
How Heat and other Extreme Weather Events Impact Our Public Health



Healthy Climate New Mexico

www.healthyclimatenm.org

New Mexico Legislative Indian Affairs Committee

Shelley Mann-Lev, Christine Dobbin, Charles Goodmacher, 9/25/2025

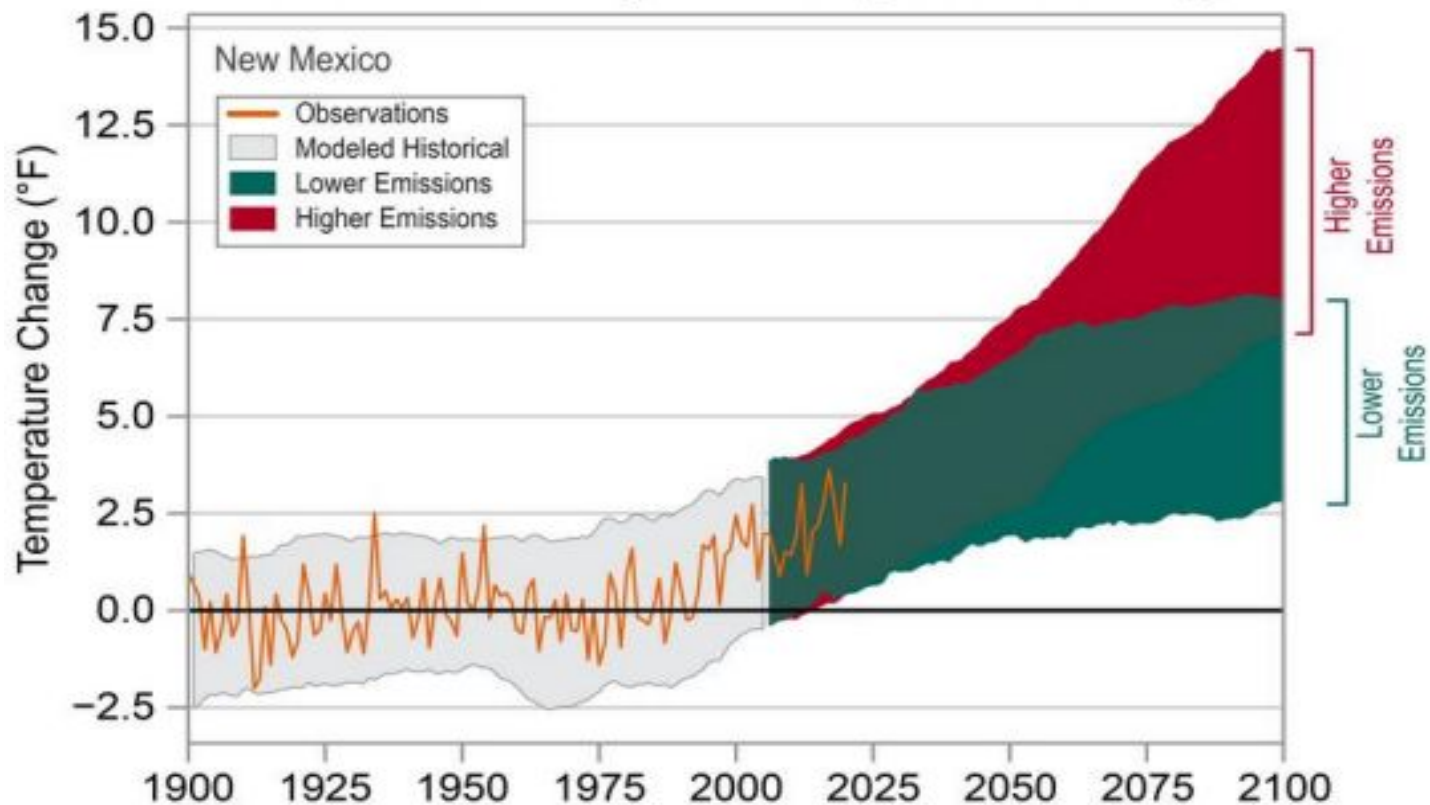
“Climate Change is the Greatest Threat to Public Health”

The greatest threat to global public health is the continued failure of world leaders to *keep the global temperature rise below 1.5° C* and to restore nature. Urgent, society-wide changes must be made and will lead to a fairer and healthier world.

