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STATEMENT OF POLICY

Comprehensive Immunization Programs – Addressing Immunizations Across the Lifespan

Policy

Immunization is one of the most successful and effective public health measures available to populations worldwide, with an unparalleled record of disease reduction and prevention. ¹ The Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics (AAP), American Academy of Family Physicians, and many other professional organizations recommend vaccinations from birth and throughout the lifespan to provide a lifetime of protection from vaccine-preventable diseases.

The National Association of County and City Health Officials (NACCHO) supports strong coordination and collaboration of immunization programs for persons of all ages to ensure access and increase vaccination coverage rates and protect individuals and communities from vaccine-preventable diseases. NACCHO recommends that the federal government provide sufficient funding through Vaccines for Children (VFC), Section 317 Program for immunization services, and potential future programs and policies to create a vaccine safety net for adults. This should include funding for vaccine counseling and administration as well as education and outreach, particularly those who face access challenges, including uninsured and underinsured children, adolescents, and adults. Local health departments (LHDs) should implement, adapt, and support programs, policies, and evidence-based practices to increase vaccination rates in their communities.

Comprehensive and sustainable immunization programs incorporate the following strategies:

- Include adequate reimbursement of public and private immunization providers for vaccine products and supplies, vaccine storage and handling, vaccine counseling and administration, and population and clinic assessments using immunization information systems (IIS).
- Implement education, training, and clinical procedures designed to increase demand for vaccination among patients and parents; promote strong vaccine recommendations by clinicians to patients; minimize missed opportunities for vaccinations; ensure series completion; train community vaccination champions; and reach underserved populations to assure access to information and immunization services.
- Identify and address immunization disparities by (1) using information technology and analysis, such as IISs and electronic health records, to monitor and respond to gaps and trends in vaccination coverage and (2) supporting local health department epidemiologists and other staff to continually measure the impact of policies and interventions on equity of immunization rates and outcomes.



NACCHO supports an immunization strategy addressing all stages of life composed of the elements listed above, aiming to increase overall immunization rates and subsequently reduce morbidity and mortality from vaccine-preventable diseases nationwide. In addition, support of comprehensive immunization programs would substantially improve the framework for delivering immunizations during pregnancy, childhood, adolescence, and adulthood.

Justification

Each year, vaccine-preventable diseases cause long-term illness, hospitalization, and death. In recent years, vaccine-preventable diseases have resurged throughout the country, with notable increases in influenza, hepatitis A, mumps, polio, and measles. Though vaccination coverage rates remain relatively stable nationwide, data indicates that sociodemographic and geographic disparities persist across the lifespan, and there is a significant need for improvement in addressing these disparities.^{2,3,4} The outcomes of low immunization rates are financially and socially devastating. The CDC estimates that vaccines given to children born between 1994-2021 will prevent an estimated 472 million illnesses, 1,052,000 deaths, and \$2.2 trillion in total societal costs.⁵ When outbreaks of vaccine-preventable diseases occur, a substantial portion of societal costs are borne by local health departments who investigate and control these outbreaks. These costs are usually excluded from annual department budgets.⁶ According to NACCHO's 2022 National Profile of Local Health Departments, nearly 90% of local health departments provide direct immunization services to adults and children.⁷ LHDs are well-situated to deliver comprehensive immunization services and counseling and are uniquely positioned to increase immunization coverage rates and address vaccine coverage disparities.

Maternal Immunization

Maternal immunization is critical in protecting both individuals who are pregnant and their infants before they are born and within an infant's first months of life. Through immunizing individuals while pregnant, newborns are protected against serious communicable diseases (such as influenza, pertussis, and tetanus) before they can be immunized. Maternal antibodies are formed when individuals receive their immunizations during pregnancy and are passed along to their infant to protect them until they can develop immunity through vaccination. Federal and professional medical groups universally recommend vaccination for influenza (seasonally) for pregnant individuals or those planning to become pregnant, as well as the tetanus, diphtheria, and acellular pertussis vaccine (Tdap), during each pregnancy.⁸ RSV vaccination is recommended for those who have not previously received the vaccine, if the pregnancy overlaps with a certain seasonal window and gestational age. The American College of Obstetrics and Gynecology also recommends individuals who are pregnant during the fall and winter virus season receive a Covid-19 immunization.⁹

Historical data on immunization rates during pregnancy indicate several explanations for suboptimal immunization coverage in this population, including people's knowledge, attitudes, and beliefs about vaccines.¹⁰ The highest indicator of having received these immunizations was a recommendation from the patient's physician.¹⁰ Therefore, considerable efforts should be focused on increasing education to maternal healthcare providers and to ensure access to and delivery of vaccines during pregnancy.

