

CDC's National Environmental Public Health Tracking Program



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National Environmental Public Health Tracking Program

CSTE Climate and Respiratory Health Workgroup Call, January 4, 2018



**National Center for Environmental Health
Agency for Toxic Substances and Disease Registry**



National Environmental Public Health Tracking Network



The National Environmental Public Health Tracking Network (Tracking Network) is a system of integrated health, exposure, and hazard information and data from a variety of national, state, and city sources.

On the [Tracking Network](#), you can view maps, tables, and charts with data about:

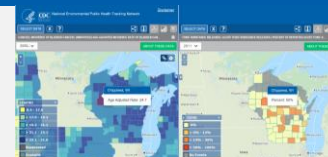
- chemicals and other substances found in the environment
- some chronic diseases and conditions
- the area where you live

You can also:

- Try our new Data Explorer
- Search for Information by Location
- Visit State & Local Tracking Portals



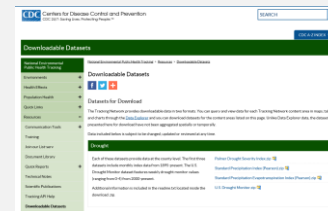
www.cdc.gov/ephtracking



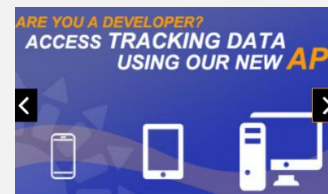
Data Explorer



Info by Location



Downloadable Datasets

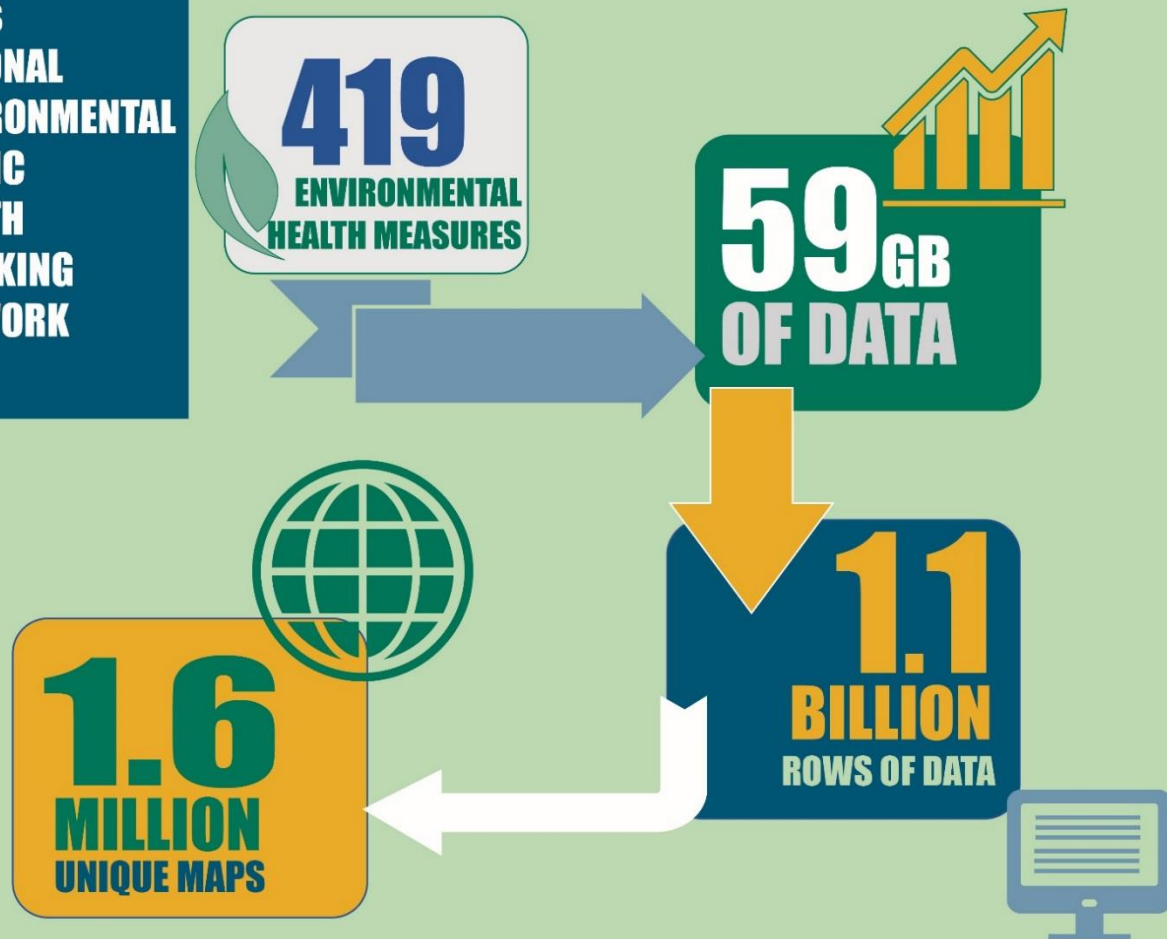


Application Program Interface

Air Quality
Asthma
Biomonitoring
Birth Defects
Cancer
CO Poisoning
Childhood Lead Poisoning
