

A Brief History and Overview of CDC's Centers for Public Health Preparedness Cooperative Agreement Program

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SYNOPSIS

The Centers for Disease Control and Prevention (CDC) funded the Centers for Public Health Preparedness (CPHP) Cooperative Agreement program from 2004 through 2010. CDC gave approximately \$134 million to 27 CPHPs within accredited schools of public health to enhance the relationship between academia and state and local health agencies to strengthen public health preparedness. Over the course of the program, CPHPs provided education and training services that met public health preparedness and response needs throughout the United States. The passage of the Pandemic and All-Hazards Preparedness Act in 2006 has had broad implications for the Department of Health and Human Services' future preparedness and response activities. Guidelines were established giving accredited schools of public health eligibility to receive federal grants to carry out the continual development and delivery of core curricula and training that responds to the needs of state, local, and tribal public health authorities.

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In the late 1980s and early 1990s, public health practitioners identified the need to enhance partnerships between academia and the practice community and to assure a competent public health and health-care workforce.¹⁻³ To address this need in part, funding from the Centers for Disease Control and Prevention (CDC) began in 2000 for what were then referred to as the Academic Centers for Public Health Preparedness.² CDC funding for these academic centers increased following the events of September 11, 2001, and continued until 2004, when the subsequent Centers for Public Health Preparedness (CPHP) Cooperative Agreement program was initiated to continue strengthening public health emergency preparedness by linking academic expertise to state and local health agency needs. CDC set the strategic direction for the CPHP program, distributed resources to support CPHP activities, ensured systems were in place to monitor performance, and managed accountability and coordinated the communication efforts among key stakeholders of the CPHP program.

From 2004 to 2005, the CPHP program resided under the Senior Advisor for Education and Training within CDC's Office of Public Health Preparedness and Response (OPHPR, formerly the Office for Terrorism Preparedness and Emergency Response). Seeing a need for closer collaboration with the Public Health Emergency Preparedness (PHEP) Cooperative Agreement, the CPHP program was moved organizationally to the Division of State and Local Readiness, Program Services Branch, in the OPHPR. In 2008, the CPHP program was moved a third and final time to CDC's Learning Office in the Office of the Director, OPHPR. This move was made to ensure coordination with other national public health preparedness and response training and education initiatives being conducted within the Learning Office while still maintaining close collaboration with the PHEP program. The Learning Office is primarily responsible for developing and executing CDC's preparedness and response learning strategy. The Learning Office has oversight and coordination responsibilities related to analysis, design, development, implementation, and evaluation of workforce development programs that target both internal CDC responders and external audiences with public health preparedness and response responsibilities.

FUNDING HISTORY

Sections 301(a) and 317(k)(2) of the Public Health Service Act⁴ authorized the CPHP program. Initially, 23 CPHPs were funded during federal fiscal year (FY) 2004 under CDC Cooperative Agreement 04209, the start of

a five-year program. An additional four CPHPs were funded in FY 2005, bringing the total CPHPs funded to 27. In 2008, funding for an additional 12 months was approved for the CPHPs to continue important activities while allowing CDC to begin implementation of applicable provisions within the Pandemic and All-Hazards Preparedness Act (PAHPA) (Figure 1).⁵ In addition, Congress has funded many other projects as part of the CPHP network since its inception.

