

Climate Change and Health Impacts in New Mexico: Opportunities for Family Medicine

Paul Charlton, MD, MA

NM Association of Family Physicians Winter Conference

February 22, 2025



**HEALTHY CLIMATE
NEW MEXICO**

Health Professionals for Climate Action

Objectives

1. Understand and communicate the **health risks** from our changing climate to individuals and communities in New Mexico.
2. Identify best-practice **climate adaptation measures** to increase the health resilience for clinic patients.
3. Increase **extreme weather preparedness** for clinic operations.
4. Share resources with patients, community groups, and colleagues about **ways to engage in New Mexico** around climate change and health issues.

Watch

Home

Live

Reels

Shows

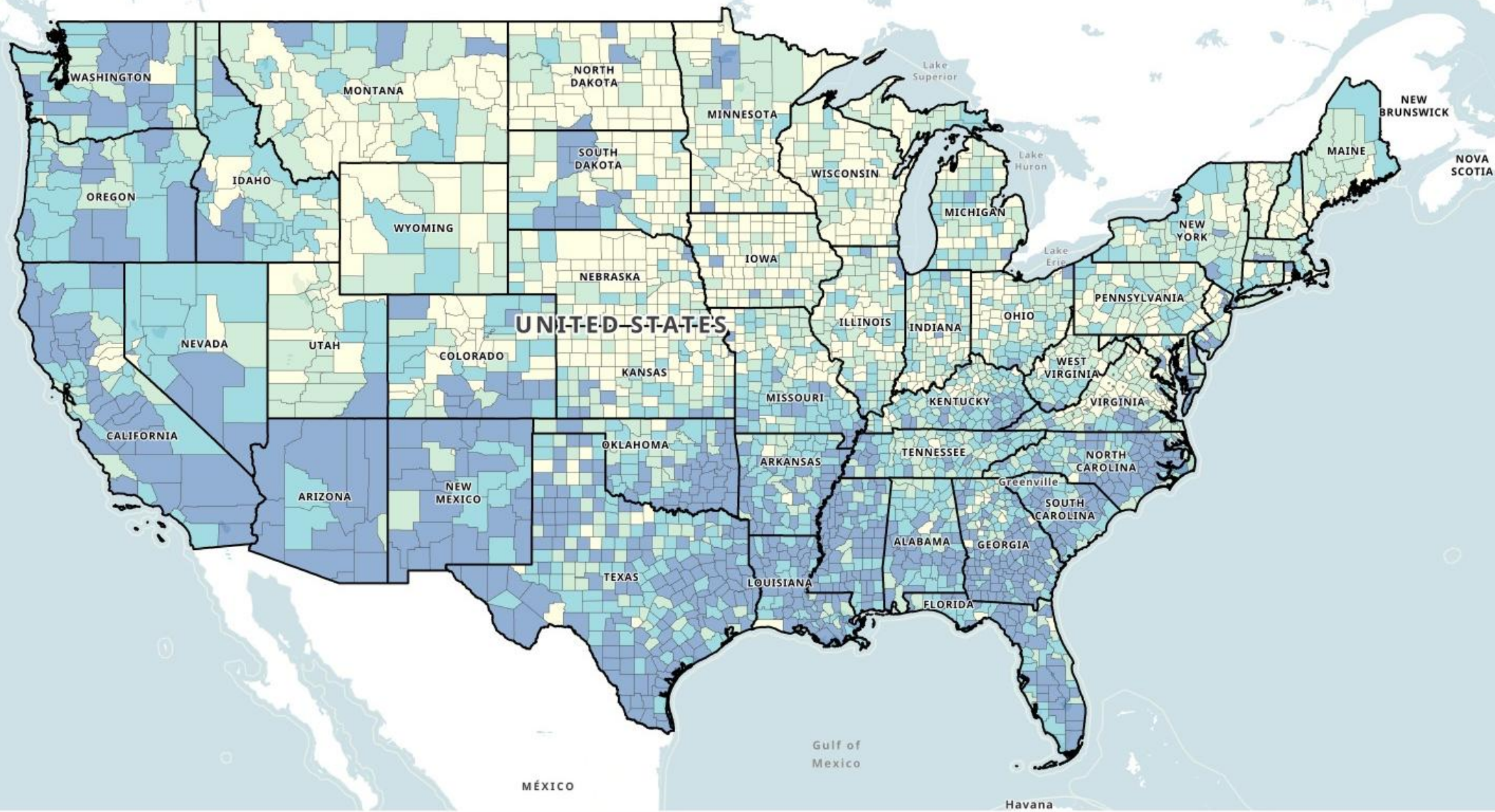
Explore



"Sheep Springs, NM" 🌊👤

<https://www.facebook.com/teesto.az/videos/sheep-springs-nm/3301776903414763/>

...



Level of Vulnerability

<https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>

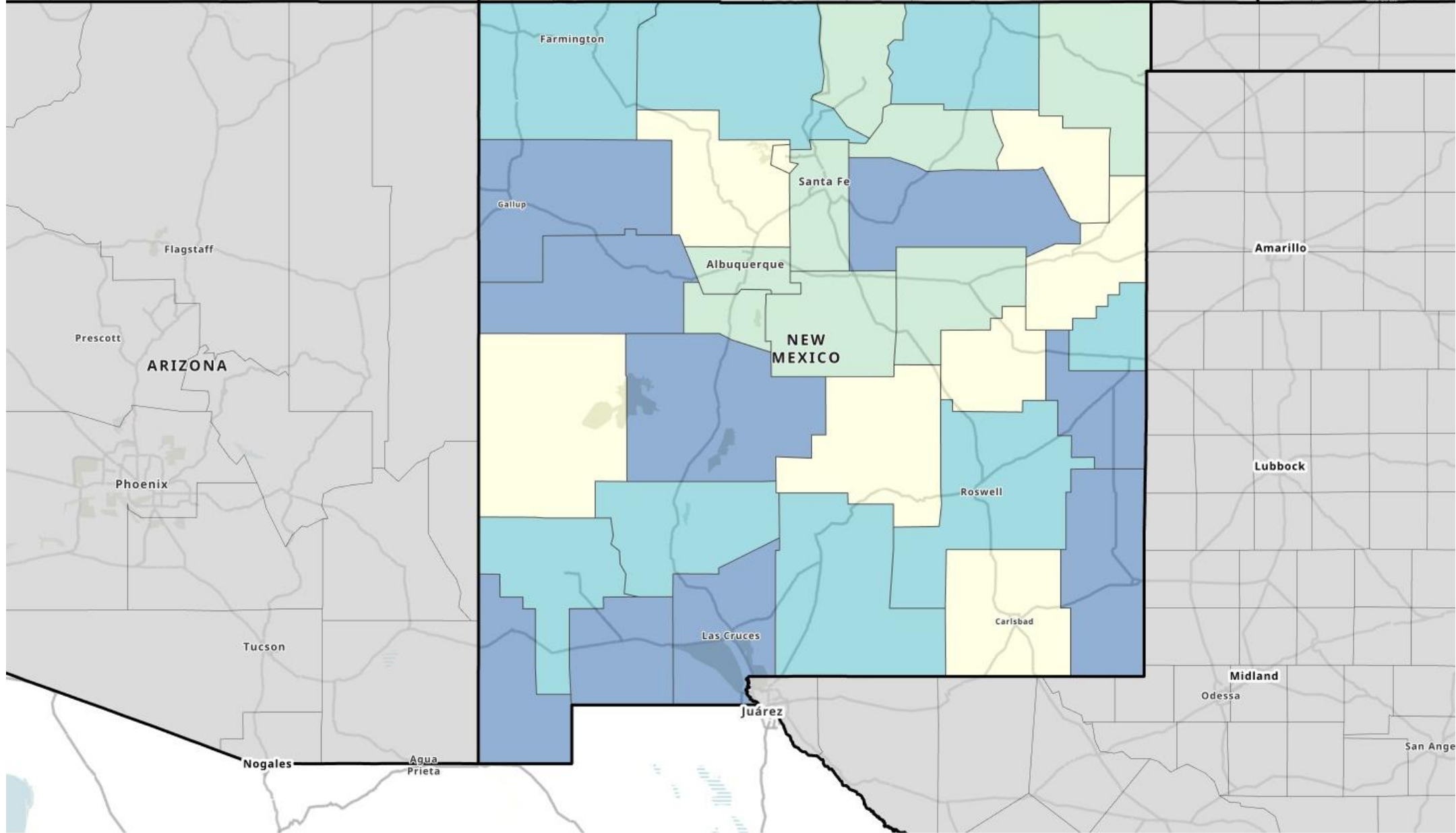
Low

Low-Medium

Medium-High

High

No Data



Level of Vulnerability





Census Tract 35031945300,
Mckinley County, New Mexico

2020 Statewide Overall SVI Score:

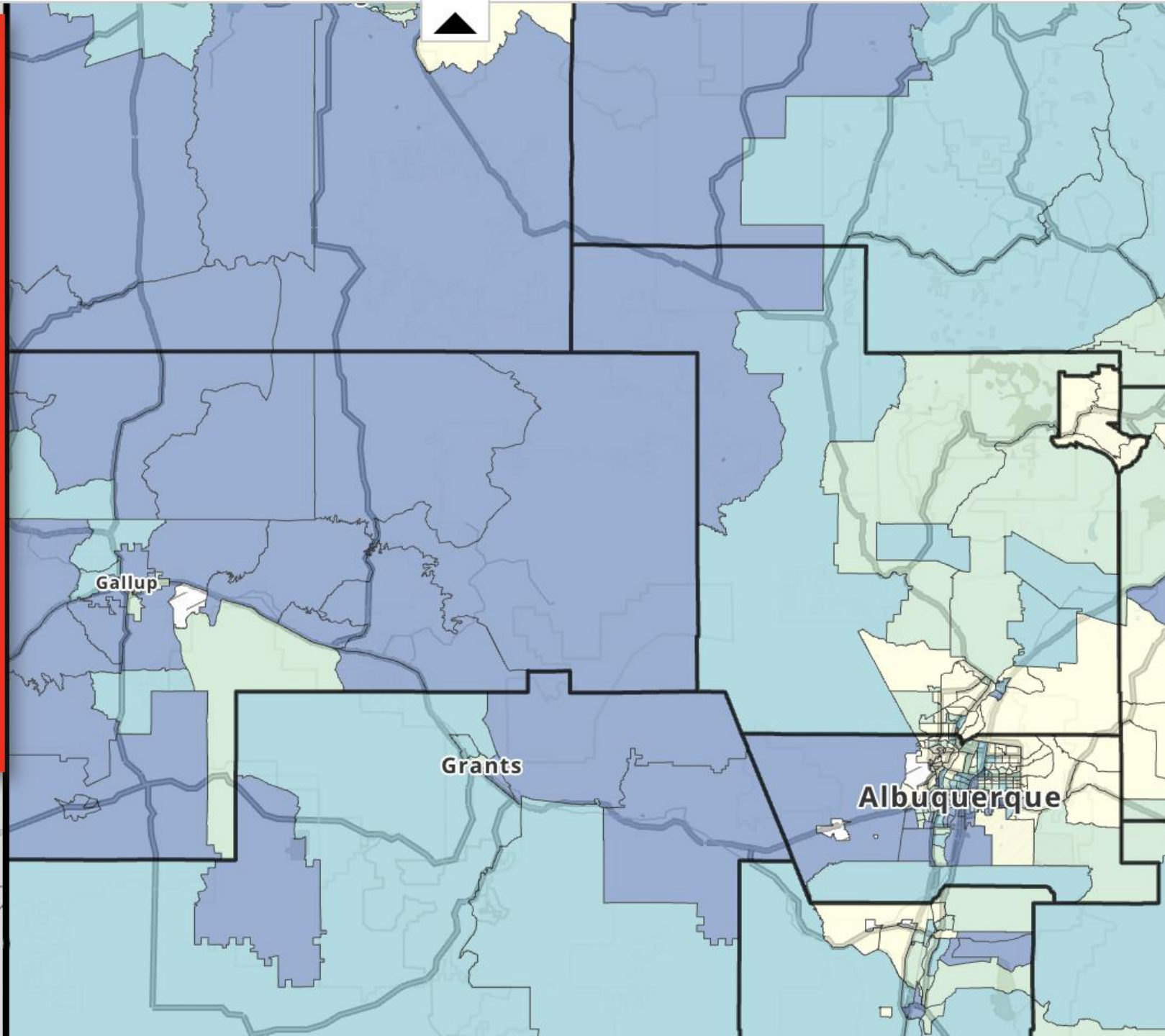
0.9883

Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability).

