



University of California  
San Francisco



# Lunch & Learn: What You Need to Know About HPV and the HPV Vaccine

April 20, 2023

# Housekeeping

- Meeting is being recorded and will be posted on the COHTAC website and YouTube – follow up materials and a link to the recording will be emailed
- Questions are welcomed in the chat box and will be answered at the end of the presentation – please stay muted until called on
- Comments, resource sharing, and other discussion are also welcomed in the chat box
- Please take a minute at the end to complete the evaluation survey

# Lunch & Learn: What You Need to Know About HPV and the HPV Vaccine

- On a scale of 1-5 (1=not at all, 5=very), how knowledgeable are you regarding the HPV vaccine?
  - Average: 2.8
- Are you planning any efforts around HPV in your LOHP?
  - 7 LOHPs responded yes, with another 7 saying they're considering it
  - One LOHP reported developing a toolkit for providers
- 35 LOHPs selected Objective 4, which includes providing protocols for providers to assess and document risk factors for oral and oropharyngeal cancers (4.1.a)

# Lunch & Learn: What You Need to Know About HPV and the HPV Vaccine

## Speakers

- Dr. Maritza Cabezas, Dental Director, Los Angeles County Oral Health Program
- Dr. Rita Chen, Senior Dentist, Los Angeles County Oral Health Program
- Dr. Lin Chan, Dentist, Los Angeles County Oral Health Program
- Dr. Abrey Daniel, Dentist, Los Angeles County Oral Health Program



# What You Need to Know about HPV and the HPV Vaccine

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*Funded by the CDPH under Contract # 22-10173*





# DISCLOSURE

**We have no actual or potential  
conflict of interest in relation to  
this program/presentation.**



# Objectives

1. Learn about LA County's implementation of State workplan activity 4.1A
2. Learn facts of Human Papillomavirus (HPV) and associated diseases
3. Learn the HPV vaccination safety and recommended schedule by age
4. Learn the different signs of oropharyngeal and oral cancers; and the high-risk factors for oropharyngeal cancer
5. Understand how HPV cancer rates affect men and women differently
6. Learn what steps dental health care personnel can take to encourage HPV vaccines



# Why Are We Here Today?



Share Work Plan Activity 4.1a implementation



Help Increase Human Papillomavirus (HPV) Vaccine Rates



Raise Awareness of Oropharyngeal Cancer and its Prevention



Promote Oral Cancer Awareness Month, Since it is in April



# State Workplan Activity Implementation



## Activity Description

### Activity 4.1a

- Provide protocols for dental care providers to assess and document risk factors for oral and pharyngeal cancers and conduct and document assessments
- Provide referral resources for follow-up to primary care



## Evaluating/Reporting/Performance Measure

- Training materials
- Toolkit for screening
- Community-based resources for referrals to physicians, etc. to mitigate oral disease risk factor
- Submit data annually on number of dental offices connected to resources to CDPH/OOH

# State Workplan Activity Implementation



How is LA County implementing Activity 4.1a?

- The goal is to educate oral health providers on oropharyngeal cancer prevention
- Reaching out to the five dental societies :  
(Los Angeles Dental Society, Harbor Dental Society, San Fernando Valley Dental Society, Western Los Angeles Dental Society, Tri-County Dental Society)
- Providing a continuing education opportunity in collaboration with the Office of Oral Health/California Oral Health Technical Assistance Center to dental society members



## HPV vaccination rates across the U.S., California, and Los Angeles County

	Healthy People 2030 Objective U.S. Target (%)	U.S. (%) 2017	California (%) 2016	Los Angeles County (%) 2018
Human Papillomavirus (HPV) vaccination coverage level of 2 or 3 doses of HPV vaccine for <b>females</b> by age 13 to 15 Years	80.0	49.9	50.1	<b>32</b>
Human Papillomavirus (HPV) vaccination coverage level of 2 or 3 doses of HPV vaccine for <b>males</b> by age 13 to 15 Years	80.0	42.3	55.1	<b>31</b>

<sup>1</sup> 2013. National Program of Cancer Registries (NPCR); Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion (CDC/NCCDPHP). Surveillance, Epidemiology, and End Results Program (SEER); National Institutes of Health, National Cancer Institute (NIH/NCI).

<sup>2</sup> 2009-2013. California Cancer Registry, California Department of Public Health. SEER\*Stat Database: Incidence - California, Dec 2018. Prepared by the California Cancer Reporting and Epidemiologic Surveillance (CalCARES) Program, Institute for Population Health Improvement, UC Davis Health.

<sup>3</sup> 2012-2016. California Cancer Registry, California Department of Public Health. SEER\*Stat Database: Incidence - California, Dec 2018. Prepared by the California Cancer Reporting and Epidemiologic Surveillance (CalCARES) Program, Institute for Population Health Improvement, UC Davis Health. There were 4,762 cases of oral cavity (mouth) and pharynx (throat) cancer (9 cases per 100,000 people) in Los Angeles County between 2012-2016.

<sup>4</sup> 2017. National Immunization Survey-Teen (NIS-Teen), CDC/NCIRD and CDC/NCHS.

<sup>5</sup> 2018. Ages 13-17 years. HPV Vaccination Up-to-date, Males and Females. TeenVaxView: Adolescent Human Papillomavirus (HPV) Vaccination Coverage Report. Centers for Disease Control and Prevention.

<sup>6</sup> 2018. Percent of children (ages 11-17 years) who have completed the required doses of the Human Papillomavirus (HPV) vaccine. Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health. Estimates are based on data collected from a random sample of 4,986 Los Angeles County children, representative of the child population in Los Angeles County. Data were reported by an adult sufficiently knowledgeable about the health and daily routines of the child. Completion is defined as taking 3 or more doses of the HPV vaccine for children ages 11-17 years or taking 2 doses of the HPV vaccine 6 months apart for children ages 11-14 years.

AJCC: American Joint Committee on Cancer.

# Let's Hear from the Patient



[https://www.youtube.com/watch?v=gthLwHV\\_DHc](https://www.youtube.com/watch?v=gthLwHV_DHc)

# Fighting HPV is Now Mainstream





# The History of Human Papillomavirus

Rita Chen, DDS



# The History of HPV

There are many fascinating stories behind Human Papilloma Virus!

1845

Rigoni-Stern, an Italian physician described that many of his prostitute patients died of cervical cancers. However, the nuns from the covenant nearby hardly suffered the same fate.<sup>1,2</sup>

1. [The HPV Vaccine Controversy: Sex, Cancer, God, and Politics : a Guide for ...](#)By Shobha S. Krishna

2. [The little death: Rigoni-Stern and the problem of sex and cancer in 20th-century biomedical research - PubMed \(nih.gov\)](#)

# The History of HPV


One notable discovery is:

1911

Dr. F. Peyton Rous, an American scientist demonstrated that sarcoma on the chest of a chicken could be transplanted to another chicken. Because cell-free tumor extracts resulted in transmission of the sarcoma to other hens, he postulated the agent must be a small transmissible agent, possibly a virus.<sup>1</sup>



# HPV Timeline



Dr. Harald Zur Hausen detected the HPV in warts and cervical cancer. He was able to subsequently isolate and clone different strains of HPV<sup>1,2</sup>

1970s

HPV strains were linked to cervical cancer in the 1980's



1983

Epidemiological studies showed HPV is a etiologic factor of oral cancer



Last 20 Years

FDA approved the first HPV vaccine



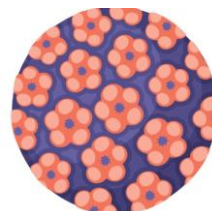
2006

# What is HPV?

Human Papillomavirus (HPV) are small, double stranded DNA Virus

Species specific – HPV only affects humans

Over 200 different types have been identified



Divided into cutaneous and mucosal categories

Estimated 79 Million persons are infected in the U.S. More than 42 million Americans are infected with types of HPV that cause disease.

About 13 million Americans, including teens, become infected each year<sup>1</sup>

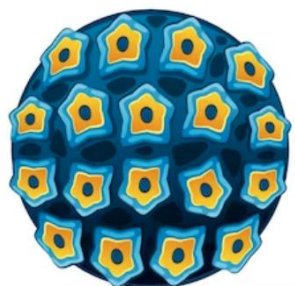
# What is HPV?

