

# Environmental Public Health Performance Standards (Version 2.0)

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Updated May 2014

National Center for Environmental Health  
Division of Emergency and Environmental Health Services





# **Environmental Public Health Performance Standards**

## **(Version 2.0)**

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## Foreword

Environmental health programs can use the Environmental Public Health Performance Standards (EnvPHPS) to improve environmental health services delivered in their community. This document provides background information on the standards and instructions for completing the assessment.

The EnvPHPS establish a set of standards that describe the level of performance and capacity to which all environmental health systems (EH System) and programs should aspire. The standards describe activities, actions, and processes an EH System or program should perform to optimally provide the Essential Environmental Public Health Services. The assessment results can be used to determine action needed to improve capacity to perform the essential services. The instrument is designed to be used at multiple levels. For instance, it can be used to

- focus on a particular programmatic area of shared concern such as safe drinking water or vector control,
- assess a division or department, or
- assess the environmental health system as a whole, involving health department organizations, other government agencies, and external organizations such as nonprofit groups, industry, academia, and community groups.

The primary goal of the EnvPHPS is to promote continuous improvement of environmental public health. Implementation of the EnvPHPS is intended to foster improvement at the state, tribal, local, territorial, and national levels by building

- Capacity to provide the ten Essential Environmental Public Health Services,
- Community accountability for environmental public health services, and
- Consistency of services across EH Systems or programs.

## Acknowledgments

CDC received input on the EnvPHPS from organizations representing the nation's leadership for environmental public health, including the following:

- American Public Health Association (APHA)
- Association of Environmental Health Academic Programs (AEHAP)
- Association of Schools of Public Health (ASPH)
- Association of State and Territorial Health Officials (ASTHO)
- National Association of County and City Health Officials (NACCHO)
- National Association of Local Boards of Health (NALBOH)
- National Environmental Health Association (NEHA)
- National Conference of Local Environmental Health Administrators (NCLEHA)
- National Conference of State Legislators (NCSL)

The instrument was developed in collaboration with an expert panel of environmental health managers and practitioners led by CAPT Patrick O. Bohan, MSEH, MS, PhD, USPHS (Ret), Assistant Professor, East Central University, Ada, Oklahoma.

The panel of experts who contributed to the creation of this instrument in 2010 includes

- Gerry Barron, MPH, Associate Professor, Department of Health Policy and Management, University of Pittsburgh Graduate School of Public Health and former Deputy Director, Allegheny County Health Department, Pittsburgh, Pennsylvania
- Rob Blake, MPH, Chief, Environmental Health Services Branch, Division of Emergency and Environmental Health Services, National Center for Environmental Health, Centers for Disease Control and Prevention, and former Director of Environmental Health Services for the State of Georgia
- Scott Holmes, MPH, Director, Environmental Health, Lincoln-Lancaster County, Nebraska
- Sarah Kotchian, EdM, MPH, PhD, former Research Assistant Professor, Institute for Public Health, University of New Mexico and former Director of the Albuquerque Environmental Health Department

Carl Osaki, MPH, Clinical Associate Professor, School of Public Health and Community Medicine, University of Washington and former Environmental Health Director of the Seattle/King County Health Department

Ken Sharp, Director, Division of Environmental Health, Iowa Department of Public Health

Peter Thornton, MPH, retired Director, Environmental Health, Volusia County, Florida

Charles Treser, MPH, Senior Lecturer, School of Public Health and Community Medicine, University of Washington

Members of the Environmental Health Services Branch, within the National Center for Environmental Health at the Centers for Disease Control and Prevention (CDC), have been valuable partners and advisors throughout this project including Dr. Sharunda Buchanan, former Environmental Health Services Branch Chief and current Director, Division of Emergency and Environmental Health Services; CAPT John Sarisky, Senior Environmental Health Scientist; CAPT Charles Otto, Senior Environmental Health Scientist; and Dr. Hugh Mainzer, Epidemiologist. Liza Corso and Teresa Daub from the CDC NPHPS program have provided important feedback to ensure that the EnvPHPS are effectively linked to the NPHPS.

In addition, numerous federal, state, local, and tribal agencies and universities reviewed the draft instrument and provided valuable feedback for its improvement.

## Background

The EnvPHPS were developed in cooperation with the National Public Health Performance Standards Program (NPHPSP) at the Centers for Disease Control and Prevention (CDC) to complement those standards.

The organizational framework for the EnvPHPS is the Ten Essential Environmental Public Health Services (<http://www.cdc.gov/nceh/ehs/Home/HealthService.htm>). The Essential Public Health Services were developed by the Core Public Health Functions Steering Committee in 1994 to describe the core functions of public health—assessment, policy development, and assurance—as identified in the 1988 Institute of Medicine Report *The Future of Public Health*. The Essential Public Health Services were later used as a guide for developing the NPHPSP. The Essential Environmental Public Health Services were derived from the Essential Public Health Services and provide the basis for the EnvPHPS.

The EnvPHPS enable a deeper assessment of an EH System's or program's capacity to provide the Essential Environmental Public Health Services. This instrument will also enable a broader exploration and understanding of the relationships among public and private entities, individuals, and informal associations that contribute to the delivery of environmental public health services within an EH System or program.

## Value and Benefits of the Environmental Public Health Performance Standards

EH Systems and programs that use the EnvPHPS may expect the following benefits:

- Participants educated about environmental health and the range of services and partners needed to improve the public's health.
- Improved collaboration among partners to enhance communication, improved coordination of activities and resources, and reduced duplication of services.
- Identified strengths and gaps that can be addressed through quality improvement efforts.
- A benchmark for environmental public health practice improvements through establishment of optimal standards and measures.
- Information and data that EH Systems and programs can use to better advocate for changes in policy or resource allocation to improve community environmental health status.

The EnvPHPS can be used to enhance the practice of environmental public health in several additional ways:

- The EnvPHPS can be used to orient new or existing staff unfamiliar with environmental public health.
- The standards provide an excellent description of what is meant by performing the Essential Environmental Public Health Services.
- Data can be collected from those who complete the instrument and aggregated to identify gaps and set an agenda to improve environmental public health capacity for a multicounty jurisdiction, state, or region.

The standards and the self-assessment process are intended to provide a valid and reliable tool for measuring and continuously improving environmental health services and performance. The standards are being used in a variety of practice settings (to assess activities, programs, departments, and agencies), and also in entire systems (to improve the quality of environmental public health services).

