Air Quality and Health in New Mexico

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HAQAST St. Louis
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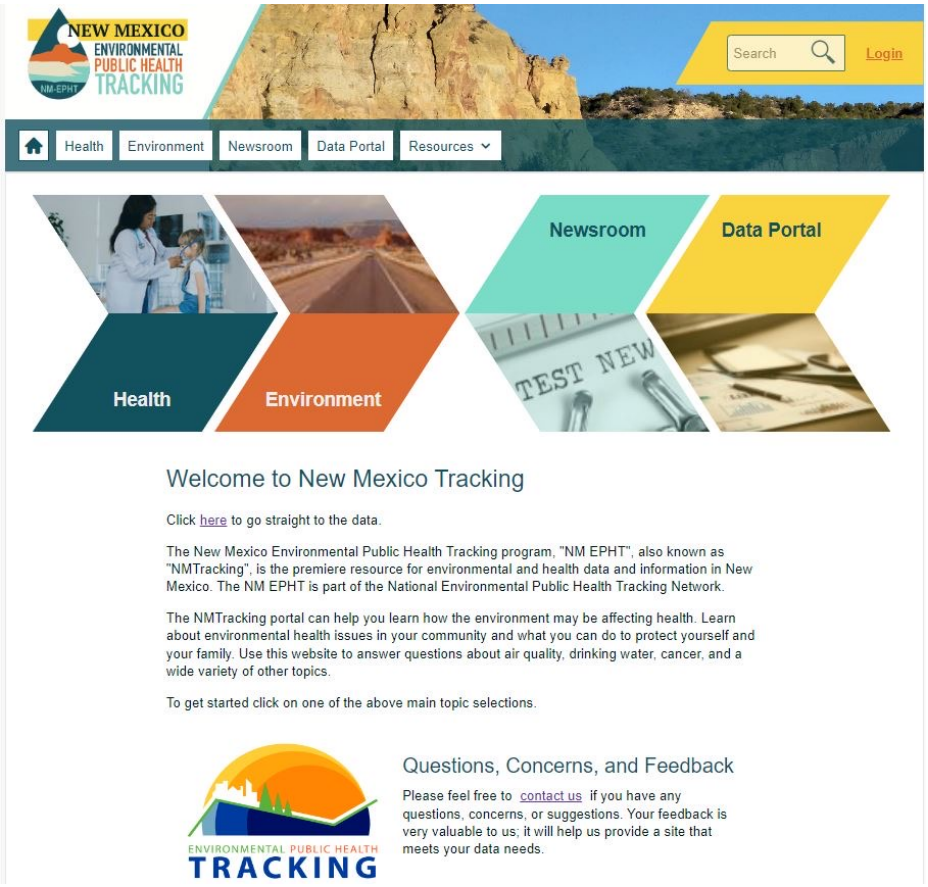
New Mexico at a Glance

- 5th largest state by area
- 36th most populous
  - 45th in population density
- Highly varied climate and geography
- Majority-minority state
  - Highest % of Hispanic
  - 2nd highest % of AIAN
  - 19 Pueblos, 3 Apache Tribes, and Navajo Nation

Environmental Health Epidemiology Bureau

- APPLETREE (ATSDR's Partnership to Promote Local Efforts to Reduce Environmental Exposures)
- Asthma Control
- Biomonitoring
- Childhood Lead Poisoning Prevention
- Environmental Health Capacity
- Environmental Public Health Tracking
- Occupational Health Surveillance
- Wastewater Surveillance

NMTracking Portal



NMHealth

New Mexico Smoke from Fires and Your Health Toolkit

New Mexico's climate offers great outdoor opportunities for work and recreation throughout the year. However, during wildfire season and prescribed burns the air quality can change rapidly, including when smoke comes from neighboring states. This means you might need to make quick decisions about being outside.

Do you know what to do when it becomes smoky? How does smoke affect health? This webpage serves as a toolkit to help you make those decisions. Get health protection tip learn how to use the 5-3-1 Visibility Method. Next, learn which health symptoms are cau by smoke. Plus, get additional tips for staying safe and healthy on smoky days and duri COVID-19 pandemic and download the resources.

