Midcourse Review

HEALTHY PEOPLE 2010

Public Health Infrastructure 23

Co-Lead Agencies:

Centers for Disease Control and Prevention
Health Resources and Services Administration

Contents

Goal: Ensure that Federal, Tribal, State, and local health agencies have the infrastructure to provide essential public health services effectively.

Introduction*

The Public Health Infrastructure focus area supports the goals and objectives of all other focus areas, particularly those that address preparedness and prevention or management of chronic disease or emphasize healthy behavioral choices. The public health infrastructure objectives encompass Tribal, rural, and urban populations. They focus on four components: data and information systems, workforce, public health organizations, and prevention research.

Modifications to Objectives and Subobjectives

The following discussion highlights the modifications, including changes, additions, and deletions, to this focus area's objectives and subobjectives as a result of the midcourse review.

Five developmental objectives became measurable, and subobjectives were added to all five to better reflect the available data: continuing education for public health personnel (23-10), performance standards for essential public health services (23-11), access to public health laboratory services (23-13), access to epidemiology services (23-14), and review and evaluation of public health laws (23-15).

Three subobjectives were added to continuing education for public health personnel (23-10) to monitor progress at the Tribal (23-10a), State (23-10b), and local (23-10c) levels. Subobjective 23-10a remained developmental; 23-10b and c became measurable.

The objective for performance standards for essential public health services (23-11) was changed to include four measurable subobjectives: State and local subobjectives on the number of public health systems using the National Public Health Performance Standards Program (23-11a and b) and the number of such systems that meet National Public Health Performance Standards (23-11c and d).

Access to public health laboratory services (23-13) was modified to reflect a new data source. Eleven measurable subobjectives related to different laboratory service fields, such as food safety (23-13e) and training and education (23-13j), were added.

Four subobjectives were added to access to epidemiology services (23-14). State epidemiologists with formal training in epidemiology (23-14a) became measurable. Subobjectives for increasing the number of public health agencies with comprehensive epidemiology services at the Tribal (23-14b), State (23-14c), and local (23-14d) levels remained developmental.

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* Unless otherwise noted, data referenced in this focus area come from Healthy People 2010 and can be located at http://wonder.cdc.gov/data2010. See the section on DATA2010 in the Technical Appendix for more information.

Two measurable subobjectives were added to model statutes related to review and evaluation of public health laws (23-15): using the Turning Point Model State Public Health Act (23-15a) and using the Model State Emergency Health Powers Act (23-15b), reflecting availability of a new data source.

Ten objectives were reworded: public access to information and surveillance data (23-2), use of geocoding in health data systems (23-3), competencies for public health workers (23-8), training in essential public health services (23-9), continuing education for public health personnel (23-10), performance standards for essential public health services (23-11), health improvement plans (23-12), access to public health laboratory services (23-13), review and evaluation of public health laws (23-15), and population-based prevention research (23-17).

Public access to information and surveillance data (23-2) and data for the Leading Health Indicators, the Health Status Indicators, and Priority Data Needs at Tribal, State, and local levels (23-5) were combined into objective 23-2. The wording of objective 23-2 was revised to "increase the proportion of Federal, Tribal, State, and local health agencies that have made information available for internal or external public use in the past year based on health indicators related to Healthy People 2010 objectives."

Use of geocoding in health data systems (23-3) was revised to include national but not State and local health data systems. The baseline was changed to 50 percent, and the target was set at 100 percent.

Subobjectives for competencies for public health workers (23-8) were added to reflect the Tribal and local, but not national, data available and to allow measurement of the extent to which the competencies have been incorporated into essential public health services. Furthermore, the wording was changed to incorporate competencies in the essential public health services into "job descriptions and performance evaluations" rather than "personnel systems." The revised language of competencies for public health workers (23-8) is "increase the proportion of Tribal and local agencies that incorporate core competencies in the essential public health services into job descriptions and performance evaluations."

Training in essential public health services (23-9) was modified to reflect competencies identified in 2001.[1, 2, 3] The revised wording of the objective is "increase the proportion of Council on Education for Public Health (CEPH) accredited schools of public health, CEPH-accredited academic programs, and schools of nursing (with a public health or community health component) that integrate core competencies in the essential public health services into curricula."

Continuing education for public health personnel (23-10) was refocused to measure the proportion of agency personnel, rather than agencies, trained with continuing education, which includes the identified core competencies. The revised objective is "increase the proportion of Tribal, State, and local public health personnel who receive continuing education consistent with the core competencies in the essential public health services."

Health improvement plans (23-12) was modified to add a fourth subobjective to reflect a new data source. The new subobjective (23-12d) is "increase local jurisdictions that have linked health improvement plans to the State plans" and is developmental.

Population-based prevention research (23-17) was reworded to specify Tribal agencies, based on a new potential data source. The objective remained developmental.

As stated in *Healthy People 2010*: "Most developmental objectives have a potential data source with a reasonable expectation of data points by the year 2004 to facilitate setting 2010 targets in the mid-decade review. Developmental objectives with no baseline at the midcourse will be dropped." Accordingly, at the midcourse review some developmental objectives and subobjectives were deleted due to lack of a data source. However, the U.S. Department of Health and Human Services (HHS) and the agencies that serve as the leads for the Healthy People 2010 initiative will consider ways to ensure that these public health issues retain prominence despite their current lack of data.

Three objectives were deleted from the Public Health Infrastructure focus area due to a lack of a baseline: public health employee access to the Internet (23-1), data for the Leading Health Indicators, the Health Status Indicators, and Priority Data Needs at the Tribal, State, and local levels (23-5), and data on public health expenditures (23-16). As stated previously, parts of objective 23-5 were retained and incorporated into public access to information and surveillance data (23-2).