- HPV infection is common. Eight out of ten people will get HPV at some point in their lives
- HPV can infect anyone
- Most HPV infections do not cause cancer
- High-risk HPV infections that persist can cause cancer



# What is HPV?

The HPV virus are divided into two categories:



Human papillomavirus (HPV)

## Cutaneous

- Infects the skin

## Mucosal

- Infects the squamous cells of mucosal membrane
  - Mouth

# What is HPV?



HPV is highly contagious

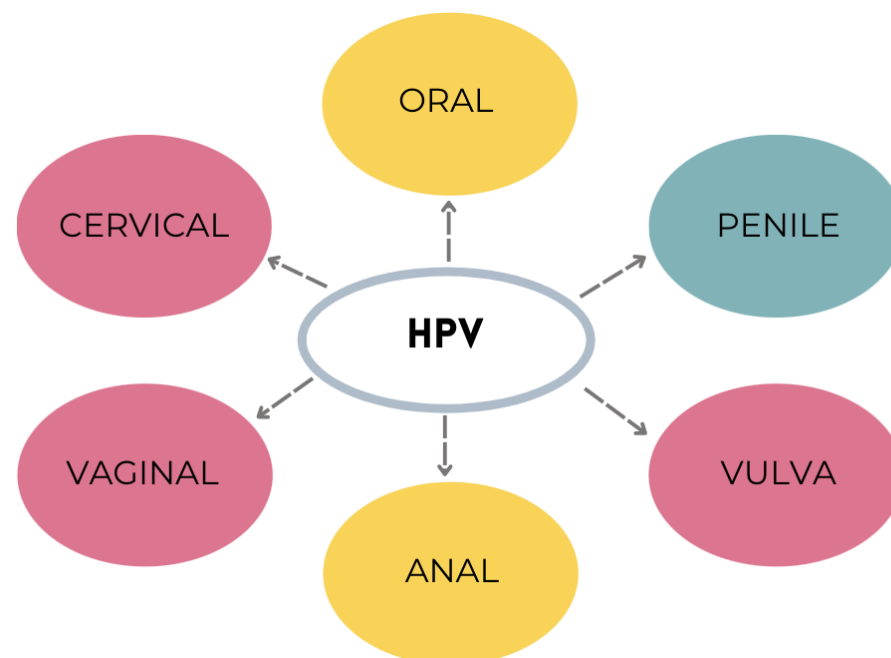
- HPV is spread through intimate skin to skin contact
- It can be spread when the infected person has no signs or symptoms

# HPV and Cancer

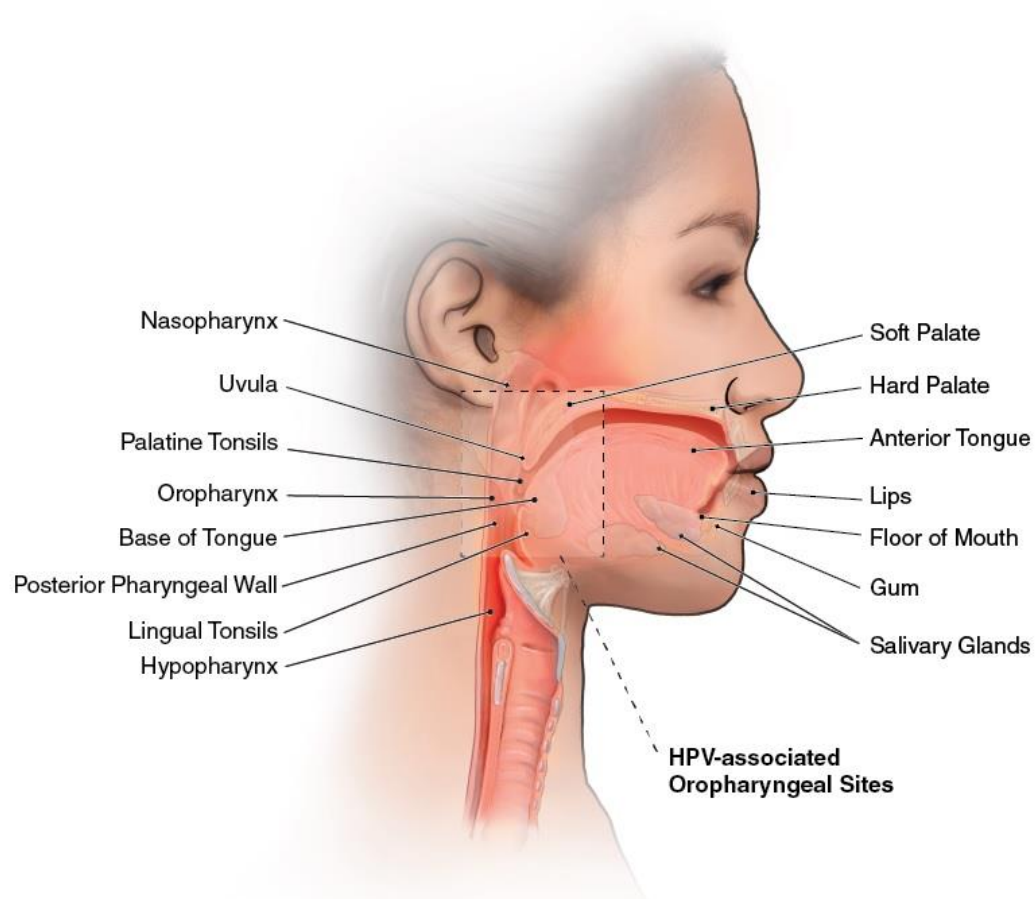
There are 14 high risk HPV types:

- HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, and 68

HPV can cause several types of cancer



# HPV Links to Oropharyngeal Cancer



Salivary glands are located throughout the oral cavity. These are identified for illustrative purposes only. Not all sites, such as cheek, are included in this figure.



# HPV Vaccine Milestones

2006

## Quadrivalent HPV Vaccine

- Protects against strains 6, 11, 16, and 18

2009

## Bivalent HPV Vaccine

- Protects against strains 16, and 18

2014

## 9-valent HPV Vaccine

- Gardasil 9, Merck & Co
- Protects against strains 6, 11, 16, 18, 31, 33, 45, 52 and 58
- At the end of 2016 only Gardasil 9 was distributed in the U.S.

2020

## Gardasil 9

- FDA approves Gardasil 9 for the Prevention of Certain HPV-related head and neck cancers





# HPV Facts and Associated Diseases

Maritza Cabezas, DDS, MPH



# HPV Facts



- About **90%** for men and **80%** for women **will get** an HPV infection in their lifetime
- Nearly **80 million** Americans are **currently** infected with some type of HPV
- HPV is spread through intimate **skin-to-skin** and **mucosal-to-mucosal** contact

# HPV by the Numbers



Certain strains of HPV cause **70%** of oropharyngeal cancers in the U.S.<sup>1</sup>



Oral HPV has been detected in newborns when the mother has an HPV cervical infection.<sup>3</sup>



Cancers of the oropharynx are about **four times** more common in men than women<sup>2</sup>



Each year in the U.S., about 47,199 HPV-associated cancers occur<sup>4</sup>



**One in nine** American men have oral HPV<sup>1</sup>



Of these, HPV causes about 37,300<sup>4</sup>

1. <http://annals.org/aim/article-abstract/2657698/oral-human-papillomavirus-infection-differences-prevalence-between-sexes-concordance-genital>

2. [https://www.cdc.gov/cancer/hpv/basic\\_info/hpv\\_oropharyngeal.htm](https://www.cdc.gov/cancer/hpv/basic_info/hpv_oropharyngeal.htm)

3. <http://journals.sagepub.com/doi/abs/10.1177/10454411000110020801>

4. <https://www.cdc.gov/cancer/hpv/statistics/cases.htm>

# HPV Facts

- Oropharyngeal cancer is the **8th most common cancer among males** and the **13th most common among females** in the United States, with a five-year relative survival rate<sup>1</sup> of 66%
- Cervical cancer is the **4th most common cancer among women**
- Chaturvedi et al. estimated that by 2020, the incidences of HPV-positive oropharyngeal cancers **will be greater** than the incidences of cervical cancer, and that by **2030**, half of **all head-and-neck cancers** will be related to HPV<sup>2</sup>
- Two HPV types (**16 and 18**) are responsible for nearly **all** cervical and oropharyngeal cancer



1. Siegel RL, Miller KD, Hemal A. Cancer statistics, 2015. CA Cancer H Clin. 2015;65(1):5-29.

2. Chaturvedi AK, Engels EA, Pfeiffer RN, et al. Human papillomavirus and rising oropharyngeal cancer incidence in the United States. J Clin Oncol. 2011;29(32):4294-4301.

