

14. Public Health Infrastructure

Goal

Ensure that the public health infrastructure at the state and local levels has the capacity to provide essential public health services

Overview

A strong and competent public health workforce is vital to protecting and promoting the health of Kentuckians as well as the health of our local communities. Kentucky's public health workforce provides essential services in the areas of disease surveillance and investigation; monitoring the safety and cleanliness of restaurants and other public establishments, protecting us against environmental hazards, educating the public in healthy lifestyles and disease prevention, and responding to disasters and other emergencies. Recent disasters (Hurricanes Katrina and Rita) have made it apparent that a well organized and well functioning public health workforce is essential in disaster planning and recovery.

Summary of Progress

Kentucky's public health workforce has entered the 21st century better equipped and better trained. State general funds appropriated by Kentucky's Legislature in the 2001-2002 Biennium provided training to local health departments to transition from clinical services to population-based services. A multi-disciplinary team of training coordinators implemented a competency-based curriculum using the core public health functions and essential services as a guide. The Department for Public Health partnered with four universities for needs assessments and curriculum development and implementation. Additionally, the funding provided a base of support for the Kentucky Public Health Leadership Institute (KPHLI) at the University of Kentucky. This Institute provides special training and mentoring for state and local public health workers. "The Link" (Summer, 2002, Vol. 16, no.1) indicates that..."over 9,000 health professionals received training as a result of the transition training initiative."

During this time Kentucky also applied for and received several grants relating to bioterrorism. These funds significantly bolstered the state's epidemiological expertise, further enhanced staffing competencies, and improved Kentucky's ability to respond to a disaster or bioterrorism event. (Kentucky was able to send several teams of staff to assist in the aftermath of Hurricanes Katrina and Rita.)

Kentucky is also well on its way in establishing the Kentucky Electronic Public Health Records System (KYEPHRS). Through KYEPHRS, an electronic record will be initiated on all babies born in Kentucky beginning in FY 2006. Any contact with a health care

facility or provider will initiate an update on the child's electronic record. This electronic information system will give health care professionals up-to-date information on health status, and as a result, facilitate better care. The availability of federal and state funding has allowed Kentucky to bring its public health information (IT) systems into the 21st century.

Progress toward Achieving Each HK Objective

- 14.1. (Developmental) Increase to 100 percent the number of local health departments that incorporate specific competencies for public health workers into the public health personnel system.**

Data Source: The Local Personnel Branch, Division of Administration and Financial Management, Department for Public Health

Baseline: Baseline has not been established

HK 2010 Target: One hundred percent of health departments will incorporate specific competencies for public health workers into the public health personnel system.

Mid-Decade Status: In 2005 the Local Health Personnel Branch, Department for Public Health, worked to incorporate competencies into the local personnel evaluation system. By July of 2006 most local health departments (an estimated 75 percent) will have adopted a performance evaluation system based upon competencies. Training is currently underway for local environmental health supervisors on competency-based employee evaluation.

Data Needs: A survey will be undertaken in FY 2006-2007 to assess the number of local health departments incorporating competencies into their employee performance evaluation tool.

Strategies to Achieve Objective:

- The Personnel Branch will continue to promote the advantages of competency-based evaluation.
- The Personnel Branch will provide training in using the evaluation tool to local health department supervisors.
- The Personnel Branch will provide ongoing technical assistance and consultation to local health departments in the implementation and use of the performance evaluation tool.

- 14.2. (Developmental) Increase the number of schools training public health workers that integrate specific training in the essential public health services into their curricula.**

Data Source: Kentucky Schools of Public Health and selected nursing schools

Baseline: Kentucky's four Schools of Public Health all include training in essential public health services as part of their accreditation. In 2005, 23 percent of nursing schools were surveyed and none included training in essential public health services in their Associate or Bachelor Degree programs (nursing schools provide training in "Community Health"); a course in Public Health is included in the Masters and Doctoral Nursing Degree programs.

