

▶ DIRECT FROM CDC ENVIRONMENTAL PUBLIC HEALTH TRACKING NETWORK



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Environmental Information for Everyone

Editor's Note: As part of our continuing effort to highlight innovative approaches and tools to improve the health and environment of communities, the *Journal* is pleased to publish a bimonthly column from the Centers for Disease Control and Prevention's (CDC's) Environmental Public Health Tracking Network (Tracking Network). The Tracking Network is a system of integrated health, exposure, and hazard information and data from a variety of national, state, and city sources. The Tracking Network brings together data concerning health and environmental problems with the goal of providing information to help improve where we live, work, and play.

Environmental causes of chronic diseases are hard to identify. Measuring amounts of hazardous substances in our environment in a standard way, tracing the spread of these over time and area, seeing how they show up in human tissues, and understanding how they may cause illness is critical. The Tracking Network is a tool that can help connect these efforts. Through these columns, readers will learn about the program and the resources, tools, and information available from CDC's Tracking Network.

The conclusions of this article are those of the author(s) and do not necessarily represent the views of CDC.

Preston Burt is a health communications specialist as a contractor to the Environmental Public Health Tracking Branch in CDC's National Center for Environmental Health (NCEH). In his current position, he designs the user experience for the Tracking Network's web and print products. Shannon DeWitt is an information technology specialist and the security steward for the Environmental Public Health Tracking Branch in CDC's NCEH. He is responsible for the Info-By-Location application as well as the public facing web query system.

Our coworkers at CDC's Environmental Public Health Tracking Program (Tracking Program) come from a variety of disciplines and backgrounds. They include epidemiologists, statisticians, database developers, contract specialists, health com-

municators, and more. If you look closer at the people within those specialties, you will find an even wider array of skills. We have medical doctors, a veterinarian, educators, graphic designers, and former military personnel, among others. Every day, each member brings unique

talents, personalities, and backgrounds to produce, maintain, and expand the National Environmental Public Health Tracking Network (Tracking Network).

Because of the staff's diversity, the "one size fits all" mentality clearly doesn't apply to the Tracking Program. When the Tracking Network launched in 2009, only one way really existed to look at the important environmental and health data within the Network. While the Network was groundbreaking at the time as the first surveillance system to provide environmental data and public health data together in one place, we knew we could improve it, especially the way we communicated data and information to our different user groups.

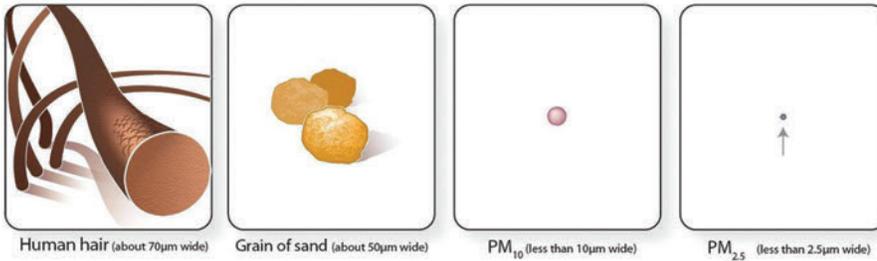
Communicating data effectively to groups as varied as environmental professionals, policy makers, teachers, and concerned parents is challenging. Choosing to be everything to everyone creates many bumps in the road and often fails at being perfect for anyone. We addressed this challenge by offering a wide array of resources to meet the needs of different groups.

For example, we use the term particulate matter (PM), and more specifically PM₁₀ and PM_{2.5} when we present data and information about outdoor air quality. Some Tracking Network user groups have no problem with these terms, but some groups are less familiar with them. In a commonly adopted effort to make PM₁₀ and PM_{2.5} more relatable, we use an easy-to-interpret comparison chart contrasting the size of particulate matter with the thickness of human hair, which is something familiar to everyone (Figure 1).

We also try to address problems with accessing the data. Some users with limited time or skills need help navigating the nearly one bil-

