Human Papillomavirus (HPV) Vaccination is Cancer Prevention Toolkit

A resource guide for providers of American Indian/Alaska Native patients to prevent the Human Papillomavirus (HPV) and HPV-related cancers

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NORTHWEST PORTLAND AREA INDIAN HEALTH BOARD
Indian Leadership for Indian Health

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Acronyms used through this toolkit:
HPV = Human Papillomavirus
AI/AN = American Indian/ Alaska Native
CDC = Centers for Disease Control and Prevention

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01

HPV At a Glance

Human Papillomavirus (HPV)

The Human Papillomavirus is the most common sexually transmitted infection in the world. According to the World Health Organization, HPV is a family of viruses and approximately 14 different types of high-risk HPV cause 6 types of cancer.

HPV and its Transmission

Transmission occurs through sexual contact and touch, including oral sex, anal sex, and vaginal sex.

Cancers related to high-risk HPV

Cervical cancer is always caused by the HPV infection. Cancers of the oropharynx, penis, anus, cervix, vagina, and vulva have been attributed to high-risk HPV infection. The figure on the next page shows the number and type of HPV-related cancers in the United States.[1]

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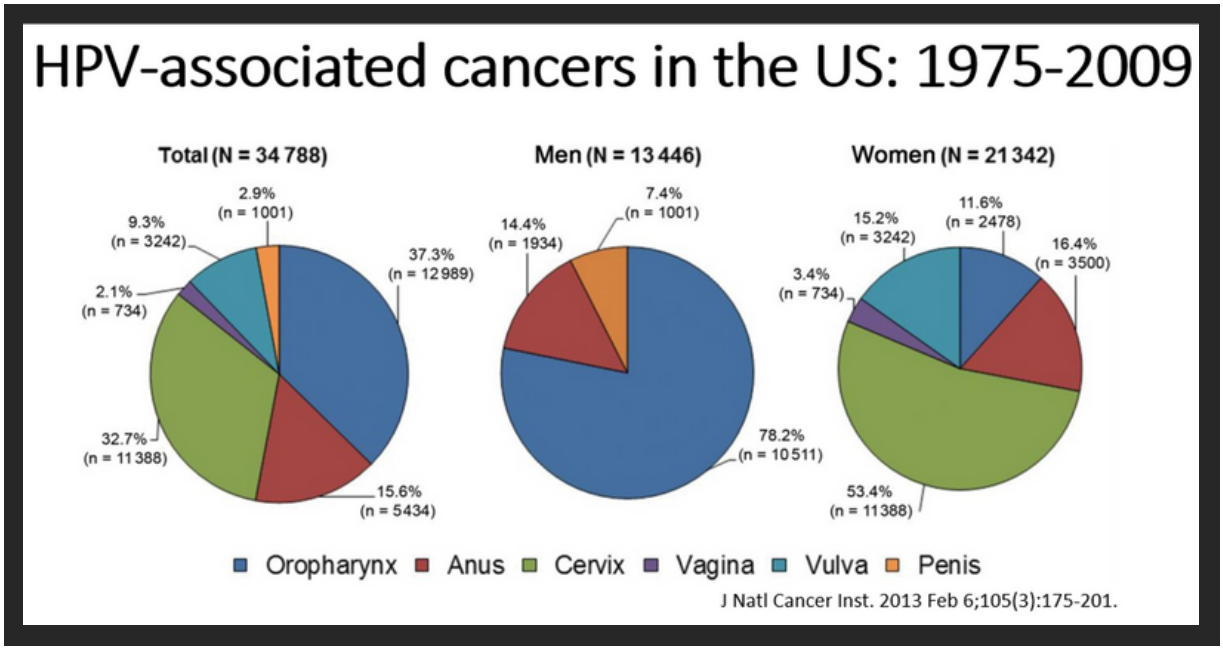
HPV Related Cancers & AI/AN Patients

