

CELL Series

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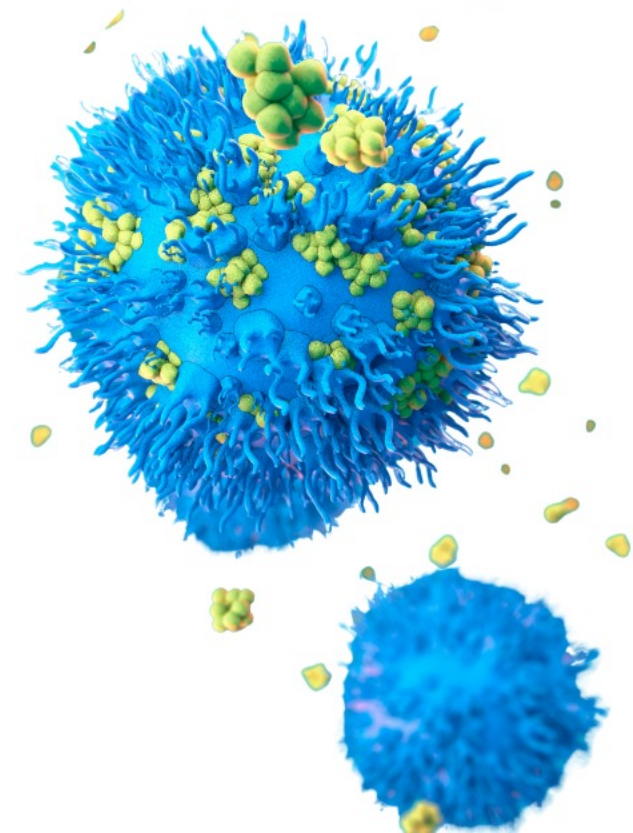
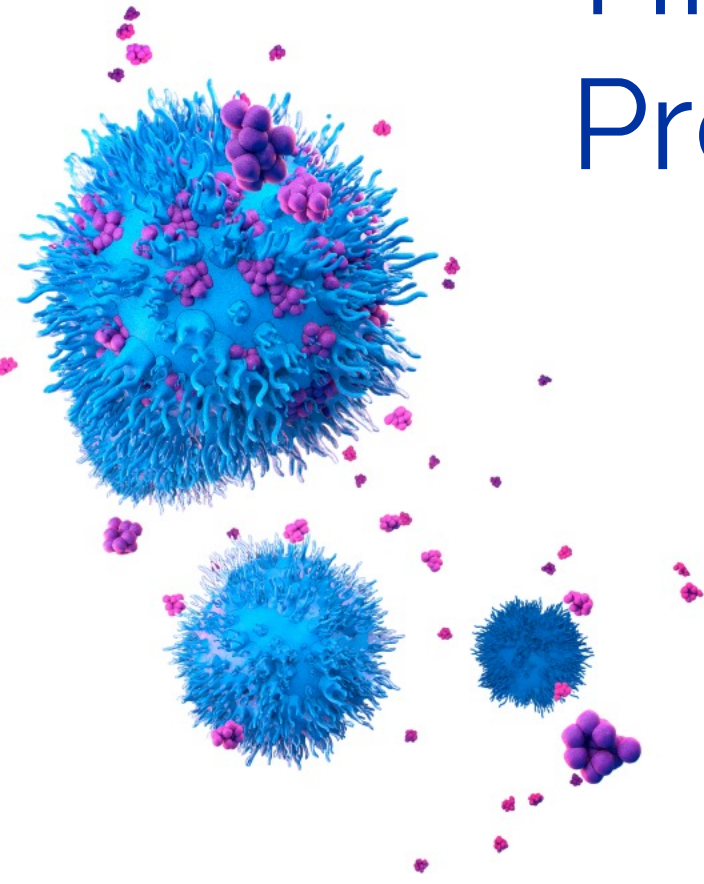
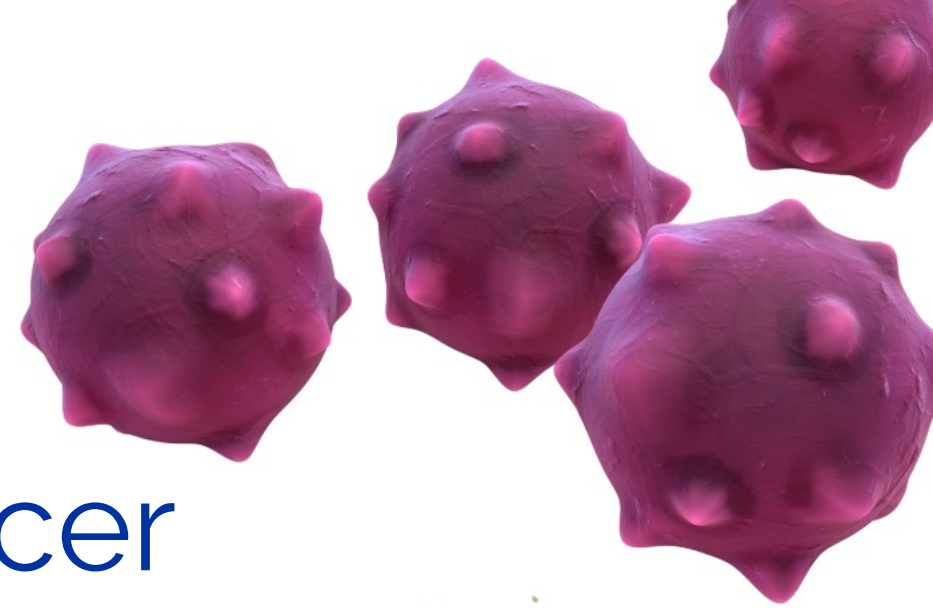


