

14. PUBLIC HEALTH INFRASTRUCTURE

Number	Objective
1	Competencies for public health workers
2	Training in essential public health services
3	Continuing education and training by public health agencies
4	Use of Standard Occupational Classification System
5	Onsite access to data
6	Access to public health information and surveillance data
7	Tracking Healthy People 2010 objectives for select populations
8	Data collection for Healthy People 2010 objectives
9	Use of geocoding in health data systems
10	Performance standards for essential public health services
11	Health improvement plans
12	Access to laboratory services
13	Access to comprehensive epidemiology services
14	Model statutes related to essential public health services
15	Data on public health expenditures
16	Collaboration and cooperation in prevention research efforts
17	Summary measures of population health and the public health infrastructure

Public Health Infrastructure

Goal

Ensure that the public health infrastructure at the Federal, State, and local levels has the capacity to provide essential public health services.

Terminology

(A listing of all acronyms used in this publication appears on page 27 of the Introduction.)

Accredited discipline-specific graduate programs in public health: Includes any academic graduate degree program specifically training public health workers, e.g., schools of public health, schools of nursing, environmental health, veterinary schools, and schools of medicine.

Essential public health services: The public health services described in the Public Health in America statement, including monitor health status; diagnose and investigate health problems; inform, educate, and empower people; mobilize community partnerships; develop policies and plans; enforce laws and regulations; link people to needed services; conduct evaluations; and conduct research.

Federal, State, and local public health agency: Any health, mental health, substance abuse, environmental health, occupational health, or public health agency charged with some portion of the roles encompassed in the Public Health in America statement. Educational agencies, while not traditionally viewed as public health agencies, do provide essential public health services to students and others.

Guide to Community Preventive Services: A guide to provide public health practitioners, their community partners, and policymakers with information needed for informed decisionmaking on the most effective and cost-effective public health strategies, policies, and programs for their communities.

Health Improvement Plan: A series of timely and meaningful action steps that define and direct the distribution of the essential public health services in a specific State or community according to problems and gaps identified in the needs assessment. The plan should link State and local services, as well as uniting and mobilizing a variety of health and social service providers to address health problems and to improve the community's capacity to respond to public health needs. All providers of public health services, such as health departments, schools, Medicaid managed care providers, environmental health agencies, and nursing organizations, should be included in the Health Improvement Plan. Health departments should be responsible for formally implementing the plan.

Information Network for Public Health Officials: A fundamental building block in the national public health information infrastructure with a vision to ensure that community health departments, organizations, and staff have easy and seamless access to data and information and the essential infrastructure to realize the fundamental public health goals of protecting and promoting the Nation's health.

Major national health data systems: Major data systems that provide tracking data for three or more national Healthy People 2010 objectives. These include national vital statistics, National Health Interview Survey, National Health and Nutrition Examination Survey, National Hospital Discharge Survey, and the Behavioral Risk Factor Surveillance System.

1 **Needs assessment:** A formal process to identify problems and assess the community's capacity to address
2 health and social service needs (examples include: APEX/PH, PATCH, Healthy Cities, and Model
3 Standards). The needs assessment will identify which populations, if any, are underserved by the providers
4 in that community and it will provide information about resource distribution and costs.
5

6 **Population-based prevention research:** Research focused on the most effective public health practices
7 for primary, secondary, and tertiary prevention in populations.
8

9 **Public health and environmental health laboratory services:** Includes health and environmental
10 assessment, surveillance, quality assurance, training, and consultation services. Public health population-
11 based laboratory services include a core set of tests in environmental, pathology, hematology, chemistry,
12 and microbiology services.
13

14 **Public Health in America statement:** A statement defining the public health vision, mission, and
15 essential public health services. It was produced in 1994 by the Core Public Health Functions Steering
16 Committee, comprised of representatives from the U.S. Public Health Service agencies, the American
17 Public Health Association, the Association of Schools of Public Health, the Association of State and
18 Territorial Health Officials, the Environmental Council of the States, the National Association of County
19 and City Health Officials, the National Association of State Alcohol and Drug Abuse Directors, the
20 National Association of State Mental Health Program Directors, and the Public Health Foundation.
21