COPD
Climate Change
Community Characteristics
Community Design
Community Water
Developmental Disabilities
Drought
Heart Disease
Heat Stress Illness
Lifestyle Risk Factors
Pesticide Exposures
Population and Vulnerabilities
Reproductive & Birth Outcomes
Sunlight and UV
Toxic Substance Releases

Red text indicates content area that contains nationally consistent data and measures

CDC's NATIONAL ENVIRONMENTAL PUBLIC HEALTH TRACKING NETWORK





Disclaimer



National Environmental Public Health Tracking Network



STEP 1: SELECT YOUR CONTENT ?

Climate Change



Select Indicator

- Flood Vulnerability
- Future Projections of Extreme Heat
- Future Projections of Extreme Precipitation
- Heat stress emergency department visits
- Heat stress hospitalizations
- Heat Vulnerability - Adaptive Capacity
- Heat Vulnerability - Exposure
- Heat Vulnerability - Sensitivity
- Heat-Related Mortality
- Historical Extreme Heat Days and Events
- Historical Extreme Precipitation
- Temperature Distribution

STEP 3: CHECK ONE GEOGRAPHY ?

STEP 4: SELECT YEAR(S) ?

STEP 5: SELECT ADVANCED OPTIONS ?

Disclaimer

Clear Selections

GO →

Close



SELECT DATA



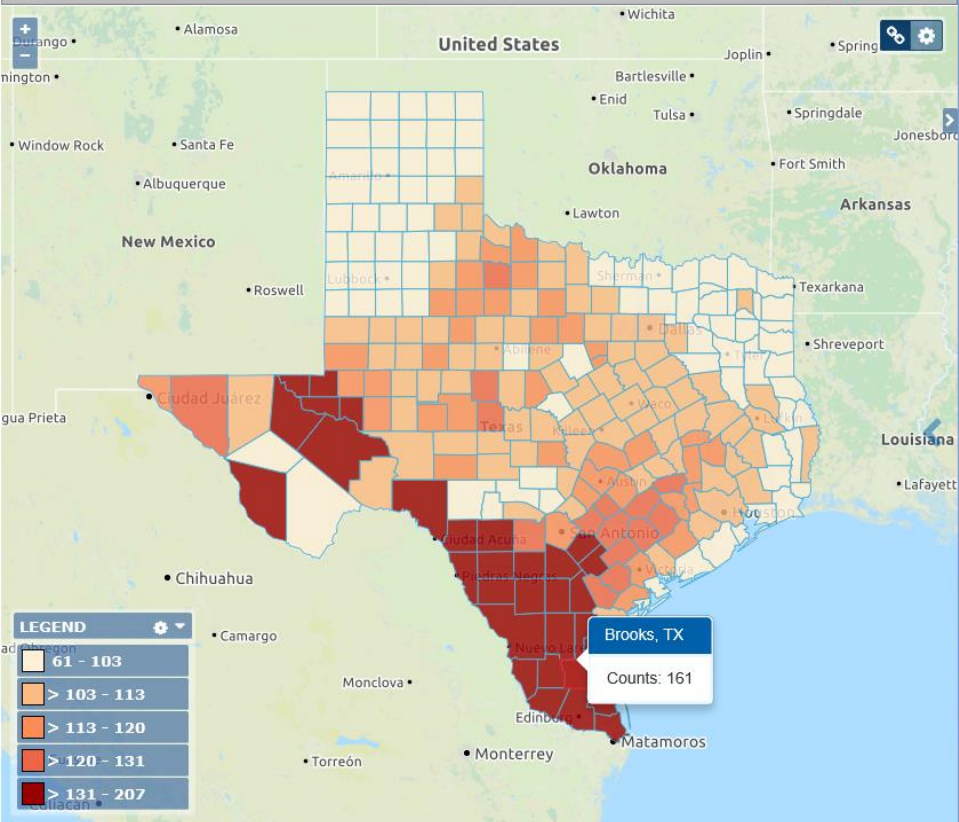
CLIMATE CHANGE | FUTURE PROJECTIONS OF EXTREME HEAT | PROJECTED NUMBER OF FUTURE EXTREME HEAT DAYS | TEXAS



