

**Who will keep the Public Healthy?
Educating Public Health professionals for the 21st century
(2003) Institute of Medicine**

Recommendations

1) The future of Public Health Education

- ▶ competencies be identified in 8 content areas (informatics, genomics, communication, cultural competence, community-based participatory research, global health, policy and law, and public health ethics);
- ▶ each area be included in graduate level public health education;
- ▶ continuing development and creation of new knowledge be pursued; and
- ▶ opportunity for specialization be offered

2) Education

- ▶ the committee recommends that schools embrace as a primary educational mission the preparation of individuals for positions of senior responsibility in public health practice, research, and teaching.
- ▶ schools of public health should emphasize the importance and centrality of the ecological approach. Further, schools have a primary role in influencing the incorporation of this ecological view of public health, as well as a population focus, into all health professional education and practice.
- ▶ the committee recommends a significant expansion of *supervised* practice opportunities and sites(e.g., community-based public health programs, delivery systems, and health agencies). Such field work must be organized and supervised by faculty who have appropriate practical experience.
- ▶ the committee recommends that doctoral research training in public health should include an understanding of the multiple determinants of health within the ecological model.

3) Research

- ▶ the committee recommends that schools of public health reevaluate their research portfolios as plans are developed for curricular and faculty reform. To foster the envisioned transdisciplinary research, schools of public health may need to establish new relationships with other health science schools, community organizations, health agencies, and groups within their regions.

4) Policy

The committee recommends that schools of public health:

- ▶ enhance faculty involvement in policy development and implementation for relevant issues;
- ▶ provide increased academic recognition and reward for policy-related activities;
- ▶ play a leadership role in public policy discussions about the future of the U.S. health care system, including its relation to population health;
- ▶ enhance dissemination of scientific findings and knowledge to broad audiences, including encouraging the translation of these findings into policy recommendations and implementations; and
- ▶ actively engage with other parts of the academic enterprise that participate in policy activities.

5) Academic Collaboration

- ▶ schools of public health should embrace the large number of programs in public-health-related fields that have developed within medical schools and schools of nursing and initiate and foster scientific and educational collaborations.
- ▶ the committee recommends that schools of public health actively seek opportunities for collaboration in education, research, and faculty development with other academic schools and departments, to increase the number of graduates in health and related disciplines who have had an introduction to public health content and interdisciplinary practice, and to foster research across disciplines.

6) Access to Life-long Learning

The committee recommends that schools of public health fulfill their responsibility for assuring access to life long learning opportunities for several disparate groups including:

- ▶ public health professionals;
- ▶ other members of the public health workforce; and
- ▶ other health professionals who participate in public health activities.

7) Community Collaboration

The committee recommends that schools of public health should:

- ▶ position themselves as active participants in community-based research, learning, and service;
- ▶ collaborate with other academic units(e.g. medicine, nursing, education, and urban planning) to provide transdisciplinary approached to active community involvement to improve population health; and
- ▶ provide students with didactic and practical training in community-based public health activities, including policy development and implementation.

Further, community-based organizations should have enhanced presence in schools' advisory, planning, and teaching activities.

8) Faculties for Schools of Public Health

- ▶ The committee recommends major changes in the criteria used to hire and promote school of public health faculty. Criteria should reward experiential excellence in the classroom and the practical training of practitioners.
- ▶ The committee acknowledges the major contributions of philanthropic foundations to the development of public health education in the United States and emphasizes the renewed importance of foundation support to fund new initiatives and experiments in public health education.

9) Graduate Programs in Public Health

The committee recommends that these graduate M.P.H. programs in public health institute curricular changes that:

- ▶ emphasize the importance and centrality of the ecological model; and
- ▶ address the eight critical areas of informatics, genomics, communication, cultural competence, community-based participatory research, global health, policy and law, and public health ethics.

10) Medical Schools

The committee strongly recommends that:

- ▶ all medical students receive *basic* public health training in the population-based prevention approaches to health;
- ▶ serious efforts be undertaken by academic health centers to provide joint classes and clinical training in public health and medicine; and
- ▶ a significant proportion of medical school graduates should be *fully* trained in the ecological approach to public health at the M.P.H. level.

Further, when a school of public health is not available to collaborate in teaching the ecological approach to medical students, the committee recommends that medical schools should partner with accredited programs in public health to provide for public health education.

- ▶ schools of medicine and schools of public health should develop an infrastructure to support research collaboration linking public health and medicine in the prevention and care of chronic diseases.

11) Schools of Nursing

- ▶ the committee recommends that these undergraduate schools be encouraged to assure that curricula are designed to develop an understanding of the ecological model of health and core competencies in population-focussed practice.
- ▶ the public health community should offer assistance in identifying the appropriate level and type of position for these graduates as well.
- ▶ the public health community should be attentive to the need for student clinical experience, should collaborate in making appropriate sites available, and should consider ways to assure that nursing education does not occur in a vacuum apart from the full range of professionals practicing in public health.
- ▶ schools of nursing that offer master's degree programs in public health nursing should be encouraged to partner with schools of public health to assure that current thinking about public health is integrated into the nursing curricula content, and to facilitate development of interdisciplinary skills and capacities.

12) Other Schools

- ▶ the committee recommends that all undergraduates should have access to education in public health.
- ▶ the committee does, however, stress the importance and recommend the integration of a more accurate and ecologically oriented view of health into primary, secondary, and post-secondary education in the United States.

13) Public Health Agencies

The committee recommends that local, state, and federal health agencies:

- ▶ actively assess the public health workforce development needs in their own state or region, including the needs of both those who work in official public health agencies and those who engage in public health activities in other organizations;
- ▶ develop plans, in partnership with schools of public health and accredited public health programs in their region, for assuring that public health education and training needs are addressed;
- ▶ develop incentives to encourage continuing education and degree program learning;
- ▶ engage in faculty and staff exchanges and collaborations with schools of public health and accredited public health education programs; and
- ▶ 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.

The committee recommends that federal agencies provide increased funding to:

- ▶ develop competencies and curriculum in emerging areas of practice;
- ▶ fund degree-oriented public health fellowship programs;

- ▶ provide incentives for developing academic/practice partnerships;
- ▶ support increased participation of public health professionals in the education and training activities of schools and programs of public health; especially, but not solely, practitioners from local and state public health agencies; and
- ▶ improve practice experiences for public health students through support for increased numbers and types of agencies and organizations that would serve as sites for practice rotations.

The committee recommends that:

- ▶ there be a significant increase in public health research support (i.e., population health, primary prevention, community-based, and public health systems research), with emphasis on transdisciplinary efforts;
- ▶ the Agency for Healthcare Research and Quality spearhead a new effort in public health systems research;
- ▶ NIH launch a new series of faculty development awards (“K” awards) for population health and related areas; and
- ▶ there be a redirection of current CDC extramural research to increase peer reviewed investigator-initiated awards in population health, prevention, community-based, and public health policy research, reallocating a significant portion of current categorical public health research funding to competitive extramural grants in these areas.