22 **Public health infrastructure:** The systems, competencies, relationships, and resources that enable
23 performance of the essential public health services in every community.
24

25 **Public health workers:** Individuals responsible for providing the services identified in the Public Health
26 in America statement regardless of the organization in which they work. At the State level many workers
27 in environmental, agricultural, and education departments have public health responsibilities and are
28 included. This definition does not include those who occasionally contribute to the effort in the course of
29 fulfilling other responsibilities. The Standard Occupational Classification (SOC) system used by the
30 Bureau of Labor Statistics, Census Bureau, and Bureau of Health Professions also can be used.
31

32 **Overview**

33

34 In the United States the mission of public health is to prevent epidemics and the spread of disease, protect
35 against environmental hazards, prevent injuries, promote and encourage healthy behaviors, respond to
36 disasters and assist communities in recovery, and ensure the quality and accessibility of health services. To
37 achieve this mission, a strong infrastructure is needed that integrates activities throughout the Federal,
38 State, and local levels. The infrastructure is the underlying base or foundation that supports the planning,
39 delivery, and evaluation of public health activities and practices. The public health infrastructure is
40 difficult to visualize. It is similar to the schools, fire departments, water systems, transportation systems,
41 and other essential structures and services governments provide.
42

43 Conceptually, the public health infrastructure has five components that support the delivery of essential
44 public health services to protect and improve the health of the community. The five components are
45 skilled workforce, integrated electronic information systems, effective public health organizations,
46 resources, and research. Research is an investment in the future that leads to better people, information
47 systems, and organizations and more effective and efficient use of resources. Together these components
48 enable every public health system to promote physical and mental health and prevent disease, injury, and
49 disability.
50

Healthy People 2010 Objectives: Draft for Public Comment

1 The landmark 1988 Institute of Medicine (IOM) report, *The Future of Public Health*, was the first to
2 characterize the public health infrastructure as a complex web of practices and organizations. This report
3 made clear that the infrastructure upon which the national public health system functions requires
4 definition, coordination, and strength to realize the universal public health mission. Subsequent reports
5 and evaluations from Healthy People 2000 work groups confirm the diagnosis and document continued
6 deterioration of the national public health system: health departments are closing; technology and
7 information systems are outmoded; emerging and drug-resistant diseases threaten to overwhelm resources;
8 and serious training inadequacies threaten the capacity of the public health workforce to address new
9 threats and adapt to changes in the health care market.

10
11 Although public health services are no longer delivered solely by governmental public health agencies,
12 government is ultimately responsible for the health of the public. Environmental health, occupational
13 health and safety, mental health, and substance abuse are integral parts of public health. In addition, new
14 providers of public health services, such as managed care organizations, hospitals, nonprofit corporations,
15 schools, churches, and businesses, have emerged within communities. The totality of the public health
16 infrastructure includes all governmental and nongovernmental entities providing essential public health
17 services.

18
19 Healthy People 2000 did not have a specific focus area on the public health infrastructure. In Healthy
20 People 2000, objective 8.14 indirectly addressed the public health infrastructure: “Increase to at least 90
21 percent the proportion of people who are served by a local health department that is effectively carrying out
22 the core functions of public health.” The core functions of public health were defined in the 1988 IOM
23 report as assessment, policy development, and assurance. This objective, while not continued in Healthy
24 People 2010, has been the basis for all infrastructure objectives listed below. Efforts to better define,
25 achieve, and measure this objective have contributed to a more complete description of the public health
26 infrastructure and to more detailed and expanded public health infrastructure goals for Healthy People
27 2010.

28
29 This chapter was developed as a collaborative effort by over 100 people representing Federal agencies;
30 national, State, and local public health officials and organizations; academia; foundations; elected health
31 officials (e.g., local boards of health); and other interested groups who worked collectively to define and
32 understand the public health infrastructure. The objectives detailed below identify specific areas needed to
33 strengthen the public health infrastructure.

