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# You are the Key to HPV Cancer Prevention

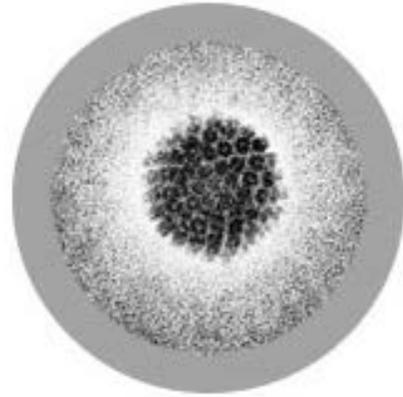
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Cherokee Nation Health Services  
Wilma P. Mankiller Health Center Stilwell, OK*

# *Disclosure Statement*

➡ *I have no disclosures to make.*

# Objectives

1. Describe why HPV vaccination is important for cancer prevention.
2. Identify the appropriate HPV vaccination schedule based on patient age.
3. Describe effective HPV vaccine recommendations for patients age 11 or 12 years, as well as for age 13 years and older.
4. Develop self-efficacy in delivering effective HPV vaccination recommendations
5. Identify reassuring, confident, and concise responses to parental questions about HPV vaccination.
6. Implement disease detection and prevention health care services (e.g., smoking cessation, weight reduction, diabetes screening, blood pressure screening, immunization services) to prevent health problems and maintain health. (REQUIRED FOR PHARMACY CREDIT)

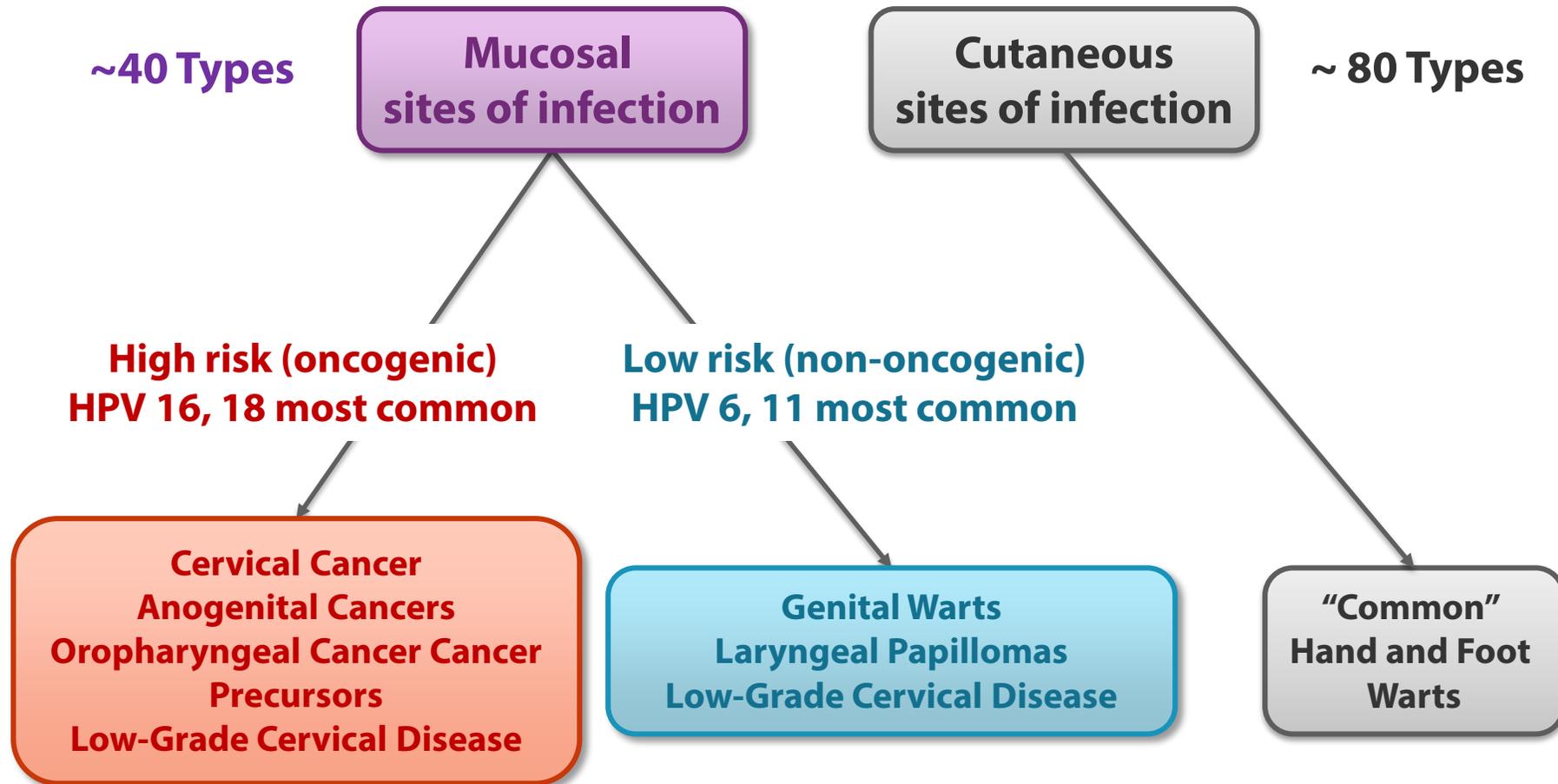


**HPV**  
(Human papillomavirus)

Understanding the Burden

## **HPV INFECTION & DISEASE**

# HPV Types Differ in Their Disease Associations



# HPV Infection

- ▶ **Most females and males will be infected with at least one type of mucosal HPV at some point in their lives**
  - Estimated 79 million Americans currently infected
  - 14 million new infections/year in the US
  - HPV infection is most common in people in their teens and early 20s
- ▶ **Most people will never know that they have been infected**

