



HPV Vaccination: The Dental Provider's Role

November 2022



Stony Brook **Medicine**

GET THE FACTS. REDUCE THE RISK. SPREAD THE WORD.
TakeActionAgainstCancer.com

CANCER
PREVENTION
IN ACTION | NASSAU
SUFFOLK

 Stony Brook
Cancer Center

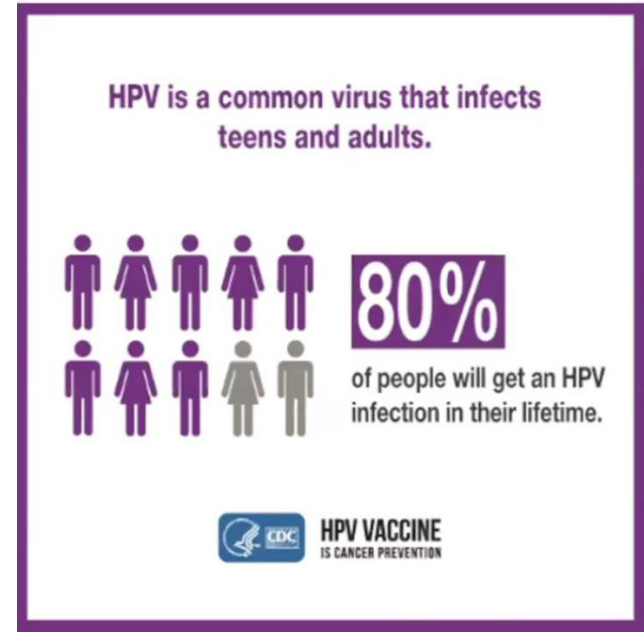
This project is supported with funds from the State of New York.

Outline:

- **HPV Basics**
- **HPV Cancer Burden: NYS & Long Island**
- **HPV Vaccine as Cancer Prevention**
- **Vaccination Rates: NYS, Long Island, & COVID considerations**
- **Best Practices in Improving Vaccine Completion Rates**
- **HPV Vaccine “Pearls of Wisdom”**
- **Supporting Vaccination: Adults and Pediatric Dental Providers**
- **Vaccine Assistance Resources**
- **Taking Action Against Cancer with Cancer Prevention in Action.**
- **HPV Vaccine Resources**

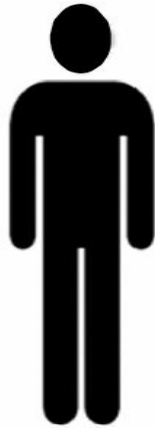
HPV Basics

- Human Papillomavirus (HPV) is the most common sexually transmitted infection in the U.S.
- In most cases, HPV infection will clear on its own
- When HPV does not go away, it can cause six different types of cancers including:
 - Cervical Cancers
 - Vaginal Cancers
 - Vulvar Cancers
 - Penile Cancer
 - Anal Cancers
 - **Oropharyngeal Cancers**



Burden of HPV in NYS

Every year in NYS, about 2,800 people are diagnosed with a cancer caused by HPV.



40% of cases are diagnosed in men



75% are mouth or throat cancers



60% of cases are diagnosed in women



50% are cervical cancer

HPV infection is thought to cause almost all cervical cancers, over 90% of anal cancers, 70% of oropharyngeal cancers, 75% of vaginal cancers, 70% of vulvar cancers, and 60% of penile cancers