## 10 Essential Environmental Public Health Services

The Essential Environmental Public Health Services provide the framework for the self-assessment instrument. These services describe the collective set of capacities and activities necessary in an EH System or program to effectively support the provision of services and programs needed to improve and protect environmental health.

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

## Instructions for Using the EnvPHPS

The standards are divided into ten sections—one for each essential service. The instrument is intended to be applied in totality to assess an EH System or program's performance. Each section begins with a description of the essential service. The instrument then presents a set of standards that describe the optimum performance of the essential services. Each standard is presented along with a narrative description and a brief list of the key actions needed to accomplish the standard. These actions are assessed through a series of questions to measure the performance of that standard.

The assessment process is described in three phases: pre assessment, assessment, and post assessment. These phases along with corresponding tools from an online toolkit are described below. (<http://www.cdc.gov/nceh/ehs/EnvPHPS/resources.htm>).

## Pre-assessment

1. Determine whether the assessment will be of a particular programmatic area, a department, or the EH System as a whole.
2. Identify the individual or core team responsible for coordinating the assessment and identify other team members who will be involved in completing the instrument. This may include environmental health staff, program managers, and other relevant partners from public agencies, private entities, and voluntary organizations that contribute to environmental health activities within a given area.

The team should appropriately represent the breadth of individuals or agencies involved with providing the relevant environmental health services. For instance, if the assessment focuses on a food program, you may wish to include environmental health specialists, supervisors, members of the regulated food community, consumers, individuals from food programs at another level of government, etc. If the assessment will focus on the broad multiagency environmental health system in the jurisdiction, include representatives from those groups that also provide environmental health services in that area. The size and constituency of the group will vary, but, in general, a group size of 5-15 allows time for discussion of various viewpoints as the group completes the instrument.

3. Orient the group to the assessment documents and process. Have a brief discussion of the core functions of public health (assessment, policy development, and assurance), the Essential Services of Public Health, the Essential Environmental Public Health Services, EnvPHPS, and the value of completing the assessment.

It may be useful for the group to review the training course on the Ten Essential Services of Environmental Health, developed by Carl Osaki and available at no charge at <http://www.wvdhhr.org/envhealth/index.htm>. Have the group review the EnvPHPS Version 2.0 document before beginning work on the self-assessment instrument.

4. Set a time to conduct the assessment. Groups have generally been able to complete the assessment in a day (or less); however, your group will decide what schedule works best.

Supporting resources for the pre-assessment phase [available in the online assessment toolkit]:

- EnvPHPS Factsheet
- EnvPHPS Frequently Asked Questions
- Invitation Letter Template
- Stakeholder List
- Stakeholder Mapping Venn Diagram

[http://www.cdc.gov/nceh/ehs/envphps/assessment\\_toolkit.htm](http://www.cdc.gov/nceh/ehs/envphps/assessment_toolkit.htm)

## Assessment

5. Review the two parts to the self-assessment instrument:

- Part I requests general information about the environmental health program. This includes some demographic information about the population served, the environmental health staff who provide the services, and budget data.
- Part II includes questions (measures) that assess the capacity of the EH System or program to provide the Essential Environmental Public Health Services. The responses to these questions serve as a measure of the level of performance.

6. Discuss the five possible responses to each question in Part II. As each question is discussed, the team should determine the response that best fits the current level of activity and record responses on the self-assessment form. Do not leave a response blank. Improvement will not occur unless the self-assessment team is brutally honest with their responses. If a partial service is provided, it should be indicated as such.

The response options are

- **NO ACTIVITY** - 0% or absolutely no activity.
- **MINIMAL ACTIVITY** - greater than zero but not more the 25% of the activity described within the question is met within the EH System or program.
- **MODERATE ACTIVITY** - greater than 25% but not more than 50% of the activity described within the question is met within the EH System or program.
- **SIGNIFICANT ACTIVITY** - greater than 50% but not more than 75% of the activity described within the question is met within the EH System or program.
- **OPTIMAL ACTIVITY** - greater than 75% of the activity described within the question is met within the EH System or program.

Supporting resources for the assessment phase (available in the online assessment toolkit):

- Facilitator's Guide
- Recorder's Guide
- Voting Cards

[http://www.cdc.gov/nceh/ehs/envphps/assessment\\_toolkit.htm](http://www.cdc.gov/nceh/ehs/envphps/assessment_toolkit.htm)

## Post-assessment

7. Enter each response into the self-assessment response analysis tool in the online assessment toolkit. The tool will calculate the level of activity for each of the ten essential services and the overall self-assessment. (You can also use the response analysis tool during the discussion to keep track of responses as you go along.)
8. Reconvene the assessment team to consider next steps once the members have the self-assessment results.

A jurisdiction may have low levels of activity on several of the essential services. The group should review the gaps revealed by the self-assessment, set priorities, and develop an improvement plan for identified gaps. For each gap, the group should first consider why the gap exists, what circumstances allow this gap to exist, whether previous attempts have been made to address this gap, and why these fixes did not work.

After fully understanding why a gap exists, the team is ready to begin developing an improvement plan. The team should consider all options and select the most appropriate and reasonable intervention. The team will then develop a plan to implement the intervention. Processes such as Protocol for Assessing Community Excellence in Environmental Health may be useful for setting priorities and action plans.

The group may also wish to establish a schedule for periodically reviewing progress on the action plan and for reassessing the program or jurisdiction after a specified time to assess progress. There may also be opportunities to integrate the findings with broader public health improvement efforts such as community health improvement plans or strategic plans, both of which are prerequisites for public health accreditation. Results can then be entered into the report template also available in the assessment toolkit.

Supporting resources for the post-assessment phase (available in the online assessment toolkit):

- Assessment Report Template
- Follow-up Letter Template
- Response Analysis Tool
- Root Cause Analysis Tool

[http://www.cdc.gov/nceh/ehs/envphps/assessment\\_toolkit.htm](http://www.cdc.gov/nceh/ehs/envphps/assessment_toolkit.htm)

# Essential Service #1: Monitor Environmental and Health Status to Identify and Solve Community Environmental Health Problems

This service includes

- Accurate assessment of the community's environmental health status:
  - Identification of community environmental health problems;
  - Identification of the environmental factors contributing to environmental health problems and data on environmental quality (air quality, water quality).
- Utilization of appropriate methods and technology, such as geographic information systems, to collect, store, manage and interpret data.
- Communication of data to diverse audiences.
- Collaboration among all environmental health system partners to share data in order to track changes in environmental conditions that potentially impact environmental and human health.