Progress Toward Healthy People 2010 Targets

The following discussion highlights objectives that met or exceeded their 2010 targets; moved toward the targets, demonstrated no change, or moved away from the targets; and those that lacked data to assess progress. Progress is illustrated in the Progress Quotient bar chart (see Figure 23-1), which displays the percent of targeted change achieved for objectives and subobjectives with sufficient data to assess progress. Data were available to measure progress for two objectives. Timely release of data for objectives (23-7) moved toward its target. The use of geocoding in health data systems (23-3) showed no change (see Figure 23-1 for the Progress Quotient).

Objectives that met or exceeded their targets. No objectives in this focus area met or exceeded their targets.

Objectives that moved toward their targets. Timely release of data for objectives (23-7) calls for an increase in the proportion of Healthy People 2010 objectives measured by major data systems that released data within 1 year of the end of data collection. In 2000, data for 36 percent of the objectives and subobjectives measured by major data systems were released within 1 year of the end of data collection. Reporting improved by 2004, when 62 percent of all data that tracked Healthy People 2010 objectives was released within 1 year of collection, achieving 41 percent of the targeted change.

Objectives that demonstrated no change. The use of geocoding in major health data systems (23-3) remained static, with 50 percent of major health data systems using geocoding[4] in both 2000 and 2004.

Objectives that moved away from their targets. No objectives in this focus area moved away from their targets.

Objectives that could not be assessed. Progress on 15 objectives could not be assessed because of insufficient data. Of these, three objectives were deleted because data were unavailable (23-1, 23-5, and 23-6). Five objectives became measurable and are anticipated to have data for trend assessment by the end of the decade (23-10, 23-11, 23-13, 23-14, and 23-15). Seven were retained as developmental, with data for assessment anticipated by the end of the decade (23-2, 23-4, 23-6, 23-8, 23-9, 23-12, and 23-17).

Progress Toward Elimination of Health Disparities

The public health infrastructure objectives are not population based. Therefore, a disparity analysis was not conducted, and no disparities table is included in the *Healthy People 2010 Midcourse Review*. The objectives work to eliminate disparities in access to care and health outcomes for vulnerable populations by addressing the capacity and resources of the public health infrastructure and the training of the persons who work within it.

Opportunities and Challenges

Currently many efforts are under way at the national, State, and local levels to address four public health infrastructure areas: education and training of public health professionals, development and coordination of data and information systems, strengthening of State and local public health organizations, and increase of prevention research. These efforts reflect the many opportunities and challenges associated with the public health infrastructure.

The education and training of the public health workforce is central to the Nation's health. Public health professionals need to be proficient in a variety of core skills and competencies such as analysis, assessment, policy development, and program planning.[3] This need has been emphasized by the Institute of Medicine's (IOM's) report *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*.[5] The maintenance and expansion of an adequately trained public health workforce requires relevant education and training.[1, 2, 3]

These competencies, which are necessary to build and maintain a strong public health system, provide the most explicit statements available to date about the skills, knowledge, and functions a public health professional needs to deliver high-quality public health services.[1, 2, 3] The competencies, training, and access to continuing education for the public health workforce are viewed as essential because of the effects that each could have on the achievement of Healthy People 2010 goals and other objectives.[1, 2, 3]

Several opportunities exist for building a strong public health workforce; for example, competencies can be required by job descriptions or built into performance appraisal systems, new graduates can be trained to enter the workforce with competencies in core areas, and agencies can build in ongoing training and allocate time and resources for competency-based continuing education for all employees.[1, 2, 3] Current efforts to address the education and training of public health professionals include the following:

- National Laboratory Training Network (NLTN).
- Educational Incentive for Curriculum Development and Training Program.

Sponsored by the Centers for Disease Control and Prevention (CDC) and the Association of Public Health Laboratories, NLTN provides clinical, environmental, and public health laboratory training for laboratory professionals throughout the United States.[6]

The Educational Incentive for Curriculum Development and Training Program (Bioterrorism Training and Curriculum Development Program) is supported by the Health Resources and Services Administration (HRSA). The program's goal is to develop a health care workforce with the knowledge, skills, abilities, and core competencies to recognize indicators of a terrorist event; meet the acute care

needs of patients, including pediatric and other vulnerable populations; participate in a coordinated, multidisciplinary response to terrorist events and other public health emergencies and include consideration of surge capacity issues; and effectively alert the public health system of such an event at the national, State, and community levels.[7]

HRSA also supports Public Health Training Centers that provide basic and advanced training for the public health workforce.[8]

The National Guideline Clearinghouse (NGC) is another example of a program geared toward the training of health care professionals. The HHS Agency for Healthcare Research and Quality maintains NGC, created in partnership with the American Medical Association and America's Health Insurance Plans (formerly American Association of Health Plans). NGC is a public resource for evidence-based clinical practice guidelines.[9]

Data and Information Systems

Information technology (IT) is a core component of the public health infrastructure. IT can play a major role in responding to public health emergencies. Current efforts to develop and coordinate public health data and information systems include the following:

- Office of the National Coordinator for Health Information Technology (ONC).
- Public Health Information Network (PHIN).
- National Environmental Public Health Tracking Network.

An effort to assist in the development of health IT systems, ONC coordinates the HHS health IT programs. ONC provides leadership for the development and nationwide implementation of an interoperable health IT infrastructure, including the seamless exchange of information between different operating systems. Such an infrastructure is designed to improve the quality and efficiency of health care and the ability of consumers to manage their care and safety.[10]

PHIN is a national initiative run by CDC to improve electronic communication within the public health community. It defines and documents the systems needed to support public health professionals, identifies industry standards needed to make those systems work together, and develops the specifications needed to make the standards do the work of public health. PHIN includes a portfolio of software and solutions to maintain interconnected systems throughout public health. Among the solutions are those supporting surveillance, outbreak management, laboratory response, emergency response, and administration.[11]

The National Association of County and City Health Officials (NACCHO) and CDC collaborate on the National Environmental Public Health Tracking Network. The goal of the network is to collect, integrate, analyze, and interpret data or information from monitoring environmental hazards, human exposure to environmental hazards, and human health effects potentially related to exposure to environmental hazards to better protect communities from adverse health effects.[12]

Public Health Organizations

In its congressional report, *Public Health's Infrastructure: A Status Report*,[13] IOM found that

- Only one-third of the U.S. population is effectively served by public health agencies.
- In a test of e-mail capacity, only 35 percent of messages to local health departments were delivered successfully.
- Only 45 percent of local health departments have broadcast fax capability.

