Council of State and Territorial Epidemiologists
Position Statement

03-CD-01

Committee: **Chronic Disease and Maternal and Child Health**

Title: **Implementation of the Recommendations in the Maternal and Child Health Epidemiology Capacity Assessment**

Statement of the Problem:
Over the past century, public health agencies at the state and territorial level in the United States have developed epidemiologic capacities to improve disease control and health promotion. The scope of epidemiologic investigations during that time has broadened from primarily infectious diseases to chronic diseases, maternal and child health (MCH), and other issues. Further, in 1988, the Institute of Medicine defined 10 Essential Public Health Services. Development of sufficient epidemiologic capacity is essential to successfully carry out those essential services. In addition, in recent years there has been an increasing demand for government accountability and for public health decisions and program interventions based on scientific evidence. Taken together, these demands have highlighted the importance of building MCH epidemiology capacity.

For many years, no effort had been made to systematically assess epidemiology capacity at the state and territorial level. Therefore, the Council of State and Territorial Epidemiologists (CSTE) began developing modules to assess epidemiology and data capacity at state and territorial public health agencies. These modules also allowed CSTE to monitor the Healthy People 2010 Objective 23-14, which calls for an increase in public health agencies that provide epidemiology services to support the essential public health services.

The module for assessing MCH epidemiology capacity was designed by CSTE's MCH working group with input from the Association of Maternal and Child Health Programs (AMCHP), the Maternal and Child Health Bureau of the Health Resources and Services Administration (HRSA/MCHB), the Division of Reproductive Health of the Centers for Disease Control and Prevention (CDC), and several state public health agencies. The survey was conducted between November 2001 and March 2002. In December 2002, CSTE published a report based on this assessment.

State and territorial MCH program directors were asked to assess their epidemiology capacity using a web- or paper-based version of the CSTE questionnaire; the response rate was 93%. After data collection and analysis, the MCH workgroup reconvened via conference calls to propose recommendations for the three (3) capacity areas, based on the results of the assessment and the expertise of the group.

- **Human capacity** included agency personnel, personnel duties and involvement in MCH activity, and agency workforce training capacity. Only 52% of States reported adequate or very adequate analytic capacity. States with a lead or senior MCH epidemiologist were more likely to report data analyses for needs assessment, program planning, surveillance, and policy development. States with lead or senior MCH epidemiologists are better able to incorporate and apply MCH epidemiology to MCH policy/program decision-making. While 76% reported having an MCH epidemiologist, only 54% have the benefits of a lead or senior MCH epidemiologist including participation in improving data collection and use or developing a strategic plan for epidemiology projects.

- **Systems capacity** was classified as data systems capacity, funding sources, external resources, internal collaboration, web resources, and training support among state and territorial public health agencies. States and territories cited financial constraints (85%), time constraints (75%), and lack of in-state programs (67%) as barriers to capacity building. Barriers to data use for policy/planning included lack of qualified personnel (48%) and lack

of financial resources (62%). From 15% to 20% of States and territories reported MCH epidemiologists are not involved in developing or reviewing legislation.

- **MCH data-related activities** may be considered capacity outcome measures, as well as the steps needed for agencies to have effective MCH programs. In 20% of states and territories, MCH directors do not routinely use data to make MCH policy and program decisions. In program areas other than prenatal care and children with special health needs, 40% of states have not done program evaluation using multiple data sources; 36% report not having data linking capacity.

Position to be adopted:

CSTE encourages the application of disease prevention and health promotion by supporting the use of effective public health surveillance and sound epidemiologic practice through training, capacity building, and advocating for resources. CSTE supports the following recommendations proposed by the MCH workgroup in the MCH Epidemiology Assessment Report to improve epidemiology and data capacity:

1. Human capacity
    - Each state and territory should have a minimum of one doctoral level MCH epidemiologist or equivalent serving as the lead MCH epidemiologist.
    - Each major MCH program area should be staffed or provided with adequate MCH epidemiology support.
2. Systems capacity
    - MCH epidemiology/data staff should strengthen and expand their data use, including use of MCH-related databases, especially those that are linked to other databases.
    - There should be close collaboration between MCH program directors and MCH epidemiology/data staff.
    - The MCH policies and plans to carry out the 10 Essential Public Health Services should reflect input from MCH epidemiology/data staff.
    - MCH directors should encourage their MCH epidemiologists to obtain continuing education in MCH epidemiology.
    - Federal MCH epidemiology leaders should work closely with universities to define competencies and develop appropriate graduate and continuing education courses.
3. MCH data-related activities
    - MCH directors and their MCH epidemiologists should actively participate in national, regional, and state meetings to exchange information with others.

In addition, CSTE recommends that state and territorial public health agencies take leadership roles in implementing the recommendations to build human and systems capacity and to promote MCH data-related activities.

Federal agencies, specifically, CDC and HRSA/MCHB, have been leading the efforts to build MCH surveillance and program evaluation capacity. Such efforts should continue, especially in the following areas:

- Providing resources to help implement the recommendations at the state and territorial level,

- Defining appropriate infrastructure-building activities and performance measurements to more fully include MCH epidemiology capacity, and
- Collaborating with universities to define competencies and develop continuing education courses.

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