HPV-IMPACT *Update*

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Left to right: **Erin Whitney**—Surveillance Coordinator, **Deanna Fink**—Epidemiologist, **Kimberly Barrera**—Operations Officer, **Dr. Ina Park**—Principal Investigator, **Dr. Utsav Pokharel**—Research Assistant *Picture taken before the December stay-at-home order*

HPV-Impact continues its 12th year of population-based surveillance to monitor the impact of the HPV vaccines. A collaboration among the California Department of Public Health (CDPH) Sexually Transmitted Diseases (STD) Control Branch, the California Emerging Infections Program (CEIP), the Alameda County Public Health Department (ACPHD), the California Cancer Registry (CCR) and the Centers for Disease Control and Prevention (CDC), HPV-Impact conducts surveillance on cervical intraepithelial neoplasia [CIN] grades 2 and 3, adenocarcinoma in situ [AIS], and cervical cancer.

Healthcare and preventive services, like cervical cancer screening and vaccination, are vital for population health. In 2020, there were advances in knowledge in both arenas. Research from Sweden showed the HPV vaccine substantially protects against invasive cervical cancer. Similarly, HPV-Impact partnered with the California Cancer Registry for a more comprehensive view of the vaccine's impact on cervical cancer. The National Immunization Survey of teens (NIS-Teen) surveyed teens ages 13-17 and found modest gains in HPV vaccination uptake; however, rates are still behind other preteen vaccines like Tdap and meningococcal conjugate vaccine. The American Cancer Society published new cervical cancer screening guidelines in April recommending use of the more sensitive HPV test as a primary screening test.

Despite COVID-19, our work continues. We appreciate the contribution of the local and national histopathology laboratories and hundreds of medical providers serving Alameda County residents who serve as our partners in this surveillance effort. The data from this important public health initiative is informing local and national policy.

Thank you for your continued collaboration!

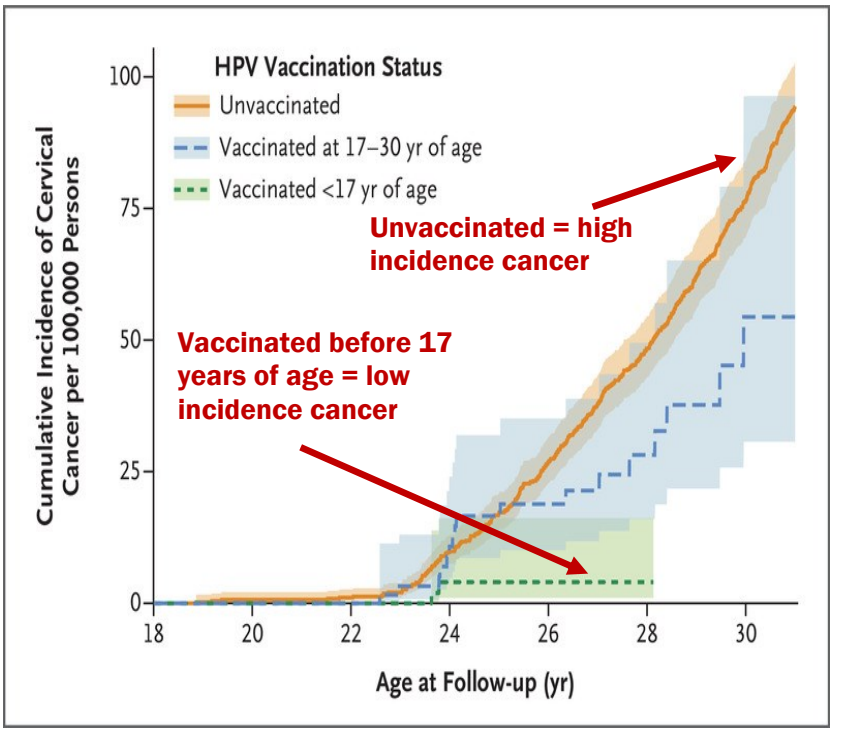
HPV vaccine protective against invasive cervical cancer

Swedish researchers have recently confirmed that the human papillomavirus (HPV) vaccine substantially reduce the risk of cervical cancer in women up to 30 years of age, and that vaccination at a young age is important for good protection.