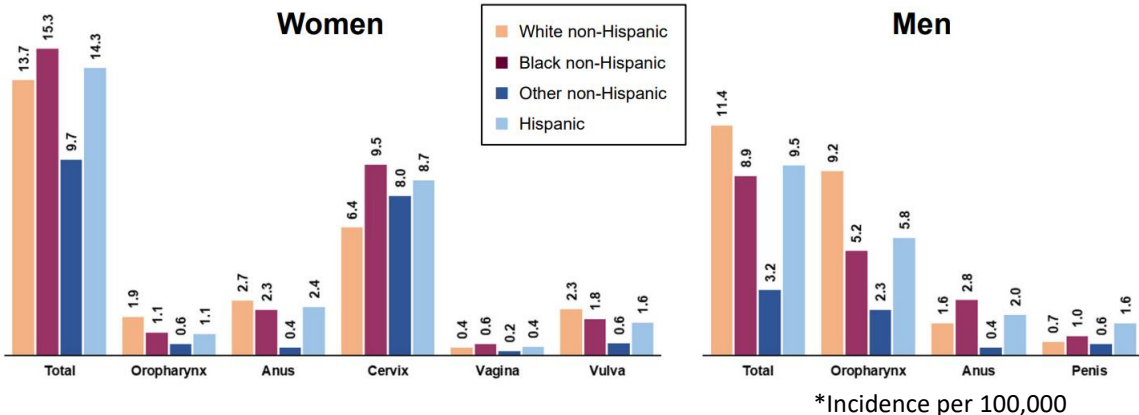
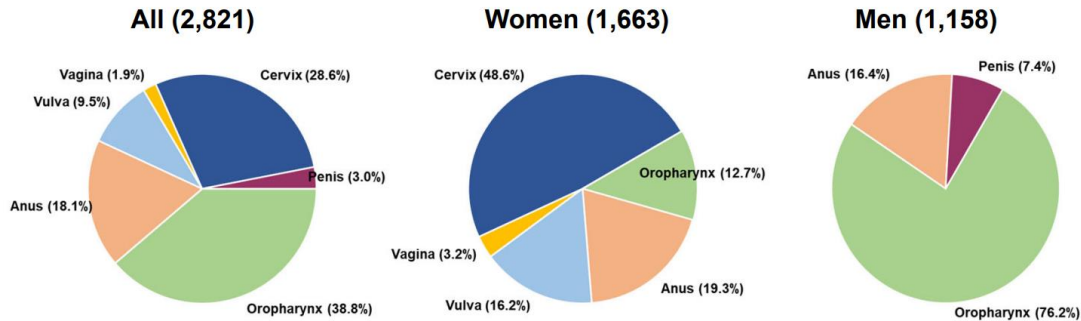
Stony Brook **Medicine**

GET THE FACTS. REDUCE THE RISK. SPREAD THE WORD.
TakeActionAgainstCancer.com



This project is supported with funds from the State of New York.

