

**Written Testimony of Gina McCarthy, Natural Resources Defense Council,
Before the House Select Committee on the Climate Crisis**

***Hearing on: Creating a Climate Resilient America: Overcoming the Health Risks of the Climate
Crisis***

February 5, 2020

Thank you to Chairwoman Castor, Ranking Member Graves, and members of the select committee for holding this hearing. Our climate crisis continues to hurt our economy, threaten our national security, and harm public health. That's what I want to focus on today — how climate change is making people sick, what government should do about it, and the policies we need, not only protect and improve public health, but create a brighter future for all Americans.

I have three children, Daniel, Maggie, and Julie. I'm also lucky enough to have two grandkids to love and cherish. I cannot help but think that they will only be 32 and 31 years old in 2050 — the year when science tells us we must achieve a zero-carbon economy, if we hope to keep pollution to levels that avoid the most destructive impacts of climate change. Before these children were born, 2050 seemed far away; but not anymore. I remember the first time that my child was handed to me right after I gave birth. I looked at my son Daniel and at first glance fell impossibly in love with him. But in some ways, I was terrified, too. From that moment forward, my future and my happiness was no longer about me, they were dependent on the health and happiness of my son, my daughters — and now, my grandchildren. It was my responsibility to protect them as best I could and it's why I keep fighting today. That's what climate change is about. It's that personal.

I spent 4 years running the Environmental Protection Agency. It was the honor of my lifetime to work alongside such smart, hardworking and committed career staff. EPA's mission is to protect public health — and its success is measured in human lives saved, fewer kids with asthma attacks, and how well we protect those most vulnerable from harm.

Climate change came under our purview because, at its core, this is an issue of pollution and public health. This is an issue of protecting people, not just the planet for the planet's sake.

I also worked for six governors prior to working for President Obama. Five of them were Republicans. None of them told me I should make sure to deliver contaminated water to their house. None of them told me they wanted their grandchildren to breathe dirty air. None of them told me to ignore the vastly unfair pollution concentration in communities of color.

Pollution, including carbon pollution that fuels climate change, is not — and should not be — a partisan issue.

But I recently made the shift after 35 years in government to take the helm of one of the premier environmental advocacy organizations in the world, the Natural Resources Defense Council. I never once questioned whether any work other than public service could be more productive, fulfilling, or important. I went to NRDC because they do the necessary work of lifting up stories and delivering the scientific analysis that clearly shows the connection between climate change and health. The risks are real — families are facing harm and decision makers with the power to act need to continually and loudly be shown the truth.

I joined NRDC because we must rebuild our long-standing public health protections, resuscitate our efforts to combat climate change, and restore science as the foundation of sound public policy. We must end the destruction of cost-effective laws and regulations like the Mercury and Air Toxics Standards and the Clean Car Rules; and we must end the marginalization of career professionals, scientists, and experts through relocations and reassignments.

I'm here to preserve, protect, and defend our irreplaceable natural resources, our precious wildlife, and the biodiversity we all depend on — a sacred obligation that historically has enjoyed strong bipartisan support.

The era of willful ignorance and flat-out denial of our climate crisis must end. It's an urgent challenge intensifying by the hour; we must work to change the way we fuel the world's economies.

I am here to talk about why climate change is the most significant public health challenge in the world today, but also why it can be the most important public health opportunity of our lifetime. I want us to stop focusing on what we are trying to avoid, and instead build the future we want to see. I want us to stop just explaining why we must run from pollution and devastation and start talking about investing in the kind of future we need, a future that is clean, healthy, more just, more sustainable, and no longer reliant on fossil fuels.

Building a climate-resilient America means real investments — investments that recognize the steep health costs of inaction. It means recognizing that pollution kills, and that it is *not* an equal opportunity killer. It disproportionately poisons our children and the elderly, the poor and the powerless, and communities of color.

While we could spend this entire hearing on the vast and complex health harms fueled by climate disruption; today, I'll spend time briefly detailing a few major areas of concern.