34
35 Because this chapter is a new focus area, most of the objectives are developmental. Sources of data for
36 measuring achievement will need to be developed. Many data systems currently collect some information
37 on the public health infrastructure, but by the year 2005 data collection systems will be in place to measure
38 the objectives.

1 **Draft 2010 Objectives**

2
3 ***Skilled Workforce***

4
5 *Competencies for Public Health Workers*

6
7 **1. (Developmental) Increase the number of States and local jurisdictions that incorporate specific**
8 **competencies for public health workers into their public health personnel system.**
9

10 The public health workforce is an integral component of the public health infrastructure. Although the
11 particular disciplines in the workforce of any national, State, or local public health agency will vary
12 according to the budget, hiring laws, needs, and population served, individuals in any specific discipline
13 must have a certain level of expertise/competency. The combined competencies of individuals will create
14 an overall organizational competency to provide the essential public health services.
15

16 The issue of what constitutes a public health worker is problematic. A variety of disciplines make up the
17 field of public health, and the number and variety of staff depend to a large extent on the size of a given
18 health department. Recently, with much input from the public health community, the SOC System used by
19 the Bureau of Labor Statistics, Bureau of the Census, and Bureau of Health Professions has been revised
20 and updated to include a broad array of public health professions.
21

22 The 1997 report *Public Health Workforce: An Agenda for the 21st Century* identified five areas of action
23 to strengthen the public health workforce for the 21st century: National Leadership, State and Local
24 Leadership, Workforce Composition, Curriculum Development, and Distance Learning. These areas are
25 similar to the national objectives related to workforce competency, which include ensuring the workforce
26 has certain levels of competency and may include expanding the disciplines in public health that are
27 licensed or certified; ensuring schools and programs of public health, as well as other institutions of
28 learning, have a focus on the essential public health services in their curricula; and ensuring that State and
29 local health departments offer continuing education opportunities to keep the workforce current in today's
30 rapidly changing world. At all levels, the issue of cultural and linguistic differences must be addressed to
31 assure a competent, diverse public health workforce.
32

33 National licensure and certification programs already exist for nurses, physicians, dietitians, health
34 educators, sanitarians, and many allied health professions and data are collected in these programs.
35 Coordination will be important to ensure that public health/essential public health service concerns are
36 covered. At least one State, New Jersey, has licensure requirements for local health officers.
37

38 *Schools of Public Health and Other Academic Public Health Programs*
39

40 **2. (Developmental) Increase the number of schools training public health workers that integrate**
41 **specific training in the essential public health services into their curricula.**
42

43 Schools of Public Health, programs in public health accredited by the Council on Education for Public
44 Health, and accredited discipline-specific graduate programs of public health are educating and training
45 tomorrow's public health workforce, including directors of public health agencies. These emerging
46 workers and leaders should be well grounded in public health and specifically in an understanding of the
47 essential public health services. This will facilitate the application of specific skills (epidemiology,
48 microbiology, engineering, nursing, program management and administration, etc.) in a way that more
49 effectively advances the overall public health agenda.
50

1 *Continuing Education and Training*
2

3 **3. (Developmental) Increase the number of State and local public health agencies that provide**
4 **continuing education and training to their employees to improve performance of the essential**
5 **public health services.**
6

7 With the face of public health continually changing and with the growing diversity of the workforce,
8 public health workers must have access to information that not only better prepares them for their specific
9 job, but also keeps them up-to-date. All public health workers should have a general understanding of
10 public health. Although several disciplines have continuing education requirements as part of the
11 licensure/certification process, this objective extends to all workers, whether or not licensed, certified, or
12 otherwise accredited. State and local public health agencies do not necessarily have to provide the
13 education or training but need to ensure its availability and accessibility to their workforce. Once an
14 effective source of data is developed for this objective, a certain percentage of employees should be
15 targeted for continuing education and training.
16