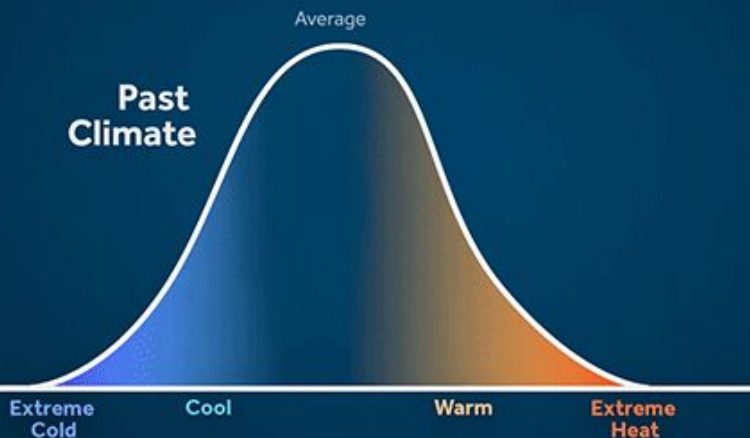
Orrin Pilkey, et al., New England Journal of Medicine, 2021



Observed and Projected Temperature Change



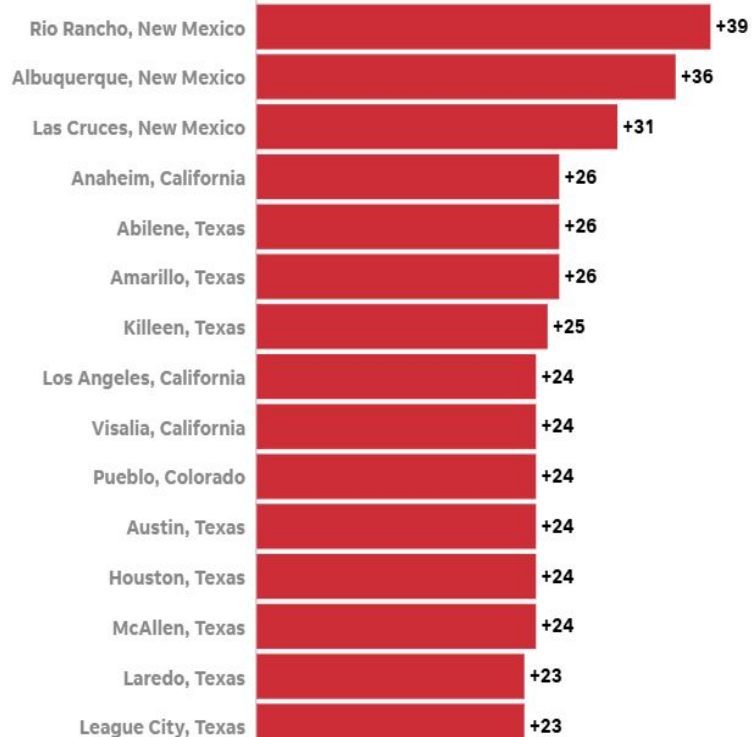
SMALL CHANGE IN AVERAGE BIG CHANGE IN EXTREMES



CLIMATE CENTRA

These cities are seeing the largest increase in high heat days

These places now experience several more weeks of days where the heat index reaches 90 degrees or higher than in 1985.

