



THE FUTURE OF  
THE PUBLIC'S HEALTH  
*in the 21st Century*

INSTITUTE OF MEDICINE  
OF THE NATIONAL ACADEMIES

---

Committee on  
Assuring the Health  
of the Public in the  
21st Century

---

# The Committee's Charge

Create a framework for assuring  
population health in the U.S.  
in the 21<sup>st</sup> Century

To be broader than 1988 report,  
*The Future of Public Health*



University of Washington

**School of Public Health**

and Community Medicine

# The Committee's Vision

Reiterate the vision of Healthy People 2010

“Healthy People in Healthy Communities”



University of Washington

**School of Public Health**

and Community Medicine

# Background

- Great national health achievement in the 20th century, *but*
- U.S. falling short in international comparisons
- Poor return on investment in health
- Concern about the government public health infrastructure's ability to meet future health challenges



University of Washington

**School of Public Health**

and Community Medicine

# Lack of Response to 1988 Report

- No fundamental reform of the statutory framework for public health in most of nation
- Increased funding for public health infrastructure primarily limited to bioterrorism and emergency preparedness
- Gaps remain in workforce capacity and competency, information and data systems, and the organizational capacity of state and local health departments and public health laboratories



University of Washington

**School of Public Health**

and Community Medicine

# 21<sup>st</sup> Century Public Health Challenges Include:

- Globalization
- Advances in scientific and medical technologies
- Demographic transition



# Approach and Rationale

- Health = public good = social goal of many sectors and communities
- Government has fundamental, statutory duty to assure the health of the public, *but*
- Government cannot do it alone
- Need for intersectoral engagement in partnership with government.



University of Washington

**School of Public Health**

and Community Medicine

# Approach and Rationale

In 1988 report, public health refers to the organized efforts of society, both government and others, to assure the population's health.

- This 2002 report elaborates on the efforts of the other potential public health system actors.



