.

The result? More allergies, asthma attacks, and other respiratory health problems.

Depending on their age and development, children may not have the emotional or cognitive tools to understand climate change and its impacts, leading to extreme distress and other psychological effects, particularly following an extreme weather event.

"The social foundations of children's mental and physical health are threatened by the specter of far-reaching effects of unchecked climate change, including community and global instability, mass migrations, and increased conflict," AAP notes.

MALNUTRITION

At the same time, the very carbon pollution that is driving the climate crisis may itself also be making our food less nutritious, jeopardizing health and wellness outcomes for all people, but especially children, all over the world.

(Read more about how elevated levels of CO2 threaten food security for all below.)

When grown under the CO2 levels expected by 2050, many common crops see reductions of protein and key nutrients like iron and zinc anywhere from 3–17 percent, according to research featured in the journal Nature. And if emissions continue at the current rate, in many countries, the consequences of these nutrient declines could turn dire.

Zinc deficiencies can dramatically impair immune system function, and cause diarrhea, delayed sexual maturation, and eye and skin lesions. Meanwhile, an iron deficiency can lead to muscle weakness, immune system and cognitive problems, and headaches and dizziness. It can also result in anemia.

As for protein: "Few nutrients are as important as protein," <u>Healthline explains</u>. "Protein is the building block of your muscles, skin, enzymes, and hormones, and it plays an essential role in all body tissues... Protein deficiency can affect almost all aspects of body function."

The importance of a diverse, nutrient-rich diet to the healthy development of children cannot be overstated.

ELEVATED RISK OF DISEASE

As mentioned, children's still-developing immune systems leave them susceptible to many types of sickness and infection. They simply aren't always able to fend off illnesses that might give a healthy adult far less trouble. And the climate crisis is exacerbating many of these diseases, bringing them to regions they've never previously been or setting up the conditions for them to thrive.

There are two major categories of climate-related disease: water-borne and vector-borne.

Water-borne diseases spread through bacteria and other pathogens in the water we drink or bathe or even play in. They include some of the most widespread and terrible illnesses that people endure. <u>The EPA reports</u> that the incidence of water-borne illnesses, like gastroenteritis and infectious diarrhea, increases when outdoor temperatures rise or immediately following severe storms or floods. That makes a lot of sense when you consider that extreme weather can inundate and lead to a breakdown of sanitation and sewer systems—and that many bacteria flourish in warmer conditions.



Children are especially susceptible to these types of illness. Approximately 1.5 million child deaths per year globally <u>are attributed</u> to infectious diarrhea, with children in developing nations disproportionately affected.

And the same conditions that allow these bacteria to prosper help to foment the other type of climate-related disease. Warm standing water left behind by excessive rainfall or storm surge flooding creates more and more habitats that are friendly to "vectors" like mosquitos and ticks.

As our climate changes, with average temperatures climbing and winters becoming milder and lengthening in many places, the geographic areas hospitable to many vectors may shift or simply grow, changing the scope of disease outbreaks and introducing new illness to places they never previously existed.

That's why diseases like malaria and cholera that were once on the way out are now making a comeback. It's why the Zika virus that threatens babies' brains is reaching more parts of the world. It's why you keep hearing more and more about rapidly growing tick populations and the Lyme disease they bring with them.

These diseases are becoming more common in the developed world, but they're hitting developing nations hardest. Modest-income communities, however, often lack the resources to effectively prevent and treat them. Which means that millions already struggling just to get by are now increasingly struggling to stay healthy.

ADULTS ARE AT RISK FROM CLIMATE-RELATED DISEASE TOO

Changing weather patterns can alter and expand the ranges of many vector-borne diseases, including Lyme disease, malaria, Zika virus, and dengue fever, and create model conditions for water-borne diseases and bacteria to flourish.

The same vector—and water—borne disease that pose a threat to children also endanger the health of grown—ups. The bottom line: Infectious diseases are becoming more prolific in our warming world—and the insidious spread of some illnesses and the uptick in dangerous diagnoses has much to do with the climate crisis.