Climate-fueled disasters and rising temperatures are already making people sick. In just the last few years, wildfire smoke has choked major cities in the West. Record drought has starved farming communities of safe drinking water. And hurricanes in the Southeast have contributed to a growing mental health crisis tied to increased suicide.¹ *The Lancet* Countdown on health and climate change, an annual snapshot developed by 35 academic institutions around the world, reports that losses in crop yield, increases in water-borne disease, and lethal weather events will profoundly affect “the life of every child born today.” The authors write: “Without accelerated intervention, this new era will come to define the health of people at every stage of their lives.”

Climate change is worsening air pollution. Roughly 80 percent of our country’s climate-warming pollution, and most of the other air pollution that causes or exacerbates heart and lung diseases, comes from burning coal, oil, and natural gas. One of the many harmful byproducts of fossil fuels are small particles called PM2.5. In 2016, PM2.5 contributed to the early deaths of more than 64,000 Americans. These types of environmental health risks widened inequality. Communities of color living closest to power plants, oil and gas operations, and busy roads bore the heaviest burden of this pollution.² In 2015, African American children were 4 times more likely to go to the hospital for asthma and 10 times more likely to die from asthma than non-Hispanic white children.³ The first few rungs of any ladder of opportunity are clean air to breathe and clean water to drink. The government's job and this body’s focus, is to act to protect people from pollution and balance the scales for those most impacted.

Climate change is increasing the intensity and frequency of dangerously hot days. Heat waves have gotten worse in 61 percent of major Southeast cities, including Birmingham and New Orleans, to name a few.⁴ Extremely hot days aren’t just an inconvenience: they lead to brain and kidney damage, premature births, heart attacks, and stroke. Research from the Harvard T.H. Chan School of Public Health shows we're seeing heat impact health, cognitive function, reaction time, impulsivity, aggression, and violence. In Boston and across cities in the U.S. there are significant increases in police and fire department calls on hot days related to medical emergencies, violent and aggressive crimes, and accidents. Outdoor workers and professionals, including members of our military, are vulnerable to heat-related illnesses. Take a moment to picture where many of our military bases are located at home and abroad. Then think about all

¹ <https://www.vox.com/policy-and-politics/2018/3/20/17138990/puerto-rico-hurricane-maria-6-months> and <https://www.usnews.com/news/best-states/north-carolina/articles/2018-11-05/suicide-raises-florence-death-toll-to-41-in-north-carolina>

² <https://www.lancetcountdownus.org/2019-lancet-countdown-us-brief>

³ <https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=15>

⁴ <https://nca2018.globalchange.gov/chapter/19/>

the heavy gear service members carry and the strain from training and fighting. From 2014 to 2018, the rate of heat stroke among active duty members increased 73 percent and the rate of heat exhaustion increased nearly 53 percent. Across the country, extreme heat also led to the loss of approximately 1.1 billion potential work hours from 2000 to 2018—with the largest losses in states like Louisiana, Alabama, Georgia, and Florida.

The health risks associated with climate change - death, illness, disruptions to care from disasters, and lost workdays — carry a steep economic cost. NRDC and the University of California, San Francisco recently teamed up to quantify that cost. If you add up the costs of just 10 climate events in 2012, including wildfires in California, Lyme disease in Michigan, and algal blooms in Florida, among others — you get about \$10 billion in health costs across the United States. And about 65 percent of the illness costs were paid for by Medicare and Medicaid, pointing to the outsized harm of climate change to older adults and low-income people. A recent analysis of Medicaid use in and around Baton Rouge, Louisiana, showed higher numbers of claims and higher costs to the system after catastrophic flooding in 2016. About a third of visits among men and women were for substance abuse and depression-related disorders, respectively. This study echoes the findings of so many others: that severe weather events are a significant threat to our mental health.