Childhood Immunization

Childhood vaccination has proven to be one of the most effective public health strategies to control and prevent diseases. To reduce childhood morbidity and mortality, AAP recommends routine vaccination of children by age 24 months against multiple, potentially serious diseases including hepatitis B, rotavirus, measles, pertussis, and mumps.¹¹ Vaccination at this age greatly increases the chance children have antibodies before they are exposed to disease. Similarly, vaccination requirements for school entry exist to protect students from diseases during a time in their life where they are particularly vulnerable.

Though vaccination coverage among children has remained high and consistent in the US, immunization data identifies opportunities for improvement among key populations within the country. Children who are living outside of metropolitan areas and who are uninsured or Medicaid-insured have lower rates of immunization compared to their urban and privately insured counterparts due to reduced reliable access to immunizations. LHDs should fill this gap to ensure equitable access to vaccines for these populations.²

Adolescent Immunization

The AAP and other leading medical and public health organizations recommend that adolescents routinely receive Tdap, meningococcal conjugate vaccine (MenACWY), and human papillomavirus vaccine (HPV) at age 11-12 years, with a MenACWY booster at [16 years](#).¹¹ Catch-up vaccination is recommended for hepatitis B vaccine, measles, mumps, and rubella (MMR) vaccine, and varicella vaccine for adolescents whose childhood vaccinations are not up to date.³

While there has been improvement in adolescent immunization, data indicates that disparities remain, particularly by Metropolitan Statistical Area (MSA) status. Immunization rates in adolescents are especially low for the HPV, MenACWY, and Hepatitis A (greater than or equal to 2 doses) vaccines among adolescents living in non-metropolitan areas.³ These low rates leave millions of adolescents susceptible to dangerous diseases and their long-term effects. In line with recommendations to increase immunization rates in children, adolescent immunization rates could also improve through similar interventions. Healthcare providers must establish an adolescent immunization platform at 16 years of age and continue to take every opportunity to immunize their adolescent patients during annual appointments, as well as sports and camp physicals. Similarly, requirements for school-required immunizations to increase immunization rates among this population should be considered.

Adult Immunization

Immunizations in adult populations result in critical protection for older individuals and the population in general. Older adults and those with chronic health conditions are considered to be at high risk of contracting vaccine-preventable diseases and experience increased morbidity and mortality.¹¹ In recent years, rates for adult immunizations have remained fairly stable, with some small increases for herpes zoster.⁴ However, the National Health Interview Survey (NHIS) data from 2019 and 2020 indicate that many adults remained unprotected against vaccine-preventable diseases with racial and ethnic differences in vaccination coverage persisting for all vaccines.⁴ A key intervention to improving adult immunization rates is increased education leading to awareness of the importance of immunizations for adults. Increasing access to immunizations in

this population is also imperative. Payment programs such as Medicaid and Medicare should prioritize their adult immunization activities to ensure that all adults have equal access to immunizations. Ongoing and potential future proposals to develop a comprehensive adult vaccine safety net program would also help to increase vaccine access for uninsured adults further improving vaccination rates. While awareness is low, a provider's recommendation remains a strong indicator for the receipt of immunizations in adults.

Conclusion

Local health departments are uniquely positioned to improve the capacity of the healthcare system for delivering immunizations by strengthening the coordination between public, professional, and private sector stakeholders. Educational outreach to providers and the public is necessary to increase immunization rates. Local health departments can collaborate with community immunization providers to determine coverage rates and use notification systems to help increase vaccination and improve series completion. LHDs should provide immunization providers with continuing education on recommended immunization schedules, vaccine administration techniques, and storage and handling practices; reducing missed opportunities; and integrating the use of IIS within practices – all strategies which are key to improving immunization rates.

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Record of Action

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