## Model Standard 1.1: Community Environmental Health Profile

The community environmental health profile (CEHP) summarizes data collected in a community assessment and describes the current status of a range of environmental health factors in a community. This information can be used to establish priorities, direct resources, and provide a baseline against which improvement is measured.

The CEHP includes broad-based surveillance data and measures related to environmentally-related illness, disease, and injury and environmental health risks at individual and community levels including such information as: demographic and socioeconomic characteristics; environmental indicators (such as air quality data, drinking water quality); environmental health indicators (such as frequency of critical violations from food inspections, underground storage tanks); risk factors; and health status (such as death, illness, injury and infectious disease).

The CEHP displays information about community trends overall, as well as about population disparities in health status and hazard exposure. Local measures are compared with peer, state, and national benchmarks. Data are prepared and displayed in multiple formats so they are easily understood by diverse audiences, such as the media, community-based organizations and policy makers.

To accomplish this, the EH System or program

Conducts community environmental health assessments approximately every 3 years to monitor progress towards environmental health-related objectives.

- Compiles and periodically updates a community environmental health profile using community environmental health assessment data.
- Assures that profile (assessment) data can be easily understood and accessed by the community.

**Please answer the following questions related to Standard 1.1:**

**1.1A** Has a community environmental health assessment been completed?

**1.1B** Is the community environmental health assessment updated at least every 3 years?

**1.1C** Are existing and potential environmental health trends identified by comparing analysis results to relevant benchmarks?

**1.1C** Discussion Toolbox: In considering 1.1C, are data compared with data from

- Peer (demographically similar) communities?
- The region?
- The state?
- The nation?

**1.1D** Have the data from the community environmental health assessment been compiled into an updated profile?

**1.1D** Discussion Toolbox: The profile may include the following elements:

- Environmentally related illness
- Environmentally related disease
- Environmentally related injury
- Environmental factors contributing to environmental health problems (such as frequency of code violations, air and water quality indicators, etc.)
- Community perceptions and other information from the community environmental health assessment

- 1.1E** Are environmental health data prepared in a format that allows for the clear communication and interpretation by the public and policy makers?
- 1.1F** Is information about the community environmental health status easily available to individuals, community groups, and other organizations in a printed and web-based version?

### **Model Standard 1.2: Current Technology for Data Collection, Storage, and Analysis (e.g., GIS, surveys and databases)**

The EH System or program develops plans to create and support data and information systems to assure accurate and timely reporting. The EH System or program identifies sources of the necessary data and contact information for obtaining the data. EH System or program utilizes current state-of-the-art technology to support data plans and information systems.

To accomplish this, the EH System or program

- Identifies and uses current technology for collecting, storing, and analyzing environmental health data.
- Uses geographic information systems (GIS).

#### **Please answer the following question related to Standard 1.2:**

**1.2A** Are appropriate tools, such as GIS, used to support the profile databases?

**1.2A** Discussion Toolbox: In considering 1.2A, is current technology, such as GIS, used to

- Collect data?
- Manage data?
- Integrate databases?
- Analyze data?

## Model Standard 1.3: Enhanced Environmental Health Databases and Plan

The EH System or program develops and implements a data collection plan to help with the assessment process. Data included in the community environmental health profile are accurate, reliable, and consistently interpreted according to the science and evidence-base for public health practice. Environmental health databases are maintained and linked with disease registries, environmental hazard/pollutant databases and exposure registries.

To accomplish this, the EH System or program

- Collects data from other agencies and organizations involved in environmental and health protection.
- Creates a plan for addressing gaps in data needed.

### Please answer the following questions related to Standard 1.3:

**1.3A** Are data collected from a range of sources involved in environmental and public health protection (e.g., epidemiology, disease registries, tracking partners, local and state departments of environmental quality)?

**1.3B** Have plans been made to address gaps in information and data needed?

## Essential Service #2: Diagnose and Investigate Environmental Health Problems and Health Hazards in the Community

This service includes

- Investigation of patterns and outbreaks of environmentally-related illness, disease, injury, environmental hazards, environmental risk factors, and other environmental health threats.
- Investigation and response to emergencies.
- Access to a public health laboratory capable of conducting rapid screening and high volume testing.

## Model Standard 2.1: Identification and Surveillance of Environmental Health Threats

A surveillance system is in place to identify patterns and/or outbreaks of environmentally-related illness, disease, injury, environmental risk factors, and other environmental health hazards. Epidemiological and environmental health investigation techniques are used to collect data to identify environmental risk factors for environmentally-related health threats. Surveillance data, which can include frequency of critical food safety violations, results from inspections of various types of facilities, and air and water quality data, are used to track environmental health problems and hazards. Surveillance data are also used to examine the impact of environmental health hazards and risk factors on illness and mortality. Surveillance data provide information necessary to develop interventions aimed at stopping an outbreak, preventing future outbreaks or reversing the patterns of disease and environmental risk factors. The surveillance system is also critical in alerting a jurisdiction to unusual events or patterns that require immediate response.

To accomplish this, the EH System or program

- Participates in a surveillance system to identify patterns of environmentally-related illness, disease, injury, environmental risk factors, and other environmental health hazards that require a response.
- Uses timely information from variety of environmental and health data sources to identify patterns.
- Employs key environmental health staff trained in the application of epidemiology and statistics, or has access to Masters and/or Doctoral level statistical and epidemiological expertise to assess, investigate, and analyze environmental health threats and hazards.

### Please answer the following questions related to Standard 2.1:

- 2.1A** Does the EH System or program operate or participate in an environmental health surveillance system that uses timely information from a variety of sources?
- 2.1B** Does the EH System or program use protocols to investigate patterns and/or outbreaks of environmentally-related illness, disease, injury, environmental hazards, and risk factors?
- 2.1C** Does the EH System or program have access to expertise in epidemiology and statistics such as Masters and/or Doctoral level statistical and epidemiological expertise?
- 2.1D** Is key environmental health staff trained in the application of epidemiology and statistics?

## Model Standard 2.2: Investigation and Response to Environmental Health Threats and Emergencies

Environmental health is integrated into the EH Systems and programs' all-hazards emergency response plan. The EH System or program has a written plan that details the roles and responsibilities for the local environmental health staff in a natural disaster or other public health emergency. The EH System or program maintains a roster of personnel with the technical expertise to respond to potential natural disasters, biological, chemical, or radiological public health emergencies.