Protect Your Health on Smoky Days

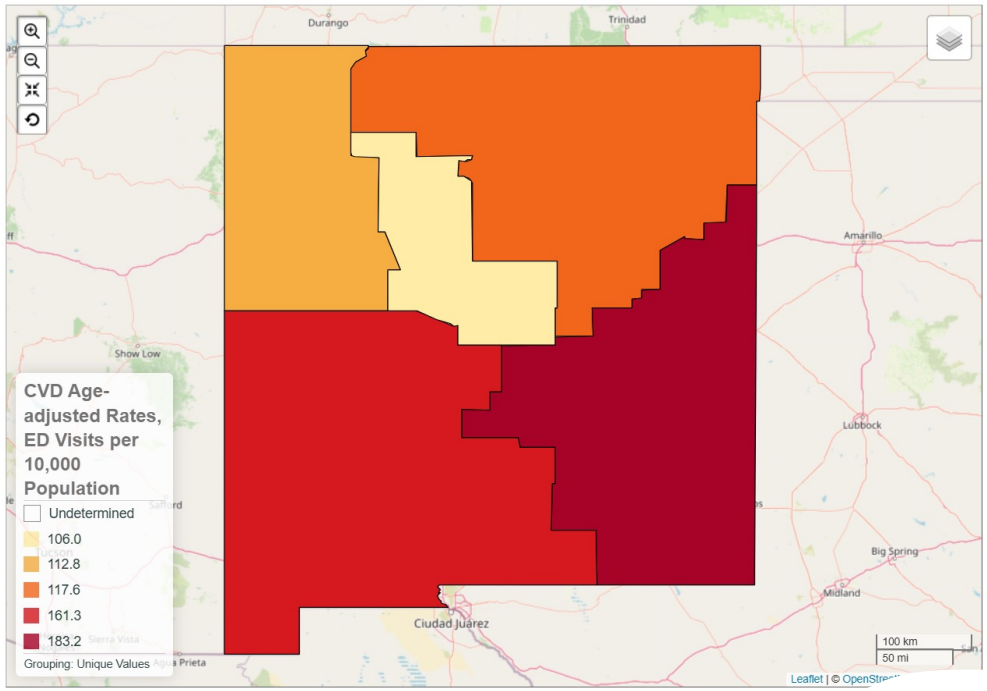
The best way to protect yourself during smoky days is to avoid breathing in smoke. Eve you can't smell the smoke or if it does not smell too bad that does not mean the air qual safe. Here are quick tips:

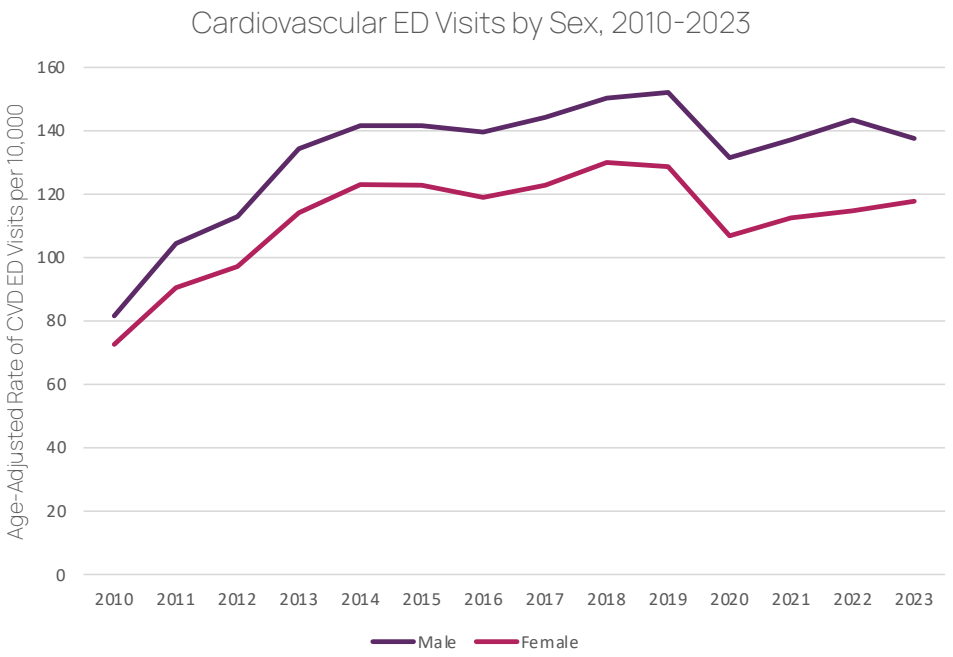
- Staying indoors during smoky days is one of the best things you can do. Check the air quality in our area (see Downloads and Resources below, for the Current Smoke Outlook link).
- When you don't have a monitor in your area, use the 5-3-1 Visibility Method created in New Mexico to estimate the air quality and the actions you should take based on your health circumstances and age. We detail how you can use this below.
- Pay attention to local air quality alerts to plan your day and travel. Air quality reports are often posted on this site in the Newsroom and are also available through local news media and social media.
- Keep your indoor air clean by closing windows and doors.
- Create a "clean room" in your home (see Downloads and Resources for more information).