HK 2010 Target: Increase the number of schools training public health workers that integrate essential public health services training

Mid-Decade Status: Same as the Baseline

Data Needs: To conduct a formal survey of schools training public health workers in order to determine how many incorporate essential services training and other training considered relevant and important for public health workers

Strategies to Achieve Objective:

- The Local Personnel Branch in conjunction with the Training Branch, Division of Administration and Financial Management and the Schools of Public Health, could provide schools with information on courses considered essential/extremely important to the preparation of public health workers.
- The agencies involved could research the possibility of securing federal and other funding sources for providing such training particularly in underserved areas.
- Assure that the schools are aware of the internet-based TRAIN System and its availability as a training resource

14.3. (Developmental) **Increase by 10 percent the number of public health agencies that provide continuing education and training to 100 percent of their employees to improve performance of the essential public health services.**

Data Source: "Kentucky Transition Training Initiative: Refocusing on Population-based Public Health", The Link, Summer, 2002

Baseline: 9,000 public health professionals, representing all (100 percent) of Kentucky's local health departments, received core public health training in 2001-2002¹

HK 2010 Target: Increase by 10 percent the number of local health departments that provide training to 100 percent of their employees

Mid-Decade Status: Unknown at mid-decade

Data Needs: An annual assessment of the number of local health departments that sent staff for continuing education/training (to include the number and type of staff by local health department)

Strategies to Achieve Objective:

- Promote continuing education and training of local health department personnel as requisite for provision of quality essential public health services
- Provide easy access to training using Internet and videoconferencing options (and the TRAIN system whenever possible)
- Assure optimum use and flexibility of funding resources available for training of local health department staff

14.4. The state and all local health departments will provide onsite access to data via electronic systems and online information systems such as the Internet.

Data Source: Division of Administration and Financial Management, Department for Public Health

Baseline: Prior to 2000, only a few local health departments had Internet access

HK 2010 Target: The state Department for Public Health and all (100 percent) of local health departments will have onsite access to public health data.

Mid-Decade Status: The Department for Public Health and all (100 percent) of Kentucky's local health departments have onsite (local) access to public health and other relevant data (2005).

Data Needs: Assure training of new local health department staff by state or local personnel on how to program and produce statistical reports from their local database

Strategies to Achieve Objective:

- Periodically survey local health departments on their data needs

- Assure maximum use of funding resources for continued upgrades in information technology in local health departments and in the Department for Public Health

14.5. (Developmental) To ensure that all Kentuckians will have access to public health information and surveillance data while maintaining privacy, confidentiality, and security. (See Revision)

14.5R. (REVISION) To assure accessibility by the public to public health information and surveillance data via the internet while maintaining privacy, confidentiality, and security.

Reason for Revision: This objective was revised because it is not possible to document (nor to assure) that all Kentuckians have access to public health information and surveillance data.

Baseline: For most of the decade prior to the Year 2000, limited information and data were available via the Internet on public health and public health surveillance.

HK 2010 Target: Assure accessibility by the public to public health information and data while maintaining privacy, confidentiality, and security

Mid-Decade Status: All (100 percent) of Kentucky's libraries have Internet access which is available to the public free of charge; the Cabinet for Health and Family Services has a website which provides information on the Cabinet, Department for Public Health, its programs and services and on local health departments. The Department also maintains a data warehouse via the Internet which provides information and data in a number of areas including (to name a few): Department for Public Health Annual Reports, Epidemiology reports including Reportable Diseases, Behavioral Risk Factor Surveillance System (BRFSS), County Health Profiles, Vital Statistics, and Healthy Kentuckians.

Data Needs: Assure that the website is updated at regular intervals

Strategies to Achieve Objective:

- Continued availability of free Internet access to the public
- Expansion of Data Warehouse information to include additional program/service areas where feasible
- Regular updating of the website and data warehouse information

14.6. Increase to 100 percent the proportion of *Healthy Kentuckians 2010* objectives that can be tracked for select populations.

Baseline and Mid-Decade Status: In 2005, 62.8 percent of the Healthy Kentuckians 2010 objectives can be tracked for select populations

HK 2010 Target: Increase to 100 percent the proportion of *Healthy People 2010* objectives that can be tracked for select populations

Data Needs: In some instances, Department for Public Health staff have chosen to eliminate those objectives for which there is no current data source or for which there are inadequate funding resources to undertake a needs assessment/survey to obtain reliable data. In other instances, objectives have been revised to correspond to existing data sources.

Strategies to Achieve Objective:

- Require Department for Public Health Divisions (as part of their strategic plans) to assess progress toward Healthy Kentuckians 2010 objectives on an annual basis (where feasible)
- For objectives that cannot be tracked on an annual basis, require the Department Divisions (as part of their strategic plans) to track the objectives on at least a triennial basis (every three years)
- Require that responsibility for compiling and preparing each Division's review of the 2010 Objectives be designated in a job description and performance evaluation of a specific position in each Department for Public Health Division

14.7. Increase to 90 percent the proportion of *Healthy Kentuckians 2010* objectives that are tracked at least every three years, and to 60 percent the proportion of objectives that are tracked annually.

