

Overview of Public Health Administration

James A. Johnson and Leiyu Shi

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 2020/2030 and how this relates to public health administration

Chapter Overview

Since 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, and Mays in the previous edition of this book, public health consists of organized efforts to improve the health of

populations.¹ 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:

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.²

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, states, "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."⁴

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 immunodeficiency 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 twentieth century, during which individuals living in developed countries increased life expectancy from 45 to 75 years. Now in the twenty-first 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, although important, is estimated to have contributed about 5 years to 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 that provides public information and facilitates delivery. Policies to support the initiative, such as vaccines for children 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 has declined because of aggressive approaches to testing and treatment of HIV during pregnancy and delivery. On the other hand, congenital syphilis, although 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, with his perspective on population health

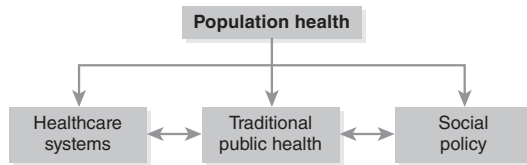


Figure 1.1 A full spectrum of population health.

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

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, “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.”⁷ The concept of population health can be seen 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 Reigelman in **Figure 1.1**.⁴

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. 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 at the local, state, and federal levels is 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 defined by the IOM are (1) assessment, (2) policy development, and (3) assurance.⁸

- **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 statement was supported and promoted by the American Public Health Association (APHA) and most other groups advocating for a consistent and unified approach to public health. The 10 essential public health services are presented in **Table 1.1**.

To better visualize how the core functions and essential services for public health fit together it helps to look at **Figure 1.2**.

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.

The Public Health System & the 10 Essential Public Health Services. Atlanta, GA: Centers for Disease Control and Prevention. <https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html>. Accessed March 26, 2020.

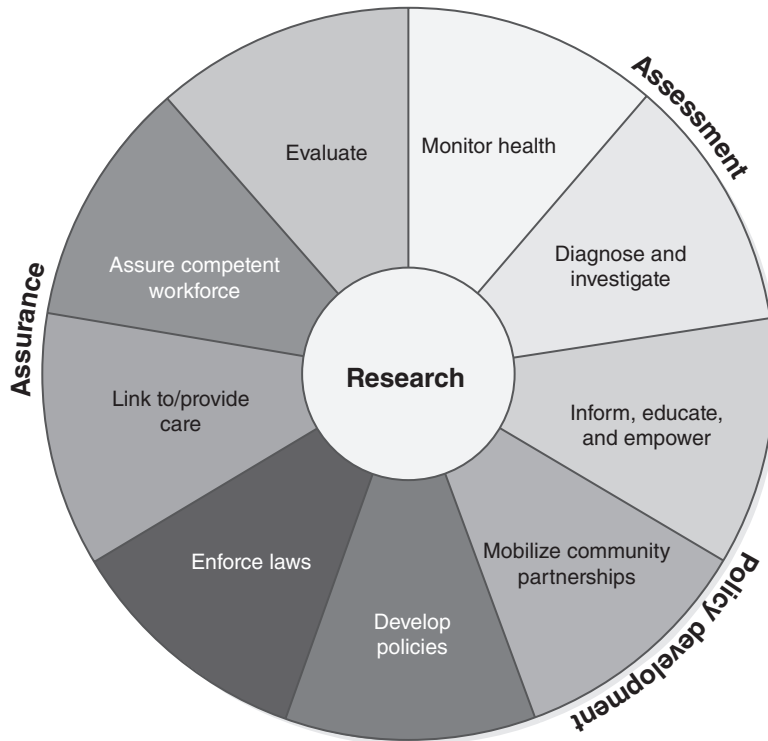


Figure 1.2 Core functions and essential public health services.

Core Functions of Public Health and How They Relate to the 10 Essential Services. Atlanta, GA: Centers for Disease Control and Prevention. http://www.cdc.gov/nceh/ehs/epihii/core_ess.htm. Accessed March 26, 2020.

This framework is used by local, state, and federal agencies throughout the country (discussed further in Chapter 4, “Systems Thinking for Public and Global Health”). 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.