Use the 5-3-1 Visibility Method to estimate air quality

Using visibility is an easy way to gauge if it is okay to go outside or if is okay to stay outside

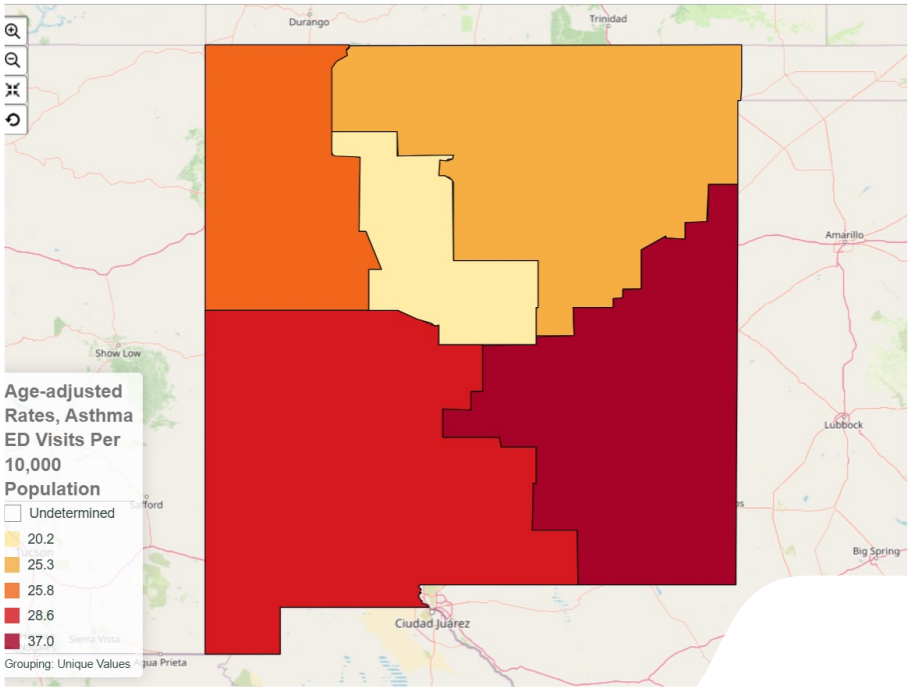
Cardiovascular ED Visits, Age-Adjusted, 2010-2023

