

## **Public Health: The Next Battlefield**

James R. Boyd, MBA, CFAAMA  
Administrator/Business Manager  
Norfolk Department of Public Health  
Norfolk, VA

The establishment of the Department of Homeland Security brought to the forefront the reality of terrorism and its' threat to America. The Executive Summary of the National Strategy for Homeland Security set forth three strategic objectives for homeland security which were: Prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism; and minimize the damage and recover from attacks that do occur. A key component of this strategy focused on the potential for the use of chemical, biological, and radiological weapons to decimate the health infrastructure of America. As a result, there is a stronger emphasis on Emergency Preparedness and Response and the inclusion of what the National Strategy for Homeland Security calls the "critical infrastructure".<sup>1</sup> An important component of that infrastructure is the public health system, particularly the local health department. For the poor, working poor, and medically disadvantaged, the local health department represents their best source for care other than the emergency room. If we accept the premise that the Department of Homeland Security is established to protect America against terrorist attack, and that public health is a function vital to national security, then public health can be considered a potential battleground in this war.

This brings up several questions: What is public health? What impact does it have on society? Why is a potential attack on public health so important so as to be included in a national strategy? Let's begin with the basic question: what is public health? Most

people accept the concept of public health as one that has been around forever. However, those same persons are normally unable to describe how public health fits into the health care continuum, how it is funded, or when the concept was conceived. Regarding the concept of public health, Winslow provided the most widely accepted definition: “Public Health is the Science and Art of (1) preventing disease, (2) prolonging life, and (3) promoting health and efficiency through organized community effort for (a) the sanitation of the environment, (b) the control of communicable infections, (c) the education of the individual in personal hygiene, (d) the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and (e) the development of the social machinery to insure everyone a standard of living adequate for the maintenance of health, so organizing these benefits so as to enable every citizen to realize his birthright of health and longevity”.<sup>2</sup>

The first establishment of a commission to deal with quarantine matters was in Louisiana (1855) after outbreaks of yellow fever and other epidemic diseases. However, the first state board of health was established in Massachusetts under the Act of 1869 (General Court of Massachusetts).<sup>3</sup> The 1950’s brought the role of the public health department to the forefront as communities received their immunizations from that source. Communities became familiar with the public health nurses who came to their neighborhoods. As modern science conquered the diseases through mass inoculation programs, and health care systems flourished throughout the nation, many considered public health to be an outdated concept. Curiously, we are again confronting the potential spread of disease, particularly smallpox. This time, it is being seriously regarded as a component of terrorist activities.

**The Role of the Public Health Department.** Although the diverse nature of states yields a range of mission statements related to their region, the general mission for public health organizations could be expressed as the responsibility to design, assess and/or manage strategies that support:

- 1) General health of the community, to include protection from disease, environmental dangers, and other health risks.
- 2) Knowledge and awareness of the community regarding health improvement and risk factors.
- 3) Documentation of health statistics related to the health status of the community.
- 4) As a part of the public safety team, the coordination of disaster related events that impact the community.

The mission of the public health system is intertwined into the safety and welfare of each community it is tasked to protect.

**Factors Contributing to the Reinvention of the Public Health Department.** Fast-forward from the 1950's to September 11, 2002 when the terrorist attacks on America focused our attention on our national infrastructure. Bio-terrorism suddenly became a major concern rather than a theoretical concept. The role of public health departments expanded in the face of new and potentially devastating diseases. Deaths by inhalation of Anthrax spores, the spread of SARS, and even the mysterious appearance of a small-pox like disease called monkey pox showed the potential deficiencies in our public health system.

Changes in the health care industry have negatively impacted both staffing levels and operating budgets of most local health departments. This has forced many to change their focus from health care delivery to community-oriented or population-based activities. Immunizations, clinic services, and such are provided on a sliding-fee scale to bring in revenue. Many health departments are funded by a combination of state, local, and grant funds. <sup>4</sup> In the midst of the continuing state and federal budget shortfalls, the need for a safety net traditionally provided through the local health departments is growing. One example is the growing number of persons living with Acquired Immunity Deficiency Syndrome (AIDS), where local health departments may provide medication, treatment, and/or coordinate community support for these patients. Ironically, as these persons become eligible for Medicaid, managed care programs remove them from the continuity of care provided by local health departments. <sup>5</sup>

**Three Fronts of the Battle.** There is a potential battle brewing in this nation, and the health department is increasingly found in the center of the battlefield. I see three distinct fronts to this battle, as follows:

- A. Cultural diversity. The changing demographics of America is clearly an issue, with growing ethnic populations a concern in all areas. In many instances, new arrivals end up receiving services through the local health department. However, the impact of culture on the acceptance and compliance of patients in regards to public health could be particularly important in dealing with epidemics.
- B. Bio-terrorism. The health department plays a vital role in the homeland security concept, tracking and monitoring health care trends as related to disease.

Although part of the National Information infrastructure, there is a dire need for a

stronger connectivity for the timely sharing of this information.<sup>6</sup> This particular front is developing daily, with every new development (monkey pox, West Nile Virus, EEE) a potential suspect for bio-terrorism. The need to track and share this information is critical.

C. The Uninsured: the silent epidemic. Baby boomers born between 1946 and 1964 represent 2/3 of all U.S. workers. Although most are active longer than previous generations, their sheer numbers will impact the public health system. Statistics show that the numbers of people unable to afford health care insurance is growing. Almost 75 million were reported as uninsured during the period of 2001-2002. Declining health, and overburdening of the safety net providers could cause eventual damage to the public health system.<sup>7</sup> Concurrently, Emergency Departments are struggling with the chronic overcrowding conditions that hinder their ability to respond to disaster conditions.<sup>8</sup>

As with all wars, an attack on any of the fronts previously mentioned could be devastating. What is most disconcerting is that many are not aware of the potential dangers. Awareness, education, and preparedness will improve the odds. We do still have a public health system, although much is needed to improve its' ability to respond to disaster conditions. The health department is a silent sentry, continuing to protect the communities of the nation by safeguarding their health and environment. If an attack on the health and safety of America's communities is possible, then public health could be the next battlefield.

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