Data Source: *Healthy Kentuckians 2010 Mid-Decade Review*

Baseline and Mid-Decade Status: In 2005, it is estimated that 86.3 percent of *Healthy Kentuckians 2010* objectives can be tracked at least every three years, and 50 percent of objectives can be tracked annually

HK 2010 Target: Increase to 90 percent the proportion of objectives that are tracked at least every three years, and to 60 percent the proportion of objectives that are tracked annually

Data Needs: (Same as for Objective 14.6)

Strategies to Achieve Objective:
(Same as for Objective 14.6)

14.8. (Developmental) Increase the use of geocoding in all state health data systems to promote geographical information systems (GIS) as a tool for enhanced surveillance and data information.

Data Source: Divisions of Public Health Protection and Safety and Administration and Financial Management

Baseline: Prior to 2000, use of geocoding in Kentucky's health data systems was nonexistent

HK 2010 Target: Increase the use of geocoding in all state health data systems

Mid-Decade Status: In FY 2005, GIS was used only in the environmental health program areas; not in the patient services (personal health) or community health areas. GIS is used in the Lead Abatement Program as a targeting tool for identification of potential residential lead problems. GIS is also used in the well water program to pinpoint the location of private wells. However, as soon as the equipment/software becomes available, plans are underway in FY 2006 to expand use of GIS through the Kentucky Electronic Public Health Records System (KYEPHRS). Through the enterprise reporting component of the KYEPHRS, an electronic record will be established on every child born in Kentucky. Private physicians' offices, local health departments, hospitals, and other licensed health care facilities will be able to enter information on each individual who is seen by that facility and for whom a record has been generated. Agency staff with designated security access will be able to view and input information into the database. Through the enterprise GIS component of the KYEPHRS, the facility or patient record will be automatically geocoded for mapping analysis and reporting purposes.

Data Needs: Plans are underway to implement an electronic public health record which will incorporate geocoding.

Strategies to Achieve Objective:

- Assure training of state, local health department, and other local agency staff in KYEPHRS system access and data entry
- Assure ongoing technical assistance, consultation, and trouble shooting on the KYEPHRS to state and local health care agencies. An informatics (competency) team will be available to state staff, local health departments, and other agencies for the implementation and ongoing operation of KYEPHRS

14.9. Ensure access to an essential set of accurate, reliable, and timely population-based public health and environmental health laboratory

services primarily in support of the Department for Public Health, but also in support of the Department of Mental Health and Mental Retardation, the Justice Cabinet, and the Labor Cabinet.

Data Source: Division of Laboratory Services, Department for Public Health

Baseline: In 2001 the Division of Laboratory Services provided the full range of laboratory support services mandated by Kentucky statute. These services were in support of the Departments for Public Health and Mental Health, and the Justice and Labor Cabinets. The Division was certified as a high complexity laboratory and was in compliance with federal CLIA regulations.

HK 2010 Target: Ensure access to an essential set of accurate, reliable, and timely population-based public health and environmental health laboratory services

Mid-Decade Status: In 2005 the Division of Laboratory Services continues to provide high quality services and continues to meet the certification requirements for a high complexity lab as well as federal CLIA requirements. Additionally, the Division is aligned with the KY 41st Civil Support Team to offer state of the art rapid screening and confirmation of biological and chemical terrorism agents.

Data Needs: Periodically assess client satisfaction with the Division of Laboratory Services

Strategies to Achieve Objective:

- Continued certification as a high complexity laboratory
- Continued compliance with CLIA regulations
- Participation in mock bioterrorism exercises
- Assure availability of training and continuing education for lab personnel
- Strive to build and maintain a “World Class” performance improvement and safety program

14.10. Increase to 100 percent the proportion of local health departments that provide comprehensive epidemiology services to support core public health activities.

Data Source: Division of Epidemiology and Health Planning, Department for Public Health

Baseline and Mid-Decade Status: In 2005, approximately 90 percent of Kentucky's local health departments provide comprehensive epidemiology services. The availability of 22 new staff positions (17 regional epidemiologists covering Kentucky's 56 local health departments) and five state staff has significantly enhanced local health departments' epidemiological capacity. Additionally, the provision of computer hardware, epidemiological software and associated training, as well as epidemiology training provided as part of the transition training initiative, have further bolstered local health departments' ability to provide comprehensive epidemiology services.

