



ADDRESSING CLIMATE CHANGE TO IMPROVE CHILDREN'S HEALTH IN NEW MEXICO

by Divya Shiv, MPP | July 2023

ADDRESSING CLIMATE CHANGE TO IMPROVE CHILDREN'S HEALTH IN NEW MEXICO

by Divya Shiv, MPP | July 2023



In the Land of Enchantment, families should be able to live, thrive, and enjoy New Mexico's natural beauty without worrying about how the changing climate is impacting their children's health. Unfortunately, children are especially vulnerable to the consequences of climate change, which include extreme heat, drought, flooding, wildfires, poor air quality, and more. These harmful weather events result in worse health outcomes for children that can persist into adulthood, as well as poorer educational outcomes and exacerbated economic instability for families. In addition, climate change is more likely to harm families and communities of color and those earning low incomes. As we saw with the COVID-19 pandemic, the inequities brought about

by centuries of systemic racism and misogyny mean these communities already face greater barriers to good health and economic stability, so they have fewer resources to deal with additional hardships. Fortunately, implementing strategies and laws that mitigate the harms of climate change and assist in adaptation can protect health outcomes for children, which will open new doors to a healthier New Mexico and a brighter tomorrow.

This policy brief looks at the impacts of extreme heat, drought and flooding, wildfires, and air quality, and includes several policy recommendations.

ENVIRONMENTAL AND CLIMATE IMPACTS ON CHILD WELL-BEING

While climate change impacts all of us, not all groups will experience the negative effects to the same extent. Children are especially at risk of the harmful effects of climate change because their bodies and immune systems are still developing, which makes them more susceptible to environmental contaminants.¹ Children also breathe in more air and drink more water for their body weight than adults do, resulting in higher exposure levels, which is compounded by the fact that children tend to spend more time outdoors. In addition, because these health issues take years to progress, children who are exposed to environmental pollutants from a young age are more likely to develop health problems compared to adults who are not exposed until later in life.² Due to these differences between children and adults, kids are at greater risk for a wide array of environmental health concerns, such as asthma, chronic lung diseases, and heat-related deaths.³

In addition to physical health concerns, climate change also impacts children's mental health. For example, experiencing an extreme climate-related event like a wildfire or flood can also worsen mental health, causing, among other things, PTSD and a higher risk of suicide for youth. This is exacerbated by the overall anxiety youth may feel due to the trajectory of the current climate crisis relative to their lifespans and the fears that governments are not adequately working to slow climate change.⁴ In fact, from a survey of 10,000 youth across several countries including the United States, almost 50% reported that their feelings of sadness and anxiety due to fears about climate change negatively impacted their daily life and functioning. In addition, more than 75% found the future frightening and felt a sense of betrayal from adults and governments.⁵

Beyond health outcomes, climate change-related weather events also exacerbate food insecurity for children and families. This is already a problem in New Mexico, where 21% of children have limited or inadequate access to food.⁶ This rate is likely to increase due to the effects that rising temperatures, droughts, and floods have on food chains, which impact food availability and prices.⁷ Other downstream effects of climate change include worse educational outcomes for children and economic and community instability for families.⁸

In addition, children who live in high-risk geographic regions, such as floodplains, forests, dry shrubland, and near oil and gas facilities, busy highways, and other industrial centers, are even more vulnerable to the impacts of extreme climate-related events.⁹

These challenges often loom even larger for communities of color and families earning lower incomes, who are already disproportionately experiencing the harms of climate change.¹⁰ In fact, an analysis from the U.S. Environmental Protection Agency found that underserved communities experience the most severe consequences from climate change because they have the fewest resources to prepare for, and recover from, extreme weather events.¹¹ In addition, neighborhoods in low-income communities tend to have a greater exposure to air pollutants, which places residents at a higher risk for environmental health problems.¹² This finding is also true for neighborhoods of color, which is why these neighborhoods have a higher incidence of childhood asthma. Furthermore, Native Americans are one of the most climate-impacted populations in the United States due to their high rates of poverty.¹³ Overall, the effects of climate change hurt those in our state who have the fewest resources to manage these worsening environmental risks.