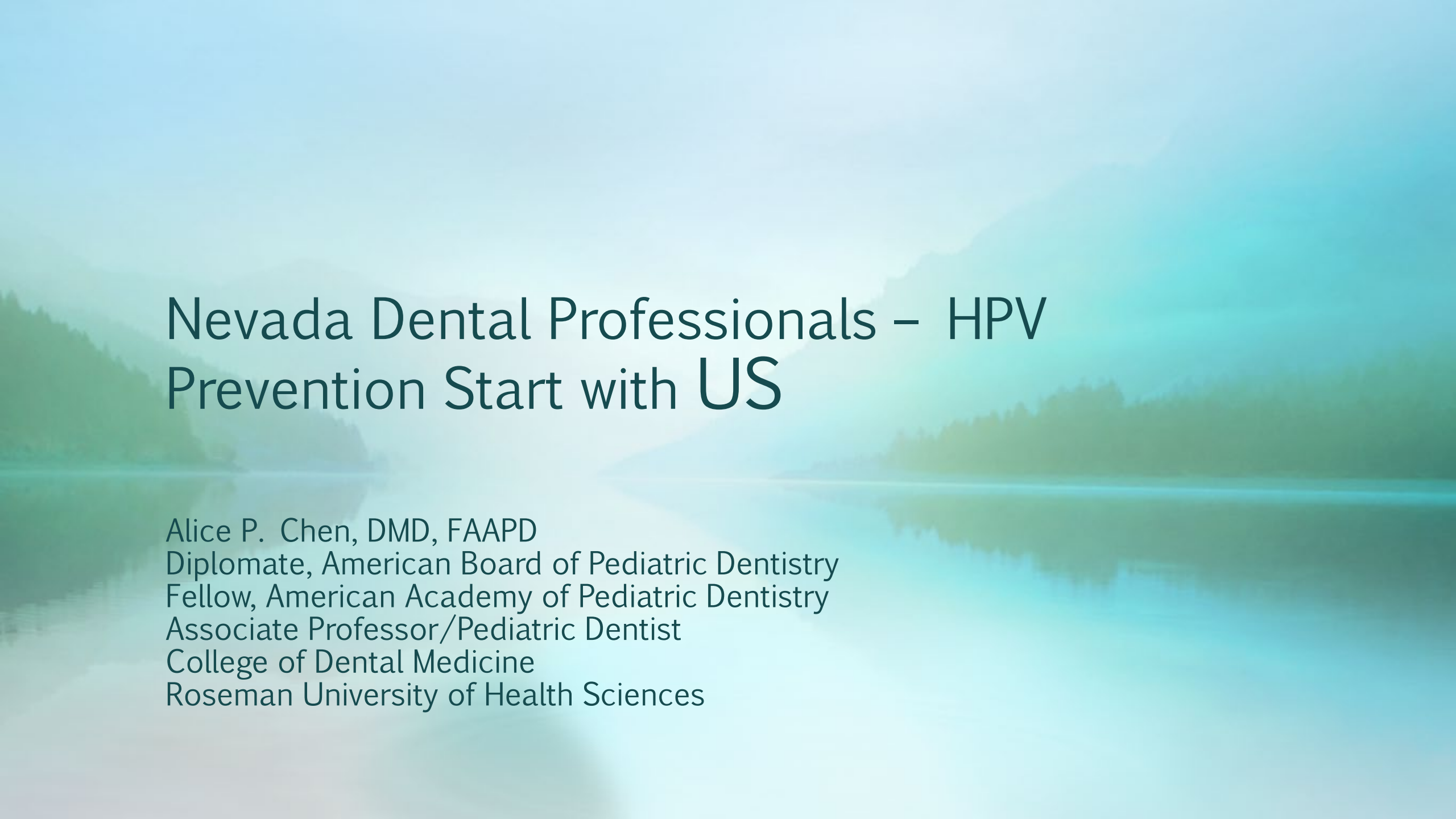
NEVADA CANCER
COALITION

HPV-Related Cancer Prevention for Dental Professionals

FEATURING:

TODD LANDABURU, CANCER SURVIVOR
ALICE P. CHEN DMD, FAAPD
CIVON GEWELBER, DDS, MHA





Nevada Dental Professionals – HPV Prevention Start with US

Alice P. Chen, DMD, FAAPD
Diplomate, American Board of Pediatric Dentistry
Fellow, American Academy of Pediatric Dentistry
Associate Professor/Pediatric Dentist
College of Dental Medicine
Roseman University of Health Sciences

Human Papillomavirus Statistics

- 20% oral cancer is caused by HPV
- 70% oropharyngeal cancer is caused by HPV



More Cases of HPV Induced Oropharyngeal Cancer than Cervical Cancer

Cancer site	Average number of cancers per year in sites where HPV is often found (HPV-associated cancers)	Percentage probably caused by any HPV type ^a	Estimated number probably caused by any HPV type ^a
Cervix	11,869	91%	10,800
Vagina	875	75%	700
Vulva	4,238	69%	2,900
Penis	1,364	63%	900
Anus ^b	7,560	91%	6,900
Female	5,150	93%	4,800
Male	2,410	89%	2,100
Oropharynx	20,805	70%	14,800

Data are from population-based cancer registries participating in CDC's National Program of Cancer Registries (NPCR) and/or the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program for 2016 to 2020, covering 97% of the U.S. population

Who Gets HPV?

- 84.6% of people will acquire a HPV infection at some point in their lifetime, most will be asymptomatic
- 80% of men and women will have acquired HPV by age 45
- Adults with no sex partners were excluded from the study