ABOUT DATA

2020

Absolute Threshold: 90 degrees



SELECT DATA

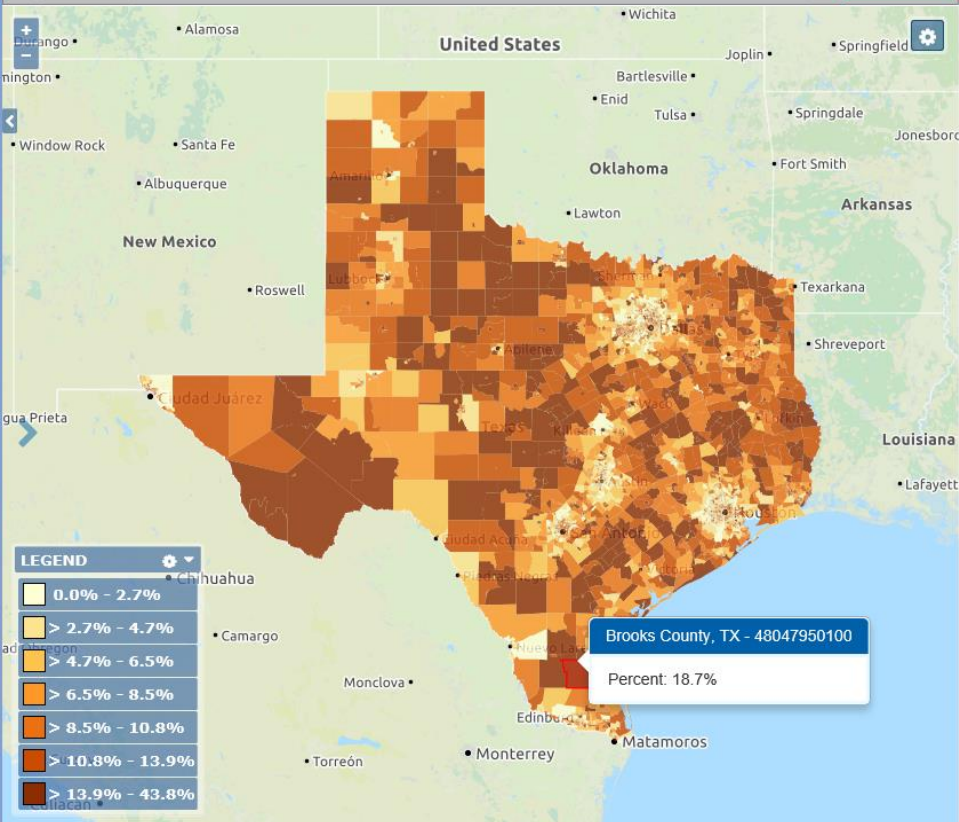


POPULATIONS AND VULNERABILITIES | DEMOGRAPHICS | PERCENT OF POPULATION AGED 65 YEARS AND OVER LIVING ALONE IN A NON-FAMILY HO...



ABOUT DATA

2015



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Downloadable Datasets



Datasets for Download

The Tracking Network provides downloadable data in two formats. You can query and view data for each Tracking Network content area in maps, tables, and charts through the [Data Explorer](#) and you can download datasets for the content areas listed on this page. Unlike Data Explorer data, the datasets presented here for download have not been aggregated spatially or temporally.

Data included below is subject to be changed, updated or reviewed at any time.