A score of **0.9883** indicates a **high** level of vulnerability.

[View Prepared County Map](#)

[View in Table](#)





Paul Charlton photo



DIPLOMA IN **CLIMATE** MEDICINE

Introducing the Diploma in Climate Medicine

The University of Colorado School of Medicine is proud to offer a comprehensive professional development program for healthcare providers across all specialties. The Diploma in Climate Medicine trains leaders to advocate for climate-resilient, patient-centered policies that serve diverse communities and systems.

Knowledge Resources

Overview knowledge:

- US 5th National Climate Assessment
- IPCC reports

Medical knowledge:

- NEJM series
- Lancet Countdown series

Clinic adaptation:

- AmeriCares
- Depts of Health/CDC

Every child born today will be affected by climate change. How we respond will determine the world we live in tomorrow and will shape the health of children across the globe, at every stage of their lives.



“Greatest global health threat facing the world in the 21st century”

- Lancet Countdown



April 22, 2024

Physicians Have Role to Play in Addressing Climate Change

By Tochi Iroku-Malize, M.D., M.P.H., M.B.A., FAAFP
AAFP Board Chair

<https://www.aafp.org/about/policies/all/climate-change-environmental-health.html>

Climate Change and Environmental Health (Position Paper)

Call to Action

The American Academy of Family Physicians calls for action in the following areas:

Physician Level

- Become informed about the impact of climate change on human health and take
- Address and manage each patient's specific environmental health risks to help th

Practice Level

- Understand the health care sector's environmental footprint and how this contrib
- Understand how climate change will impact the health care sector's ability to pro
- Partner with sustainability experts to set greenhouse gas emissions reduction go
resilient health care.

Community/Leadership Level

- Promote partnerships with private and public community organizations and heal
[and public health](#).
- Proactively engage with other health care and social service organizations to link

Educational Level

- Lead change in undergraduate, graduate and continuing medical education to pre
occupational impacts related to climate change.

Advocacy Level

- Leverage the voices of family physicians as stewards of public health to advocat
determinants affecting communities, patients and health care workers.

Americans trust NASA, family & friends, climate scientists, and their primary care doctors the most as sources of information about global warming

Rank by trust	All Registered Voters	Liberal Democrats	Moderate/Conservative Democrats	Liberal/Moderate Republicans	Conservative Republicans
1	NASA	Climate scientists	Climate scientists	NASA	Family & friends
2	Family & friends	Environmental organizations	EPA	Family & friends	Your primary care doctor
3	Climate scientists	EPA	Environmental organizations	Your primary care doctor	NASA
4	Your primary care doctor	NASA	NASA	Climate scientists	The Fox News Channel
5	EPA	Teachers	Television weather reporters	EPA	Leaders in your religious faith
6	Television weather reporters	President Biden	American Medical Association	Television weather reporters	Television weather reporters
7	Environmental organizations	National Public Radio (NPR)	President Biden	U.S. military leaders	Climate scientists
8	Teachers	Television weather reporters	Your primary care doctor	Teachers	U.S. military leaders
9	American Medical Association	Family & friends	National network news	American Medical Association	American Medical Association
10	Your local newspaper	National network news	National Public Radio (NPR)	Environmental organizations	Teachers
11	National Public Radio (NPR)	American Medical Association	Your local newspaper	Your local newspaper	Oil, gas, and coal companies
12	Local TV news	Your local newspaper	Family & friends	Local TV news	EPA
13	National network news	CNN	Local TV news	National Public Radio (NPR)	Your local newspaper
14	President Biden	Your primary care doctor	Teachers	National network news	Environmental organizations
15	U.S. military leaders	MSNBC	CNN	The Fox News Channel	Your Congressperson
16	CNN	Local TV news	MSNBC	Leaders in your religious faith	Local TV news
17	MSNBC	Your Congressperson	U.S. military leaders	Your Congressperson	National Public Radio (NPR)
18	Your Congressperson	U.S. military leaders	Your Congressperson	CNN	National network news
19	Leaders in your religious faith	Leaders in your religious faith	Leaders in your religious faith	MSNBC	CNN
20	The Fox News Channel	The Fox News Channel	Oil, gas, and coal companies	Oil, gas, and coal companies	MSNBC
21	Oil, gas, and coal companies	Oil, gas, and coal companies	The Fox News Channel	President Biden	President Biden

How much do you trust or distrust the following as a source of information about global warming?

April 2022

Slide: Courtesy Ed Maibach, 2023, used with permission

Six key facts about global warming in 12 words

IT'S REAL

Global warming is happening.

IT'S US

Human activity is the main cause.

EXPERTS AGREE

More than **97%** of the world's climate experts are convinced, based on the data, that human activity is warming the planet.

IT'S BAD

The impacts are serious, and they affect people, especially our children and grandchildren.

OTHERS CARE

You're not alone.
Most people are worried about global warming, and they support climate action.

THERE'S HOPE

There are actions we can take that will make a big difference.

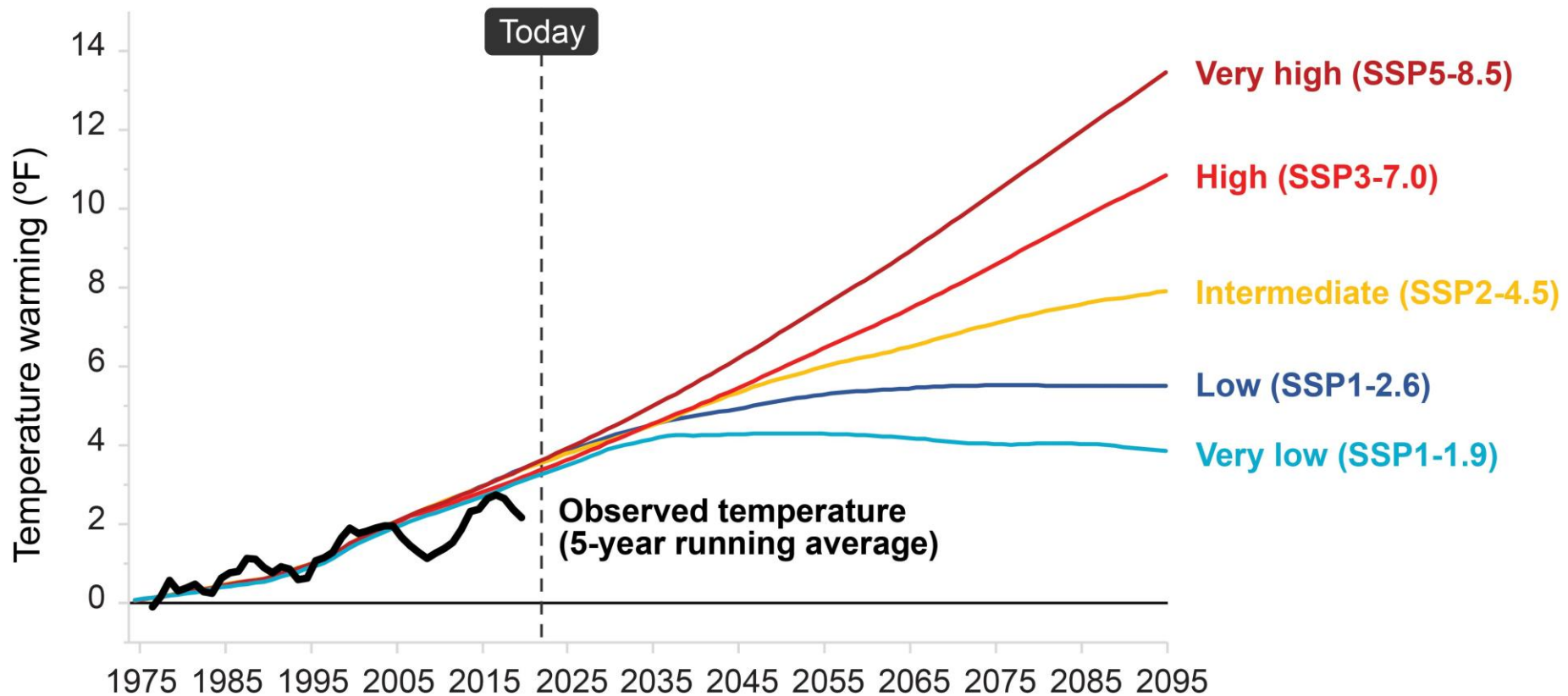
Objectives

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Potential Warming Pathways in the United States

Future Warming

Future warming in the United States will depend on the total amount of global greenhouse gas emissions.





Mitigation

Adaptation

Suffering

“We basically have three choices: mitigation, adaptation and suffering. We’re going to do some of each. The question is what the mix is going to be. The more mitigation we do, the less adaptation will be required and the less suffering there will be.”

- John Holdren, energy and climate expert at Harvard

Statement at 2007 launch of the fourth IPCC report,

Climate-related impacts on

Health



Health systems



Social & structural determinants of health



Ecological determinants of health



Climate change harms health through eight distinct pathways

FOSSIL FUELS
8,7 MILLION †
globally per year in 2018



Morbidity & Mortality:

- **Air pollution**
- Extreme heat
- Extreme weather
- Vector-borne illness
- Water-borne illness
- Food-borne illness
- Hunger and malnutrition
- Mental health harms

COMMUNITIES OF COLOR

Some communities of color living in risk-prone areas face cumulative exposure to multiple pollutants.

Adaptation plans that consider these communities and improve access to healthcare help address social inequities.

OLDER ADULTS

Older adults are vulnerable to extreme events that cause power outages or require evacuation.

Checking on elderly neighbors and proper emergency communication can save lives.

CHILDREN

Children have higher risk of heat stroke and illness than adults.

Adults can lessen risk by monitoring exertion and hydration.

LOW INCOME COMMUNITIES

Low income families are at risk of physical and mental illnesses during flooding and in crowded shelter conditions.

Comprehensive disaster management can improve resiliency for people with limited resources.

Our families

Diabetes?

Heart disease?

Kidney disease?

Pregnant?

Child under 5?

Over 65?



**HEALTHY CLIMATE
NEW MEXICO**
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New Mexicans are vulnerable

- Elderly – 20%¹
- Children – 23% (5% under 5yo)²
- People living in poverty – 18%⁶
- Disability – 18%³
- Migrants – 10%⁴
- Outdoor workers – 47%⁵
- Homelessness increase 2022-2023 – 57%⁷
- Substance use mortality – high⁸



Eddie Moore/Albuquerque Journal

Large percentage of NM population is

1 – 2023 www.census.gov

2 – 2023 www.census.gov

3 – 2023 www.census.gov

4 – 2023 www.census.gov

5 – US Bureau of Labor statistics - <https://www.bls.gov/opub/ted/2017/over-90-percent-of-protective-service-and-construction-and-extraction-jobs-require-work-outdoors.htm>

6 – 2023 www.census.gov

7 - <https://www.huduser.gov/portal/sites/default/files/pdf/2023-AHAR-Part-1.pdf>

8 - <https://www.kff.org/statedata/mental-health-and-substance-use-state-fact-sheets/new-mexico/>



The NEW ENGLAND
JOURNAL of MEDICINE

SPECIALTIES ▼ TOPICS ▼ MULTIMEDIA ▼ CURRENT ISSUE ▼

Climate Change

<https://www.nejm.org/browse/specialty/climate-change>

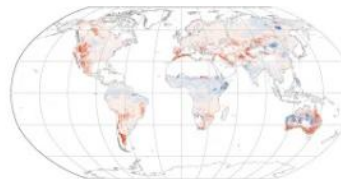
Fossil-Fuel Pollution and Climate Change

NEJM Group publications — *NEJM*, *NEJM Evidence*, and *NEJM Catalyst* — present a series on fossil fuel–driven health harms and strategies to reduce risk.