EXTREME HEAT

Extreme heat is the leading cause of weather-related deaths in the United States, and temperatures continue to climb due to climate change.¹⁴ Extreme heat – which is defined by the Centers for Disease Control and Prevention as summertime temperatures that are much hotter and/or humid than is average for any given location – causes an increase in heat-related illnesses, such as heat exhaustion and heat stroke, and it can lead to deaths from heart attacks and other cardiovascular diseases.¹⁵ The body's primary mechanism for cooling down is to release moisture via sweat glands on the skin. As the moisture evaporates, the body is cooled, much in the same way that an evaporative cooler brings down the temperature in a building. Since this cooling mechanism relies on evaporation, high humidity makes it more difficult for the body to cool, which is why the heat index (see Figure I) includes relative humidity. Fortunately, New Mexico is much dryer than most of the rest of the southern states. Still, given how the body copes with high temperatures, dehydration is a common danger during the summer months.

Children are disproportionately impacted by extreme heat, as are seniors, and their bodies may struggle to regulate internal temperatures.¹⁶ Native Americans are also at a greater risk of heat-related illnesses

because they have a higher likelihood for high blood pressure, which makes extreme heat conditions more dangerous.¹⁷ In addition, the risk of heat-related illnesses increases in urban heat islands that have little tree cover and overall vegetation and where the concentration of buildings and pavement absorb and retain heat.¹⁸ Heat-related deaths of the elderly often occur in urban settings.¹⁹

In New Mexico, an average 20 days out of the year are classified as extremely or dangerously hot, a number that is set to double by 2050.²⁰ In fact, since 1970, New Mexico has warmed by 3.3 degrees Fahrenheit. Absent human activity, such an increase would have taken thousands of years to occur.²¹ Rising temperatures are an issue throughout New Mexico, as 80,000 residents in the state are vulnerable to extreme heat.²² Unfortunately, 15% of the state’s population do not have cooling units to help them during periods of extreme heat.²³ In addition, individuals who rely on evaporative

cooling systems may get exposed to air pollutants because their cooling system pulls air from the outside. Evaporative cooling systems are especially dangerous during wildfires.²⁴

Fortunately, heat-related illnesses are preventable through the implementation of early warning heat-health systems.²⁵ However, although New Mexico’s extreme heat response plan addresses current heat threats, the state does not have climate adaptation plans that adjust for intensified future heat risks.²⁶ The state and local municipalities should also continue their heat reduction efforts through policies that prioritize tree and vegetation cover and use urban green infrastructure techniques to shade building surfaces, deflect radiation from the sun, and release moisture into the atmosphere.²⁷ In addition, the state should utilize its Medicaid program like Oregon did to provide air filters and air conditioners for people with the highest needs.²⁸

FIGURE I
The NWS Heat Index Shows How High Humidity Makes High Temperatures More Dangerous

		Temperature (in Fahrenheit)															
		80°	82°	84°	86°	88°	90°	92°	94°	96°	98°	100°	102°	104°	106°	108°	110°
Relative Humidity	40%	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45%	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50%	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
	55%	81	84	86	89	93	97	101	106	112	117	124	130	137			
	60%	82	84	88	91	95	100	105	110	116	123	129	137				
	65%	82	85	89	93	96	103	108	114	121	128	136					
	70%	83	86	90	95	100	105	112	119	126	134						
	75%	84	88	92	97	103	109	116	124	132							
	80%	84	89	94	100	106	113	121	129								
	85%	85	90	96	102	110	117	126	135								
	90%	86	91	98	105	113	122	131									
	95%	86	93	100	108	117	127										
	100%	87	95	103	112	121	132										

Likelihood of heat disorders with prolonged exposure or strenuous activity:

Caution
 Extreme Caution
 Danger
 Extreme Danger

How to Read This Index: Find the heat index by tracing the temperature and relative humidity to where they coincide on the chart. For example, if the temperature is 94 degrees Fahrenheit and the relative humidity is 75%, the heat index is 124 – in the danger zone.