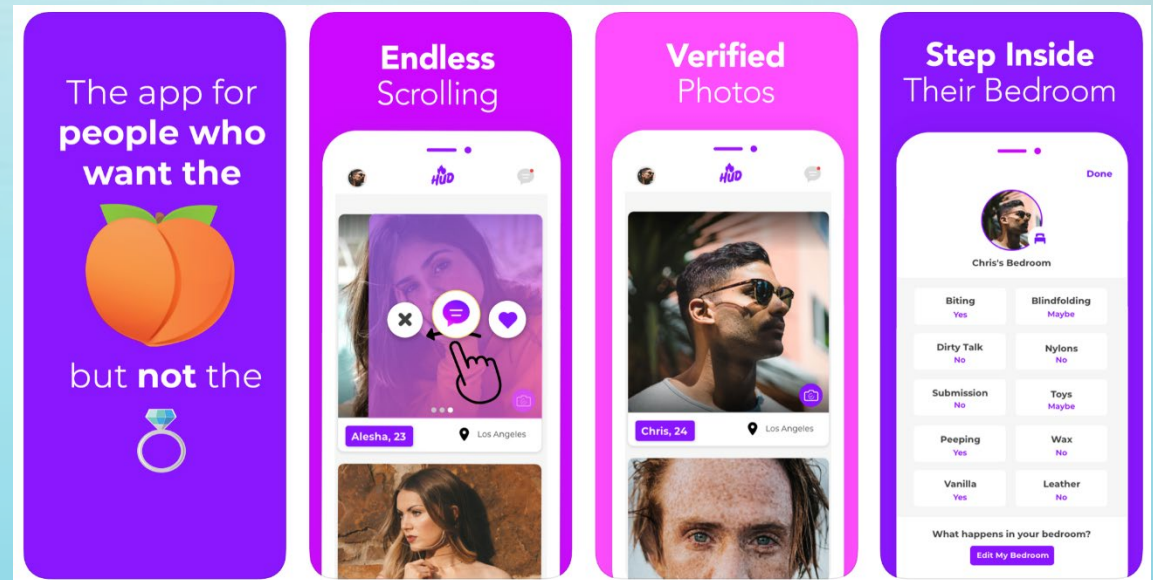
Chesson HW, Dunne EF, Hariri S, Markowitz LE. The estimated lifetime probability of acquiring human papillomavirus in the United States. *Sex Transm Dis.* 2014 Nov;41(11):660-4.

HPV in America

- Since 1980's, there has been a 200% increase in oropharyngeal cancer in United States

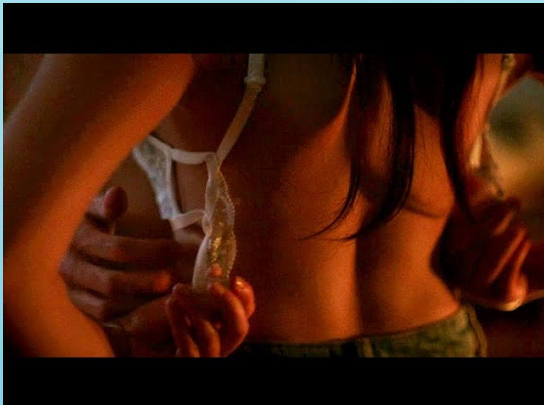


A screenshot of the Ashley Madison website. The header features the logo "ASHLEY MADISON®" and the tagline "Life is short. Have an affair.®". Below this is a form to select relationship status and a "See Your Matches »" button. A large image of a woman's face with her finger to her lips is in the background. Text at the bottom left says "Over 38,855,000 anonymous members!". The footer includes a "100% Like-minded People" badge, media mentions, and various award logos like "Trusted Security Award" and "100% DISCREET SERVICE".



A series of four mobile app interface screens for Ashley Madison. The first screen is a purple background with the text "The app for people who want the [peach icon] but not the [diamond ring icon]". The second screen, titled "Endless Scrolling", shows a card for "Alesha, 23" in Los Angeles with icons for close, match, and like. The third screen, titled "Verified Photos", shows a card for "Chris, 24" in Los Angeles. The fourth screen, titled "Step Inside Their Bedroom", shows a user profile for "Chris's Bedroom" with a grid of preferences: Biting (Yes), Blindfolding (Maybe), Dirty Talk (No), Nylons (No), Submission (No), Toys (Maybe), Peeping (Yes), Wax (No), Vanilla (Yes), and Leather (No). It also includes a "What happens in your bedroom?" section with an "Edit My Bedroom" button.

HPV in America



2023 Top American Teen TV Shows:

X.O. Kitty

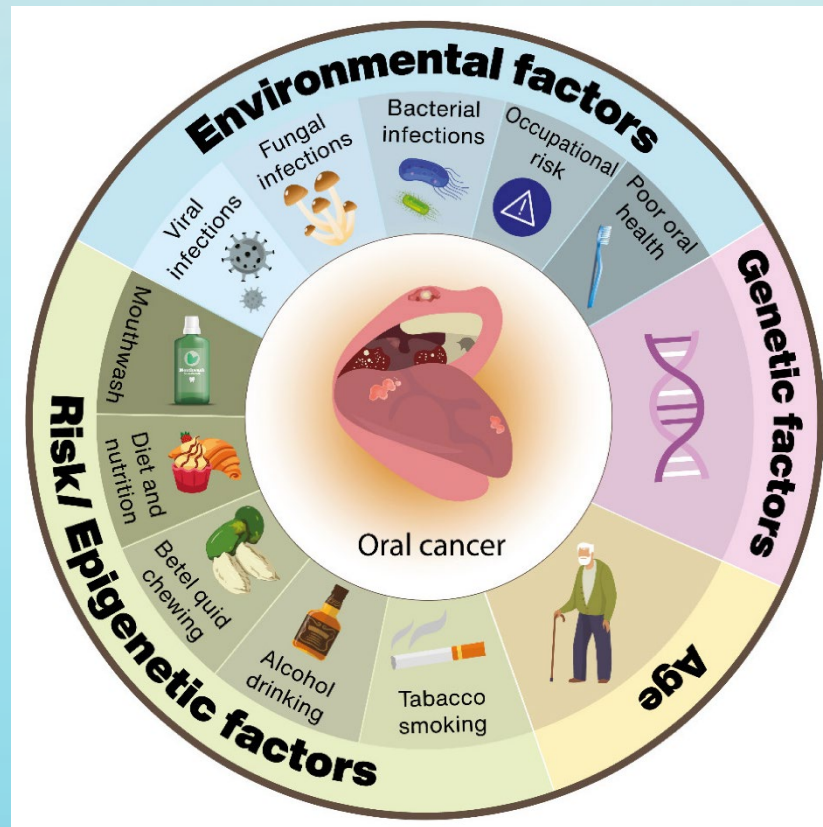
Ginny and Georgia

The Summer I Turned Pretty

Never Have I Ever

Who Gets Cancer?

- Although there are known risk factors; current science has no way of predicting who will clear their HPV infection, and who will end up with cancer



Do Boys Need to Worry about HPV?