# HPV by the Numbers

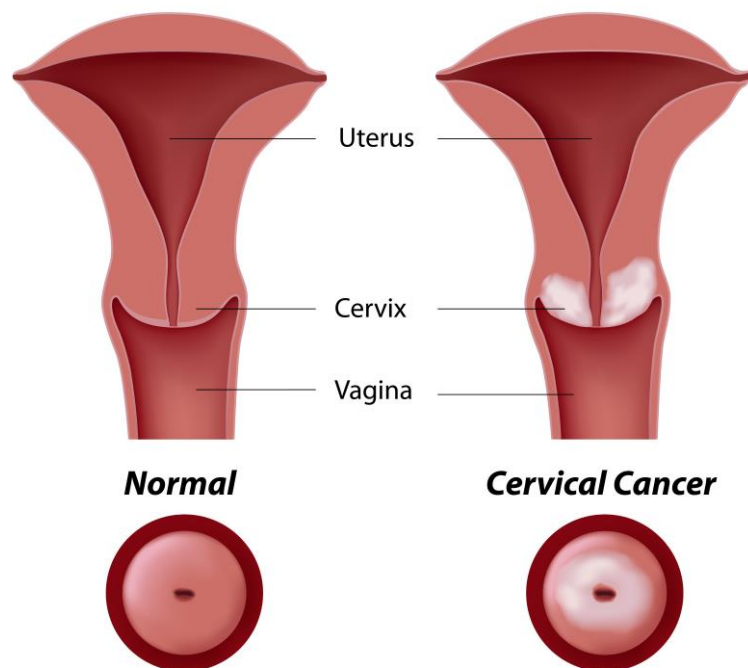
Most HPV infections (9 out of 10) go away by themselves within two years. Sometimes HPV infections will last longer, and can cause certain types of cancers. **6 types of cancer linked by HPV:**

**70%** of oropharynx, vaginal, & vulvar cancers are thought to be caused by HPV

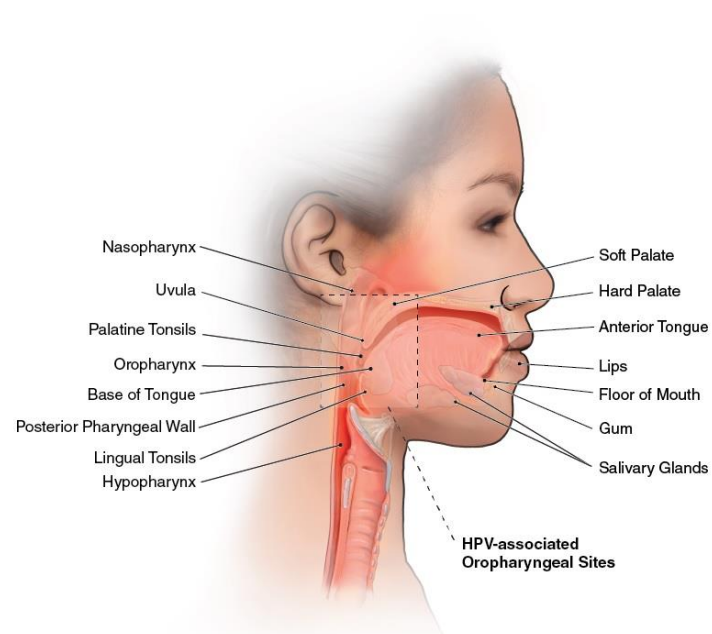
**91%** of cervical and anal cancers are thought to be caused by HPV

**63%** of penile cancers are thought to be caused by HPV

## HPV and Cervical Cancer



## HPV and Oropharyngeal Cancer

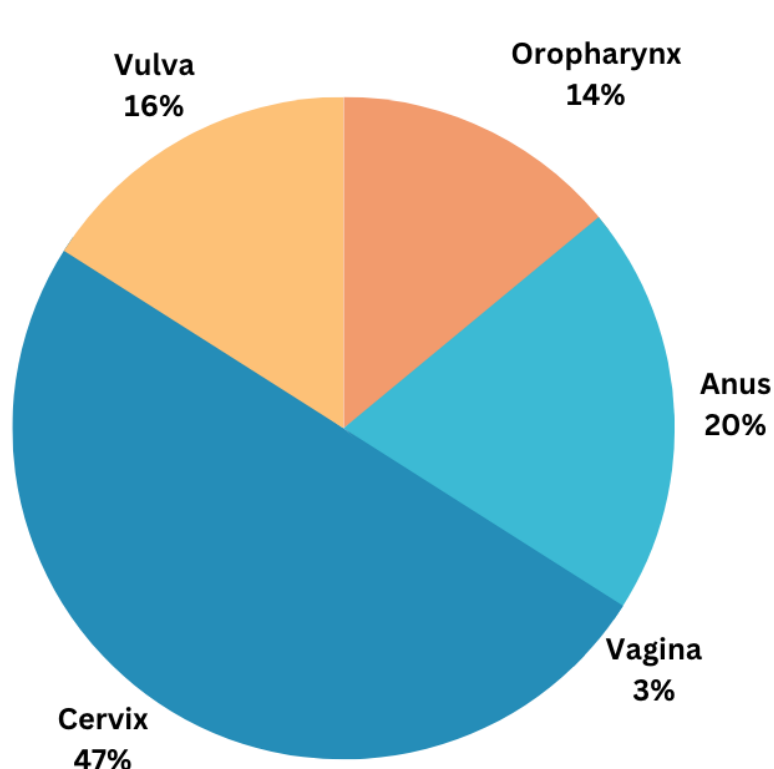


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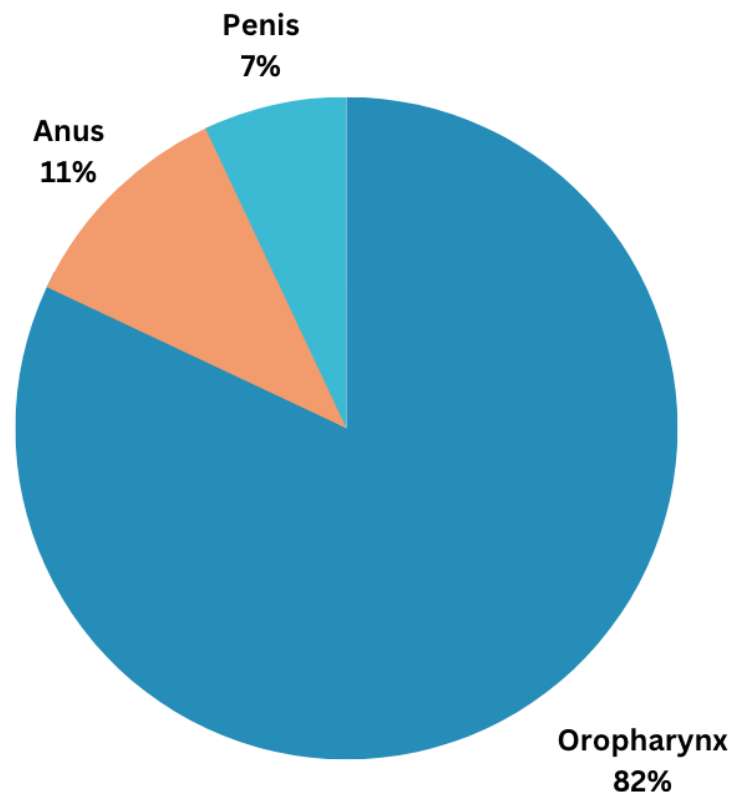


# Number of New HPV-Associated Cancer Cases Each Year

United States 2015-2019



**FEMALE (26,177)**



**MALE (21,022)**

# Call to Action

You have the power to reduce the **incidence** of human papillomavirus (HPV) associated-cancers and pre-cancers among patients in your care.

It is estimated that approximately **90%** of the newly diagnosed HPV-attributable cancers in the US could be prevented by receipt of the HPV vaccine.