To accomplish this, the EH System or program

- Defines roles and responsibilities of environmental health staff in emergencies.
- Develops written protocols for immediate investigation of public health threats and emergencies.
- Regularly updates roster of personnel.

### Please answer the following questions related to Standard 2.2:

- 2.2A** Are roles and responsibilities of the local environmental health staff integrated into the all hazards emergency response plan?
- 2.2B** Are written protocols available to guide immediate investigation of and response to public health threats and emergencies?
- 2.2C** Does the EH System or program regularly update the roster of personnel with technical expertise to respond to potential natural disasters, biological, chemical or radiological public health emergencies?

## Model Standard 2.3: Laboratory Accessibility

EH System or program has access to approved laboratories (e.g., credentialed, licensed) capable of supporting investigations of environmental health problems, hazards, and emergencies. EH System or program has written agreements and/or procurement processes in place to access services in emergency situations. In some communities, the actual testing of environmental samples may be performed outside the traditional public and environmental health system. However, the environmental health program retains the responsibility for ensuring that proper testing and timely results are available to the community.

To accomplish this, the EH System or program

- Has agreements with laboratory (ies) capable of meeting routine and emergency diagnostic and surveillance needs.
- Maintains guidelines or protocols to address handling of laboratory samples as well as reporting of findings.

### Please answer the following questions related to Standard 2.3:

- 2.3A** Does the EH System or program have established agreements and/or procurement processes to access (24 hours-per-day/7 days-per-week) approved laboratories capable of supporting investigations of environmental health problems, hazards and emergencies?
- 2.3B** Are guidelines or protocols in place to address handling of laboratory samples and reporting of findings?

## Essential Service #3: Inform, Educate, and Empower People and Communities about Environmental Health Issues

This service includes

- Communicating the status of environmental health and environmentally-related illness, disease, and injury to the community.
- Designing culturally appropriate environmental health information, environmental health education, and environmental health promotion activities to reduce environmental health risk and promote better health.
- Maintaining accessible environmental health information and educational resources.
- Targeting environmental health education activities to specific groups as necessary (children, septic tank installers and owners, community water systems operators, etc.).
- Establishing emergency risk communication processes designed to inform and mobilize the community regarding environmental health threats or crises.

### Model Standard 3.1: Health Education, Health Promotion and Health Communications

There is a plan and system in place to routinely educate and inform the community about environmental health issues. The system recognizes the important role of health education and promotion in ensuring that all community members have the opportunity to become informed about and participate in environmental health decisions. Effective community-based environmental health education uses targeted and culturally appropriate language, materials, and processes. Health communications activities include media campaigns, social marketing, entertainment education and interactive health communication. The EH System or program chooses among a variety of communication channels including interpersonal, small group, organizational, community and mass media to most effectively reach specific segments of the community.

To accomplish this, the EH System or program

- Provides the public, policy makers and stakeholders with information on community environmental health status and needs, as well as information on policies and programs that can improve environmental health.
- Collaborates with various entities in the community on health education and promotion activities.
- Utilizes appropriate communication channels and tools to reach and address the needs of various target audiences.

### Please answer the following questions related to Standard 3.1:

- 3.1A** Does the EH System or program have a health communications plan that routinely provides the community (general public, policy makers, and public and private stakeholders) with EH information to enable effective individual, community and policy action?
- 3.1B** Does the EH System or program work with the community to identify health education needs of different segments of the community?
- 3.1C** Does the EH System or program develop appropriate and targeted messages for various segments of the community (e.g., vulnerable, sensitive or disproportionately impacted populations)?
- 3.1D** Are broad-based partners (such as health department, planning and zoning, public works, building, environmental advocacy groups, and the media) working together on environmental health education and promotion activities?
- 3.1E** Does the communications plan provide guidance on creating messages and materials appropriate to the differing communication channels (e.g., Internet, print, radio, and television)?

### Model Standard 3.2: Crisis Communications

Crisis communication is the provision of information by public officials to allow individuals, stakeholders, or an entire community to make the best possible decisions about their safety and well-being during a crisis or emergency.

To accomplish this, the EH System or program:

- Develops emergency communications plan(s) and procedures to coordinate governmental alerts to the community about possible environmental health threats and disease outbreaks.

### Please answer the following question related to Standard 3.2:

- 3.2A** Does the EH System or program have emergency communication plan(s) to share information among key responders and the public in the event of potentially serious environmental health threats, disease outbreaks and other emergencies?

**3.2A** Discussion Toolbox: In considering 3.2A, does the emergency communications plan

- Integrate with other emergency communications plans and partners?
- Identify procedures for inter-agency coordination?
- Include procedures for alerting all subpopulations in the community?

## Essential Service #4: Mobilize Community Partnerships to Identify and Solve Environmental Health Problems

This service includes

- Identifying potential stakeholders who contribute to or benefit from environmental health, and increase their awareness of the value of environmental health.
- Building coalitions to draw upon the full range of potential human and material resources to improve the community's environmental health.
- Convening and facilitating partnerships among groups and associations (including those not typically considered to be environmental health-related) in undertaking defined environmental health improvement projects.

### Model Standard 4.1: Constituency Development

The comprehensive identification and effective solution of environmental health problems can best be accomplished with the assistance or input from constituents and stakeholders within the community. Establishing two-way channels to provide the community with information about the status of environmental health (both environmental and health) and solicit input from the community is essential in addressing environmental health issues in a comprehensive manner. Constituents of the EH System or program include all persons and organizations that directly contribute to or benefit from environmental health. These may include members of the public served by the EH System or program, the governmental bodies it represents, and other health, environmental, and non-health-related organizations in the community. Constituency development is the process of establishing collaborative relationships among other entities charged with environmental health protection and among current or potential stakeholders.

To accomplish this, the EH System or program

- Establishes a process to identify key constituents, stakeholders and partners for community environmental health in general (e.g., improved environmental health conditions at the community level) or for specific environmental health concerns (e.g., drinking water, vector-borne disease, food safety).
- Establishes and maintains a comprehensive directory of community organizations and agencies with an interest in environmental health issues and services.
- Encourages constituent participation in environmental health decisions and policy development.

**Please answer the following questions related to Standard 4.1:**

- 4.1A** Does the EH System or program maintain an up-to-date directory of key constituents and stakeholders for environmental health?
- 4.1B** Does the EH System or program have a plan and process that employs a variety of methods to involve constituents in key decisions and policy development for environmental health issues?