Source: National Weather Service

NEW MEXICO VOICES FOR CHILDREN

DROUGHT AND FLOODING



The rising temperatures in New Mexico increase the likelihood of both drought and flooding, which creates issues of water access and quality.²⁹ In fact, over the last several decades, the United States has experienced an increase in extreme rainfall and drought events that have serious consequences for children's health and well-being.³⁰

Specifically, severe storms and floods can lead to water contamination that cause poor health outcomes for children such as impaired cognitive function, gastrointestinal issues, and cancer.³¹ In addition, the remaining standing water after a flood creates favorable conditions for disease-carrying insects like mosquitoes, which increases the risk of vector-borne diseases.³² Floods and intense storms also increase the likelihood of mold in families' homes, which results in poor air quality and associated negative health outcomes.

Drought, on the other hand, is associated with diarrheal disease in children because it causes a higher concentration of dangerous bacteria in water and reduces the amount of water available for personal hygiene. Diarrheal diseases can cause stunted development or even death due to severe dehydration.³³ Drought also causes dust storms, disruptions in food production, and it increases the risk for wildfires.³⁴ Overall, both drought and flooding can result in displacement and job insecurity if families need to evacuate their homes, which creates greater instability

and mental health issues for their children.

Like other states, New Mexico has experienced an increase in droughts and flooding due to climate change. More than 300,000 residents live in areas experiencing drought, and New Mexico has had many dangerous floods in the last couple of decades.³⁵ In addition, more than 17% of housing properties in New Mexico are at risk of being severely impacted by flooding, which puts families in danger of housing instability and homelessness.³⁶ Droughts are also projected to become more intense in the state due to higher temperatures and decreased precipitation, which would hurt the state's agriculture, exacerbate water-scarcity in New Mexico, and increase the intensity and occurrence of wildfires.³⁷

Fortunately, New Mexico has already taken steps to address the increase in droughts and floods by creating a Drought Task Force and statewide Drought Plan,³⁸ and has prepared a 2018 New Mexico State Water Plan to address issues such as water infrastructure, drought, and water conservation.³⁹ The state has also invested in statewide conservation funds and in efforts to protect surface water and groundwater resources.⁴⁰ Local governments have also enacted policies to address drought and flooding, such as Albuquerque Bernalillo County Water Utility Authority offering rebates to promote water conservation.⁴¹

WILDFIRES



Drought and flooding are bookends to another issue that has worsened with climate change – wildfires. Droughts have made wildfires more likely, more devastating, and more difficult to contain. Once a landscape has been scarred by a wildfire, the terrain is less able to absorb rainfall, which leads to flooding. The harm caused by flooding makes it even more difficult for a burn scar to heal. In the past few years, New Mexicans have experienced many devastating wildfires across the state, displacing hundreds of families from their homes and land.⁴² These fires were followed by severe flooding, which hampered efforts to rebuild and restore the land. Unfortunately, the rising temperatures of climate change, as well as the longer periods of extreme heat and drought conditions, has resulted in longer, hotter, and drier wildfire seasons, increasing the risk and intensity of wildfires in the future.⁴³ Due to these worsening environmental conditions, New Mexico may no longer have a wildfire “season” but rather experience wildfires throughout the year.⁴⁴

Wildfires have immediate, negative consequences for children. In fact, children are especially vulnerable to the effects of particulate pollution caused by wildfire smoke, which can reduce lung function and impact

children’s respiratory health as adults.⁴⁵ Exposure to wildfire particulate pollution may also increase children’s risk for autism and ADHD and result in worse school performance.⁴⁶ In addition, when families have to evacuate because of wildfires, they are more likely to face housing instability and job insecurity, all of which harm children’s physical and mental well-being.⁴⁷ Wildfires also hurt our state by displacing people and communities that have existed in one place for hundreds of years, destroying unique aspects of our state’s culture.⁴⁸

New Mexico can do more to help communities in the aftermath of a wildfire and climate adaptation in general, by creating a program within the Department of Health that focuses on the public health impacts of worsening environmental events. This bill was introduced during the 2023 session as the “Public Health and Climate Resiliency Act,” but it did not pass. Other policies that New Mexico can implement to reduce the risk and harms from wildfires include healthy forest thinning programs, burning restrictions, vegetation management, and making electric systems in high fire-risk areas more weather-resistant.

