



HEALTH TRACKING

Congressional Briefing: April 28, 2004

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1. UNDERSTANDING AND PREVENTING CHRONIC DISEASE:

Recommendation: Provide \$100,000,000 for the Public Health Tracking Network to expand the program to understand the potential link between environmental and health data and to identify problems and effective solutions that will reduce the burden of chronic diseases in the American population.

Justification: The National Academy of Sciences estimates that 25% of developmental diseases, such as cerebral palsy, autism, and mental retardation, are caused by environmental factors. In addition some researchers have hypothesized that diseases such as multiple sclerosis, Parkinson's disease, and Alzheimer's disease may be linked to environmental hazard exposures. Only a handful of states have made any effort to track these diseases.

The link between environmental risk factors and chronic disease is still largely unknown. However, chronic diseases such as cancer, asthma, heart disease, and diabetes are responsible for seven out of ten deaths in America. These diseases strike more than a third of our population – over 100 million women, men, and children – and the costs of caring for people with chronic diseases account for more than 75% of the nation's \$1 trillion health care budget.

The initial efforts to establish such a Network are now being carried out through a series of State grants to develop pilot initiatives and projects. The first round of pilot projects is beginning to yield some valuable information on how to create a nationwide disease tracking system by building on the existing public health infrastructure. The program needs to be expanded to all 50 states.

Program Description: CDC's goal is to develop a nationwide network that will protect and improve the health of all American communities. Using information from the nationwide health

tracking network, federal, state, and local agencies will be better prepared to develop and evaluate effective public health actions to prevent or control chronic and acute diseases that may be linked to hazards in the environment. In addition, the public will have a better understanding of what health threats affect their communities and what actions they may take to protect their health. With FY03 funding, CDC was able to increase from 20 to 30 the number of state-based demonstration projects that focus on defining tracking functions for the Public Health Tracking Network.

After the completion of the pilot program grants, the nationwide health tracking network will begin to take shape. The network will coordinate local, state, and federal health agencies' collection of critical data. In all fifty states, the network will be able to track:

- Asthma and other respiratory diseases
- Developmental disorders such as autism, cerebral palsy, and mental retardation
- Neurological diseases such as Alzheimer's, multiple sclerosis, and Parkinson's
- Birth defects
- Cancers, especially in children
- Environmental exposures

2. ENHANCING BIOMONITORING TO PREVENT DISEASE AND RESPOND TO TERRORISM:

Recommendation: Provide a \$20 million increase for NCEH public health laboratory biomonitoring capacity to prevent disease caused by exposure to toxic chemicals that are released by terrorists or naturally occur in the environment. Of the increase, \$10 million would be used extramurally to enhance state public health laboratory biomonitoring capabilities, including upgrading facilities and equipment and bolstering workforce capacity so that these laboratories are able to measure chemicals in the human body. The remaining \$10 million increase would be used by NCEH to provide adequate technical assistance and training to states in assessing exposure to chemicals, and to develop more rapid and easily transferable laboratory methods for measuring toxic substances in people for both long-term and acute exposures.

Justification: Limited information exists about chemical exposures in humans and how these chemicals affect people's health. Without this information, public health officials cannot effectively identify and prevent diseases that result from chemical exposures. With prior CDC funding, 36 state public health labs developed plans for increasing biomonitoring capacity – the testing of body fluids, hair and skin for chemical exposure. However, in 2004, NCEH only had sufficient funds to support implementation of those plans for three grantees. NCEH's funding is inadequate to provide the technical assistance states require to upgrade biomonitoring capacity.

Program Description: Biomonitoring has become the worldwide standard for assessing people's exposure to toxic substances as well as for responding to serious environmental public health problems. Through biomonitoring techniques, NCEH laboratory scientists are able to measure actual levels of chemicals in people's bodies. They do so with precision, speed, and pinpoint accuracy, measuring many chemicals in a very small amount—often a teaspoon or less—of blood or urine. Biomonitoring's value lies in decreasing the uncertainty of assessing human

exposure to chemicals and in vastly improving the ability to make timely and appropriate public health decisions.

CDC also uses its biomonitoring expertise to investigate unusual or chronic exposures and to study the causes of diseases and birth defects. For example, CDC scientists analyzed samples for an investigation of acute leukemia cases among children in Nevada. CDC also participated in an exposure investigation of New York City firefighters involved in rescue operations after terrorist attacks on the World Trade Center. The NCEH laboratory also has developed the Rapid Toxic Screen to analyze people's blood or urine for 150 chemical agents likely to be used by terrorists.

3. IMPROVING STATE AND LOCAL PUBLIC HEALTH BIOTERRORISM PREPAREDNESS

Recommendation: Restore the \$105,000,000 cut proposed by the President to the CDC's Public Health and Social Services Emergency Fund to continue needed improvements to the public health infrastructure, thereby providing greater protection to Americans in the event of a bioterrorist attack or public health emergency.

Justification: For more than two decades America's public health infrastructure has been neglected. A recent report by TFAH, notes that "numerous evaluations of the country's overall health defenses have found serious deficiencies in the fundamental and underlying infrastructure. The lack of investment in core programs has resulted in deficiencies in workforce, communications systems, laboratories and health tracking capabilities. Together, all of these public health functions are essential to an effective response in the event of an emergency." Since September 11, 2001 and the subsequent anthrax attacks, federal investments to state and local governments have helped to improve the system, however, much more needs to be done to strengthen the public health infrastructure across the country.

The December 2003 TFAH report, "*Ready or Not? Protecting the Public's Health in the Age of Bioterrorism*," examines 10 key indicators to assess areas of improvement and areas of ongoing vulnerability in the nation's effort to prepare against bioterrorism and other large-scale health emergencies. Nearly 75 percent of states earned positive marks for only half (five) or fewer of the 10 possible indicators. Similarly, a February 2004 GAO report, "*HHS Bioterrorism Preparedness Programs, States Reported Progress but Fell Short of Program Goals for 2002*" (GAO-04-360R) found that many states are missing critical benchmarks of preparedness and "much remains to be accomplished." In March 2003, the Pentagon released parts of the two-year old analysis, "*Lessons from the Anthrax Attacks: Implications for U.S. Bioterrorism Preparedness*," which identified weaknesses in almost every aspect of U.S. biopreparedness and response."

Program Description: CDC supports "dual use" public health infrastructure upgrades to respond to acts of terrorism or infectious disease outbreaks and public health threats. Funds are used by state and local health departments for needs assessments, terrorism response planning, training, strengthening epidemiology and surveillance, upgrading lab capacity and communications systems, and other related activities.

Recent Successes:

- 43 states have at least one laboratory that is equipped to handle critical biological agents.
- 29 states have upgraded communications and connect to the national Health Alert Network (HAN).
- All states have a CDC-approved plan for developing a response plan for a bioterrorist attack.

Additional Needs:

- Increasing staffing to receive and distribute emergency “push packs” from the Strategic National Stockpile.
- Improving laboratory capacity – only six states report they have sufficient Biosafety Level 3 capability, although 43 states have at least one such laboratory.

Researched and compiled by Trust for America’s Health – www.healthyamericans.org