Systems Perspective in Public Health

As can be seen so far in this chapter and will be further emphasized throughout this text, public health is best understood from a systems perspective. Described by Johnson in the recent book *Health Systems Thinking*, “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.”⁹ Johnson further explains that the systems approach in public health is more than just the relationships that support and facilitate the organization and actions of public health, but also includes “the mindset of public health professionals.”⁹ This is often referred to as systems thinking, and it is especially salient in public health management, practice, and research. The National Cancer Institute (NCI) sums up its understanding and embrace of systems thinking as presented in **Box 1.1**. The NCI 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 Public Health

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.

Implementation Science at a Glance. Washington, DC: National Cancer Institute. <https://researchtoareality.cancer.gov/cyber-seminars/using-systems-thinking-and-tools-solve-public-health-problems>.

Other systems thinking applications and efforts in public health will be discussed in Chapter 4, “Systems Thinking for Public and Global Health.” However, the importance of this is further underscored by the World Health Organization in its report titled *Systems Thinking for Health Systems Strengthening*, which asserts that systems thinking is a “paradigm shift” for public health. The report states: “Systems thinking offers a more comprehensive way of anticipating synergies and mitigating negative emergent behaviors, with direct relevance for creating more system-ready policies.”¹⁰

Role of the Public Health Administrator and Manager

The work of public health could not be done or 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:¹¹

- 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 Davey identify the following seven interconnected processes and responsibilities commonly associated with the administrative role:¹²

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 and Programs of Public Health provides a list of core competencies in the managerial and leadership domains, as shown in **Table 1.2** and **Table 1.3**.

Johnson defines management as “the process of working with and through others to achieve organizational or program objectives in an efficient and ethical manner.”¹³ In subsequent chapters of

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.

Reproduced from Master’s Degree in Public Health Core Competency Development Project, version 2.3. Association of Schools of Public Health; August 2006. https://s3.amazonaws.com/aspph-wp-production/app/uploads/2014/04/Version2.31_FINAL.pdf.

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.

Reproduced from Master’s Degree in Public Health Core Competency Development Project, version 2.3. Association of Schools of Public Health; August 2006. https://s3.amazonaws.com/aspph-wp-production/app/uploads/2014/04/Version2.31_FINAL.pdf.

this text every element of this definition and all of the competencies listed in these tables will be addressed and elaborated on.

As described in their book, *Managing Public Health Organizations*, published in 2021, James

Johnson and Kim Davey provide the following commentary on the role of public health managers:

Public health managers and leaders are needed to help their organizations,

agencies, and departments navigate complex systems and constantly evolving culture and subcultures to enact change and influence health. Within the public health context, escalating costs, provider shortages, health disparities, obesity and diet-related diseases, the opioid epidemic, climate change, resurgence of infectious diseases, demographic shifts, shrinking budgets, and numerous other challenges are threatening the health and well-being of individuals and communities. These challenges require public health professionals who possess strong management knowledge, skills, and abilities. Public health professionals must be able to manage an evolving and expanding number of public health priorities, programs, professionals, organizations, inter-organizational and multi-sector collaborations, population health activities, policy initiatives, and much more. Countries and communities around the world are looking to public health professionals and organizations for answers and innovative approaches to address health disparities and priorities. Furthermore, public health organizations and practice must evolve to redefine and reinvent itself in response to environmental forces. Managers have a primary responsibility for enabling, implementing, and overseeing this evolution in public health organizations.¹²

All organizations require managers, who are essential for their maintenance, effectiveness, and sustainability. Whether it be the management of resources (people, finances, buildings, technology) or strategy (vision, mission, goals, objectives) or behavior dynamics (motivation, conflict, change, decision making), or values (fairness, diversity, responsiveness, accountability, social responsibility), the manager's role and effectiveness in that role are central to the organization's ability to exist and perform its mission and purpose. Public health managers are often leaders within their own professions, and many are

leaders in their communities and in the world. In fact, public health, with its public service mission and global reach, is an ideal environment for managers who desire to have a positive and lasting impact. It is also a changing and sometimes demanding environment that offers many challenges and opportunities to grow professionally and personally, and to help others in large and small ways. **Table 1.4** identifies some of the ways public health managers make a difference.