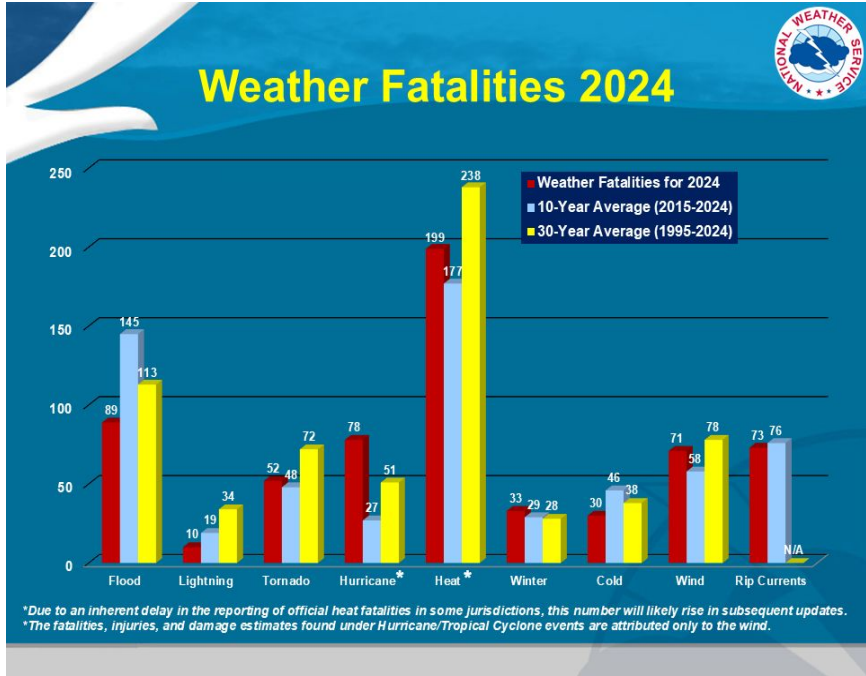


SOURCE: USA TODAY analysis of climate data from 1985 through 2014.





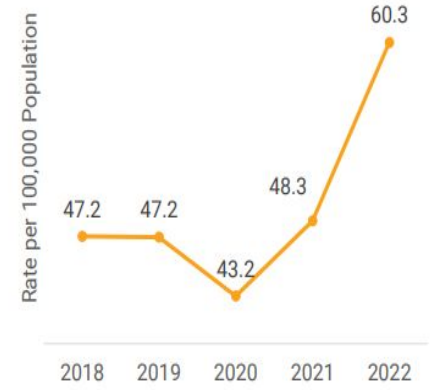
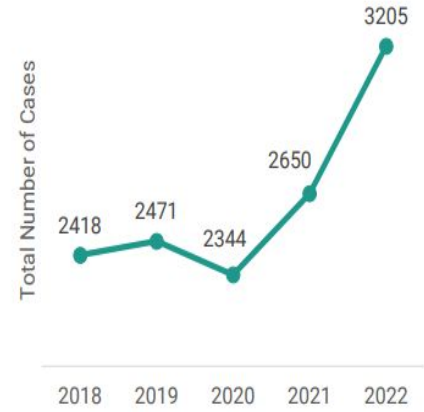
Weather Fatalities are On the Rise, Heat is the Leading Cause



Heat-Related Morbidity Over Time

By Year

Between the years of 2018-2022, the total number of heat morbidity cases increased 33%. The rate per 100,000 population also increased 40% from 2020 to 2022.



Note: Counts include residents and non-residents of Maricopa County

Note: Rates include only residents of Maricopa County



New Mexico is particularly vulnerable to climate change

- Poverty and unhoused
- Chronic health conditions: diabetes, kidney disease, heart disease, respiratory diseases (asthma, COPD)
- Substance use & mental health issues
- Overweight and people taking certain medications
- Outdoor workers and student athletes
- Elders (people over the age of 65)
- Social isolation and loneliness
- Pregnant people and young children



Indigenous Women's Day on February 8 in the rotunda of the New Mexico State



As global temperatures continue to rise, the Southwest region is experiencing the fastest warming.