Throughout the US, the relative risk of HPV-related cancer for females is 1.16 when compared to the Non-Hispanic white population; and is lower among males, 0.86. For females, cervical cancer accounted for 63% of all HPV-related cancers; and, for males, oropharyngeal cancer was the most common and accounted for 82% of all HPV-related cancers. There is variation in these trends across different geographic regions in the United States with greater rates of HPV-related cancers seen in the Southern Plains and lowest rates observed in the East. [2]



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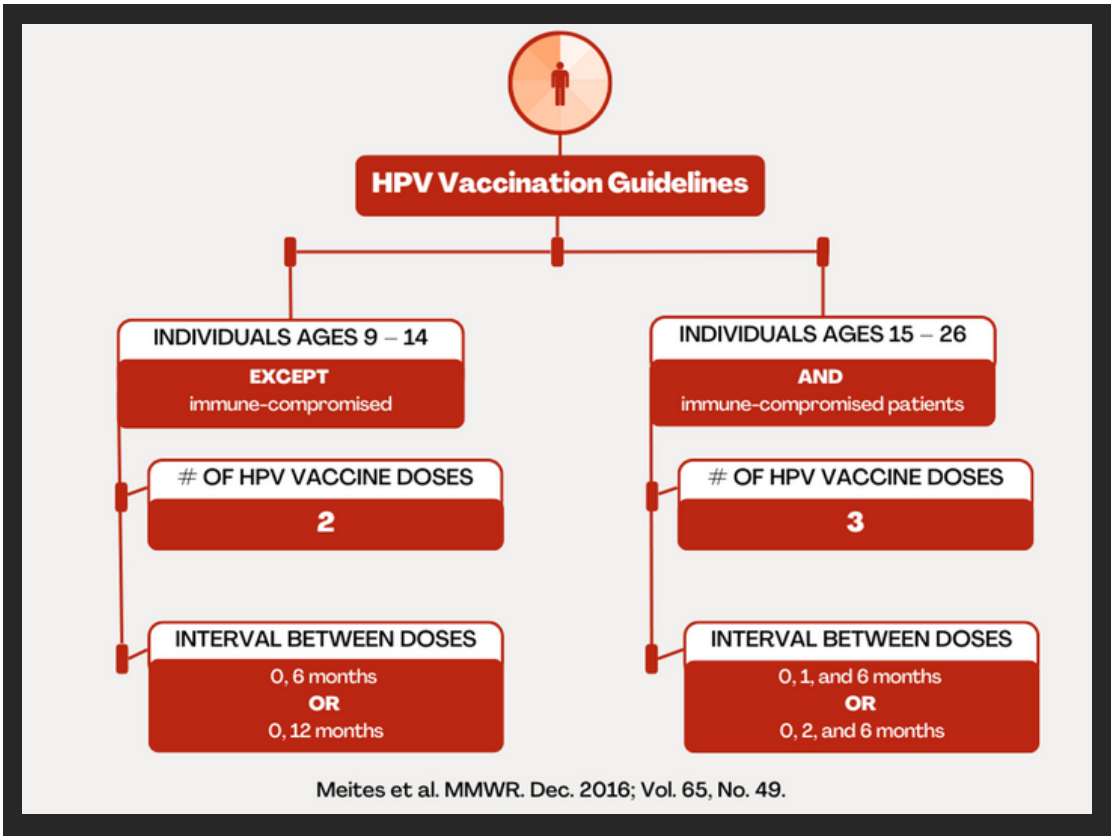
03 HPV Vaccination is Cancer Prevention

National HPV Vaccination Recommendations for Youth

The American Academy of Pediatrics (AAP) and the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) recommend routine HPV vaccination for all adolescents, regardless of sex. National guidelines recommend starting the series between 9 and 12 years, and completing the series by age 14, or at an age that the provider deems optimal for acceptance and completion of the vaccination series.