- Oropharyngeal cancer in men are four time more common than in women
- HPV-related throat cancer patients are usually non-smoking, white, heterosexual males in their 50s or 60s
- "We used to see mostly smokers. Now we see mostly nonsmokers, and their throat cancers are almost uniformly HPV-related."

[Neil Gross, M.D.](#), professor and director of clinical research in the Department of Head and Neck Surgery at MD Anderson

Prevention

- Avoiding tobacco use
- Avoid frequent or large consumption of alcohol
- Minimize number of sexual partners and avoid oral sex (CDC recommends using condoms and dental dams during oral sex)
- HPV Vaccination starting at age 9 (Younger age patients produces stronger immune response)
- Regular exam for early detection

HPV Vaccine

- First developed Australia
- Introduced in 2006 to US patients, target patients initially were teen girls and young adult women
- In 2009, vaccine received approval for boys and young men to prevent penile and anal cancer
- Under age 15: Two Doses
- Over age 15: Three Doses
- **All HPV vaccines have been found to have high efficacy (close to 100%) for prevention of HPV vaccine type-related persistent infection**

Nevada



HPV Vaccination in Nevada 🔍

Explore national- and state-level data for hundreds of health, environmental and socioeconomic measures, including background information about each measure. Use features on this page to find measures; view subpopulations, trends and rankings; and download and share content.

[? How to use this page](#)

Nevada Value:

59.5%

Percentage of adolescents ages 13-17 who received all recommended doses of the human papillomavirus (HPV) vaccine

Nevada Rank:

37

Problem #1 : Medical Professionals

- 2020 UNR Study: Medical, physician assistant, graduate, and undergraduate students lack HPV knowledge, with a low percentage (30%) aware of oropharyngeal cancer as a result of HPV infection.

Evans, L., Matley, E., Oberbillig, M. *et al.* HPV Knowledge and Attitudes Among Medical and Professional Students at a Nevada University: A Focus on Oropharyngeal Cancer and Mandating the Vaccine. *J Canc Educ* 35, 774–781 (2020)

Dental Professionals

- 2017 AAPD Survey: A majority (77 percent) of graduate and associate program directors believe they should be discussing the human papillomavirus vaccine with patients and parents; however, only 25 percent of respondents currently include information about HPV and the vaccine in their curricula.

[Hosking, Yoshita Patel](#)¹; [Cappelli, David](#)²; [Donly, Kevin](#)³; [Redding, Spencer](#)⁴; [Pediatric Dentistry](#), Volume 39, Number 5, September-October 2017, pp. 383-389(7)

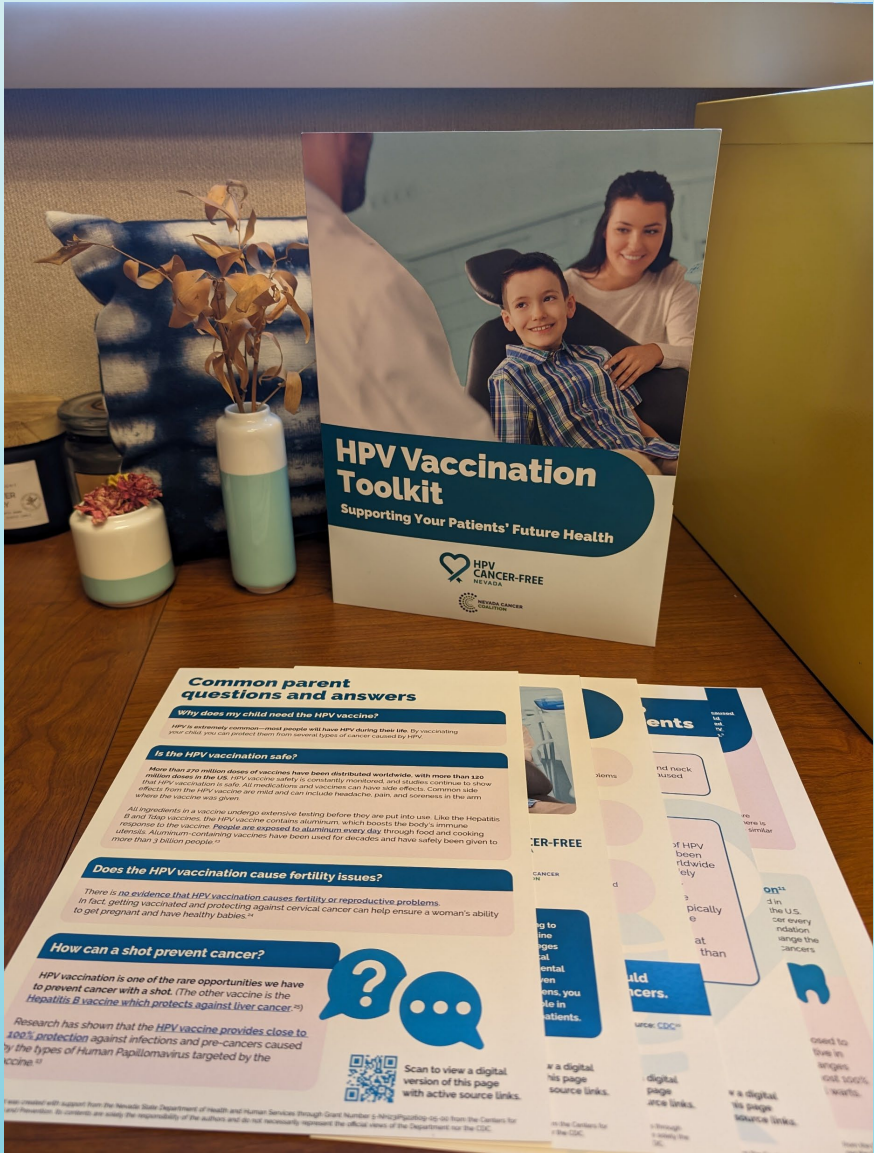
Problem #2: Parents

- Vaccine Hesitancy from parent/patient
- Medical mistrust and misinformation



Dental Professionals

- Many patients see their dentists and dental hygienists more often than their physicians
- Seen as trusted healthcare providers who see children on a regular schedule
- We are already in a position to speak about wellness and prevention
- We are routinely doing intra and extra oral exams
- Presenting HPV vaccine as an oropharyngeal cancer prevention vaccine rather than a STD prevention vaccine



Vaccine Hesitancy

A provider recommendation is the strongest predictor of HPV vaccination.