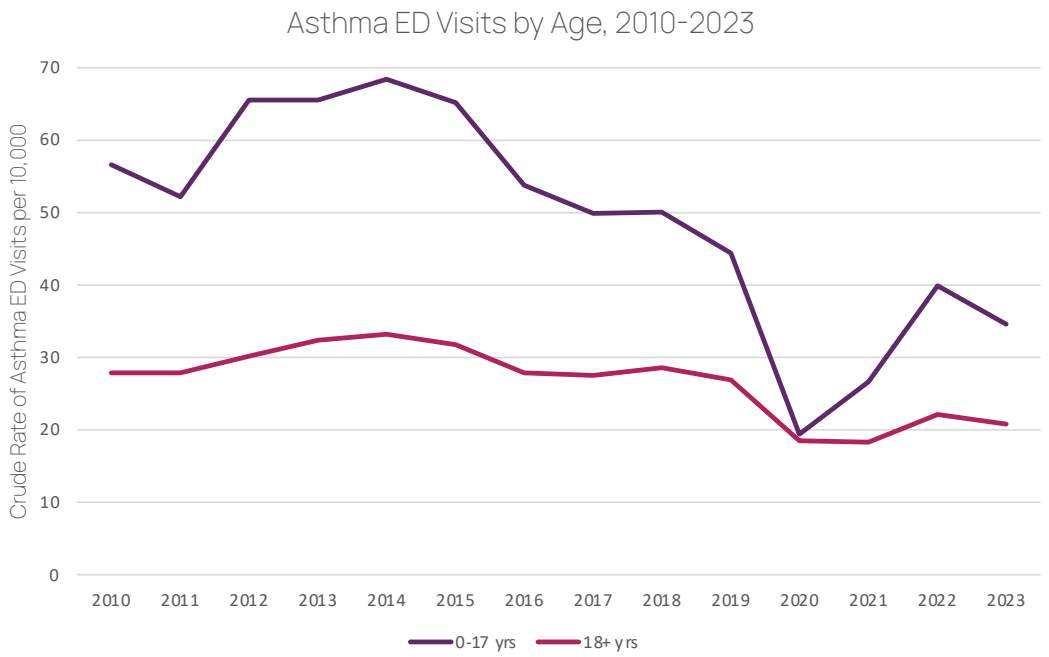




- Highest rate of CVD ED visits in southeast region, followed by southwest region.
- Males have higher rates of CVD ED visits than females.

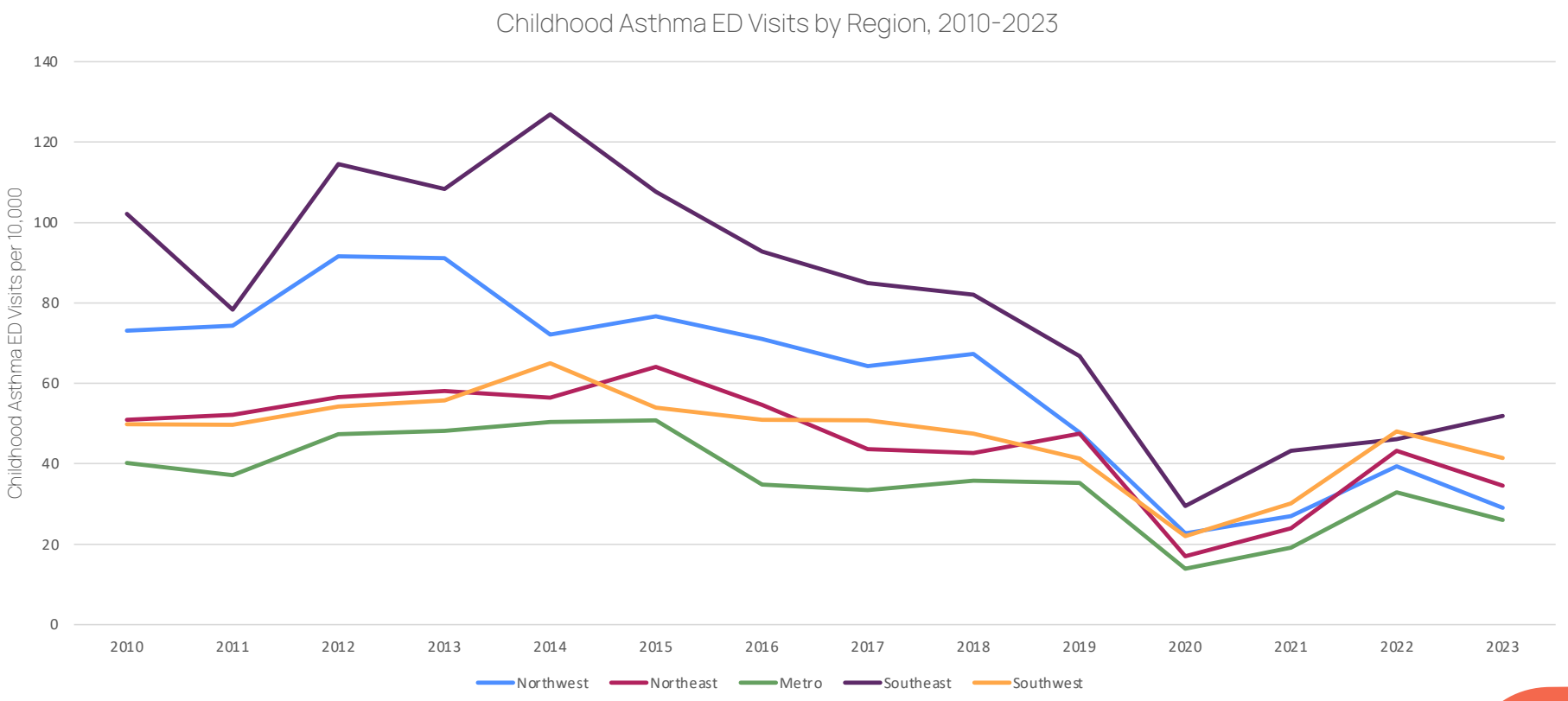
Asthma ED Visits, Age-adjusted, 2010-2023