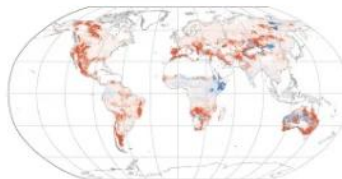
Change in Frequency of Wildfires, 1.5°C Increase



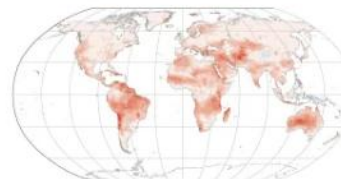
Change in Length of Wildfire Season, 1.5°C Increase



Change in Frequency of Wildfires, 2.0°C Increase



Change in Length of Wildfire Season, 2.0°C Increase



SPECIAL REPORT | OCT 09, 2020 | FREE

Wildfires, Global Climate Change, and Human Health

R. Xu and Others

Wildfires are increasingly common and projected to worsen with climate change. Health consequences include burns and mental health effects, as well as risks from air pollutants in smoke. Cutting carbon emissions to limit the global temperature increase to 2.0°C or 1.5°C above the preindustrial level would markedly reduce wildfire risks.

SPECIAL REPORT | NOV 20, 2024 |

Climate Change, Floods, and Human Health

Y. Wu and Others

With climate change, exposure to floods has increased and is linked to adverse health outcomes, such as injuries, diseases, and mental health harms, all of which are greater in vulnerable populations.

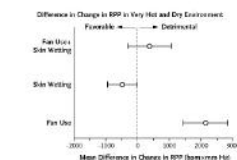


CORRESPONDENCE | NOV 06, 2024

Strategies to Reduce Cardiac Strain in Extreme Heat

G.K. Chaseling and Others

In this crossover trial in older adults with or without coronary artery disease, cardiac strain was reduced with fan use, skin wetting, or both in hot and humid conditions but worsened with fan use in very hot and dry conditions.





Heat

Wildfires

Health System Vulnerability



Patient experiences



**HEALTHY CLIMATE
NEW MEXICO**
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WARMING AT ALL LEVELS

Temperature change (°F) since 1970

5°

4°

3°

2°

1°

0°

+4.1°

LAS CRUCES

+3.5°

NEW MEXICO

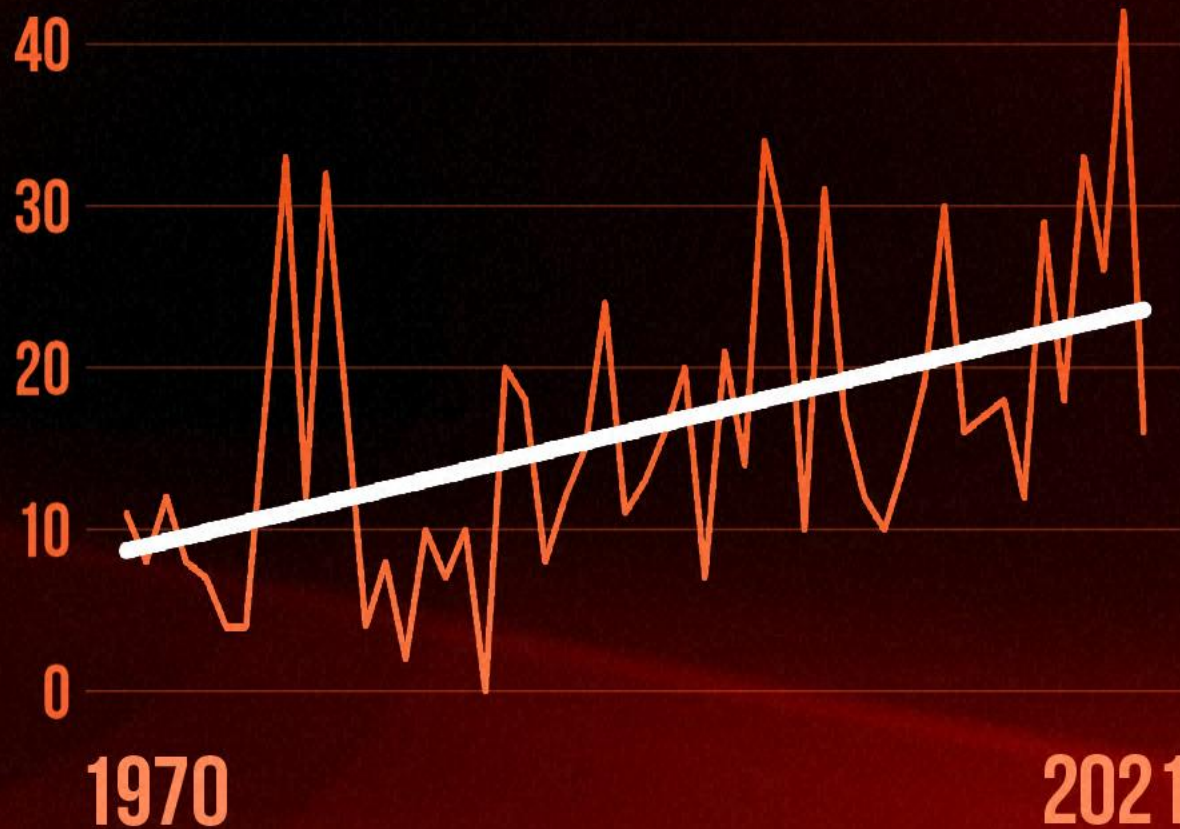
+2.5°

UNITED STATES

Based on linear trends of average annual temperature (1970–2022).
Source: RCC-ACIS.org; NCEI Climate at a Glance

CLIMATE  CENTRAL

LAS CRUCES DAYS ABOVE 100°



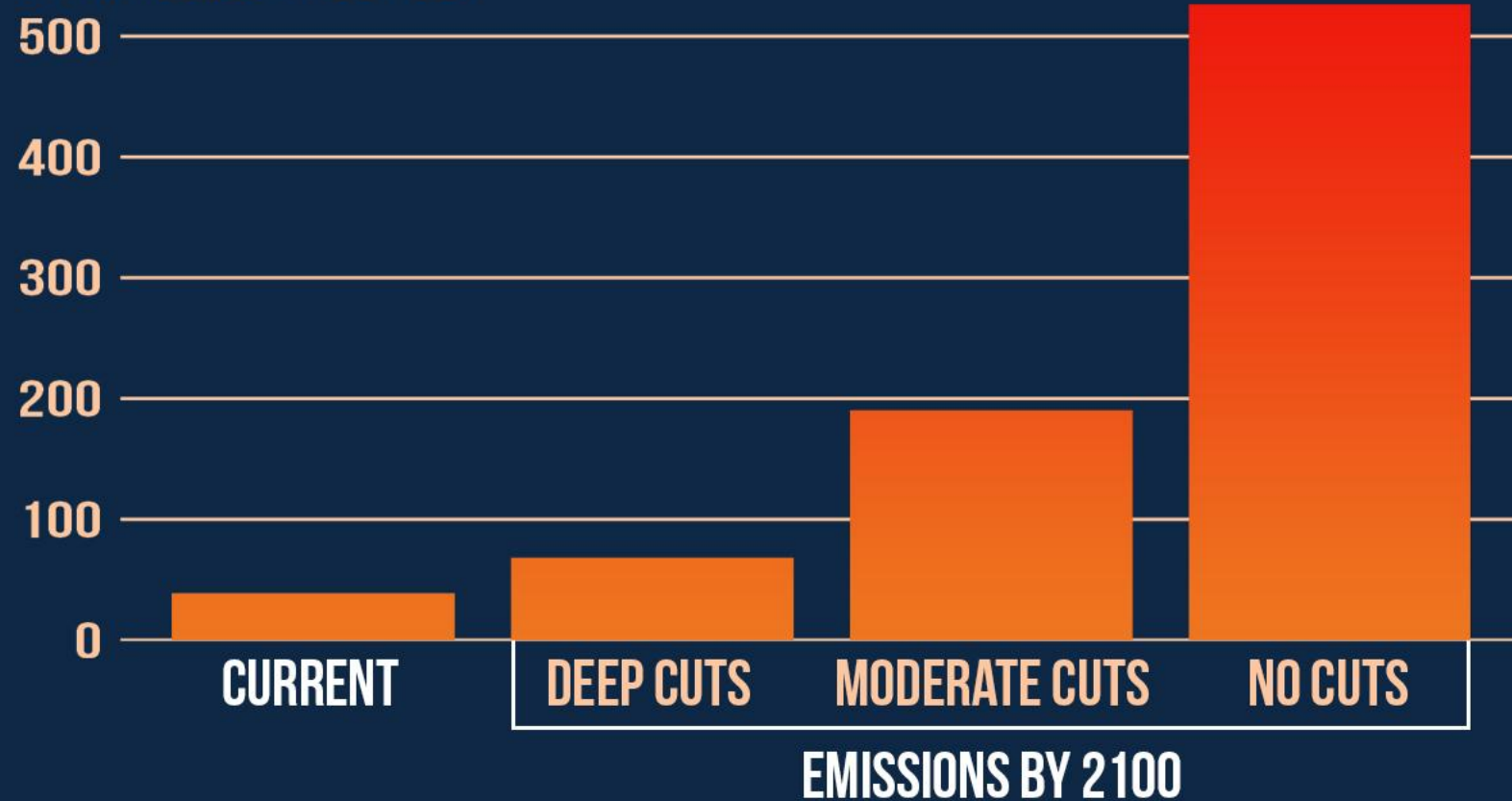
**+15
DAYS**

Change in days above 100°F based on rate of change since 1970.
Source: RCC-ACIS.org

CLIMATE  CENTRAL

NEW MEXICO YEARLY HEAT-RELATED DEATHS

(PER MILLION PEOPLE)



Deep cuts (RCP 2.6), moderate cuts (RCP4.5), no cuts (RCP 8.5)
Source: Shindell et al. 2020

The NEW ENGLAND JOURNAL *of* MEDICINE

CLINICAL PRACTICE

FOSSIL-FUEL POLLUTION AND CLIMATE CHANGE

Caren G. Solomon, M.D., M.P.H., *Editor*

Treatment and Prevention
of Heat-Related Illness

Cecilia Sorensen, M.D., and Jeremy Hess, M.D., M.P.H.

Table 3. Prevention Strategies for the General Population and for Specific Groups.*

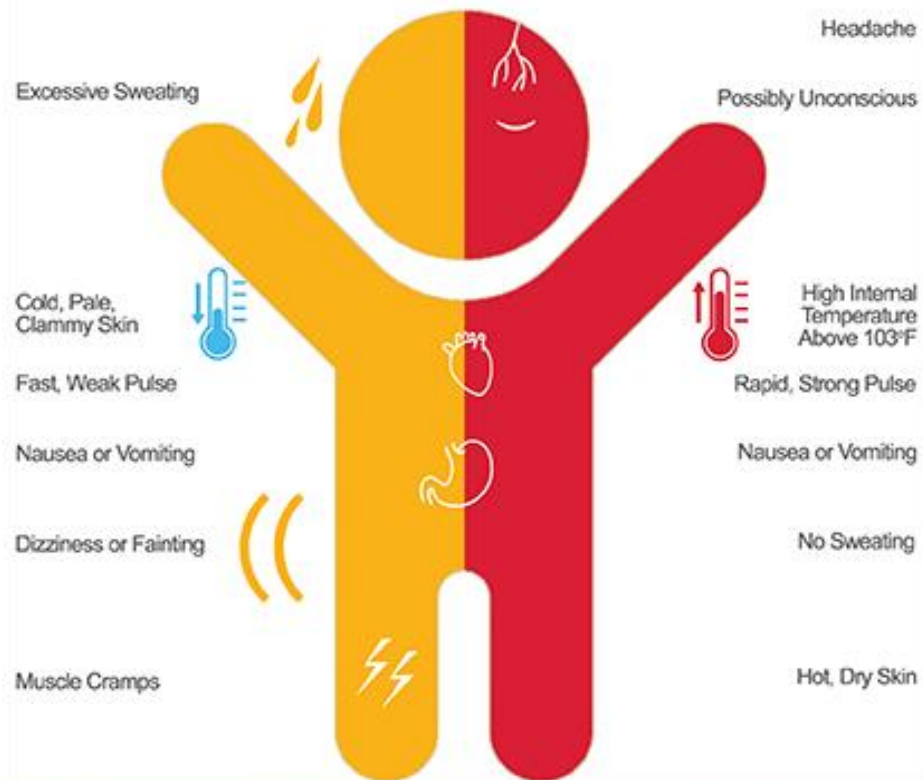
Risk Group	Strategy
General population	<p>Identify heat-vulnerable patients.</p> <p>Alert patients and caregivers to potential heat risks.</p> <p>Provide counseling regarding signs and symptoms of heat-related illness (e.g., excessive sweating or cessation of sweating, thirst, myalgias, confusion)^{27,38}</p> <p>Provide counseling regarding how to reduce risks and when to seek medical attention.³⁹</p> <p>Provide education regarding medications that may increase heat risk.²⁷</p> <p>Provide counseling about ensuring access to cooling when needed, including the appropriateness of fans as a cooling strategy⁴⁰ and access to mechanical air conditioning at home or at a nearby site, where available.</p> <p>Review emergency plans in the event of a power outage.⁴¹</p> <p>Engage social work and related services as needed to assist in reducing risks, including arrangement of safety checks.</p> <p>Become familiar with local heat-risk thresholds and monitor risk levels⁴² (in the United States, information can be obtained through a free OSHA application³⁷).</p>
Athletes	<p>Educate administrators, coaches, stakeholders, athletes, staff, and spectators about the risks and manifestations of heat-related illness.⁴³</p> <p>Encourage acclimatization in advance of substantial heat exposure.¹⁰</p> <p>Provide counseling regarding when to schedule practices and events and exercise-modification strategies appropriate for the region.⁴³</p> <p>Support event organizers in planning and preparedness activities.⁴³</p>
Outdoor workers	<p>Identify heat-vulnerable patients who work outdoors.⁴⁴⁻⁴⁷</p> <p>Explore potential barriers to reducing heat risk and formulate strategies to address these barriers, including drinking water, resting, or removing extra clothing or equipment.⁴⁵</p> <p>Discuss whether outreach to the patient's employer about the reduction of heat risks might be beneficial.</p> <p>Inform patients of relevant local worker protections and standards.⁴⁸</p>

* OSHA denotes Occupational Safety and Health Administration.

