

## ENVIRONMENTAL PUBLIC HEALTH: Everyone. Everywhere. Every Day.

*"The emergence of many new issues and threats... Cryptosporidium in drinking water, hantavirus, Escherichia coli, West Nile virus, and most recently homeland terrorism... points to the need for a well prepared environmental public health system."* Source: CDC 2003

meeting  
needs in:

# California

California is a highly urban state; 94 percent of its residents live in cities or towns, and the majority live in one of four metropolitan areas: San Jose, San Francisco-Oakland, San Diego or Los Angeles. Environmental public health issues in these areas are typical of many major urban areas. The population explosion in California puts further demand on the state's resources and adds to existing environmental public health issues. Border environmental public health issues are critical in California, as a neighbor to Mexico. US Census Bureau 2000; US Census Bureau on Urbanization, California 2004; Border Environmental Research Reports (Number 1) 1999

## CRITICAL ISSUES

### ADDRESSING URBAN SPRAWL

Population growth (increasing at a rate of 1 million people per year) is contributing to urban sprawl in California. Agricultural land is being converted into residential property. Urban sprawl creates increased demand on public health infrastructure and services e.g., drinking water, sewage treatment, food safety and landfill capacity.

Source: California Environmental Protection Agency—California Resources Agency, Environmental Protection Indicators for California 2002

### CONTROLLING WEST NILE VIRUS

West Nile virus is a serious concern among the environmental public health community and the general public.

Source: Trust for America's Health 2004; San Francisco Chronicle, June 9, 2004

### MANAGING SOLID WASTE

Each year Californians generate an estimated 76 million tons of waste. This amount is rising with the population boom. Waste recycling and diversion efforts are creating new environmental issues. Land use approval, and the siting and permitting of new landfill facilities, are often lengthy and controversial processes.

Source: California Integrated Waste Management Board 2004

## GREATEST CHALLENGES

### FRAGMENTED SYSTEM

The coordination of state, county and city health agencies to provide consistent and uniform environmental public health services is an ongoing challenge—these agencies are often fragmented.

### DECLINING WORK FORCE

The environmental public health workforce requires a large number of professionals with experience in a wide range of fields. Recruitment, training and retention are significant goals.

### STRETCHED RESOURCES

Increasing demand for services including emergency response requires environmental public health services to stretch the existing workforce and budgets.

## MODEL PROGRAMS

### BUILDING ALLIANCES

State and local environmental public health jurisdictions are continually working to build alliances with industry as well as state and federal agencies. A good example is the California Retail Food Safety Coalition—environmental public health professionals work with the food industry and other health agencies to put forth meaningful food safety legislation.

### DELEGATING SERVICES

To provide the best customer service and most efficient use of labor and funds, state and federal programs delegate to the local level. For example, the state office of drinking water delegates regulatory authority to local environmental public health agencies in areas for water systems of fewer than 200 hookups.

## Community Profile



**Elisa Fisher**  
Mother of Brooke  
Fisher  
Danville, California

*"I had no idea that the french fries my daughter ate would result in her death. We were both vegetarians, so I thought we were safe."*

In 2000, Elisa Fisher lost her 2-year-old daughter Brooke to *E. coli* poisoning from french fries. Elisa had no idea that cross-contamination of *E. coli* from beef to other food products could occur or that the fast food restaurant where her daughter ate had numerous health code violations over the past 10 years.

Today, Elisa Fisher is a member of Safe Tables Our Priority (S.T.O.P.), an organization that fights against foodborne illness. She also speaks out about proper food handling, safety procedures and the need for public education about food safety.

## CHALLENGES

### Fragmented System

Environmental public health services in California are challenged to overcoming inconsistency and fragmentation. At the state level,\* there is a lack of coordination and communication between the Department of Health Services and California Environmental Protection Agency, the state agencies responsible for these services.

At the local level, there are 62 environmental public health agencies, representing 58 counties and four cities. The size, scope and operation of the local environmental public health agencies vary. Some are freestanding comprehensive environmental public health agencies, some are sub-units of local health departments and others depend on state support and have very limited resources.

Source: Public Health Enumeration 2000

\*There is a proposed comprehensive reorganization of state government (through the California performance review). Under this plan a new Department of Public Health will be created; many aspects of the current system will be eliminated.

### Declining Work Force

In recognition of the complex and varied issues faced by the environmental public health work force, the California Department of Health Services, Registered Environmental Health Specialist (REHS) Program, and other environmental public health professional organizations have developed a strategic plan to Shape the Future of the REHS. Funding to implement this plan is limited.

#### REHS STRATEGIC PLAN FIVE INITIATIVES

Education	Recruitment	Public Relations	REHS Administration	Professional Outreach
Develop educational strategies for EPH protection	Develop effective recruitment approaches for the EPH profession	Develop a public relations approach to EPH protection	Develop administration programs for EPH enhancement	Develop forums and linkages to promote awareness of EPH protection

EPH = environmental public health

Source: Shaping the Future of the Registered Environmental Health Specialist Program, Draft 2003

### Stretched Resources

Response to emergencies and emerging issues such as West Nile virus, fires and possible terrorism requires preparedness and resources. There is concern that many environmental public health professionals are already stretched to capacity with more traditional responsibilities and may not be prepared to handle these emerging and emergency issues.

#### Traditional Responsibilities

- Drinking water quality
- Solid/liquid waste management
- Onsite septic system inspection
- Land use planning
- Food safety
- Milk and dairy sanitation
- Hazardous waste management
- Integrated pest management
- Pool inspection
- Disaster response

#### Emerging and Emergency Issues

- West Nile virus
- Terrorism
- Earthquake
- Fire
- Food security
- Water security
- Indoor air quality
- Biomonitoring
- Children's environmental health
- Environmental justice

## CDC FUNDED PROGRAMS

**Biomonitoring planning grant.** In 2001 and 2002, the Centers for Disease Control and Prevention, National Center for Environmental Health (CDC, NCEH) funded California to plan a biomonitoring program. Data gathered during this program could help to identify chemicals that may be of health concern within California borders and to measure these chemicals in the population.

**Environmental Health Specialists Network (EHS-Net).** California Emerging Infections Site is one of eight programs in the country to join forces with CDC and the FDA to form EHS-Net. Members of EHS-Net are gathering information from food-service establishments to learn more about food-handling practices and how they relate to foodborne illness.

Source: CDC, NCEH California Fact Sheet 2004, CDC

### Support Environmental Public Health Services

Environmental public health practitioners are responsible for protecting and preventing public exposure to harmful agents. Protection of the public's health comes through the many services they provide, including air quality, safe drinking water and food safety, integrated pest management (e.g., West Nile virus), toxic chemical control, disaster planning and control (terrorism preparedness) and public education. State and local environmental public health programs are typically underfunded and stretched beyond capacity. Environmental public health practitioners are often not sufficiently trained or supported to handle the emerging and complex environmental public health issues they face every day. Programs lack infrastructure to manage these issues, and research is needed. There is a need to continue and *increase* the federal funding that is so critical to these programs. Without this support, the environmental public health systems may not be able to fulfill their responsibilities, resulting in an increased risk to the public's health. CDC, NCEH, Environmental Health Services Branch is spearheading an effort to revitalize environmental public health services. For more information on this program, visit [www.cdc.gov/nceh/ehs](http://www.cdc.gov/nceh/ehs), or call APHA's Director of Government Relations and Affiliate Affairs at (202) 777-2541.



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