**Cancer prevention starts with you.**





# The HPV Vaccine is Cancer Prevention



# HPV and Benign Lesions

Human papilloma virus–associated oral benign conditions include:

- Oral Verruca Vulgaris - HPV 2 and 4
- Oral Squamous Papilloma - HPV 6 and 11
- Condyloma Acuminata - HPV 2, 6 and 11
- Focal Epithelial Hyperplasia - HPV 13 and 32



# Oral Benign Lesions (Oral Warts)

Squamous papilloma Verruca vulgaris

Signs:

- Single or multiple
- Any mucosal or pedunculated
- Small fingerlike projections
- Rough, pebbled surface
- Whitish or light pink

Symptoms:

- Non-painful (unless traumatized)



## **Etiology**

Human  
Papillomavirus

## **Diagnosis**

Clinical  
diagnosis

## **Treatment**

Surgical excision  
cyotherapy

Condyloma Acuminata  
HPV 2, 6 and 11

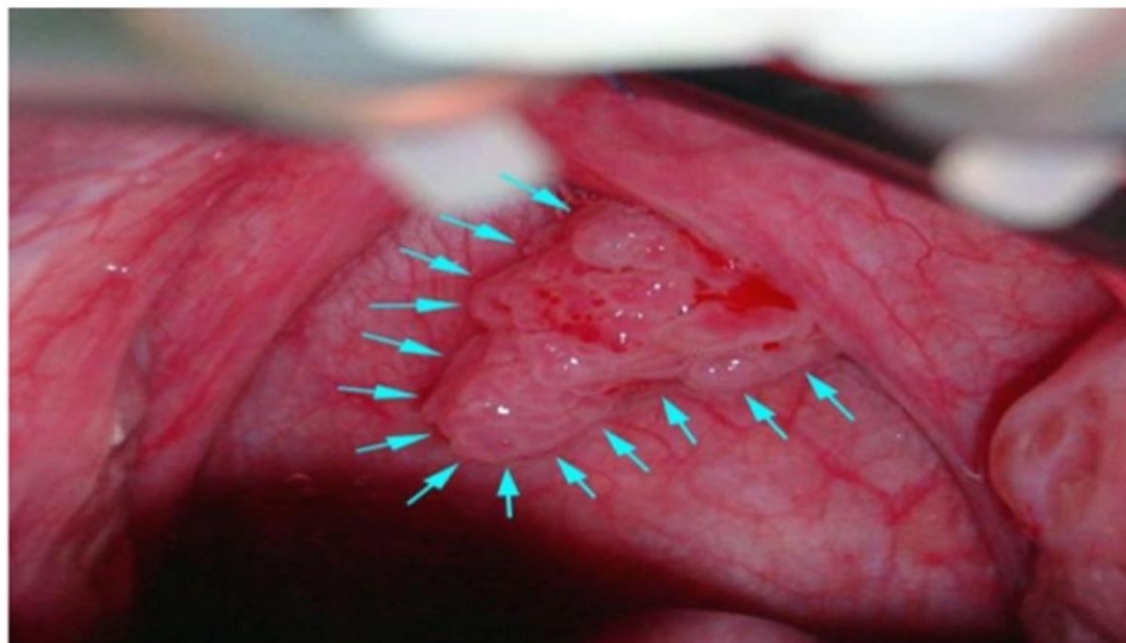


Focal Epithelial  
Hyperplasia  
HPV 13 and 32



# HPV and Oropharyngeal Cancer

HPV Papilloma extending from nasopharynx to oropharynx



Adelstein DJ, Rodriguez CP. Human papilloma virus: changing paradigm in oropharyngeal cancer. *Curr Oncol Rep* 2010;12:115-20

# HPV Links to Oropharyngeal Cancer

## HPV Tonsil



Adelstein DJ, Rodriguez CP. Human papilloma virus: changing paradigm in oropharyngeal cancer. *Curr Oncol Rep* 2010;12:115-20

# High-Risk Factors for Oropharyngeal Cancer

- Chewing tobacco
- Heavy smoking (more than a pack a day)
- Chronic inflammation
- Having a weakened Immune system
- Poor oral hygiene
- Current cannabis use
- A history of multiple sex partners





# Oral and Oropharyngeal Cancer





# Early Signs of Oral Cancer

## Characterized by:

- a visible lesions in the mouth
- a persistent white and/or red lesion
- a non-healing ulcer
- progressive swelling
- sudden tooth mobility without apparent cause
- unusual oral bleeding or epistaxis



# Early Signs of Oropharyngeal Cancer

## Characterized by:

- A neck mass
- Persistent odynophagia, dysphagia, dysphonia, otalgia
- A feeling of a lump in the throat
- Enlarged lymph nodes
- Unexplained weight loss
- Consistent sore throat





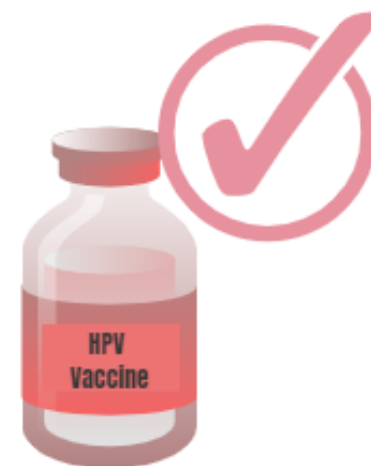
# HPV Vaccine Safety and Recommendations

Lin Chan, DDS

# HPV Vaccine Safety

HPV vaccine is non-infectious and highly effective

- HPV vaccines are based on virus-like particles (VLPs) that are formed by HPV surface components<sup>1</sup>
- VLPs lack virus' DNA
- The VLPs have been found to be strongly immunogenic, which means that they induce high levels of antibody production by the body. This makes the vaccines highly effective



# HPV Vaccine Safety



- Over 15 years of monitoring and research were conducted
- All three licensed vaccines went through extensive safety testing
- More than 135 million doses distributed in the U.S.
  - Vaccine safety surveillance data demonstrate that HPV vaccine is safe and effective

# HPV Vaccine - Possible Side Effects



- Pain, redness, or swelling in the arm where the shot was given
- Fever
- Headache or feeling tired
- Nausea
- Muscle or joint pain
- Dizziness or fainting
  - To prevent fainting and injuries from fainting, anyone receiving the vaccine should be seated or lying down during vaccination and for 15 minutes after getting the shot

# Contraindications

- Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including yeast
- Pregnancy



# Long-lasting Protection

- Studies suggest that vaccine protection is long-lasting
- No evidence of waning protection





Since HPV vaccination was first recommended in 2006, infections with HPV types that cause most HPV cancers and genital warts have dropped **88%** among teen girls and **81%** among young adult women.<sup>1</sup>

There was a **65%** reduction in cervical cancer rates in women ages 20-24 from 2012 through 2019, in the wake of the introduction of the human papillomavirus (HPV) vaccine.<sup>2</sup>



1. <http://hpvroundtable.org/wp-content/uploads/2018/04/OFFICE-TEAMS-Action-Guide-WEB.pdf> pg3

2. <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/2023-cancer-facts-figures.html>



# Top Five Reasons for Not Vaccinating Adolescents with HPV Vaccine\*

National Immunization Survey-Teen, United States, 2013

## Parents of Girls

REASON	PERCENTAGE
Lack of knowledge	15.5
Not needed or necessary	14.7
Safety concern/Side effects	14.2
Not recommended	13.0
Not sexually active	11.3

## Parents of Boys

REASON	PERCENTAGE
Not recommended	22.8
Not needed or necessary	17.9
Lack of knowledge	15.5
Not sexually active	7.7
Safety concern/Side effects	6.9



## Frequently Asked Questions and Talking Points

**Why does my child need HPV vaccine?**

HPV vaccine is important because it prevents infections that can cause cancer. That's why we need to start the shot series today.

Some HPV infections can cause cancer—like cancer of the cervix or in the back of the throat—but we can protect your child from these cancers in the future by getting the first HPV shot today.

**What diseases are caused by HPV?**

**How do you know the vaccine works?**

Studies continue to prove HPV vaccination works extremely well, decreasing the number of infections and HPV precancers in young people since it has been available.

HPV is a very common infection in women and men that can cause cancer. Starting the vaccine series today will help protect your child from the cancers and diseases caused by HPV.

**Is my child really at risk for HPV?**

**Why do they need HPV vaccine at such a young age?**

Vaccines protect your child before they are exposed to a disease. That's why we give the HPV vaccine earlier rather than later, to protect them long before they are ever exposed. Also, if your child gets the shot now, they will only need two doses. If you wait until your child is older, they may end up needing three shots.

Studies tell us that getting HPV vaccine doesn't make kids more likely to start having sex. I made sure my child (or grandchild, etc.) got HPV vaccine, and I recommend we give your child her first HPV shot today.

**I'm worried my child will think that getting this vaccine makes it OK to have sex.**

**Why do boys need the HPV vaccine?**

HPV vaccination can help prevent future infections that can lead to cancers of the penis, anus, and back of the throat in men.

Yes, HPV vaccination is very safe. Like any medication, vaccines can cause side effects, including pain, swelling, or redness where the shot was given. That's normal for HPV vaccine too and should go away in a day or two. Sometimes kids faint after they get shots and they could be injured if they fall from fainting. We'll have your child stay seated after the shot to help protect him/her.

**I'm worried about the safety of HPV vaccine. Do you think it's safe?**

**Are all of these vaccines actually required?**

I strongly recommend each of these vaccines and so do experts at the CDC and major medical organizations. School entry requirements are developed for public health and safety, but don't always reflect the most current medical recommendations for your child's health.

There is no evidence available to suggest that getting HPV vaccine will have an effect on future fertility. However, women who develop an HPV precancer or cancer could require treatment that would limit their ability to have children.

