



## Talk Climate: Medical Professionals Handout

### Start Right Where You Are

How can we as medical professionals share and discuss climate information in age-appropriate ways that are honest about the urgency of the climate era, while also being sensitive to the discomfort that comes with this knowledge? When we discuss the science and impacts of climate change with our patients or public audiences, it can be deeply concerning to kids and grown-ups alike. Grief, anger, anxiety, and feelings of helplessness are natural responses to learning distressing information—and on such a wide scale. How we present the material, especially if we focus on purpose and empowerment, has a huge impact on how it lands for our patients and the public. We can share climate information with honesty and in ways that leave people feeling empowered and capable to face the challenges of the climate era.

If we were taught about climate science at all, many of us were probably given “just the science.” This is akin to us presenting a patient with test results (only the science) and then failing to share ideas about healing, lifestyle, and treatment. In fact, as healthcare professionals, we are already well-versed in the need to go beyond the science and share the tools necessary to heal and repair. Given our professional strengths, we can empower ourselves and our patients, audiences, young people, students, and adults alike, for individual and collective actions to address and soften the landing into the new climate era.

*In the face of climate change, hope only comes in the form of action. ~ [Jamie Margolin](#), age 17, founder of the youth climate organization, Zero Hour; Author of [Youth to Power](#)*

*Politeness no longer makes sense and inaction is now negligent. Children are rising up to protect the future. We must now take direct action with them. ~ Dr. Bing Jones, retired haematologist*

### Take and Encourage Action

Sharing climate stories, especially when they are specific and connect with your patients or audience, is a significant way to exchange information and relate it to what people care about. Learn about the ways that climate change affects the health of your patients and your community and what is being done individually and collectively. Your own involvement on climate is going to depend on how you choose to use your available resources to make change at this crucial time.. This includes your voice, time, energy, social positioning, creativity, and/or financial support, in order to make individual and collective changes. Introduce this important subject into consultations and patient handouts, not as your own agenda but as an imminent concern to all.

*Start from the heart. Start by talking about why it matters to us, to begin with genuinely shared values. Are we both parents? Do we live in the same community? Do we enjoy the same outdoor activities: hiking, biking, fishing, even hunting? Do we care about the economy or national security?*  
~ [Katharine Hayhoe, PhD](#), Professor, Director of the Climate Center

Taking climate action as a community decreases isolation and increases connection and support. There are a number of organizations where you can be involved professionally, as well as many you can point your patients to explore. Some examples, both locally and internationally: [Physicians for Social Responsibility](#), [Front and Centered](#), the [Sunrise Movement](#), [Got Green](#), [Futurewise](#), [350.org](#), [March for Science](#), [Union of Concerned Scientists](#), [500 Women Scientists](#), [Fridays for Future](#), [Parents for Future](#), [Extinction Rebellion](#), [Climate Action Families](#), and many organizations in which you and your audience are already involved.

### **Climate Justice**

Climate change affects people in front line communities who are already vulnerable today, and future generations who cannot yet speak for themselves. The richest 0.54% (~42 million people) in the world emit more emissions of greenhouse gases than the poorest half of the global population (~3.6 billion). It is the wealthiest countries, corporations, and people in the world whose actions are causing climate change through high consumption lifestyles, and those who live in the Global South, and Black, Indigenous, and Latinx communities, who suffer most from the impacts. Sea level rise, ocean acidification, and global warming are exacerbating air pollution, heatwaves, disease spread, hurricanes, fires, flooding, drought, food insecurity, mass extinction, and [driving climate migration](#).

Climate change affects people in front-line communities who are already vulnerable today, as well as future generations who cannot yet speak for themselves. The richest 0.54% (~42 million people) emit more emissions of greenhouse gases than the poorest half of the global population (~3.6 billion). It is the richest people in the world whose actions are causing climate change through high consumption lifestyles, and the poorest who are suffering and dying from the impacts. Sea level rise, ocean acidification, and global warming are exacerbating disease, air pollution, hurricanes, fires, flooding, drought, food insecurity, mass species extinction, and they are creating climate refugees.

