

New Steps

With the advent of the National Environmental Public Health Tracking Program:

- Communities learn about health and the environment in their area
- Scientists get information to help research
- Officials get information to protect and improve health in your community

- The Centers for Disease Control and Prevention (CDC) established the National Environmental Public Health Tracking Program in 2002.
- CDC is funding health departments and schools of public health.
- CDC has established agreements with national agencies and organizations.

Find Out More

This summary of the Pew Environmental Health Commission report gives you the background leading to the call for a nationwide tracking system. Resources about how tracking will work and how you can get involved are available.

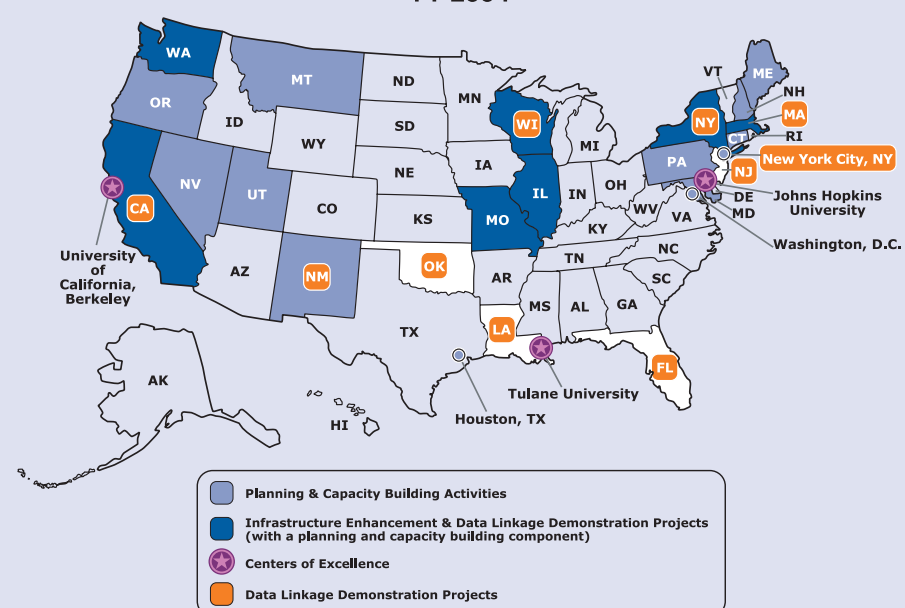
- The full Pew Commission report with complete citations can be found at:
http://www.pewtrusts.com/pdf/hhs_enviro_health_gap_technical.pdf
- A shorter version of the Report, called the "Companion Report," can be found at:
<http://healthyamericans.org/reports/files/healthgap.pdf>

Other resources for finding out about tracking activities include:

- Centers for Disease Control and Prevention:
<http://www.cdc.gov/nceh/tracking/>
Email: EPHT@cdc.gov
Telephone: 404-498-2170
- The Oak Ridge Institute for Science and Education EPHT Library
<http://www.ornl.gov/hsc/cdc/nceh/epht/>



CDC's Environmental Public Health Tracking Program Grantees FY 2004



The state of the environment and your health: A quick look at the Pew Environmental Health Commission Report

This is a summary of the Pew Environmental Health Commission report on *America's Environmental Health Gap: Why this Country Needs a Nationwide Health Tracking Network*. Johns Hopkins School of Public Health wrote the report.

This nation has come a long way in responding to and reducing the threats caused by infectious diseases, such as the measles.

But, a gap remains. That gap involves our knowledge about what effect the environment may have on the development of non-infectious diseases.

Americans have the right to know how healthy their environment is. They have the right to know what an unhealthy environment may do to their health.

Americans want this to be a national priority. The Pew Environmental Health Commission agrees. As a result, the Commission recommended a nationwide health tracking network.



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"We know there are pollutants entering our air and water each year with suspected or known adverse effects on the health of our communities.

What we are limited in knowing is if there is a link between that pollution and the increases we are seeing in chronic diseases because we aren't tracking environmental health factors.

We need to gather the facts now. Americans have a right, and the need, to know."