HPV Vaccination for Individuals ages 27-45

In an October 2018 news release, the U.S. Food and Drug Administration (FDA) expanded the use of the HPV vaccine for women and men, aged 27 to 45 years. This decision was based on long-term follow-up from a study that determined Gardasil-9 (an HPV vaccine) "was 88% effective in the prevention of a combined endpoint of persistent infection, genital warts, vulvar and vaginal precancerous lesions, cervical precancerous lesions and cervical cancer". With this new approval, ACIP updated their guidelines to include "shared clinical-decision making" between the patient and provider to determine if vaccination would be of benefit. [3]

04 HPV Vaccination Rates Among Pacific Northwest AI/AN Patients

New data on the Pacific Northwest from 2010-2020 show vaccination initiation rates for females surpassed rates for males across all age groups. The 13-18 age group represented the highest vaccination rates for both genders, with 83.1% of females and 48.8% of males initiating the vaccine by the end of the study period (Figure 1). HPV vaccination completion rates similarly increased over the study period for all ages and genders with the 13-18 age group having the highest rates with 71.1% and 41.0% for females and males, respectively (Figure 2). [4]

Figure 1

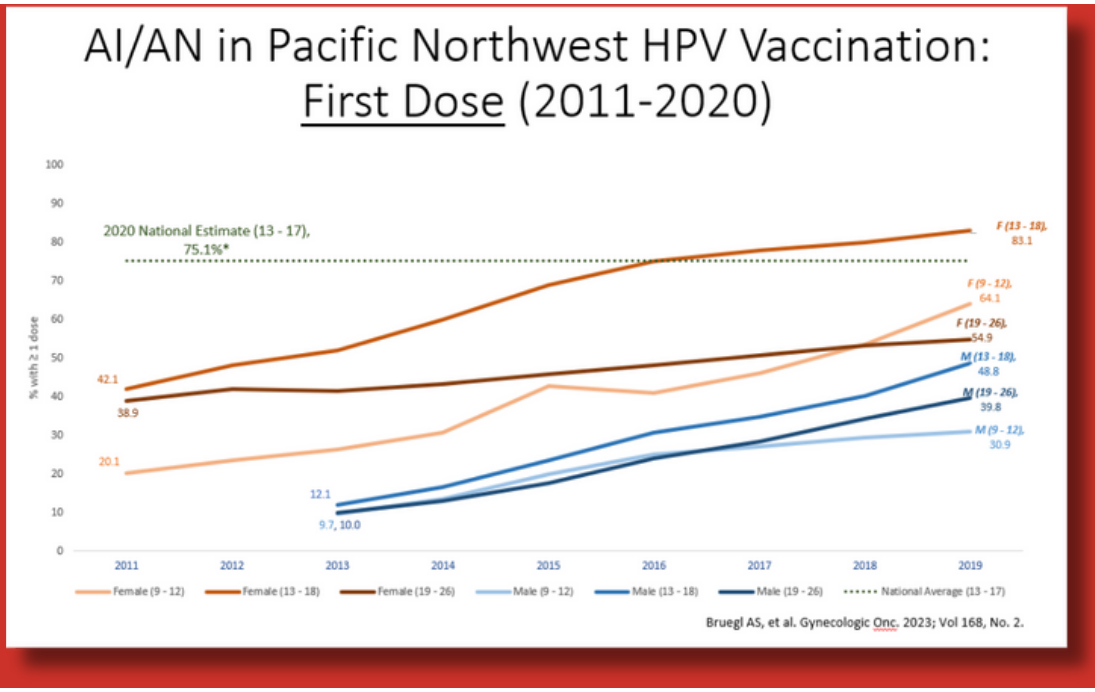
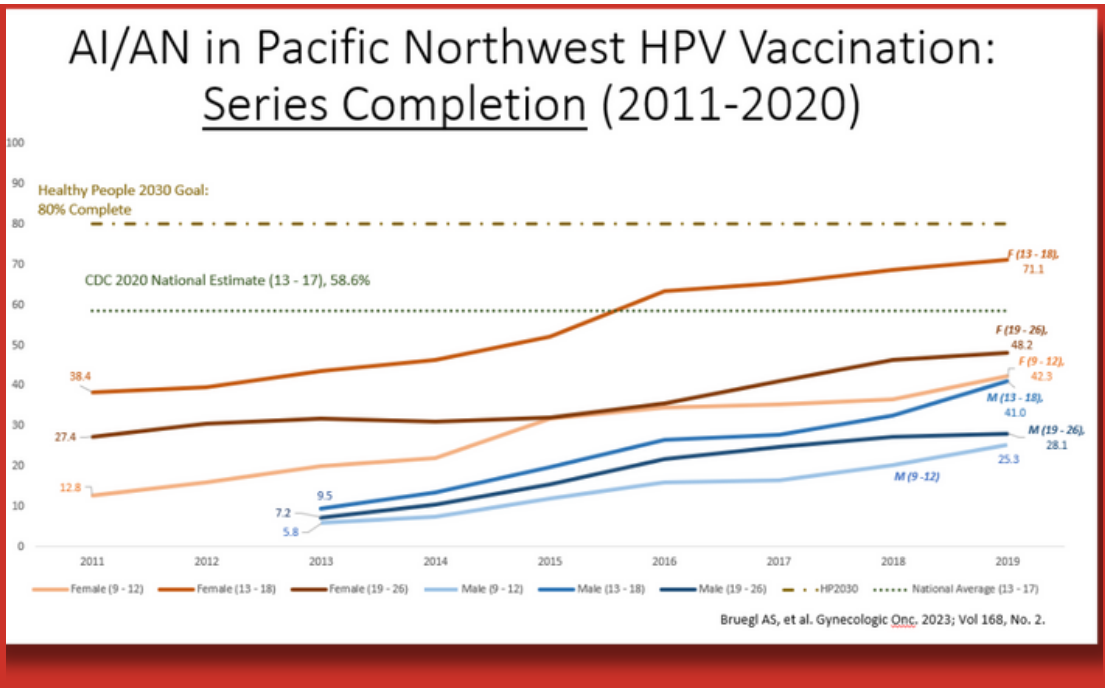