Research shows that when temperatures exceed 86 degrees, health impacts and emergency department visits increase across New Mexico. Immediate and comprehensive action is required.

Rural isolation significantly compounds heat vulnerability, as many communities face substantial distances to healthcare facilities and longer response times for emergency services.

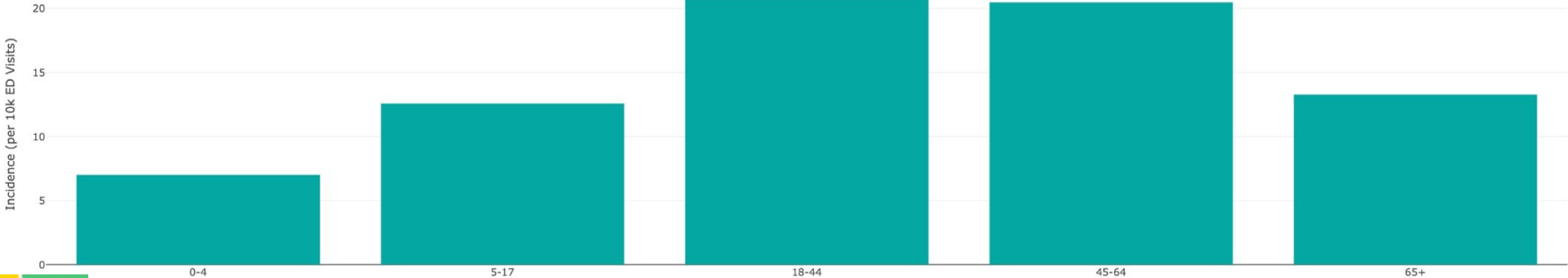
Healthy Climate New Mexico produced a **Heat Advisory** to help public policy makers in our state protect the health of of our people. This is available at the [Healthy Climate New Mexico website](#), under the “Advocacy” tab.



NM Emergency Department heat related illness visits show the dangers to workers (April 1st - September 30th 2024)

	Age Group	Count	% of HRI visits	Incidence (per 10k ED visits)
1	0-4	24	2.6%	7
2	5-17	70	7.5%	12.58
3	18-44	420	45.1%	20.83
4	45-64	251	26.9%	20.48
5	65+	167	17.9%	13.28

72% of all Heat Related Illness ED visits were among 18-64 year olds



NMDOH Environmental Tracking Data, Accessed 12/5/2024

<https://nmdoh-reports.shinyapps.io/HeatRelatedIllnessDashboard/>

Heat is impacting workers everywhere

Classrooms hot, cooling units not working at APS schools

Brittany Costello | KOB

Updated: August 8, 2024 - 11:07 PM

Published: August 7, 2024 - 8:31 PM

‘Sending drivers out to die’: UPS workers demand heat safety amid record temps

Union representatives around the country say they’re worried about the number of UPS workers who have needed medical treatment for heat illness.

Migrant worker’s death prompts calls for extreme heat labor laws

As the climate

UPS workers facing extreme heat win a deal to get air conditioning in new trucks

JUNE 14, 2023 · 3:39 PM ET

By Joe Hernandez

Indoor Workers Need Protection from Extreme Heat Too

Warehouses, restaurant kitchens, factories, and schools can get dangerously hot—but without adequate safety standards, employees are having to just sweat it out.



Workers in New Mexico Need Protection Now.

Federal protections?

- Not yet. U.S. Occupational Safety and Health Administration (OSHA) proposed rule
- OSHA heat standard likely on hold; and would not protect public sector workers (23% of NM workforce)



We need NM state protections:

- NM has the opportunity to:
 - adopt a standard to cover both indoor and outdoor workers
 - create and adopt model-thresholds for southwest heat: dry (low humidity) and intense solar radiation



HCNM supports the NMED proposal for a Worker Heat Protection (OSHA) Rule.