**Model Standard 4.2: Community Partnerships**

Community partnerships describe a range of relationships (e.g., networking, coordination, cooperation and collaboration) that foster the sharing of information, resources, and/or accountability in undertaking community environmental health improvement. For example, several groups in the jurisdiction with an interest in food safety (such as restaurant owners, producers and consumers) may partner to address concerns particular to the food protection program.

Multi-sector collaboration can be defined as: a voluntary strategic alliance of public, private, and nonprofit organizations to enhance each other's capacity to achieve a common purpose by sharing risks, responsibilities, resources, and rewards. Multi-sector partnerships can contribute greatly to effective community environmental health improvements.

To accomplish this, the EH System or program

- Establishes partnerships among government agencies (e.g., health, environment, agriculture) and the private sector (e.g., professional associations, trade associations, advocacy groups and universities).

**Please answer the following question related to Standard 4.2:**

- 4.2A** Are partnerships among government agencies and the private sector used to enhance environmental health program effectiveness?

## Essential Service #5: Develop Policies and Plans That Support Individual and Community Environmental Health Efforts

This service includes

- An effective governmental presence at the local level.
- Development of policy that protects the health of the public from environmental factors, promotes the ecological balances important to human health and guides the practice of environmental health within the community.
- Systematic community-level and state-level planning for environmental health improvement and emergency response and preparedness.
- Alignment of local environmental health program resources and strategies with a community environmental health improvement plan.

### Model Standard 5.1: Governmental Presence at the Local Level

Every community must be served by a governmental environmental health entity. As the line of first defense, the local governmental environmental health entity plays an especially vital role in ensuring the safety, health, and well-being of communities. The governmental environmental health entity works in partnership with the community to assure the development and maintenance of a flexible and dynamic environmental health system that provides the Essential Environmental Health Services. In many places, the local health or environmental health department or a local branch of the state health agency serves as the local governmental environmental health entity.

To accomplish this, the environmental health system

- Provides a designated governmental environmental health entity to assure the delivery of the Essential Environmental Health Services to the community.

### **Please answer the following question related to Model Standard 5.1:**

- 5.1A** Does the environmental health system provide a governmental environmental health entity (i.e. local environmental health department or local office of a state health or environmental health department) to assure the delivery of the Essential Environmental Health Services to the community?

### **Model Standard 5.2: Public Health Policy Development**

The governmental entity works well with its community partners to develop necessary policy and program resources. Policy development is a process that enables informed decisions to be made concerning issues related to environmental health. “Policy development” involves the means by which problem identification, technical knowledge of possible solutions, and societal values join to set a course of action. Policy development is not synonymous with the development of laws, rules, and regulations (which are the focus of Essential Service # 6). Laws, rules, and regulations may be adopted as tools to implement policy, but good policies must precede good legislation.

To accomplish this, the EH System or program

- Uses data from various environmental health sources and assessments to make recommendations on establishing priorities for policy development to address critical environmental health issues.
- Contributes to the development and/or modification of public and environmental health policy by facilitating community involvement and engaging in activities that inform the public and environmental health policy development process.
- Advocates for policies and plans to ensure consistent and equitable services within all geographic areas and segments of the community to ensure social and environmental equity.
- Advocates for policies and plans directed toward protecting populations who bear a disproportionate burden of mortality or morbidity or are particularly sensitive to some environmental health threats.
- Alerts policymakers and the public regarding the potential environmental health impacts (both intended and unintended) from current and/or proposed policies
- Reviews existing policies at least every two years.

**Please answer the following questions related to Model Standard 5.2:**

- 5.2A** Has the EH System or program developed a community environmental health improvement process in which environmental health policy needs are identified?
- 5.2B** Does the system/program advocate for prevention and protection policies for those in the community who bear a disproportionate burden of mortality or morbidity, or that are particularly sensitive to some environmental health issues?
- 5.2C** Is a process in place to review existing policies every two years?

**Model Standard 5.3: Community Environmental Health Improvement Process and Strategic Planning**

The community environmental health improvement process involves an ongoing collaborative, community-wide effort by the local EH System or program to anticipate, recognize, evaluate, and address environmental health problems including issues classified within traditional environmental health, as well as other community issues that indirectly affecting the community's environmental health including business and economic development, housing, and land use planning. The key steps in a community environmental health assessment process include: assess applicable data; inventory community environmental health assets and resources; identify community perceptions about environmental health; develop and implement coordinated strategies; develop measurable objectives and indicators; identify entities accountable; and cultivate community "ownership" of the entire process. The community environmental health improvement process provides the opportunity to develop a community-owned plan that will ultimately lead to a healthier community. The community environmental health improvement process is further strengthened by the organizational strategic planning activities of key environmental health agencies and partners to achieve community environmental health improvement objectives and identify entities accountable to achieve each objective.

To accomplish this, the EH System or program

- Establishes a community environmental health improvement process which includes broad-based participation and uses information from community environmental health assessments.
- Develops organizational strategic plans to identify goals, objectives, outcome measures, and a plan of action to address needs identified through the community improvement process. The strategic plan is updated periodically.

**Please answer the following question related to Model Standard 5.3:**

- 5.3A** Has the EH System or program incorporated the Community Environmental Health Assessment and stakeholder input into a community environmental health improvement plan which identifies environmental health priorities, policies and resources?

**Model Standard 5.4: Plan for Environmental Health Emergencies**

An essential community plan is an “All Hazards” emergency preparedness and response plan which describes the roles, functions and responsibilities of local partners in the event of one or more types of environmental health emergencies. These plans describe community interventions necessary to prevent, monitor and control an incident or emergency event.

To accomplish this, the EH System or program

- Develops a plan that defines environmental health disasters and emergencies that might trigger implementation of the emergency response plan, describes organizational responsibilities, establishes standard operating procedures, and clearly outlines alert and evacuation protocols.

**Please answer the following question related to Model Standard 5.4:**

- 5.4A** Does the EH System or program have an all-hazards emergency preparedness and response plan?

**Essential Service #6: Enforce Laws and Regulations that Protect Health and Ensure Safety**

This service includes

- Reviewing, evaluating, and revising laws and regulations designed to protect health, environmental quality, and safety to assure that they reflect current scientific knowledge and best practices for achieving compliance.
- Educating persons and entities obligated to obey or to enforce laws and regulations designed to protect health, environmental quality, and safety in order to encourage compliance.
- Assuring compliance with environmental health and protection laws, regulations, ordinances, and policies.