HK 2010 Target: Increase to 100 percent the proportion of local health departments that provide comprehensive epidemiology services

Strategies to Achieve Objective:

- To research available avenues of funding for additional epidemiological staff
- To promote ongoing training of new local health department staff in Principles of Epidemiology
- To promote availability of epidemiological hardware and software upgrades to local health departments

14.11. Increase the proportion of state and local public health agencies that make data available on public health expenditures for essential public health activities. (See Revision)

14.11R. (REVISION) Increase the proportion of state and local public health agencies that make expenditure data readily available to the public.

Reason for Revision: The state Department for Public Health does not mandate reporting of expenditures by essential public health service; rather the state Department mandates reporting by federal and state project cost reporting area. The Department and LHDs can track expenditures for core functions of assessment, policy development and assurance.

Data Source: Division of Administration and Financial Management

Baseline: 100 percent (all local health departments) are required by statute to publish an annual financial statement on the health department and the taxing district (for those departments that have a public health tax). Additionally, financial information is provided each year to the county court clerk. However, information may not be readily available and accessible to the public or tax payer. An undetermined number of health

departments make financial information available to the public through an annual report or similar document.

HK 2010 Target: To determine the baseline and increase (from the baseline) the proportion of local health departments that makes expenditure data readily available through an annual report or similar document

Mid-Decade Status: In 2005 a significant (but unknown) number of local health departments publish an annual report which is distributed to various agencies, stakeholders, and the public. This report generally includes information on expenditures for public health services. Additionally, a few (4) local health departments maintain websites which may include this information as well. The state Department for Public Health publishes an annual report which is available over the Internet and contains information on public health service expenditures.

Data Needs: A survey of local health departments needs to be conducted to determine the number of departments that publish and distribute an annual report in their community.

Strategies to Achieve Objective:

- Strongly encourage local health departments to issue an annual report detailing program expenditures and to make it available to community agencies and the public
- Consider adding information on each local health department's expenditures to the state Department's annual report which is available over the Internet
- Consider adding annual information on each local health department's expenditures to the Data Warehouse available over the Internet

14.12. (Developmental) Facilitate greater collaboration and cooperation between public and private agencies for conducting population-based prevention research.

Data Source: Division of Administration and Financial Management

Baseline: Baseline is unknown at this time; however, prior to FY 2000, the state Department was required to have separate contracts with the Universities for each of the state Department's research or service projects. In FY 2000, the Department folded projects with each of the two major Universities (University of Kentucky and University of Louisville) into two mega contracts. Local health departments were also permitted to incorporate different services (projects) with the same contractor into one contract document.

HK 2010 Target: To determine the baseline and, where appropriate, facilitate greater collaboration and cooperation between public and private agencies for conducting population-based prevention research

Mid-Decade Status: Unknown at this time (Both the state Department and local health departments are required to have formal memoranda of understanding (MOA's) or contracts with outside agencies. Local health departments and/or the state Department have in the past contracted with managed care organizations, private foundations, and health care product producers.) Local health departments have contracts and interagency agreements with outside providers but these agreements are primarily for services rather than research.

Data Needs:

- To determine the number of existing contracts/MOA's for population-based prevention research conducted by the state Department and local health departments
- A survey is needed to determine the number of population-based prevention research projects the state Department is contracting for and to determine the number of population-based prevention research projects local health departments are contracting for. Prevention-based research is conducted primarily at federal and state levels. However, a few large health departments may contract with outside agencies for population-based research projects.

Strategies to Achieve Objective:

- Retain the ability for local health departments to incorporate population-based research into one contract as this forgoes the development of an entirely new contract document for separate projects with the same contractor
- Encourage local health departments (that have the resources) to participate in population-based preventive research with private, non profit agencies, making optimum use of the Department and local health departments' epidemiological expertise
- Encourage state Department staff to apply for population-based prevention research in their program area, making optimum use of the Department's epidemiological expertise

14.13. (Developmental) Maintain at 100 percent the number of state and local health agencies that use summary measures of population health.

Data Source: Divisions of Epidemiology and Adult and Child Health, Department for Public Health

Baseline: In FY 2001, 100 percent of local health departments are using summary measures of population health when planning their annual programs and services

HK 2010 Target: Maintain the baseline of 100 percent of local health departments using summary measures of population health when planning their programs and services; expand the use of summary measures to other venues (e.g., annual reports)

Mid-Decade Status: The Department for Public Health uses statewide summary measures of population health which are incorporated in various reports and grant applications. Local health departments use summary measures of population health when planning annual programs and services.

