

15-02

STATEMENT OF POLICY

Human Papillomavirus

Policy

The National Association of County and City Health Officials (NACCHO) supports strong coordination, collaboration, and communication among public health, healthcare providers, parents and caregivers, and community partners at the local, regional, state, and federal levels to increase human papillomavirus (HPV) vaccination coverage in both males and females according to the recommendations of the Advisory Committee on Immunization Practices (ACIP). Local health departments should implement, adapt, and support programs, policies, and evidence-based practices to increase vaccination rates in their communities.

NACCHO encourages local health departments to develop a comprehensive approach to increasing HPV vaccination rates that includes the following:

- Encouraging providers to make strong and consistent HPV vaccine recommendations and educating them on the most effective way of communicating these recommendations;
- Supporting communication campaigns to educate parents and caregivers about the importance of HPV vaccination for cancer prevention and encouraging parents and caregivers to vaccinate their children;
- Educating adolescents directly about HPV and other adolescent health issues;
- Developing relationships with non-traditional healthcare providers such as dentists, pharmacists, and gynecologists and expanding their role in increasing HPV vaccination rates;
- Developing relationships with adolescent health groups, hospital systems, healthcare and cancer coalitions, school systems, and provider groups to support HPV vaccination;
- Developing, using, and sharing best practices to increase HPV vaccination rates and address the disparities in vaccination administration;
- Reducing missed opportunities and increasing HPV vaccine series completion through assessment and system-based changes using tools such as Immunization Quality Improvement Program (IQIP), reminder/recall, standing orders, and Immunization Information Systems;
- Collecting, analyzing, and interpreting data to plan, implement, and evaluate the impact of HPV vaccine promotion initiatives;
- Seeking opportunities to address systemic barriers to vaccination such as health inequity and a lack of access to healthcare; and
- Establishing themselves as trusted sources of information about HPV and other vaccines in their community.



Local health departments should consider developing or maintaining the capacity to bill thirdparty payers for the vaccine and administration to ensure long-term programmatic sustainability. NACCHO also encourages continued state and federal support of local health department efforts to establish HPV initiatives, sustain program activities, and collaborate with public health partners.

Justification

HPV infection is a leading cause of cervical cancer and a contributing factor to cancers of the anus, vagina, vulva, penis, and throat. Similarly, HPV is the most common sexually transmitted infection in the United States and is responsible for nearly 26,000 new cases of cancer each year. As such, HPV infections are responsible for the majority of cervical cancer and have been increasingly linked to those cancers of the anus, penis, throat, vagina, and vulva.^{1,2} Previous studies on cancer incidence trends estimated that the number of HPV-related oropharyngeal cancers would surpass the number of cervical cancers by the year 2020, but this has already occurred.^{3,4} This only serves to highlight the importance of comprehensive outreach, education, and immunization programs that target all adolescents, not just females. The combined cost of HPV-associated cancers and other conditions is estimated to be \$8 billion per year in the United States.⁵

Immunization has proven to be one of the most effective and safest public health interventions available. In 2006, ACIP recommended the HPV vaccine for routine vaccination of adolescent females between ages 11-12.⁶ In 2011, ACIP expanded the recommendation to include adolescent males.⁷ Although the President's Cancer Panel considers HPV vaccination a top priority in cancer prevention, coverage rates remain significantly low and fall short of the Health People 2020 target of 80% for both males and females.^{8,9} According to 2016 National Immunization Survey data, 67.1% of females and 37.5% of males received at least one dose of HPV vaccine compared to 88% for tetanus, diphtheria, and pertussis (Tdap) and 82.2% for meningococcal conjugate vaccines. This demonstrates both the disparity between males and female vaccination rates and the feasibility of high adolescent vaccine coverage.¹⁰

Increasing access to healthcare may also lead to increased HPV vaccination rates since adolescents with health insurance and high healthcare utilization are associated with higher vaccination coverage.¹¹ Misinformation about HPV and the HPV vaccine are pervasive in many communities, which can be overcome through effective communication campaigns. Racial disparities also exist in HPV vaccination coverages, as lower rates of series completion have been shown in African-American females compared to other groups¹²; thus, addressing systemic issues such as health inequity may help increase vaccination rates.