HPV Cancer By the Numbers in NY

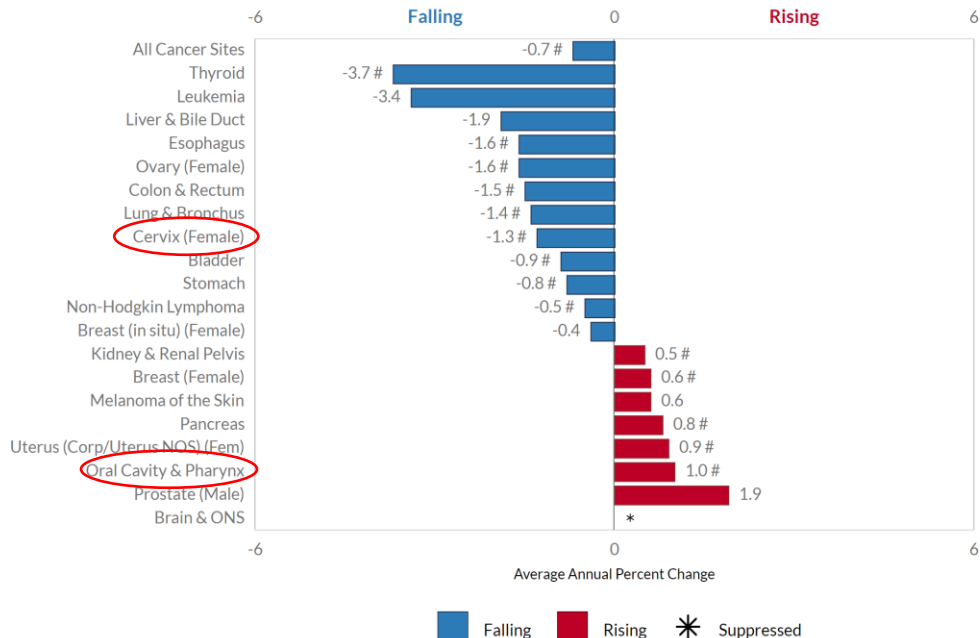


https://www.health.ny.gov/statistics/cancer/docs/hpv_related_cancer_15-19.pdf

Cancer Trends

- In New York in 2018, there were 2,751 new cases of Oral Cavity and Pharynx cancer overall.
- Oral Cavity and Pharynx cancer rates are higher in men- 16.6/100K compared to 6.7/100k for women in NYS.
- Cases of Oral Cavity and Pharynx cancers are on the rise nationally and in NY.
- Most cancers found in the back of the throat, including the base of the tongue and tonsils, are HPV-related.

5-Year Rate Changes - Incidence
New York, 2014-2018
All Ages, Both Sexes, All Races (incl Hisp)

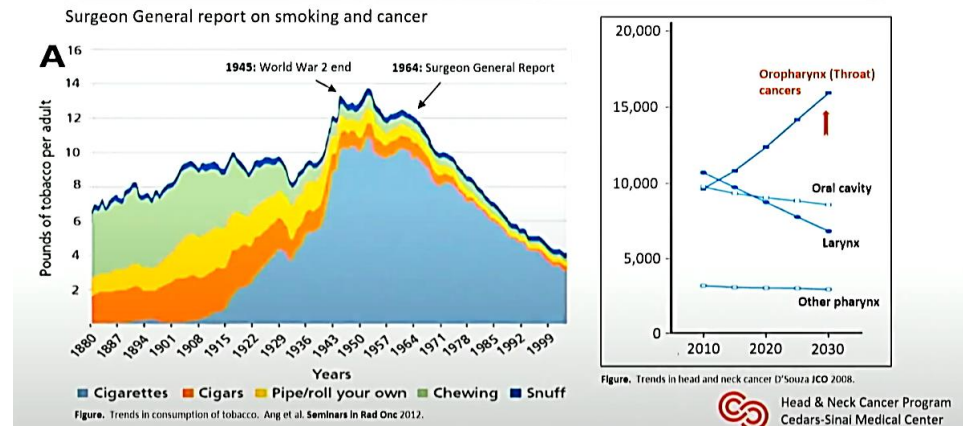


Created by statecancerprofiles.gov on 4/14/2022 at 2:10 PM.

Source: Incidence data provided by the [SEER Program](#).

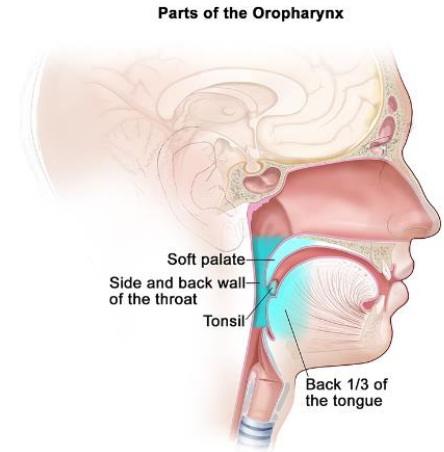
Oropharyngeal cancers and HPV

- There are two types of oropharyngeal cancer, HPV-associated, and non-HPV-associated
- Smoking and drinking were traditionally the cause, but those numbers are going down
- 70% of oropharynx cancers are currently caused by HPV



Oropharyngeal cancers and HPV

- HPV loves tonsil tissue- hides in the crypts
- In most of the HPV(+) oropharyngeal cancers, the tumor originates deep inside the tonsillar crypt epithelium. This is why these cancers are neither visible on inspection nor noticeable by superficial brush biopsy
- HPV type 16 (which is covered by the HPV vaccine) causes most oropharyngeal cancers