Drought

Each of these datasets provide data at the county level. The first three datasets include monthly index data from 1895-present. The U.S. Drought Monitor dataset features weekly drought monitor values (ranging from 0-4) from 2000-present.

Additional information is included in the readme.txt located inside the download .zip.

[Palmer Drought Severity Index.zip](#)

[Standard Precipitation Index \(Pearson\).zip](#)

[Standard Precipitation Evapotranspiration Index \(Pearson\).zip](#)

[U.S. Drought Monitor.zip](#)

Solar Radiation

Solar radiation datasets are available at the county level. Population-weighted Global Horizontal Irradiance (GHI) data are available daily from 1991-2012. Ozone Monitoring Instrument (OMI) Population-Weighted Ultraviolet (UV) irradiance data are available daily from 2004-2015.

Additional information is included in the readme.txt located inside the download .zip.

[Population-Weighted Global Horizontal Irradiance.zip](#)

[Population-Weighted UV Irradiance.zip](#)

Tracking Network Data Application Program Interface (API)

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Environments +

Health Effects +

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Tracking Network Data Application Program Interface (API)



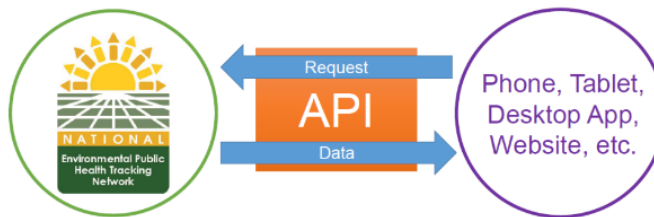
The Tracking Network Data Application Program Interface (API) is an alternate way for developers to query data from the Environmental Public Health Tracking Network. The Tracking API provides a standard Uniform Resource Locator (URL) interface with a JavaScript Object Notation (JSON) formatted response. See the [User Guide](#) for instructions on how to access the API.

Related Documents

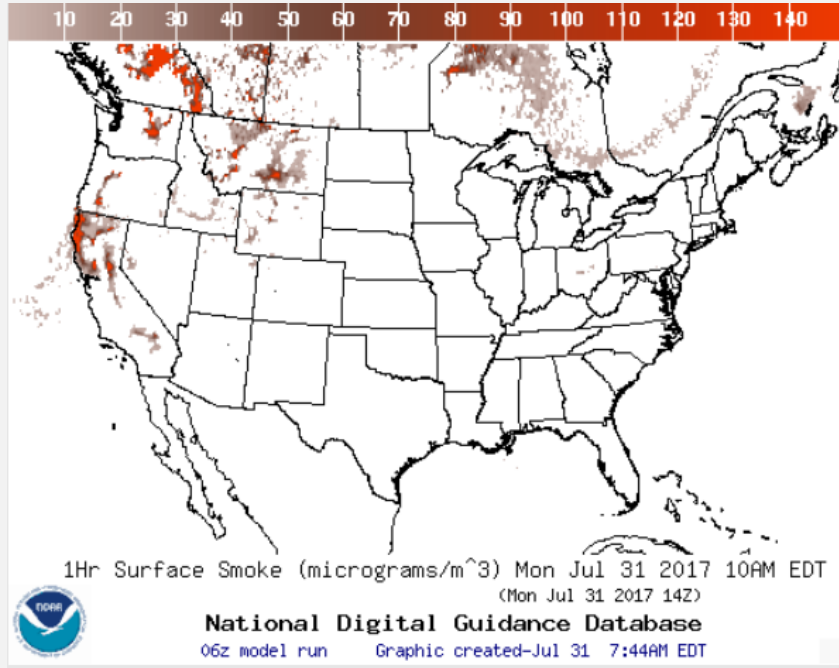
- [User Guide](#)
- [Frequently Asked Questions \(FAQ\)](#)
- [Data Discovery Guide](#)
- [Measure Guide](#)

What is an Application Program Interface (API)?

An API is a tool for accessing data in machine-readable format. The Tracking API allows users to leverage the data on the Environmental Public Health Tracking Network to create tools and programs (e.g., mobile apps, web apps, etc.) that present the data in human-readable formats such as maps, charts, tables, infographics and so forth. The image below illustrates the high-level relationships between the Environmental Public Health Tracking Network, the Tracking API, and consuming Applications.