17 *Classification of Public Health Personnel*
18

19 **4. (Developmental) Increase the proportion of Federal, State, and local public and private sector**
20 **employers that voluntarily adopt and use the Standard Occupational Classification System to**
21 **categorize public health personnel.**
22

23 Data systems are needed to track the extent to which the public health workforce has the knowledge, skills,
24 and abilities to carry out its functions. Meaningful public health workforce data collection and subsequent
25 workforce analysis and research activities have been hampered to date by lack of a standard taxonomy to
26 categorize or classify public health personnel. With wide input from the public health community, the
27 SOC System has been recently revised and updated (1997-98) to include a broad array of public health
28 professions. The SOC will continue to be used by the Bureau of Labor Statistics (Department of Labor),
29 Bureau of the Census (Commerce Department), and Bureau of Health Professions (Department of Health
30 and Human Services) in a number of national population and employer-based surveys. Potential users of
31 this new standard taxonomy in public health include government agencies and public health practice
32 organizations that sponsor or conduct workforce data collection, schools of the health professions that train
33 and educate public health professionals, and employers that use job classification titles.
34

35 *Integrated Electronic Information Systems*
36

37 *Electronic Access to Health Information and Surveillance Data*
38

39 **5. Increase to 90 percent the proportion of State and local public health agencies that provide**
40 **onsite access to data via electronic systems and online information systems such as the Internet.**
41

42 Limited data are available at present. Unpublished data from the Centers for Disease Control and
43 Prevention (CDC) indicate that in 1996, three States (6 percent) gave full Internet access to all employees.
44 Other unpublished data from CDC indicate that a small percentage of State employees have computers on
45 their desks. In a recent survey by the National Association of County and City Health Officials
46 (NACCHO) on electronic communication capacity of local health departments, 62 respondents said their
47 health department had access to the Internet or online services. One could reasonably guess that even
48 fewer local public health workers have computers on their desks and thus do not currently have desktop
49 access to the Internet.
50

1 Of the many systems that comprise the public health infrastructure, a strong public health information
2 system that meets needs at the Federal, State, and community levels is a high priority for public health
3 officials and other policymakers. The information system should be useful, accessible, adaptable, timely,
4 relevant, and secure. The information from these systems should have the capacity to be linked, integrated,
5 transmitted, and used for assessment, policy development, and quality assurance. The information
6 technology revolution continues to expand the information available, as well as ways to collect and
7 disseminate data. This modern technology has brought with it both opportunities and challenges, including
8 improved coordination of data and data systems, enhanced “real-time” access to data, more opportunities
9 for sharing, and more points of access to data (e.g., home, work, travel). At the same time, challenges arise
10 in synthesizing the masses of information available, but also in ensuring the scientific accuracy of data.

11
12 It is not sufficient that a State or local public health agency have only a few access points to electronic
13 information systems. Access should be available for a large proportion of workers within an agency and be
14 appropriate to job function. Access requires hardware (computers, modems, CD-ROM drives, etc.),
15 software that can browse the Internet and can be applied to health information databases, and staff trained
16 in how to effectively use and search the Internet and other database systems. Computer specialists, as well
17 as staff trained in the use of computers and data synthesis, are essential to the system. It is important that
18 in addition to onsite access to online data sources, public health agencies provide appropriate training and
19 familiarization with the sources available, along with their usefulness.

20
21 *Community Access to Health Information and Surveillance Data*

22
23 **6. (Developmental) Increase the proportion of the population that has access to public health**
24 **information and surveillance data.**

25
26 The purpose of this objective is to ensure that data collected at national, State, and local levels are available
27 and electronically aggregated, as well as accessible by interested community individuals and organizations.
28 Data should include health outcomes; utilization statistics, such as the Health Plan Employer Data and
29 Information Set or similar measures from managed care organizations; infrastructure data; health risk data;
30 community report card; and other related measures. Efforts should be made to include other sources of
31 data not widely used for public health assessment. Data should be made available in a timely manner. The
32 electronic information era makes it feasible to have public health data available within a very short time
33 from collection.

