

8 Things We Hate About Summer are Getting Worse with Climate Change... And What We Can Do About Them



Along with all that we love about summer, the dog days are also increasingly bringing extreme heat waves, bad air days, ticks, poison ivy, foodborne illnesses, risky swimming and ruined park visits, and so on.

They will get worse unless we take serious actions to combat climate change. That's because heat-trapping carbon pollution encircling Earth is driving up temperatures, supercharging these summer hazards.

But here's the good news. In early June, the Environmental Protection Agency (EPA) issued the centerpiece of President Obama's Climate Action Plan—the first-ever limits on carbon dioxide pollution spewed by our fossil fueled power plants. These plants are responsible for nearly 40 percent of our heat-trapping carbon pollution, which is fueling climate change.

We're nearly out of time to curb climate change, but we're not out of solutions. By 2030, the president's proposal would reduce the annual 2 billion tons of carbon pollution from power plants 30 percent, compared to 2005 levels. That's a great start.

In the meantime, we all need to get through another summer made more challenging by climate change. Here are some day-to-day things that you and your family can do to tackle eight of the here-and-now effects of climate change.

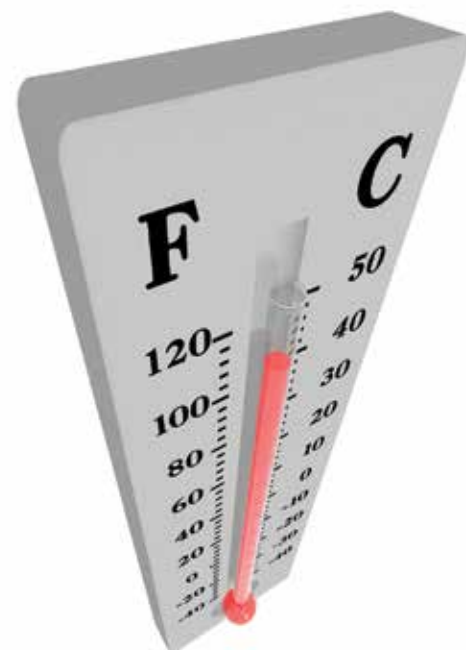
1. HEAT WAVES

Because of climate change, heat waves will worsen. Temperatures in cities are already higher due to the urban heat island, and rising global temperatures from heat-trapping carbon pollution will make heat waves longer, hotter, and more frequent. Eight of the nine warmest years since record-keeping began in 1880 have occurred since 2000. May 2014 was the hottest May ever. And temperatures could be hotter by 4 to 11 degrees Fahrenheit by 2100.¹

Today, heat is the leading weather-related killer in the United States.² During heat waves, deaths and illness can occur from conditions caused by direct heat exposure (like heat stroke), but extreme heat can also increase hospital admissions or deaths among people with existing health conditions such as cardiovascular, respiratory, or cerebrovascular diseases. Hot nighttime temperatures are especially dangerous to those vulnerable to heat stress.

What should you do?

- Never leave children or pets in unattended parked vehicles on hot days.
- Slow down. Reduce, reschedule, or eliminate strenuous activities until the coolest part of the day.
- People with health problems should stay in the coolest place, which may not be indoors. Use shade outdoors, and drink plenty of water.
- Don't get too much sun; sunburn lowers your body's ability to dissipate heat.³



For more information, please contact:

Jake Thompson
jthompson@nrdc.org
S switchboard.nrdc.org/
blogs/jthompson

www.nrdc.org/policy
www.facebook.com/nrdc.org
www.twitter.com/nrdc



2. BAD AIR ALERT DAYS

With climate change, days will be hotter and that will amp up ground-level ozone smog pollution and increase the number of “bad air days.” These days, marked by local code red or code orange alerts warning people to curtail outdoor activities are based on daily air monitoring data gathered in the EPA’s Air Quality Index.⁴