Anatomical illustration of the oropharynx. *National Cancer Institute*

No screening

Oropharyngeal cancers and HPV- the good news and the bad news

Bad News

- HPV is more carcinogenic than smoking and drinking

Good News

- We have a vaccine to prevent HPV cancers

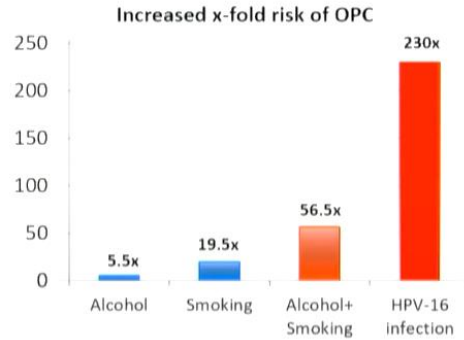
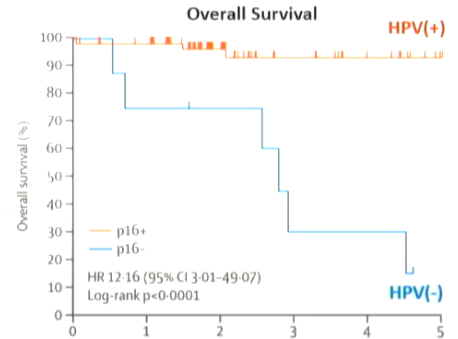


Fig. Oropharyngeal cancer risk factors. Castellsague et al. Int J Cancer 2004.



Head & Neck Cancer Program
Cedars-Sinai Medical Center



Stony Brook Medicine

GET THE FACTS. REDUCE THE RISK. SPREAD THE WORD.
TakeActionAgainstCancer.com



HPV Vaccine Schedule

- Routine vaccination is at 11-12 years of age for all children, and it may be given as early as 9 years of age
- Vaccination completion is recommended by the child's 13th birthday
- The vaccine is most protective before any exposure to HPV and elicits a higher immune response in younger adolescents
- The HPV vaccine provides safe and long-lasting protection against cancer causing infections, preventing over 90% of HPV-caused cancers



Source: Training presentation by Sarah Hershey, RN, BSN, NYSDOH Bureau of Immunization 5-20-2021

HPV Vaccine Schedule

Gardasil-9 is approved by the FDA for everyone ages 9 to 45

The Advisory Committee on Immunization Practices (ACIP) recommends that all adolescents and young adults ages **13-26** be given a “catch-up” vaccine

ACIP recommends that adults ages **27 to 45** who have not been fully vaccinated and who may be at risk for new HPV infections talk to their medical provider about getting a vaccine

Teens and young adults who initiate vaccination at ages 15 through 26 should receive three doses over six months (0, 1–2, 6-month schedule)

Start Talking Early
Ages 9-10
2 doses



On Time
Ages 11-12
2 doses



Late
Ages 13-14
2 doses



Late
Ages 15-26
3 doses



Source: CDC, HPV Vaccine Schedule and Dosing, <https://www.cdc.gov/hpv/hcp/schedules-recommendations.html>

HPV Vaccination Rates: NYS & Long Island

- Nearly half of adolescents in New York State (NYS) are not getting vaccinated as recommended
- On Long Island, HPV vaccine rates are lower than the statewide average
- Only 57% of NYS adolescents 13-17 have completed HPV vaccination (2019)
- Healthy People 2030 Target: 80% of adolescents receive recommended doses of HPV vaccine

Rates of HPV Vaccine Series Completion by Age 13 (2020)

