

Overview of Public Health Administration

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LEARNING OBJECTIVES

- To be able to define public health and population health
- To describe public health functions and essential services
- To understand the systems perspective in public health and the utility of systems thinking
- To understand the roles and responsibilities of public health administrators
- To be familiar with core competencies for public health managers and leaders
- To identify the purpose and goals of *Healthy People 2020* and how this relates to public health administration

Chapter Overview

From the beginning of public health activities in the ancient world there has been a need for organization and management. Coordination of effort to accomplish goals necessitates certain skills and abilities. This chapter defines public health and population health to establish the context in which public health administration takes place. It also addresses important perspectives and needed competencies, along with future goals and challenges.

Public Health and Population Health Definitions

As described by Novick, Morrow, Mays¹ in the previous edition of this text, **public health** consists of organized efforts to improve the health of populations. The operative components of this definition are that public health efforts are directed to populations rather than to individuals. Public health practice does not rely on a specific body of knowledge and expertise, but rather relies on a dynamic, multidisciplinary approach that often combines the natural and social sciences. The definition of public health reflects its central goal, the reduction of disease and the improvement of health in a population. In 1920, famed American bacteriologist and public health expert Charles-Edward Amory Winslow provided the following seminal definition of public health practice:²

Public health is the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health.

Charles-Edward Amory.

Since Winslow's definition, the Institute of Medicine (IOM) published its classic 1988 report, *The Future of Public Health*, which similarly defined public health as an "organized community effort to address the public interest in health by applying scientific and technical knowledge to prevent disease and promote health."³ Thus, the mission of public health, both historically and contemporarily, is to ensure the necessary conditions that promote the health of the population.

Richard Riegelman, founding dean of the School of Public Health and Health Services at George Washington University, stated:⁴

Public health is about what makes us sick, what keeps us healthy, and what we can do TOGETHER about it. When we think about health, what comes to mind first is individual health and wellness. In public health, what should come to mind first is the health of communities and society as a whole. Thus, in public health the focus shifts from the individual to the population, from me to us.

Population-based strategies for improving health include, but are not limited to, efforts to control epidemics, ensure safe drinking water and food, reduce vaccine-preventable diseases, improve maternal and child health, and conduct surveillance of health problems. In addition to long-standing efforts to protect populations from infectious disease and environmental health hazards, the public health mission has expanded to address contemporary health risks such as obesity, injury, violence, substance abuse, sexually transmitted infections (STIs), human immunodeficiency virus (HIV) infection, acquired immune deficiency syndrome (AIDS), natural disasters, and bioterrorism. To effectively address both historical and contemporary health concerns and sustain improved health outcomes, public health approaches involve multilevel interventions that address the individual, the community, and public policy.

The importance of public health and population-based interventions is underscored by achievements in the 20th century during which individuals living in developed countries increased life expectancy from 45 to 75 years. Now in the 21st century we have seen this increase to 78 years in the United States and 82 years in Japan.⁵ The majority of this gain, 25 of the 30-plus years, can be attributed to public health measures such as better nutrition, improved air quality, sanitation, and clean drinking water. Medical care focusing on individual patients, though important, is estimated to have contributed about 5 years of the gain in life expectancy.

Both science and social factors form the basis for an effective public health intervention. For example, successfully eradicating a vaccine-preventable disease from a community requires more than the development of an effective vaccine. Acceptance and widespread use of the vaccine in the community depends on a successful public health initiative providing public information and facilitating delivery. Policies to support the initiative, such as the Vaccines for Children Program and school/daycare requirements for vaccinations, further increase the likelihood of success. Too often, scientific advances are not fully translated into improved health outcomes. For example, in the United States perinatal transmission of HIV decreased because of aggressive approaches for testing and treatment of HIV during pregnancy and delivery, whereas congenital syphilis, though decreased, has not achieved the same level of success despite the fact that the scientific means (penicillin) to eradicate it was discovered in 1928. A comprehensive public health approach, combining science with practical approaches to address cultural and socioeconomic factors affecting health, is essential for the reduction and ultimately the elimination of preventable diseases.