WATER-RELATED ILLNESSES are caused by waterborne pathogens like bacteria, viruses, and protozoa; toxins produced by certain harmful algae; and chemicals introduced into the environment by humans (think agricultural runoff). We are exposed to them by ingesting or other direct contact with contaminated water, or by eating affected fish and shellfish.

They include: Cholera, typhoid fever, dysentery, and hepatitis A, as well as health problems related to exposure to toxin-producing algae.



VECTOR-BORNE DISEASES are transmitted by "vectors," typically a biting insect like a mosquito, flea, or parasitic arachnid like a tick. Vectors carry infective pathogens like viruses and bacteria, and transmit diseases or parasites from one animal to another.

They include: Lyme disease, malaria, West Nile virus, dengue fever, Zika virus, plague, Rocky Mountain spotted fever, and more.

ENVIRONMENTAL POLLUTION AND NEUROLOGICAL PROBLEMS

The very fossil fuels driving the climate crisis also present *direct* dangers to the health of children.

Most people have heard about "fracking"—the process of hydraulic fracturing used to extract natural gas. But most people haven't heard about the dangerous chemicals like benzene that fracking companies pump right into the earth to get the gas.

Learn more: 3 Big Myths About Natural Gas and Our Climate

"Given the profound sensitivity of the developing brain and the central nervous system, it is very reasonable to conclude that young children who experience frequent exposure to these pollutants are at particularly high risk for chronic neurological problems and disease," the Center for Environmental Health's Ellen Webb, a researcher on the neurological and neurodevelopmental effects of chemicals linked to unconventional oil and gas operations, told The Guardian.

And that's just the start. The carbon dioxide driving climate change isn't the only pollutant billowing from power plant smokestacks around the world. Lead. Sulfur dioxide. Ozone. You name it. Exposure to these pollutants can be particularly damaging to both pregnant women and very young children.

When pregnant moms breathe in or drink down these often-invisible chemicals, it goes right to their babies—at a time when they're at their most vulnerable. And the danger doesn't end once they're out of the womb. The most critical time for brain development for children happens through the first six years of their lives.

Studies show links between fossil fuel pollution and neurological impacts no parent wants for their child. If you don't want to take our word for it, take the <u>National Institutes of Health's</u>:

"By impairing children's health, ability to learn, and potential to contribute to society, pollution and climate change cause children to become less resilient and the communities they live in to become less equitable. ... Global pediatric health is at a tipping point, with catastrophic consequences in the absence of bold action."



It's clear that the impacts of the climate crisis could have unique, serious, and potentially alarming repercussions for the health of children all over the world—and in turn, the very future of our planet.

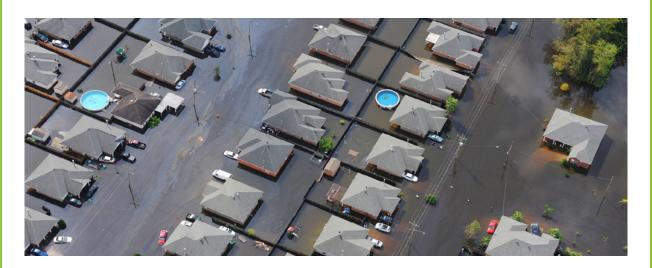
"Given this knowledge, failure to take prompt, substantive action would be an act of injustice to all children," <u>AAP concludes</u>. "A paradigm shift in production and consumption of energy is both a necessity and an opportunity for major innovation, job creation, and significant, immediate associated health benefits."

We couldn't agree more.

DROUGHT, FLOODING, HEATWAVES, AND OTHER CLIMATE-RELATED EXTREME WEATHER EVENTS CAN HAVE FATAL CONSEQUENCES.

What's the connection between extreme weather and public health? Beyond the tragic fatalities that can result directly, extreme weather events can damage infrastructure, jeopardizing access to lifesaving care for extended periods of time, and can compromise water quality and food supplies.