Data Needs:

Continued availability and annual updating of the County Health Profiles via the Internet

Strategies to Achieve Objective:

- Assure availability of regional epidemiologists to assist local health departments in compiling summary measures of population health
- Assure that local health department staff have been trained in how to program and produce statistical reports from their databases

References

- "Kentucky Transition Training Initiative: Refocusing on Population-based Public Health", Eula Spears, R.N., MS and Connie Richmond, ARNP, MSN, CS, The Link, Vol. 16, No. 1, Summer, 2002

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14. Public Health Infrastructure – Summary Tables

Summary of Objectives for Public Health Infrastructure	Baseline	HK 2010 Target	Mid-Decade Status	Progress	Data Source
14.1. (Developmental) Increase to 100 percent the number of local health departments (LHDs) that incorporate specific competencies for public health workers into the public health personnel system	Not established	100%	TBD	TBD	Survey of LHDs in FY 2007
14.2. (Developmental) Increase the number of schools training public health workers that integrate specific training in the essential public health services into their curricula.	Four schools of public health include training; Of nursing schools surveyed, no training included (2005)	Higher than baseline	Same as baseline	N/A	Survey of Schools of Public Health and Nursing Schools
14.3. Developmental) Increase by 10 percent the number of public health agencies that provide continuing education and training to 100 percent of their employees to improve performance of the essential public health services.	100% (2001-2002)	100%	TBD	TBD	Survey of Public Health Agencies
14.4. The state and all local health departments will provide onsite access to data via electronic systems and online information systems such as the Internet.	Few LHDs had onsite access (1999)	Provide access (100%)	DPH and all LHDs have onsite access (2005)	Yes	Survey of LHDs and DPH
14.5R. To assure accessibility by the public to public health information and surveillance data via the internet while maintaining privacy, confidentiality, and security.	Limited KY public health data on internet (1999)	Assure accessibility to the public	All libraries have internet to public free of charge. CHFS now has an internet site that contains public health data	Yes	Review and maintenance of CHFS website
14.6. Increase to 100 percent the proportion of <i>Healthy Kentuckians 2010</i> objectives that can be tracked for select populations.	62.8% (2005)	100%	62.8% (2005)	Yes	HK 2010 Mid-Decade Review

Summary of Objectives for Public Health Infrastructure	Baseline	HK 2010 Target	Mid-Decade Status	Progress	Data Source
14.7. Increase to a) 90 percent the proportion of <i>Healthy Kentuckians 2010</i> objectives that are tracked at least every three years, and b) to 60 percent the proportion of objectives that are tracked annually.	a) 86.3% (2005)	a) 90%	86.3% (2005)	Yes	HK 2010 Mid-Decade Review
	b) 50%	60%	50%	Yes	
14.8. (Developmental) Increase the use of geocoding in all state health data systems to promote geographical information systems (GIS) as a tool for enhanced surveillance and data information.	In 2000 geocoding in KY health data systems was nonexistent	Increase geocoding	In 2005 geocoding has been used in the Environmental Health Program and in Epidemiology Division	Yes	Review of geocoding section of public health data systems
14.9. Ensure access to an essential set of accurate, reliable, and timely population-based public health and environmental health laboratory services primarily in support of the Department for Public Health, but also in support of the Department of Mental Health and Mental Retardation, the Justice Cabinet, and the Labor Cabinet.	In 2001, Div. of Lab Services provided full range of lab services as mandated by statute	Ensure access to lab services	In 2005, Div. of Lab Services provided full range of lab services as mandated by statute	Target Achieved	Review of lab services
14.10. Increase to 100 percent the proportion of local health departments that provide comprehensive epidemiology services to support core public health activities.	90% (2005)	100%	90% (2005)	N/A	Division of Epidemiology and LHDs
14.11R. Increase the proportion of state and local public health agencies that make expenditure data readily available to the public.	Not established	Increase from baseline	TBD	TBD	Survey of LHDs
14.12. (Developmental) Facilitate greater collaboration and cooperation between public and private agencies for conducting population-based prevention research.	Not established	Greater collaboration	TBD	TBD	
14.13. (Developmental) Maintain at 100 percent the number of state and local health agencies that use summary measures of population health.	100%	100%	100%	Target Achieved	Review of LHDs

R = Revised objective.

N/A = Only baseline data are available. Not able to determine progress at this time.

TBD = To be determined. No reliable data currently exist.