AIR QUALITY

No matter its cause, air pollution and poor air quality have devastating effects on health for children due to their developing respiratory systems and the tendency to spend more time outdoors.⁴⁹ Children who are exposed to air pollution from a young age and even in the womb are at a greater risk for health issues such as adverse birth outcomes, poor neurodevelopment and lung function, asthma, childhood obesity, and continued health issues as adults.⁵⁰ Moreover, asthma is associated with school absenteeism, which negatively impacts educational outcomes for children.

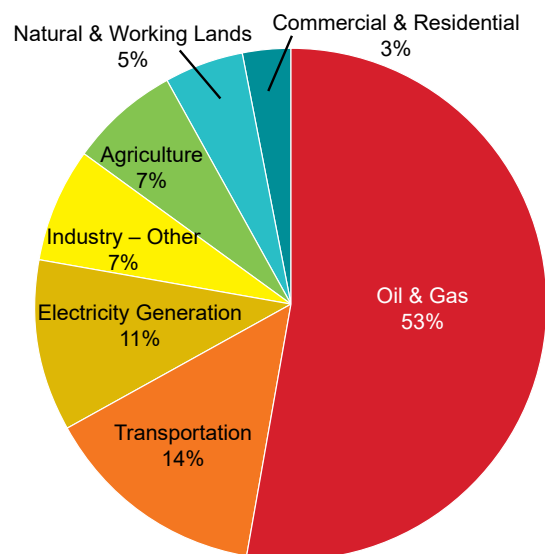
As climate change persists, conditions such as rising temperatures and stagnant air increase the risk of unhealthy ozone levels and lead to higher levels of air pollutants like transportation emissions, pesticides, wildfire smoke and pollen.⁵¹ New Mexico is not immune to these conditions, as many cities and counties have experienced high ozone levels due to increasing temperatures, wildfires, and drought.⁵² The 130 dairy farms in New Mexico are a contributor to poor air quality as they add dust, fecal matter, and more, into the air.⁵³ New Mexico's more than 60,000 oil and gas extraction facilities also contribute to methane pollution, which worsens air quality by releasing more hazardous ground-level ozone into the air.⁵⁴ Unfortunately, more than 100 schools and child care centers are located near oil and gas facilities in the state, and almost 30,000 children in New Mexico live within a half-mile radius of an oil or gas production facility.⁵⁵ In fact, air pollution from oil and gas facilities in 2016 alone caused 2,200 new childhood asthma cases and 7,500 deaths across the United States, with a cost of \$77 billion in total health impacts.⁵⁶ Furthermore, people of color are more likely to live in areas that have gas leaks and worse air quality, which increases health inequalities within the state.⁵⁷ Relatedly, research finds that oil and gas pipelines are inequitably concentrated in lower-income counties and communities of color.⁵⁸

Orphan wells – abandoned oil and gas wells – also impact the health of New Mexicans. These orphan wells leak high concentrations of methane pollution into the air, as well as contaminants into the water supply, which worsens climate conditions and health outcomes. As of 2022, there were approximately 1,700 orphan wells on state and private land across New Mexico and hundreds more on federal lands.⁵⁹

Fortunately, the effects of poor air quality are not permanent, as research finds that children experience improvements in their health when exposure to air pollutants is curtailed. In fact, when exposed to cleaner

FIGURE II

Oil & Gas Production Puts Out the Most Green House Gas Emissions by Far



Source: "Progress and Recommendations," NM Interagency Climate Change Task Force, 2021
NEW MEXICO VOICES FOR CHILDREN

air, children experience significant improvements in lung function growth and reductions in asthmatic symptoms, and these positive health benefits continue into adulthood.⁶⁰