FIGURE 1

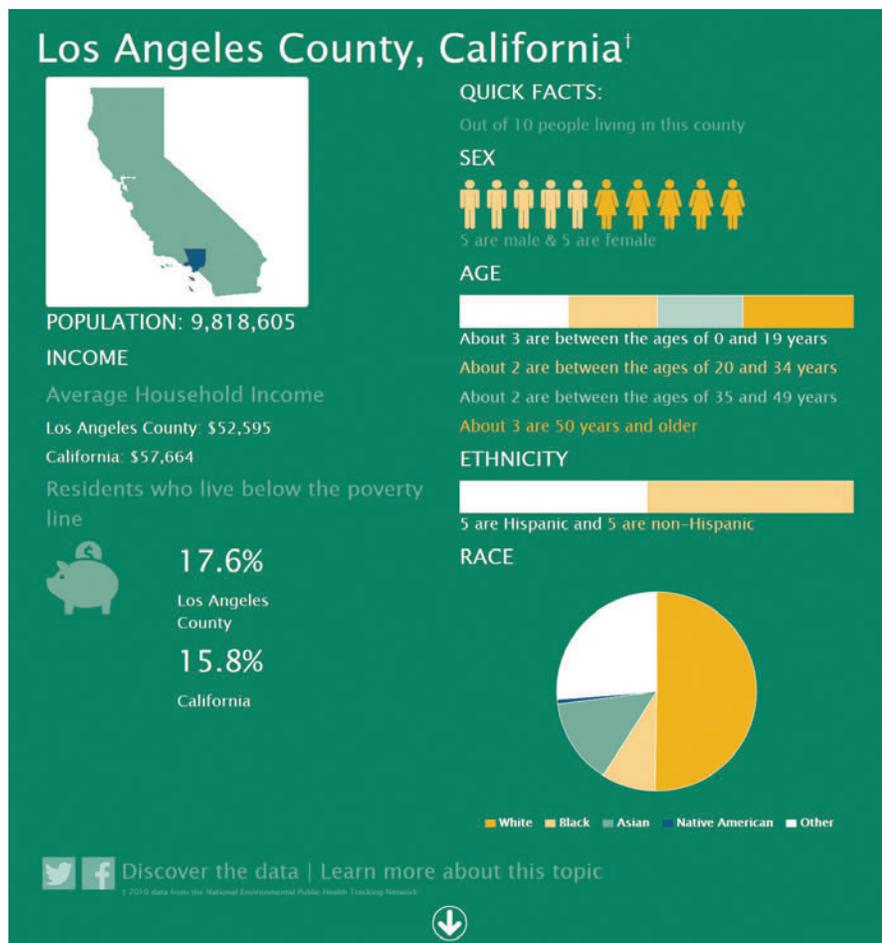
PM_{2.5} Size Comparison Chart



µm = micrometer

FIGURE 3

Info By Location (Demographics Section Screenshot)



lion rows of data, 1.4 million unique maps, and numerous pages of useful content housed on the Tracking Network. Our solution: info-

graphics. Creating and displaying infographics allows the user to consume complex information fairly quickly (Figure 2).

FIGURE 2

Asthma and Air Pollution Infographic



With this in mind, we recently redesigned the “Info by Location” Tracking Network feature to make Tracking data more accessible using infographics (Figure 3). The intent of Info by Location is to present information to Tracking Network users who want to see quick facts about a county or state without having to delve into the data query system themselves. This method allows our creative, multifaceted staff to take a new approach to data display.

After thorough research, review of several design concepts, and many rounds of revisions, we produced a much improved version of Info by Location. Now, users enter a county name or zip code and click “submit” to see data for that area in an infographic-style display. Users can view demographic,

Tracking Network Resources

- Info By Location: <http://ephtracking.cdc.gov/InfoByLocation>
- Infographics: <http://ephtracking.cdc.gov/showInfographics.action>
- Tracking in Action success story videos: <http://ephtracking.cdc.gov/showTrackingInAction.action>
- Fine particulate matter size comparison: http://ephtracking.cdc.gov/images/content/PM2-5_5.jpg
- Animated timeline maps: <http://ephtracking.cdc.gov/showAnimatedMaps.action>
- New features demonstration: <http://youtube/0P6ymfSqy6E>

health, and environmental information and data. They have the option to share what they see via social media, explore the data further using the Tracking Network's data query system, or learn more about health and environmental topics on the Tracking Network.

Info by Location appears to be a feature of interest for network users. We have measured a 150% increase in user traffic in the first 30 days following the launch. Though our first release was well received, we will continue to find ways to improve the feature's content and design using feedback from user testing.

Plans for adjustments to the application this year are already underway.

In addition to the items geared more toward users who are not public health or environmental health professionals, the Tracking Program aims to meet the needs of our data query system users by expanding the features and functionality for the Tracking Network. Additions have included enhanced display options for maps and benchmarks for certain datasets.

The digital public health landscape is always changing and advancing, and CDC's Tracking Program continues to work hard to develop

meaningful content and resources highlighting the data contained within the Tracking Network. Whether through mapping applications, data query systems, infographics, or face-to-face interactions, we continue to recognize and embrace differences within the population by relying on those differences within our team to make the most impact in environmental health.

Using social media, infographics, success story videos, animated timeline maps, or quality web page content, we have developed a wide array of tools for various audiences (See Sidebar).

To learn more about the Tracking Network, please visit us online at cdc.gov/ephtracking. To stay up-to-date on our latest tools and resources, join our LISTSERV by sending an e-mail to epht@cdc.gov.

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DAVIS CALVIN WAGNER SANITARIAN AWARD

The American Academy of Sanitarians announces the annual Davis Calvin Wagner Award. The award will be presented by the academy during the Annual Educational Conference of the National Environmental Health Association. The award consists of a plaque and a \$500 honorarium.

Nominations for this award are open to all diplomates of the academy who:

1. Exhibit resourcefulness and dedication in promoting the improvement of the public's health through the application of environmental and public health practices.
2. Demonstrates professionalism, administrative and technical skill, and competence in applying such skills to raise the level of environmental health.
3. Continues to improve oneself through involvement in continuing education type programs to keep abreast of new developments in environmental and public health.
4. Is of such excellence to merit academy recognition.

The nomination for the award may be made by a colleague or a supervisor and must include the following:

1. Name, title, grade, and current place of employment of the nominee.
2. A description of the nominee's educational background and professional experience.
3. A description of the nominee's employment history, including the scope of responsibilities.

4. A narrative statement of specific accomplishments and contributions on which the nomination is based, including professional association activities, publications, and community/civic activities.
5. Three endorsements (an immediate supervisor and two other members of the professional staff or other person as appropriate).

NOMINATIONS MUST BE RECEIVED BY APRIL 15, 2015. Nomination packages should be sent electronically to tcrow23701@aol.com. If desired, three hard copies of the nomination document may be submitted to:

American Academy of Sanitarians
c/o Thomas E. Crow
25278 Kennebec Drive
South Riding, VA 20152

For more information, please visit www.sanitarians.org/aas-awards/.