**Can HPV vaccine cause infertility in my child?**

For more information, visit  
[cdc.gov/vaccines/conversations](http://cdc.gov/vaccines/conversations)

# HPV Vaccination Recommendations

CDC's Advisory Committee on Immunization Practices (ACIP) Recommends:

- HPV vaccination for girls and boys at ages 11 or 12 years to protect against cancers caused by HPV infections (Vaccination can be started at age 9)
- In June 2019, ACIP recommended catch-up HPV vaccination for all persons through age 26



# HPV Vaccination Recommendations

- Food and Drug Administration (FDA), in 2018, approved HPV vaccine to be given through age 45 years
- CDC ACIP recommends that clinicians consider discussing with their patients in this age group if HPV vaccination is right for them
- HPV vaccination in this age range provides less benefit because more people have already been exposed to the virus





# HPV Vaccination Recommendations

What is the recommended dosing schedule in the U.S.?

The recommended dosing schedule depends on the age of the patient at vaccine initiation

How early can the vaccine be given?

The vaccine can be given as early as age 9

Who gets two doses?

A 2-dose schedule is recommended for people who get the first dose before their 15th birthday

Who gets three doses?

A 3-dose schedule is recommended for people who get the first dose on or after their 15th birthday

Who else gets three doses?

A 3-dose schedule is also recommended immuno-compromised persons

\*All doses contain the same contents and amounts.

# HPV Vaccination Recommendations

The age range and dosage schedule is based on immunogenicity studies

- A two-dose schedule (0, 6–12 months) will have efficacy equivalent to a three-dose schedule (0, 1–2, 6 months) if the HPV vaccination series is initiated before the fifteenth birthday
- Therefore, age fifteen is determined as the starting of three doses



# Recommended Vaccination Schedule


**On Time**  
AGE 9-12  
*2 Doses*  
6-12 months apart



**Late**  
AGES 13-14  
*2 Doses*  
6-12 months apart



**Critical**  
AGES 15-26  
*3 Doses*  
1st dose at visit one  
2nd dose 1-2 months later  
3rd dose 6 months after 2nd



\*Exception if immunocompromised and ages <15, need 3 doses.



# Start the HPV Conversation Early!



- Vaccination at age 9 offers more time for completion of the series by the age of 13
- Results in a strong immune response to HPV vaccine
- Increases the likelihood of vaccinating prior to first HPV exposure
- Decreases questions about sexual activity
- Decreases the number of administered shots per visit
- Cancer prevention decreases as the age of vaccination increases - it is important to **start early!**

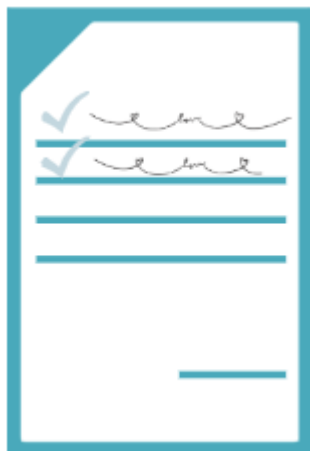


# **The Critical Role Public Health Professionals and Dental Health Care Professionals Play in Cancer Prevention**

Abrey Daniel, DDS



# Policies on HPV



- The American Dental Association adopted a policy in 2018 urging dentists to support the use and administration of the HPV vaccine
- The American Academy of Pediatric Dentistry (AAPD) has a policy on HPV vaccinations
  - The AAPD encourages oral health care providers to educate patients, parents, and guardians on the serious health consequences of oral and oropharyngeal cancer (OOPC) and the relationship of HPV to OOPC

# Common Barriers to the Discussion of HPV in Dental Settings

- Lack of education and training
- Lack of information about the HPV vaccine and the connection to cancer
- Discomfort discussing sexual history or topics such as oral sex and HPV
- Fear of offending a patient





## **Resources You Can Provide Dental Health Personnel**





## HPV vaccination rates across the U.S., California, and Los Angeles County

	Healthy People 2030 Objective U.S. Target (%)	U.S. (%) 2017	California (%) 2016	Los Angeles County (%) 2018
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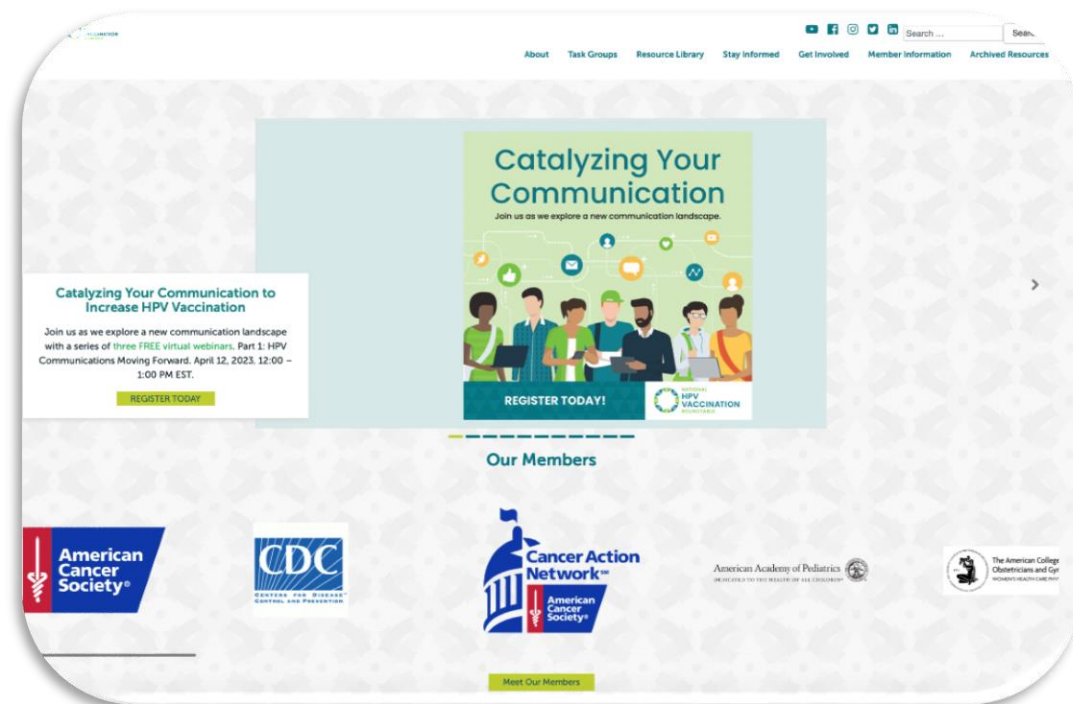
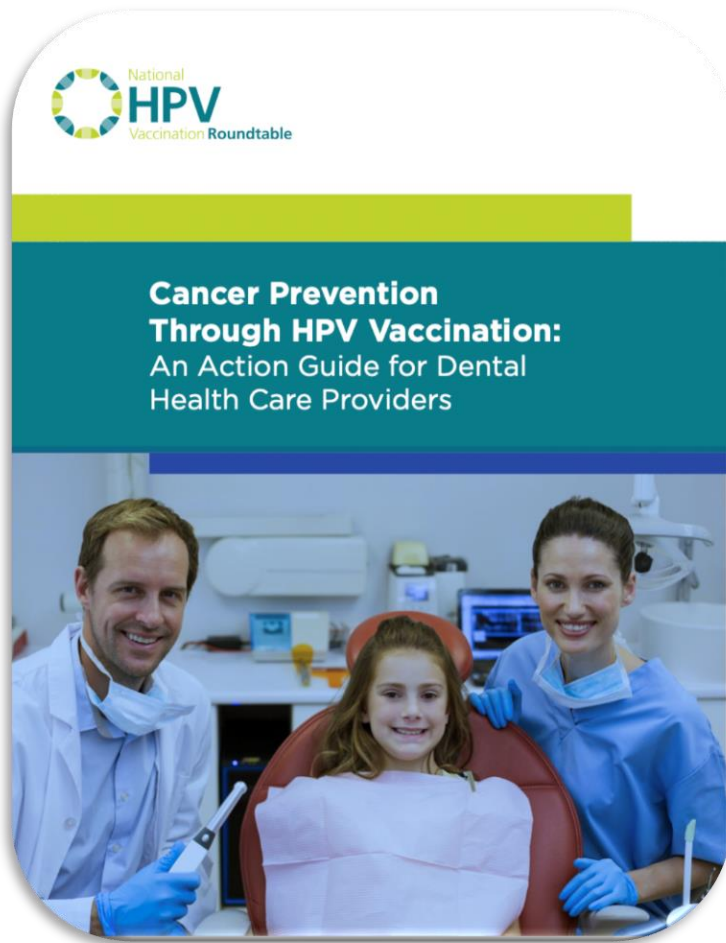
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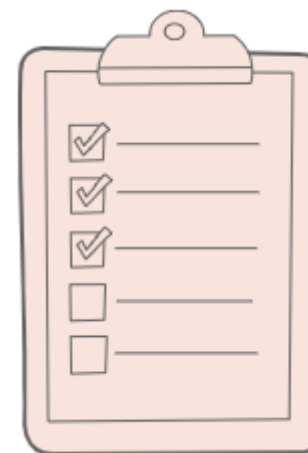
<sup>6</sup> 2018. Percent of children (ages 11-17 years) who have completed the required doses of the Human Papillomavirus (HPV) vaccine. Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health. Estimates are based on data collected from a random sample of 4,986 Los Angeles County children, representative of the child population in Los Angeles County. Data were reported by an adult sufficiently knowledgeable about the health and daily routines of the child. Completion is defined as taking 3 or more doses of the HPV vaccine for children ages 11-17 years or taking 2 doses of the HPV vaccine 6 months apart for children ages 11-14 years. AJCC: American Joint Committee on Cancer.