Heat: The leading cause of death among all weather-related events in the US.

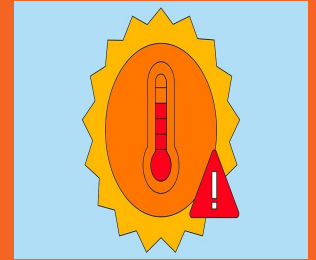
Research has found worse health outcomes for rural heat-related emergency service calls.

Extreme heat is a serious indoor AND outdoor occupational health hazard disproportionately impacting vulnerable populations.

Workers experience lost wages, increased medical bills, and job insecurity.

Currently no protections exist for workers in NM.

For more information see: <https://www.climateactionnownm.org/safe-work-for-all>



HCNM partnered with 15 Tribal communities for the New Mexico Tribal Communities Extreme Heat Exercise

The full final report will soon be available at healthyclimatenm.org, and elsewhere.

We are grateful for the collaboration on this project by the NM Dept of Health, Bureau of Health Emergency Management; National Weather Service, Albuquerque Office; Albuquerque Area Southwest Tribal Epidemiology Center (AASTEC); Cornell Department of Public & Ecosystem Health

The Extreme Heat Tabletop Exercise conducted on April 15, 2025, brought together 67 participants from 15 tribal communities across New Mexico to address the growing threat of extreme heat events. This exercise served as a critical first step in building collaborative capacity for heat emergency preparedness and response in tribal contexts.

The tabletop identified significant resilience practices, systems, and assets that uniquely protect and mitigate the effects of heat on tribal communities. However, the exercise also revealed substantial gaps, exacerbated by historical underinvestment and systemic resource disparities that have resulted in limited staffing, specialized expertise, and **compounding vulnerabilities.**



Scientists predict wildfire smoke will kill Thousands

“Wildfire smoke may be more toxic,” particularly when a wildfire burns through buildings, cars and other human-produced materials. n N95

Masks are recommended by the CDC and others!

A new study, published in the journal Nature on Thursday, found that each year, on average, wildfire smoke is causing more than 41,400 excess deaths,

By midcentury, the study’s authors expect that number to grow by an additional 26,500 to 30,000 deaths as human-caused climate change worsens and the risk of wildfires igniting increases.

Healthy Climate New Mexico has prepared a comprehensive Wildfire Smoke Policy Advisory that describes key recommendations for policymakers to address these risks and promote New Mexicans' health.



Confront the public health risks posed by wildfire smoke.

The HCNM comprehensive wildfire smoke Policy Advisory describes key recommendations for policymakers to address these risks and promote New Mexicans' health.

[Read the **Policy Advisory - 2024 Wildfire Smoke Season**](#)

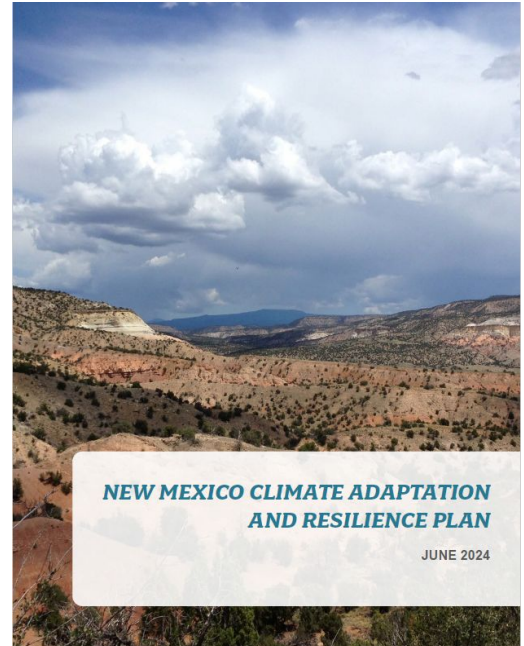
Some of the top recommendations (11 in the Advisory):

1. Establish clear statewide evidence-based occupational air quality (AQ) standards.. Align smoke-related advisories and activation of response plans to these standards...
2. Improve public health surveillance systems to capture and timely analyze smoke-and heat-related morbidity and mortality data.
3. Expand New Mexico Environment Department's Statewide AQ Monitoring System and fill in areas without coverage with a robust network of open-access consumer-grade air quality monitors.
4. Provide safe, accessible, and culturally appropriate clean(er) air shelters equipped with air filtration and off-grid power to provide respite for vulnerable populations during smoke and heat events.