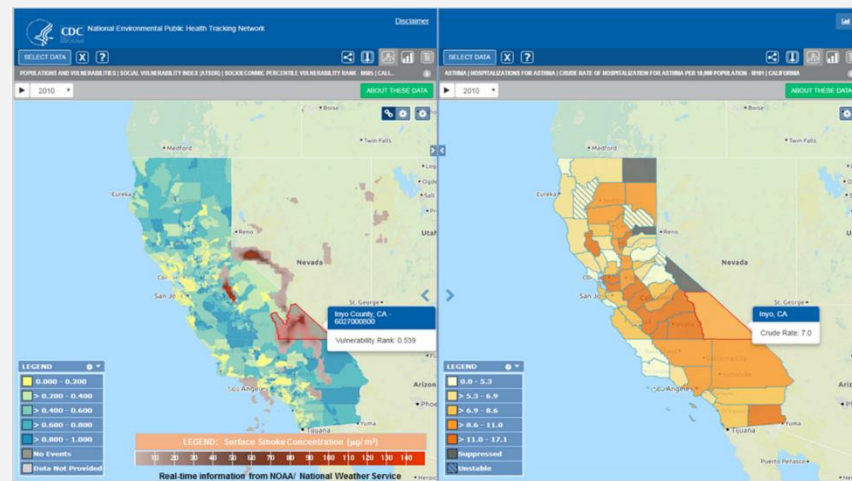
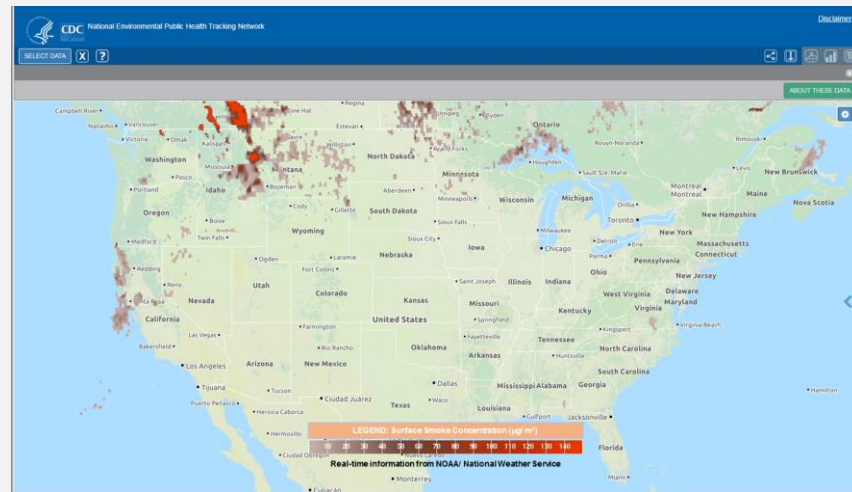
Developing an Online Tool for Identifying At-Risk Populations to Wildfire Smoke Hazards



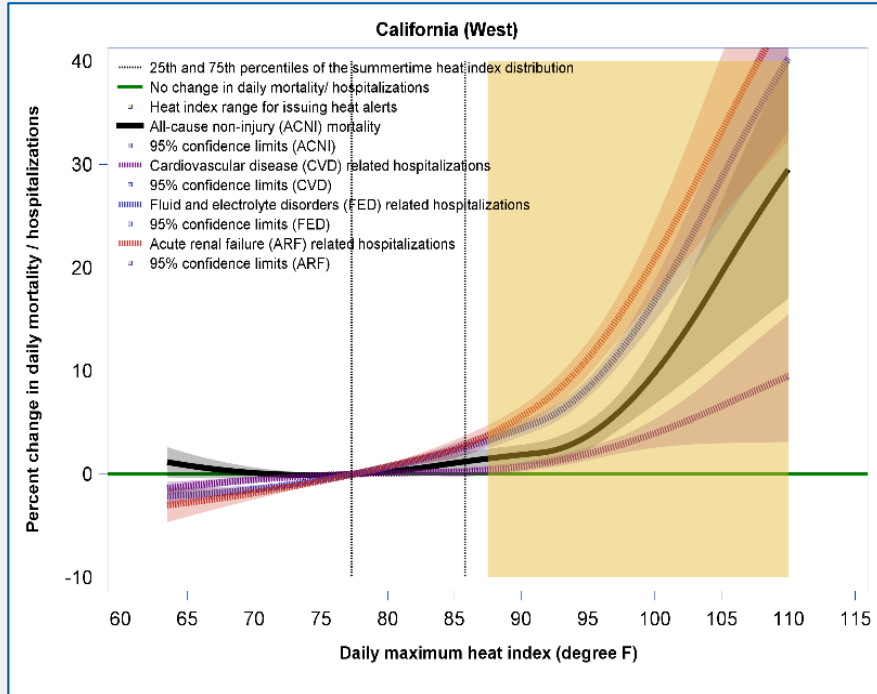
- **Goal: Integrate real-time wildfire smoke data with information on populations to identify at-risk communities**