# Action Guide



# Actions Dental Providers Can Take

- Action 1: Know Your Role
- Action 2: Practice Cancer Prevention
- Action 3: Refer patients for vaccinations
- Action 4: Collaborate
- Action 5: Engage Your Team





# Toolkit

- The Massachusetts HPV Coalition has a free dental toolkit
- The toolkit includes provider materials such as talking tips and background research and patient materials
- Patient materials are available in English, Spanish, Brazillian Portugese, Hatitian Creole, Arabic, Chinese, and Vietnamese
- There is an opportunity to co-brand the toolkit





# Toolkit: Talking Tips

## HPV AT THE DENTIST Parent Talking Tips

**Start the Conversation:** "Is your child up to date on the HPV vaccine? It prevents 6 types of cancer, including oropharyngeal cancer. Make sure to ask your child's doctor at your next visit."

Parents May Ask	Your Answer
Why does my child need the HPV vaccine?	HPV is extremely common – <b>most people will have HPV during their life.</b> By vaccinating your child, you can protect them from several types of cancer.
Can't we wait until they are older?	<b>The best time to get the HPV vaccine is between ages 9 and 12.</b> This is because children have a stronger immune response. After age 14, they will need an extra catch-up shot to be fully protected.
Does the vaccine really work?	<b>Yes, studies continue to prove the HPV vaccine works extremely well.</b> We have seen a significant decrease in the number of infections and cervical precancer in young people since the vaccine was introduced in 2006.
I thought the HPV vaccine was only for girls?	<b>The vaccine was first recommended for girls, but is now recommended for all children.</b> The vaccine prevents both cervical and oropharyngeal (throat/back of tongue) cancer. In fact, oropharyngeal cancer is now more common than cervical cancer, and is more likely to impact men.
How much does the vaccine cost?	Like other childhood vaccines in Massachusetts, the HPV vaccine is free. Talk to your doctor or call your health insurance to find a provider.
I'm worried about the safety of the vaccine. Do you think it is safe?	<b>Yes, the HPV vaccination is very safe.</b> Like any other shot, the most common side effect is soreness at the injection site. Over 120 million doses of the HPV vaccine have been given and no serious safety concerns have been found. <b>Talk to your doctor if you still have questions.</b>

## HPV AT THE DENTIST Age 18-26 Talking Tips

**Start the Conversation:** "Have you gotten the HPV vaccine? It prevents 6 types of cancer, including oropharyngeal cancer. Ask your doctor about the vaccine at your next visit."

Parents May Ask	Your Answer
What is Human Papilloma Virus (HPV)?	HPV is an extremely common virus that spreads through sexual and intimate contact. <b>Most of us will have HPV at some point in our lives.</b> HPV can cause genital warts and 6 types of cancer, including oropharyngeal cancer.
Am I too old for the HPV vaccine?	It is most effective when given between the ages 9-12 but <b>the vaccine is recommended for everyone up to age 26.</b>
Can I still get the vaccine if I already have HPV?	<b>Yes.</b> The vaccine can protect you from other types in the future.
Can I still get HPV if I am vaccinated?	<b>Unfortunately, yes.</b> There are over 100 different strains, or types, of HPV. The vaccine protects you from 9 strains that are responsible for about 90% of genital warts and HPV-related cancers.
Is there a way to test for oral HPV?	<b>Not yet.</b> Researchers are working on developing a test, but so far they are unreliable.
I'm worried about the safety of the vaccine. Do you think it is safe?	<b>Yes, the HPV vaccination is very safe.</b> Soreness at the injection site is common, but over 120 million doses of the HPV vaccine have been given and no serious safety concerns have been found. <b>Talk to your doctor if you still have questions.</b>

## HPV AT THE DENTIST Age 27+ Talking Tips

**Start the Conversation:** "Did you get the HPV vaccine as a child or young adult? It prevents 6 types of cancer including oropharyngeal cancer."

Parents May Ask	Your Answer
Am I too old for the HPV vaccine?	<b>Talk to your doctor to see if you would benefit from getting vaccinated.</b> The vaccine is approved up to age 45, but it is not usually recommended after age 26 because most adults have already been exposed to HPV by this time.
What is oropharyngeal cancer?	The oropharynx is the area at the back of your throat. It includes your tonsils, the base of your tongue and the back of the roof of your mouth. <b>Cancer in this area is usually caused by HPV.</b>
How common is HPV-related oropharyngeal cancer?	HPV causes almost 20,000 cases of oropharyngeal cancer every year and the number of cases is increasing each year. Oropharyngeal cancer is now the most common HPV-related cancer.
What are the symptoms of oropharyngeal cancer?	Symptoms include hoarseness, pain or difficulty swallowing, pain while chewing, a lump in the neck, a feeling of a persistent lump in the throat, change in voice, or non-healing sores on the neck.
Who is at risk of HPV-related oropharyngeal cancer?	<b>Anyone can get oropharyngeal cancer, but it is more common in men than women.</b> It is usually transmitted through oral sex. Having multiple sex partners can increase your risk. Smoking and drinking may also increase your risk of oropharyngeal cancer.
How serious is HPV-related oropharyngeal cancer?	Oropharyngeal cancer is usually treated with a combination of chemotherapy, radiation, and surgery. <b>The 5-year survival rate is 85-90%.</b> This is much higher than oropharyngeal cancers that aren't caused by HPV.



# Toolkit: Patient Educational Resources

## PREVENTING CANCER At the Dentist!

### What is HPV?

Human Papilloma Virus (HPV) is a very common virus that spreads from skin-to-skin contact. Almost everyone will have HPV at some point in their life.

HPV usually has no symptoms, so most people with HPV don't know they have it. Most cases of HPV go away on their own, but other cases can go on to cause cancer.

### HPV & Cancer

HPV causes 6 types of cancer. The most common are oropharyngeal and cervical cancer. The oropharynx is the area in the back of the tongue and throat.

80% of oropharyngeal cancer cases are found in men. Cervical cancer is found in women and people with a cervix.



The vaccine is for everyone ages 9 to 26.

The HPV vaccine protects you or your child from the most cancer-causing strains of HPV and 90% of genital warts.

The best time to get the HPV vaccine is between ages 9 and 12. This is because children have a stronger immune response.

How much do YOU know about HPV?




Scan the QR Code with your phone to take our HPV quiz!

**Rx** Date \_\_\_\_\_

HPV Vaccine Reminder


\_\_\_\_\_ is due for the cancer-preventing HPV Vaccine. Call their doctor to schedule an appointment!



**Rx** Date \_\_\_\_\_

HPV Vaccine Reminder


\_\_\_\_\_ is due for the cancer-preventing HPV Vaccine. Call their doctor to schedule an appointment!



**Rx** Date \_\_\_\_\_

HPV Vaccine Reminder


\_\_\_\_\_ is due for the cancer-preventing HPV Vaccine. Call their doctor to schedule an appointment!



**Rx** Date \_\_\_\_\_

HPV Vaccine Reminder

\_\_\_\_\_ is due for the cancer-preventing HPV Vaccine. Call their doctor to schedule an appointment!



### ORAL, HEAD & NECK SELF EXAM GUIDE

Check your mouth and neck each month. Talk to your dentist or doctor if you notice a lump or have any other changes that last over 2 weeks.



Use a mirror or flashlight to look at your cheeks, tongue, gums, back of the throat, and the roof of your mouth.



Feel for lumps behind your ears and down to your neck on both sides.