State and local health agencies, which are first responders to community health threats, have been stretched in responding to fears about severe acute respiratory syndrome (SARS), avian influenza, natural disasters, bioterrorism, and many other potential threats to the public's health. The infrastructure of the Nation's public health system has been weakened over time because of emerging health threats as well as the responsibility to aid in disease prevention, response to disasters, protection against environmental hazards, and encouragement of healthy behaviors.

Some opportunities exist to aid in the strengthening of the Nation's public health system. NACCHO, in collaboration with CDC, has produced *MAPP—Mobilizing for Action through Planning and Partnerships*.[14] MAPP is a communitywide strategic planning and implementation tool for improving community health.

CDC also maintains the National Public Health Performance Standards Program, which is a national, State, and local instrument for assessing the public health system capacity to perform essential services.[15] State and local health departments can use tools from this site to determine their infrastructure needs and develop public health improvement plans.

An example of programs that provide assistance to States in strengthening public health infrastructure is the Title V Maternal and Child Block Grants managed by HRSA. Another example is Title V of the Social Security Act, one of the largest Federal block grant programs. It leads the Nation in ensuring the health of all mothers, infants, adolescents, and children, especially those with special health care needs. Infrastructure building services provided under the grant include, but are not limited to, needs assessments, evaluation, planning, policy development, standards development, and training.[16]

Project Public Health Ready, a collaboration between NACCHO and CDC, prepares local government public health agencies to respond to emergencies and to protect the public's health through a competency-based training and recognition program.[17]

Emerging Issues

Because of the broad-based origins and intrinsically cross-cutting nature of the public health infrastructure, issues and limitations are wide ranging. Some examples include the following:

- A greater need for adequate and continuing training in public health core competencies for State and local health departments.
- State-level information technology to train the public health workforce in the field.
- Effective communication between State health departments to disseminate and receive information at the Federal and local levels.

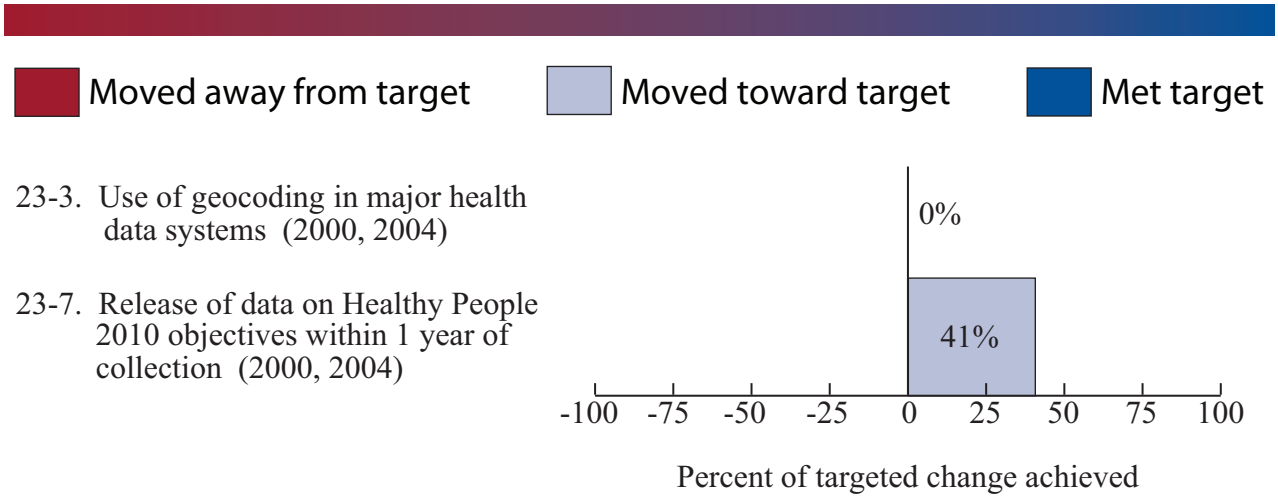
- Enhancement of State and local health department links to the U.S. Department of Homeland Security and other agencies involved in community-based and national disaster response.
- Ability of State and local health care systems to rapidly shift the allocation of their resources from chronic diseases to emergency situations like bioterrorism and infectious disease outbreak.

The events of the first half of the decade have given rise to new State-led initiatives in the areas of enhanced communications and coordinated information systems. States have begun to pool resources for information systems that can ensure the timely exchange of critical data. Nearly half of the States have collaborated on standardized laboratory information system specifications.[18] Also, nearly half of the States have financed a nationwide learning management system known as the Training Finder Real-time Affiliate Integrated Network.[19] A catalog of information and resources that can assist public health leaders in tracking the development and activities related to information systems is available at the Public Health Infrastructure Resource Center.[20]

State and local health departments have purchased updated hardware and information and communication systems for surveillance and other purposes with the Federal bioterrorism dollars. However, data sharing among these systems overall remains limited.[21]

Although bioterrorism and emergency preparedness are relatively new issues that the public health system must face, the issues of infectious disease outbreak and natural disasters have always been present. The urgent and frequently unexpected nature of these events places stress on a public health system that has increasingly focused on responding to the effects of increasing chronic disease. Achieving gains in the Nation's workforce, laboratory, surveillance, information systems, research, legal, and other public health system capacities are central to allowing for effective response to these stresses. Such gains need to cover the wide spectrum of issues that burden the Nation's public health infrastructure. The future success of the public health system will depend on the ability to change to meet new threats to the public's health.