Table 1.4 Public Health Practice Profile for Public Health Administration

Public Health Administrators Make a Difference by

Public Health Purposes

- Preventing epidemics and the spread of disease
Protecting against environmental hazards
Preventing injuries
Promoting and encouraging healthy behaviors
- Responding to disasters and assisting communities in recovery
- Ensuring the quality and accessibility of health services

Essential Public Health Services

- Monitoring health status to identify community health problems
- Diagnosing and investigating health problems and health hazards in the community
- Informing, educating, and empowering people about health issues
- Mobilizing community partnerships to identify and solve health problems
 - Developing policies and plans that support individual and community health efforts
 - Enforcing laws and regulations that protect health and ensure safety
- Linking people with needed personal health services and ensuring the provision of health care when otherwise unavailable
- Ensuring a competent public health and personal healthcare workforce
 - Evaluating effectiveness, accessibility, and quality of personal and population-based health services
- Researching new insights and innovative solutions to health problems

Reproduced from Turnock B. *Essentials of Public Health*. Burlington, MA: Jones & Bartlett Learning; 2016.

Exhibit 1.1 WHO Perspective on Public Health Management

Effective leadership and management are essential to scaling up the quantity and quality of health services and to improving population health.

Good leadership and management are about:

- providing direction to, and gaining commitment from, partners and staff;
- facilitating change; and
- achieving better health services through efficient, creative, and responsible deployment of people and other resources.

Strengthening leadership and management requires the fulfillment of four main conditions: adequate numbers of managers deployed, managers with appropriate competencies, functioning management support systems, and a work environment that expects, supports, and rewards good management performance.

While leaders set the strategic vision and mobilize the efforts toward its realization, good managers ensure effective organization and utilization of resources to achieve results and meet the aims.

The WHO management framework proposes that good leadership and management at the operational level need to have a balance between four areas:

1. ensuring an adequate number of managers at all levels of the health system;
2. ensuring managers have appropriate competences;
3. creating better critical management support systems; and
4. creating and enabling the working environment.

The WHO is a strident advocate of systems thinking. These four conditions are closely interrelated. Strengthening one without the others is not likely to work.

Reproduced from World Health Organization. Management for health services delivery. <https://www.who.int/management/en>. Accessed March 26, 2020.

In public health, the need for skilled and highly effective managers and leaders is great. APHA, ASPPH, and the WHO have all recognized the importance of management in public health systems, organizations, and programs. Furthermore, these groups have called for better management development and leadership if public health is to meet its greatest potential and achieve the goal of health for all. This is captured in the WHO perspective presented in **Exhibit 1.1**.

As public health continues to advance, the role of the public health manager will likely expand. One such vision, as described by the Centers for Disease Control and Prevention (CDC), has public health leaders serving as *chief health strategists* in their communities, partnering across multiple sectors and leveraging data and resources to address social, environmental, and economic conditions that affect health and health equity.¹⁴

Looking to the Future

Public health administrators and practitioners will face many challenges in the twenty-first 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. Going beyond that, we will have the Healthy People 2030 initiative to consider. 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 in subsequent chapters of this text. 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: Healthy People 2020 strives to (1) identify nationwide health improvement

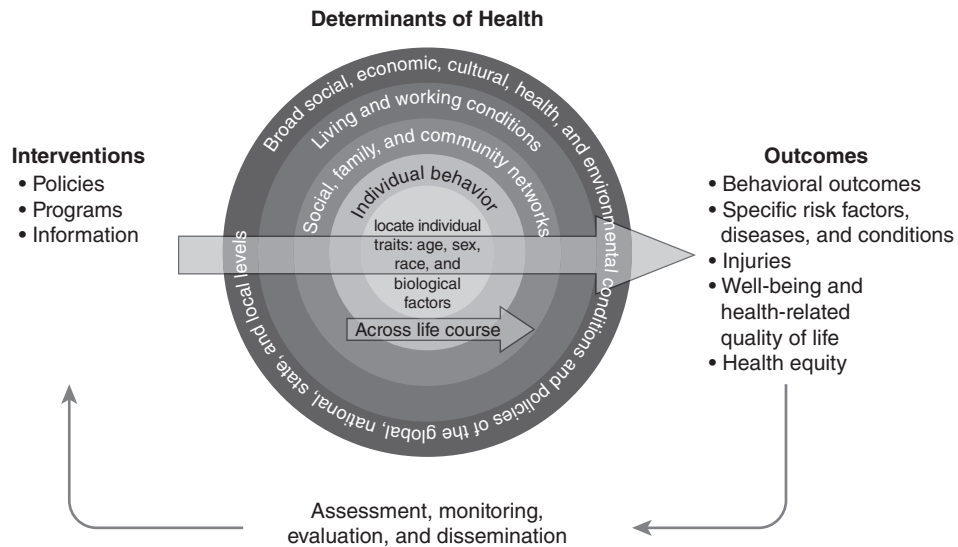


Figure 1.3 Action model to achieve U.S. Healthy People 2020 overarching goals.

