

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:

Pennsylvania

As the most populous rural state where agriculture is the biggest industry, many of the environmental public health issues in Pennsylvania are associated with agricultural practices and those typical of rural areas such as limited resources and lack of infrastructure.

Philadelphia and Pittsburgh wrestle with environmental public health issues typical of most urban metro areas such as sprawl (air and water quality) and poor urban areas (unhealthy homes and rodent control). Source: The Costs of Sprawl in Pennsylvania 2000

CRITICAL ISSUES

TOXIC WASTE

In 1999, Pennsylvania ranked in the top 90 percent of dirtiest states for cancer and non-cancer risk and as the third-highest in number of Superfund sites.

Source: Public Health in Pennsylvania: Critical Issues for Challenging Times 2002

POOR WATER QUALITY

Each year an estimated 16 billion gallons of raw sewage containing dangerous bacteria and viruses are discharged from outflows into Pittsburgh waterways where people boat, swim and wade, and into drinking water sources. The sewage collection system for this area is inadequate and cannot contain overflow from homes.

Source: Water and Waste Digest 2004; 3 Rivers West Weather 2004

MANAGING URBAN SPRAWL

Philadelphia ranks fifth in the nation of the 100 largest urban areas and sixth in sprawl. Sprawl contributes to environmental public health issues by increasing the population and thus the demand for services, and by increasing air and water pollution.

Source: U.S. Bureau of Census on Urbanization 2004; The Costs of Sprawl in Pennsylvania 2000

GREATEST CHALLENGES

FRAGMENTED SYSTEM

Environmental public health services across the state are inconsistent and fragmented.

ILL-PREPARED WORK FORCE

Environmental public health professionals are nearing retirement and there is a shortage of young professionals in the ranks.

STRETCHED RESOURCES

Pennsylvania has the fewest number of public health workers per capita in the nation. Combined with retiring professionals and loss of positions due to budget cuts, the number of environmental public health professionals is insufficient.

MODEL PROGRAMS

FORMING LINKAGES

In Philadelphia, the Department of Health has linked its maternal and child health services with its environmental public health programs to provide comprehensive in-home service to newborns. A maternal and child public health professional works with the environmental public health professional to assess and manage rodent infestation in unhealthy homes.

INCREASING EFFICIENCY

The Philadelphia Department of Health passed an ordinance that requires food establishments to have a staff person trained in food safety onsite during all hours of operation. The health department can now provide a food safety assurance function rather than a regulatory oversight function.

Community Profile



Van Haitsma
Family
Pittsburgh,
Pennsylvania

"The local environmental public health department was proactive... when my 1-year-old daughter had high lead levels."

When Yvonne Van Haitsma discovered through a routine pediatric check-up that her 1-year-old daughter, Maya, had elevated lead levels, the local environmental public health service was proactive in helping figure out the possible source and how to reduce the lead hazard.

Through a home inspection and an interview, it was discovered that Maya might have ingested lead-based paint chips that had fallen to the ground from recent home renovations.

Thankfully, with the help and guidance of the local environmental public health services, Maya and the Van Haitsmas' home are now risk-free.

CHALLENGES

Fragmented System

- Environmental public health services in Pennsylvania are fragmented and dispersed. Of the state's 67 counties, 10 have local public health agencies that provide environmental public health services. The remaining 57 counties rely on seven state agencies and private organizations for services, which are often minimal, especially in rural areas.
- At the state level, those seven state agencies are responsible for different environmental public health issues. It can be difficult to coordinate responses, especially when dealing with an emergency response or a new and emerging issue, such as when West Nile virus first appeared.

Source: Public Health in Pennsylvania: Critical Issues for Challenging Times 2002

Ill-Prepared Work Force

The average age of an environmental public health worker in Pennsylvania is higher than the national average. There is a shortage of young professionals to fill the positions of retiring professionals.

	U.S. Worker	U.S. Public Health Worker	Pennsylvania Public Health Worker	Allegheny County Environmental Public Health Worker
average age (years)	40	46.7	47	53*

*Allegheny County Health Department lost 10 percent of its staff due to budget cuts in 2004.

Source: ASTHO 2004; Allegheny County Health Department 2004

Stretched Resources

- The number of public health professionals per capita is the lowest among all states. This number continues to decline as baby boomers retire.

AVERAGE NUMBER OF PUBLIC HEALTH PROFESSIONALS PER CAPITA	
National	138/100,000
Pennsylvania	37/100,000

- Given this insufficient number, there is concern as to how the individual environmental public health worker can keep up with daily responsibilities as well as adequately prepare for and handle emerging and emergency issues.

TYPICAL RESPONSIBILITIES OF AN ENVIRONMENTAL PUBLIC HEALTH WORKER	
Air quality	Solid waste management
Community environmental assessment	Safe waterways
Food safety	Private wells
Healthy homes	Pool inspections
Pollution prevention	Tattoo/tanning inspections
Public drinking water	Emergency preparedness and response

Source: Public Health Work Force Enumeration 2000; University of Pittsburgh Center for Public Health Practice 2004

CDC FUNDED PROGRAMS

Building Communities of Excellence Through Environmental Health Capacity-Building. Allegheny County Health Department received funding through a three-year cooperative agreement with the Centers for Disease Control and Prevention, National Center for Environmental Health (NCEH) to build capacity for environmental public health service activities. The department hired an epidemiologist and conducts videoconferences across the country on environmental public health issues.

Rodent Control and Environmental Improvements. Philadelphia Department of Public Health received funding from CDC, NCEH for an Urban Commensal Rodent Control and Environmental Improvement and Safety Program. The health department is using a comprehensive rodent control program to demonstrate that such an approach can also prevent, eliminate or reduce the consequences of disease and injuries associated with unhealthful home environments.

Source: CDC, NCEH Pennsylvania Fact Sheet 2004

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 monitoring air quality, safe drinking water and food safety, integrated pest management (e.g., West Nile virus), toxic chemical control, disaster planning and control (terrorism) 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, or call APHA's Director of Government Relations and Affiliate Affairs at (202) 777-2541.



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