CPHP PROGRAM GOALS AND PRIORITIES

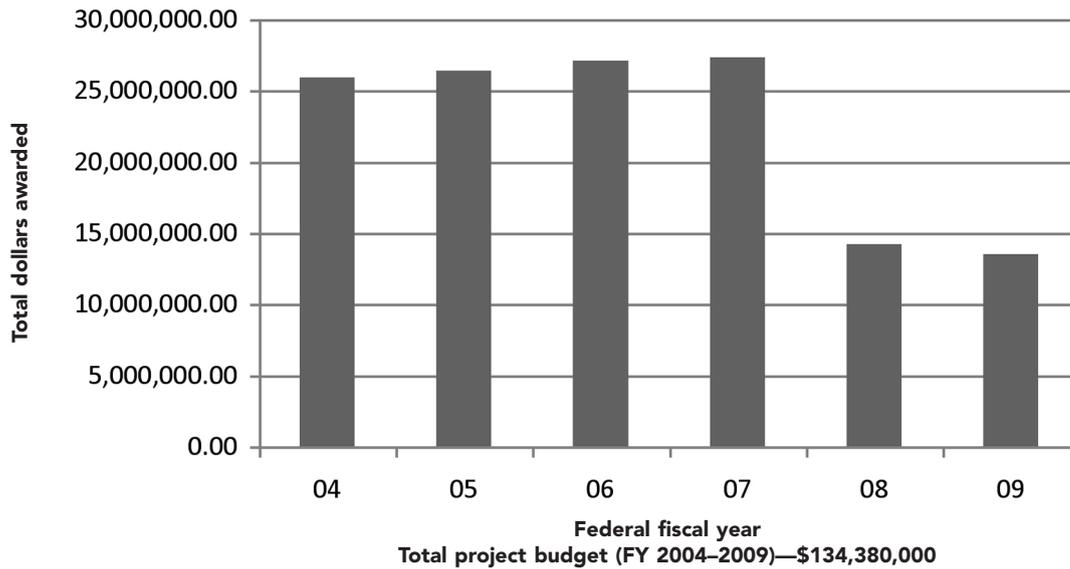
The CPHP program was designed to support the public health goals and strategic imperatives described in the CDC report, *A National Public Health Strategy for Terrorism Preparedness and Response: 2003–2008*.⁶ In particular, the CPHP program was aligned with Strategic Imperative 5 of the report—Competent and Sustainable Workforce. Critical objectives under this imperative were to (1) increase the number and type of professionals who comprise a preparedness and response workforce, (2) deliver certification and competency-based training and education, (3) recruit and retain the highest quality workforce, and (4) evaluate the impact of training to assure learning has occurred.⁶

In keeping with the objectives set forth in Imperative 5, the overall goals of the CPHP Cooperative Agreement were to (1) strengthen public health workforce readiness through implementation of programs for lifelong learning, (2) strengthen capacity at state and local levels for terrorism preparedness and emergency public health response, and (3) develop a network of academic-based programs contributing to national terrorism preparedness and emergency response by sharing expertise and resources across state and local jurisdictions. Based upon CDC strategic imperatives, key priorities for CPHP activities were to (1) collaborate with health and public health agencies across the nation to help them meet preparedness education and learning needs, (2) maximize outreach of existing preparedness materials, and (3) enhance the evidence base for effective preparedness education.

CPHP ACTIVITIES

The primary focus of CPHP program activities was the delivery of education and training, as well as the dissemination of new information related to enhancing emergency preparedness and response. CDC expected funded CPHPs to work closely with state and local health agencies to plan, implement, and evaluate activities designed to deliver competency-based training and education, meet identified needs of state and

Figure 1. Funding for the Centers for Public Health Preparedness, FY 2004 through 2009 (program years one through six)^a



^aSOURCE: Centers for Public Health Preparedness and Response program, Office of Public Health Preparedness and Response, the Centers for Disease Control and Prevention

FY = fiscal year

local public health agencies across jurisdictions, and build workforce preparedness and response capabilities. Preparedness education activities were required to be either partner-requested based on a community need, or academic- or university student-focused. The 27 CPHPs were located in only 23 states (Figure 2); however, the CPHPs conducted CDC-approved activi-

Figure 2. Distribution of the Centers for Public Health Preparedness, 2004–2010^a



^aSOURCE: Association of Schools of Public Health, Washington, D.C. Available from: URL: <http://preparedness.asph.org/cphp/centermaps.cfm>

ties in all states and some U.S. territories throughout the course of the Cooperative Agreement. In addition to providing training and education to state and local public health agencies, each CPHP was required to participate in network activities that enhanced the preparedness network, maximized opportunities for sharing resources, and contributed to the national public health preparedness strategy. CPHP activities fell into the following four categories:

Education and training activities

These activities were developed to drive knowledge gain in the areas of preparedness and response. All education and training activities were to be evaluated for learning outcomes. Activities included training courses, certificate programs, train-the-trainer programs, conferences, workshops, preparedness curriculum development, internships, and exercises/drills providing training.