Figure 2



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05 Facilitators & Barriers to AI/AN Patients Receiving the HPV Vaccine

There are few published studies specific to HPV vaccination among AI/ANs, but a recently published systematic review has elucidated the state of the science in this population.[5] There were four studies specific to AI/ANs that identified factors related to higher rates of HPV vaccination: HPV knowledge, HPV education, and provider trust.

Twenty-one barriers and fifteen themes were identified as barriers to HPV vaccination among publications evaluating AI/ANs. The most common barriers to HPV Vaccination are safety (46.7% of articles), knowledge (40%), and concerns about sexual activity (33%).

Providers and clinic staff can respond to the most common barriers by using the following facts or going to the American Academy of Pediatrics' healthychildren.org HPV-related pages.

The HPV Vaccine Prevents Cancer

- This vaccine protects children from HPV-caused cancers for a lifetime
- The HPV vaccine prevents cervical cancer as well as cancers of the vulva, vagina, mouth, throat, and penis
- The HPV vaccine is more effective in preteens (ages 9 to 12) as preteens produce more antibodies after vaccination than older adolescents do
- The earlier a child is given the HPV vaccine, the earlier a child will be protected from cancer
- The HPV vaccine also prevents "nearly 100% of cases of" genital warts

Vaccine Safety Facts

- Since vaccines are meant to be given routinely at well-child visits, they are under regular and constant study
- The FDA begins monitoring vaccine safety when vaccines begin testing, through approval, and monitors vaccine safety indefinitely
- "Millions of doses have been distributed, and there have been no serious safety concerns. The vaccine continues to be monitored for safety in over 80 countries."[6]

Data about Increased Sexual Activity after Vaccination Facts

There is no published data to indicate that children increase sexual activity after being vaccinated against HPV

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Clinic-wide Strategies for Increasing Rates of HPV Vaccination

Lessons Learned

From California's American Academy of Pediatrics' HPV Series Quality Improvement Project