(Ylitalo et al., 2013; Lau et al., 2012)



Feb 2014: AAP, CDC, and others urged providers to “give a strong recommendation” for HPV vaccination: “what you say matters; *how* you say it matters even more”

2018 Study in Dallas: Persistence in discussion yields the highest same-day vaccination rate for hesitant parents

- Persistent providers vaccinate 17/18 hesitant families
- Acquiescent providers vaccinated zero hesitant family.

Parent-Provider Communication of HPV Vaccine Hesitancy. Laura A. Shay et al. *Pediatrics* (2018) 141 (6): e20172312.

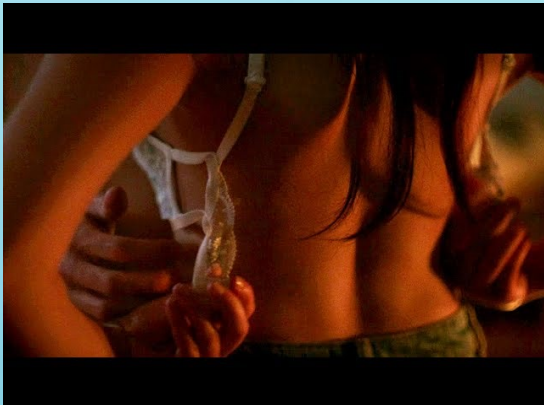
Communication Strategies

- Normalizing: it is normal to feel unsure about the HPV vaccine given what you've heard about it.
- Acknowledging feelings: it sounds like you are nervous or uncertain about if the HPV vaccine is right for you.
- Affirming strengths: I'm so impressed with your interest in gaining as much information as possible prior to making your decision.
- Nonjudgment: Whatever your decision, I am not judging you.

Communication Strategies

- Avoid asking “Why” questions as it conveys judgement
- Asking permission to share information
- Avoid showing frustration

HPV in America



2023 Top American Teen TV Shows:

X.O. Kitty (Kitty and Dae: 16)

Ginny and Georgia (Abby and Press: 16)

The Summer I turned Pretty (Belly:16, Conrad: 17)

Never Have I Ever (Devi and Ben: 17)

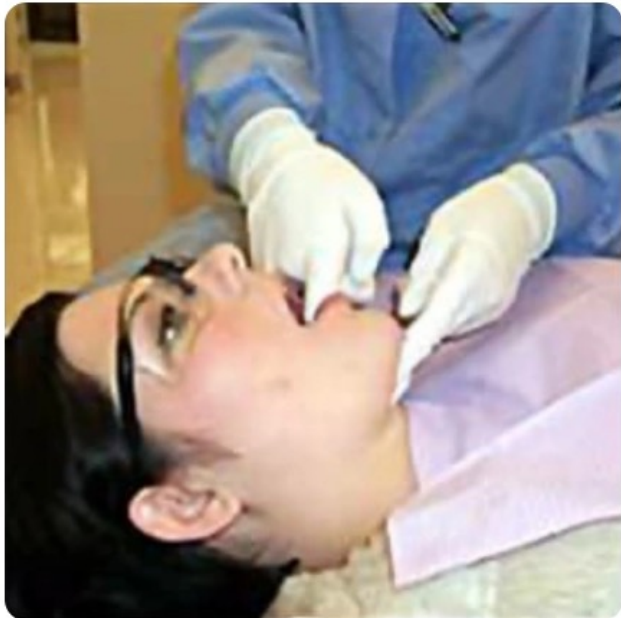
Oral Cancer Screening: The Oral Health Provider's Responsibility

Civon Gewelber DDS, MHA

Roseman University

Assistant Professor

Free CE Course



The Intraoral and Extraoral Exam



COURSE NUMBER: 337

Nancy W. Burkhart, EdD, MEd, BSDH, AFAAOM; Leslie DeLong, RDH, AS, BSHS, MHA

Credit Hours: **3 Hour(s)**

The purpose of this course is to introduce the protocol for a complete oral cancer examination with proper techniques for both the head and neck and intraoral examinations; to provide patient education information; to provide information on...[View More](#)

Create Assignment

Start Course

(Use this feature to create assignments for your students and staff.)

