Section 317 Immunization Program: Protecting a National Asset

Paul Jarris, MD, MBA^a Virginia Dolen, MS^a The article, "Protecting the Public's Health: Critical Functions of the Section 317 Immunization Program-A Report of the National Vaccine Advisory Committee," describes the many critical components of the effective immunization infrastructure that Section 317 funding supports.¹ The federal Section 317 Immunization Program, which disseminates grants to 64 states, cities, and territories, provides core funding for the nation's immunization programs and services.² In addition to the purchase of vaccines, Section 317 funding provides resources for the public health capacity that supports outbreak investigation and control, supports providers through education about vaccines and information on storage and handling, and monitors vaccine effectiveness. The Association of State and Territorial Health Officials (ASTHO) agrees with the report's recommendation that the Section 317 Immunization Program should be sustained at adequate funding levels. Our national governmental public health enterprise—comprising federal, state, and local health agencies—must work together to maintain and strengthen the health and economic gains that result from a successful immunization program.

We cannot protect everyone from every disease, and although we have been very successful in protecting the U.S. population from vaccine-preventable diseases (VPDs), we need to remain vigilant and activated. A recent resurgence of pertussis demonstrates that these diseases do not go away and cannot be ignored.³ In fact, there continues to be room for improvement in the immunity of the public we serve. The network in place to sustain this valuable protection is complex and multifaceted. When someone receives a shot, years of work have enabled the transaction to occur. There has been extensive research to develop the vaccine; years of testing to ensure safety; ongoing monitoring of the vaccine proper storage, handling, and administration of the vaccine. The successful immunization program in the United States is a model for effective public and private-sector collaborations, and this partnership must be maintained going forward to keep the public protected from these debilitating and costly diseases.

As mentioned in the National Vaccine Advisory Committee (NVAC) report in this issue of *Public Health Reports*, the foundation of this collaboration is a

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strong public health infrastructure at federal, state, and local levels that includes a highly trained immunization workforce, disease surveillance experts and systems, scientific support for developing immunization policies, systems for monitoring and assuring vaccine safety, and mechanisms to monitor vaccine coverage rates.¹ Public health takes the lead role in ensuring that everyone has access to safe and effective vaccines. Immunization infrastructure is a foundational capacity that must be included in the minimum package of public health services provided to every community. A recent Institute of Medicine report, "For the Public's Health: Investing in a Healthier Future," recommends that the nation take steps to ensure that there is adequate funding and capacity for such foundational services that protect and improve the population's health.⁴

Thanks to our nation's public health system and resources made available through the Section 317 Program, childhood immunization coverage rates are high in most parts of the U.S. In 2010, coverage levels of at least 90% were met for five out of seven recommended childhood vaccines.⁵ This high coverage rate has resulted in a more than 90% decline in once common VPDs, such as diphtheria, polio, and measles.⁶ Although levels of adult vaccination are not as high, new recommendations and initiatives are designed to ensure that more adults are protected from preventable illness. However, we need to transition the Section 317 Program carefully to increase the rates of adult vaccinations. We wish to continue to improve upon our childhood vaccination rates as we take steps to improve adult vaccination. A balanced approach is necessary to make certain the safety net that is the Section 317 Immunization Program remains intact.

In addition to their positive impact on health, vaccines are one of the most cost-effective public health approaches to reducing health-care costs because they prevent disease before it occurs and spreads through our communities. For each birth cohort vaccinated against 13 diseases in accordance with the recommended immunization schedule, society saves \$13.6 billion in direct health-care costs, 42,000 lives are saved, and 20 million cases of disease are prevented.⁷ However, to realize the savings in lives and costs, we need to continue investments in the nation's immunization program.

ASTHO has followed the trend of shrinking state budgets since 2008, when we initiated a longitudinal study to investigate the impact of budget cuts on state and territorial public health agencies and the people they serve. Since July 2008, 87% of reporting state health agencies have experienced budget cuts, which impact their ability to respond to public health threats, and 31% have experienced cuts that directly impact their immunization programs. The ASTHO Budget Cuts Surveys' findings show that state health agencies continue to experience budget cuts and job losses, resulting in the reduction or elimination of critical public health programs and services.⁸

The effect of such budget cuts has been seen in Washington State, which recently experienced an epidemic of pertussis (also known as whooping cough). Washington State and its local health departments have addressed this epidemic through health-care provider education, public awareness efforts, a substantial increase in providing vaccinations (a 140% increase for adults), and increases in laboratory testing and case investigations.9 Health departments have struggled to find the staff capacity and resources to provide the increased level of services needed to fully address the cases, the highest number in decades, and maintain all the other day-to-day activities necessary to protect the public's health. The New York Times reported that the "response to the epidemic has been hampered by the recession [and] years of sustained budget cuts."¹⁰ Due to the need to limit efforts, there are missed opportunities for collecting rich epidemiologic data that may inform better responses in the future or provide evidence for changed vaccine recommendations. As more states across the country experience increased levels of VPDs, budget constraints may prevent public health from providing appropriate responses to control the surge of cases or address other health emergencies that arise concurrently.

In a time of expanding health insurance coverage, it is important to remember that insurance coverage does not ensure access, and access does not assure quality of care. Successful immunization requires much more behind-the-scenes work than providers purchasing and administering vaccines. There are fundamental activities conducted by public health professionals that are critical to the future of the nation's immunization efforts even if the population is fully insured. Section 317 infrastructure funds are used to ensure that vaccines are accessible, safe, and effective. State and local health agencies conduct activities such as disease surveillance, and offer provider support, quality assurance, communications, outreach, and outbreak response. Furthermore, in some locations, public health agencies are essential community providers, as sufficient private capacity to vaccinate the population does not currently exist. Careful planning and investment must take place either to create a capacity for public health agencies to generate sufficient insurance revenue to support providing immunizations, or to transition direct immunization services to private providers. Measurement

and monitoring of vaccination rates must take place during this time to avoid unintended consequences, such as children being turned away from schools or increased VPDs.

The entire public health enterprise—at the federal, state, and local levels—is involved in the response to outbreaks of VPDs, but much of the on-the-ground burden affects the local and state levels. For example, after an outbreak of measles affiliated with the 2012 Super Bowl, state health officials provided near-daily updates on the number of cases and places visited by those infected to stop the disease's spread.¹¹ When three cases of meningococcal disease were diagnosed in a small town in Oregon, the state and county health agencies coordinated community vaccinations, immunizing more than 1,000 people.¹² These jurisdictions can be heavily impacted by even a relatively small decrease in funding, especially as public health activities become increasingly integrated.

With lives and health at stake, we cannot afford to slip back on the progress we have made. Continued investment in immunization infrastructure will ensure that gains made by the introduction and continued use of vaccines will not be lost. The Centers for Disease Control and Prevention is providing transition funding in select program areas to a limited number of grantees, in part through the Prevention and Public Health Fund, to build capacity and strengthen the public health immunization infrastructure to be more effective in the changing health-care delivery environment.¹³ Funded activities will include enhancing immunization information systems, developing and implementing strategic plans for revenue generation in health department clinics, and supporting adult and school-located vaccination. Although this transition funding will help public health, sufficient and sustained funding is necessary to realize the full benefits that vaccines can provide.

The U.S. vaccine program has had a demonstrated impact on improving the population's health. It is imperative that the infrastructure that supports the nation's immunization program remains intact. The NVAC report in this issue articulates the significant role of public health infrastructure in the U.S. immunization program and the critical need to support Section 317 funding for these programs.

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