The focus on the health of populations as the most contemporary way of expanding the definition of public health is further underscored, by Kindig's perspective on population health as "the distribution of health outcomes within a population, the health determinants that influence distribution and the policies and interventions that impact those determinants."⁶ Further along this line of thinking, Nash adds:⁷

It spans wellness and health promotion, chronic disease management, care of the frail and elderly, and palliative and end-of-life care. In essence, broad population health approaches are designed to preserve wellness and minimize the physical and financial impact of illness.

The concept of **population health** can be described as a comprehensive way of thinking about the current and future scope of public health. It utilizes an evidence-based approach to analyze the determinants of health and disease, along with options for intervention and prevention to preserve and improve health. The interconnection of public health, public policy, and health systems is demonstrated by Riegelman⁴ in **Figure 1.1**.

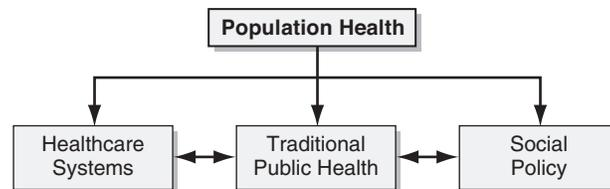


Figure 1.1 A Full Spectrum of Population Health

Source: Reproduced from Riegelman, Richard, *Public Health 101: Healthy People-Healthy Populations*, 2012: Jones & Bartlett Learning, Burlington MA. www.jblearning.com. Reprinted with permission.

Public Health Functions

The 1988 Institute of Medicine report mentioned earlier, *The Future of Public Health*, defined three core functions that public health agencies need to perform.³ These functions remain the responsibility of governments and should not be delegated to nongovernmental organizations. While population health does engage the full spectrum of stakeholders, public health agencies at the local, state, and federal levels are responsible for accomplishing the essential health services. While much work may be contracted out to other sectors, the responsibility remains with the government public health agencies. The core functions, assessment, policy development, and assurance, are defined by the IOM as follows:

- **Assessment** involves obtaining data to define the health of populations and the nature of health problems
- **Assurance** includes the oversight responsibility for ensuring that essential components of an effective health system are in place
- **Policy development** includes developing evidence-based recommendations and analysis to guide public policy as it pertains to health

Building on the IOM recommendations the U.S. Public Health Service put forth the “Public Health in America Statement” in 1994. This was supported and promoted by the American Public Health Association and most other groups advocating for a consistent and unified approach to public health. The 10 essential services are presented in **Table 1.1**. **Figure 1.2** can help to better visualize how the core functions and essential services for public health fit together. This framework is used by local, state, and federal agencies throughout the country. It serves as a guide and framework for public health organization design and development, workforce planning and staffing, strategic management, resource allocation, information systems design, and staff training.

Table 1.1 Essential Public Health Services

1. **Monitor** health status to identify community health problems.
2. **Diagnose and investigate** health problems and health hazards in the community.
3. **Inform, educate, and empower** people about health issues.
4. **Mobilize** community partnerships to identify and solve health problems.
5. **Develop policies and plans** that support individual and community health efforts.
6. **Enforce** laws and regulations that protect health and ensure safety.
7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. **Assure** a competent public health and personal healthcare workforce.
9. **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.
10. **Research** for new insights and innovative solutions to health problems.

Source: Reproduced from Centers for Disease Control and Prevention (CDC), Atlanta, GA. Available at: <http://www.cdc.gov/nphsp/essentialservices.html>. Accessed December 16, 2012.