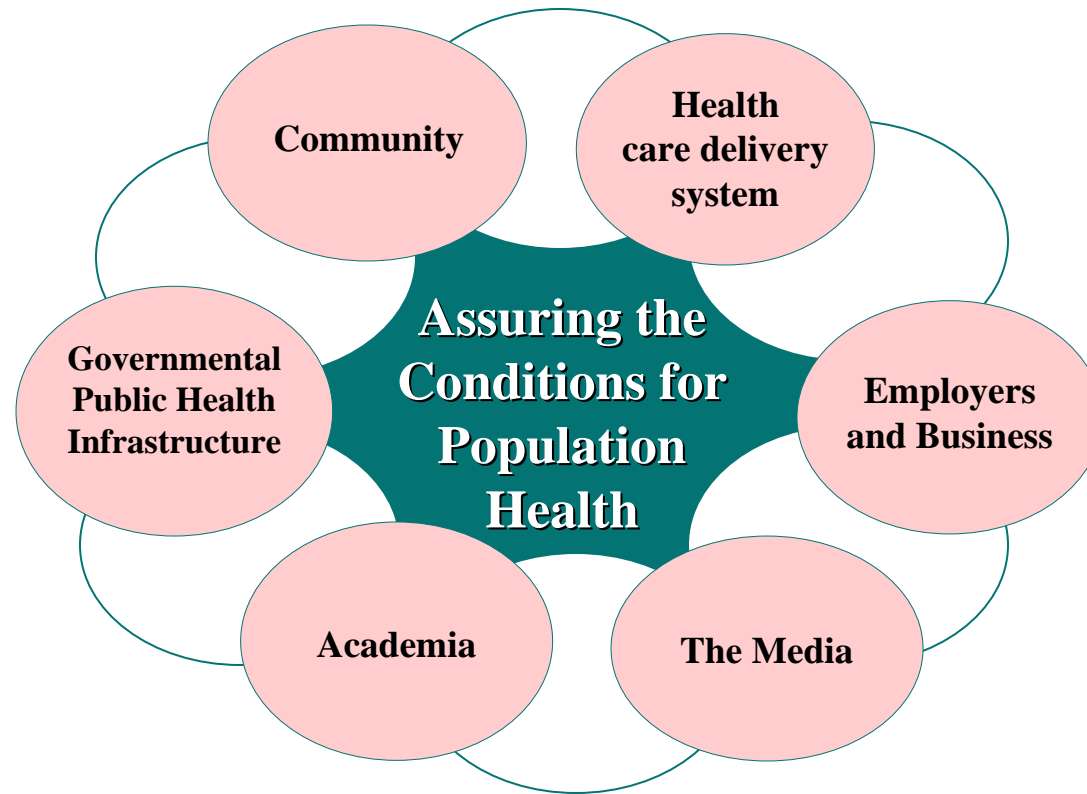
University of Washington

**School of Public Health**

and Community Medicine



# The Public Health System

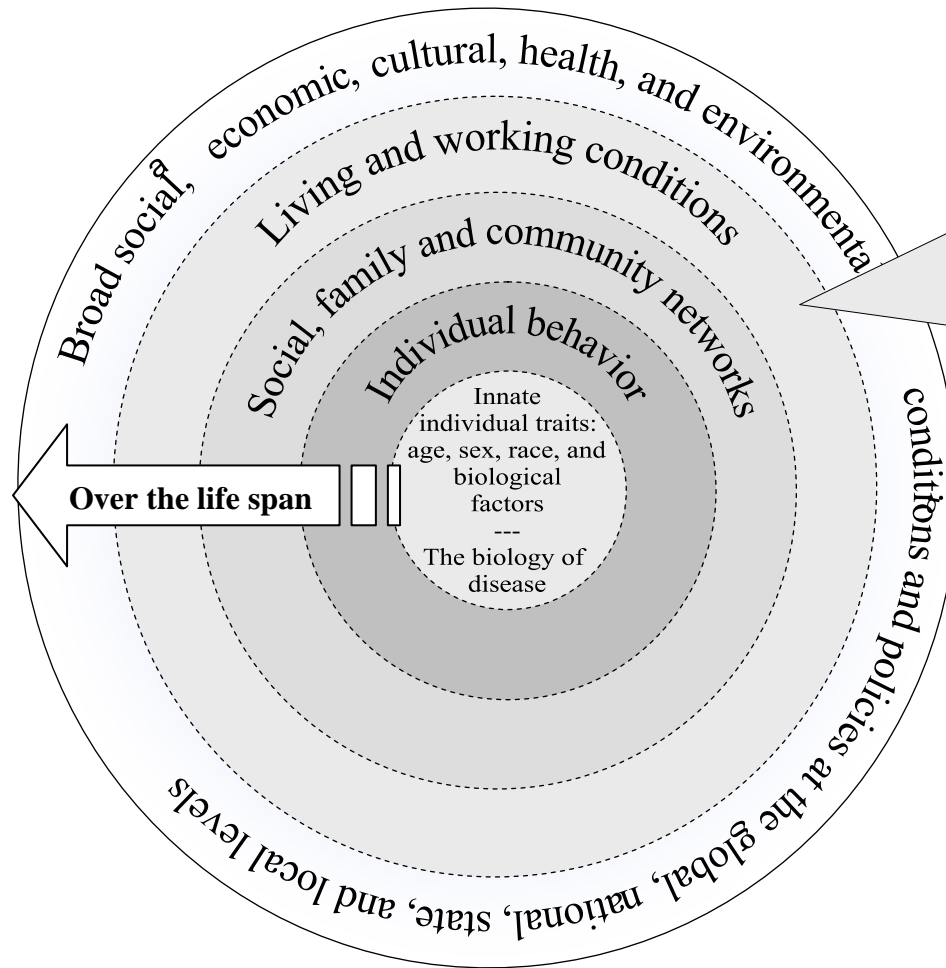


# Areas of Action for Public Health



- Adopt a population-level ecological approach
- Strengthen the governmental public health infrastructure
- Build partnerships
- Develop systems of accountability
- Base policy and practice on evidence
- Enhance communication

# Determinants of Population Health



Living and working conditions may include:

- Psychosocial factors
- Employment status and occupational factors
- Socioeconomic status (income, education, occupation)
- The natural and built<sup>c</sup> environments
- Public health services
- Health care services



# Multiple Determinants of Population Health

- Biology
- Behavior
- Social, Family & Community Networks
- Living & Working Conditions
  - Employment & occupation
  - Education
  - Socioeconomic status
  - Psychosocial factors
  - Natural and built environment
  - Public & health care services
- Broad social, economic, cultural & environmental policies at global, national, state & local levels.



# Addressing the Challenges: Ecological Model of Health

- An Ecological Model includes:
  - multiple determinants of health
  - linkages and relationships among determinants are emphasized
  - multiple strategies by multiple sectors



University of Washington

**School of Public Health**

and Community Medicine

# Infrastructure

## Recommendations to government public health agencies

Make leadership training, support, and development a priority within government public health agencies and the academia that prepares the workforce.



University of Washington

**School of Public Health**

and Community Medicine

# Infrastructure

## Recommendations to the Secretary of HHS and DHHS agencies

Develop a research agenda and estimate the funding needed to build the evidence base that will guide policy making for public health practice.



University of Washington

**School of Public Health**

and Community Medicine

# Community

## Recommendations to government and others

Local health departments should support community-led efforts to promote and protect health.



University of Washington

**School of Public Health**

and Community Medicine



# Health Care Delivery System

## Recommendations to government and others

All public and privately funded insurance plans should include age-appropriate preventive services and provide evidence-based coverage of oral health, mental health, and substance abuse treatment services.