Preparation

- Provide informational brochures to 9 and 10-year-olds to get them prepared
- Create a roster of 10, 11 and 12-year-olds who had not come in for a physical
- Look up patients turning 11 and call them to come in for an appointment

Leveraging the Use of Immunization Records

- Make each patient's Immunization Record available at the beginning of the visit (and do not leave the exam room to get it)
- Summer Camp or Sports Physical forms: opportunity to look at immunization records and recommend HPV

Clinic Level Tips and Tricks

- Consider adopting tribal clinic standing orders for HPV vaccination
- It is effective for medical assistants to mention the HPV vaccine. ...It's taken as coming more from a peer
- When patients are in clinic because of an illness, schedule an "illness follow-up appointment" to vaccinate later

Messaging to Parents & Caregivers

- Mention HPV first in a list, never last. For example, "Today we are vaccinating against HPV, tetanus, diphtheria, and pertussis (Tdap) and meningococcal."
- Provide parents with proof of long-term studies showing vaccine efficacy and safety
- Tell parents: "This vaccine is given at a young age because their immune system works better at this point"
- Congratulate parents for making the correct choice

Messaging for Hesitant Parents and Caregivers

- Give CDC handout to parents who refuse vaccination, then follow up with a phone call
- Use the CDC Vignette written by a father whose daughter had cervical cancer at age 23
- Ask parents who refuse vaccination and reference their own online research "what website were you reading?" and provide resources from credible institutions (e.g., CDC, AAP, NCI)

Messaging to Youth

- Emphasize the HPV vaccine as a Cancer Prevention vaccine. Get it now and only get 2 shots
- Talk about the HPV vaccine 3 times: Nurse mentioned when rooming, handed HPV information at the start of the visit, discussed at end of the visit
- Explain that sex is not the only transmission route. Touch is also an HPV transmission route

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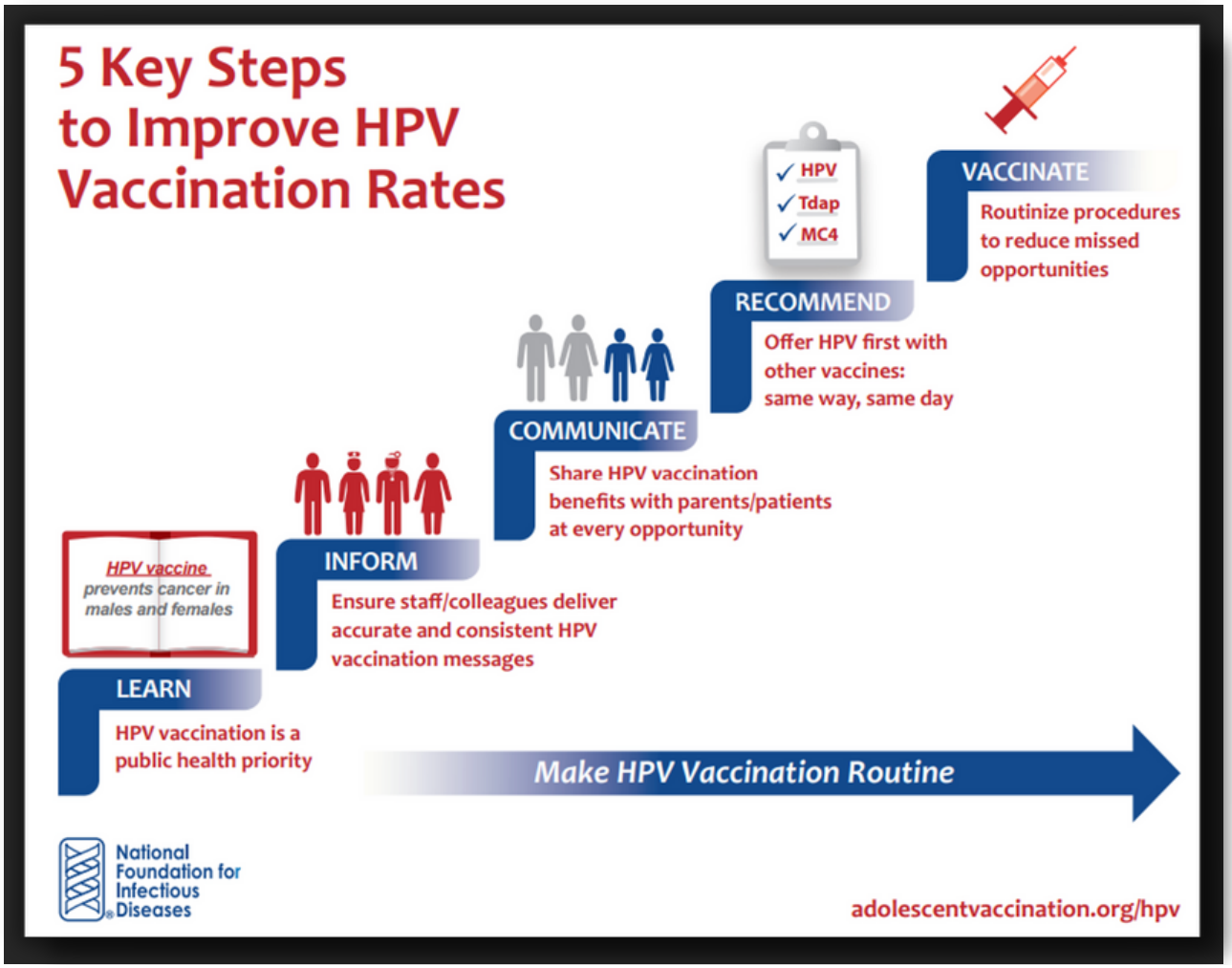
5 Key Steps to Improve HPV Vaccination Rates