Bad air days put many of us at risk for irritated eyes, noses, and lungs—but air pollution is particularly dangerous for people with respiratory diseases like asthma. Already about 27 million Americans suffer from asthma, according to the American Lung Association. As the climate changes, unhealthy air pollution will get worse. Here’s how:

Ozone smog forms when pollutants from vehicles, factories, and other sources react with sunlight and heat. Increasing temperatures speed this process up, resulting in more smog. Added to the mix are ragweed and other allergens in the air—which are expected to worsen as climate change leads to more pollen production. Also, as dry areas get drier, wildfire risks go up and smoke from burning landscapes will further decrease air quality.

And so, those with asthma, allergies, and other respiratory diseases will have a harder time in our hotter future.

What should you do?

- On high-smog days, take breaks and do less intense activities.
- Asthma sufferers should follow their asthma action plans and keep their quick relief medicine handy.
- Use the Air Quality Index to learn about local ozone smog conditions, and take precautions on bad air days. (www.airnow.gov)

3. TICKS AND MOSQUITOES

Tick and mosquito bites are not only a nuisance of summertime, they transmit serious diseases. Unfortunately, climate change may create more favorable conditions for the spread of disease-carrying insects.⁵

Warming temperatures and a changing climate are particularly likely to turn some U.S. regions into new suitable habitat for Lyme-carrying ticks.⁶ And the EPA just added Lyme disease as a new indicator of climate change.⁷

Mosquito species that can transmit dengue fever typically live in tropical regions, but two species of mosquitos that are capable of spreading dengue are now found in 28 states.⁸

Scientists have projected that higher temperatures and lower precipitation leads to a higher probability of West Nile virus infections. One study estimates that by 2050, approximately 68 percent of California will face increased risk from West Nile virus due to climate change. West Nile is also projected to spread northward into other previously unaffected areas. A harbinger: in 2012, Maine recorded its first human case of West Nile Virus.⁹

What should you do?¹⁰

- After spending time outdoors, especially in wooded or grassy areas, check for ticks and remove them with tweezers. If a tick is attached for less than 24 hours, the chance of getting Lyme disease is lessened.
- To avoid insect bites, tuck in your shirt and wear long sleeves, long pants, and socks when spending time outside.
- Eliminate standing water in rain gutters, buckets, plastic covers, and other potential breeding grounds for mosquitoes. Empty and change water in bird baths, rain barrels, and wading pools.





4. POISON IVY

Today, about 350,000 cases of poison ivy-induced contact dermatitis are reported each year. This will get worse with climate change because poison ivy grows faster and is more toxic as carbon dioxide pollution increases. Even now, the plant can be found in forests, roadsides, and even backyards in every state except California (although poison oak grows there with similar health impacts), Hawaii, and Alaska.¹¹

What should you do?¹²

- Wear long pants, long sleeves, boots, and gloves when working outside. If clothing is exposed, wash separately with hot water and detergent.
- DO NOT BURN poison ivy, as the smoke can cause severe allergic respiratory problems.
- If you come in contact, immediately and repeatedly rinse skin with dishwashing soap or detergent and water. Oatmeal baths and hydrocortisone cream can reduce itching.



5. SNEEZING AND WHEEZING

Can a warming planet change your life? Climate change may already be making life miserable for the 30 to 40 million seasonal allergy sufferers nationwide, according to a number of scientific studies conducted over the past several years. Rising carbon dioxide levels and global temperatures are driving the growth of the very plants that make us sneeze and wheeze.

A 2011 study confirmed that ragweed, a major culprit in seasonal allergies, now sheds pollen up to a month longer than it did in 1995 in some parts of North America.¹³ In late summer, higher temperatures can worsen ozone smog at the same time ragweed plants produce their allergenic pollen, creating a ‘double-whammy’ for respiratory health.