With more heat energy in the oceans and trapped in the atmosphere thanks to climate change, particularly powerful **hurricanes** are becoming both more likely and more dangerous. That danger takes many forms: winds are getting stronger, rains associated with them are becoming exponentially heavier, and storm surges are higher and moving further inland.



Drought and **flooding** events can make drinking water vulnerable to contamination, leading to increases in incidents of water-borne infections and diseases like cholera, and can ruin agriculture, resulting in hunger when damaged farms fail to provide enough crops for the people who rely on them.

At the same time, in places like the American West, the climate crisis creates the perfect conditions for extreme **wildfire** seasons. The reasons why are pretty simple science: Warm weather is arriving earlier and earlier and lasting longer. It goes to figure that snowpacks are melting earlier, leaving less water available during the heat of the summer. Precipitation patterns are also changing. The result? Parching of the land and die-off of plant life.



All these dead and dried-out plants then act as tinder, igniting when the heat soars and lightning strikes or a careless cigarette butt is tossed in the wrong direction. And, with less predictable rains, and seemingly more unpredictable wildfire behavior, once fires begin, it's harder to stop them.

In addition to the lives and homes lost to these climate tragedies, major wildfires also dramatically diminish the quality of one of the most important things to health on earth—the air we breathe—often hundreds of miles away from the fire itself.

Which brings us to the deadliest climate impact of all: **extreme heat**. Of all the types of extreme weather, heatwaves may be the most obvious one to connect to climate change and, well, a warming world. As humans burn more and more fossil fuels, we're releasing heat-trapping gases like carbon dioxide into our atmosphere. As a result, we're seeing more and more warmer-than-average years and more frequent extreme heat events.

Extreme heat is more deadly than any other weather-related hazard—on average causing more deaths annually than tornadoes, floods, or hurricanes in the United States. And heatwaves are becoming more and more common as climate change transforms our world.

FOOD AND WATER SECURITY

Everybody knows that a healthy diet rich in fruits, green vegetables, nuts, and whole grains is one of the keys to living a long and happy life.

We also know that <u>climate change is a major threat to agriculture</u>.

In any given place, normal, long-established climatic patterns dictate the types of food we can grow, as well as when, where, and how we grow them. But as global temperatures rise, weather patterns shift, and precipitation becomes more unpredictable because of the climate crisis, farmers are struggling to keep up.

And unless we take action now to fight back, it's a struggle they could lose—to the detriment of every single person on the planet.

And in the very near future, there will be a whole lot more of us.

"The world population is expected to grow to almost 10 billion by 2050. With 3.4 billion more mouths to feed...global demand for food could increase by between 59 and 98 percent," according to Columbia University. "This means that agriculture around the world needs to step up production and increase yields.

"But scientists say that the impacts of climate change—higher temperatures, extreme weather, drought, increasing levels of carbon dioxide, and sea level rise—threaten to decrease the quantity and jeopardize the quality of our food supplies."

Put plainly, these changes could transform the planet in ways that undermine its capacity to support a large and thriving human population. The stakes don't get much higher than that.

SHIFTING BREAD BASKETS

A "bread basket" is a region that produces a large amount of the cereal grains (think wheat, corn, rice, oats, etc.) that are critical to the daily survival of billions of people. Cereal grains are <u>staple crops</u>—eaten routinely, often daily, and in such quantities that they can make up a substantial portion of a person's standard diet, supplying them with energy and nutrients.



Some well-known breadbaskets include the American prairies, Ukraine in Europe, vast swaths of Southeast Asia, and southern Brazil.

But "[as] temperatures rise, the best growing conditions for many crops are moving away from the tropics, and from lower lying land to cooler climbs," <u>Bloomberg reports</u>. "The US corn belt stretching from Ohio to the Dakotas is edging toward the border with Canada."

And while "shifting breadbaskets" doesn't necessarily always mean "empty breadbaskets," at least in the relative near-term, the reasons crops are moving away from the places they've long grown are part of a larger trend threatening the long-term sustainability of our food systems—and perhaps even our national security.