Know The Signs

Heat Exhaustion

Heat Stroke

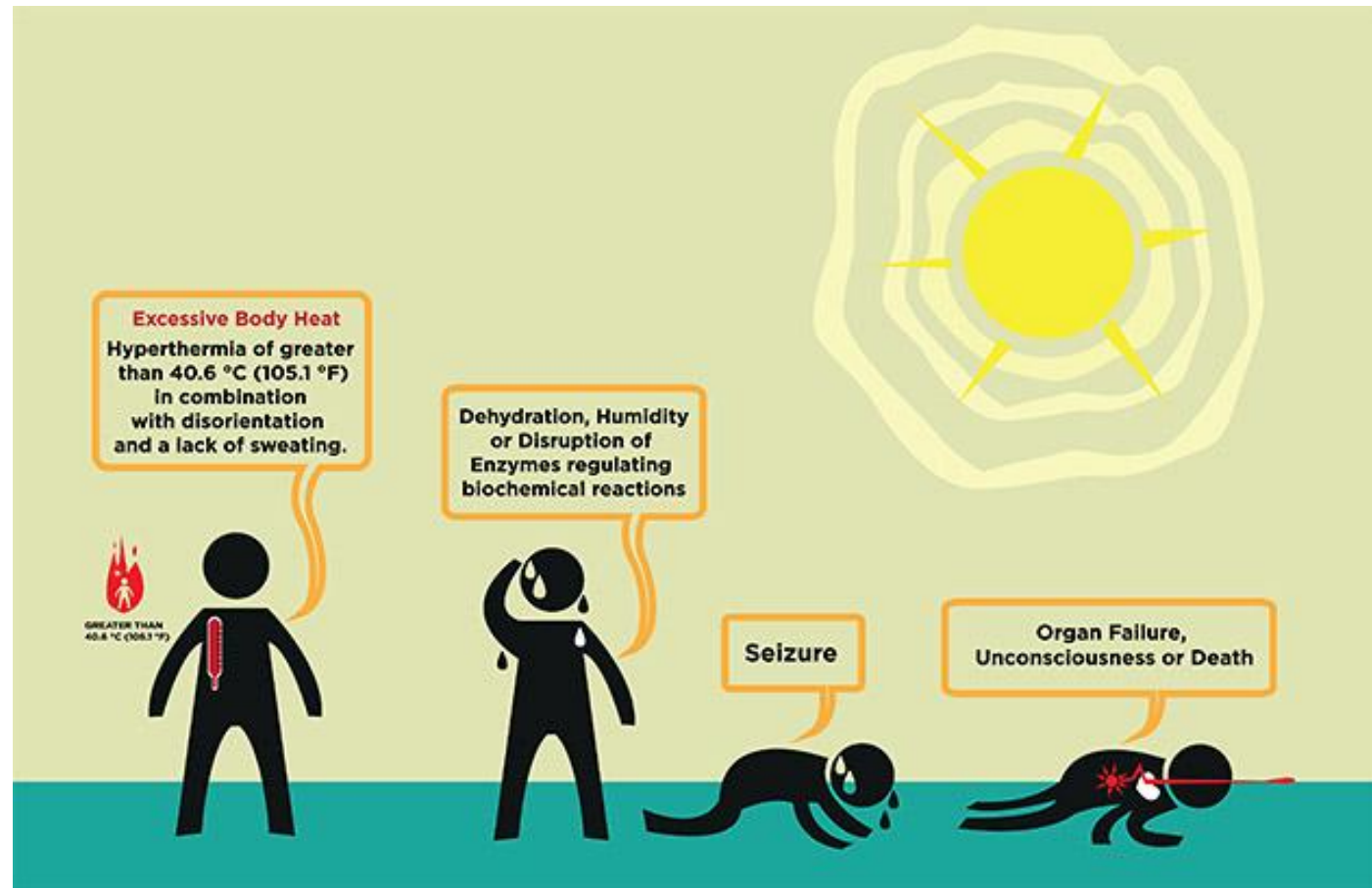


What To Do

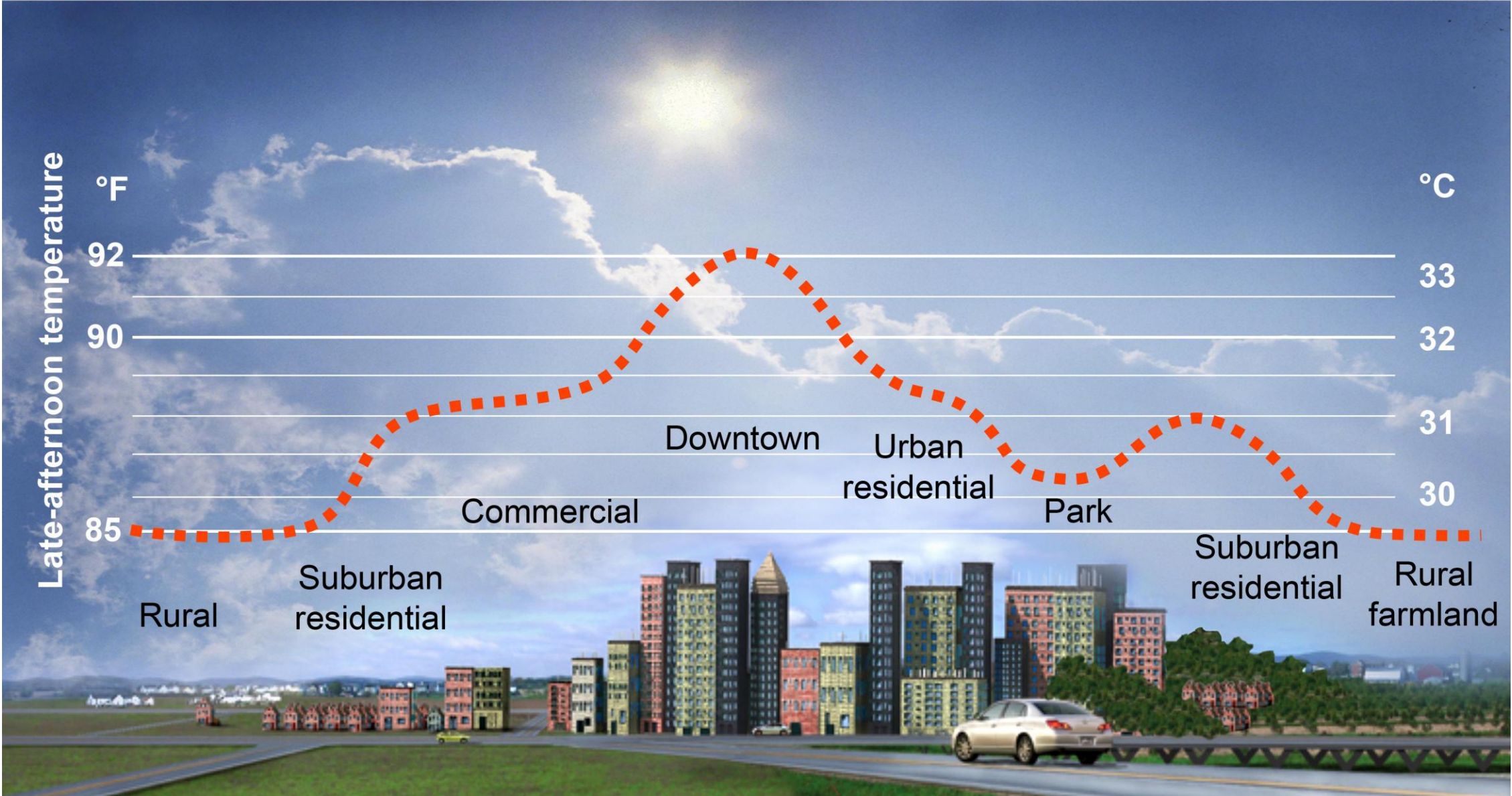
1. Move to a cooler location.
2. Lie down and loosen your clothing.
3. Apply cool, wet cloths to as much of your body as possible.
4. Sip water.
5. If you have vomited and it continues, seek medical attention immediately.

What To Do

1. CALL 911 IMMEDIATELY
2. Move the person to a cooler environment.
3. Reduce the person's body temperature with cool cloths or even a bath.
4. Do NOT give fluids.



The Urban Heat Island Effect



Lessons from Maricopa County (Phoenix)

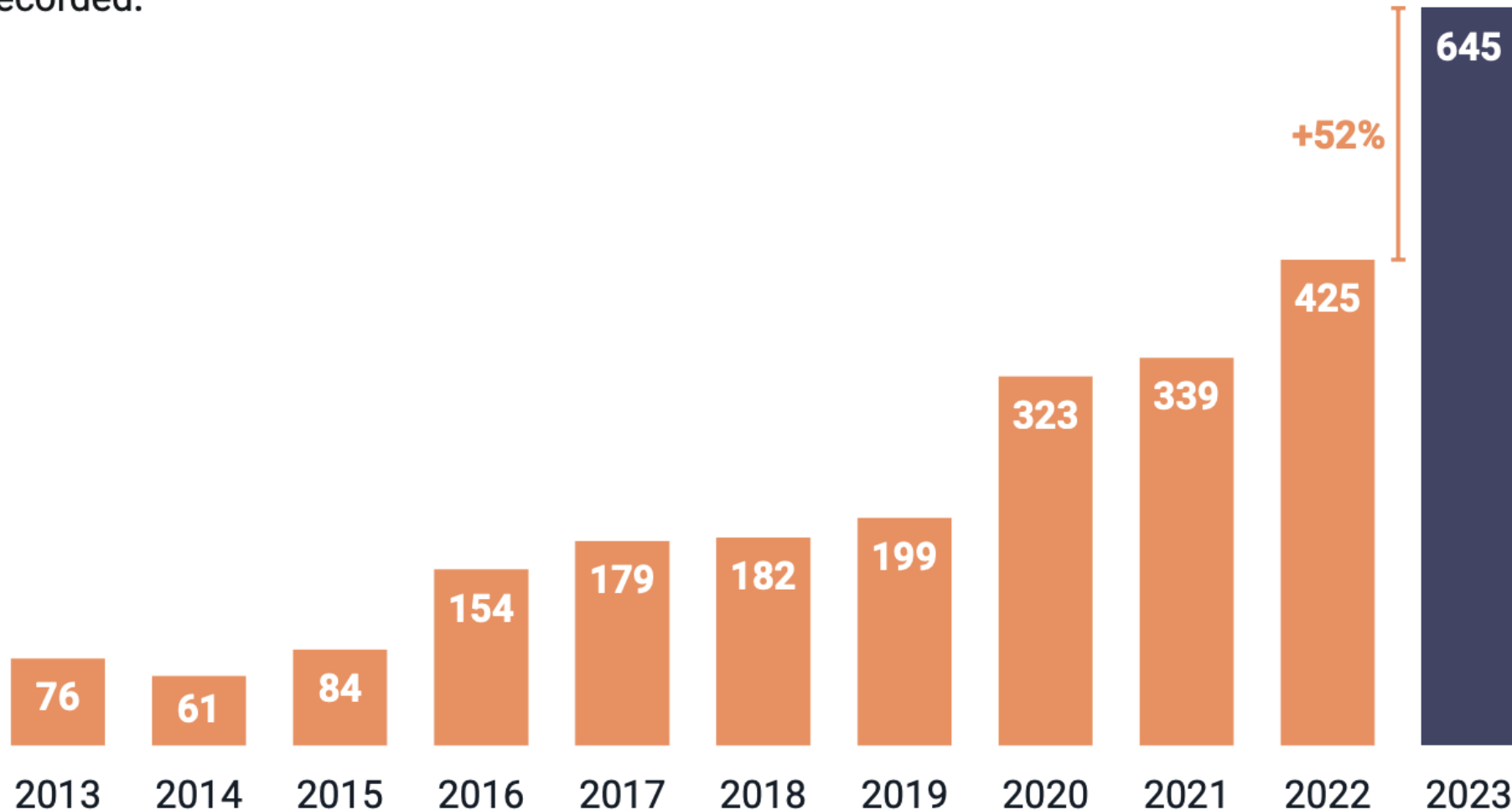
Annual Heat Reports

Heat Related Deaths Over Time

Deaths by Year

Maricopa County identified a total of 645 heat related deaths occurring in 2023.