Figure 23-1. Progress Quotient Chart for Focus Area 23: Public Health Infrastructure



Notes: Tracking data for objectives 23-2, 23-4, 23-6, 23-8, 23-9, 23-10a, b, and c, 23-11a through d, 23-12a through d, 23-13a through k, 23-14a through d, 23-15a and b, and 23-17 are unavailable. Objectives 23-1, 23-5, and 23-16 were deleted at the midcourse.

Years in parentheses represent the baseline data year and the most recent data year used to compute the percent of the Healthy People 2010 target achieved.

$$\text{Percent of targeted change achieved} = \left(\frac{\text{Most recent value} - \text{baseline value}}{\text{Year 2010 target} - \text{baseline value}}\right) \times 100$$

Objectives and Subobjectives for Focus Area 23: Public Health Infrastructure

Goal: Ensure that Federal, Tribal, State, and local health agencies have the infrastructure to provide essential public health services effectively.

As a result of the Healthy People 2010 Midcourse Review, changes were made to the Healthy People 2010 objectives and subobjectives. These changes are specific to the following situations:

- Changes in the wording of an objective to more accurately describe what is being measured.
- Changes to reflect a different data source or new science.
- Changes resulting from the establishment of a baseline and a target (that is, when a formerly developmental objective or subobjective became measurable).
- Deletion of an objective or subobjective that lacked a data source.
- Correction of errors and omissions in *Healthy People 2010.*

Revised baselines and targets for measurable objectives and subobjectives do not fall into any of the above categories and, thus, are not considered a midcourse review change.[1]

When changes were made to an objective, three sections are displayed:

1. In the Original Objective section, the objective as published in *Healthy People 2010* in 2000 is shown.
2. In the Objective With Revisions section, strikethrough indicates text deleted, and underlining is used to show new text.
3. In the Revised Objective section, the objective appears as revised as a result of the midcourse review.

Details of the objectives and subobjectives in this focus area, including any changes made at the midcourse, appear on the following pages.

[1] See Technical Appendix for more information on baseline and target revisions.

Data and Information Systems

OBJECTIVE DELETED

23-1. ***(Objective deleted due to lack of data source)*** **(Developmental) Increase the proportion of Tribal, State, and local public health agencies that provide Internet and e-mail access for at least 75 percent of their employees and that teach employees to use the Internet and other electronic information systems to apply data and information to public health practice.**

ORIGINAL OBJECTIVE

23-2. **(Developmental) Increase the proportion of Federal, Tribal, State, and local health agencies that have made information available to the public in the past year on the Leading Health Indicators, Health Status Indicators, and Priority Data Needs.**

Potential data sources: CDC, NCHS; National Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); National Public Health Performance Standards Program, CDC, PHPPO; IHS.

OBJECTIVE WITH REVISIONS

23-2. **(Developmental) Increase the proportion of Federal, Tribal,* State, and local health agencies that have made information available for internal or external public use in the past year based on health indicators related to Healthy People 2010 objectives~~to the public in the past year on the Leading Health Indicators, Health Status Indicators, and Priority Data Needs.~~†**

* Tribal agencies encompass American Indian/Alaska Native health departments, regional Tribal organizations, health boards, and Tribal Epidemiology Centers (Epi Centers).
† There are currently no data sources at the Federal, State, or local level.

Potential data source: ~~CDC, NCHS; National Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); National Public Health Performance Standards Program, CDC, PHPPO; IHS.~~Survey of Regionally Based Public Health Services/Infrastructure in Indian Country, Tribal Epidemiology Centers (Epi Centers), CDC, IHS.

REVISED OBJECTIVE

23-2. **(Developmental) Increase the proportion of Federal, Tribal,* State, and local health agencies that have made information available for internal or external public use in the past year based on health indicators related to Healthy People 2010 objectives.†**

* Tribal agencies encompass American Indian/Alaska Native health departments, regional Tribal organizations, health boards, and Tribal Epidemiology Centers (Epi Centers).
† There are currently no data sources at the Federal, State, or local level.

REVISED OBJECTIVE *(continued)*

Potential data source: Survey of Regionally Based Public Health Services/ Infrastructure in Indian Country, Tribal Epidemiology Centers (Epi Centers), CDC, IHS.

ORIGINAL OBJECTIVE

23-3. Increase the proportion of all major national, State, and local health data systems that use geocoding to promote nationwide use of geographic information systems (GIS) at all levels.

Target: 90 percent.

Baseline: 45 percent of major national, State, and local health data systems geocoded records to street address or latitude and longitude in 2000.

Target setting method: 100 percent improvement.

Data source: CDC, NCHS.

OBJECTIVE WITH REVISIONS

23-3. Increase the proportion of ~~all~~ major national~~, State, and local~~ health data systems that use geocoding to promote nationwide use of geographic information systems (GIS).~~at all levels.~~

Target: 9100 percent.

Baseline: ~~45~~ 50 percent of major national~~, State, and local~~ health data systems geocoded records to street address or latitude and longitude in 2000.

Target setting method: 100 percent improvement.

Data source: CDC, NCHS.

REVISED OBJECTIVE

23-3. Increase the proportion of major national health data systems that use geocoding to promote nationwide use of geographic information systems (GIS).

Target: 100 percent.

Baseline: 50 percent of major national health data systems geocoded records to street address or latitude and longitude in 2000.

Target setting method: 100 percent improvement.

Data source: CDC, NCHS.

NO CHANGE IN OBJECTIVE
(Data updated and footnoted)

23-4. Increase the proportion of population-based Healthy People 2010 objectives for which national data are available for all population groups identified for the objective.

Target: 100 percent.

Baseline: 13[1] percent of the population-based objectives had national data for all select population groups in 2004.[1]

Target setting method: Total coverage.

Data source: CDC, NCHS.

[1] Baseline and baseline year revised from 11 and 2000 after November 2000 publication.