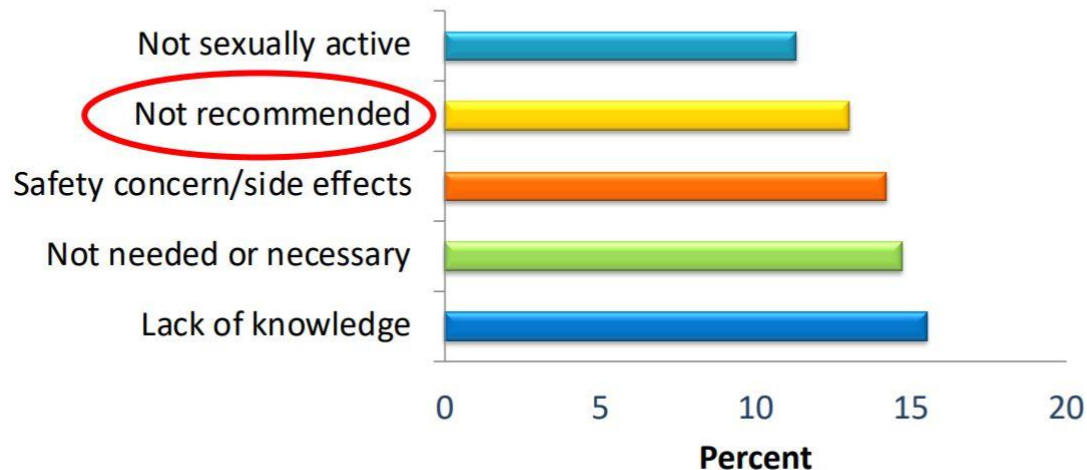
New York State	39.1%
Nassau County	25.5%
Suffolk County	28.6%

Source: New York State Prevention Agenda Dashboard

Sources: CDC: HPV and Cancer, New York State Prevention Agenda Dashboard, Healthy People 2030, Pingali et al. MMWR, 2021; CDC, National Immunization Survey-Teen

Why Aren't NY Youth Getting Vaccinated?

Parents of unvaccinated girls – top reasons for not starting HPV vaccine series

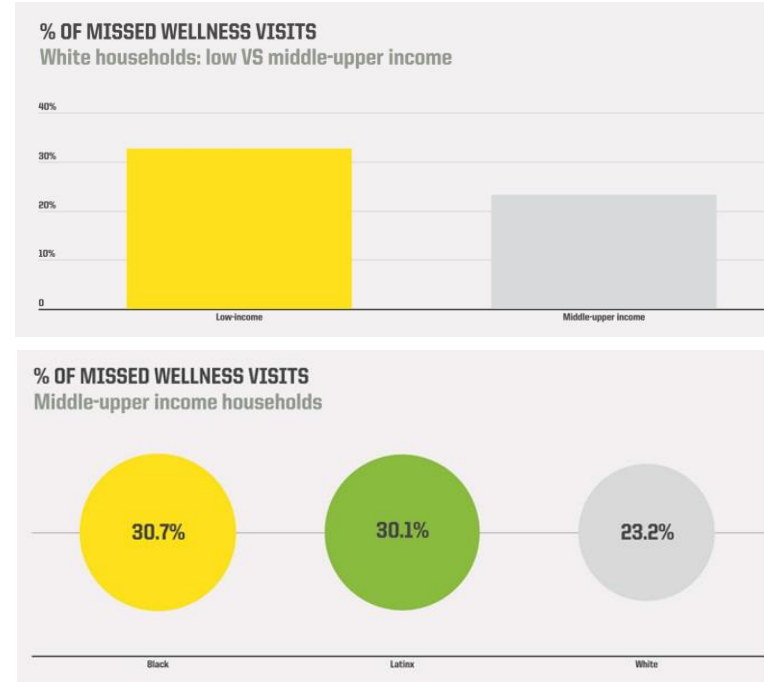


Stokley et al. *MMWR*. 2014.

HPV Vaccine: Pandemic Considerations

The ongoing pandemic has created unprecedented challenges for healthcare providers and patients

- In 2020, there were one million fewer HPV vaccine doses given in the U.S., as compared with 2019
- A 2020 study showed a 71% drop in healthcare visits for 7-17 year-olds, ages when critical vaccines like Tdap, HPV, and meningitis are given

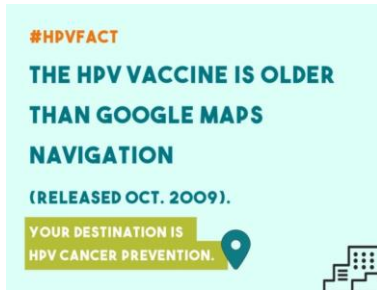


Ateev Mehrotra et al., "The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges," To the Point (blog), Commonwealth Fund, May 19, 2020. <https://doi.org/10.26099/ds9e-jm36>