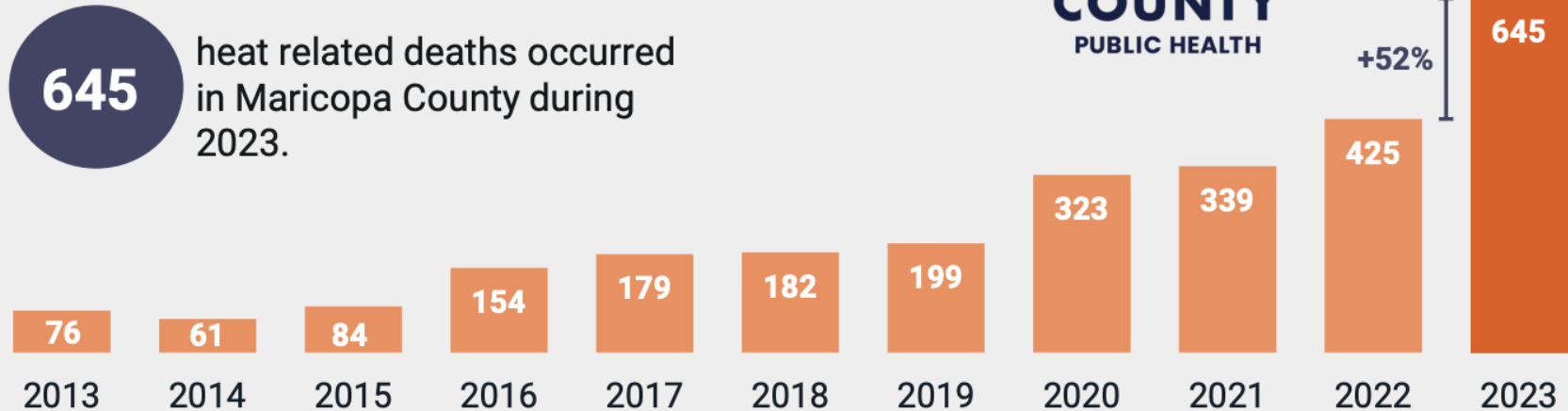
This represents a 52 percent increase from last year and the most heat related deaths ever recorded.



2023 Heat Related Deaths



645 heat related deaths occurred in Maricopa County during 2023.



More than **3 out of 4** heat related deaths were **male**.



Almost **2 out of 3** heat related deaths were **age 50 years or older**

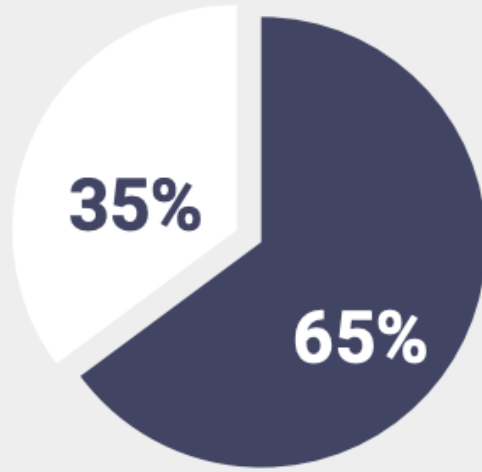
80%

of heat related deaths were among **Maricopa County residents**

3 out of 4 heat related deaths had an injury location **outside**.



Sixty-five percent of heat related deaths **involved substances** in 2023.



Forty-five percent of heat related deaths were among **people experiencing homelessness**.



1 out of 2 heat related deaths had a medical history of **physical/mental health conditions**.



71% of heat related deaths occurred on a day where the Weather Service issued an **excessive heat warning**



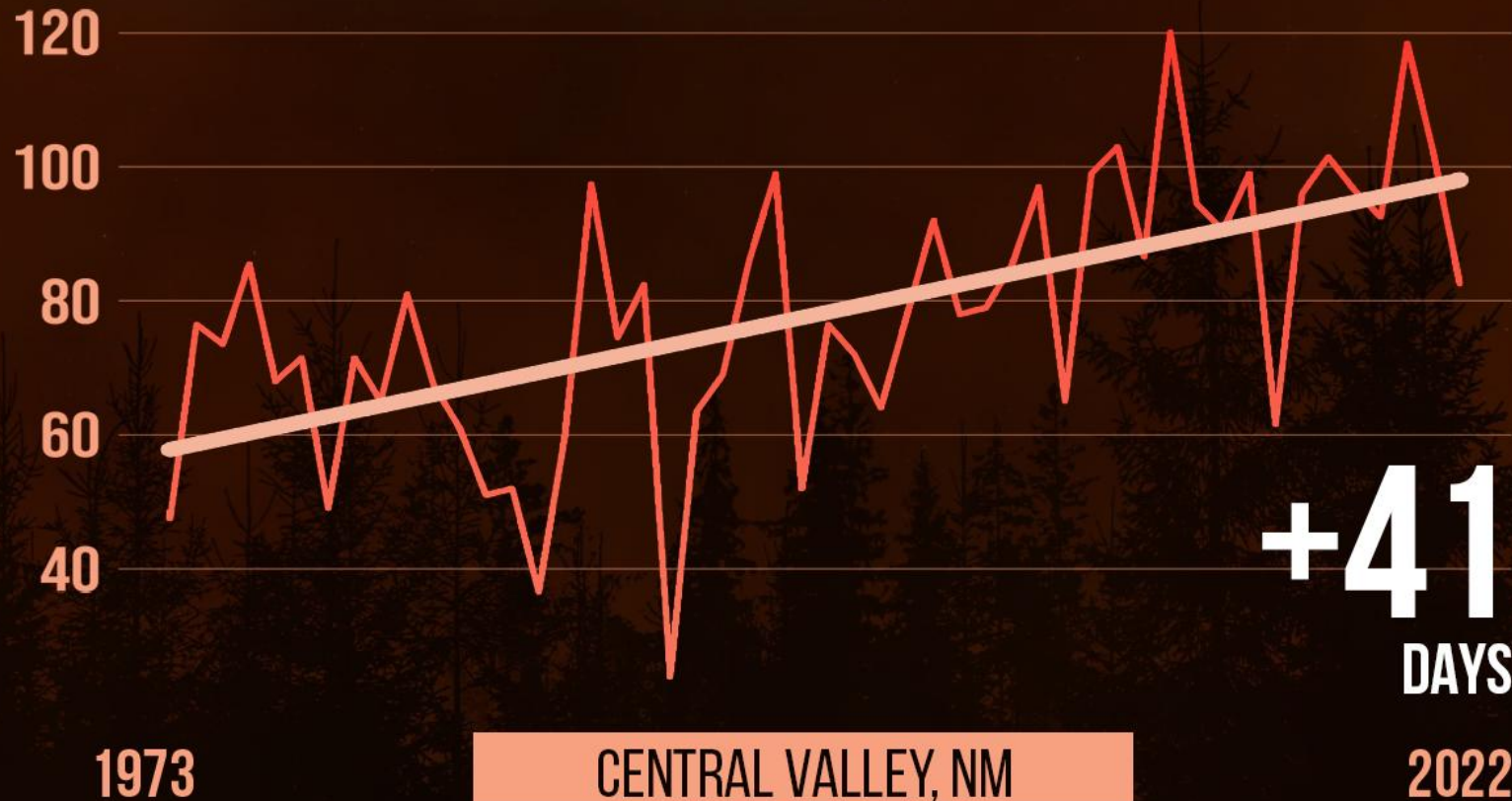
Photo: Jim Weber / Santa Fe New Mexican



<https://www.npr.org/2022/05/08/1097455610/new-mexico-residents-brace-for-extreme-wildfire-conditions>

FIRE WEATHER DAYS

Change in hot, dry, windy days

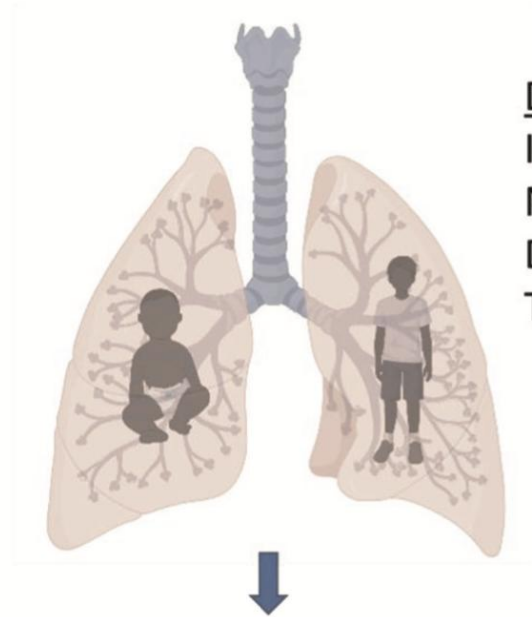


Annual days (1973-2022) at/above fire weather thresholds in at least two hourly observations per day. (2 stations in climate division)
Source: NOAA/NCEI Local Climatological Data (LCD)

Temperature, Air Pollution, Wildfires, Flooding, Drought, Dust Storm, Hurricane



PM2.5, Ozone, Pollen, Fungal Spores, Poor Water Sanitation, Poor Nutrition



Developmental Differences

Increased Respiratory Rate

Narrow airways

Developing Lungs

Thermoregulation



Asthma Exacerbation, Infection, Bronchitis, Pneumonia, Allergic Disease

Kline O, Prunicki M. Climate change impacts on children's respiratory health. Curr Opin Pediatr. 2023 Jun 1;35(3):350-355.

FIGURE 1. Selected climate change and respiratory health impacts in children.

Prebirth impacts

KEY POINTS

- Climate change and air pollution affect children's respiratory health before they are born.
- Climate change-related exposures indirectly affect pediatric lung health by increasing adverse pregnancy outcomes.
- Exposure to elevated temperatures, air pollution, and maternal stress decreases lung function and increases children's wheezing, asthma, atopy, and pulmonary infections.
- Adaptation measures should be implemented to decrease prenatal exposure to climate change and air pollution.

