Evidence-Based Public Health Issues and Concepts

Executive Summary

This document provides a brief overview of important concepts related to evidence-based public health (EBPH). Additional details on these and other concepts are contained in other fact sheets and case studies in the ASTHO EBPH Toolkit.

Evidence-Based Public Health Overview

State and local public health professionals apply evidence-based strategies to address their most pressing public health needs and gaps. Armed with data about community health needs and preferences—derived through community health assessments—public health officials and policymakers can make informed decisions about where to focus resources and interventions for maximum gain.

EBPH Defined. Evidence-based public health has been defined as “the development, implementation, and evaluation of effective programs and policies in public health through application of principles of scientific reasoning.”¹ The definition has evolved to include a strong emphasis on community needs and preferences. EBPH offers a process to help decision makers “determine the best intervention strategy to use to address the problem at hand for a particular population of interest and the local context.”² State and local public health professionals use the process to evaluate and adapt current strategies or develop new ones with strong evidence of effectiveness. The process helps state and local public health professionals make effective decisions based on the best available research to achieve desired outcomes.³

EBPH Characteristics. As described in the 2009 report “Evidence Based Public Health: A Fundamental Concept for Public Health Practice,” there are several characteristics of evidence-based public health (EBPH), including:

- Making decisions based on best available peer-reviewed evidence.
- Using information systems and data systematically.
- Applying program planning frameworks.
- Engaging the community in assessment and decision making.
- Conducting sound evaluation.
- Disseminating what is learned to key stakeholders and decision makers.

² Ibid.
³ Ibid.
**EBPH Framework.** The evidence-based process involves identifying unmet needs, setting objectives, selecting effective interventions, and implementing and evaluating programs and policies. The EBPH framework (Figure 1) guides public health professionals through a series of steps, including assessment (to identify the problem and unmet needs), determining what is known, developing and prioritizing policy options, developing an action plan, and evaluating the program or policy. The framework helps public health professionals and their partners select interventions that are well-matched to the community’s needs, preferences, and organizational capacity.

**EBPH Tools and Resources.** There are numerous tools and worksheets available that help stakeholders work through the evidence-based steps. For example, the Guide to Community Preventive Services (The Community Guide) offers evidence-based recommendations from the Community Preventive Services Task Force about public health programs, services, and policies to improve health. The Community Guide helps public health professionals identify evidence-based interventions, understand their potential effects on public health, and understand the gaps in the evidence for specific policies and practices. Public health professionals can use The Community Guide to support various aspects of public health programming and policy, from evaluating current programs to determine their evidence of effectiveness to planning and funding new approaches that have been proven effective. The supplemental resources section of this toolkit provides links to tools that help users work through the EBPH process.

**Characteristics of State EBPH Approaches**

As described in the EBPH toolkit action sheets and case studies, state and local health agencies have adopted a wide range of evidence-based approaches. While their approaches and objectives vary, they share several key characteristics and components.

**Addressing Public Health Problems Through Targeted Solutions.** States and communities perform assessments to identify problems and objectives, review existing policies and gaps, and assess needs and available resources. As the first step in the EBPH framework, assessments are used to develop responsive and targeted approaches to address public health needs and challenges. For example, states that are grappling with rising obesity and associated chronic conditions have turned to evidence-based recommendations for increasing physical activity and improving nutrition for children and adults.

**Utilizing Evidence-Based Resources and Tools.** The state examples provided in this toolkit demonstrate state use of The Community Guide and other evidence-based resources to select proven strategies for addressing public health challenges. States such as Colorado and New York utilize tools and checklists to review scientific literature, define agency roles, and prioritize and rank a wide range of public health strategies.
Equipping Public Health Professionals to Apply Evidence-Based Practices. Adopting an evidence-based public health approach requires knowledge of evidence-based principles, tools, and processes. Several states have participated in state team workshops and other training opportunities to promote EBPH knowledge and support state efforts to identify needs, prioritize strategies, and develop and implement community-specific action plans. Several states have adopted a “train the trainer” model in which a small group of experts promote widespread dissemination of EBPH information and tools across programs and externally with local health departments and other stakeholders.

Mobilizing Partnerships. State EBPH approaches rely on a coordinated approach involving public, private, nonprofit, and academic partners. With limited resources to support evidence-based initiatives, states leverage the skills and resources of multiple stakeholders to plan and implement effective policies and programs.