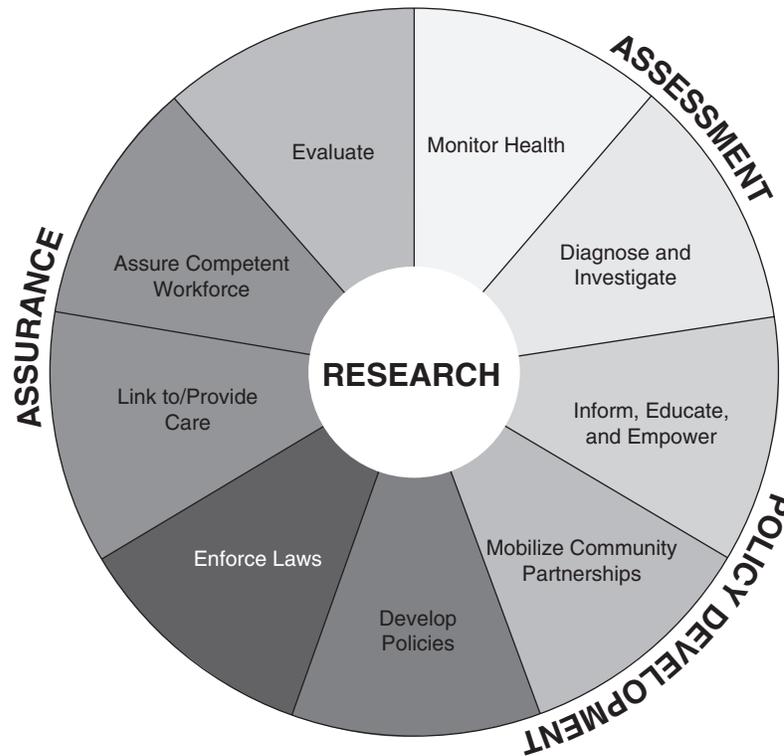


Figure 1.2 Core Functions and Essential Public Health Services

Source: Reproduced from Centers for Disease Control and Prevention, Atlanta, GA. Available at: http://www.cdc.gov/nceh/ehs/ephli/core_ess.htm. Accessed December 1, 2012.

Systems Perspective in Public Health

Public health is best understood from a **systems perspective**. As described by Johnson:⁸

Public health is highly interconnected and interdependent in its relationship to individuals, communities, and the larger society, including the global community. Using the language of systems theory, public health is a complex adaptive system. It is complex in that it is composed of multiple, diverse, interconnected elements, and it is adaptive in that the system is capable of changing and learning from experience and its environment.

Johnson further explains the systems approach in public health is more than the relationships that support and facilitate the organization and actions of public health, but also includes “the mindset of public health professionals.” This is often referred to as systems thinking and is especially salient in public health management, practice, and research. The National Cancer Institute (NCI) sums up their understanding and embrace of systems thinking as presented in **Box 1.1**. It was one of the first public health agencies to fully embrace systems thinking and has found it a most useful paradigm in its Tobacco Control Research Branch.

Box 1.1 National Cancer Institute (NCI) Statement on Systems Thinking

Public health researchers and practitioners often work to solve complex population and health issues, such as obesity and chronic disease, which are deeply embedded within the fabric of society. As such, the solutions often require intervention and engagement with key stakeholders and organizations across many levels ranging from local entities (schools, churches, and work environments) to regional systems (health departments and hospital networks) to entire countries (national agencies). This multilevel, multiparticipant view is at the heart of systems thinking, a process of understanding how parts influence one another within a whole.

Source: Reproduced from National Cancer Institute, Washington, DC. Available at: <https://researchtooreality.cancer.gov/cyber-seminars/using-systems-thinking-and-tools-solve-public-health-problems>. Accessed December 1, 2012.

Other systems thinking applications and efforts in public health have been identified by Trochim, Cabrera, Milstein, Gallagher, and Leischow.⁹ These include the Syndemics Prevention Network, supported by the CDC, which studies how recognition of mutually reinforcing health problems (substance abuse, violence, HIV/AIDS) expands the conceptual, methodological, and moral dimensions of public health work and ways of thinking about health as a system. Examples of other relevant efforts include the Institute of Medicine report, *Crossing the Quality Chasm: A New Health System for the 21st Century*;¹⁰ the Community–University Partnerships Initiative sponsored by the W. K. Kellogg Foundation; community-based participatory research efforts sponsored jointly by the Agency for Healthcare Research and Quality and the W. K. Kellogg Foundation; the Community–Campus Partnerships for Health; the Healthy Cities movement; and the efforts of the World Health Organization’s Commission on Social Determinants of Health.

The World Health Organization published a report in 2009 titled *Systems Thinking for Health Systems Strengthening* in which they claim systems thinking is a “paradigm shift” for public health. As stated in the report, “Systems thinking offers a more comprehensive way of anticipating synergies and mitigating negative emergent behaviors, with direct relevance for creating more system-ready policies.”¹¹

Trochim, et al.⁹ assert that systems thinking is consonant with ecological models familiar to public health professionals, including the ideas of human ecology, population health, and the social determinants of health. But it goes beyond these models, incorporating advances in fields such as organizational behavior,¹² system dynamics,¹³ emergence theory,¹⁴ and complexity theory.¹⁵ The system thinking approach emphasizes how everything fits into the larger social, cultural, economic, and political system. As Johnson and Breckon¹⁶ claim, the importance placed on interconnectedness cannot be underestimated in the world of the 21st century.