*We have to stop investing in something that is a thing of the past, and is actually subsidizing health harms... Climate change and air pollution have the same root cause — the burning of fossil fuels.  
~ Dr. Renee Salas, emergency room physician, Massachusetts General Hospital (NPR 2020)*

Climate and environmental justice entails dismantling systems of oppression using a care and repair approach, with environmental reparations and an equitable sharing of resources at its foundation. Below are examples of where issues about health, climate, justice, and equity intersect:

- Fossil fuels burned in our cars, airplanes, ships, buildings, and homes are responsible for [1 in 5 deaths](#), with most of the death in China (3.9 million), India (2.5 million), and parts of the US, Europe and Southeast Asia, according to a recent [Harvard study](#). Even small children aged 0-4 are impacted with 876 deaths in North America, 747 in South America and 605 in Europe.
- Healthcare is responsible for [10% of all US carbon emissions](#), and 9% of the harmful non-greenhouse air pollutants. Health impacts of burning medical waste perpetuates environmental racism, as incineration sites are often located near low income communities.
- West Coast Wildfire Smoke disproportionately impacts the housing insecure, elderly, very young, and those with compromised respiratory and cardiovascular health. Community care and repair is exemplified by [mutual aid efforts](#) by community groups such as Got Green and The Station Cafe, in Seattle, Washington, responding to community need for box fan air filters and HEPA filters during fire smoke events.

- Fossil fuels in the Home: Children who live in homes that use methane (“natural” gas), show a [42% increase in asthma symptoms](#), and a 32% increased risk of having current and [lifetime asthma](#). This is in addition to already [elevated incidence rates of asthma](#) for children in low-income, Indigenous, Latinx, and Black communities growing up in close proximity to fossil fuel infrastructure and freeways due to heightened exposure to toxic particulates such as PM2.5 and benzene. [Other health effects](#) from PM 2.5 include cardiovascular effects and cancer.
- Urban heat island effect: Temperatures in cities vary greatly depending on the amount of tree cover and greenspaces in a neighborhood. The [hottest parts](#) of cities are historically [redlined neighborhoods](#) where discriminatory practices by homeowners associations, banks and insurance companies limited the purchase of homes by Black, Indigenous, Asian and Jewish people. For instance, days over 90F in [Seattle](#) have more than doubled since the 1940s. The number of days over 90F increased from an average of 3 days per year, to over 6 days per year. Those living in redlined neighborhoods are most impacted by these increased summertime heat and urban heat island effects.

*We know that air pollution from fossil fuels has already damaged the health of generations of Americans. It's unnecessary and unacceptable, and we can do better.*

*~ Dr. Jeremy Hess, associate professor of emergency medicine, environmental health, and global health at University of Washington, author of the 2019 [Lancet Countdown Global Report and U.S. Policy Brief](#).*

### **Healthcare Givers Can Lay a Foundation to Talk Climate with Young People**

Let's be honest, talking about climate change with young people can feel downright scary and uncertain, especially if we've never done it before. Worry that we will terrify children can stop us in our tracks. The belief that we aren't expert “enough” can leave us feeling ill-equipped in even bringing up the topic or answering basic questions. These experiences are normal, even among professionals whose job it is to safeguard and research the health of our children. But the reality is that young people are going to hear about climate change sooner rather than later. Talking about it in a developmentally guided way helps build a strong foundation for them to weather the uncertainty and adversity of a changing world.

Medical professionals are also caregivers, teachers, parents, grandparents, aunts, uncles, and mentors of children in our practices, or within our family or community. With our scientific and medical training, we are uniquely equipped to navigate climate conversations. Young people need us to help them understand how their climate is changing. It's especially important that we also equip them with tools to advocate for a stable and healthy society, planet, and climate.

### **Respond with Developmental Attunement**

**Preschoolers** are developmentally falling in love with the natural world and understanding their connection to it. This is a time to build awareness of ecosystems and connections between them, and all of us. Participate in activities such as tree plantings or park clean-ups, which emphasize the message that earth is our shared home that we love and care for.

**Elementary-aged** kids are learning cause and effect alongside basic science. Around age 7, focus on how actions can make a difference. Invite kids' natural problem solving abilities into making greener decisions and traditions at home, school and in community, such as gardening, camps, and clubs. Avoid messages that may elicit hopelessness, as research



shows this can foster anxiety and fear of the natural world. Use art, music, and storytelling to help kids imagine and create a healthier and more just world.

**Tweens and teens** are generally concerned with the world outside of home and are exercising independence. Adults can help them build on their innate desire to lead and take action. Teens and tweens are at a natural developmental stage to become independent leaders and drive their own climate actions with the support of adults in their lives. Our role as adults is to find supportive ways to say “yes” and to empower their ideas and projects. Young people are motivated by peer social interactions and often find satisfaction engaging in projects and activities in which they can make a difference together. Actions can include joining or starting a youth climate action organization with friends and peers such as: Sunrise, Fridays for Future, or Zero Hour. Other actions include creating art, music, or stories with a climate or justice theme.