34
35 *Tracking Objectives for Special Populations*

36
37 **7. Increase to 100 percent the proportion of Healthy People 2010 objectives that can be tracked for**
38 **select populations.**

39
40 **Data Source:** CDC, NCHS.

41
42 The capacity of the public health system to understand and measure the health of all individuals requires
43 special attention to groups that may not be identifiable in statewide or national databases because of small
44 numbers or other special circumstances. Better and more effective tracking systems are needed to facilitate
45 tracking of health objectives for special populations such as racial and ethnic minorities, people with
46 disabilities, specific tribes, homeless people, people in institutions (including nursing homes and
47 correctional facilities), people with low incomes, recent immigrants, and special education participants.

1 *Periodicity of Data Collection*
2

3 **8. Increase to 100 percent the proportion of Healthy People 2010 objectives that are tracked at**
4 **least every 3 years and to 70 the proportion of objectives that are tracked annually.**

5
6 **Data Source:** CDC, NCHS
7

8 The ability to tailor strategies to achieve national objectives across a decade depends on feedback at
9 regular, relatively short intervals. Past efforts to achieve national health objectives have been hampered by
10 the number of objectives tracked at only 5- or 10-year intervals.
11

12 *Geocoding and Geographical Information System Analysis*
13

14 **9. (Developmental) Increase the use of geocoding in all major national and State health data**
15 **systems to promote the development of geographical information system (GIS) capability at**
16 **national, State, and local levels.**
17

18 As with timeliness, the capacity to achieve national goals also is tied to the ability to target strategies to the
19 geographic areas most in need. Extension of geocoding capacities throughout health data systems will
20 facilitate this ability. A GIS is a powerful tool that combines geography and computers. With a GIS, maps
21 and tabular databases are stored with linked georeferenced identifiers so that a computer can manipulate,
22 display, and analyze the information they contain. GIS maps are cross-referenced with associated tabular
23 data, so any information can be viewed instantly on a map. This versatility makes it easy to comprehend
24 large volumes of data and spatially explore relationships, patterns, and trends that would otherwise go
25 unnoticed. Map elements can be layered, combined, and statistically analyzed for even more indepth
26 study.
27

28 *Effective Public Health Organizations*
29

30 *Performance Measurement*
31

32 **10. (Developmental) Increase the proportion of State and local public health agencies that meet**
33 **performance standards for the essential public health services.**
34

35 No baseline data are available at present. Unpublished data from CDC indicate that a number of States
36 have or are developing State-specific standards and performance measures for local public health agencies.
37 Principal data sources could be regular surveys of State and local health agencies.
38

39 Experts in quality improvement have long asserted that “what gets measured gets done.” The
40 measurement of public health performance is not new, nor is the concept foreign to most health
41 departments. What is currently not being done, however, is a comprehensive and systematic evaluation of
42 public health performance. Without common performance indicators and systematic comparison, public
43 health lacks useful benchmarks for system improvement. Attempts to characterize the capacity and
44 resource needs for public health organizations are relegated to crude estimates and generalizations because
45 of the lack of objective data. One outcome of the lack of a measurement system is survey data that suggest
46 most people do not understand what public health is and what it does. National performance measures
47 would provide public health with comparative data to be used in quality improvement, increasing
48 accountability for dollars invested and creating a greater level of credibility in relating to both internal and
49 external constituents. CDC, in conjunction with national and State-based public health organizations, is
50 currently developing performance indicators and a national system for performance evaluation. Because

1 the performance measurement system is still under development, this infrastructure objective is
2 developmental.

3
4 *Health Improvement Plan*

5
6 **11. Increase to 100 percent the proportion of States that have a health improvement plan and**
7 **increase to 80 percent the proportion of local jurisdictions that have a health improvement plan**
8 **linked with the State plan.** (Baseline: 32 percent of local health departments in 1992-93)
9

10 **Data Source:** National Association of County and City Health Officials.