Role of the Public Health Administrator and Manager

The work of public health could not be done nor its goals accomplished without managers and administrators. These individuals often obtain a graduate degree, either master of public health (MPH) or master of public administration (MPA) during which time they study management, administration, and policy. Others learn management skills on the job or take coursework in

other related fields of **management** such as business and health services administration. Burke and Friedman define management in the following ways:¹⁷

- It is first and foremost an interdisciplinary, rigorous, and valid endeavor that is integral to all human enterprise, including public health.
- It is both a necessary and sufficient condition to ensure the goals of public health programs are met.

Johnson and Breckon identify seven interconnected processes and responsibilities commonly associated with the administrative role:¹⁶

1. **Planning** is the process of specifying goals, establishing priorities, and otherwise identifying and sequencing action steps to accomplish goals.
2. **Organizing** involves establishing a structure or set of relationships so plans can be implemented and goals accomplished.
3. **Staffing** is the assignment of personnel to specific roles or functions so the organization works as designed.
4. **Directing** involves making decisions and communicating them so they can be implemented.
5. **Coordinating** is the task of assuring effective interrelationships.
6. **Reporting** is the transfer of information and assurance of accountability.
7. **Budgeting** is fiscal planning, accounting, and control.

The Council on Education for Public Health (CEPH) places considerable importance on management and administration by identifying “Management Competencies” for public health education and practice. The Association of Schools of Public Health provides a list of core competencies in the managerial and leadership domains, as shown in **Tables 1.2** and **1.3**.

Johnson defines management as “the process or working with and through others to achieve organizational or program objectives in an efficient and ethical manner.”¹⁸ One of the goals of this text is to address and elaborate upon every element of this definition and all of the competencies listed in Tables 1.2 and 1.3.

Future Outlook

Public health administrators and practitioners will face many challenges in the 21st century while also having an opportunity to shape public health practice and policy. One way of gaining insight into the kinds of issues to be faced is to look at the *Healthy People 2020* initiative. As described by Shi and Singh,¹⁸ since 1980 the United States has undertaken 10-year plans outlining certain key national objectives to be accomplished during each subsequent decade. The process and achievements of these plans are explored further later; however, in our discussion of the role of public health administrators, it is important to realize how these objects for the coming years will help galvanize efforts and guide policy. The mission is as follows:¹⁸

- Healthy People 2020* strives to: (1) Identify nationwide health improvement priorities; (2) Increase public awareness and understanding of the determinants of health, disease and disability and the opportunities for progress; (3) Provide measurable objectives and goals

Table 1.2 Management Competencies, Health Policy and Management**D. Health Policy and Management***

Health policy and management is a multidisciplinary field of inquiry and practice concerned with the delivery, quality, and costs of health care for individuals and populations. This definition assumes both a managerial and a policy concern with the structure, process, and outcomes of health services including the costs, financing, organization, outcomes, and accessibility of care.

Competencies: Upon graduation, a student with an MPH should be able to...

- D.1 Identify the main components and issues of the organization, financing, and delivery of health services and public health systems in the United States.
- D.2 Describe the legal and ethical bases for public health and health services.
- D.3 Explain methods of ensuring community health safety and preparedness.
- D.4 Discuss the policy process for improving the health status of populations.
- D.5 Apply the principles of program planning, development, budgeting, management, and evaluation in organizational and community initiatives.
- D.6 Apply principles of strategic planning and marketing to public health.
- D.7 Apply quality and performance improvement concepts to address organizational performance issues.
- D.8 Apply “systems thinking” for resolving organizational problems.
- D.9 Communicate health policy and management issues using appropriate channels and technologies.
- D.10 Demonstrate leadership skills for building partnerships.

*In this series, *health policy* is treated as a separate text and area of inquiry. As such, this text addresses only the health management competencies.

Source: ASPH.

Table 1.3 Management Competencies, Leadership**H. Leadership**

The ability to create and communicate a shared vision for a changing future, champion solutions to organizational and community challenges, and energize commitment to goals.

Competencies: Upon graduation, it is increasingly important that a student with an MPH be able to...

