

## PUBLIC HEALTH INFORMATICS

### WHAT IS THE PUBLIC HEALTH ISSUE?

Dramatic changes in information technology motivated public health professionals to realize that technology is essential to public health practice. To design and use information technology effectively, the nation's public health workforce must have the skills necessary to meet this challenge. Training to improve public health capacity in the areas of information technology and infrastructure development is necessary to improve the health of the nation. There is a great need for professionals to bridge the information, computer, and public health sciences. Such training is critical to the development of processes and tools to improve the sharing of data, information, and knowledge. To meet this need, public health professionals require training in public health informatics, which is the systematic application of information and computer science and technology to public health practice, research, and learning. Public health informatics combines information and computer sciences, optimizing the use of information technology to achieve the mission and objectives of public health.

### WHAT HAS CDC ACCOMPLISHED?

CDC's public health informaticians have played a critical role in enhancing public health's informatics, information technology, and information infrastructure capacity. In addition to providing informatics technical assistance for information technology infrastructure development, CDC has been at the forefront of training public health informatics professionals to respond to informatics-related challenges and initiatives. Since 1996, CDC has trained public health informaticians to fill the need for this category of very specialized public health worker. Extensive training in new and emerging technologies (computers, servers, internal working and programming of computers and other equipment), cutting-edge informatics issues (metadata and electronic data transfer), and public health programs (infectious and chronic diseases, prevention programs, HIV/AIDS) prepares these professionals for the future of public health. Continuing this leadership role, CDC has established a 2-year Public Health Informatics Fellowship Program (PHIFP) which provides training and experience for qualified fellows to effectively apply computer and information science and technology to real public health problems, including the ability to lead and manage all aspects of the design, development, and implementation of public health information systems.

### WHAT ARE THE NEXT STEPS?

CDC seeks to further strengthen the training of public health professionals in informatics by

- Developing strong partnerships with universities and state, local, and other health agencies to train the current and future public health workforce in relevant informatics principles and methods.
- Continuing the evolution of informatics core curriculum and researching public health informatics competencies.
- Developing strong integrated public health information systems.
- Increasing the number of fellows in the PHIFP.
- Continuing to identify and address new and emerging issues in public health informatics.
- Improving dissemination of information about public health informatics and the role of informaticians in public health.

*For additional information on this or other CDC programs, visit [www.cdc.gov/program](http://www.cdc.gov/program)*

*January 2004*