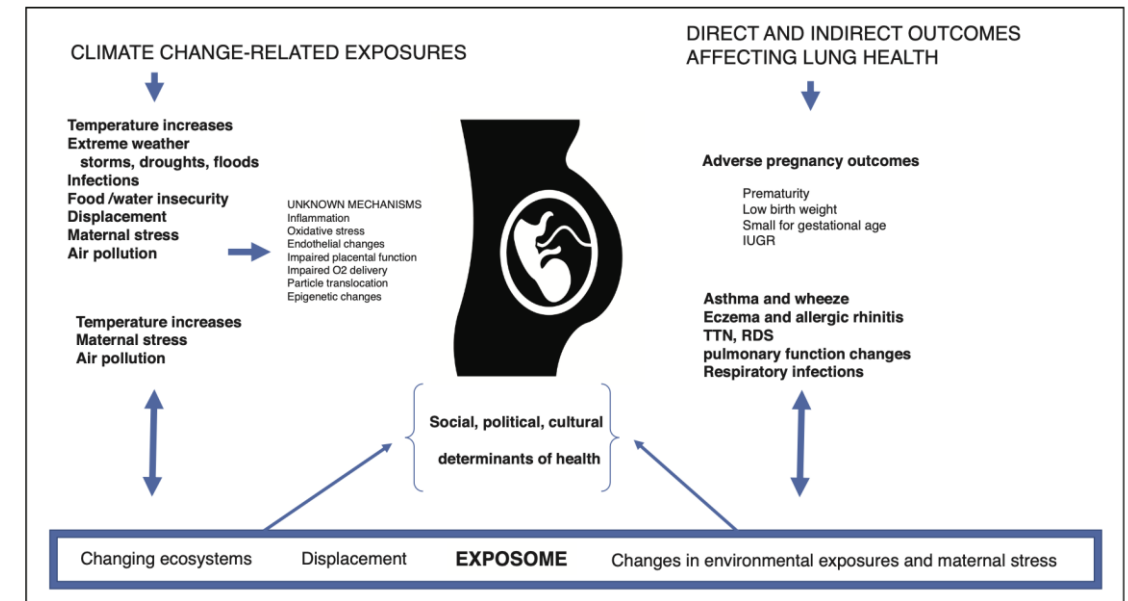


FIGURE 1. Pulmonary outcomes related to prenatal exposures to climate change during pregnancy. Climate change affects pulmonary health via two routes: the environmental changes associated with climate change (e.g. temperature increases, extreme weather, infections, food/water insecurity, population displacement, air pollution, and maternal stress) affect the developing fetus by increasing adverse pregnancy outcomes, which compromises the offspring's pulmonary health. In

Increased Risk



Images: Midjourney generated images, 2023 [16].

Condition/Individual with Greater Sensitivity to Smoke Exposure	Potential Health Effects from Wildfire Smoke Exposure
Asthma, COPD, and other chronic respiratory diseases	Respiratory symptoms including breathing difficulties (e.g., coughing, wheezing, and chest tightness). Greater medication usage, emergency department visits, and hospital admissions. ⁵⁻⁷
Cardiovascular disease (CVD)	Ischemic events; worsening of heart failure; or arrhythmias. Excess emergency department visits, hospital admissions, and even death from CVD. ^{8,9}
Children	Coughing, wheezing, difficulty breathing, chest tightness, decreased lung function, pneumonia. ¹⁰
Chronic Kidney Disease	Excess same-day mortality for dialysis patients. ¹¹ Decreased renal function and progression to end-stage renal disease. ¹²
Low wealth individuals	Greater smoke exposure as well as lesser access to exposure reducing measures (e.g., air filtration) and healthcare. ¹³
Older adults	Increased vulnerability to smoke effects, and therefore higher rates of healthcare utilization and mortality, due to higher prevalence of chronic medical conditions. ⁵
Outdoor workers	Increased vulnerability to smoke effects due to extended periods of time exposed to high concentrations of wildfire smoke, possibly without adequate protection.
Pregnant women	May increase risk of low birth weight and preterm birth. ^{14,15}

Adapted from <https://www.epa.gov/wildfire-smoke-course/which-populations-experience-greater-risks-adverse-health-effects-resulting>



Climate Resilience for Frontline Clinics Toolkit



**[www.americares.org/
climateclinics](https://www.americares.org/climateclinics)**

It's here! Download the entire toolkit or see below for specific modules. Individual resources can be downloaded for your use by clicking on **General Weather Guidance, Extreme Heat, Wildfire and Smoke, Hurricanes** or **Floods** below and then selecting the individual document or full module that you wish to download.

Download Complete Toolkit

Project Background and Contributors

[English](#)

[Spanish](#)

How to Use This Toolkit

[English](#)

[Spanish](#)

General Weather Guidance



Extreme Heat



Wildfire and Smoke



Hurricanes



Wildfire and Smoke



Wildfires have many effects on health, especially for individuals with chronic medical conditions.

The changing climate leads to greater periods of drought and extreme heat which increases the likelihood of wildfires and wildfire smoke. These resources contain critical information you need and actions you and your patients can take to help

FOR PATIENTS



Wildfire Action Plan and Tip Sheet

[English](#)

[Spanish](#)



Wildfire Smoke Action Plan and Tip Sheet

[English](#)

[Spanish](#)



All About Air Purifiers

[English](#)

[Spanish](#)

FOR PROVIDERS



Helping Patients Establish a Wildfire/Wildfire Smoke Action Plan

[English](#)

[Spanish](#)



Wildfires and Health

[English](#)

[Spanish](#)

FOR ADMINISTRATORS



Guidance and Checklist for Facility Repair and Re-Entry After Wildfires

[English](#)

[Spanish](#)



Wildfires and Planned Power Outages

[English](#)

[Spanish](#)



Wildfire Smoke Action Plan and Tip Sheet

For Patients

Use this plan and tips to stay safe if wildfire smoke is in the air around you. Share this plan with everyone in your home and with friends and family members. Review this information every year so that everyone is ready to act when there is wildfire smoke.

Wildfire smoke is dangerous to your health

Wildfire smoke increases the risk of lung problems, heart problems, and other health problems. It is particularly dangerous if you have ongoing health issues such as asthma, COPD, or heart or blood vessel disease.

Before wildfire smoke

- Be aware that being outside when there is smoke may pose a health risk.
- Wildfires and wildfire smoke can make the air dangerous to breathe.

To know when the air outside may not be safe to breathe, I will check my local air quality at:

Check for fires and wildfire smoke near you on your phone, computer, or local news or radio station. Most phone weather apps now include information on air quality.



Wildfire Smoke Communications Templates

For Administrators

Effective communication is crucial for health centers and clinics to ensure the safety and well-being of their patients and staff during wildfire smoke. This document provides guidance and sample messages that can be used to disseminate important information and alerts before, during, and after wildfire smoke.

Before wildfire smoke

Recorded phone message or email – preparedness

Wildfires across [impacted region] are creating hazardous and smoky conditions. Smoke from the [impacted region] fires may drift into [your community's name] and rapidly reduce air quality.

If you suffer from asthma, COPD, heart failure, or any other chronic respiratory or heart conditions, plan for how you will protect yourself from harmful wildfire smoke.

Check air quality at [local official site] to know your level of danger and exposure. Ensure you have back up medications safely stored in a possible evacuation bag. Keep up to date on evacuation warnings here: [insert local resource for evacuations]

In the meantime, limit exertion and exercise, especially outdoors. If possible, stay inside in a designated clean room. Information on how to set up your own clean room at home can be found here: [How to Set Up Your Own Clean Room at Home](#)

System-level disruption



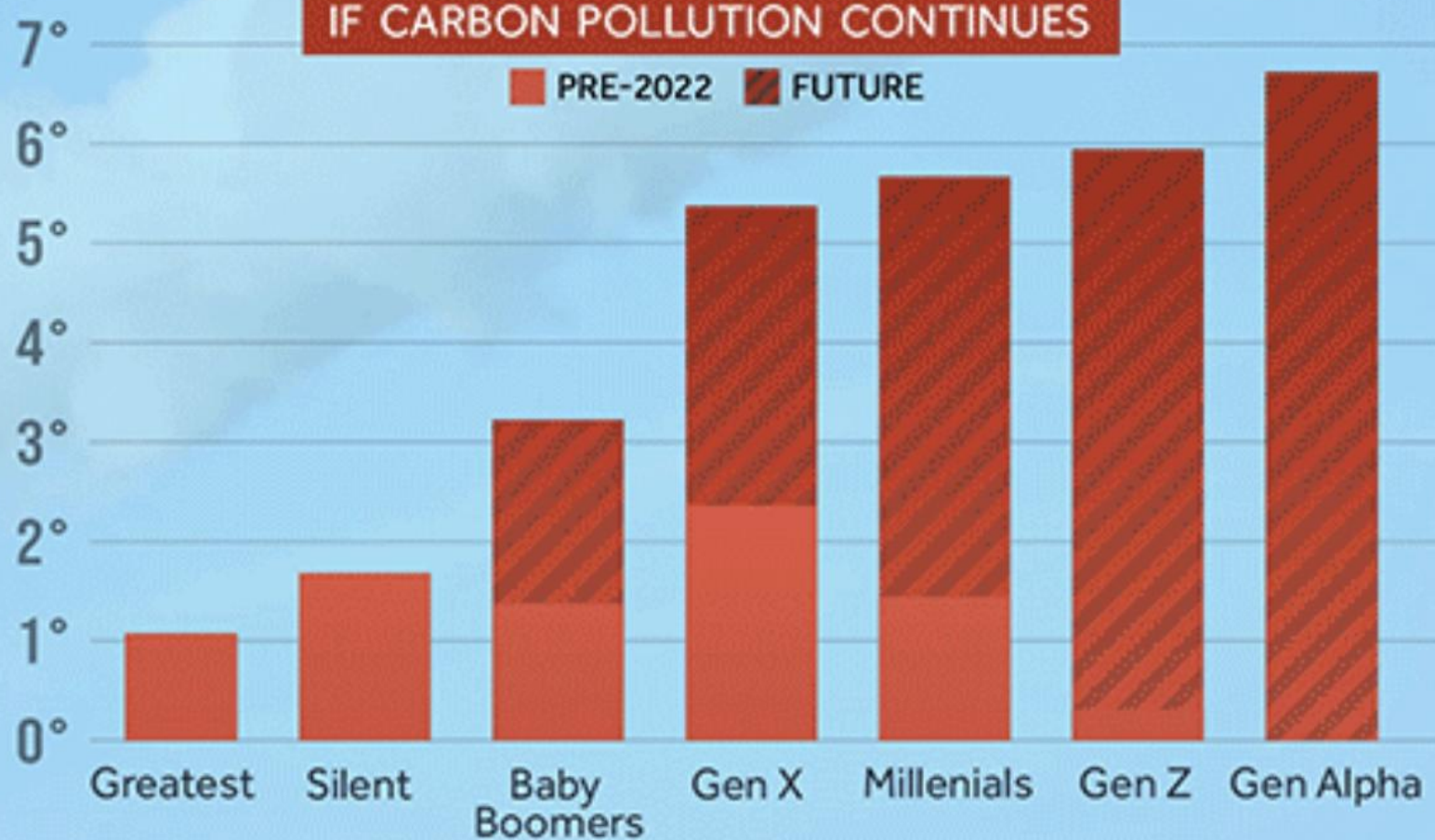
**HEALTHY CLIMATE
NEW MEXICO**
Health Professionals for Climate Action