New Mexico has already taken steps to address poor air quality in the state by implementing a ban on all new oil and gas leases on state trust land that are within a mile of schools and other educational institutions.⁶¹ In addition, the state has utilized state and federal funding to begin to plug orphan wells to protect the environment and the health of nearby households.⁶² New Mexico also passed the Energy Transition Act in 2019 to move toward renewable energy, and it passed ozone precursor regulations to reduce ozone emissions from the oil and gas sector.⁶³

However, New Mexico must do more to address poor air quality and protect the health of children in the state. Given the role that the oil and gas industry plays in polluting our air and emitting methane, the state needs to decrease its economic dependence on oil and gas by diversifying its revenue streams and by prioritizing a just transition away from the industry.⁶⁴ In addition, New Mexico should modernize the Oil and Gas Justice Reform Act so that members of the Oil Conservation Commission and the Oil Conservation Division protect the environment, public health, and frontline communities.⁶⁵ New Mexico can also do more to better enforce existing environmental protection regulations by fully funding state agencies responsible for enforcing environmental laws that protect children's health.

POLICY ACTIONS AND RECOMMENDATIONS



This section identifies a list of actions that the state has or should take to address the climate impacts on health. For example, while New Mexico has committed to reducing greenhouse gas emissions that trap heat by at least 45% from 2005 to 2030,⁶⁶ the state is not currently on track to meet these commitments. One action New Mexico can take to meet these targets is to make these commitments legally binding by putting them into statute.

In addition, while New Mexico has invested in renewable energy, it can reap more of the benefits from these investments by expanding its renewable energy infrastructure and supporting job development in these fields.⁶⁷ Building off of its existing policies, New Mexico can do more to reduce the threats of extreme weather events. The list of actions below indicate where the state has already succeeded, as well as the actions that New Mexico must take to protect the environmental health of children.

Graphic Key:

- ✔ New Mexico has already taken this action
- ⊕ New Mexico is taking this action
- ✖ New Mexico has not yet taken this action

Reduce Greenhouse Gas Emissions

- ✔ Set goals to reduce greenhouse gas emissions from 2005 levels by 45% by 2030.
- ✔ Adopt California's clean car standards.
- ✔ Pass oil and gas pollution rules.
- ⊕ Invest in clean, renewable energy.
- ✖ Update New Mexico's Oil and Gas Justice and Reform Act to protect the environment, public health, and frontline communities.
- ✖ Put greenhouse gas reduction goals in statute to make state commitments legally binding.
- ✖ Adopt Advanced Clean Trucks and Advanced Clean Cars II standards to reduce emissions from passenger cars, SUVs, and trucks.
- ✖ Increase royalty rates for oil and gas leases on state trust lands to reduce oil and gas development.

Decrease State's Dependency on Oil and Gas

- + Support job development in clean energy industries.
- + Provide the infrastructure and funding needed for a just transition for workers.
- Diversify the state's revenue streams away from its over-reliance on the oil and gas industry.

Enforce Existing Laws and Rules

- Fully fund state agencies so they can enforce laws that protect residents' health.
- Eliminate legal loopholes to limit pollution from oil and gas facilities.

Prioritize Conservation Efforts

- ✓ Create and invest in state conservation funds.
- ✓ Invest in efforts to protect surface water and groundwater resources.
- + Invest federal funding from the Inflation Reduction Act toward climate-oriented agriculture practices.
- Enact bonding reform to cover the costs to clean up and restore natural habitats around orphan well sites, which are inactive, unplugged oil and gas wells that leak toxic chemicals into the air.

Support Climate-Friendly Infrastructure

- ✓ Update building codes so buildings are more energy efficient.
- ✓ Support energy efficient improvements for local communities.
- ✓ Develop an electric grid modernization plan.
- + Plant tree canopies in urban neighborhoods to reduce extreme heat.
- Require new buildings to apply solar-ready building designs to take advantage of future solar installations.
- Incentivize the development of solar-powered building and parking facilities.

