

## ▶ DIRECT FROM CDC ENVIRONMENTAL HEALTH SERVICES



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## Empowered by Tracking: Using Data to Solve Public Health Problems

**Editor's Note:** NEHA strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, the National Environmental Health Association (NEHA) features this column on environmental health services from the Centers for Disease Control and Prevention (CDC) in every issue of the *Journal*.

In these columns, authors from CDC's Water, Food, and Environmental Health Services Branch, as well as guest authors, will share insights and information about environmental health programs, trends, issues, and resources. The conclusions in these columns are those of the author(s) and do not necessarily represent the official position of CDC.

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Environmental health problems require data to be solved. As a result, public health professionals are, by nature, data explorers. Attempting to identify, measure, and respond to pressing environmental health problems requires reliable data that are accessible, understandable, timely, and actionable. Data do not, however, collect themselves. They must be collected and put into a useable format. The Centers for Disease Control and Prevention's (CDC) Environmental Public Health Tracking Program (Tracking Program) does exactly that.

### How Does the Tracking Program Help?

The CDC Tracking Program funds 26 state and local programs that feed data into a national surveillance system called the National Envi-

ronmental Public Health Tracking Network (Tracking Network). The Tracking Network provides valuable tools for environmental health professionals. For example, the Data Explorer produces interactive maps, tables, and charts to visualize more than 500 environmental and health data measures. The Info by Location tool empowers users to quickly learn about the top environmental issues by county or ZIP code. Most importantly, the Tracking Program is built and run by a national network of public health professionals whose priority is to help address the public health data gaps that practitioners encounter.

### What Is the Info by Location Tool?

Info by Location provides users with a quick snapshot of the top environmental issues a

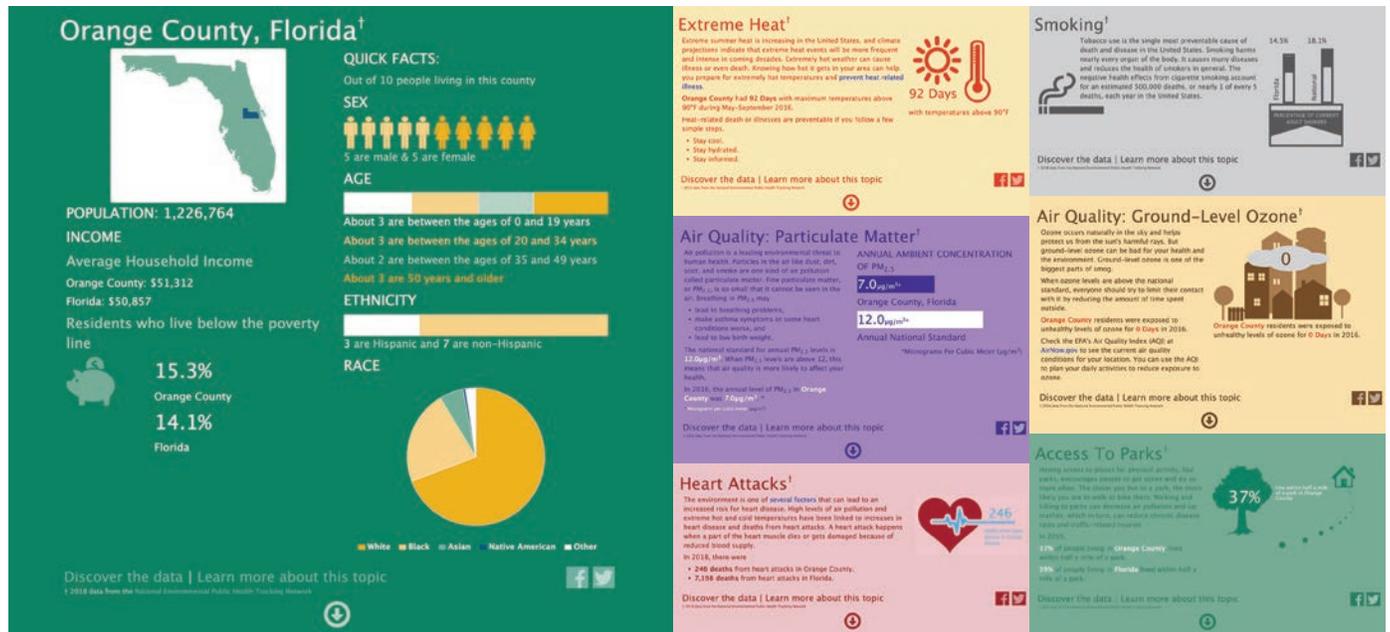
community experiences (Figure 1). Users can enter a county name or ZIP code and get data about demographics including income, sex, age, ethnicity, and race. Additionally, the tool provides a variety of environmental public health data, such as population proximity to parks and highways, and explains how those factors impact public health outcomes. Furthermore, users can learn how the region compares to the national rates for asthma, smoking, heart attacks, and particulate matter that affects air quality. Lastly, it shows how many days per year an area experiences unhealthy levels of ozone and extreme heat. Want to learn more? Each topic directly links to the complete data housed within the Data Explorer.