Mental Health

HOUSTON

WARMING OVER A LIFETIME

IF CARBON POLLUTION CONTINUES

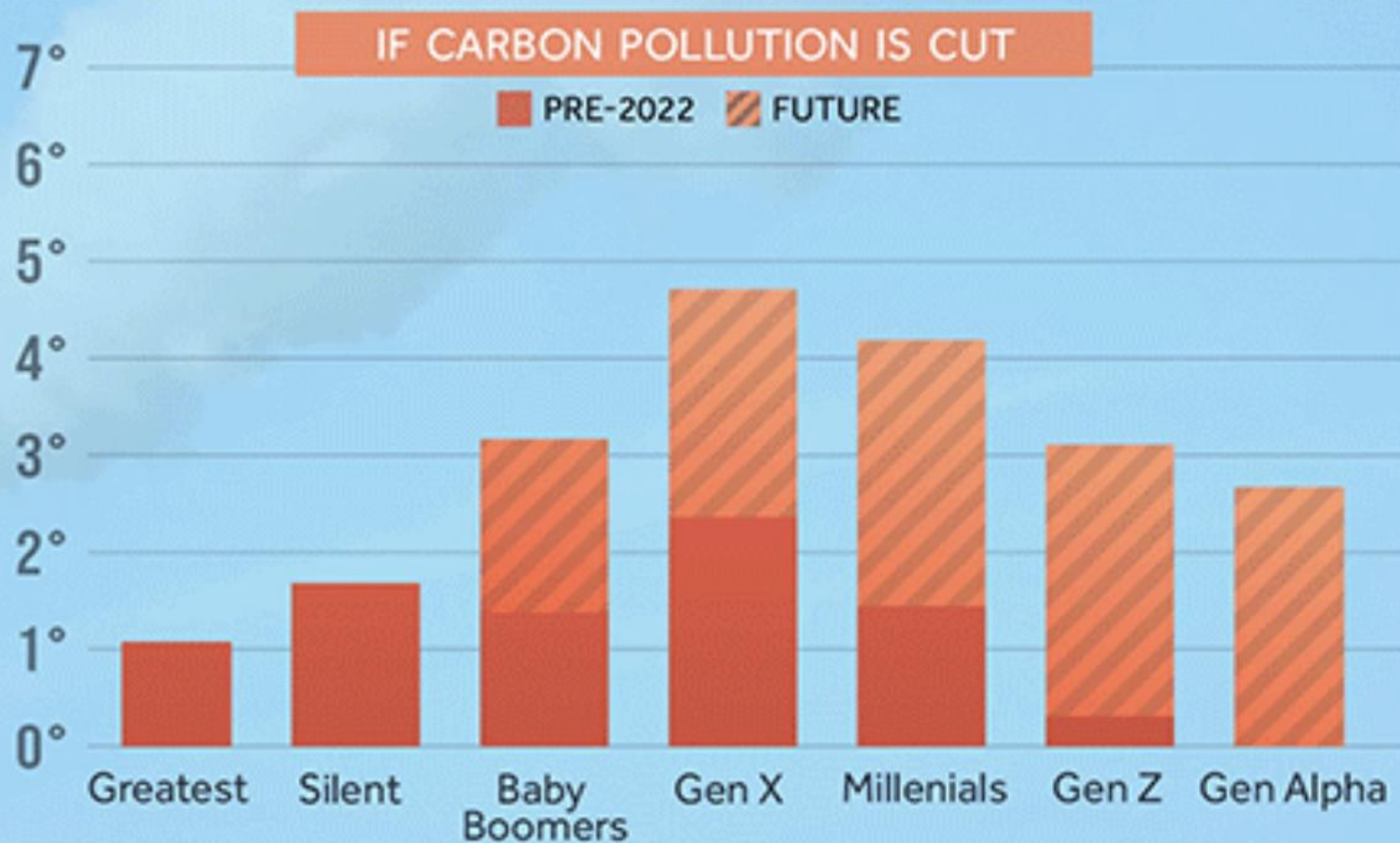


Projected lifetime warming (°F) with continued emissions (SSP3-7.0) & significant emissions cuts (SSP1-2.6). Source: NOAA/NCEI and CMIP6

CLIMATE  CENTRAL

HOUSTON

WARMING OVER A LIFETIME

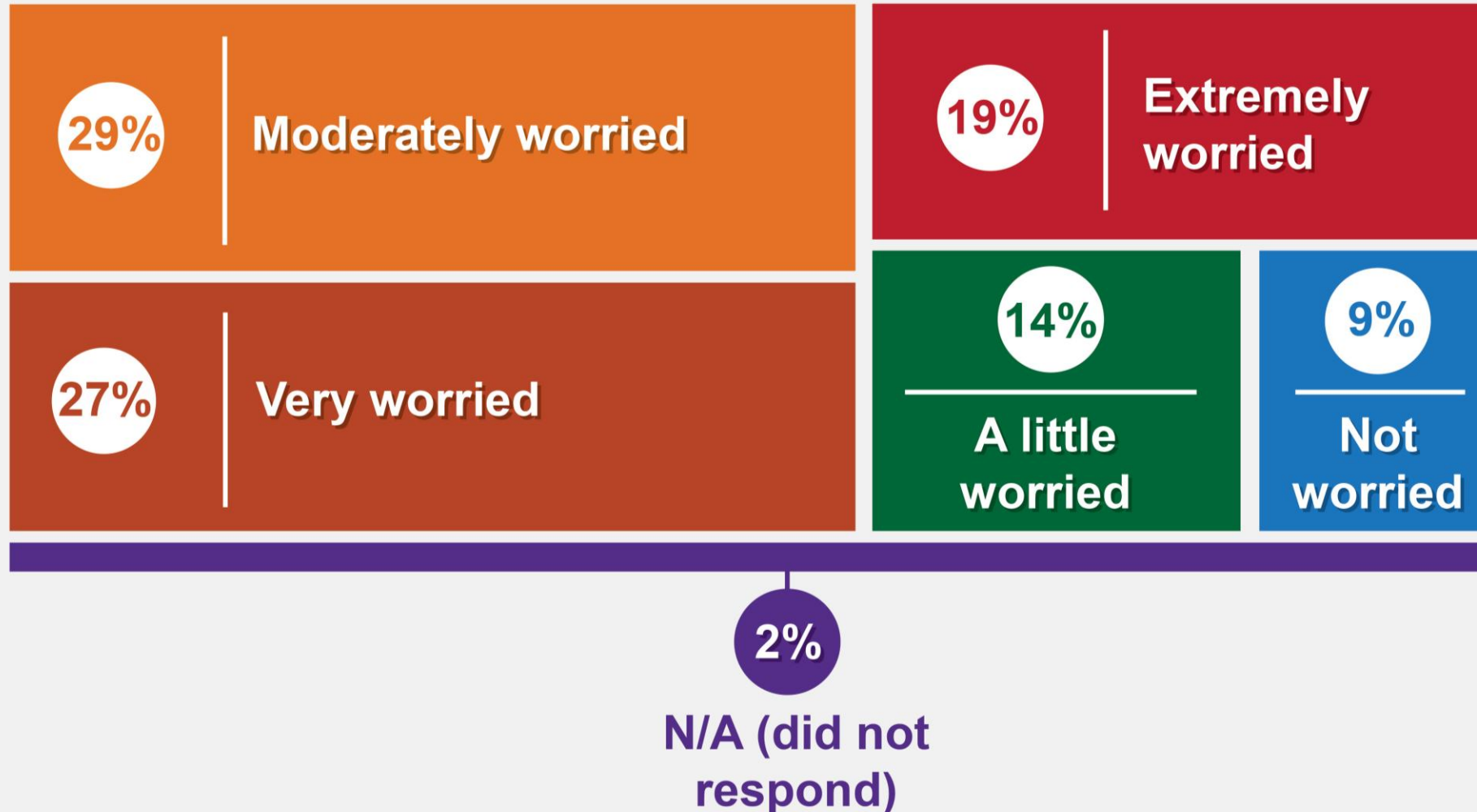


Projected lifetime warming (°F) with continued emissions (SSP3-7.0) & significant emissions cuts (SSP1-2.6). Source: NOAA/NCEI and CMIP6

CLIMATE  CENTRAL

Children's Mental Health

Worry level indicated by survey participants



26% of participants also reported that climate change had a negative effect on their daily life and functioning

Hickman C et al. Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey
The Lancet Planetary Health, 5(12), Dec 2021.

New terms

Ecoanxiety

Ecogrief

Ecoparalysis

Ecoguilt

Solastalgia^{*}

^{*}a form of homesickness one gets when one is still at home, but the environment has been altered and feels unfamiliar

How can we reduce the risks that climate change poses to our mental health?

- Support for those at risk
- Support for action to address climate change
- Provider education
- Psychological resilience training
- Youth climate education programs focused on empowerment—reframing threat as opportunity for pursuing solutions

Objectives

1. Understand and communicate the **health risks** from our changing climate to individuals and communities in New Mexico.
2. Identify best-practice **climate adaptation measures** to increase the health resilience for clinic patients.
3. Increase **extreme weather preparedness** for clinic operations.
4. Share resources with patients, community groups, and colleagues about **ways to engage in New Mexico** around climate change and health issues.

Innovation Framing

Challenge *and* huge opportunity for innovation

Lessons from modern medicine

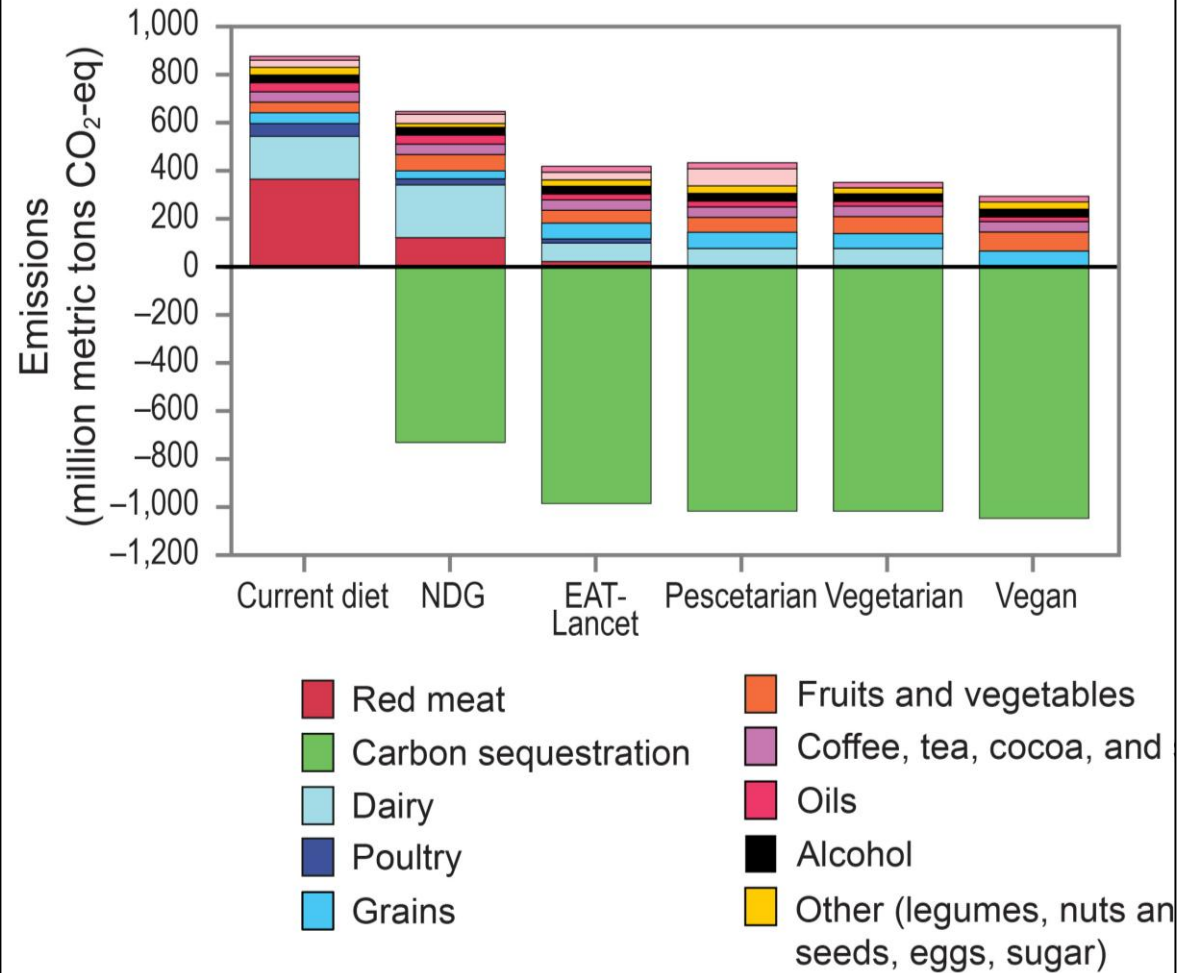
Lessons from traditional Indigenous knowledges



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a)

Emissions by diet type



Personal levels



ENERGY STAR Most Efficient 2025

The Year's Best of ENERGY STAR for
Energy Efficiency and Innovation

WHEN ONLY THE BEST WILL DO.