The team from Sweden analyzed data for 1.7 million girls and young women between the ages of 10–30 years from 2006 to 2017. Of those, almost one-third (31%) of females received at least one dose of the vaccine while more than two-thirds (69%) did not receive any doses. The population of girls and women were followed until their 31st birthday for any cervical cancer development.

The analysis showed that women who had been vaccinated before age 17 had their risk of developing cervical cancer reduced by 88%. In women who had been vaccinated between the ages of 17 to 30 years, their risk decreased by 53%.

Of the 557 women who developed cervical cancer, the vast majority of those women (97%) had not been vaccinated. This work documents that the HPV vaccine is successful at preventing cervical cancer.



Women who received the HPV vaccine before turning 17 had a much lower occurrence of cervical cancer development compared to women who were not vaccinated at all.

>>Lei J, Ploner A, Elfström KM, et al. HPV Vaccination and the Risk of Invasive Cervical Cancer. *N Engl J Med*. 2020;383(14):1340-1348. doi:10.1056/NEJMoa1917338

CALIFORNIA HPV VACCINATION ROUNDTABLE

Working to prevent HPV cancers

Established October 2018, the California HPV Vaccination Roundtable is a coalition of stakeholders whose **mission is to prevent HPV associated cancers and pre-cancers in California by increasing the HPV vaccination rate to 80% by 2026**.
In the "HPV Attributable Cancers and Vaccination Rates in California: Report of findings of the California HPV Vaccination Roundtable," they found that in 2018, between 28%-50% of California's adolescent population were fully immunized against HPV by their 13th birthday and that no county or health system achieved an 80% vaccination rate. Immunization rates varied by source and geography. With 90% of HPV cancers preventable with the vaccine, increasing vaccination rates will help California, and the United States, work toward global cervical cancer elimination efforts. With your help we will get closer to these goals! Questions? Get in touch at info@cahpvroundtable.org

>>Visit https://cahpvroundtable.org/ for more information and to view the Report of Findings

ACS's updated recommendations for HPV screening

On July 30, 2020, the American Cancer Society released updated guidelines to begin cervical cancer screening at age 25 with an HPV test. The guidelines are for people with a cervix with an average risk of cervical cancer. ACS recognizes availability for a primary HPV test may be limited and includes other options for a pap test alone or a Pap and HPV test together. The HPV test looks for the virus that has been known to cause cancer and primary HPV testing is more sensitive in detecting cervical intraepithelial neoplasia (CIN) grade 2 or higher.[1]

Why the change to start screening at age 25 instead of age 21?
After reviewing newer studies, ACS concluded the benefits of cervical cancer screening do not outweigh the harms for people aged 21 to 24. With higher uptake of the HPV vaccine preventing HPV infections, it is expected that there will be a drop in infections as the first cohort of vaccinated women reach the eligible age for cervical cancer screening.

Is anyone else using primary HPV testing?
The Netherlands was the first country to switch to HPV screening at the national level in 2017. The same year, the HPV test replaced the Pap test in Australia.[2] Turkey, Italy, Sweden, and Finland have implemented HPV-based screening in several regions, and other countries are at various stages of implementation.

What do other guidelines recommend?
Prominent professional organizations have issued specific guidelines that address the time to start screening, the screening methods and intervals, the time to stop screening, and the use of the HPV test. Vaccinated people should continue to be screened.

*These recommendations do not address special, high-risk populations who may need more intensive or alternative screening. These special populations include women with a history of CIN2, CIN3, or cervical cancer, women who were exposed in utero to diethylstilbestrol, women who are infected with HIV, or women who are immunocompromised.