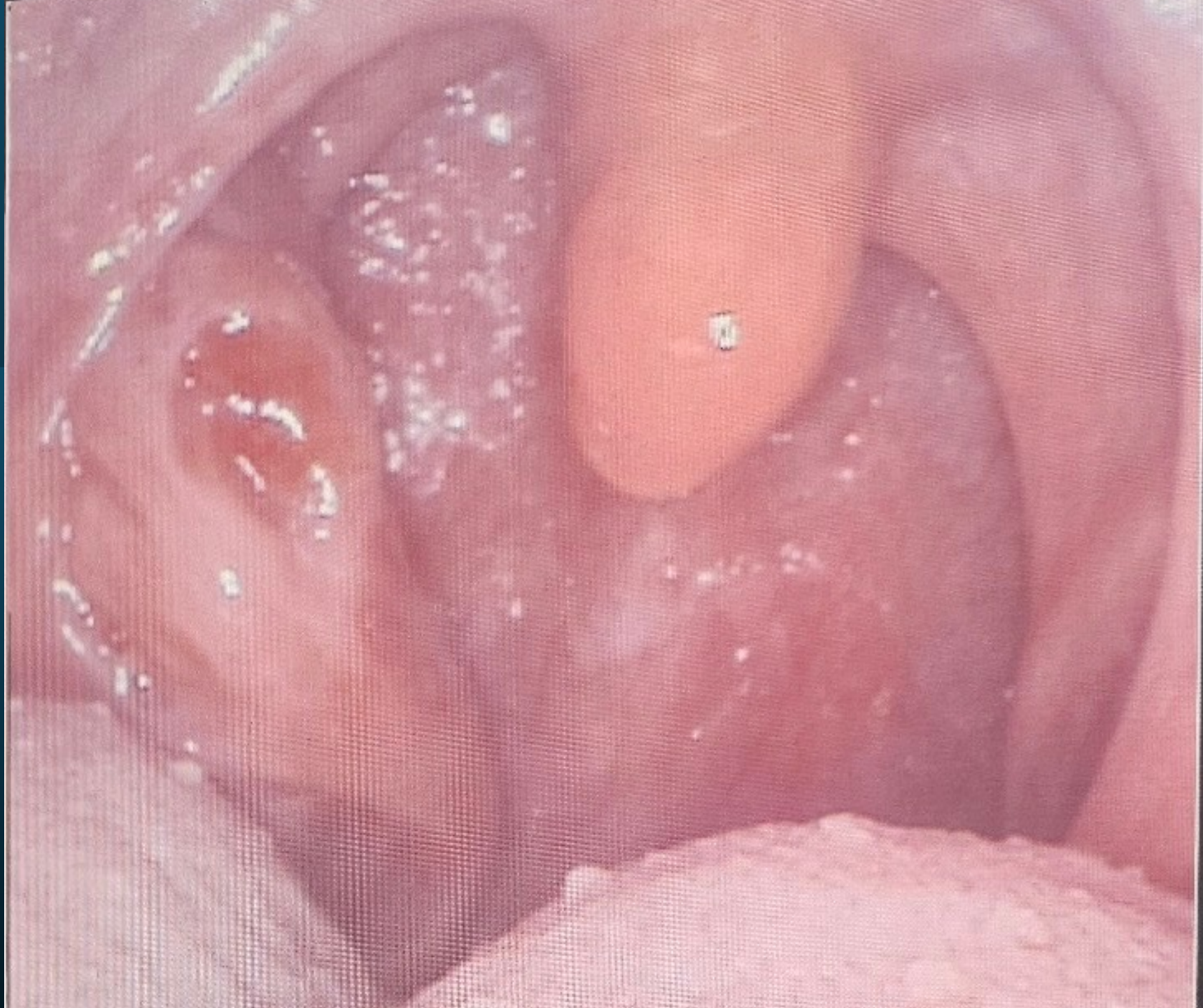
Develop a Routine

Radiographs
Teeth
Gingiva
Ridges
Saliva
Floor of Mouth
Tongue
Soft palate
Hard palate
Oropharynx
Skin/Face
Eyes
TMJ
Swallow
Lymph nodes
Lips
Buccal mucosae
Mallampati
Tonsils
Nutrition
Habits
Product usage
Medical history
Dental history
Social history

Start with the
“Hello!”



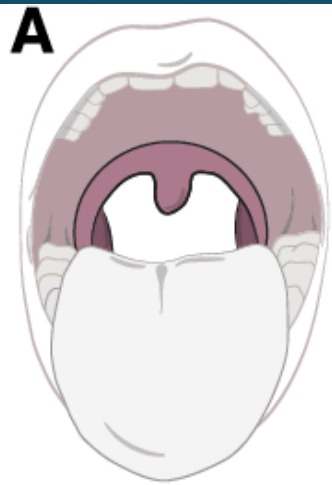
Say, "Ahhh!"