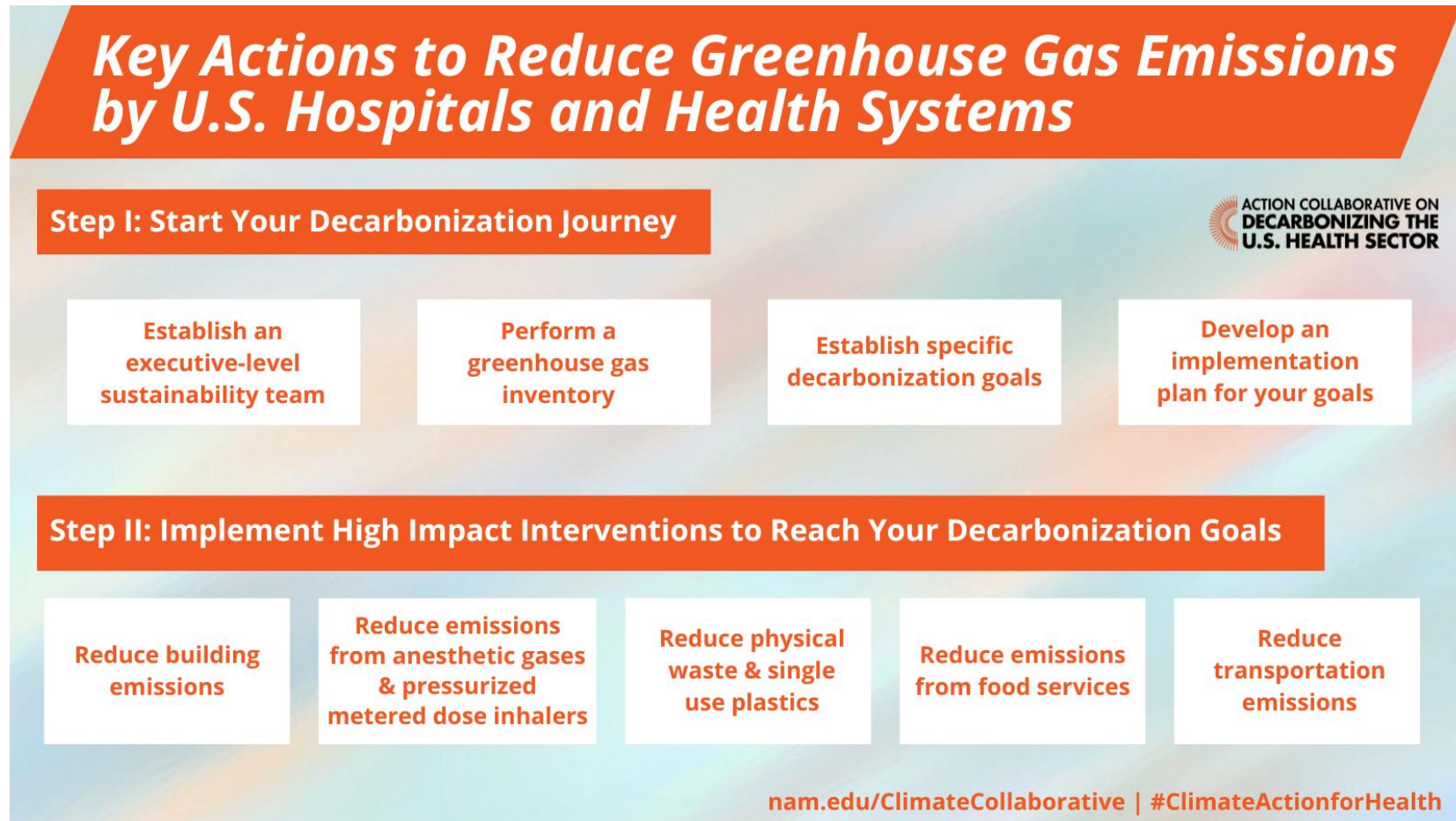
Looking for the ENERGY STAR label is a simple way to save you money and protect the environment. Now EPA introduces ENERGY STAR Most Efficient 2025, a distinction that recognizes products that deliver cutting edge energy efficiency along with the latest in technological innovation. It is an award that truly represents the best of ENERGY STAR.



Most Efficient
2025
www.energystar.gov

Healthcare Decarbonization

- 8.5% of US greenhouse gas emissions¹
- Recruitment tool for staff



1. Eckelman, M. J., et al. 2020. Health care pollution and public health damage in the United States: An update. *Health Affairs* 39(12). <https://doi.org/10.1377/hlthaff.2020.01247>.

2. <https://nam.edu/programs/climate-change-and-human-health/action-collaborative-on-decarbonizing-the-u-s-health-sector/key-actions-to-reduce-greenhouse-gas-emissions-by-u-s-hospitals-and-health-systems/#:~:text=In%20fact%2C%20the%20U.S.%20health,U.S.%20carbon%20emissions%20%5B2%5D>.

Collective Action

- Local
- State
- National
- Global

What do NM health professionals have to offer?

- 1. We are on the frontlines, and we have stories to tell.**
- 2. We are a trusted sources of information for our patients and communities**
- 3. Climate impacts on health will continue to involve health professionals**
- 4. Leveraging our expertise and experience to ensure that climate policies are meaningful, equitable, and rooted in protecting our communities.**



Leading Institutions, Organizations, and Associations are Sounding the Alarm

PRESS RELEASES

AMA adopts new policy declaring climate change a public health crisis

Climate change can impact the overall health of physicians see this as a medical emergency. Stay change with news and articles from the AMA.



AMERICAN PSYCHOLOGICAL ASSOCIATION

Urgent need to address mental health effects of climate change, says report

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

Climate change poses significant threats to human health, safety and security.

Children are especially vulnerable to the health effects of climate change.



American Academy of Family Physicians

To raise awareness about the impact that climate change has on patient health, the AAFP partnered with 20 other medical organizations and associations (representing more than 500,000 health care professionals) to form the Medical Society Consortium on Climate and Health.

The U.S. Call to Action on Climate, Health, and Equity...has support from more than 150 health organizations from across the country. The Call to Action declares climate change one of the greatest threats to health America has ever faced and sets priority policy actions.



The Medical Society Consortium

ON CLIMATE & HEALTH

<https://medsocietiesforclimatehealth.org/>

Become a Medical Advocate for Climate and Health

We are seeking physicians in every community in America who are willing to become advocates for climate and health in their community by speaking to local policymakers, local press and community groups. Please become an advocate today.

SIGN UP NOW



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[Join HCNM](#)

Healthy Climate New Mexico

Health Professionals for Climate Action

Healthy Climate NM's **vision** is a healthy, equitable, sustainable future for all New Mexicans.

Healthy Climate NM's **mission** is to mobilize New Mexico healthcare and public health professionals to advocate for climate solutions that protect health and promote equity.

About Us

Learn more about
Healthy Climate
NM and our team.

Climate & Health Day at the Roundhouse January 27th

Register to join
HCNM members
in Sante Fe to

Support Climate Legislation

Add your name to
a growing list of
supporters for the
State Climate

Get Involved

Become a
member today to
stay in the loop
on our efforts!

Wildfire Smoke Policy Advisory

Read HCNM's
latest policy
advisory on
protecting New

healthyclimatenm.org



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Policy & Advocacy

LET YOUR CLIMATE STORY & VOICE BE HEARD!

Join other Health Professionals as we bring
our voices on climate change to our legislators.

Monday, January 27, 2025
9:00 AM - 3:30 PM

*Gain critical knowledge about policies to
address climate & health.*

Learn about the legislative process.

Meet our legislators.

Education

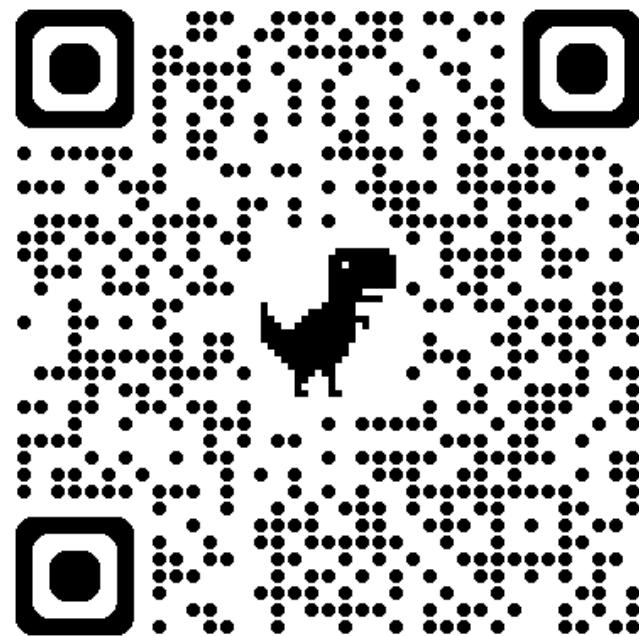
HEALTHY CLIMATE
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2025 Extreme Heat, Health & Resiliency Summit

Save the Date
Wednesday, April 23, 2025

Community

Please join! (no dues)



Mitigation

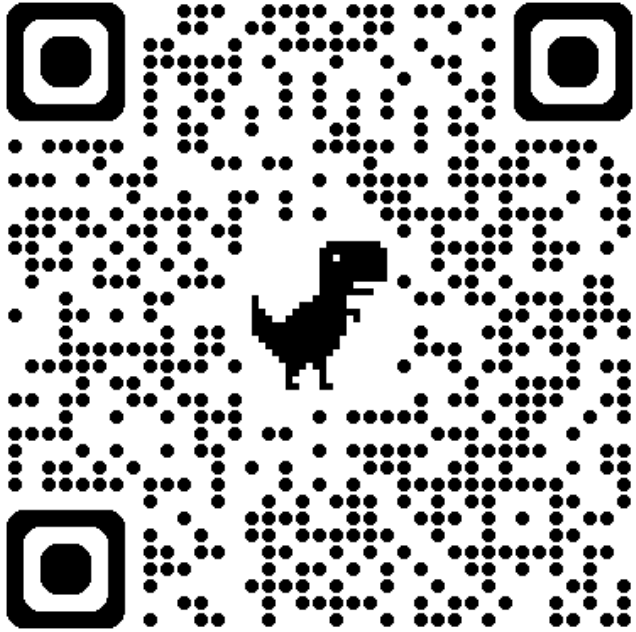
Adaptation

Suffering

- 1. We are in this together**
- 2. There are solutions**
- 3. You, we, these efforts matter**



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Overview: US 5th NCA; IPCC report

Medical: NEJM series; Lancet Countdown

Clinic adaptation: Americares resources

This is our lane

There are solutions to this situation



HEALTHY CLIMATE NEW MEXICO

Health Professionals for Climate Action

Thank You

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Healthy Climate New Mexico

Select References

American Association of Family Physicians 2024 Climate Change and Environmental Health Position Paper, accessed 2.9.2025. <https://www.aafp.org/about/policies/all/climate-change-environmental-health.html>

CDC Social Vulnerability Index. <https://svi.cdc.gov>

Climate Central. Climatecentral.org

Commonwealth Fund. How Climate Change Affects Mental Health. <https://www.commonwealthfund.org/publications/explainer/2023/mar/how-climate-change-affects-mental-health>, access 2.9.2025.

Hickman C et al. Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey. *The Lancet Planetary Health*, Volume 5, Issue 12, e863 - e873, Dec 2021.

Howard et al., *The Lancet Planetary Health* 2023 7e251-e264DOI: (10.1016/S2542-5196(23)00022-0)

Kline O, Prunicki M. Climate change impacts on children's respiratory health. *Curr Opin Pediatr*. 2023 Jun 1;35(3):350-355. doi: 10.1097/MOP.0000000000001253. Epub 2023 Apr 14. PMID: 37057656.

Lancet Countdown. <https://lancetcountdown.org/>

Sheep Springs flooding event, Facebook. <https://www.facebook.com/teesto.az/videos/sheep-springs-nm/3301776903414763/>

Sorensen C, Hess J. Treatment and Prevention of Heat-Related Illness. *N Engl J Med* 2022;387:1404-13.

US Census Bureau, New Mexico Data 2023. https://data.census.gov/profile/New_Mexico?g=040XX00US35, accessed 2.9.2025.

US National Climate Assessment (5th), 2023. <https://nca2023.globalchange.gov/>

University of Colorado Diploma in Climate Medicine. <https://medschool.cuanschutz.edu/climateandhealth/diploma-in-climate-medicine>

World Health Organization. Mental Health and Climate Change, <https://www.who.int/publications/i/item/9789240045125>

Yadav A, Pacheco S.E. Prebirth Effects of Climate Change on Children's Respiratory Health. *Curr Opin Pediatr* 35, 344-349 (2023).