11
12 Planning is central to improvements in public health in any State or community. A Health Improvement
13 Plan (HIP) is a long-term plan by which health and other governmental education and human service
14 agencies, in collaboration with community partners, can coordinate and target resources and set priorities
15 to address health problems based on the results of the community needs assessment. A HIP is critical for
16 developing policies and defining actions to target individual and community efforts that promote health. It
17 should define the vision for the future health of the community. Most important, the plan should be
18 meaningful, timely, and inclusive.

19
20 At the State level, the HIP is the link between Healthy People 2010's national perspective and the unique
21 health needs of each State. The specific process by which a State plan is established may vary, but care
22 should be taken to be inclusive of all interests and to link health goals to other State goal setting or
23 benchmarking processes.

24
25 Moving to the local jurisdiction, there is a need to involve a broad range of participants in the creation of a
26 plan that defines the community, develops solutions to address the primary causes for problems, engages
27 the community to take action, and acknowledges the different roles and responsibilities of State and local
28 agencies and organizations. Community coalitions that are formed should include individuals from local
29 government agencies, including public health, substance abuse, mental health, environmental health and
30 education, business, medical and managed care organizations, the legal profession, the civic community,
31 the faith community, and consumer representatives. The coalition should ensure appropriate cultural and
32 linguistic representation. The health department should facilitate the planning process and ensure that all
33 of the above-mentioned participants are involved. By banding together participants from a broad network
34 of health and social service providers, the health department will be able to mobilize partnerships to
35 address specific community needs.

36
37 *Laboratory Services*

38
39 **12. (Developmental) Increase the proportion of State and local public health agencies that ensure**
40 **access to an essential set of accurate, reliable, and timely population-based public health and**
41 **environmental health laboratory services for all providers of public health services.**
42

43 Because every U.S. resident requires a personal laboratory test or derives benefits from some
44 environmental laboratory test, the public is the ultimate beneficiary of improvements in laboratory test
45 quality and access. Efforts to improve the quality of personal-health laboratory practices have been
46 ongoing since enactment of the 1988 Clinical Laboratory Improvement Amendments, with the
47 understanding that accuracy is essential for timely and appropriate medical decisions. Public health is in
48 danger because insufficient attention has been given to describe the full range of essential public health
49 laboratory services. Population-based laboratory services are limited and difficult for community
50 practitioners and health departments to access, particularly those that exclusively rely on contracted or

1 outsourced laboratory services. Access to population-based services also is hampered when financial
2 incentives and personal health needs take precedence over the public health system. State and local health
3 agencies therefore must pay special attention to the availability, affordability, and quality of population-
4 based laboratory services, in addition to personal-health services, to ensure timely and appropriate testing.
5 Examples of population-based laboratory services include such areas as assuring a quality water supply,
6 radon monitoring, and lead testing.

7
8 *Epidemiology Services*
9

10 **13. (Developmental) Increase the proportion of State and local public health agencies that ensure**
11 **the provision of comprehensive epidemiology services to support the essential public health**
12 **services.**
13

14 Epidemiology services are necessary to enable public health agencies to conduct several essential public
15 health services:

- 16
- 17 • Monitor health status to identify community health problems.
- 18
- 19 • Diagnose and investigate health problems and health hazards in the community.
- 20
- 21 • Inform, educate, and empower people about health issues.
- 22
- 23 • Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
- 24
- 25 • Research for new insights and innovative solutions to health problems.
- 26

27 Program planning, management, and evaluation activities, in particular, are dependent upon public health
28 surveillance and data systems, and these systems require epidemiological capacity for data collection,
29 analysis, interpretation and dissemination. More acutely, epidemiology services are essential for
30 emergency response to outbreaks of communicable disease and for investigation of reported clusters of
31 cancer and other chronic diseases. Comprehensive epidemiology services include those provided by an
32 interdisciplinary team composed of staff also trained in demography, sociology, survey design, economic
33 evaluation, program evaluation, and qualitative data collection.