Everyone in a clinic setting should be able to confidently tell parents and youth:

"The HPV vaccine is Safe, Effective, and Prevents Cancers!"



We can eliminate HPV-related cancers by promoting and administering the HPV vaccine, a cancer prevention vaccination.

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Frequently Asked Questions

Question	Answer
If someone is age 15 years or older and started the vaccination series at age 11 but only received one dose then, how many more doses do they need now?	This person needs one more dose to complete a 2-dose series, which is recommended because the vaccination series was started before their 15th birthday. In a 2-dose series, the second dose is recommended 6–12 months after the first dose, but there is no upper time limit. In this case, the first dose was given several years ago, so the second dose can be given right away.
What is the recommendation for persons with immunocompromising conditions?	The CDC recommends three doses of the HPV vaccine (0, 1–2, 6-month schedule) for people ages 9–26 years if they have certain immunocompromising conditions. People whose immune responses might be lower, for example, due to HIV infection, cancer, transplantation, autoimmune disease, or taking immunosuppressant medications, should receive three doses to make sure they get the most benefit. However, children with asthma, diabetes, and other conditions that do not suppress immune responses to vaccination can receive a 2-dose schedule.
If the vaccine series was started with a previous HPV valent vaccine, what are the intervals for the remaining doses in a 3-dose or 2-dose series?	Any licensed HPV vaccine can be used to complete the vaccination series with the same recommended schedule and dosing intervals. • If the first dose of any HPV vaccine was given before the 15th birthday, vaccination should be completed according to a 2-dose schedule. In a 2-dose series, the second dose is recommended 6–12 months after the first dose (0, 6–12-month schedule). • If the first dose of any HPV vaccine was given on or after the 15th birthday, vaccination should be completed according to a 3-dose schedule. In a 3-dose series, the second dose is recommended 1–2 months after the first dose, and the third dose is recommended 6 months after the first dose (0, 1–2, 6-month schedule). • If the vaccination schedule is interrupted, vaccine doses do not need to be repeated.
Should adults ages 27-45 years be vaccinated against HPV?	HPV vaccination provides the most benefit when given before a person is exposed to any HPV. This is why CDC recommends HPV vaccination for ages 11–12 years. HPV vaccination is recommended through age 26 years for everyone who receives the vaccine. It is FDA approved for individuals through age 45.

09

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