Sadly, the story in Baton Rouge is a familiar one across the country. As I said, pollution is not an equal opportunity killer. The imbalance in harm demands we aim for balance in our solutions. Significant amounts of money will need to be spent to stop carbon emissions and to adapt to our changing climate – the longer we take, the higher the cost. A 2019 study by EPA scientists found that proactively adapting roads and rail networks to climate disruption would prevent twice as much damage as reactively adapting.⁵ But how much bang for the buck we get from these investments depends on where we spend it and on what. Are we going to be smart and focus our resources on protecting the people who are *most* vulnerable today, the people who need investment quicker and in larger amounts, the people living in places where people are dying today? If we do, we can build momentum to get us on the path towards a more sustainable and more just future.

I'm proud that NRDC, along with other major environmental groups, has signed onto the Equitable and Just National Climate Platform. The two key principles of the platform are, to enact solutions that address the legacy of pollution, and to make justice and equity a priority in any climate solution.

⁵ <https://www.nature.com/articles/s41558-019-0444-6>

The good news is we have solutions that shift us away from carbon pollution and move us towards clean energy and cleaner communities. We have plenty of opportunities to make real progress, Even if progress is incremental, forward movement matters. It shows what's possible, broadens engagement, and builds hope. People will continue to see the clear benefits of a low carbon future — and will continue to want it, demand it, and run towards it.

So how do we do we create that future? First and foremost, we need to tackle the root cause of climate change: pollution from fossil fuels.

Congress needs to lead in reducing emissions in the U.S. and beyond. It must speak out and respond to the Trump administration's efforts to undermine fuel efficiency standards and clean power regulations, among many other rollbacks, that are taking us in the wrong direction and putting public health at risk.

What we need are policies that get us to net-zero emissions economy-wide by 2050 at the latest. NRDC sees a number of possible paths to achieving this and is eager to work with anyone and everyone in Congress to achieve that goal.

Ramping up energy efficiency, which is essential to decarbonization has been and will continue to be a job creator; the U.S. is home to 2.3 million energy efficiency jobs, employing twice as many workers as the entire fossil fuel industry.⁶ One hundred percent clean energy is within reach, if we keep investing in innovation. The three states leading the country in producing wind power are Texas, Iowa, and Oklahoma. Why? Because it makes clear economic sense: nationally, the cost of solar and wind power dropped more than 25% last year alone.⁷ From 2010⁸ to 2018⁹, wind, solar and geothermal more than tripled its proportion of our national energy mix.

For the transportation sector, the single largest source of carbon emissions, that means a zero emission vehicle market transformation through federal incentives for vehicle purchases and investment in networked charging infrastructure like those found in *H.R. 2256, the Drive America Forward Act* or *S. 674, the Clean Corridors Act*. And it means states working together to protect the California waiver and expand its reach, as well as regional carbon action like the cap and invest strategy that states are employing as part of the Transportation and Climate Initiative (TCI). This kind of transformation to a clean economy will create countless jobs and

⁶ <https://www.nrdc.org/experts/lara-ettenson/energy-efficiency-jobs-soar-now-make-them-available-all>

⁷ <https://www.utilitydive.com/news/renewable-energy-prices-keep-falling-when-do-they-bottom-out/555822/>

⁸ <https://www.eia.gov/electricity/data/state/>

⁹ <https://www.eia.gov/electricity/data/state/>

opportunities. There are already 3.2 million Americans working in clean energy and vehicles right now.

The power sector is the nation's second largest source of carbon pollution, down from being the largest source a decade ago. Why? Because a clean energy transition is already underway. States across the country are seeing the cost *and* health benefits of shifting power generation to cleaner sources. The economically prudent thing to do is also the prudent public health thing to do. But it all needs to happen faster and recognize the hardship for some workers and communities as economic activity shifts to cleaner energy production and delivery. That's why it's essential that inclusive and meaningful transition plans for workers are designed and adopted for those currently employed in highly-polluting sectors, and for communities that have depended on those industries for so long.

Let me give you an example of effective regional action: the Regional Greenhouse Gas Initiative in the Northeast — a multi-state effort to cut carbon pollution from the power sector, which also has reduced other forms of air pollution that I helped design and implement when I was working for the State of Connecticut. RGGI has had a measurable impact on improving health. In the last two decades, the cap and invest program has resulted in billions of dollars in health benefits¹⁰ and is associated with decreased mortality of infants.¹¹ Not to mention, RGGI states continued to grow their economies while cutting carbon pollution nearly in half.