Increase Governmental Climate Change Capabilities

- ✓ Create an Interagency Climate Change Task Force.
- ✓ Publish reports on New Mexico's climate change progress.
- ✓ Develop climate adaptation plans.
- Prioritize tribal and rural communities in state environmental decisions.
- Pass legislation to help communities address climate-health risks.

Reduce the Cumulative Effects of Climate Change on Children's Health

- ✓ Ban oil and gas leasing on state trust lands within a mile of schools.
- Limit the use of pesticides around schools to improve air quality.
- Train health practitioners about climate-related health risks.

Prioritize Adaptation and Mitigation Efforts within Medicaid

- Incentivize health care facilities to implement sustainability initiatives.
- Provide coverage of air filters and air conditioners to protect enrollees from extreme heat.
- Conduct research of possible New Mexico-specific climate adaptation Medicaid benefits.



CONCLUSION



New Mexico is already experiencing an alarming number of climate crisis events, such as extreme heat, droughts, flooding, and wildfires, as well as poor air quality. These weather events are becoming more frequent and intense as temperatures continue to rise, harming all of us in the process. Unfortunately, it is our state's children who are hurt the most since they are especially vulnerable to the health impacts of these events. If New Mexico does not take action to reduce the causes and effects of climate change now, more children will be at risk for severe health issues including asthma, chronic lung diseases, and heat-related deaths, as well as worse mental health. In fact, low-income children and children of color who live in high-risk areas

are already experiencing the harmful effects of these worsening environmental conditions.

No family should have to worry about the effect of the environment on their children's health. While New Mexico has taken steps to reduce the effects of climate change, the state can and must do more to protect children's health and to reduce the risk and harms of extreme weather events. By continuing to implement and enforce strategies that reduce the negative health outcomes and inequities caused by climate change, New Mexico can open new doors to a healthier, brighter future for every child in the state.