OBJECTIVE DELETED

23-5. ***(Objective deleted due to lack of data source and to be combined with objective 23-2)*** **(Developmental) Increase the proportion of Leading Health Indicators, Health Status Indicators, and Priority Data Needs for which data—especially for select populations—are available at the Tribal, State, and local levels.**

NO CHANGE IN OBJECTIVE
(Data updated and footnoted)

23-6. Increase the proportion of Healthy People 2010 objectives that are tracked regularly at the national level.

Target: 100 percent.

Baseline: 44[1] percent of measurable objectives, including their subobjectives, were tracked at least every 3 years in 2004.[1]

Target setting method: Total coverage.

Data source: CDC, NCHS.

[1] Baseline and baseline year revised from 82 and 2000 after November 2000 publication.

NO CHANGE IN OBJECTIVE

23-7. Increase the proportion of Healthy People 2010 objectives for which national data are released within 1 year of the end of data collection.

Target: 100 percent.

NO CHANGE IN OBJECTIVE *(continued)*

Baseline: 36 percent of the objectives, including their subobjectives, measured by major data systems were tracked, with data released within 1 year of the end of data collection in 2000.

Target setting method: Total coverage (as measured by major data systems).

Data source: CDC, NCHS.

Workforce

ORIGINAL OBJECTIVE

23-8. (Developmental) Increase the proportion of Federal, Tribal, State, and local agencies that incorporate specific competencies in the essential public health services into personnel systems.

Potential data sources: National Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); HRSA; IHS.

OBJECTIVE WITH REVISIONS

23-8. (Developmental) Increase the proportion of ~~Federal,~~ Tribal~~, State,~~ and local agencies that incorporate ~~specific~~ core competencies in the essential public health services into ~~personnel systems~~job descriptions and performance evaluations.

23-8a. Increase the proportion of Tribal health agencies that incorporate core competencies in the essential public health services into job descriptions and performance evaluations.

23-8b. Increase the proportion of local health agencies that incorporate core competencies in the essential public health services into job descriptions and performance evaluations.

Potential data source: Profile of Local Health Departments, National Association of County and City Health Officials (NACCHO)~~;Association of State and Territorial Health Officials(ASTHO); HRSA; IHS~~.

REVISED OBJECTIVE

23-8. (Developmental) Increase the proportion of Tribal and local agencies that incorporate core competencies in the essential public health services into job descriptions and performance evaluations.

REVISED OBJECTIVE *(continued)*

23-8a. Increase the proportion of Tribal health agencies that incorporate core competencies in the essential public health services into job descriptions and performance evaluations.

23-8b. Increase the proportion of local health agencies that incorporate core competencies in the essential public health services into job descriptions and performance evaluations.

Potential data source: Profile of Local Health Departments, National Association of County and City Health Officials (NACCHO).

ORIGINAL OBJECTIVE

23-9. (Developmental) Increase the proportion of schools for public health workers that integrate into their curricula specific content to develop competency in the essential public health services.

Potential data sources: Association of Schools of Public Health; American Association of Medical Colleges; HRSA's Bureau of Health Professions; American Association of Colleges of Nursing.

OBJECTIVE WITH REVISIONS

23-9. (Developmental) Increase the proportion of Council on Education for Public Health (CEPH) accredited schools ~~for~~of public health, CEPH-accredited academic programs, and schools of nursing (with a public health or community health component) that integrate core competencies in the essential public health services into curricula. ~~workers that integrate into their curricula specific content to develop competency in the essential public health services.~~

Potential data sources: ~~Association of Schools of Public Health; American Association of Medical Colleges; HRSA's Bureau of Health Professions; American Association of Colleges of Nursing~~Public Health Competencies Survey (PHCS), Council on Linkages in collaboration with American Schools of Public Health, Association of Teachers of Preventive Medicine, and the Quad Council.

REVISED OBJECTIVE

23-9. (Developmental) Increase the proportion of Council on Education for Public Health (CEPH) accredited schools of public health, CEPH-accredited academic programs, and schools of nursing (with a public health or community health component) that integrate core competencies in the essential public health services into curricula.

REVISED OBJECTIVE *(continued)*

Potential data source: Public Health Competencies Survey (PHCS), Council on Linkages in collaboration with American Schools of Public Health, Association of Teachers of Preventive Medicine, and the Quad Council.

ORIGINAL OBJECTIVE

23-10. (Developmental) Increase the proportion of Federal, Tribal, State, and local public health agencies that provide continuing education to develop competency in essential public health services for their employees.

Potential data sources: National Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); IHS.

OBJECTIVE WITH REVISIONS

23-10. ~~(Developmental)~~ Increase the proportion of ~~Federal,~~ Tribal, State, and local public health ~~agencies~~ personnel who ~~provide~~ receive continuing education consistent with the core competencies ~~to develop competency~~ in the essential public health services~~for their employees~~.

Target and baseline:

Objective	Increase in the Proportion of Public Health Personnel Who Receive Continuing Education Consistent With the Core Competencies in the Essential Public Health Services	2000 Baseline	2010 Target
		Percent	
23-10a.	Tribal public health personnel	Developmental	
23-10b.	State public health personnel*	13	14
23-10c.	Local public health personnel*	15	17

* Data are for State and local public health nurses and address general continuing education. As data for other health professionals are obtained, the information will be added.

Target setting method: 10 percent improvement.

~~Potential d~~Data sources: National ~~Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); IHS~~Sample Survey of Registered Nurses (NSSRN), HRSA, BHPr.

REVISED OBJECTIVE

23-10. Increase the proportion of Tribal, State, and local public health personnel who receive continuing education consistent with the core competencies in the essential public health services.

REVISED OBJECTIVE *(continued)*

Target and baseline:

Objective	Increase in the Proportion of Public Health Personnel Who Receive Continuing Education Consistent With the Core Competencies in the Essential Public Health Services	2000 Baseline	2010 Target
		Percent	
23-10a.	Tribal public health personnel	Developmental	
23-10b.	State public health personnel*	13	14
23-10c.	Local public health personnel*	15	17

* Data are for State and local public health nurses and address general continuing education. As data for other health professionals are obtained, the information will be added.