Some State Action is Underway: New Mexico has a Climate Adaptation & Resilience Plan

- New Mexico faces changing climate conditions, and state and local entities must anticipate and prepare to meet these climate challenges, which are expected to disproportionately impact the most vulnerable populations and infrastructure. As the state faces mounting challenges, including extreme heat, wildfires, droughts, storms, heavy precipitation, and associated health risks, the Climate Adaptation and Resilience Plan provides a blueprint for a more resilient New Mexico.
- [Read the Full Report](https://service.web.env.nm.gov/urls/VdwnAxpq)
<https://service.web.env.nm.gov/urls/VdwnAxpq>



Extreme Weather Resilience Fund.

- * **Provide much needed financial resources to local governments *and tribal communities* to plan, prepare for, and respond to these escalating threats.**
- * Support climate adaptation projects such as heat mitigation strategies, wildfire smoke protections, emergency response infrastructure, and flood preparedness.
- * **At least 50% of the funding will be directed to small communities ensuring that the most vulnerable populations- children, elderly, low-income folks- receive that support.**
- * Could be used for a variety of critical interventions decided by the communities themselves.
- * **For extreme heat, it could be used for installing effective cooling and air purification systems in schools, senior centers, public buildings, to allow these community spaces to act as safe shelters during the extreme weather events.**



Extreme Weather Resilience Fund.

“My name is Conroy Chino and I'm the registered lobbyist for the Pueblos of Taos and Acoma. So much of our worldview and belief system and cultural practices at these two Pueblos is connected to the land and the environment. Many of these cultural practices occur outdoors and some are during the peak summer season. We notice the change in weather. It was hot a couple years ago and it's getting even hotter. So the concern is the impact of extreme weather conditions on land and air, and human life. ” Testimony 2/27/2025



Reduce Greenhouse Gas Emissions: Proven to Protect our Public Health

- Even if we make little impact on worldwide climate change – New Mexicans will be healthier with the implementation of the comprehensive climate legislation such as last year’s Clear Horizons bill.
- Many New Mexico counties have very poor air quality, largely a consequence of locally generated Greenhouse Gas Emissions. “State of the Air” - The American Lung Association report breaks this down by county.
- **The Clear Horizons Act:** Codify the Governor’s climate pollution reduction commitments, requiring new rules that place limits on total climate pollution from the state’s largest emitters. *(last year’s SB4)*



CONCLUSION: The health of all New Mexicans is threatened by our changing weather. State action can reduce the health consequences!

- **Pass The Clear Horizons Act to set GHG emissions targets**
- **Establish the Extreme Weather Resilience Fund**
- **Increase monitoring of air quality and More data and staff are needed at the Department of Health (Climate and Public Health Program). Data needs to be local and widely shared in order to be useful**
- **Adopt HCNM's recommendations in our Wildfire Smoke and HEAT Advisories**
- **Address funding shortfalls, both direct and indirect from federal cutbacks.**
- **Support locally generated action across our state in ways that honor and respect local governments and Tribal Sovereignty**



How Heat and other Extreme Weather Events Impact Our Public Health *9/25/2025*

Healthy Climate New Mexico thanks Indian Affairs Committee Chair Senator Pinto and Vice Chair Representative Johnson for this opportunity. In the next presentations you'll hear more specifically about how our changing weather is impacting traditional ways of life in New Mexico.

www.healthyclimatenm.org

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