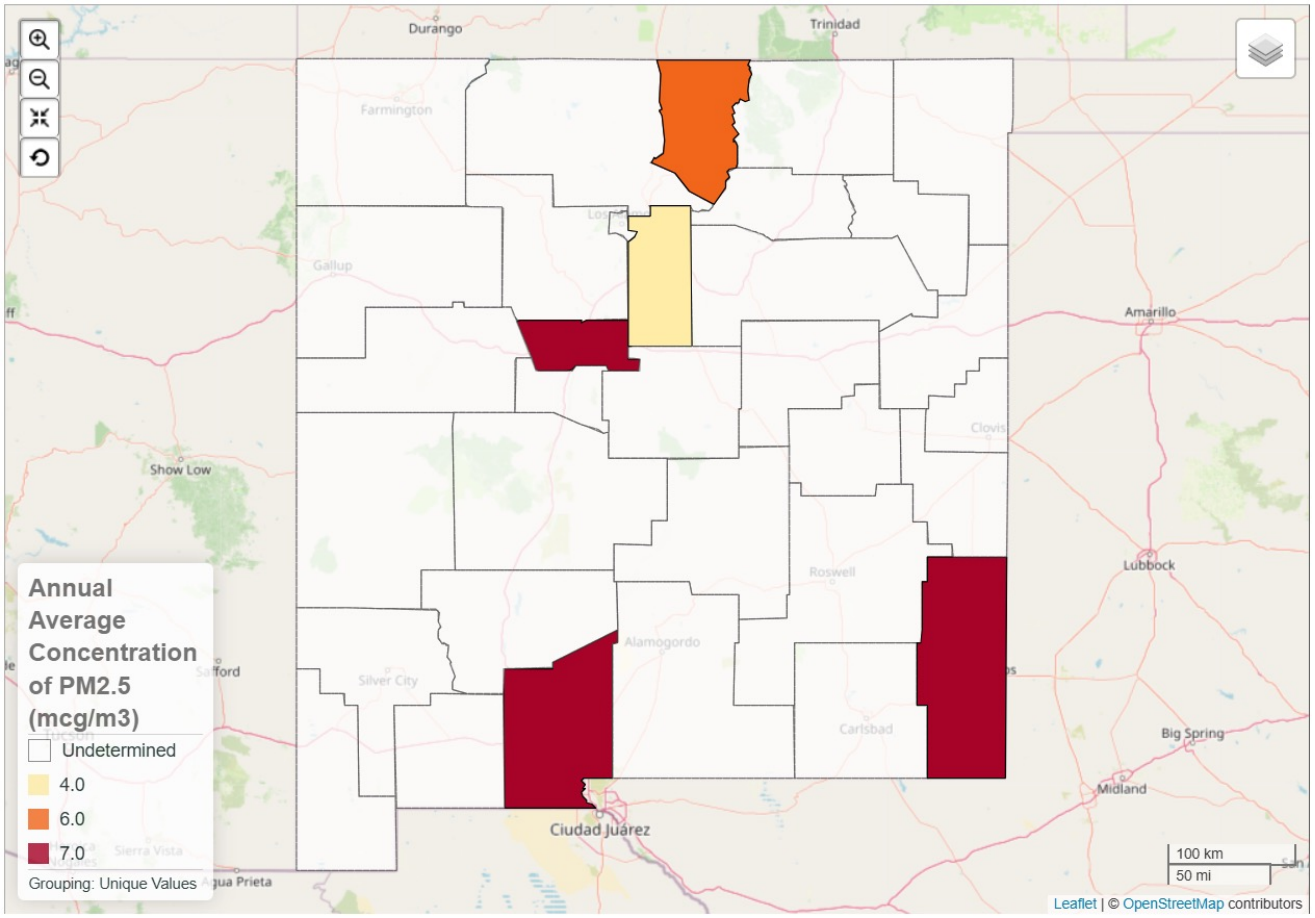


- Highest rate of asthma ED visits in the southeast region, followed by southwest.
- Children experience highest rate of asthma ED visits.