One of the most remarkable things about cleaning up our power plants, our cars, and our factories is that *we don't have to wait for decades* to see results. A recent review by the Forum of International Respiratory Societies found that community members can experience better health just two weeks after significant cuts to nearby sources of pollution. Benefits include fewer premature births, missed school and work days, and deaths from heart and lung problems¹²

As we implement these climate solutions, we also need to rethink how we approach the delivery of health services, how we build and renovate critical infrastructure, and how we prepare for and respond to disasters. An obvious place to start is with our public health system. At its core, public health is about keeping people healthy by preventing harm rather than by treating symptoms. But right now, annual public health spending in the United States amounts to just \$255 per person.¹³ Cash-strapped state and local public health officials simply cannot focus on the climate crisis when they are dealing with issues like the opioid crisis or

¹⁰ <https://fas.org/sgp/crs/misc/R41836.pdf>

¹¹ <https://bmjopen.bmj.com/content/9/4/e024735>

¹² <https://www.atsjournals.org/doi/10.1513/AnnalsATS.201907-538CME>

¹³ <https://www.tfah.org/wp-content/uploads/archive/assets/files/TFAH-2018-InvestInAmericaRpt-FINAL.pdf>

coronavirus. NRDC strongly supports Congressional action to increase funding and capacity for the U.S. Centers for Disease Control's Climate and Health program, which is the only direct federal support for state and local agencies trying to prevent climate-related health harms.

We must also prioritize the climate resilience of our hospitals and other healthcare facilities. Despite recent progress in disaster preparedness, we've seen too many examples of extended disruptions in care delivery, permanent hospital closures, and massive layoffs of healthcare workers. Federal funding for hospitals and other healthcare facilities should be conditioned on climate planning and risk assessments. Babies were literally being born in smoke filled hospitals in Australia, due to the historically devastating climate-charged wildfires that have burned down massive swaths of their country.¹⁴ The United States has roughly 200 federal hospitals that should be put through "climate and health stress tests" to ensure they can maintain essential services in a hotter and wilder world.

One piece of legislation that would address both areas is the Climate Change Health Protection and Promotion Act of 2019 (H.R. 1243/S. 523). The bill would, among other things, result in a national action plan to ensure our public health and healthcare systems are ready for the climate crisis.

And what does the world look like if we succeed at both ending our dependence on deadly fossil fuels and creating a more climate-resilient society? It looks cleaner, safer, healthier, and more prosperous.

It looks like workers returning safely home at the end of their shift. It looks like shady, tree-lined neighborhoods with clean, breathable air and drinkable water. It looks like diverse options for clean transportation that get people where they need to go on time. And it looks like a family sitting down to a table with enough good food to go around, and without worrying about paying their medical bills or packing for yet another evacuation to get out of harm's way.

I know that in the United States we have an administration that doesn't want to recognize climate change or climate science, but this administration doesn't represent the views or the value or the character of the United States of America. Just the opposite. The anti-science intransigence of the federal government is igniting action across our country at the local, state and regional levels.

¹⁴ <https://www.insider.com/australian-bushfires-babies-delivered-in-smoky-hospitals-2020-1>

I am confident that everyone in this room — no matter their party affiliation — is here to do the hard work needed to leave this country, and our world, better than we found it. We are here to defend the future for our children. I'm a mother and a grandmother — my kids and grandkids are the face of climate change for me; *they* are my moral compass and my reason to sit here today. They are the reason I fight.

I ask the members, and everyone else here today to think about who you fight for, why you fight, and what you can do to help.

At times like these, when the furor of partisan politics seems to run so hot and so deep that it's can be overwhelming, we cannot lose sight of the core values that bind us together. Surely one of those values must be protecting the health and wellbeing of our kids.

Thank you for convening this critical conversation and for your attention. I look forward to continuing to work with the select committee as you develop your climate policy recommendations for Congress.

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