While engaging in climate action is often a [protective factor](#) for mental well-being, [adolescents](#) appear to be more vulnerable to climate related anxiety, depression, and suicidality than younger children. Adults need to help connect teens who are exhibiting concerning changes in mood, behavior, or functioning to mental health supports. If you think a teen is at-risk, look for [warning signs](#) of teen suicide and seek immediate [help](#). That said, building a healthy, adaptive relationship with the facts of our changing climate has become an essential skill to grow into adulthood in the climate era. Our responsibility as adults is to support the next generations stay informed while also processing the forms of grief that comes with knowing the facts and experiencing climate change.

### **ACTIONS speak louder than words**

In order to make the necessary systemic changes to soften the impacts of climate change and protect our future, we need everyone to actively work toward shifting culture. Cultural change comes from engaging in frequent conversations, education, advocacy, actions, and activism. Here are a few impactful ways you can contribute to collective action to address climate.

1. **Talk Climate!** Nurses and medical doctors are the [most trusted](#) of all professionals. Research shows that talking about climate change within our sphere of influence, including with our patients, colleagues at work, and with family, friends, and in our neighborhoods and communities, is the most important thing we can do to promote climate action.
2. **Climate Justice!** Elevate and participate in groups addressing systemic injustice, including racial, economic, and housing. The people least responsible for climate change are also those who feel its impacts first and worst. Addressing long-standing systems of injustice are critical for getting to the root causes of climate change and helping those experiencing impacts today. As Ugandan activist Vanessa Nakate said, “We cannot achieve climate justice without racial justice.”
3. **System Change!** It is systemic change that will ultimately allow us to address the climate crisis. Individual actions are needed too: our choices have a ripple effect within our social circles, which shifts culture to effect the systemic changes needed to address the climate crisis. The voices and images of medical professionals carry great weight in the media, in public forums, and with policymakers.



4. **Empower Yourself and Young People!** Voice your climate concerns and ask for the specific changes you want from those in power. Research shows young people are influential in shifting the adults in their lives' views on climate. Involve and support students and young people in community and civic action, and in developing relationships with politicians and decision makers.
  
5. **Protect and Restore Nature!** Participate in projects and programs that repair and bring improvements in health to people and the planet. These can include community tree plantings, tree preservation, removal of invasive species, and garbage pickup events. Join a citizen scientist group to collect information aimed at improving the health of communities, land, air, and water. Participate in or donate to food justice projects such as community gardens, food forests, and community-led farms. Encourage your town or city to adopt a school garden program and landscape practices that include native species or plants that can adapt to your changing climate (such as drought-tolerant, fire-resistant, heat-tolerant, pollution-tolerant plants and trees). If you have a lawn, explore ways to make it more climate-friendly such as: adding a vegetable garden or fruit trees; adding plants that support birds, bees, and butterflies; or installing a rain garden to protect waterways from pollutant runoff.
  
6. **Individual Choices Ripple Out to System Change**
  - Reduce gas fueled transportation including air and auto travel
    - Take a train or road trip instead of flying - explore your region
    - Make your next car 100% electric, and push for electric public transport
    - Bicycle, and advocate for more protected bike lanes, trails, and walkable neighborhoods
  - Adopt a planet friendly diet
    - Eat local and organic as much as possible, and ask your school or work to offer organic and local options
    - Reduce or stop eating meat and dairy, and ask your school or workplace to offer more dairy-free and meat-free protein options
    - Start a garden or join a community garden
  - Reduce food waste
    - Plan meals and get creative with leftovers
    - Groups like Buy Nothing can connect you with neighbors to share extra food
    - Ask your city to offer composting service, or compost in your yard or community garden
  - Shift to renewable power and electric appliances
    - The most energy-efficient cooking is electric induction
    - Electric heat pumps are most efficient for heating and air conditioning
    - Solar has dropped in price by more than half in a decade. Ask your city or state to build solar and wind energy that everyone can benefit from, and if you can afford to, install solar on your roof.

This Handout was created Feb 27, 2021 by:  
Heather Price, PhD  
Ian Slade, MD  
Megan Slade, MA, LMHC  
Daniel Masler, PsyD, MLIS  
Diana Gergel, PhD