### What Is the Data Explorer Tool?

Users can create custom maps, tables, and charts with the Data Explorer. The mapping feature provides the ability to view multiple map backgrounds and a side-by-side comparison of data on two separate maps that can be linked together so you can navigate them simultaneously (Figure 2). Additionally, users can add points of interest, such as nursing homes, hospitals, and urgent care facilities, to any data map. Additional map features include real-time data overlays like weather, surface smoke, carbon monoxide poisoning (regional), and active Atlantic cyclones. Users can easily share a link directly to data of interest, export images, and download the raw data. If the data points cover multiple years, users can watch the data trend over time. Best of all, the tool includes built-in tutorials, making exploring the data easy and fun. Lastly, if users want to create an app that

FIGURE 1

Example of Info by Location Snapshot

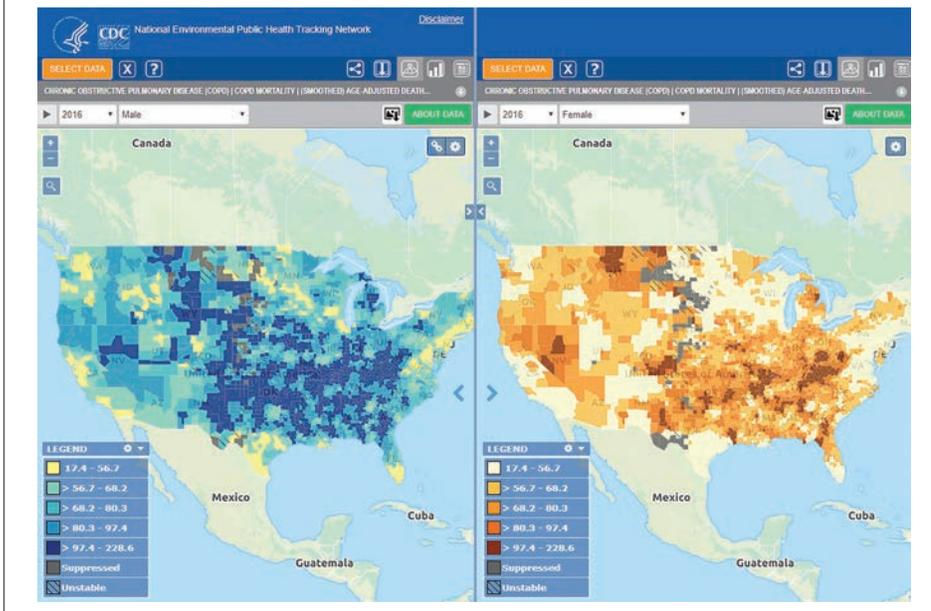


Info by Location  
[www.cdc.gov/ephtracking](http://www.cdc.gov/ephtracking)



FIGURE 2

Example of Data Explorer Side-by-Side Data Maps



uses Environmental Public Health Tracking Data, they have an application programming interface (API) for that as well.

The Tracking Program is more than just tools—it is also a network of professionals who value addressing data gaps that arise when trying to respond to environmental health concerns. Is the data you are looking for more specific to a region or locality? Finding some informed, helpful guidance is closer than CDC headquarters. With 26 state and local Tracking Programs across the nation (Figure 3), help is just a local inquiry away.

How Are Professionals Using These Tools?