Partner-requested activities (other than training)

These activities were identified through partner requests, as needed, to support the analysis, design, development, implementation, or evaluation of training and partnerships. Partner-requested activities included exercises and drills that assessed participants' knowledge to identify training needs, tools that identified training needs, planning assistance, and other

activities that addressed the identified needs of partners, among others.

Supportive activities

The CPHP's supportive activities included publications, site visits, technical assistance, facility development, and tools for dissemination of training products (e.g., learning management systems).

Network activities

The purpose of the CPHP network was to leverage and coordinate preparedness education and training resources and expertise among the CPHPs. The Association of Schools of Public Health (ASPH) provided coordination for continuity of information services, assistance in strengthening academic-practice partnerships in meeting preparedness goals, and assistance in addressing long-term public health workforce issues for ensuring capacity to respond to terrorism and emerging health threats. As participants in the CPHP network, each CPHP was required to include ongoing submission of education programs to an online resource center, participate in collaborative projects with other CPHPs, and actively participate in program conference calls and meetings.

CPHP PROGRAM REPORTING

Although the CPHP program was initiated in 2004, CDC created and began conducting electronic progress reporting in year two of the program, FY 2005. CPHPs reported data on their activities to CDC via a standardized Microsoft® Word-based format. Data were then uploaded into a Web-based, internal CDC system. CPHP activity data presented in this article were summarized and obtained from this database, which allowed CDC CPHP program staff to electronically view, update, and add activity information such as descriptions, partner and audience needs, evaluation information, and overall progress. These functions enhanced CDC's ability to manage external program activities and to provide the leadership at CDC, the Department of Health and Human Services (HHS), and other agencies detailed information regarding the activities, progress, and accomplishments of the program. This database was enhanced in the sixth year of the program, FY 2009, to allow CPHP awardees to input progress report data directly online, ideally to streamline program reporting and improve the quality of data. As a result of continuous enhancements to the database, over the course of the CPHP program, CDC had the ability to better identify the breadth of target audiences, topic areas, classifications of activities, states and territories served

Table 1. Centers for Public Health Preparedness activities per target audience category, fiscal year 2005^{a,b}

<i>Audience type</i>	<i>Number of activities targeting the corresponding audience type</i>
State and/or local public health worker	178
Graduate/undergraduate student	86
Clinician and health-care professional	44
First responder (EMT/paramedic/fire/rescue/hazmat/etc.)	27
Public health leadership	18
Emergency management	17
Laboratorian	11
Epidemiologist	9
Veterinarian	8
Environmental health professional	6
Tribal population	6
Public safety worker	6
Pharmacist	4
Business and civic leader	4
Legal professional (law/judicial/attorney)	3

^aTarget audience type data collection began through the CPHP Activity Database in fiscal year 2005

^bSOURCE: Centers for Public Health Preparedness and Response program, Office of Public Health Preparedness and Response, Centers for Disease Control and Prevention

EMT = emergency medical technician

by various activities, and more. For example, the target audience categories for which data were collected from the CPHPs in the initial year of the database (2005), or program year two of the CPHP Cooperative Agreement, were substantively changed by 2009 (Tables 1 and 2). By increasing the variety of data elements collected through online progress reporting from 2005 through 2009, CDC obtained a higher level of detail, showing more unique target audience types.

Since FY 2005, the CPHPs have conducted 1,615 education and training activities, 427 partner-requested activities, and 649 supportive activities (Figure 3). All 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and several additional U.S. territories were served in some capacity (with at least one activity) through the 27 CPHPs. As of the final year of the Cooperative Agreement, the CPHP program had successfully achieved the initiation of 2,691 program activities that reached nearly 1,380,000 learners nationwide (Figure 4).

CPHP PROGRAM EVALUATION

OPHPR's Learning Office undertook a comprehensive evaluation of the CPHP program during the final year of the Cooperative Agreement. The primary goals

Table 2. Centers for Public Health Preparedness activities per target audience category, fiscal year 2009^a

