

# INSTITUTE OF MEDICINE

*Shaping the Future for Health*

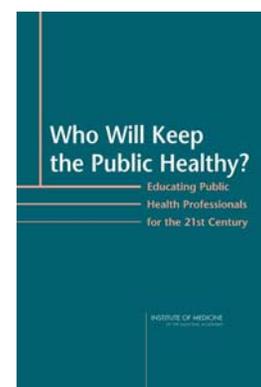
## WHO WILL KEEP THE PUBLIC HEALTHY? EDUCATING PUBLIC HEALTH PROFESSIONALS FOR THE 21ST CENTURY

**I**n a world where public health threats range from AIDS and bioterrorism to an epidemic of obesity, the need for an effective public health system is as urgent as it has ever been. The extent to which we are able to address the complex challenges of the 21<sup>st</sup> century and make additional improvements in the health of the public depends, in large part, upon the quality and preparedness of our public health workforce, which, in turn, is dependent upon the relevance and quality of public health education and training. A new Institute of Medicine report examines the education of public health professionals, who are an essential component of the public health workforce. This report provides a framework and recommendations for strengthening public health education, research, and practice that can be used by the institutions and organizations responsible for educating public health professionals and supporting public health education.

### AN ECOLOGICAL MODEL

Public health professionals receive education and training in a wide range of disciplines, come from a variety of professions, work in many types of settings, and are engaged in numerous kinds of activities. For purposes of this study the committee defines a public health professional as *a person educated in public health or a related discipline who is employed to improve health through a population focus*. Regardless of their backgrounds, public health professionals must have a framework for action and an understanding of the forces that impact on health, a model of health that emphasizes the linkages and relationships among multiple determinants affecting health. Such an ecological model, the committee believes, is key to effectively addressing the challenges of the 21<sup>st</sup> century.

The report also recommends that eight content areas be included in graduate-level public health education programs and schools of public health: informatics, genomics, communication, cultural competence, community-based participatory research, global health, policy and law, and public health ethics. These areas are natural outgrowths of the traditional core public health sciences as they have evolved in response to ongoing social, economic, technological, and demographic changes.



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## SCHOOLS OF PUBLIC HEALTH

The committee determined that schools of public health have six major responsibilities.

1. Educate the educators, practitioners, and researchers, as well as to prepare public health leaders and managers.
2. Serve as a focal point for multi-school transdisciplinary research, as well as traditional public health research to improve the health of the public.
3. Contribute to policy that advances the health of the public.
4. Work collaboratively with other professional schools to assure quality public health content in their programs.
5. Assure access to life-long learning for the public health workforce.
6. Engage actively with various communities to improve the public's health.

Among the report's recommendations for schools of public health:

- Schools of public health should embrace as a primary educational mission the preparation of individuals for positions of senior responsibility in public health practice, research, and training.
- They should emphasize the importance and centrality of the ecological approach.
- Curricula and teaching approaches should incorporate enhanced participation in the educational process by those in senior practice positions or with comparable experiences, experts in medicine or its practice, or those with unique skills in areas such as communication, cultural competence, leadership development, policy, or planning;
- *Supervised* practice opportunities and sites (e.g., community-based public health programs, delivery systems, and health agencies) should be expanded.
- Schools should establish new relationships with other health science schools, community organizations, health agencies, and groups within their region to foster transdisciplinary research.
- Faculty should be involved in policy development and implementation for relevant issues and play a leadership role in public policy discussions about the future of the United States health care system.
- Schools should foster scientific and educational collaborations with other academic schools and departments, and should actively participate in community-based research, learning, and service.

## OTHER PROGRAMS AND SCHOOLS

Although the primary focus of this report is on schools of public health, other programs, schools, and institutions play major roles in educating public health professionals. This report examines the potential contributions these other institutions and programs can make to educating public health professionals. Among the report's recommendations:

- Graduate M.P.H. programs in public health should develop curricula emphasizing the importance and centrality of the ecological approach; they should also address the critical areas listed above.
- All students in medical schools should receive *basic* public health training in the population-based prevention approaches to health.
- A significant proportion of medical school graduates should be *fully* trained in the ecological approach to public health at the M.P.H. level.
- Schools of medicine and of public health should support research collaborations linking public health and medicine in the prevention and care of chronic diseases.
- Schools of nursing should encourage an understanding of the ecological model of health; the public health community should collaborate in making appropriate sites available for clinical experience, and should consider ways to assure that nursing edu-

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cation does not occur in a vacuum apart from the full range of professionals practicing in public health.

- “Health literacy” can and should be a goal of our educational system as a whole (St. Leger, 2001).

## **PUBLIC HEALTH AGENCIES**

Governmental public health agencies at the local, state, and federal level have a major interest in educating and training the current public health workforce and future public health workers. Among the report’s recommendations for local, state, and federal health agencies:

- Health agencies should actively assess the public health workforce development needs in their own state or region.
- Engage in faculty and staff exchanges and collaborations with schools of public health and accredited public health education programs.
- Assure that those in public health leadership and management positions within federal, state, and local public health agencies are public health professionals with M.P.H. level education or experience in the ecological approach to public health.
- Federal agencies should provide increased funding for the development of curricula, fellowship programs, academic/practice partnerships, and the increased participation of public health professionals in the education and training activities of schools and programs of public health.

Further, the report recommended that there be significant increases in research on population health, primary prevention, and public health systems, as well as increased emphasis on community-based participatory research.

## **CONCLUSION**

At no time in the history of this nation has the mission of promoting and protecting the public’s health resonated more clearly with the public and the government than now. To improve health in our communities, we need high-quality and well-educated public health professionals. Previous efforts to design truly effective systems of public health education generally fell short because of a lack of political will, public disinterest, or a paucity of funds. At present, the opportunity exists to strengthen public health education, research, and practice if we act appropriately. The report’s recommendations are sometimes incremental, occasionally quite radical, but always grounded in the realization that if we lose sight of who will keep the public healthy, we will miss an opportunity to improve the public’s health in the 21st century.

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#### **For More Information...**

Copies of *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21<sup>st</sup> Century* are available for sale from The National Academies Press; call (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area), or visit the NAP home page at [www.nap.edu](http://www.nap.edu). The full text of this report is available at <http://www.nap.edu>

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