Target setting method: 10 percent improvement.

Data source: National Sample Survey of Registered Nurses (NSSRN), HRSA, BHPr.

Public Health Organizations

ORIGINAL OBJECTIVE

23-11. (Developmental) Increase the proportion of State and local public health agencies that meet national performance standards for essential public health services.

Potential data source: National Public Health Performance Standards Program, CDC, PHPPO.

OBJECTIVE WITH REVISIONS

23-11. ~~(Developmental)~~ Increase the number ~~proportion~~ of State and local public health ~~agencies~~ systems that meet national performance standards for the essential public health services.

Target and baseline:

Objective	Increase in State and Local Public Health Systems That Use the National Public Health Performance Standards Program	2004 Baseline	2010 Target
		Number	
23-11a.	State public health systems	9	35

OBJECTIVE WITH REVISIONS *(continued)*

		Percent	
23-11b.	Local public health systems	12	50
	Increase in State and Local Public Health Systems Participating in the National Public Health Performance Standards Program That Meet National Public Health Performance Standards		
		Percent	
23-11c.	State public health systems	0	50
23-11d.	Local public health systems	36	50

Target setting method: Expert opinion.

~~Potential d~~Data source: National Public Health Performance Standards Program, CDC, Office of the Chief of Public Health Practice.~~PHPPO~~.

REVISED OBJECTIVE

23-11. Increase the number of State and local public health systems that meet national performance standards for the essential public health services.

Target and baseline:

Objective	Increase in State and Local Public Health Systems That Use the National Public Health Performance Standards Program	2004 Baseline	2010 Target
		Number	
23-11a.	State public health systems	9	35
		Percent	
23-11b.	Local public health systems	12	50
	Increase in State and Local Public Health Systems Participating in the National Public Health Performance Standards Program That Meet National Public Health Performance Standards		
		Percent	
23-11c.	State public health systems	0	50
23-11d.	Local public health systems	36	50

Target setting method: Expert opinion.

REVISED OBJECTIVE *(continued)*

Data source: National Public Health Performance Standards Program, CDC, Office of the Chief of Public Health Practice.

ORIGINAL OBJECTIVE

23-12. Increase the proportion of Tribes, States, and the District of Columbia that have a health improvement plan and increase the proportion of local jurisdictions that have a health improvement plan linked with their State plan.

Target and baseline:

Objective	Jurisdiction	1997 Baseline (unless noted)	2010 Target
		Percent	
23-12a.	Tribes	Developmental	
23-12b.	States and the District of Columbia	78	100
23-12c.	Local jurisdictions	32 (1992–93)	80

Target setting method: Total coverage for Tribes, States, and the District of Columbia; 150 percent improvement for local jurisdictions.

Data sources: National Profile of Local Health Departments, National Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); IHS.

OBJECTIVE WITH REVISIONS

23-12. Increase the proportion of Tribales, States,* ~~and the District of Columbia~~ and local health agencies that have implemented a health improvement plan and increase the proportion of local health jurisdictions that have a health improvement plan linked with their State plan.

Target and baseline:

Objective	~~Jurisdiction~~Increase in Jurisdictions That Have Implemented a Health Improvement Plan	1997 Baseline (unless noted)	2010 Target
		Percent	
23-12a.	Trib~~es~~al agencies†	Developmental	
23-12b.	State~~s~~ and the District of Columbia health agencies	78	100
23-12c.	Local health ~~jurisdictions~~agencies	32 (1992–93)	80

OBJECTIVE WITH REVISIONS *(continued)*

23-12d.	Local jurisdictions~~Departments~~ that have linked health improvement plans to the State plans	Developmental

* Includes the District of Columbia.
† At this time, data for Tribal agencies are not collected. However, if data should become available by 2010, the information will be included.

Target setting method: Total coverage for ~~Tribes,~~ States and the District of Columbia; 150 percent improvement for local ~~jurisdictions~~health departments.

Data sources: ~~National~~ Profile of Local ~~Health Departments~~Public Health Agencies Study and National Profile of Local Health Departments, National Association of County and City Health Officials (NACCHO); Salary Survey of State and Territorial Health Officials, Association of State and Territorial Health Officials (ASTHO)~~; IHS~~.

REVISED OBJECTIVE

23-12. Increase the proportion of Tribal, State,* and local health agencies that have implemented a health improvement plan and increase the proportion of local health jurisdictions that have implemented a health improvement plan linked with their State plan.

Target and baseline:

Objective	Increase in Jurisdictions That Have Implemented a Health Improvement Plan	1997 Baseline (unless noted)	2010 Target
		Percent	
23-12a.	Tribal agencies†	Developmental	
23-12b.	State and the District of Columbia health agencies	78	100
23-12c.	Local health agencies	32 (1992–93)	80
23-12d.	Local jurisdictions that have linked health improvement plans to the State plans	Developmental	

* Includes the District of Columbia.
† At this time, data for Tribal agencies are not collected. However, if data should become available by 2010, the information will be included.

Target setting method: Total coverage for States and the District of Columbia; 150 percent improvement for local health departments.

Data sources: Profile of Local Public Health Agencies Study and National Profile of Local Health Departments, National Association of County and City Health Officials (NACCHO); Salary Survey of State and Territorial Health Officials, Association of State and Territorial Health Officials (ASTHO).

ORIGINAL OBJECTIVE

23-13. (Developmental) Increase the proportion of Tribal, State, and local health agencies that provide or assure comprehensive laboratory services to support essential public health services.

Potential data sources: CDC; Association of Public Health Laboratories; Association of State and Territorial Health Officials (ASTHO); and National Association of County and City Health Officials (NACCHO).

OBJECTIVE WITH REVISIONS

23-13. ~~(Developmental)~~ Increase the proportion of Tribal* and~~,~~ State~~,~~ † ~~and local~~ public health agencies that provide or assure comprehensive laboratory services to support essential public health services.