"You see guys now in Canada growing more corn, which was almost unheard of some time ago, growing soy beans," agriculture journalist and author Chris Clayton told Climate Reality for our e-book on soil health and the climate crisis.

"And when that year hits where food production in two or three bread baskets around the world is short a little bit—10 percent here, 15 percent there—the risk of political instability becomes huge."

FRESH WATER AND THE CLIMATE CRISIS

Climate change is fundamentally altering the water cycle around the world. Less stable precipitation together with increased heat is causing more-frequent, often more-severe drought in many places, drying up rivers, reservoirs, and wells.

But full-on drought is not the only climate-exacerbated threat to drinking water supplies.

As the glacial meltwater and high-elevation snowmelt that constitute the headwaters of many rivers diminishes because of warming and lessening annual precipitation and/or as seasonal distribution of precipitation changes, entire river systems can suffer. The result: less fresh water filling lakes and reservoirs.

And as seen in the aftermath of Hurricanes like Harvey, Irma, and Maria, the damage done to drinking water reserves by tremendous rainfall and storm surge events can linger long after the floodwaters recede.

"Harvey flooded or damaged more than 50 oil refineries and chemical plants, dumping a year's worth of pollutants into Texas within a matter of weeks," according to Vox. In Florida, the New Republic reports, "more than 28 million gallons of treated and untreated sewage [were] released in 22 counties" due to flooding and power outages from Hurricane Irma.



This runoff can compromise the availability of fresh water, as the pollutants drain into nearby waterways.

In coastal areas, sea-level rise more generally may lead to increased groundwater salinization as the salty sea floods further inland. This could threaten the availability of fresh water up and down coasts all around the world.

LOWER CROP YIELDS, RISING PRICES, AND UNREST

In our warming world, the circumstances Clayton describes are becoming increasingly more likely. Indeed, in some places, they are already in motion.

"Eighty percent of the world's crops are rain-fed, so most farmers depend on the predictable weather agriculture has adapted to in order to produce their crops," Columbia writes. "However, climate change is altering rainfall patterns around the world."

Free Download: <u>Climate Change and the Water Cycle: Four Big</u> Questions Answered

The amount of water a plant needs to flourish varies from species to species—and plants that have thrived in one area for thousands of years can be imperiled by even seemingly minor decreases in rainfall. On the other end of the spectrum, more rainfall isn't always good for plant life—even if water is not collecting on the surface, soil can become over-saturated, and plants will drown.

These concerns multiply when changes in precipitation are coupled with rising temperatures.

If we keep burning fossil fuels without making any real efforts to cut emissions, we could see average surface temperatures on Earth warm by more than 4 degrees Celsius (7.2 degrees Fahrenheit) by the end of this century. This would devastate agriculture in many places around the world.

Without effective climate mitigation, "each degree-Celsius increase in global mean temperature would, on average, reduce global yields of wheat by 6 percent, rice by 3.2 percent, maize by 7.4 percent, and soybean by 3.1 percent," according to four independent estimates compiled and published in the <u>Proceedings of the National Academy of Sciences</u>.

Approximately two-thirds of human caloric intake globally <u>are provided</u> by wheat, rice, maize, and soybeans. These crops are utterly central to the health and wellbeing of billions of people—and their futures are imperiled at a time of major global population growth.

These precipitous drops in staple crop yield are unlikely to happen suddenly or all at once, but as they escalate, it makes easy sense that they'll translate into

ever-higher prices at the supermarket. It's simple supply and demand: When something is needed or wanted by many, it often costs more—particularly if it's in short supply.

Rising food prices are a burden—sometimes a very serious one—to families everywhere, but as Clayton mentions above, **diminished food supplies and the resultant rising prices of staples like rice or wheat can also quickly escalate to violent unrest**, which is itself a threat to human health and safety.



"Food supply shocks and surging prices have the power to displace people and destabilize governments," <u>Bloomberg writes</u>.

And you need look no further than Syria for an example of how agricultural issues exacerbated by the climate crisis can quickly spiral into a truly devastating conflict.