ENDNOTES

- 1 "Making the Connection: Climate Changes Children's Health," American Public Health Association, ecoAmerica, American Association of Pediatrics, and Climate for Health, accessed May 25, 2023
- 2 "Children's Environmental Health," Centers for Disease Control and Prevention, Feb. 15, 2022
- 3 "Climate Change and the Health of Children," Harvard T.H. Chan School of Public Health, Jan. 1, 2019.
- 4 Ibid; "Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon," *The Lancet*, Sept. 2021
- 5 "Climate Change Anxiety in Young People," *Nature Mental Health*, May 10, 2023
- 6 2022 *New Mexico KIDS COUNT Data Book: Promoting Generational Prosperity*, New Mexico Voices for Children, Jan. 2023
- 7 "Climate Changes Reproductive and Children's Health: A Review of Risks, Exposures, and Impacts," *Pediatric Research*, 414–19, Nov. 15, 2019; *Climate Change, Global Food Security, and the U.S. Food System*, USDA, Dec. 2015
- 8 "Climate Changes Reproductive and Children's Health: A Review of Risks, Exposures, and Impacts"
- 9 "Climate Change and Child Health: A Scoping Review and an Expanded Conceptual Framework," *The Lancet Planetary Health*, March 2021; "New Mexico Communities at Greatest Risk of Wildfires," KQRE TV, April 22, 2022
- 10 "For families of color, climate change in New Mexico is already here, say experts," *New Mexico Political Report*, July 26, 2021
- 11 *Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts*, EPA, Sept. 2021
- 12 Ibid.
- 13 "Southwest Climate and Health," American Public Health Association, accessed May 25, 2023
- 14 "Climate Change Indicators: U.S. and Global Temperature," EPA, July 2022; Excessive Heat, National Weather Service, accessed May 25, 2023
- 15 Ibid; "About Extreme Heat," CDC, June 19, 2017
- 16 "Climate Changes Reproductive and Children's Health: A Review of Risks, Exposures, and Impacts"
- 17 "Extreme Heat Will Take an Unequal Toll on Tribal Jails," *New Mexico In Depth*, May 16, 2023
- 18 "Reduce Urban Heat Island Effect," EPA, April 2023
- 19 "The Effect of Heat on Older Adults," *Harvard Medicine*, 2021
- 20 "America's Preparedness Report Card 2015: New Mexico," *States At Risk*, 2015
- 21 "2021 New Mexico Wildfires: When, Why, and How to Stay Safe," Natural Resources Defense Council, July 2021
- 22 "America's Preparedness Report Card 2015: New Mexico"
- 23 "2020 Residential Energy Consumption Survey," U.S. Energy Information Administration, 2020
- 24 "Using Air Conditioners When It's Smoky Outside," Better Health Channel, accessed July 17, 2023: <https://www.betterhealth.vic.gov.au/using-air-conditioners-when-its-smoky-outside>
- 25 "Extreme Heat Adaptation: How the Climate-Ready States and Cities Initiative (CRSCI) Grant Recipients are Preparing for and Responding to Increasing Temperatures," CDC, Sept. 2020
- 26 "America's Preparedness Report Card: New Mexico," *States at Risk*, accessed June 2, 2023
- 27 "EPA Articulates the Multiple Benefits of Green Infrastructure," Surfrider Foundation, March 19, 2013
- 28 "The Role of Medicaid in Addressing Climate Change and Climate-Related Inequity," *Health Affairs*, March 10, 2023
- 29 *How Climate Change Impacts Our Water*, Columbia University Climate School, Sept. 2019
- 30 "Extreme Rainfall and Drought," American Public Health Association and CDC, accessed May 30, 2023
- 31 "Summary: Water Quality," KidsData, Population Reference Bureau, accessed May 30, 2023
- 32 "Climate Changes Health: Extreme Weather," American Public Health Association, accessed May 30, 2023
- 33 "Drought Linked to Higher Diarrhea Risk in Children," Yale School of Health, June 2022
- 34 "Climate Changes Health: Extreme Weather"
- 35 National Integrated Drought Information System, National Oceanic and Atmospheric Administration, accessed May 30, 2023; "The History of Deadly, Damaging Floods in Southern New Mexico," KQRE TV, Aug. 2022
- 36 "Does New Mexico Have Risk?" *Risk Factor*, accessed May 30, 2023
- 37 "State Climate Summaries: New Mexico," NOAA, 2022
- 38 *New Mexico Drought Plan: 2028*, NM Office of the State Engineer and NM Water Resources Research Institute, Dec. 2018
- 39 "2018 New Mexico State Water Plan," New Mexico Interstate Stream Commission, Dec. 6, 2018
- 40 *Progress and Recommendations*, NM Interagency Climate Change Task Force, 2021; Create Legacy Permanent Funds, SB 9, 56th Legislative Session, state of New Mexico, 2023
- 41 "Water Conservation Rebate Requirements," Albuquerque Bernalillo County Water Utility Authority, April 1, 2022
