

06-EC-01

Committee: Executive

Title: Workforce Capacity: Investing in the Next Generation of Public Health Applied Epidemiology and Laboratory Leaders

Statement of the Problem:

State and local public health agencies face shortages of key public health personnel including nurses, epidemiologists, and laboratory scientists¹. In addition to aging leadership at the state level, these agencies also encounter major recruitment/retention problems associated with a variety of factors that put states and local recruitment efforts at a major disadvantage when competing with universities and the private sector for recently trained epidemiologists.

State and local efforts to streamline and update hiring practices and compensation can help alleviate some of the problems associated with recruitment and retention. Federal efforts to address the critical shortages are currently focusing on the training “pipeline” to attract and train more students for careers in nursing, epidemiology and laboratory professions². Although this will help to ease the problem for all three professions, it will be most effective for the nursing profession where the acute need can be best addressed by increasing the number of persons entering the profession. This approach will not work as well in bringing qualified epidemiologists into public health practice. We believe the combination of academic training combined with hands-on fellowships will be far more effective in solving the acute shortage. The Epidemic Intelligence Service (EIS), operated by the Centers for Disease Control and Prevention, has been able to consistently compete for most highly qualified candidates by providing a post-graduate training program in applied epidemiology. This program provides a mentor model training experience which fast tracks the development of applied epidemiology competencies and skills for leaders in this profession. The program has successfully provided the leadership for the Centers for Disease Control for over 50 years. By placing trainees in state health agencies, EIS has also provided much of the top level leadership in state health departments and many large cities³. However, the overall estimated number of epidemiologists needed at the state and local level to meet the essential public health services far exceeds those currently in the workforce⁴. Both CDC and States share the common problem of resources to expand efforts to address the acute capacity problem of states and local health departments and the long term need in these agencies to develop leaders.

It is a training/quality issue to turn a classroom epidemiologist into a highly productive applied epidemiologist. Programs such as EIS, the CSTE/CDC Applied Epidemiology Fellowship and the CDC/APHL EID Laboratory Fellowship are programs that can accelerate young laboratory scientists and epidemiologists along the learning curve and produce the next generation of leaders. We know what a program such as the EIS has done for CDC and encourage policy makers and legislators to build in large-scale fellowship training component into legislation and funding considerations to address Federal, state, and local workforce needs, particularly for the critical core public health professionals--epidemiologists and laboratory scientists. All three of the above programs share the same mentorship model designed on the CDC's EIS model and provide competency-based programs designed to give advanced on-the-job training and ensure a smooth transition from academic to applied skills which lead to careers in public health. The need for well-trained epidemiologists and laboratory scientists that will remain employed in state

¹ State Public Health Employee Worker Shortage Report: A Civil Service Recruitment and Retention Crisis. Association of State and Territorial Health Officials. 2004. P. 3.

² Ibid. P. 1.

³ 2004 National Assessment of Epidemiologic Capacity: Findings and Recommendations. Council of State and Territorial Epidemiologists. 2004. P. 10.

⁴ Ibid. P.29.

and local health department beyond a work fulfillment requirement is much more likely with the combined efforts from these programs.

Statement of the desired action(s) to be taken:

- Include a workforce component into legislation reauthorizing the Public Health Security and Bioterrorism Response Act of 2002.
- Add language to S. 506, the Public Health Preparedness Workforce Development Act of 2005, that permits eligible grantees to fulfill their work obligations through participation in the Epidemic Intelligence Service (EIS), CDC/Council of State and Territorial Epidemiologists (CSTE) or CDC/Association of Public Health Laboratory (APHL) fellowship programs, which entail full-time work placement in Federal, state, and local health departments. These are programs currently funded through the Centers for Disease Control and Prevention to recruit, train, and retain newly graduating epidemiologists and laboratory scientists into the state and local public health workforce.
- Stabilize funding for EIS and seek new investment opportunities for the Epidemic Intelligence Service (EIS), CDC/Council of State and Territorial Epidemiologists (CSTE) or CDC/Association of Public Health Laboratory (APHL) fellowship programs in conjunction with other programs where CDC and states currently collaborate on public health program capacity building in states.

Public Health Impact:

- 1) Better meet the epidemiology workforce requirements needed to fulfill the essential public health services related to disease surveillance and response
- 2) Provide effective scientific leadership to state and local public health agencies through effective national recruitment and training programs that support retention efforts at the state and local levels.
- 3) Provide recruiting and retention opportunity for the next generation of scientific leadership at the CDC and state and local health agencies.

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