In Syria, a major climate-related long-term drought—said to be the Middle Eastern nation's worst in 900 years—and attendant agricultural shortages were an "important driver of the initial unrest" that contributed to the destabilization of the country as it descended into what would become a nightmarish civil war.

Circumstances like these are unlikely to remain quarantined to only a handful of places for long, in large part because of how most of us get our hands on the food we eat.

"Because food is a globally traded commodity today, climate events in one region could raise prices and cause shortages across the globe," <u>Columbia University notes</u>. "Starting in 2006, drought in major wheat producing countries was a key factor in a dramatic spike in food prices. Many countries experienced food riots and political unrest."

NUTRIENT DEFICIENCY

As we touched upon earlier, the same carbon pollution that is driving these trends all over the globe may itself also be having an impact we are only just now beginning to understand. Recent research points to a disturbing trend—increased levels of CO2 in the atmosphere may be making our food less nutritious.

These concerns are particularly acute in some of the most vulnerable parts of the world.

"The results [of the study], which cover 151 countries, reveal that it is countries in north Africa, south and south-east Asia, and the Middle East that are likely to be among the hardest hit—together with some nations in sub-Saharan Africa," <u>The Guardian reports</u>. "In India, it is estimated that by 2050 about 50 million more people will be zinc deficient, and 38 million more protein deficient. With quality of diet linked to income, the researchers say the poorest in such countries are most likely to be at risk."

While this area of research is relatively new, scientists hypothesize that increased atmospheric CO2 speeds up photosynthesis, the process that helps plants transform sunlight to food. This makes plants grow faster, but in so doing they pack in more carbohydrates like glucose at the expense of other essential nutrients human beings (and other animals, right down the food chain) depend on.

Some have gone so far as to call this the "junk-food effect."

It's clear that the climate crisis poses a very real threat to food security across the globe. If no action is taken, millions—perhaps billions—of people are at risk of malnutrition as staple crops and other fruits and vegetables become harder to grow, more expensive, and less nutritious.

But it doesn't have to be this way.

THE HEALTH CARE COST OF CLIMATE CHANGE

According to the World Bank, "The economic impact of climate change on health is striking."

Though it's a challenge to assign definitive costs to climate change's future effect on public health because the crisis' environmental and societal factors are many and variable, in the near-term, the Bank notes the *direct* costs from damage to health due to climate change <u>could reach</u> \$2-\$4 billion per year by 2030.



Those numbers <u>exclude</u> "costs in health-determining sectors such as agriculture, water, and sanitation," which means it doesn't take into account <u>most</u> of the major health impacts we've mentioned throughout this e-book.

This much is clear: when it comes to the broader financial burden of the climate crisis on health, a lot depends on how you look at it.

Once some of those so-called "indirect" health outcomes start being accounted for, the numbers become truly staggering. As just a few examples of many, according to the Fourth National Climate Assessment (2018), in the US alone:

• Under a high-emissions scenario, by 2090, nearly two billion labor hours could be lost annually to the health consequences of extreme temperatures, costing an estimated \$160 billion in lost wages per year.

- Annual cases of West Nile are likely to more than double by 2050 due largely to rising temperatures. The result? About \$1 billion per year in hospitalization costs and premature deaths.
- By the end of the century, an additional 3,300 West Nile cases and \$3.3 billion in costs are projected annually. (Yes, we're talking about West Nile alone here.)

Meanwhile, in 2010, the <u>Organisation for Economic Co-operation and</u> <u>Development (OECD)</u> placed the cost of air pollution-related disease on lost economic output at \$1.7 trillion annually in OECD countries—with \$1.4 trillion of that from China alone and another \$500 billion from India.

The cost of other future climate-exacerbated health impacts are impossible to even speculate about. We can't know the cost of a hurricane until it happens – or how many survivors will walk away from it with a vector- or water-borne disease they may not have acquired had the storm not been supercharged by warmer-than-ever ocean waters. It's not until well after a major wildfire ends that we know how many people were sent to the hospital after breathing its dangerous smoke.