Childhood Asthma ED Visits, 2019-2023

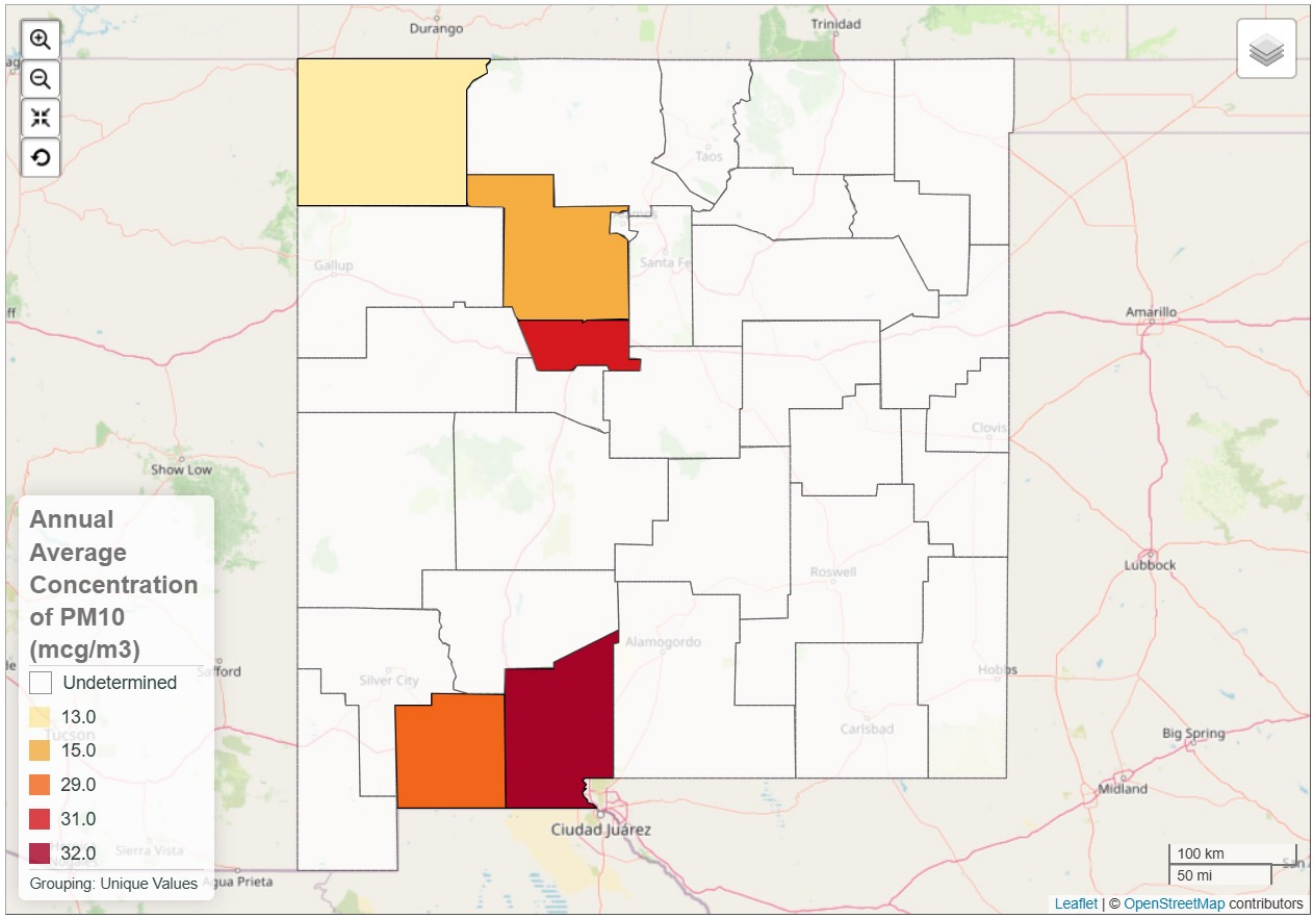


PM2.5



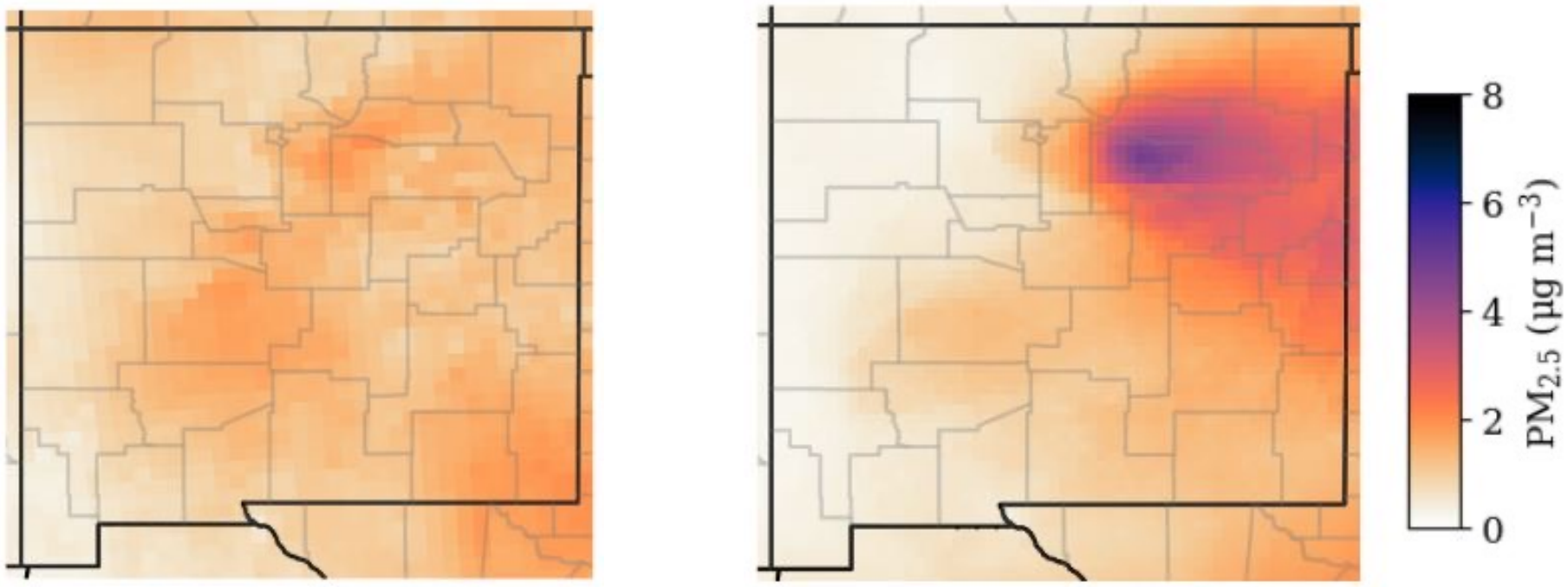
Bernalillo (Albuquerque), Dona Ana (Las Cruces), Lea (Hobbs), Santa Fe (Santa Fe), and Taos (Taos)

PM10



Bernalillo (Albuquerque), Dona Ana (Las Cruces), Luna (Deming), Sandoval (Rio Rancho), and San Juan (Farmington)

PM2.5 from Smoke in NM: 2022



PM2.5 smoke exposure estimates with EPA air monitors (left) and adding in low-cost sensors (right).

Dust in 2025

- As of early June, 169 dust storm warnings issued statewide from National Weather Service.
- On average, 4 dust storm warnings per year over last 25 years.
- Schools closed early or altogether on dust storm days.
- State offices closed early.

Questions Posed to NMDOH

- What is impact on health from Permian Basin / oil and gas production / air quality in southeastern NM?
  - HB35 Children's Health Protection Zones
- Can my child play outside at recess today?
  - Wildfires, dust storms, etc.
- Is it safe to have practice outside this afternoon?
  - Wildfires, dust storms, etc.
- How do I protect myself and my family?

Questions from NMDOH: What is in the air?

- Aerosolized byproducts from the oil and gas industry that make it into dust?
- PFAS evaporated from water (Holloman Lake)?
- Heavy metals?
- Inorganic vs organic
- Pollen, allergens, etc.?
- Valley fever?

Are there any low-cost air monitors for PM10?

What monitoring is there for PM10?

Question from NM State Climatologist

Could HAQAST provide high resolution dust images of the most recent spring season?

- Roswell has been a hotspot for dust and there is no monitoring in that area.

Acknowledgements

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NEW MEXICO ENVIRONMENTAL PUBLIC HEALTH TRACKING

NM EPHT

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