Target and baseline:

Objective	Increase in State Public Health Agencies That Provide or Assure Comprehensive Laboratory Services	2004 Baseline (States‡)	2010 Target
		Percent	
23-13a.	Disease prevention, control, and surveillance	90	98
23-13b.	Integrated data management	69	85
23-13c.	Reference and specialized testing	65	80
23-13d.	Environmental health and protection	31	70
23-13e.	Food safety	2	50
23-13f.	Laboratory improvement and regulation	94	99
23-13g.	Policy development	23	50
23-13h.	Emergency response	29	65
23-13i.	Public health related research	65	85
23-13j.	Training and education	85	90
23-13k.	Partnerships and communication	48	75

* At this time, data for Tribal agencies are not collected. However, if data should become available by 2010, the information will be included.

† Includes Puerto Rico and the District of Columbia.

Target setting method: Expert opinion.

~~Potential d~~Data sources: Comprehensive Laboratory Services Survey (CLSS), ~~CDC; Association of Public Health Laboratories; Association of State and Territorial Health Officials (ASTHO); National Association of County and City Health Officials (NACCHO)~~Association of Public Health Laboratories (APHL), Leadership Committee.

REVISED OBJECTIVE

23-13. Increase the proportion of Tribal* and State† public health agencies that provide or assure comprehensive laboratory services to support essential public health services.

Target and baseline:

Objective	Increase in State Public Health Agencies That Provide or Assure Comprehensive Laboratory Services	2004 Baseline (States†)	2010 Target
		Percent	
23-13a.	Disease prevention, control, and surveillance	90	98
23-13b.	Integrated data management	69	85
23-13c.	Reference and specialized testing	65	80
23-13d.	Environmental health and protection	31	70
23-13e.	Food safety	2	50
23-13f.	Laboratory improvement and regulation	94	99
23-13g.	Policy development	23	50
23-13h.	Emergency response	29	65
23-13i.	Public health related research	65	85
23-13j.	Training and education	85	90
23-13k.	Partnerships and communication	48	75

* At this time, data for Tribal agencies are not collected. However, if data should become available by 2010, the information will be included.
† Includes Puerto Rico and the District of Columbia.

Target setting method: Expert opinion.

Data source: Comprehensive Laboratory Services Survey (CLSS), Association of Public Health Laboratories (APHL).

ORIGINAL OBJECTIVE

23-14. (Developmental) Increase the proportion of Tribal, State, and local public health agencies that provide or assure comprehensive epidemiology services to support essential public health services.

Potential data sources: Council of State and Territorial Epidemiologists; IHS.

OBJECTIVE WITH REVISIONS

23-14. ~~(Developmental)~~ Increase the proportion of Tribal, State, and local public health agencies that provide or assure comprehensive epidemiology services to support essential public health services.

Target and baseline:

Objective	Increase in Public Health Agencies That Provide or Assure Comprehensive Epidemiology Services To Support Essential Public Health Services	2001 Baseline	2010 Target
		Percent	
23-14a.	State epidemiologists with formal training in epidemiology	58	80
23-14b.	Tribal public health agencies*	Developmental	
23-14c.	State public health agencies	Developmental	
23-14d.	Local public health agencies	Developmental	

* Tribal agencies encompass American Indian/Alaska Native health departments, regional Tribal organizations, health boards, and Tribal Epidemiology Centers (EpiCenters).

Target setting method: Expert opinion.

~~Potential d~~Data sources: Epidemiology Capacity Assessment, Council of State and Territorial Epidemiologists (CSTE); Survey of Regionally Based Public Health Services/ Infrastructure in Indian Country, Tribal Epidemiology Centers Program (EpiCenters), CDC, IHS.

REVISED OBJECTIVE

23-14. Increase the proportion of Tribal, State, and local public health agencies that provide or assure comprehensive epidemiology services to support essential public health services.

Target and baseline:

Objective	Increase in Public Health Agencies That Provide or Assure Comprehensive Epidemiology Services To Support Essential Public Health Services	2001 Baseline	2010 Target
		Percent	
23-14a.	State epidemiologists with formal training in epidemiology	58	80
23-14b.	Tribal public health agencies*	Developmental	
23-14c.	State public health agencies	Developmental	
23-14d.	Local public health agencies	Developmental	

REVISED OBJECTIVE *(continued)*

* Tribal agencies encompass American Indian/Alaska Native health departments, regional Tribal organizations, health boards, and Tribal Epidemiology Centers (EpiCenters).

Target setting method: Expert opinion.

Data sources: Epidemiology Capacity Assessment, Council of State and Territorial Epidemiologists (CSTE); Survey of Regionally Based Public Health Services/ Infrastructure in Indian Country, Tribal Epidemiology Centers Program (EpiCenters), CDC, IHS.

ORIGINAL OBJECTIVE

23-15. (Developmental) Increase the proportion of Federal, Tribal, State, and local jurisdictions that review and evaluate the extent to which their statutes, ordinances, and bylaws assure the delivery of essential public health services.

Potential data sources: National Conference of State Legislators; Association of State and Territorial Health Officials (ASTHO); National Association of County and City Health Officials (NACCHO); IHS.

OBJECTIVE WITH REVISIONS

23-15. ~~(Developmental)~~ Increase the ~~proportion~~ number of ~~Federal, Tribal,~~ States* ~~and local jurisdictions~~ that review and evaluate ~~the extent to which~~ their public health ~~statutes, ordinances, and bylaws assure the delivery of essential public health services~~ using tools such as the Turning Point Model State Public Health Act and the Model State Emergency Health Powers Act.

Target and baseline:

Objective	Increase in States and the District of Columbia That Use Tools To Review and Evaluate Their Public Health Laws	2003 Baseline	2010 Target
		Number	
23-15a.	Using the Turning Point Model State Public Health Act	30	51
23-15b.	Using the Model State Emergency Health Powers Act	35	51

* Includes the District of Columbia.