Risk Factors

- For oral cancer
- For early diagnosis
- For sleep apnea





Mallampati I



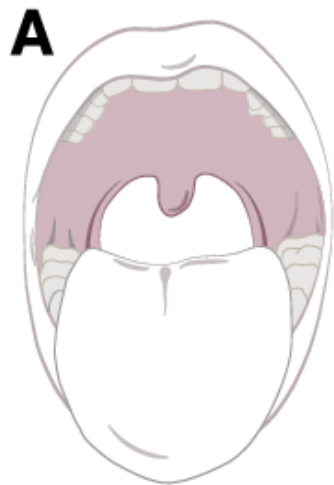
Mallampati II



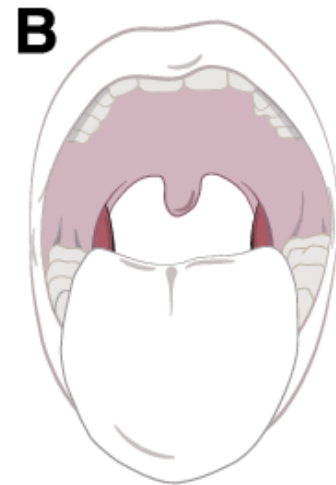
Mallampati III



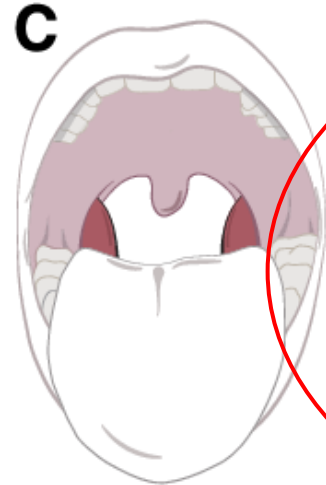
Mallampati IV



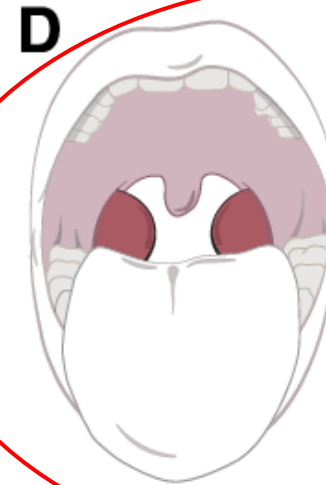
Friedman 0



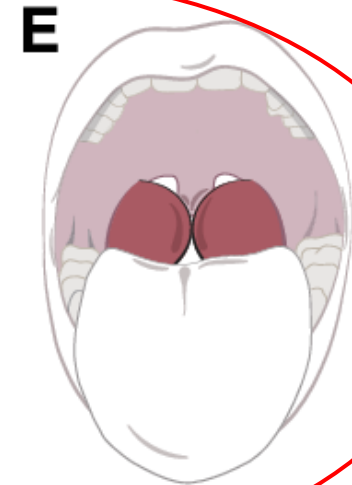
Friedman 1



Friedman 2

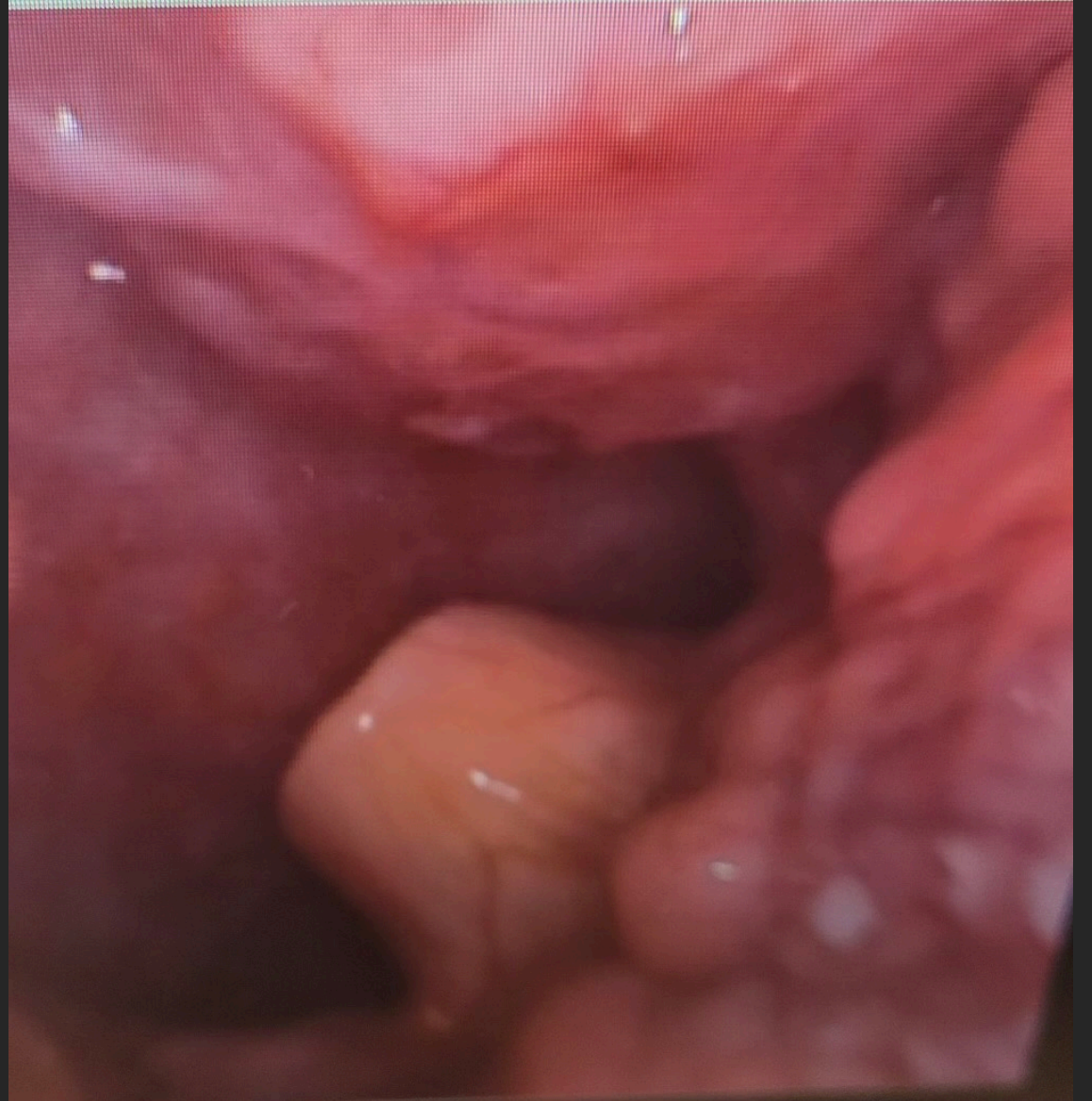
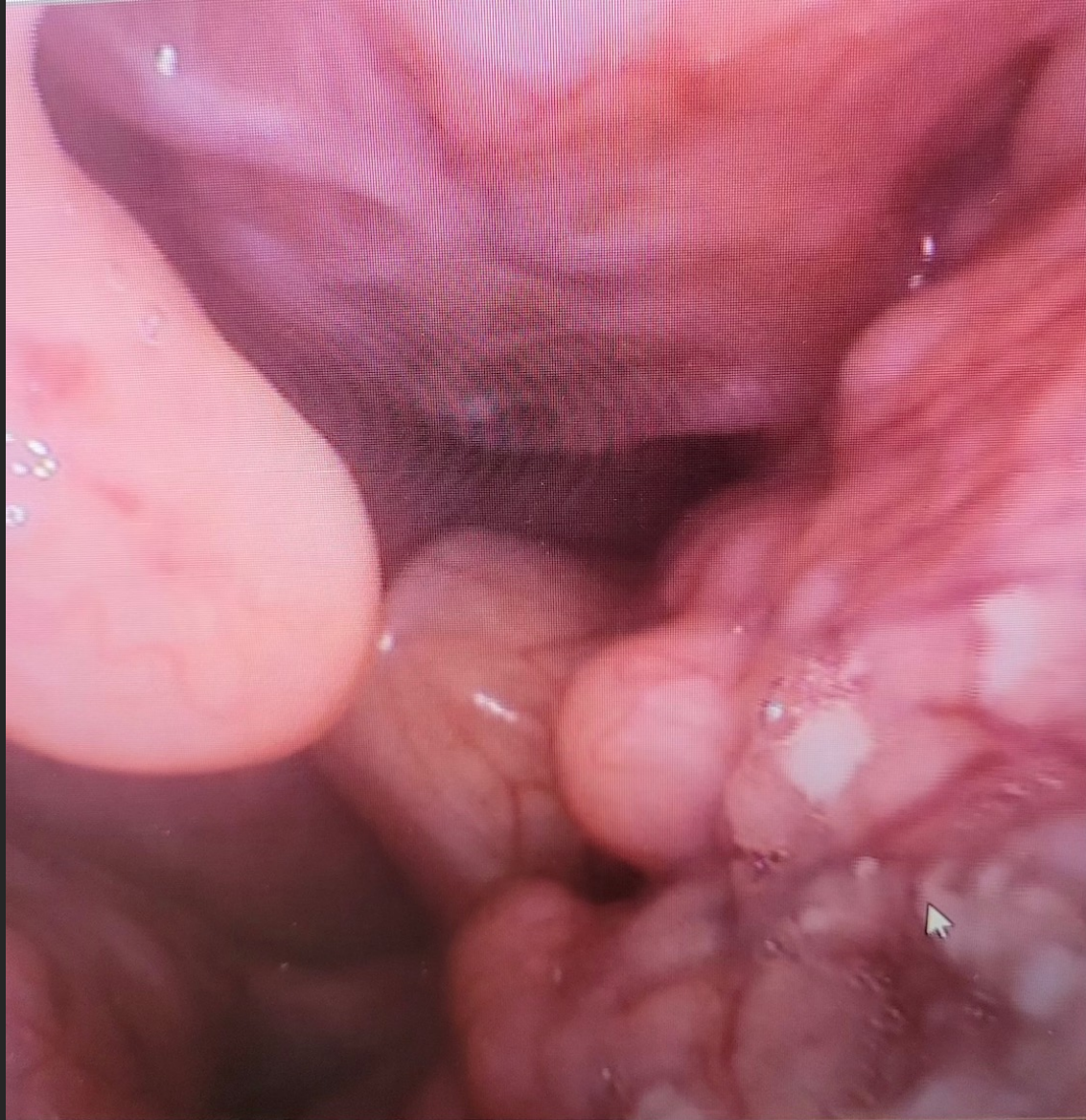