- 42 "2022 Wildfires," NM Department of Homeland Security and Emergency Management, accessed May 30, 2023
- 43 "Climate Changes Reproductive and Children's Health: A Review of Risks, Exposures, and Impacts"
- 44 "Experts Predict Bad Year for New Mexico Wildfires," *Santa Fe New Mexican*, March 28, 2022
- 45 "Health Effects of Wildfire Smoke in Children and Public Health Tools: A Narrative Review," *Journal of Exposure Science & Environmental Epidemiology*, 1-20, 2021 <https://doi.org/10.1038/s41370-020-00267-4>
- 46 Ibid.
- 47 "Health and Social Impacts of California Wildfires and the Deficiencies in Current Recovery Resources: An Exploratory Qualitative Study of Systems-Level Issues," *PLOS ONE* 16(3), 2021
- 48 "Wildfire Threatens 'Cultural Genocide' in New Mexico Villages," Reuters, May 8, 2022
- 49 "Air Pollution and Children's Health: Prescribing Clean Air," World Health Organization, 2018
- 50 "Climate Changes Reproductive and Children's Health: A Review of Risks, Exposures, and Impacts"
- 51 "Climate Change and Air Pollution," American Lung Association, Nov. 2022; *Climate Change and Child Well-being in Oregon: Issue Brief*, Our Children Oregon, accessed May 30, 2023
- 52 "Albuquerque's Air Quality Has Worsened, According to New State of the Air Report," *NM Political Report*, April 21, 2022; "Most Polluted Cities," American Lung Association, accessed May 30, 2023
- 53 "Overview of the New Mexico Dairy Industry Supply Chain," Dairy Farmers of America, Western Dairy Transport LLC, accessed July 17, 2023, and "As Dairy Farms Grow Bigger, New Concerns About Pollution," *YaleEnvironment360*, Yale School of the Environment, May 27, 2014
- 54 Oil and Gas Threat Map, Earthworks and FracTracker Alliance, accessed May 30, 2023
- 55 Ibid.
- 56 "Air pollution and health impacts of oil & gas production in the United States," Environmental Research Health, 2022
- 57 "Albuquerque's Air Quality Has Worsened, According to New State of the Air Report," *NM Political Report*, April 21, 2022, and "Methane Gas Leaks Present Environmental Justice Concerns," Environmental Defense Fund, 2022
- 58 "Natural Gas Gathering and Transmission Pipelines and Social Vulnerability in the United States," *GeoHealth*, 2021
- 59 "Orphan Well Clean-Up Work Begins," Energy, Minerals, and Natural Resources Department, State of New Mexico, Nov. 3, 2022
- 60 "The Effects of Policy-Driven Air Quality Improvements on Children's Respiratory Health," *Health Effects Institute*, 190: 1-75, 2017
- 61 "New Mexico Imposes Oil and Gas Moratorium on State Lands Near Schools," Associated Press, June 1, 2023
- 62 "Orphan Well Clean-Up Work Begins," Energy, Minerals, and Natural Resources Department, State of New Mexico, Nov. 3, 2022
- 63 "Ozone Precursor Rule Fact Sheet," New Mexico Environment Department, May 2021
- 64 *Revenue We Can Rely On: Diversifying Our State Revenue is Critical for Equitably Funding Our Future*, NM Voices for Children, Oct. 2021
- 65 "Fact Sheet: New Mexico Oil and Gas Justice and Reform Act (SB 418)," Western Environmental Law Center, Feb. 2023
- 66 "2021 New Mexico Wildfires: When, Why, and How to Stay Safe," Natural Resources Defense Council, 2021
- 67 "New Mexico at a Crossroads: False Solutions or Just Transition?" Institute for Policy Studies, Jan. 2023; "New Mexico Clean Energy Workforce Development Study," NM Department of Workforce Commission, June 2020

New Mexico Voices for Children Staff

Amber Wallin, MPA, *Executive Director*
Farah Council, MA, *Director of Operations & Organizational Effectiveness*
Shelby Greaser, MBA, MSW, *Grants Manager & Development Associate*
Bill Jordan, MA, *Government Relations Officer*
Sharon Kayne, *Communications Director*
Paige Knight, MPP, *Senior Research & Policy Analyst*
Alex McCausland, *Graphics & Social Media Manager*
Barbara Mike, *Operations Support Clerk*
Lydia Paukei, JD, MSW, *Research & Policy Analyst/ State Tribal Policy Fellow*
Javier Rojo, MPA, *Research & Policy Analyst*
Divya Shiv, MPP, *Research & Policy Analyst*
Brian Urban, *Office Manager*
Jacob Vigil, MSW, *Senior Research & Policy Analyst*
Emily Wildau, MPP, *Research & Policy Analyst/ KIDS COUNT Coordinator*



This report is available for download and use with proper citation at www.nmvoices.org

New Mexico Voices for Children

625 Silver Ave, SW, Suite 195 • Albuquerque, New Mexico 87102 • 505.244.9505 • www.nmvoices.org

NM Voices for Children is a proud member
of the following networks:

Follow us online



www.nmvoices.org