Real-Time Wildfire Smoke Tool

- Evaluated smoke prediction models
- Conducted epi analyses to address gaps in evidence of estimated health effects
- Piloted real-time intake of NOAA's smoke data



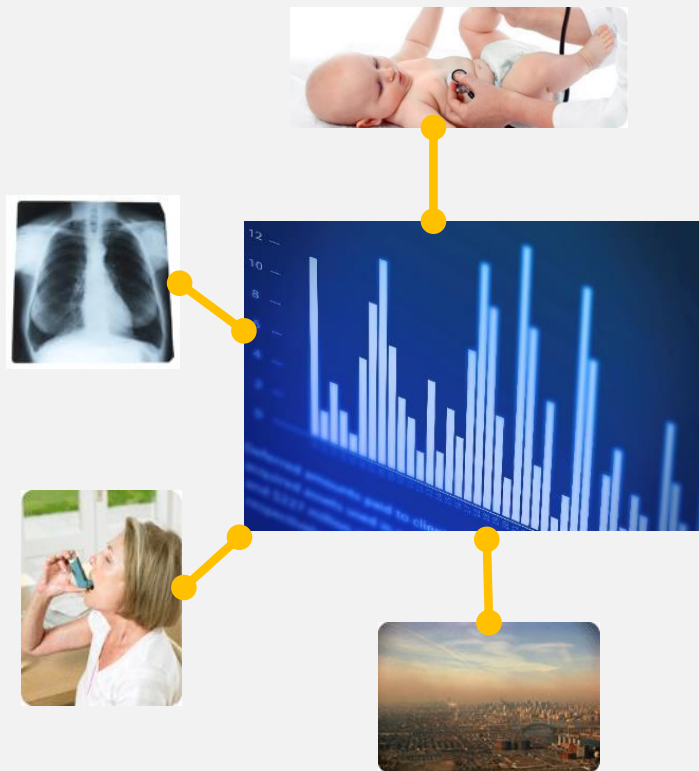
Translating Findings from Heat-Health Risk Assessments to Inform Public Health Practice in the U.S.



- **Goal: Develop a decision support tool at a national scale, integrating routine forecasts of temperature with location-specific health risk profiles to generate predictions of health burden at relevant temperature thresholds**

Addressing Gaps in Age-Specific Evidence Used for United States Air Pollution Policy