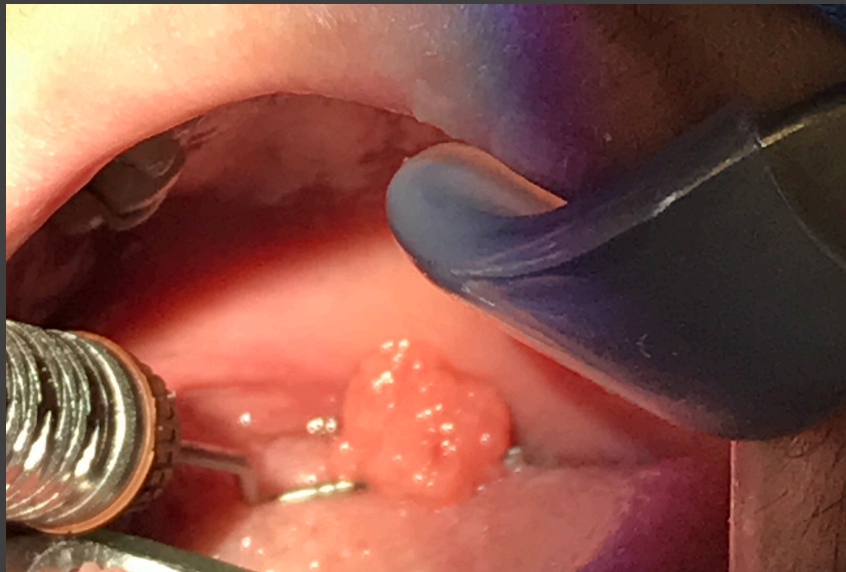
Friedman 3



Friedman 4

Mallampati score and Friedman tonsil scale. The Mallampati score, although principally intended to help estimate the relative







Whole Mouth
1002 05 05

Talking to adults about HPV

It can prevent a common infection.

It can prevent some types of cancer.

It has lasting benefits.

I think it is important.

It is a safe vaccine.



BOX. Considerations for shared clinical decision-making regarding human papillomavirus (HPV) vaccination of adults aged 27 through 45 years



Ideally, HPV vaccination should be given in early adolescence because vaccination is most effective before exposure to HPV through sexual activity. For adults aged 27 through 45 years who are not adequately vaccinated,* clinicians can consider discussing HPV vaccination with persons who are most likely to benefit. HPV vaccination does not need to be discussed with most adults aged >26 years.

- HPV is a very common sexually transmitted infection. Most HPV infections are transient and asymptomatic and cause no clinical problems.
- Although new HPV infections are most commonly acquired in adolescence and young adulthood, some adults are at risk for acquiring new HPV infections. At any age, having a new sex partner is a risk factor for acquiring a new HPV infection.
- Persons who are in a long-term, mutually monogamous sexual partnership are not likely to acquire a new HPV infection.
- Most sexually active adults have been exposed to some HPV types, although not necessarily all of the HPV types targeted by vaccination.
- No clinical antibody test can determine whether a person is already immune or still susceptible to any given HPV type.
- HPV vaccine efficacy is high among persons who have not been exposed to vaccine-type HPV before vaccination.
- Vaccine effectiveness might be low among persons with risk factors for HPV infection or disease (e.g., adults with multiple lifetime sex partners and likely previous infection with vaccine-type HPV), as well as among persons with certain immunocompromising conditions.
- HPV vaccines are prophylactic (i.e., they prevent new HPV infections). They do not prevent progression of HPV infection to disease, decrease time to clearance of HPV infection, or treat HPV-related disease.

* Dosing schedules, intervals, and definitions of persons considered adequately vaccinated have not changed.

References

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3. Harley EH. Asymmetric Tonsil Size in Children. *Arch Otolaryngol Head Neck Surg.* 2002;128(7):767–769. doi:10.1001/archotol.128.7.767
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6. Meites E, Szilagyi PG, Chesson HW, Unger ER, Romero JR, Markowitz LE. Human Papillomavirus Vaccination for Adults: Updated Recommendations of the Advisory Committee on Immunization Practices. *MMWR Morb Mortal Wkly Rep* 2019;68:698–702.
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9. HPV and Cancer. NCI. <https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-and-cancer>

Have a Question?

Drop your question in the Q&A box or chat.
We will address questions at the end of the session.

Recording & Slides

The recorded webinar and slides will be posted to
[YouTube.com/@nevadacancercoalition](https://www.youtube.com/@nevadacancercoalition).