<i>Audience type</i>	<i>Number of activities targeting the corresponding audience type</i>
State and/or local public health worker	124
Public health nurse	106
Administrator/director/ manager	91
Public health leadership	89
Bioterrorism coordinator	85
Nurse	79
Emergency management	71
Epidemiologist	68
Environmental health professional	64
Graduate student	64
Physician	62
First responder (EMT/paramedic/fire/rescue/hazmat/etc.)	58
Volunteer	56
Emergency medical personnel	55
Public information officer/media/communications specialist	51
Hospital management/administrator	47
Law enforcement/public safety (police/state patrol/etc.)	47
Mental and behavioral health professional	47
Public health laboratorian	40
Administrative support staff	38
Allied health professional	37
Pharmacist	36
Tribal population	35
Rural population	33
Teacher/faculty	31
Veterinarian	29
Business and civic leader	28
Legal professional (law/judicial/attorney)	24
Chemical terrorism coordinator	20
Local board of health members	20
Information specialist/technical support staff	19
Laboratorian	17
Undergraduate student	15
Dental professional	12
Food services personnel	12
Therapist	9
Other	36

^aSOURCE: Centers for Public Health Preparedness and Response program, Office of Public Health Preparedness and Response, Centers for Disease Control and Prevention

EMT = emergency medical technician

of this evaluation were to ensure that the program met the original, perceived needs of the Cooperative Agreement, identify how well the program worked in regard to program management and processes, and identify both intermediate and long-term outcomes of

the collective work generated by the CPHPs since the program's inception in 2004. In addition to analyzing existing CPHP information gathered from awardee progress reports, several data collection tools, including surveys and in-depth interviews, were used to gather information describing the program's processes and outcomes. Respondents included key CPHP staff, national partners of the CPHP program, and state and local CPHP customers and partners. The CPHP program staff will use this data to generate a one-time evaluation report that will be disseminated to partners and other key stakeholders to provide lessons learned and recommendations for future program improvement.

PARTNERSHIP WITH ASPH

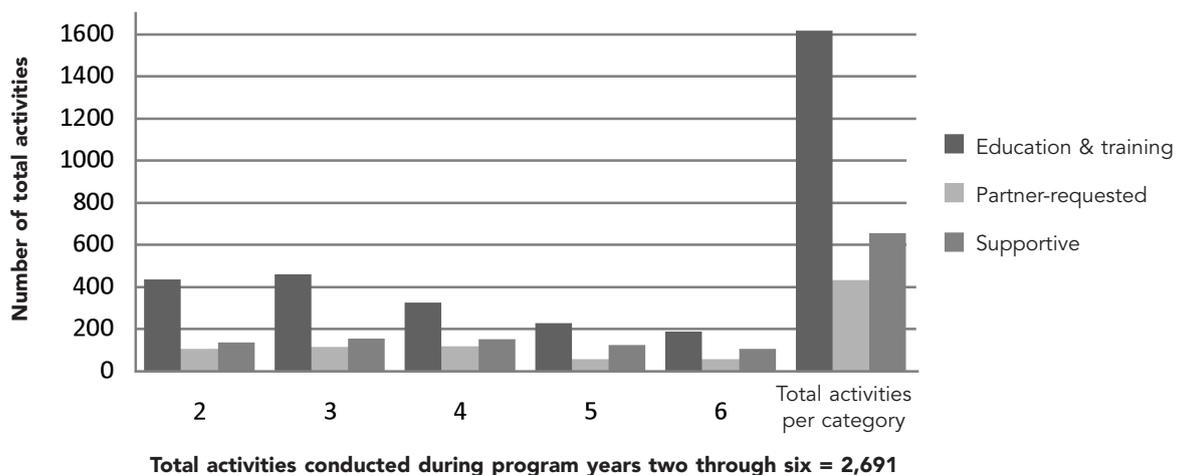
Through a separate Cooperative Agreement, ASPH worked in partnership with CDC's OPHPR to assist with the coordination and facilitation of various CPHP network activities. Among these activities, ASPH convened the CPHP Consultation Committee to obtain external input on the coordination of the CPHP network activities, increased participation of practice partners in network activities, facilitated CPHP H1N1 and other response activity information sharing both internally and externally to the CPHP network, and supported annual CPHP awardee meetings. Additionally, ASPH assisted OPHPR with implementing provisions of the PAHPA legislation and cataloging CPHP network resources against requirements in PAHPA and Homeland Security Presidential Directive 21.⁷