34
35 *Legal Basis of Public Health*
36

37 **14. (Developmental) Develop a set of model statutes relating to essential public health services and**
38 **increase the proportion of jurisdictions that review their statutes/ordinances/bylaws to ensure**
39 **the delivery of essential public health services.**
40

41 The legal basis for any public agency is the statute, ordinance, or charter action creating it and setting forth
42 its powers and duties. General language sets forth responsibility for preserving, promoting, and protecting
43 the health of the people of the jurisdiction. In addition, public health agencies usually are authorized or
44 required to act under or enforce multiple specific statutes regarding control of specific diseases (or classes
45 of diseases), limitations on certain classes of businesses (e.g., restaurants, health facilities), or control of
46 waste materials (e.g., sewage, garbage). These authorities may be centralized in one agency or distributed
47 across several, depending on the public policy preferences of the jurisdiction. Within one State, it is
48 possible for local agencies to vary widely due to flexibility in some State statutes and differing public
49 policy preferences at the local level. The program requirements and funding streams of the Federal

1 Government continue to have a powerful influence on the scope and organization of public health agencies
2 at the State and local level.

3
4 Recent research on public health statutes has examined the degree to which disease control statutes take
5 into account new and emerging infections and current community standards regarding civil rights
6 protections and privacy and the degree to which enabling statutes reflect current thinking about the mission
7 and essential services of public health. To the extent that statutes are not brought into line with current
8 thinking about public health or legal protections of individual members of the public, it may become
9 difficult for public health officials to take needed actions in the face of public health emergencies or to
10 assume leadership in developing community health improvement.

11
12 Without diminishing the role each jurisdiction has in tailoring a statute (or ordinance, charter, or
13 regulation) to local conditions and priorities, the Nation's public health infrastructure would be
14 strengthened if all jurisdictions had available the template of a model law and could regularly use that
15 model to consider improvements. The model should contain examples of complete statutory language for
16 key provisions (establishment of agency powers, authorities of agency director, surveillance for conditions
17 of public health importance, due process in enforcement actions to protect the public's health) and
18 principles and examples for use in crafting any other specific portion of the law.

19
20 ***Resources***

21
22 *Financial*

23
24 **15. (Developmental) Increase the proportion of State and local public health agencies that make**
25 **data available on public health expenditures by essential public health service.**

26
27 **Note:** The Public Health Foundation (PHF) led a study of eight States that estimated expenditures by
28 essential public health services. A joint NACCHO, National Association of Local Boards of Health, and
29 PHF study has recently looked at the feasibility of collecting expenditure data by essential public health
30 services at the local level.

31
32 Financial resources fuel the public health infrastructure. The Public Health Expenditures Project
33 conducted a recent study to estimate and aggregate expenditures in Federal agencies and State health
34 departments by the 10 essential public health services. The purpose was to understand the capacity to
35 collect such data apart from specific programmatic expenditures. Considerable difficulty was encountered
36 in collecting information, because expenditure information is not regularly collected using this framework.
37 Reporting requirements are different for different program areas and for different funding streams.
38 Understanding how and where resources are being expended for the essential public health services will
39 allow gaps to be identified and more effective allocation of resources. A standardized approach to the
40 collection and reporting of expenditures is necessary for a better understanding of where resources are
41 being directed.

1 ***Prevention Research***

2
3 ***Collaboration and Cooperation***

4
5 **16. (Developmental) Establish and implement an ongoing system that facilitates greater**
6 **collaboration and cooperation between public and private agencies conducting population-based**
7 **prevention research and ensures community input and participation in research efforts.**
8

9 Research is our investment in the future. Public health research is both funded by and conducted by
10 Federal, State, and local public health agencies, academic institutions, private industry, and philanthropic
11 institutions. The intent of this objective is to strengthen the capacity to conduct prevention research that
12 improves the practice of public health. Opportunities and incentives should be provided to attract new
13 researchers and to encourage collaboration with new partners. This effort should result in the setting of an
14 overall public health infrastructure research agenda. The Federal Government has a strong commitment to
15 health research as evidenced by the billions of dollars allocated annually to research at the National
16 Institutes of Health, CDC, the Agency for Health Care Policy and Research, and other Federal Public
17 Health Service agencies. State governments, private foundations, and private industry also are strong
18 supporters of research. To date, most resources have been directed toward biomedical research with a
19 focus more on individual disease or risk factors than on population-based prevention.
20