[1] Torres-Ibarra L, Cuzick J, Lorincz AT, et al. Comparison of HPV-16 and HPV-18 Genotyping and Cytological Testing as Triage Testing Within Human Papillomavirus-Based Screening in Mexico. *JAMA Network Open*. 2019;2(11):e1915781. doi:10.1001/jamanetworkopen.2019.15781

[2] Cancer Council Victoria. Prevent Cervical Cancer. *Prevent Cervical Cancer*. N.D. Accessed December 18, 2020. https://www.cancervic.org.au/preventing-cancer/attend-screening/cervical-screening

>>Fontham ETH, Wolf AMD, Church TR, et al. Cervical cancer screening for individuals at average risk: 2020 guideline update from the American Cancer Society. *CA Cancer J Clin*. 2020;70(5):321-346. doi:10.3322/caac.21628

	American Cancer Society (ACS): 2020	U.S. Preventive Services Task Force: 2018	American College of Obstetricians and Gynecologists (ACOG) : 2016
Who	All individuals with a cervix	Women	Women
When to start	Age 25 Regardless of the age of onset of sexual activity or HPV vaccination Hx	Age 21	Age 21 Regardless of the age of onset of sexual activity or behavior-related risk factors
	NO Screening recommendation for <25	Recommend against screening women aged <21 years	<21 years should not be screened
Annual screening	Women of any age should not be screened annually by any screening method.	Use annual Pap test screening visit to discuss other health problems and facilitate receipt of recommended preventive services.	In women aged 30–65 years, annual cervical cancer screening should not be performed but counsel all patients at annual visits.
Screening: Cytology	Every 3 years, Age>25 (Acceptable only if 1^0 HPV testing not available)	Every 3 years (21-65)	Every 3 years (21-65)
Screening: co-testing (HPV + cytology)	Every 5 years, Age>25 (Acceptable only if 1^0 HPV testing not available)	<30 years; Recommend against 30-65. Every 5 years is an option	<30 years; should not be performed. 30- 65. Preferred every 5 years
Screening: 1^0 HPV testing	Every 5 years (25-65)	Every 5 years (30-65)	Every 3 years (>25) Alternative screening
Screening: post- hysterectomy	After Hysterectomy + Without >CIN2 in past 25 years	Recommend against screening in women who have had a hysterectomy	Women who have had a hysterectomy should stop screening and not restart for any reason
When to stop screening	Aged >65 years + Documented adequate negative screening history (past 10 years) + No History of CIN2 or higher (past 25yrs)	Aged >65 years + Adequate screening history + Not otherwise at high risk for cervical cancer	Aged >65 years + Adequate negative prior screening + Results and no history of CIN 2

March 4th is International HPV Awareness Day

Cervical cancer is preventable with vaccination and screening. On November 17, 2020, the World Health Organization (WHO) officially launched their global cervical cancer elimination strategy with a goal of less than 4 cases per 100,000 women.