Under the Cooperative Agreement, ASPH also established and managed the online CPHP Resource Center to better maximize outreach of all CPHP-developed preparedness education materials.⁸ This database provided users with access to more than 1,600 CPHP-developed educational programs, course materials, slide notes, and other resources for adoption or adaptation by CPHP program participants and their partners. Additionally, ASPH provided an up-to-date Preparedness Education Calendar where the public could access a listing of current preparedness training and education activities conducted by the CPHPs, including conferences, institutes, and other scheduled educational offerings open for enrollment.⁹

THE FUTURE OF FEDERALLY FUNDED PUBLIC HEALTH PREPAREDNESS EDUCATION AND TRAINING

In December 2006, Congress passed and the President signed PAHPA into Public Law No. 109-417,⁵ amending

Figure 3. Comparison of Centers for Public Health Preparedness activity categories (Total activities per year, program years two through six)^a

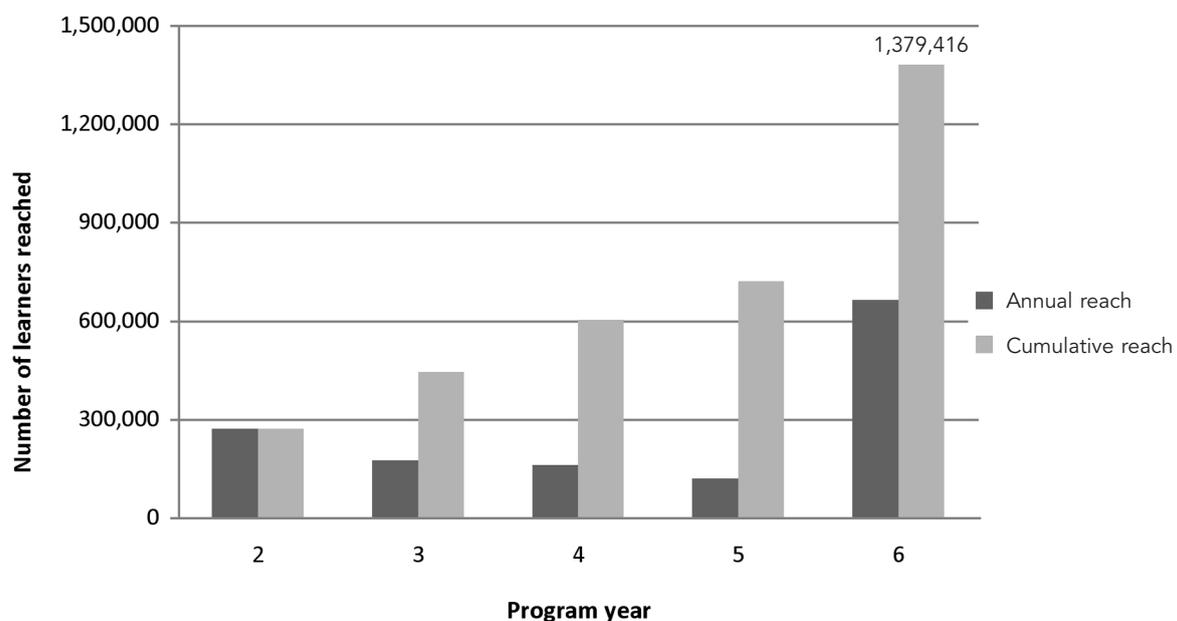


^aSOURCE: Centers for Public Health Preparedness and Response program, Office of Public Health Preparedness and Response, Centers for Disease Control and Prevention

Section 319F-1(d) of the Public Health Service (PHS) Act (42 USC § 247d-6(d)). The passage of PAHPA had broad implications for HHS's preparedness and

response activities. FY 2010 saw a shift in national priorities for public health preparedness education and training due to requirements set forth in PAHPA. The

Figure 4. Centers for Public Health Preparedness activity reach (program years two through six)^a



^aSOURCE: Centers for Public Health Preparedness and Response program, Office of Public Health Preparedness and Response, Centers for Disease Control and Prevention

Secretary of HHS now has additional authority to meet goals for public health and health-care emergency preparedness through the HHS grants programs. HHS established guidelines for accredited schools of public health to be eligible to receive awards to carry out Section 304 of PAPHA, including the development and delivery of core curricula and training that respond to the needs of state, local, and tribal public health authorities, as well as emphasize essential public health security capabilities.

The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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