The same can be said for future heat waves and droughts, for lost crops and bone-dry reservoirs, right on down the line.



MENTAL HEALTH

Surviving a dangerous major hurricane, deadly flood, or other extreme weather event and living with the damage it leaves behind can take a very real toll on a person's mental well-being. But all too often, these serious health impacts lurk unseen and ignored in the shadows of easier-to-understand conditions—or they're swept under the rug entirely and forgotten.

"People coping with severe weather conditions can experience serious mental health symptoms, including post-traumatic stress, depression, and anxiety," the Union of Concerned Scientists writes. "Research suggests that between 25 and 50 percent of all people exposed to an extreme weather disaster may have some adverse mental health effects, the degree of severity depending on a number of things, including the person's age, coping capacity, and proximity to the devastation."

As just one example among many, consider Puerto Rico in the aftermath of devastating Hurricane Maria. Thousands were displaced, and across the territory, tens of thousands were left without power and clean water for months. <u>Reports</u> put the storm's death toll at more than 1,400.

In the long, chaotic wake of the storm, calls from desperate residents to suicide prevention hotlines <u>doubled</u> and suicide rates "<u>reached a new high after years</u> <u>of steady drops</u>." By the close of 2017, just five months after the hurricane, the island's suicide rate had increased 29 percent compared to the previous year.

Also of note when discussing mental health and the climate crisis: when populations are forced to relocate following an environmental disaster, they can suffer from "acculturation stress." This is the psychological impact of the significant and long-lasting stressors many migrants experience as they adapt to and/or adopt a new culture.

With migration driven by the climate crisis <u>already on the rise</u>, and as many as 143 million <u>likely to be displaced</u> by 2050 by its impacts across Sub-Saharan Africa, South Asia, and Latin America alone, this added source of mental anguish should not be overlooked.

WHERE DO WE GO FROM HERE?

This much is clear: Alternative facts and denial won't cure life-threatening diseases or stop them from spreading faster than ever as the crisis continues. But together, real climate scientists, medical professionals, and those of us elevating their voices will.

Fighting the climate crisis means fighting for the health and well—being of every person on the planet today—as well as those who will join us in the future.

SO, HOW CAN YOU FIGHT THE CLIMATE CRISIS NOW?

If you're in the United States, <u>you can join a Climate Reality chapter</u> in your community, or take the next step and become a trained <u>Climate Reality Leader</u>.

Across the country, everyday Americans are joining <u>Climate Reality chapters</u> and working together for practical climate solutions in communities from sea to shining sea.



These friends, neighbors, and colleagues are bringing clean energy to their towns, fighting fracking developments, supporting carbon pricing legislation, and so much more. Most of all, they're making a real difference for our climate when it matters—and you can too.

And if you're ready to take your devotion to a safer, healthier, more sustainable tomorrow even further, our <u>Climate Reality Leadership Corps</u> is the place for you.

At a training, individuals ready to make a difference in our planet's future spend three days working with former Vice President Al Gore and world-renowned scientists and communicators learning about the climate crisis and how together we can solve it.

<u>Join us</u> and gain the skills, knowledge, and network to shape public opinion, influence policy, and inspire your community to act at this critical time.

We have a responsibility to the people we love to solve the climate crisis and protect public health and wellness for generations to come.

We can be the generation that took on the greatest challenge humanity's ever faced—and won.



Founded and chaired by former US Vice President and Nobel Laureate Al Gore, The Climate Reality Project is dedicated to catalyzing a global solution to the climate crisis by making urgent action a necessity across every level of society.

Today, climate change is standing in the way of a healthy tomorrow for all of us. But we know that practical solutions are right in front of us. We can create a healthy, sustainable, and prosperous future by making a planet-wide shift from dirty fossil fuels to clean, reliable, and affordable renewable energy. At Climate Reality, we combine digital media initiatives, global organizing events, and peer-to-peer outreach programs to share this good news with citizens everywhere and build overwhelming popular support for policies that accelerate the global transition to a clean energy economy.

To learn more, visit www.climaterealityproject.org.