Lowell Weicker, Jr., Chairman, Pew Environmental Health Commission

Executive Summary, *America's Environmental Health Gap*:

Why the Country Needs a Nationwide Health Tracking Network, Companion report, September 2000

Know Your Environmental Health

A \$2.8 million grant to the Johns Hopkins School of Public Health funded the Pew Environmental Health Commission report. The Pew Commission made proposals to strengthen America's ability to track and prevent health problems linked to the environment. The Commission finished its work in January 2001.

According to the Pew Commission, in the last 20 years, scientists have noticed a sharp increase in illnesses and deaths that might have environmental factors. For example, the number of Americans reporting that they have asthma rose 75 percent between 1980 and 1995. The number of asthma cases will probably double by 2020, according to the Pew Commission Report.

- Asthma deaths in children up 115%
- Brain cancer in children up 32%
- Blood cancers in children up 23.1%

Information is the Key

A nationwide health tracking network could track:

- Environmental hazards
- Exposure to hazards
- The potential health effects of exposure to hazards

An environmental hazard is an agent or factor in the environment that may adversely affect human health. People can be exposed to physical, chemical, or biologic agents from various environmental sources through air, water, soil, and food.

- An example of an environmental hazard might be mercury. It is released into the air by industrial processes; and mercury enters surface water, where it can bioaccumulate in fish tissue as methylmercury, its most toxic form.

Exposure to hazards is measured through a tool called biomonitoring. Biomonitoring is one tool for the assessment of exposure through direct measurement of environmental chemicals or their metabolites in human specimens such as blood or urine.

- An example of exposure might be methylmercury. Fish consumption is the primary source of methylmercury exposure in people. Total blood mercury is a biomarker of methylmercury exposure.

Health effects are chronic or acute health conditions that affect the well being of an individual or community.

- An example of a health effect might be neurological defects. Exposure of the fetus to mercury during pregnancy can result in neurological abnormalities ranging from cerebral palsy to learning disorders.

Centralizing Information is Essential

The Commission proposed a nationwide health tracking network because there was not a central place to bring information on hazards, exposure and health effects together. A nationwide health tracking network would bring it all together. It would use local, state and national data. The network would:

- Assemble information about exposure to hazards
- Collect information about diseases and human health
- Link the information together



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Five Components of Information and Action

The Pew Commission proposed five steps for closing the environmental health gap.

National Baseline Tracking

National baseline tracking of diseases and exposure will be established. The Pew Report recommended that the diseases that would be tracked initially are:

- Birth defects
- Problems that delay the normal development of children, such as autism, mental retardation and cerebral palsy
- Asthma, emphysema and chronic bronchitis
- Cancer, including childhood cancer
- Disorders of the brain and nervous system, such as Alzheimer's, multiple sclerosis and Parkinson's disease

The Pew Commission also recommended a focus on five particular types of exposures:

- "Persistent organic pollutants" are materials that stay in the environment for a long time. They occur in higher amounts at higher levels in the food web. They may affect human health.
- Heavy metals can stay in water or soil
- Some pesticides
- Materials that pollute the air
- Materials that pollute the water

Information Makes Early Warning Possible

Nationwide tracking will allow the rapid identification of immediate health problems. This national system would alert the government to potential health problems caused by environmental factors.

- For example, if an accidental event occurred that involved the misuse or release of toxic chemicals, an early warning system with environmental capacity could quickly recognize the episode, identify the chemical exposure and rapidly initiate effective treatment and response.

State Programs

State pilot programs will be supported. These programs would respond to regional exposures and health concerns. They would help with the systematic development of tracking methods. These methods would be flexible, practical and adaptable.

Pilot programs would:

- Develop model systems
- Identify and evaluate data
- Work with communities and other organizations

Training

Public health officials at the federal, state and local levels will have access to training tools so that they can learn to respond to health concerns identified through the EPHT. In this way, public health could respond in a coordinated way to:

- Disease outbreaks
- Disease clusters
- Emerging threats

Community Involvement

Communities will have a chance to be involved. This would permit local concerns to be addressed. An additional goal would be to make sure that community-based organizations have access to nationwide tracking data. Local officials would know the health status of their environment. This would help the people they serve.

Conclusions

The Pew Commission proposed that we strengthen America's ability to track and prevent health problems linked to the environment. This would be done through the nationwide tracking network. The mission of a nationwide tracking network would be to improve the health of our communities.

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