University of Washington

**School of Public Health**

and Community Medicine

# Employers and Business

## Recommendations to government and business

The corporate community and public health agencies should engage in joint efforts to strengthen health promotion and disease and injury prevention programs for employees and their communities.



University of Washington

**School of Public Health**

and Community Medicine

# Academia

## Recommendations to academia and funders

Federal funders of research and academic institutions should recognize and reward faculty scholarship related to public health practice research.



University of Washington

**School of Public Health**

and Community Medicine

# Academia

## Recommendations to DHHS agencies

CDC should authorize an analysis of the funding levels necessary for effective Prevention Research Center functioning, as well as the amount of prevention research occurring in other institutions and organizations.



University of Washington

**School of Public Health**

and Community Medicine

# Academia

## Recommendations to DHHS agencies

NIH should increase the portion of its budget allocated to population- and community-based prevention research.



University of Washington

**School of Public Health**

and Community Medicine

# Academia

## Recommendations to Congress

Increase funding for HRSA programs that support public health students, the Public Health Training Centers, and the National and Regional Leadership Institutes that train public health and community leaders.



University of Washington

**School of Public Health**

and Community Medicine

# Academia

## Recommendations

Academic institutions should develop criteria for recognizing and rewarding faculty scholarship related to service activities that strengthen public health practice.



University of Washington

**School of Public Health**

and Community Medicine

# Who Will Keep the Public Healthy?

Educating Public Health Professionals  
for the 21st Century

Institute of Medicine  
THE NATIONAL ACADEMIES  
*Advisers to the Nation on Science, Engineering, and Medicine*



University of Washington  
**School of Public Health**  
*and Community Medicine*



# New Content Areas Needed

- Informatics
- Global Health
- Cultural competency
- Ethics
- Community-based Participatory Research
- Genomics
- Policy and Law
- Communication



University of Washington

**School of Public Health**

and Community Medicine

# Recommendation for Community Collaboration

Schools of public health should:

- position themselves as active participants in community-based research, learning, and service
- provide students with didactic and practical training in community-based public health activities.



University of Washington

**School of Public Health**

and Community Medicine

# Recommendation for Community Collaboration

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



University of Washington

**School of Public Health**

and Community Medicine

# Recommendation for Governmental Health Agencies

- Actively assess the public health workforce development needs in their region;
- Develop incentives to encourage continuing education and degree-program learning;
- Assure that those in public health leadership and management positions have formal public health training.



University of Washington

**School of Public Health**

and Community Medicine

# Recommendation for Governmental Health Agencies

- Develop plans in partnership with schools of public health for assuring that public health education and training needs are addressed.
- Engage in faculty and staff exchanges and collaborations with schools of public health.



University of Washington

**School of Public Health**

and Community Medicine

# Recommendation for Access to Life-Long Learning

- Schools of public health should assure access to life-long learning opportunities for:
  - public health professionals,
  - other members of the public health workforce, and
  - other health professionals who participate in public health activities.



University of Washington

**School of Public Health**

and Community Medicine

# Recommendation for Governmental Health Agencies

- Support increased participation of public health professionals in the education/training activities of schools/programs of public health, especially practitioners from local and state public health agencies; and
- Improve practice experiences for public health students through increased numbers and types of agencies that serve as sites for practica.



University of Washington

**School of Public Health**

and Community Medicine

# Funding Recommendations

Provide increased funding to:

- Support increased participation of public health professionals in the education and training activities of schools; and
- Improve practice experiences for public health students.





# Educational Contribution of Public Health Professionals to Academia

- Provision of on-site practicum opportunities for students,
- Mentoring and career counseling,
- Service on school advisory committees, and
- Participation in classroom teaching.



University of Washington

**School of Public Health**

and Community Medicine

# Schools of Public Health Recommendation for Faculty

- There should be major changes in 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.



University of Washington

**School of Public Health**

and Community Medicine

# Funding Recommendations

- There should be a significant increase in public health research support (i.e., population health, primary prevention, community-based and public health systems research).



University of Washington

**School of Public Health**

and Community Medicine

# Funding Recommendations

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;



University of Washington

**School of Public Health**

and Community Medicine

# Funding Recommendations

- CDC should redirect current extramural research to increase peer reviewed investigator-initiated awards in population health, prevention, community-based and public policy research.
- CDC should reallocate a significant portion of current categorical public health research funding to competitive extramural grants in population health, prevention, community-based, and public health policy research.



# Unanswered Questions about Public Health Workforce Development

- Little systematic information about:
  - Use of various education/training opportunities
  - Courses and topics most frequently sought
  - Effectiveness of different types of education and training modalities
  - Level of use and value of distance education
  - How to increase the diversity of the workforce



University of Washington

**School of Public Health**

and Community Medicine