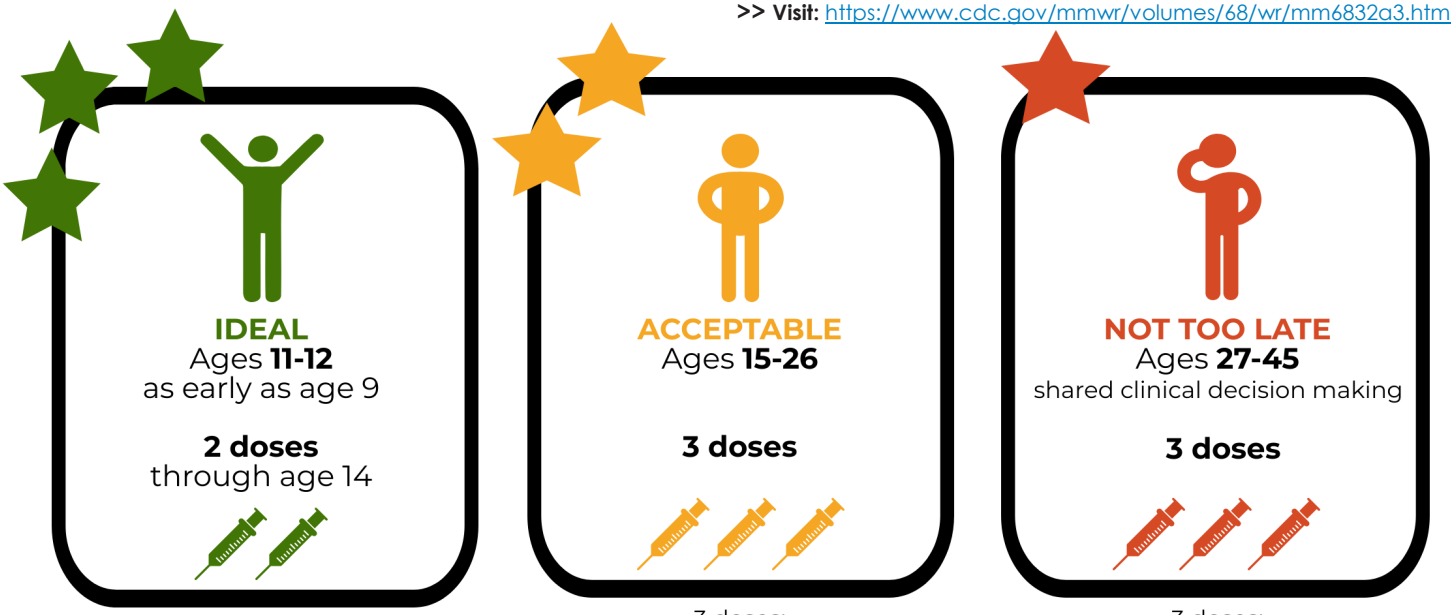
What can we do to prevent HPV-related cancer and raise awareness about HPV?

- Continue HPV vaccinations and regular cervical cancer screening in recommended age groups
- Visit AskAboutHPV.org for a social media toolkit to promote International HPV Awareness Day
- Join the #AskAboutHPV conversation on social media to get people talking, and taking action to prevent HPV-related cancer

VIRAL BEFORE THE INTERNET
#ASKABOUTHPV

CDC's HPV Vaccination Recommendations

>> Visit: https://www.cdc.gov/mmwr/volumes/68/wr/mm6832a3.htm



2 doses:
6-12 months apart

3 doses:
1st dose at visit one
2nd dose 1-2 months later
3rd dose 6 months
after 1st dose

3 doses:
1st dose at visit one
2nd dose 1-2 months later
3rd dose 6 months
after 1st dose

Vaccine Accessibility

Patients Aged 18 years and Younger Vaccines for Children Program (VFC)	Patients Aged 19-45* Years Merck Vaccine Patient Assistance Program
If your practice serves MediCal or under/ uninsured children, verify your enrollment in the VFC program. www.eziz.org/vfc/enrollment/	A confidential program that provides free Gardasil®9 vaccination to eligible adults, primarily uninsured, who cannot afford the vaccine. www.merckhelps.com/GARDASIL%209

*the Merck Vaccine Patient Assistance Program for the HPV vaccine has been updated to include patients up to 45 years of age

CDPH | CAIR2 California Immunization Registry

The California Immunization Registry (CAIR) helps ensure documentation of your patients vaccinations, consolidating records from thousands of health care providers and pharmacies. **If your clinic isn't already participating in the California Immunization Registry (CAIR), please consider joining.** CAIR is a secure, confidential, statewide immunization information system that helps track patient immunization records and reduce missed opportunities for patients. CAIR now has a reminder/recall function to ensure your patients stay up to date on routine vaccinations.

Questions?

Jeanette Chapman
510-412-1603
jeanette.chapman@cdph.ca.gov

Jerard Timmons
510-412-1601
jerad.timmons@cdph.ca.gov

>>Visit http://cairweb.org/docs/CAIR2-Communications/IMM-1266

We would love to hear from you!

850 Marina Way Parkway, Building P, 2nd Floor, Richmond CA 94804

Contact Erin Whitney
Erin.Whitney@cdph.ca.gov
(510) 620-2379

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http://ceip.us/projects/hpv-impact

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Human Papillomavirus Vaccine IMPACT