Feel along your neck all the way down to your collarbone.



Lift your chin and feel upward to check underneath your jaw.

### PREVENTING CANCER at the Dentist!

**PREVENT CANCER CHECKLIST**

Get Vaccinated!

See your doctor and dentist regularly

Check your mouth each month for any changes

Stop smoking & limit drinking

Talk to your doctor about cervical cancer screening



Stop Cancer Before it Starts  
Talk to your dentist about the HPV vaccine today.



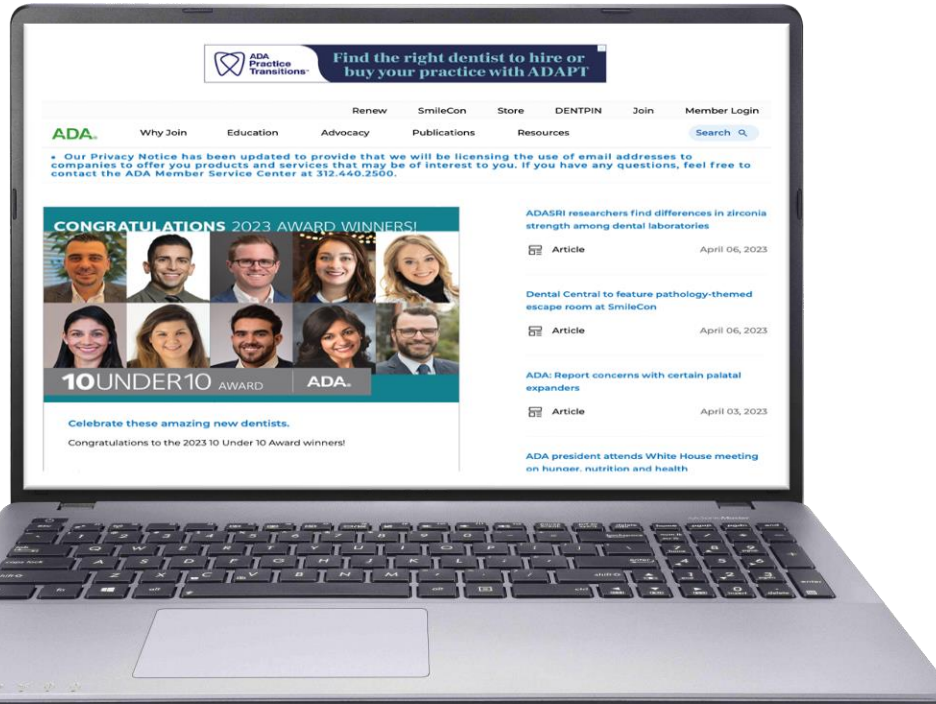
For more information on HPV, visit:  
cdc.gov/hpv  
mahpcoalition.org  
teamaureen.org



This poster is provided by the Massachusetts HPV Coalition. Visit [mahpcoalition.org](http://mahpcoalition.org) for more information.



# American Dental Association Webinars



Preventing HPV Cancers in Action Part 3: 'Building Blocs'  
— Medical-Dental Collaboration Models and More

1 CE credit(s)

Start Course

Preventing HPV Cancers in Action Part 2: Dentists As  
Vaccinators

1 CE credit(s)

Start Course

Preventing HPV Cancers in Action Part 1: The Critical  
Role of the Dentist

1 CE credit(s)

Continue



# Referral Resources for Follow-up to Primary Care

The screenshot shows the EZIZ website interface. At the top, there's a search bar with "ENHANCED BY Google" and a search icon. Below the search bar is a navigation menu with links for Home, Vaccine Programs, Vaccine, Storage Units, Temperature, EZIZ Training, and Job Aids &. The main content area is titled "VFC Provider Locations" and includes a search form with fields for "Enter Address or ZIP" and "Code". There's a "Search Within: 5 miles" dropdown and a "Find Prov" button. Below the search form is a map of California with a red pin indicating a location in Los Angeles. To the right of the map is a legend: a blue pin for "Public Health Sites" and a green pin for "Private Providers". Below the map is a section titled "VFC and VFA Provider Locations" with a sub-section "Eligibility for the receipt of VFC vaccines". It lists two criteria: 1. Be eligible for Medi-Cal or Child Health and Disability Program (CHDP) or - VFC & VFA Providers; 2. Have no health insurance (be uninsured) or - Federally Qualified Health Centers/Rural Health Clinics. At the bottom, there's a "Frequently Asked Questions" section with a question mark icon.



## VACCINE PREVENTABLE DISEASE CONTROL PROGRAM PROVIDER REFERRAL LIST



These clinics provide no-cost or low-cost immunizations to children 18 years of age and younger. Some clinics also offer vaccines for adults. If you have health insurance or a regular health care provider, please contact them for immunization services. Children 12 years of age and older may consent to receive HPV and hepatitis B vaccines. For all other vaccines, parental consent is required.

Please call to confirm which immunizations are provided and to check the clinic's hours. Bring your child's immunization record (yellow card), if you have one.

Estas clínicas proporcionan vacunas a bajo costo o sin costo a los niños de 18 años de edad y menor. Algunas clínicas también ofrecen vacunas para los adultos. Si tiene seguro de salud o un proveedor de atención médica regular, por favor comuníquese con ellos para los servicios de inmunización. Niños mayores de 12 años pueden consentir para recibir las vacunas del HPV y de la hepatitis B. Toda otra vacuna se requiere el consentimiento de los padres.

Favor de llamar a la clínica para confirmar qué vacunas son proporcionadas y para verificar el horario de la clínica. Lleve el registro de la vacunas de su niño(a) (tarjeta amarilla) si tiene una.

For referrals to no-cost and low-cost immunization providers, dial 2-1-1 (Los Angeles County Information Line) Llame a la Línea de Información del Condado de Los Angeles al 2-1-1 para referencias a proveedores de vacunas sin o a bajo costo.

CITY	PROVIDER NAME	ADDRESS	ZIP	PHONE
Alhambra	VFA Chinatown Service Center - Community Helath Center - San Ga	320 S. Garfield Avenue, Suite 118	91801	(626) 773-3388
Arleta	El Proyecto Del Barrio - Arleta	8902 Woodman Avenue	91331	(818) 830-7033
Azusa	VFA El Proyecto Del Barrio - Azusa	150 North Azusa Avenue	91702	(626) 969-7885
Baldwin Park	Central City Community Health - Baldwin Park	4126 N. Maine Avenue	91706	(626) 653-0800
Baldwin Park	VFA El Proyecto Del Barrio - Baldwin Park	3942 Maine Avenue	91706	(626) 678-9296
Bell	VFA Northeast Community Clinic - Community Medical Alliance	4129 E. Gage Avenue	90201	(323) 771-8400
Bell Gardens	FHCCGLA - Bell Gardens Family Medical Center	6501 S. Garfield Avenue	90201	(562) 928-9600
Bell Gardens	FHCCGLA-SCHOOL BASED HEALTH CENTER	6119 Agra Street	90201	(323) 457-9982
Bell Gardens	VFA JWCH - Bell Gardens Health Center	6912 Ajax Avenue	90201	(323) 562-5813
Bellflower	DHS Bellflower Health Center	10005 E. Flower Street	90706	(562) 804-8112
Bellflower	VFA JWCH - Wesley/Bellflower Health Center	14371 Clark Avenue	90706	(562) 867-6006
Boyle Heights	VFA AltaMed Health Services - Boyle Heights 1st Street	2219 E. 1st Street	90033	(323) 269-0421
Burbank	All Inclusive Community Health Center	1311 N. San Fernando Blvd.	91504	(818) 843-9900
Canyon Country	Facey Medical Foundation - Canyon Country	17909 N. Soledad Canyon Road	91387	(661) 250-5225
Canyon Country	Samuel Dixon Family Health Center - Canyon County	27225 Camp Plenty Road, Suite 4	91351	(661) 424-1220
Carson	VFA South Bay Family Health Care Center - Carson	270 E. 23rd Street	90745	(310) 221-6800
City of Industry	Herald Christian Health Center - City of Industry	1661 Hanover Rd Ste. 103	91748	(626) 286-8700
Claremont	Pomona Valley Health Center at Claremont	1601 N. Monte Vista Avenue, Suite 100	91711	(909) 630-7938
Commerce	VFA AltaMed Health Services - Commerce	972 Goodrich Blvd.	90022	(323) 853-6060
Compton	Aghaby Comprehensive Community Health Center	349 W. Compton Blvd.	90220	(424) 785-5170
Compton	Banj Health Center	201 N. Central Avenue	90220	(310) 635-7123
Compton	VFA De Novo Health Care, Inc.	803 E. Rosecrans Avenue	90221	(310) 605-4800
Compton	DHS Dollarhide Health Center	1108 N. Oleander Street	90222	(424) 338-1800
Compton	R.O.A.D.S. Community Care Clinic	121 S. Long Beach Blvd.	90221	(310) 627-5850
Compton	VFA St. John's Well Child & Family Center - Compton	2115-A N. Wilmington Avenue	90222	(310) 603-1332
Compton	VFA St. John's Well Child & Family Center - Dominguez	15301 S. San Jose Avenue	90221	(562) 630-6825
Covina	VFA East Valley Community Health Center, Inc	276 West College Street	91723	(626) 919-5724
Cudahy	VFA Cudahy Family Health Center	7910 Atlantic Avenue, Suite M	90201	(323) 908-4200
Cudahy	Wellness Center at Elizabeth Learning	4811 Elizabeth Street	90201	(323) 908-4200