Target setting method: Total coverage.

~~Potential d~~Data sources: ~~National Conference of State Legislators; Association of State and Territorial Health Officials (ASTHO); National Association of County and City Health Officials (NACCHO); IHS~~Center for Law and the Public's Health, Georgetown University Law Center and Johns Hopkins Bloomberg School of Public Health.

REVISED OBJECTIVE

23-15. Increase the number of States* that review and evaluate their public health laws using tools such as the Turning Point Model State Public Health Act and the Model State Emergency Health Powers Act.

Target and baseline:

Objective	Increase in States and the District of Columbia That Use Tools To Review and Evaluate Their Public Health Laws	2003 Baseline	2010 Target
		Number	
23-15a.	Using the Turning Point Model State Public Health Act	30	51
23-15b.	Using the Model State Emergency Health Powers Act	35	51

* Includes the District of Columbia.

Target setting method: Total coverage.

Data source: Center for Law and the Public's Health, Georgetown University Law Center and Johns Hopkins Bloomberg School of Public Health.

Resources

OBJECTIVE DELETED

23-16. *(Objective deleted due to lack of data source)* (Developmental) Increase the proportion of Federal, Tribal, State, and local public health agencies that gather accurate data on public health expenditures, categorized by essential public health service.

Prevention Research

ORIGINAL OBJECTIVE

23-17. (Developmental) Increase the proportion of Federal, Tribal, State, and local public health agencies that conduct or collaborate on population-based prevention research.

Potential data sources: Association of Schools of Public Health; National Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); and CDC Sentinel Network.

OBJECTIVE WITH REVISIONS

23-17. (Developmental) Increase the proportion of Federal, Tribal,* State, and local public health agencies that conduct or collaborate on population-based prevention research.†

* Tribal agencies encompass American Indian/Alaska Native health departments, regional Tribal organizations and health boards, and Epidemiology Centers (EpiCenters).
† There are currently no data sources at the Federal, State, or local level. However, if data should become available by 2010, the information will be included.

Potential data source: ~~Association of Schools of Public Health; National Association of County and City Health Officials (NACCHO); Association of State and Territorial Health Officials (ASTHO); CDC Sentinel Network~~Survey of Regionally Based Public Health Services Infrastructure in Indian Country, Tribal Epidemiology Centers (EpiCenters), CDC, IHS.

REVISED OBJECTIVE

23-17. (Developmental) Increase the proportion of Federal, Tribal,* State, and local health agencies that conduct or collaborate on population-based prevention research.†

* Tribal agencies encompass American Indian/Alaska Native health departments, regional Tribal organizations and health boards, and Epidemiology Centers (EpiCenters).
† There are currently no data sources at the Federal, State, or local level. However, if data should become available by 2010, the information will be included.

Potential data source: Survey of Regionally Based Public Health Services Infrastructure in Indian Country, Tribal Epidemiology Centers (EpiCenters), CDC, IHS.

References

[1] Council on Linkages Between Academia and Public Health Practice. Core Competencies for Public Health Professionals. More information available at www.phf.org/competencies.htm; accessed October 31, 2006.

[2] Public Health Functions Steering Committee. Essential Public Health Services. [Adopted fall 1994.] More information available at www.health.gov/phfunctions/public.htm; accessed October 31, 2006.

[3] More information about the Essential Public Health Services available at www.apha.org/ppp/science/10ES.htm; accessed October 31, 2006.

[4] Geocoding is a technique that specifies the geographic location where a specific event occurs. Public health agencies may use geocoding to detect geographic clusters of disease or areas of health disparity, for example.

[5] More information available at www.iom.edu/CMS/3793/4723/4307.aspx; accessed October 31, 2006.

[6] More information available at www.cdc.gov/programs/train08.htm; accessed October 31, 2006.

[7] More information available at www.hrsa.gov/about/budgetjustification07/bioterrorismtraining&curriculumdevelopmentprogram.htm; accessed October 31, 2006.

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[9] More information available at www.guideline.gov; accessed October 31, 2006.

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[11] More information available at www.cdc.gov/phin/overview.html; accessed October 31, 2006.

[12] More information available at www.naccho.org/topics/environmental/EPHT.cfm; accessed October 31, 2006.

[13] More information available at www.phppo.cdc.gov/documents/phireport2_16.pdf; accessed October 31, 2006.

[14] More information available at www.naccho.org/topics/infrastructure/MAPP.cfm; accessed October 31, 2006.

[15] More information available at www.cdc.gov/od/ocphp/nphpsp; accessed October 31, 2006.

[16] More information available at mchb.hrsa.gov/programs/default.htm; accessed October 31, 2006.

[17] More information available at www.naccho.org/topics/emergency/pphr.cfm; accessed October 31, 2006.

[18] More information available at www.phii.org/LIMSdesign.html; accessed October 31, 2006.

[19] More information available at www.train.org and www.trainingfinder.org/competencies/list_nolevels.htm; accessed October 31, 2006.

[20] More information available at www.phf.org/infrastructure; accessed October 31, 2006.

[21] Institute of Medicine. *The Future of the Public's Health in the 21st Century.* Washington, DC: National Academies Press, 2002.

Related Objectives From Other Focus Areas

1. Access to Quality Health Services

1-7. Core competencies in health profession training
1-8. Racial and ethnic representation in health professions

6. Disability and Secondary Conditions

6-1. Standard definition of people with disabilities in data sets
6-13. Surveillance and health promotion programs

7. Educational and Community-Based Programs

7-10. Community health promotion programs
7-11. Culturally appropriate and linguistically competent community health promotion programs

8. Environmental Health

8-26. Information systems used for environmental health

11. Health Communication

11-1. Households with Internet access
11-3. Research and evaluation of communication programs
11-4. Quality of Internet health information sources
11-5. Centers of excellence

17. Medical Product Safety

17-2. Use of information technology

21. Oral Health

21-16. Oral and craniofacial State-based surveillance system