The Tracking Program provides a vital lifeline to help public health practitioners find and use data to impact the environmental health issues their communities face where they live, work, and play. For example:

- The Wisconsin Poison Center partnered with the Wisconsin Tracking Program to create a real-time system to notify health department

Quick Links

- Tracking Program Website: <https://ephtracking.cdc.gov>
- Info by Location Tool: <https://ephtracking.cdc.gov/InfoByLocation/>
- Data Explorer Tool: <https://ephtracking.cdc.gov/DataExplorer/#/>
- State and Local Tracking Programs: [www.cdc.gov/nceh/tracking/grants.htm](http://www.cdc.gov/nceh/tracking/grants.htm)
- Tracking in Action Video Series: <https://ephtracking.cdc.gov/showTrackingInAction>
- Available Training Resources From the Tracking Program: <https://ephtracking.cdc.gov/showTraining>
- Tracking Program Facebook Page: [www.facebook.com/CDCEPHTracking](http://www.facebook.com/CDCEPHTracking)

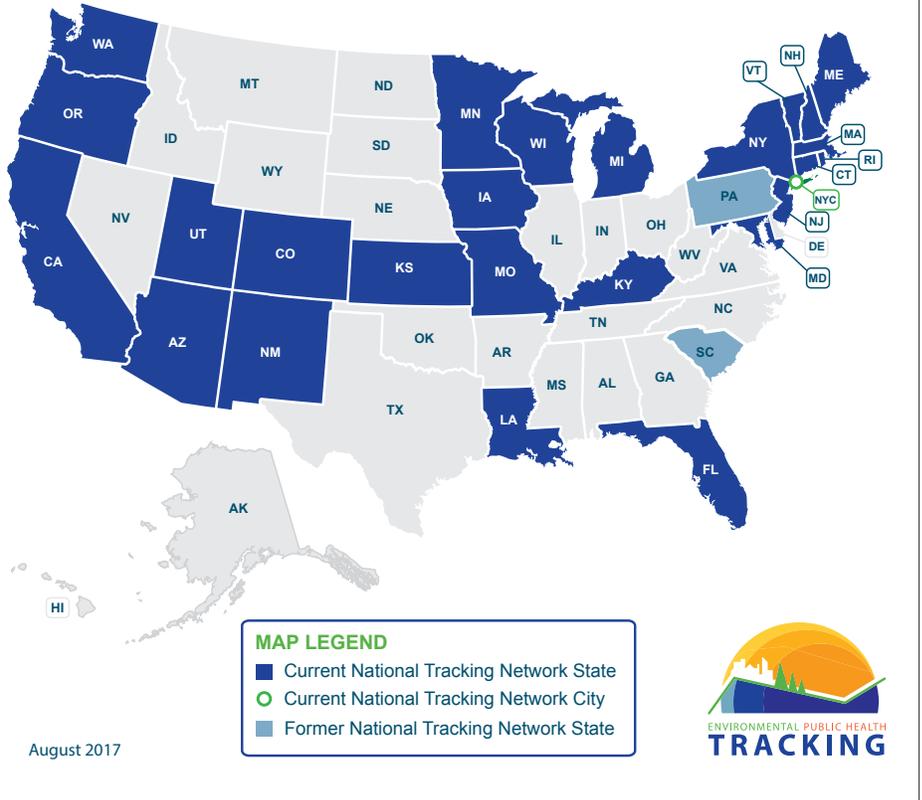
staff of an unusually high number of calls to the poison center about carbon monoxide.

- The New Mexico Department of Health worked with the New Mexico Tracking Program to develop an interactive mapping tool to help residents determine their exposure risk from dangerous wildfire smoke.
- The Missouri Department of Health and Senior Services collaborated with the Missouri Tracking Program to create an interactive map of cooling centers during the height of summer, helping reduce heat-related illnesses and deaths.

As public health professionals tackle environmental health issues in their communities, many find the Tracking Program to be a valuable resource that helps support studies, inform policies, target programs and inter-

FIGURE 3

**Centers for Disease Control and Prevention's National Environmental Public Health Tracking Program Participant Map**



ventions, improve surveillance, identify communities at risk, impact city or state planning, and educate communities.

**Where Do I Find These Tools?**

Visit CDC's Tracking Network at [www.cdc.gov/ephtracking](http://www.cdc.gov/ephtracking) to find data and tools you can use to protect the public health of your community. The Tracking Program continu-

ously expands and improves its environmental health data to help you solve public health problems. 🐞

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Did You Know?

NEHA thanks all of the attendees, presenters, and exhibitors who participated in NEHA's Digital Defense: Education for a Safer World Virtual Conference & Exhibition. We also thank FDA for its support of this virtual conference. If you were unable to attend or missed a few sessions of interest, you can still view NEHA's Digital Defense on-demand. The free, on-demand offering includes access to the recorded Food Safety and Water educational sessions and the Exhibition and Poster Halls. The on-demand virtual conference will be available until February 28, 2021. Learn more at [www.neha.org/digital-defense](http://www.neha.org/digital-defense).