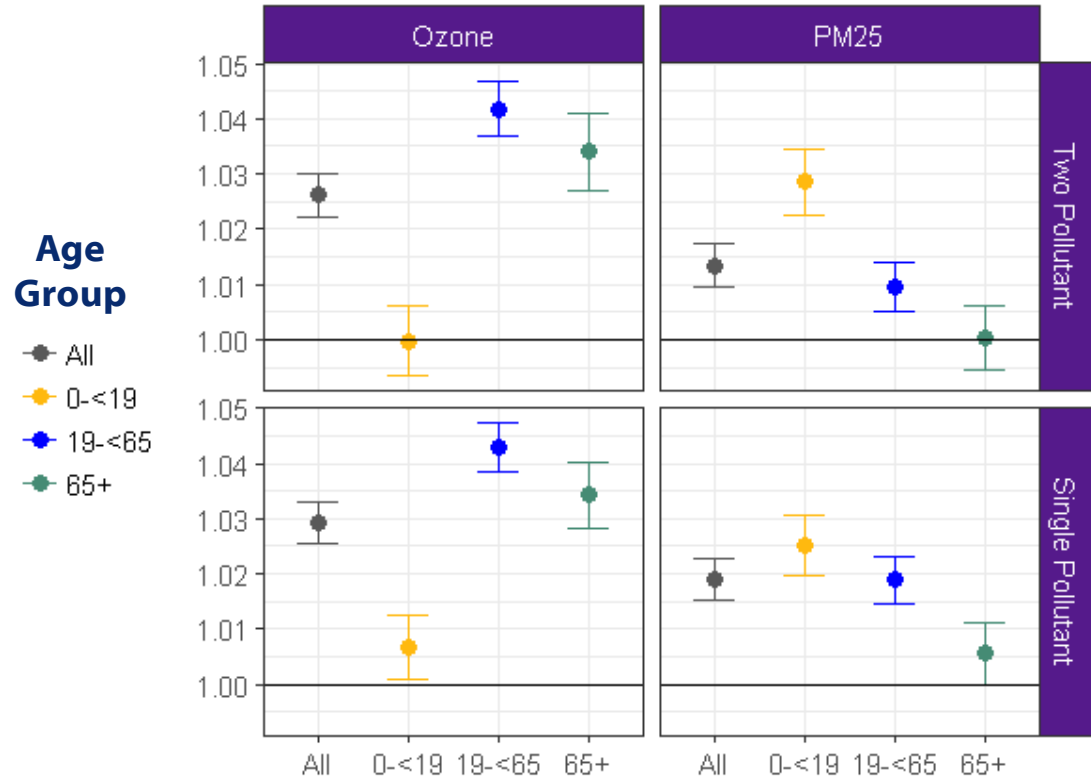
- **Goal:** Conduct a nationally relevant multi-county analysis to estimate age-specific associations between short-term ambient air pollution and respiratory ED visits including acute respiratory infection, asthma chronic obstructive pulmonary disorder, and pneumonia.



Air Pollution

- Evaluate effect modification of the estimated effects by county-level factors
- Add data on rates of respiratory ED visits and visits prevented by reductions in air pollution
- Expand Tracking's daily data repository to include other ED visits and hospitalizations

Increased Rate of Respiratory ED Visits (Rate Ratio & 95% Credible Interval) for a 20 ppb increase in 8-hour Ozone and for a 10 $\mu\text{g}/\text{m}^3$ increase in 24 hour $\text{PM}_{2.5}$ for lag days 0-6



Tracking's Content Workgroup: Climate Change Team

- **Mission:** To identify and promote access to credible and consistent climate-related environmental and public health indicators that inform the public and support actions that protect health and address health disparities.

Heat Stress Illness

Pollen

Lyme Disease

Temperature

Wildfires

Extreme weather-related morbidity and mortality

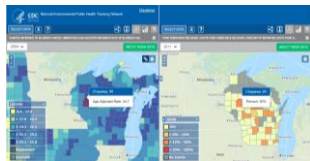
Climate Change Team Strategic Plan

- **Goal 1: Identify and characterize the process used for selecting regional climate-related health and environmental indicators.**
- **Goal 2: Develop a robust set of climate-related environmental and health indicators that can be used to track health effects and other related impacts, assess vulnerability and measure the effectiveness of public health interventions.**
- **Goal 3: Support improvements in the availability, quality and use of climate-related environmental and health data**

National Aeroallergen Network Steering Committee

- **Participating member**
- **Developing proposal for NAB to routinely access and disseminate their data on Tracking Network**

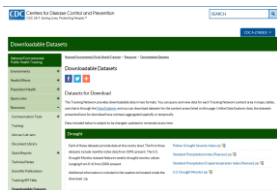




Data Explorer



Application Program Interface



Downloadable Datasets



Info by Location

www.cdc.gov/ephtracking



ENVIRONMENTAL PUBLIC HEALTH
TRACKING

CDC Public Health Grand Rounds Presentation and “Beyond the Data”:
Tracking Environmental Health Data for Public Health Decision Making
www.cdc.gov/cdcgrandrounds/archives/2016/june2016.htm

For more information, contact NCEH/ATSDR
1-800-CDC-INFO (232-4636)

TTY: 1-888-232-6348

www.atsdr.cdc.gov

www.cdc.gov

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