However, providers often miss opportunities to vaccinate adolescents during routine healthcare visits as evidenced by the fact that nearly two-thirds of 11-12 year olds are not vaccinated for HPV at office visits where they receive other vaccines.¹⁰ If these missed opportunities were avoided, approximately 93% of 13-17 year-old females would have at least initiated the series by 2012.¹⁵ Healthcare provider peer-to-peer education can be effective in overcoming challenges for the collective uptake of adolescent vaccines; therefore, it may be useful in reducing missed opportunities and encouraging providers to make a strong recommendation. This is especially

important since a physician's recommendation is the strongest predictor of HPV vaccination among adolescents.^{14,15}

References

- 1. International Agency for Research on Cancer. (2007). *Monographs on the evaluation of carcinogenic risks to humans. Volume 90: human papillomaviruses.* Lyon, France: World Health Organization, International Agency for Research on Cancer.
- 2. Gillison, M.I., Alemany, L., Sniiders, P.J., Chaturvedi, A., Steinberg, B.M., Schwartz, S., et al. (2012). *Human* papillomavirus and disease of the upper airway; Head and neck cancer and respiratory papillomatosis. *Vaccine*, 30, (5 Suppl.), F34-54
- 3. Chaturvedi, Anil K., et al. *Human Papillomavirus and Rising Oropharyngeal Cancer Incidence in the United States.* Journal of Clinical Oncology 29.23 (2011): 4294-4301. PMC. Web. 21 May 2018.
- 4. CDC. *How Many Cancers are Linked with HPV Each Year*? (2017, March 3) Retrieved from: www.cdc.gov/cancer/hpv/statistics/cases/htm#5
- 5. Chesson, H.W., Ekwueme, D.U., Saraiya, M., Watson, M., Lowy, E.R., & Markowitz, L.E. (2012). Estimates of the annual medical costs of the prevention and treatment of diseases associated with human papillomaviruses in the United States. *Vaccine*, 30(42), 6016-9.
- 6. Markowitz, L.E., Dunne, E.F., Saraiya, M., Lawson, H.W., Chesson, H., & Unger, E.R., (2007). Quadrivalent human papillomavirus vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP). *Morbidity and Mortality Weekly Report*, 56(RR-2), 1-24.
- 7. CDC. (2011). Recommendations on the use of quadrivalent human papillomavirus vaccine in males Advisory Committee on Immunization Practices (ACIP). *Morbidity and Mortality Weekly Report*, 60(50), 1705-8.
- 8. National Cancer Institute. (2014). Accelerating HPV vaccine uptake: Urgency for action to prevent cancer. A report to the President of the United States from the President's Cancer Panel. Retrieved April 4, 2014, from http://deainfo.nci.nih.gov/advisory/pcp/annualReports/HPV/index.htm
- 9. Department of Health and Human Services. Healthy People 2020 webpage. Retrieved January 6, 2015, from http://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-disease
- Walker, T.Y., Elam-Evans L.D., Singleton J.A., et al., (2017). National, Regional, State and Selected Local Area Vaccination Coverage Among Adolescents Aged 13-17 Years – United States, 2016 Morbidity and Mortality Weekly Report, 66:874-882. DOI: <u>http://dx.doi.org/10.15585/mmwr.mm6633a2</u>
- 11. Reiter, P.L., McRee, A.L., Pepper, J.K., Gilkey, M.B., Galbraith, K.V., & Brewer, N.T. (2013). Longitudinal predictors of human papillomavirus vaccination among a national sample of adolescent males. *American Journal of Public Health*, 103(8), 1419-27.
- 12. Kessels, S., Marshall, H., Watson, M., Braunack-Mayer, A., Reuzel, R., & Tooher, R., (2012). Factors associated with HPV vaccine uptake in teenage girls: A systematic review. *Vaccine*, 30, 3546-56.
- 13. Stokley, S., Cohn, A., Jain, N., & McCauley, M.M. (2011). Compliance with recommendations and opportunities for vaccination at ages 11 to 12 years: Evaluation of the 2009 national immunization survey-teen. *Archives of Pediatrics & Adolescent Medicine*, 165(9), 813-8.
- CDC. (2013). Human papillomavirus vaccination coverage among adolescent girls, 2007-2012, and poslicensure vaccine safety monitoring, 2006-2013 – United States. *Morbidity and Mortality Weekly Report*, 62(29), 591-5
- 15. Gargano, L.M., Herbert, N.L., Painter, J.E., Sales, J.M., Morfaw, C., Rask, K., et al. (2013). Impact of a physician recommendation and parental immunization attitudes on receipt or intention to receive adolescent vaccines. *Human Vaccines & Immunuotherapeutics*, 9(12), 2627-33.

Record of Action

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