What you should do:

- Check daily pollen reports and ozone air quality conditions online, particularly on sunny, still, hot days.¹⁴
- On days when pollen counts or ozone levels are high, minimize outdoor activities and keep windows closed when possible.
- Shower and wash bedding and outdoor clothing to remove pollen that settles on pillows and sheets and vacuum regularly. After outdoor work or play, use a damp cloth to remove pollen from hair and skin—or shower.

6. FOOD-BORNE ILLNESS

Salmonella and *Campylobacter* are two of the most common forms of bacteria that cause food-borne illness. Scientists have shown that hotter summer temperatures are closely associated with the number of *Salmonella* and *Campylobacter* infections.¹⁵ These and other diarrheal diseases are more common when temperatures are higher.¹⁶ Climate change also is expected to increase harmful algal blooms in some areas, which may lead to increases in illnesses from seafood consumption. Already today, an estimated 10 percent of foodborne disease outbreaks in the United States result from seafood contaminated with algal toxins.¹⁷

What should you do?¹⁸

- Keep perishable food refrigerated—don't leave out food for more than one hour when temperatures are above 90 Fahrenheit.
- Cook poultry, beef and eggs thoroughly. If you are served undercooked meat in a restaurant, don't hesitate to send it back.
- Pay attention to shellfish warnings and alerts about harmful algal blooms. Algal toxins are not destroyed by cooking, so avoiding consumption of contaminated seafood is the only method to prevent illness from harmful algal blooms.



7. DANGEROUS SWIMMING CONDITIONS

Climate change is expected to increase harmful algal blooms and runoff of pollution into beaches and waterways, leading to more unsafe swimming conditions.¹⁹ Harmful algal blooms, including “red tide” and blue-green algae, can cause respiratory symptoms and also irritate the eyes and skin.²⁰

Already, the Great Lakes states are seeing an abundance of algae growth causing beaches to be closed to swimming earlier in the year.²¹ Climate projections also show that, in the Great Lakes region, the amount of untreated sewage overflowing into waterways could increase significantly in coming decades as combined sewer systems are overwhelmed with rainwater, triggering even more beach closings.²²

What should you do?²³

- Check the safety of your local beach before swimming. Take a look at NRDC's Testing the Waters Guide at www.nrdc.org/water/oceans/ttw/guide.asp.
- Do not swim at your local beach for a day or two after heavy rainstorms, especially if your city does not monitor water quality.



8. RUINED VISITS TO NATIONAL LANDMARKS AND PARKS

America has 401 national parks, monuments, battlefields, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails in every state, the District of Columbia, American Samoa, Guam, Puerto Rico and the Virgin Islands. These sites attract more than 250 million visitors throughout the summer.

Sadly many of the United States' iconic national parks, landmarks and heritage sites are at risk from climate change.²⁴ Sea level rise, coastal erosion, increased flooding, heavy rains, and more frequent wildfires are damaging park land, archaeological resources, historic buildings, and cultural landscapes across the nation, according to research by the Union of Concerned Scientists, which recently provided case studies on 25 impacted sites.²⁵

What should you do?

- Send in a statement of support for the EPA's Clean Power Plan to curb carbon pollution from power plants at <https://secure.nrdconline.org/site/Advocacy?cmd=display&page=UserAction&id=3447>.
- Support efforts to build climate resiliency and prepare National Parks and historic sites for the impacts of climate change.



OUR CLIMATE IS CHANGING, HERE AND NOW. THE OBAMA ADMINISTRATION'S CLEAN POWER PLAN WILL MAKE A BIG DIFFERENCE FOR OUR CHILDREN AND FUTURE GENERATIONS. CLICK HERE TO SHOW YOUR SUPPORT: [HTTPS://SECURE.NRDCONLINE.ORG/SITE/ADVOCACY?CMD=DISPLAY&PAGE=USERACTION&ID=3447](https://secure.nrdconline.org/site/advocacy?cmd=display&page=UserAction&id=3447).

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