

Health in Our Changing Climate: Rising Heat

Why Now?

Virginia summers are getting hotter and more dangerous. Temperatures have risen every decade in Virginia since the 1970s.¹ Rising heat puts more Virginians at risk of heat illness including heat exhaustion and heat stroke.

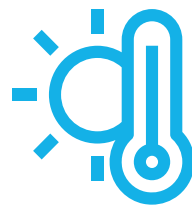
- There were 1,774 heat-related Emergency Room and Urgent Care visits in Virginia between May-September of 2015. In 2022, this number rose to 2,922.²
- "Dangerous" heat days (heat index of 100°F or higher) and "Extremely Dangerous" heat days (heat index of 125°F or higher) are on the rise. Virginians may experience nearly 60 days of these by 2050.³
- The fastest-warming metro areas in Virginia since 1970 are Norfolk (2.3°F), Richmond (2.3°F), and Roanoke (3°F).⁴
- There has been a 20% reduction in labor productivity in Virginia due to extreme heat.⁵

By rapidly reducing heat-trapping pollution, we can prevent more extreme heat and improve the lives of Virginians.



2,922

Virginians reported heat-related illnesses from May-Sep 2022.



1.6°F

Virginia's climate has warmed by about 1.6° F since 1970.



4X

The number of dangerous heat days annually by 2050.



Virginia Clinicians for Climate Action

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Disparities in Impact

Some Virginians are more at risk from extreme heat:

- City residents experience much warmer temperatures because of concrete and buildings that retain heat. This is called the "Heat island" effect.
- In areas like Roanoke, urban heat impacts some underserved communities and neighborhoods more intensely. A study of U.S. cities found that previously redlined communities had air temperatures that are 7 - 10°F hotter than non-redlined areas in the same city.⁶



7-10°F Difference in temperatures
within Roanoke City

What We Can Do

By reducing pollution we can reduce the number of extreme heat days in Virginia. Turning to clean energy sources for our electricity and transportation protects against further warming and heat illness.

Planting trees and gardens can cool our neighborhoods.

HOW TO PREVENT HEAT ILLNESS



Drink plenty of water.

Don't wait until you feel thirsty. Drink plenty regularly.



Look for shade.

Provide a shaded space for events and outdoor breaks.



Take more breaks.

Increase the number of breaks in shaded areas with water if working or playing outside.



Schedule events earlier or later.

Schedule events earlier or later when it is cooler.

Join Virginia's clinicians in supporting responsible policies to address extreme heat and its impact on the health of Virginians.

References:

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2. Heat-related illness surveillance. <https://www.vdh.virginia.gov/surveillance-and-investigation/syndromic-surveillance/hri-surveillance/>
3. States At Risk. Virginia Extreme Heat. <https://statesatrisk.org/virginia/extreme-heat>
4. Virginia's climate has warmed by 1.58° F since 1970. Stacker. (2021) <https://stacker.com/virginia/virginias-climate-has-warmed-158deg-f-1970>
5. Zhang, Y., Shindell, D.T. Costs from labor losses due to extreme heat in the USA attributable to climate change. *Climatic Change* 164, 35 (2021)
6. Urban Heat Island Effect. <https://www.roanokeva.gov/2720/Urban-Heat-Island-Effect>



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