## Model Standard 6.1: Review and Evaluation of Current Laws, Regulations and Ordinances

The EH System or program reviews and assesses the impact of state and local laws, regulations, and ordinances on the environmental health of the community including those which govern food safety, clean water and air, as well as those which affect environmental health and protection more broadly, including but not limited to land use, community design, transportation, and agriculture. The review includes scientific merit, best practices for achieving compliance, and opinions of constituents. Through this process, EH System or program determines whether existing laws need updating.

To accomplish this, the EH System or program

- Reviews and assesses the impact of existing laws, regulations and ordinances at least every five years.

### Please answer the following question related to model standard 6.1:

- 6.1A** Are state and local laws, regulations, and ordinances reviewed, at least once every five years, to assess their impact on the environmental health of the community and determine whether they need updating?

## Model Standard 6.2: Involvement in Improvement of Laws, Regulations and Ordinances

The EH System or program identifies gaps in public health and environmental laws, regulations, ordinances, or policies for problems and issues that can only be addressed through these means. The EH System or program participates in the modification of existing laws, regulations, and/or the formulation of new laws, regulations, and ordinances designed to assure and improve the public's health and the quality of the environment that may impact human health. Participation can include drafting proposed legislation, regulations, and ordinances, or providing technical assistance to others involved in policy review and development.

To accomplish this, the EH System or program

- Identifies public health and environmental issues that are not adequately addressed through existing laws, regulations and ordinances.
- Participates in the modification of existing laws, regulations and ordinances and policy development to address identified gaps.

**Please answer the following questions related to model standard 6.2:**

- 6.2A** Are gaps identified in public health and environmental laws, regulations, or ordinances?
- 6.2B** Does the EH System or program participate in the updating and/or modification of existing, or the formulation of new laws, regulations, and ordinances designed to assure and improve the public's health and the quality of the environment that may impact human health?

**Model Standard 6.3: Enforcement of Laws, Regulations, and Ordinances**

The authority of the governmental organization within the EH System or program to enforce public health and environmental quality laws, regulations, and ordinances varies from state to state and between jurisdictions within states. In many communities, the local public health agency exercises regulatory enforcement that is delegated or contracted to it by federal, state, county, or municipal government entities. In other communities, enforcement authority may be retained by the state or delegated to one or more governmental agencies outside of the local public health agency. Some communities have local environmental health enforcement created through home rule authority. Regardless of which governmental entity or entities is vested with authority and responsibility, the EH System or program as a whole must ensure effective and equitable enforcement of laws, regulations and ordinances.

To accomplish this, the EH System or program

- Assures that all its enforcement activities are conducted in a timely manner in accordance with laws, regulations, and ordinances.
- Performs education, enforcement and compliance activities consistently and equitably within all geographic areas and segments of the community to ensure social and environmental equity.
- Informs and educates individuals, organizations, and regulated entities of the meaning and purpose of public health and environmental quality laws, regulations, and ordinances.
- Evaluates the compliance and responsiveness of regulated organizations and entities and makes appropriate adjustments.

**Please answer the following questions related to model standard 6.3:**

- 6.3A** Does the EH System or program provide timely, consistent and equitable enforcement of environmental health protection laws, regulations, ordinances, and policies within all segments of the jurisdiction?
- 6.3B** Does the EH System or program provide information about the meaning and purpose of public and environmental health laws, regulations and ordinances to the individuals and organizations that are required to comply with them?
- 6.3C** Has the compliance and responsiveness of regulated organizations and entities been evaluated in the past five years?

## **Essential Service #7: Link People to Needed Environmental Health Services and Assure the Provision of Environmental Health Services When Otherwise Unavailable**

This service includes

- Identifying populations with limited access or barriers to environmental public health services.
- Identifying environmental public health service needs of populations with limited access or barriers to a coordinated environmental health system.
- Assuring the linkage of people and the community to appropriate environmental public health services through coordination of services and development of interventions that address barriers to service (e.g., culturally and linguistically appropriate staff and materials).

## **Model Standard 7.1: Identification of Environmental Public Health Service Needs of the Population**

There may be populations that have difficulty with obtaining services. The EH System or program has a responsibility to ensure all constituents have equal access to environmental health services by identifying populations with limited access to a coordinated environmental health system, anticipating some of their needs, and addressing the barriers to service (e.g., poverty, language or culture).

To accomplish this, the EH System or program

- Identifies populations in the community that may experience barriers to the receipt of environmental public health services.
- Defines environmental health service needs for the general population and for those who may experience barriers to obtaining these services.

### **Please answer the following question related to model standard 7.1:**

**7.1A** Are populations with limited access or barriers to a coordinated environmental public health services identified?

## **Model Standard 7.2: Assuring the Linkage of People to Environmental Public Health Services**

The EH System or program provides services to address identified needs by assuring a program delivery system that is timely and responsive to its constituents. In some instances, environmental health responsibilities have been fragmented and assigned to several different agencies. The EH System or program should take steps to ensure that all the agencies and entities within the environmental health system are linked through a referral network and that all constituents have equal access to all services; regardless of which governmental entity is assigned responsibility. The EH System or program supports and coordinates partnerships and referral mechanisms among the community's environmental health and protection programs to optimize access for the entire population to needed environmental public health services. Additionally, the EH System or program seeks to create innovative partnerships with other organizations—such as professional associations, trade associations, and advocacy groups—that will help to enhance the effectiveness and accessibility of local environmental public health and environmental protection services.

To accomplish this, the EH System or program

- Develops referral mechanisms among the community's environmental public health and protection programs to link populations to needed services and to optimize access by populations that may experience barriers to needed environmental health services.
- Convenes periodic meetings among agencies responsible for environmental public health and protection to coordinate activities and agree on roles and responsibilities.

**Please answer the following questions related to model standard 7.2:**

- 7.2A** Does the EH System or program have an active outreach and referral mechanism in place to link constituents to environmental public health and protection services?
- 7.2B** Are there memorandums of understanding, or some other written agreements, among the entities with responsibility for aspects of environmental health protection within the EH System or program?
- 7.2C** Does the EH System or program periodically convene the multiple agencies with responsibility in areas of environmental health in order to assure a program delivery system that is coordinated, timely and responsive to all constituents?