Reproduced from U.S. Department of Health and Human Services. About Healthy People. <https://www.healthypeople.gov/2020/About-Healthy-People>. Updated May 26, 2020. Accessed April 1, 2020.

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 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; and (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 Johnson, Healthy People 2020 is differentiated from previous Healthy People initiatives by including multiple new topic areas to its objectives list, such as adolescent health; blood disorders and blood safety; dementias; genomics; global health; healthcare-associated infections; quality of life and well-being; lesbian, gay, bisexual, and transgender health; older adults; preparedness; sleep health; and social determinants of health.¹⁵ Healthy People 2020 also established four foundational health measures to monitor progress toward achieving its goals. These measures include general health status, health-related

quality of life and well-being, determinants of health, and disparities.

The next 10-year period of national health planning is being addressed in Healthy People 2030. Although much progress has been made since the Healthy People initiatives began, the United States is still behind other developed on key measures of health and well-being, including life expectancy, infant mortality, and obesity. A challenge for Healthy People 2030 is to guide the country in achieving its full potential for health and well-being. See **Box 1.2** for an overview.

The remaining chapters of this text address 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 (including sections on COVID-19), 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.

Box 1.2 Overview of Healthy People 2030

Vision

A society in which all people can achieve their full potential for health and well-being across the lifespan.

Mission

To promote, strengthen, and evaluate the nation's efforts to improve the health and well-being of all people.

Foundational Principles

Foundational principles explain the thinking that guides decisions about Healthy People 2030.

- Health and well-being of all people and communities are essential to a thriving, equitable society.
- Promoting health and well-being and preventing disease are linked efforts that encompass physical, mental, and social health dimensions.
- Investing to achieve the full potential for health and well-being for all provides valuable benefits to society.
- Achieving health and well-being requires eliminating health disparities, achieving health equity, and attaining health literacy.
- Healthy physical, social, and economic environments strengthen the potential to achieve health and well-being.
- Promoting and achieving the nation's health and well-being is a shared responsibility that is distributed across the national, state, tribal, and community levels, including the public, private, and not-for-profit sectors.
- Working to attain the full potential for health and well-being of the population is a component of decision-making and policy formulation across all sectors.

Overarching Goals

- Attain healthy, thriving lives and well-being, free of preventable disease, disability, injury, and premature death.
- Eliminate health disparities, achieve health equity, and attain health literacy to improve the health and well-being of all.
- Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all.
- Promote healthy development, healthy behaviors, and well-being across all life stages.
- Engage leadership, key constituents, and the public across multiple sectors to take action and design policies that improve the health and well-being of all.

Plan of Action

- Set national goals and measurable objectives to guide evidence-based policies, programs, and other actions to improve health and well-being.
- Provide data that are accurate, timely, accessible, and can drive targeted actions to address regions and populations with poor health or at high risk for poor health in the future.
- Foster impact through public and private efforts to improve health and well-being for people of all ages and the communities in which they live.
- Provide tools for the public, programs, policymakers, and others to evaluate progress toward improving health and well-being.
- Share and support the implementation of evidence-based programs and policies that are replicable, scalable, and sustainable.
- Report biennially on progress throughout the decade from 2020 to 2030.
- Stimulate research and innovation toward meeting Healthy People 2030 goals and highlight critical research, data, and evaluation needs.
- Facilitate development and availability of affordable means of health promotion, disease prevention, and treatment.

U.S. Department of Health and Human Services. Healthy People 2030 Framework and Goals. <https://www.healthypeople.gov/2020/About-Healthy-People/Development-Healthy-People-2030/Framework>. Updated May 26, 2020. Accessed April 1, 2020.

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 with which managers are commonly involved?
6. Identify several core competencies needed by public health managers and leaders. How does your degree program address these?
7. What are Healthy People 2020 and Healthy People 2030? What do these plans seek to accomplish? How might they serve to guide public health administrators in their program planning?

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