

US EPA ARCHIVE DOCUMENT

Inventory/Assessment of Environmentally-related Disease and Environmental Databases in the California/Baja California Border Region

Start Date: 2005

Completion Date: expected 2007

Project Purpose:

Because California is the largest user of agricultural pesticides in the nation, and the Imperial Valley of California houses a large monolingual agricultural worker population, opportunities for pesticide exposure and illness are of great concern. This is a transboundary issue as agricultural workers in Imperial County live both in the U.S. and Mexico, and exposures can be obtained from both sides of the border. Pesticide illness surveillance in the area, however, is incomplete, due to failures of clinicians to recognize this illness, incomplete reporting, and lack of timely surveillance.

Likewise, Imperial County has the highest childhood hospitalization rate for asthma in California, and shares a common airshed with the urban area of Mexicali, Baja California. Data on the prevalence of childhood asthma morbidity and information on asthma risk factors are incomplete in the region.

The purpose of this project is to conduct an inventory and assessment of health, hazard, and exposure databases unique to the border region and to complete an interactive web-based GIS community information system which will allow the user to visualize patterns of disease and hazards in the border counties.

Project Description:

During the course of this project, we propose to:

(1) Conduct an inventory and assessment of health, hazard, and exposure databases unique to the border region which could be used in a border environmental and occupational health surveillance system. Identify and obtain data on key environmental health indicators for the border region.

(2) Develop a database and Geographic Information System (GIS) warehouse of all environmental and health data products, including environmental health indicators already assembled by EHIB and PAHO for the border region, in a website for public access, including:

- a. Reports by CDHS, CDC, and Cal/EPA (e.g., soil sampling in Imperial Valley schools, pesticide use near schools, organophosphate metabolites in women of reproductive age living in the Imperial Valley, and use of satellite imagery to detect crop patterns in Mexico);
- b. GIS products such as an interactive GIS of sensitive receptor sites of pesticide use, maps/tables on environmental health germane to this area (e.g., border environmental health indicators, data from Pan American Health Organization);
- c. Occupational asthma and pesticide illness tracking databases supported by the National Institute for Occupational Safety and Health and Cal/EPA.

Accomplishments:

Specific deliverables resulting from this project will be:

1. An inventory of environmental and health databases and reports for the California/Baja California border region;
2. A report on environmental health indicators for the California/Baja California border region; and
3. Development of a clearinghouse of environmental health reports, data, and fact sheets which would be accessible to both stakeholders and border residents.

Expected Outcome(s):

We expect that environmental improvements will result from creating better informed health professionals and other stakeholders in the border region who will be able to knowledgeably influence environmental public health policy.

Presentations or Publications:

None yet.

Project Contacts:

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Participant(s):

The Public Health Institute; the California Department of Health Services (CDHS) – EHIB and COBBH; the CDC – California Environmental Health Tracking Program; and EPA