CDC, Current Issues in Immunization Webinar, https://www2.cdc.gov/vaccines/ed/ciinc/archives/21/downloads/7_14/CIIW_071421.PDF

HPV Vaccine: Safety

- We are currently living in an age of extreme vaccine hesitancy and mistrust of science and experts
- Many people have the perception that the HPV vaccine is “new”
- With over 270 million doses given worldwide since 2006, the HPV vaccine has a reassuring safety record that is backed by over 15 years of research and monitoring
- HPV infections have dropped 71% among teen girls since 2006



“Pearls of Wisdom” from providers we have worked with

- Dental role in vaccine recommendation is important- reinforces the message they should be getting at PMD.
- Kids may see the dentist more often than the PMD! (check-ups 2x/year vs 1x, orthodontist even more!)
- Encourage HPV vaccine to all genders equally
- Introduce it as a “cancer prevention vaccine”
- Discuss the HPV vaccine every visit for patients within the recommended age group and revisit as needed if there is hesitancy
- Vaccines for Children (VFC) program for children (18 or younger) when parents/guardians are unable to pay for vaccination
- Merck Vaccine Patient Assistance Program (19 and older) for uninsured adults who are unable to pay for vaccination

Dental Providers Can Support HPV Vaccination

Dental providers are vital in taking a multidisciplinary approach to prevent HPV-caused cancers

- ✓ Include immunization questions on medical history forms, and discuss HPV vaccination when reviewing medical history and during oral exams



Source: ADA, ADA adopts policy supporting HPV vaccine, <https://www.ada.org/en/publications/ada-news/2018-archive/october/ada-adopts-policy-supporting-hpv-vaccine>

Dental Providers Can Support HPV Vaccination

- ✓ Refer patients in the recommend age range to their Primary Care Physician if not vaccinated, and refer to a PCP if they do not have care established



Source: ADA, ADA adopts policy supporting HPV vaccine, <https://www.ada.org/en/publications/ada-news/2018-archive/october/ada-adopts-policy-supporting-hpv-vaccine>

Dental Providers Can Support HPV Vaccination

- ✓ Display rack cards and posters throughout practice promoting the HPV vaccine, and have materials available for patients or parents who would like more information



Source: ADA, ADA adopts policy supporting HPV vaccine, <https://www.ada.org/en/publications/ada-news/2018-archive/october/ada-adopts-policy-supporting-hpv-vaccine>

Dental Support for HPV Vaccination

The American Dental Association and the American Academy of Pediatric Dentistry supports the HPV vaccine as an effective way to reduce the risk for cancer and other oral HPV infections

Policy statement

The AAPD supports measures that prevent OOPC, including the prevention of HPV infection, a critical factor in the development of oral squamous cell carcinoma.

The AAPD encourages oral health care providers to:

- educate patients, parents, and guardians on the serious health consequences of OOPC and the relationship of HPV to OOPC.
- counsel patients, parents, and guardians regarding the HPV vaccination, in accordance with CDC recommendations, as part of anticipatory guidance for adolescent patients.

ABBREVIATIONS

AAP: American Academy of Pediatrics. **AAPD:** American Academy of Pediatric Dentistry. **ACIP:** Advisory Committee on Immunization Practices. **CDC:** Centers for Disease Control and Prevention. **HPV:** Human papilloma virus. **OOPC:** Oral and oropharyngeal cancer.

CPiA Dental Outreach

- For the Public
- Find a Dentist
- Going to the Dentist
- National Children's Dental Health Month
- Oral Cancer Awareness
- Concerned About Your Care?
- Home Dental Care
- Mouth Healthy(TM)
- Substance & Alcohol Abuse in Dentistry

Home > For the Public > Oral Cancer Awareness

Oral Cancer Awareness

Early oral cancer detection can happen at your dental check up!

You know your dentist is looking for cavities, but you may not realize your dentist can check for cancer at your visit too. Regular visits to your dentist can help you detect such cancers early. The American Cancer Society estimates that people with a new diagnosis of cancers of the mouth and pharynx will exceed 54,000 this year.