- H.1 Describe the attributes of leadership in public health.
- H.2 Describe alternative strategies for collaboration and partnership among organizations, focused on public health goals.
- H.3 Articulate an achievable mission, set of core values, and vision.
- H.4 Engage in dialogue and learning from others to advance public health goals.
- H.5 Demonstrate team building, negotiation, and conflict management skills.
- H.6 Demonstrate transparency, integrity, and honesty in all actions.
- H.7 Use collaborative methods for achieving organizational and community health goals.
- H.8 Apply social justice and human rights principles when addressing community needs.
- H.9 Develop strategies to motivate others for collaborative problem solving, decision making, and evaluation.

Source: ASPH.

that can be used at national, state, and local levels; (4) Engage multiple sectors to take actions that are driven by the best available evidence and knowledge; (5) Identify critical research and data collection needs.

Figure 1.3 presents an action model that may be used by public health planners, administrators, and policymakers to better achieve overarching goals.

As described by Shi and Singh,¹⁸ *Healthy People 2020* is differentiated from previous *Healthy People* initiatives by including multiple new topic areas to its objective list, such as adolescent health; blood disorders and blood safety; dementias; genomics; global health; healthcare-associated infections; quality of life and wellbeing; lesbian, gay, bisexual, and transgender health; older adults; preparedness; sleep health; and social determinants of health. *Healthy People 2020* also establishes four foundational health measures to monitor progress toward achieving its goals. These measures include general health status, health-related quality of life and wellbeing, determinants of health, and health disparities.

This text addresses a wide range of public health administration and population health management topics including ethics, law, finance, policy, human resources, leadership, information systems, strategic planning, performance management, evaluation, social marketing, health education and prevention, social entrepreneurship, disaster preparedness, public health quality, and global health. The intent is to facilitate a comprehensive understanding of this subject matter and an appreciation for the complex role of public health administrators and managers in the promotion and assurance of the nation’s health.

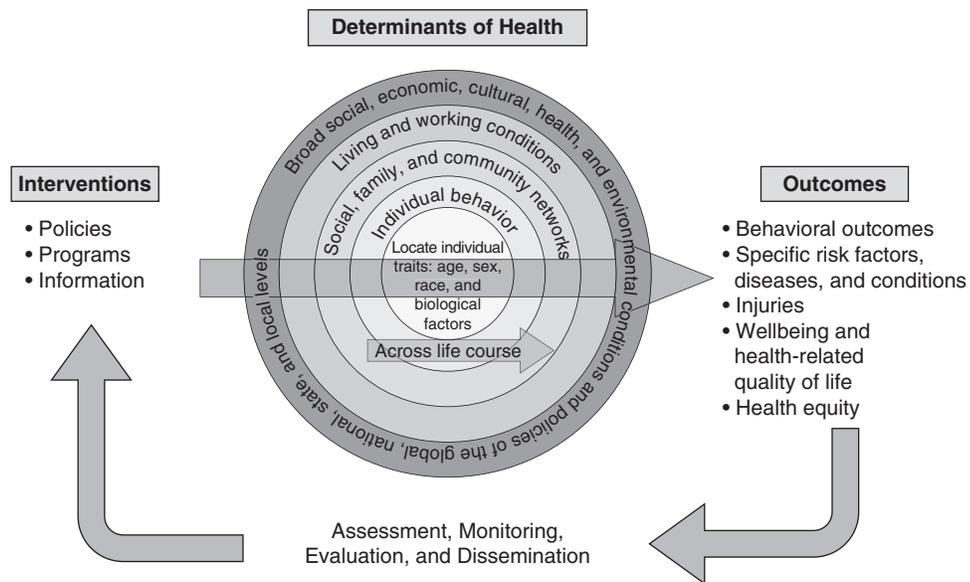


Figure 1.3 Action Model to Achieve U.S. *Healthy People 2020* Overarching Goals
 Source: Reproduced from the Department of Health and Human Services.

Discussion Questions

1. Define public health and define population health. How are the two concepts related?
2. What are the core functions of public health?
3. Describe the 10 essential services of public health.
4. What is systems thinking, and why is it useful for public health?
5. What are the tasks and processes managers are commonly involved in?
6. Identify several core competencies needed by public health managers and leaders. How does your degree program address these?
7. What is *Healthy People 2020* and what does it seek to accomplish? How might it serve to guide public health administrators in their program planning?

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