21 In recent years, researchers and research organizations have recognized the value of including diverse
22 populations and communities in research studies. As we move into the next decade, it will be important to
23 ensure that women, racial, ethnic, and underserved minorities continue to be included as human subjects in
24 population-based prevention and clinical research that is responsive to national, State, and local public
25 health priorities and needs.
26

27 Little research is being conducted on best practices in the public health system or on the public health
28 infrastructure. With major changes occurring in the way public health services are organized and delivered
29 (managed care, privatization, mergers, etc.), research will be needed to measure their impact on prevention
30 and health outcomes. The diversity of funding sources, including Federal, State, and local governments,
31 foundations, and the private sector, provides opportunities for improving the health status of communities.
32 A coordinated research program, based on national, State, and local priorities and support by public and
33 private funds, will help ensure conditions for people to be healthy. Projects such as the Guide to
34 Community Preventive Services will be a major contributor to identify research needs.
35

36 ***Summary Measures for Tracking Goals and Infrastructure Capacity***

37
38 **17. (Developmental) Increase the number of State and local public health agencies that use**
39 **summary measures of population health and the public health infrastructure.**
40

41 This objective addresses three tracking measures: (1) development of a set of summary population health
42 measures, (2) development of summary measures for the public health infrastructure, and (3) use of the
43 sets at the State and local levels. Summary measures will be useful for overall population tracking and for
44 investigating health differences in populations. It is important that such summary measures be amenable to
45 disaggregation into outcome-oriented variables for analysis and explication.
46

1 The summary measures model could consist of one of the following options:
2

- 3 • A single measure that combines mortality and morbidity into one number. This could be any of a
4 number of measures currently being used, including Quality-Adjusted Life Years (QALYs), Disability-
5 Adjusted Life Years (DALYs), Health-Adjusted Life Years (HALYs), or Years of Healthy Life
6 (YHL). YHL is currently used to track the Healthy People 2000 goal to increase the years of healthy
7 life.
8
- 9 • A summary index of disparity, possibly summarizing the range of disparity among population groups
10 for all the Healthy People 2010 objectives or for each Healthy People 2010 focus area.
11
- 12 • Several measures (components of the single measure) that represent primary summaries of health, such
13 as a measure of mortality, morbidity, disability, and disparity.
14
- 15 • Several summary measures could be shown and tracked. For example, we could show YHL, DALYs,
16 and a disparity index.
17
- 18 • Summary measures for the public health infrastructure will address the five areas that encompass the
19 Healthy People 2010 public health infrastructure objectives: workforce, information systems,
20 organizations, resources, and research.
21

22 For all these options considerable developmental work and methodological research are needed to
23 determine the robustness and sensitivity of the candidate measures.

24 **Related Objectives From Other Focus Areas**

25 **Educational and Community-Based Programs**

- 26 10 Community health promotion initiatives
- 27 11 Culturally appropriate community health promotion programs
- 28
- 29

30 **Environmental Health**

- 31 26 Environmental and environmental health information systems
- 32

33 **Oral Health**

- 34 19 State-based surveillance system
- 35

36 **Access to Quality Health Services**

- 37 A.5 Training to address health disparities
- 38 B.5 Racial/ethnic minority representation in the health professions
- 39

40 **Medical Product Safety**

- 41 10 Patient information about prescriptions
- 42

43 **Health Communication**

- 44 1 Public access to health information
- 45

46 **Cancer**

- 47 15 Statewide cancer registries
- 48

1 **Disability and Secondary Conditions**

2 12 Disability surveillance and health promotion programs

4 **Immunization and Infectious Diseases**

5 36 Laboratory confirmation of tuberculosis cases

7 **Sexually Transmitted Diseases**

8 11 STD clinics

10 **Resources**

11 **General**

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