## **Essential Service #8: Assure a Competent Environmental Health Workforce**

This service includes

- Assessment of the workforce (including agency and non-governmental workers such as private septic and water well contractors, food service managers, and others) to meet community needs for environmental public health services.
- Maintenance of environmental health workforce standards, including efficient processes for licensure/credentialing of professionals and incorporation into personnel systems of core competencies needed to provide the Essential Environmental Health Services (EssEnvHS).
- Adoption of continuous quality improvement and life-long learning programs for all members of the environmental health workforce, including opportunities for formal and informal public health and environmental health leadership development.

## Model Standard 8.1: Workforce Assessment, Planning and Development

It is vital to have a well prepared environmental health workforce which has a fundamental understanding of environmental health and public health and which has the capacity to carry out the essential environmental health services (EssEnvHS). Workforce assessment is the process of determining the competencies, skills, and knowledge of workers and the training needed to achieve community environmental health goals. It is a community process that includes the identification of those available to contribute to the provision of the essential environmental health services and the particular strengths and assets that each brings. Workforce assessment includes the projection of optimal numbers and types of personnel and the formulation of plans to address identified workforce shortfalls or gaps. Particular attention needs to be paid to diversification of the workforce to reflect the diversity of the community it serves.

To accomplish this, the EH System or program

- Periodically determines the competencies, composition, demographics, and size of the environmental health workforce that provides the EssEnvHS.
- Identifies and addresses gaps in training and competence.
- Creates a workforce plan that includes documentation of findings from the workforce determination, a projection of optimal workforce numbers and the types of personnel required, and development of a plan to address environmental health needs.
- Distributes information from the workforce assessment to community organizations, including governing bodies, advisory groups, academic institutions, and public and private agencies, for use in strategic and operational plans.

### Please answer the following questions related to Model Standard 8.1:

**8.1A** Are gaps within the workforce relative to the needs of the community identified?

**8.1A** Discussion Toolbox: In considering 8.1A, does the EH System or program have information on shortfall or gaps related to workforce?

- Composition?
- Size?
- Skills and/or experience?
- Recruitment and retention?

**8.1B** Is a workforce development plan in place to address gaps in workforce?

**8.1.B** Discussion Toolbox: In considering 8.1B, does the plan address workforce

- Composition?
- Recruitment?
- Competency requirements?
- Performance expectations?
- Retention incentives?
- Succession?
- Training?

**8.1C** Has the EH System or program established requirements for licensure, registration and certification of the environmental health workforce for relevant areas of environmental public health services such as the requirement for the REHS or RS credential?

**8.1D** Does the plan encourage and/or give preference to graduates of accredited undergraduate and/or graduate programs of environmental health or public health and/or to candidates with RS or REHS credentials?

**8.1E** Are gaps within the workforce (including but not limited to workforce training and staffing needs) communicated to key stakeholders including governing bodies, advisory groups, academic institutions, and public and private agencies?

## **Model Standard 8.2: Environmental Health Workforce Standards**

Clear standards are established for workforce performance and are incorporated into personnel systems. Environmental health workforce qualifications include certifications, licenses, and education required by law or established by local, state, or federal policy guidelines. Additional core and specific competencies that are needed to provide the essential environmental health services are incorporated in written position descriptions and regular performance evaluations.

To accomplish this, the EH System or program

- Establishes requirements for licensure, registration and certification of the environmental health workforce for relevant areas of environmental public health services. such as the requirement for the REHS or RS credential

- Develops, uses, and reviews job standards and position descriptions that incorporate specific competency and performance expectations for providing the essential environmental health services and performing the technical aspects of the position.
- Evaluates members of the environmental health workforce on their: demonstration of core competencies for performing their duties and responsibilities; understanding and applying the essential environmental health services; and understanding of the competencies specific to the principles of environmental health and public health.
- Develops plans to enhance individual skills and competencies through continuing education and training opportunities.

**Please answer the following questions related to Model Standard 8.2:**

**8.2A** Are environmental health workforce standards linked to job performance through clearly written position descriptions?

**8.2B** Is workforce performance routinely evaluated?

8.2B Discussion Toolbox: In considering 8.2B, does the evaluation assess workers'

- Knowledge and understanding of the Essential Environmental Health Services?
- Skills related to the Environmental Public Health Competencies?
- Technical competency related to job function?

**8.2C** Are specific plans made to enhance individual skills and competencies?

### **Model Standard 8.3: Life-Long Learning through Continuing Education, Training, and Mentoring**

The EH System or program benefits from a workforce engaging in lifelong learning provided through continuing education, job-related training and mentoring. Continuing education may encompass distance learning, workshops, seminars, national and regional conferences, and other activities intended to strengthen the professional knowledge and skills of employees contributing to the provision of the EssEnvHS. Experienced mentors and coaches are available to less experienced staff to provide advice, assist with skill development, and offer other needed career resources. Opportunities are available for staff to work with academic and research institutions, particularly those connected with schools of public health, accredited undergraduate and graduate programs of environmental health science, and public administration. Through these academic linkages, the environmental health workforce, faculty, and students are provided opportunities for relevant interaction which enriches both settings.

To accomplish this, the EH System or program

- Identifies continuing education and training needs and encourages opportunities for environmental health workforce development.
- Provides incentives (e.g., improvements in pay scale, release time, tuition reimbursement) for the environmental health workforce to pursue education and training.
- Evaluates the impact of training on workforce skills and competencies, and modifies individual training plans accordingly.
- Please answer the following questions related to Model Standard 8.3:

**8.3A** Are there continuing education opportunities available that address the specific needs of the environmental health workforce?

**8.3B** Are there incentives provided (e.g., improvements in pay scale, release time, tuition reimbursement) for the workforce to pursue education and training?

## **Model Standard 8.4: Environmental Health Leadership Development**

Leadership for improvement in community environmental health may be provided by the governmental public health entity, state/local environmental quality and environmental protection agencies, and may emerge from the public and private sectors or the community, or may be shared by multiple stakeholders. The governmental environmental health entity encourages the development of leadership capacity that is inclusive, representative of community diversity, and respectful of the community's perspective.

To accomplish this, the EH System or program

- Provides formal (e.g., educational programs, leadership institutes) and informal (e.g., coaching, mentoring) opportunities for leadership development for environmental health among potential emerging leaders at all organizational levels.
- Recognizes the importance of succession planning for critical leadership positions.