Thursday, June 07, 2018

DHS = Department of Health Services    DPH = Department of Public Health  
\* No-cost or low-cost adult vaccinations may be available    \* VFA = Vaccines for Adults



## **Education Materials for Community Members**





# Fact Sheet

## Vaccines for Your Children

Parents > Diseases that Vaccines Prevent

### Parents

- Why Vaccinate +
- Vaccine Schedule +
- Vaccines by Age +

### Diseases that Vaccines Prevent

- Chickenpox (Varicella)
- Diphtheria
- Flu (Influenza)
- Hepatitis A
- Hepatitis B
- Hib
- HPV (Human Papillomavirus)**
- Measles
- Meningococcal
- Mumps
- Pneumococcal
- Polio
- Rotavirus
- Rubella
- Tetanus
- Whooping Cough (Pertussis)
- Diseases You Almost Forgot About

## Vaccine (Shot) for Human Papillomavirus

[Español \(Spanish\)](#) | [Print](#)

Print



HPV vaccination is recommended at ages 11-12 years to protect against cancers caused by HPV infection.

### When should my child get the shot?

#### 11-12 Years

- Two doses of the HPV shot are needed, 6-12 months apart.
- If the shots are given less than 5 months apart, a 3<sup>rd</sup> dose is needed.

If started after 15<sup>th</sup> birthday

- Three doses of the HPV shot should be given over 6 months.
- If your teen hasn't gotten the vaccine yet, talk to his/her doctor about getting it as soon as possible.

Your child can get the first dose of the HPV vaccine at the same visit they get vaccines to protect against meningitis and whooping cough.

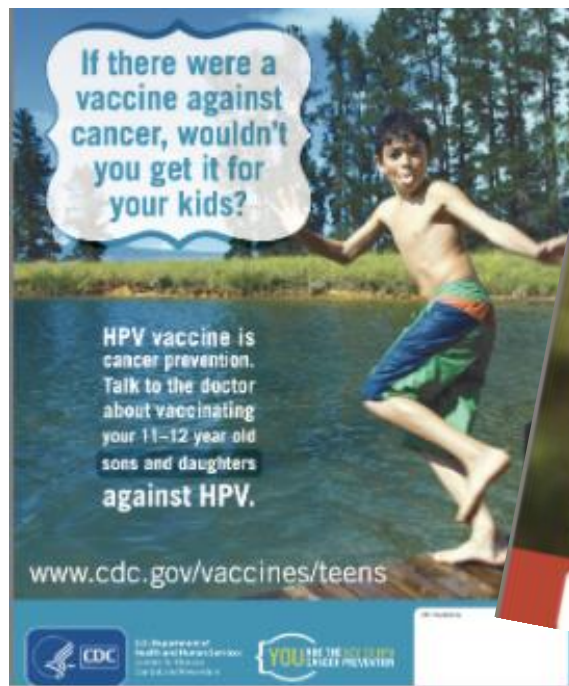
### Why does my child need the HPV shot?

- Protects against infections that can lead to certain cancers.
- Protects against abnormal cells that can lead to cancer (precancers) and the lasting effects of testing and treatment for these precancers.
- Protects your child long before they are ever exposed to [cancer-causing infections](#).

**The HPV shot is safe.**  
The HPV shot is very safe, and it is effective at protecting against HPV infection. Vaccines, like any medicine, can have side effects. These are usually

With over 135 million doses distributed in the United States, HPV vaccine has a reassuring [safety record](#) that's backed by over 15 years of monitoring and research.

# Flyers and Posters







# American Cancer Society

Cancer Helpline 800.227.2345 [Contact Us](#) [Sign Up For Email](#) [GIVE IN HONOR & MEMORIAL](#) [DONATE](#)

- Cancer A-Z
- Risk, Prevention, & Screening
- Treatment & Survivorship
- Programs & Services
- Our Research
- Get Involved
- About Us
- Q



[Ver en español](#)

[Home](#) - Risk, Prevention, & Screening

## Prevent 6 Cancers with the HPV Vaccine

HPV, or Human Papillomavirus, is a common virus that can cause 6 types of cancer. While there is no treatment for HPV, there is a vaccine that can prevent it.

If your son or daughter is between ages 9 and 12, talk to their doctor about the HPV vaccine. The vaccine is safe, effective, and long-lasting.

Vaccinating your child at the recommended ages can help keep them healthy well into adulthood and is the best way to prevent HPV cancers later in life.



### 3 steps to take now

- 1.) Use this site to learn the facts about the HPV vaccine and how it can help protect your child from 6 types of cancer later in life.
- 2.) Call your child's doctor to schedule an appointment or request the HPV vaccine at your child's well visit.
- 3.) If you have any questions about the HPV vaccine, write them down and take them to your child's doctor visit.



# Gardasil Website



[Patient Information](#) [Prescribing Information](#) [Important Safety Information](#) [For Health Care Professionals](#)

[What Is the HPV Vaccine?](#) [Why Vaccinate Now?](#) [Safety & Side Effects](#) [HPV Vaccine Schedule](#) [FAQs](#)

Information About GARDASIL 9



**Help protect your child today from certain HPV-related cancers later in life with GARDASIL 9.**

For most, HPV clears on its own.

[Learn About the HPV Vaccine](#)



ACTOR PORTRAYALS

## Important Points to Share with Dental Health Care Personnel

- Some patients may not know that the HPV vaccine protects against oropharyngeal cancers, cervical cancers and 4 other types of cancers
- It is within a dental health care personnel's scope of practice to discuss oral cancer risk reduction
- It is not necessary for dental health care personnel to mention sexual transmission of HPV
- The dental health care personnel could include discussion of the HPV vaccine when asking if the patient (or their children) are current with their immunizations, including the HPV vaccine





Public health professionals and oral health professionals play a critical role in combating growing rates of HPV-positive oropharyngeal cancers, which affect the tonsils and the base of the tongue.

Public health professionals and oral health professionals should strongly and clearly recommend HPV vaccination to all age-eligible patients.





## Special Thanks to:

The California Department of Public Health,  
Office of Oral Health

The California Oral Health Technical Assistance  
Center

### The American Cancer Society:

- Raquel Arias, MPH, Associate Director, State Partnerships
- Rebecca Dabbs, MPH, Associate Director, Community Partnerships

### CA HPV Vaccination Roundtable:

- Julie Dang, PhD, MPH, Executive Director, Office of Community Outreach and Engagement, UC Davis Comprehensive Cancer Center
- Susan Park, MD, MPH Assistant Clinical Professor, Division Gynecology Oncology, Harbor - UCLA Medical Center
- Mark H. Sawyer, MD, Professor of Clinical Pediatrics, Vice Chair for Education, Department of Pediatrics, UC San Diego and Rady Children's Hospital San Diego



## Survey Questions

1. Is there a vaccine to protect against cervical cancer? **YES**
2. HPV vaccine is recommended starting at age 9. **TRUE**
3. HPV is the most common viral sexually transmitted infection in the United States. **TRUE**
4. HPV infection can cause cancer in the back of the throat, including the base of the tongue and tongue and tonsils (called oropharyngeal cancer). **TRUE**
5. Oral health professionals play a critical role in combating growing rates of HPV-associated oropharyngeal cancers? **TRUE**
6. Most HPV infections do not go away by themselves? **FALSE**
7. HPV infections are so common that nearly all men and women will get some type of HPV at some point in their lives. **TRUE**
8. It is necessary to discuss sexual history when talking about HPV vaccination. **FALSE**



*Thank You*



University of California  
San Francisco



# Thank You

- Follow up materials and a link to the recording will be sent afterwards
- Please take a minute to complete the evaluation survey (poll & link in chat)
- Send questions or requests to: [oralhealthsupport@ucsf.edu](mailto:oralhealthsupport@ucsf.edu)