Plan to schedule a dental check-up and remember to ask about an oral cancer screening.

Oral Cancer Signs & Symptoms

- A sore, or soreness or irritation that doesn't go away
- Red or white patches, pain, tenderness, or numbness in mouth or lips
- Lumps, thickening tissues, rough spots, crusty or eroded areas
- Difficulty chewing or swallowing, moving jaw or tongue
- A change in the way your teeth fit together when you close your mouth

Top 5 Risks for Oral Cancer


- **Human Papillomavirus (HPV)**
 - HPV is the most common sexually transmitted disease in the US. People who are diagnosed with HPV-related head and neck cancer tend to be younger and nonsmokers. Lesions can develop in difficult-to-detect areas such as the back of tongue and tonsils. [Learn reasons to get the HPV vaccine and when the right time to vaccinate your child is.](#)

ADVERTISEMENT

Member Benefit: Legal Protection Plan

Let us help you to protect your career investment.

[Learn More](#)



ADVERT

Member Benefit: Legal Protection Plan

New York Dental Association

Let us help you to protect your career investment.

[Learn More](#)



Navigation: FIND A DENTIST JOIN/RI

Suffolk County DENTAL SOCIETY

Search

ABOUT CALENDAR MEMBERS CENTER CLASSIFIEDS BULLETIN PUE

Public Resources

Home > Public Resources > HPV Cancer Prevention

- Find an ADA Dentist/Mouth Healthy.org
- Why should I see a dentist?
- Why an ADA Member dentist?
- Dental Emergency Help
- Concerned About Your Care?
- Dental Resources for Veterans
- Dental Careers
- HPV Cancer Prevention**

HPV Cancer Prevention

[HPV Cancer Prevention for Dental Providers](#)

[HPV Vaccine Action Guide](#)

Taking Action Against Cancer

Get the HPV Vaccine.

Because the best time to stop cancer, is before it starts.



GET THE FACTS. REDUCE THE RISK. SPREAD THE WORD.

visit: *TakeActionAgainstCancer.com*

CANCER PREVENTION IN ACTION | NEW YORK



Stony Brook Medicine

GET THE FACTS. REDUCE THE RISK. SPREAD THE WORD.

TakeActionAgainstCancer.com

CANCER PREVENTION IN ACTION | NASSAU SUFFOLK

Stony Brook Cancer Center

This project is supported with funds from the State of New York.

Cancer Prevention in Action (CPIA)

CPIA is a NYSDOH grant recently awarded to Stony Brook Cancer Center to support local cancer prevention interventions in Nassau & Suffolk counties, with a focus on skin cancer and HPV cancer prevention

CPIA Takes Action Against Cancer By...

- Educating our community on the benefits of HPV vaccination and providing resources on where the vaccine can be obtained
- Supporting health care providers to increase their knowledge on HPV vaccination and increase vaccine completion rates at their practice
- Distributing free educational materials about HPV and the HPV vaccine in both English & Spanish
- Promoting HPV vaccine awareness, education, and provider success stories in local media and social media



Stony Brook School of Dental Medicine Can Take Action Against Cancer By...

- ✓ Teach dental students and professionals about strategies to increase HPV vaccination, by practicing strong provider recommendations
- ✓ Supporting HPV vaccination and raising awareness in the dental community
- ✓ Educating patients and parents on the benefits of HPV vaccination at all visits
- ✓ Engage your team and collaborate with other healthcare providers
- ✓ Create a pro- immunization environment at your practice

Source: NYS HPV Coalition

Protecting Your Patients from HPV-Associated Cancer

This video was developed for healthcare providers to understand the science, evidence and trends in oropharyngeal cancer, or cancer of the mouth and throat, caused by HPV. National expert and member of the National HPV Vaccination Roundtable, Dr. Terry Day, narrates and makes the case for why HPV vaccination can help reduce cancer incidence.

https://www.youtube.com/watch?v=qnwb2-y_yPU&list=PLRu0uHzo7TdKdq1TstwyNbSn0KMI8L4--&index=14

Vaccine Assistance Programs

Did You Know Your Child Can Get Free Vaccines?

