



The California Environmental Health Tracking Program Alameda County Pilot Project

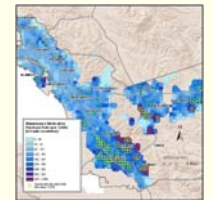
Environmental Public Health Tracking is the ongoing, systematic monitoring of pollutants and diseases that are known or suspected to be related to the environment. The California Environmental Health Tracking Program (CEHTP) is implementing a 4-year pilot project that will serve as a “road test” for elements of an environmental public health tracking system.

Scope of the Project




This project is demonstrating how utilization of existing data can contribute to public knowledge while maintaining data confidentiality. To locate “hot spots” of disease and explore possible relationships with environmental hazards, we are using data from 2001 for Alameda County for:

- **Preterm birth and term low birthweight** (Source: California Center for Health Statistics)
- **Asthma-related health care use** (Sources: Kaiser Permanente of Northern California and Medical Care Statistics Section of the California Department of Health Services)
- **Traffic pollution** (Sources: CalTrans and the California Air Resources Board)

See back for project updates and highlights:



Project Components

- **Partnerships for Data Sharing**– We are partnering with Kaiser Permanente of Northern California and DHS Medical Care Statistics Section to access administrative data in order to describe the burden of asthma in communities within Alameda County. 
- **Data Processing and Analysis**– We are exploring and developing methods to effectively present information visually. This includes the creation of high resolution smoothed-surface maps. 
- **Stakeholder Participation**– We are partnering with the Pacific Institute to coordinate and convene a stakeholder group to provide input and feedback on the project methods, findings, and dissemination plan. Members include representatives from CBOs, NGOs, health providers, and local agencies.
- **Dissemination Plan**– We are partnering with InfoOakland to develop and display project findings in a countywide, interactive visual user interface. InfoOakland also provides trainings and direct assistance to communities. For more information, go to www.infooakland.com. 

Intended Outcomes

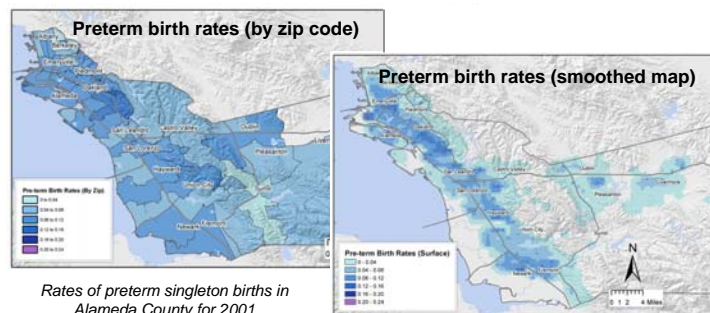
- Identify communities with elevated risk for asthma, preterm birth, or low birthweight and assess their exposure to traffic pollution.
- Increase the capacity to examine possible connections between asthma, preterm birth, and low birthweight with exposure to pollution caused by automobile and truck traffic.
- Explore various methods of measuring asthma in populations.
- Assess the benefits, limitations, and costs of this type of environmental health tracking system and explore how this approach may be applied to other diseases and environmental hazards throughout California.
- Provide communities with new information to address health concerns regarding traffic-related exposures.

For more information, go to www.catracking.com

Project Updates and Highlights

Mapping Health Outcomes

Using GIS (Geographic Information Systems) and Tracking methods, we created “smoothed-surface” maps to visualize health outcome data. These smoothed maps have a higher resolution and better represent reality than more commonly available maps whose representation of data are constrained by geopolitical boundaries such as zip codes.

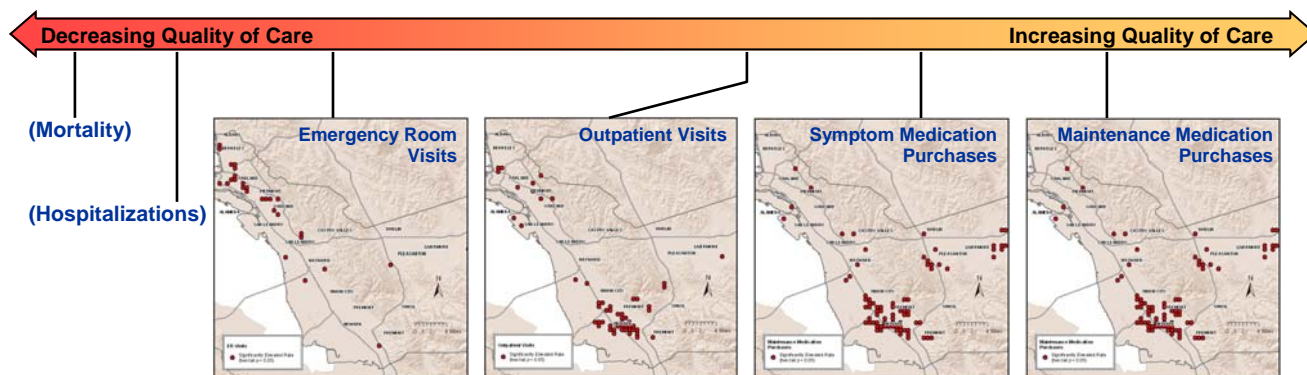


Benefits of smoothed-surface maps:

- Artificial political boundaries no longer limit or influence the visualization of data
- Areas without people are no longer assigned rates
- Neighborhood-level “hot spots” are now identified
- Confidentiality of private patient information is preserved

Improving Asthma Information

While asthma is most commonly characterized by hospitalizations due to asthma, examining other asthma-related events has contributed to our understanding of asthma in the population. These events fall along a spectrum of severity, ranging from mortality and hospitalization to outpatient visits and medication purchases. These events also fall along a quality of care spectrum. Individuals receiving worse care would likely experience the more severe asthma-related events, such as hospitalization and emergency room visits, which likely could have been prevented by the use of maintenance medications.



Statistically-significant elevations in the spectrum of asthma-related events among pediatric Kaiser Permanente and Medi-Cal Fee for Service enrollees in Alameda County, 2001.

By comparing maps that indicate areas in the county with significantly elevated rates for a range of asthma-related events, we have identified communities that are likely experiencing disproportionately worse asthma and a worse quality of health care. We have also identified communities in southern Alameda County that may have significantly high rates of relatively well-maintained asthma.

Stakeholder Input

We have presented preliminary findings for birth outcomes, asthma, and traffic pollution to our stakeholder advisory group over a series of meetings. We will continue to meet and solicit the group's input and feedback on subsequent findings and our dissemination plan. Responses from the group have indicated that, in general, the project findings are useful for:

- Identifying burdened communities
- Guiding the development of policy and public health programs
- Informing the allocation of resources and services
- Evaluating the effectiveness of policies and programs

CEHTP Alameda County Pilot Project - Contact Information

For research questions, please contact:

Eric M Roberts, MD, PhD
Pilot Project Manager

(510) 622-4534
erobert1@dhs.ca.gov

For community participation and other questions, please contact:

Michelle Wong, MPH
Health Educator

(510) 622-4479
mwong@dhs.ca.gov