**Please answer the following questions related to Model Standard 8.4:**

**8.4A** Are there formal or informal opportunities for leadership development?

**8.4B** Does the EH System or program actively identify and invest in future environmental health leaders?

## Essential Service #9: Evaluate the Effectiveness, Accessibility, and Quality of Personal and Population Based Environmental Health Services

This service includes

- Assessing the accessibility and quality of services delivered and the effectiveness and accomplishment of programs provided.
- Providing information necessary for allocating resources and reshaping programs and/or services.

### Model Standard 9.1: Evaluation of Environmental Public Health Services

There is a process in place for continually improving environmental public health services. This process includes an evaluation of the effectiveness, accessibility, and quality of services as well as progress toward program goals. The EH System or program establishes its own benchmarks and criteria for performance (e.g., related to the EH System or program's strategic and operational plans) and/or uses externally established performance criteria (e.g., Healthy People 2010 objectives) to evaluate local conditions against a set of specific indicators for environmental public health services. The evaluation of environmental public health services includes analysis of environmental health outcomes—including environmentally-related illness, environmental indicators, and environmental risk factors known to contribute to illness and injury— service utilization, and community satisfaction in order to assess program effectiveness, and to provide information to allocate resources and reshape programs.

To accomplish this, the EH System or program

- Evaluates environmental public health services against established criteria for performance, including the extent to which program goals and objectives are achieved for these services with a focus on outcome and improvement (e.g., decreased rate of illness and injury, decrease in critical factors, decrease in exposure) in addition to the number of services/inspections provided.
- Routinely assesses or evaluates its activities to seek improvement in services and outcomes; this process includes determining the effectiveness, accessibility, and quality of services.
- Assesses community satisfaction with environmental public health services and programs through a broad-based process, which includes stakeholders and residents who are representative of the community and groups at increased risk of environmental exposures and negative health outcomes.
- Utilizes findings of the evaluation to modify plans and program activities to address identified deficiencies.

### Please answer the following questions related to Model Standard 9.1:

**9.1A** Are environmental public health programs and services routinely evaluated with a focus on accomplishments and achievement of program goals?

**9.1A** Discussion Toolbox: In considering 9.1A, does the evaluation include a review of

- Health outcomes?
- Environmental quality?
- Environmental indicators?
- Frequency of violations (other than the number of inspections)?
- Targets for effectiveness?
- Goals for access to services?
- Quality standards for service (e.g., state licensure)?

**9.1B** Is an assessment completed that measures the satisfaction of stakeholders and residents with environmental public health services?

**9.1B** Discussion Toolbox: In considering 9.1B, does the assessment

- Gather input from broad cross-segment of the community?
- Determine if needs are being met, including the groups at increased risk?
- Determine satisfaction with responsiveness to complaints or concerns?
- Identify areas where services could be improved?

**9.1C** Is an action plan in place and implemented to address needed improvements to services and policies identified through evaluations?

### Model Standard 9.2: Evaluation of Local Environmental Health System

A range of public, private, and voluntary entities, as well as individuals and informal associations, contribute to the delivery of the Essential Environmental Health Services within an EH System or program. The EH System or program evaluates the performance of these entities in working together to address environmental health issues and outcomes. The governmental environmental health entity takes a lead role in convening a collaborative evaluation process.

To accomplish this, the EH System or program

- Identifies public and private entities that contribute to the delivery of the Essential Environmental Health Services.
- Assesses the effectiveness of communication, coordination and linkage among the various entities that contribute to the delivery of the Essential Environmental Health Services in an EH System or program.

**Please answer the following question related to Model Standard 9.2:**

**9.2A** Has the EH System or program evaluated the effectiveness of the multiple agencies with responsibility in areas of environmental health in terms of their coordinated and timely responses to all constituents?

**9.2A** Discussion Toolbox: In considering 9.2A, does the evaluation consider effectiveness of

- Communication and information exchange?
- Coordination of services?
- Linkage between programs and/or agencies?
- Use of resources?

## **Essential Service #10: Research for New Insights and Innovative Solutions to Environmental Health Problems and Issues**

This service includes

- Identification of research needs and a continuum of innovative solutions to environmental health problems including practical field-based efforts to foster change in environmental public health practice and to develop best practices of environmental public health services.
- Establishing linkages with institutions of higher learning and research.
- Maintaining capacity to undertake timely policy analyses and systems research.

## Model Standard 10.1: Fostering Innovation

The EH System or program fosters innovation by adopting a philosophy of learning and encouraging employee involvement in research through awards and other forms of recognition.

To accomplish this, the EH System or program:

- Enables staff to identify research needs and new solutions to environmental health problems in the community by being given the time and resources to pilot test or measure the effectiveness of new or existing practices.
- Researches and monitors best practice information from other agencies and organizations at the local, state, and national level; applies information or best practices to program activities.
- Initiates and/or participates in research that contributes to improved environmental health system performance including best practices research.

### Please answer the following questions related to model standard 10.1:

**10.1A** Are environmental health staff encouraged and supported to identify new or innovative solutions to environmental health problems?

**10.1A** Discussion Toolbox: In answering 10.1A, consider the following, does the EH System or program

- Provide time and resources for staff to pilot test or conduct studies to determine new solutions?
- Publish results of staff research?
- Recognize staff (e.g., in performance reviews or through awards)?

**10.1B** Is environmental health staff encouraged and supported in identifying areas needing additional research to improve services and conditions?

**10.1C** Are best practices for environmental public health services routinely identified and applied to program activities?

**10.1D** Does the EH System or program initiate and/or participate in research that contributes to improved environmental health system performance?

## Model Standard 10.2: Linkage with Institutions of Higher Learning or Research

The EH System or program establishes a wide range of relationships with institutions of higher learning and research organizations. These relationships are mutually beneficial for research, continuing education, and practical training. Research relationships can occur with schools and programs of public health or with schools and programs of environmental health science as well as the public. Linkages are established with other research organizations, such as federal and state agencies, associations, research organizations, institutions of higher learning and research departments or divisions of business firms. Links are established with one or more institutions of higher learning and/or research organizations to cosponsor continuing education programs.

To accomplish this, the EH System or program

Partners with institutions of higher learning or research organizations as well as the public to conduct research activities related to the essential environmental health services and to improvements to the practice of environmental health.

### Please answer the following question related to model standard 10.2:

**10.2A** Does the EH System or program partner with institutions of higher learning or research organizations as well as the public to conduct research related to environmental health?

**10.2A** Discussion Toolbox: In considering 10.2A, does the research

- Relate to the essential environmental public health services?
- Aim to improve the practice of environmental public health?
- Include the community in discussions about environmental health research?