Vaccines for Children Can Help

The Vaccines for Children (VFC) program provides free vaccines to children who qualify. About half of American children less than 19 years old receive VFC vaccine.

Is my child eligible for the VFC Program?

Children are eligible if it is before their 19th birthday and they:

- Qualify for Medicaid
- Don't have insurance
- Are American Indian or Alaska Native

Children whose insurance doesn't cover some or all routinely recommended vaccines (underinsured) can still get vaccines through VFC if they go to a Federally Qualified Health Center or Rural Health Clinic.

Where can I go to get my child vaccinated?

- Ask if your child's doctor or nurse is a VFC provider. Nationally, there are thousands of health care providers enrolled in the VFC program.
- If your child does not have a doctor, ask if your local public health department provides vaccines.
- Visit a Federally Qualified Health Center (FQHC) or Rural Health Clinic (RHC).



Learn more at [CDC.gov/features/vfcprogram](https://www.cdc.gov/features/vfcprogram)

How much will I have to pay?

- All routinely recommended vaccines are free through the VFC Program.
- Doctors can charge fees to give each shot. However, they cannot refuse to vaccinate your child if you are unable to pay these fees.
- The doctor can charge additional fees for the office visit or non-vaccine services such as an eye exam or blood test.

Where can I get more information?

- Ask your child's doctor's office if they participate in VFC.
- If you don't have a regular doctor's office:
 - See if your state has a searchable website for VFC providers.
 - Call your state or local health department.
 - Visit [findahealthcenter.hrsa.gov](https://www.findahealthcenter.hrsa.gov) to find a Federally Qualified Health Center.



Merck Vaccine Patient Assistance Program Merck Helps™



Merck Vaccine Patient Assistance Program provides vaccines to eligible individuals, primarily the uninsured, who, without assistance could not afford needed Merck medicines, such as the Gardasil Vaccine.

How do I know if I am eligible?

1. You live in the United States and are age 19 or older
You do not have to be a US citizen
2. You do not have health insurance or other coverage for vaccines
3. You cannot afford to pay for vaccination



For more information
Call: 800-727-5400
Visit: www.merckhelps.com

Resources

CPIA Resources:

- <https://takeactionagainstcancer.com/stony-brook-cancer-center/>
- Free posters, rack cards, flyers, vaccine appointment cards, and other HPV vaccine materials both in English & Spanish.
- Free social media graphics to promote the HPV vaccine as cancer prevention.
- Patient education and provider training on HPV vaccination in both English & Spanish.

NYS HPV Coalition Resources:

- <https://www.nyshpv.org/>
- NYS HPV Vaccination Guide for School-Based Health Centers

Resources

Other Resources:

- <https://www.cdc.gov/vaccines/programs/vfc>
- <https://www.merckhelps.com/Programs.aspx>
- <https://www.gardasil9.com/adults/>
- <https://www.cdc.gov/vaccines/vpd/hpv/hcp/resources.html>
- <https://www.cancer.org/health-care-professionals/hpv-vaccination-information-for-health-professionals/hpv-vaccination-resources-for-health-professionals.html>
- <https://hpvroundtable.org/resource-library/>
- <https://hpvroundtable.org/action-guides/>
- National HPV Vaccination Roundtable Action Guides for:
 - Physicians, Physician Assistants, & Nurse Practitioners
 - Nurses & Medical Assistants
 - Dental Health Care Providers
 - Office Administrative Staff

What have you learned?

- **Let's brainstorm!**
 - What are some reasons it is important for dental providers to recommend the HPV vaccine?

- **Think, pair, share...**
 - What are some ways you can talk about HPV vaccination to people are hesitant? Think about both patients for themselves, and parents for their children.



Contact us:

Email: COE@stonybrookmedicine.edu

Phone: (631) 444-4COE

Websites: <https://cancer.stonybrookmedicine.edu/CancerResearch/COE>
<https://takeactionagainstcancer.com/agency/stony-brook-cancer-center/>

Funding for this presentation was made possible by Health Research, Inc. (HRI) and the State of New York. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of HRI or the State.