## Cancers Caused by HPV per Year, U.S., 2011–2015

Cancer site	Percentage probably caused by any HPV type	Number probably caused by any HPV type		
		Female	Male	Both Sexes
Cervix	91%	10,800	0	10,800
Vagina	75%	600	0	600
Vulva	69%	2,700	0	2,700
Penis	63%	0	800	800
Anus*	91%	4,000	1,900	5,900
Oropharynx	70%	2,200	10,700	12,900
<b>TOTAL</b>		<b>20,300</b>	<b>13,400</b>	<b>33,700</b>

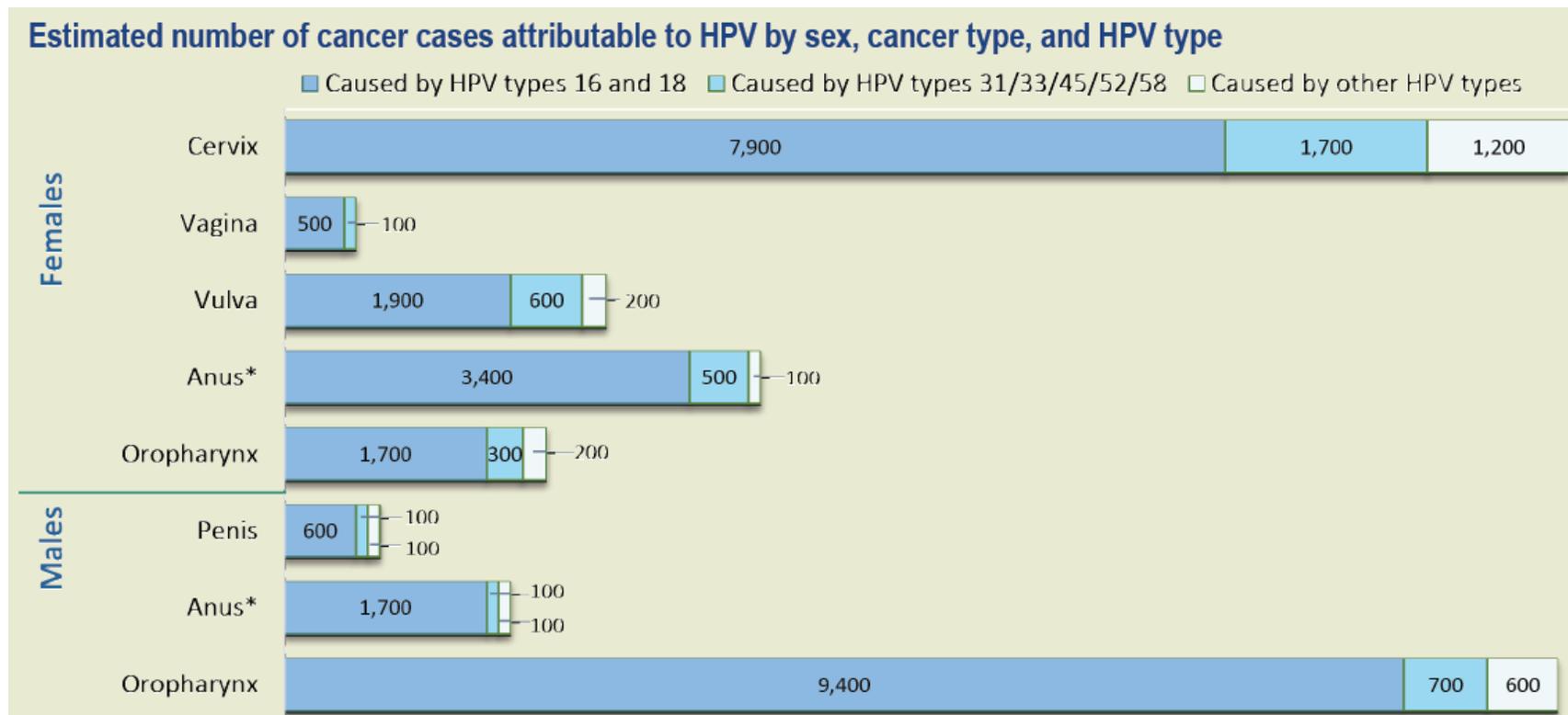
\*Includes anal and rectal squamous cell carcinomas

Sources: <https://www.cdc.gov/cancer/hpv/statistics> and Saraiya M et al. J Natl Cancer Inst.

2015;107:djv086



# Number of HPV-associated and HPV-attributable cancer cases per year, United States, 2011-2015



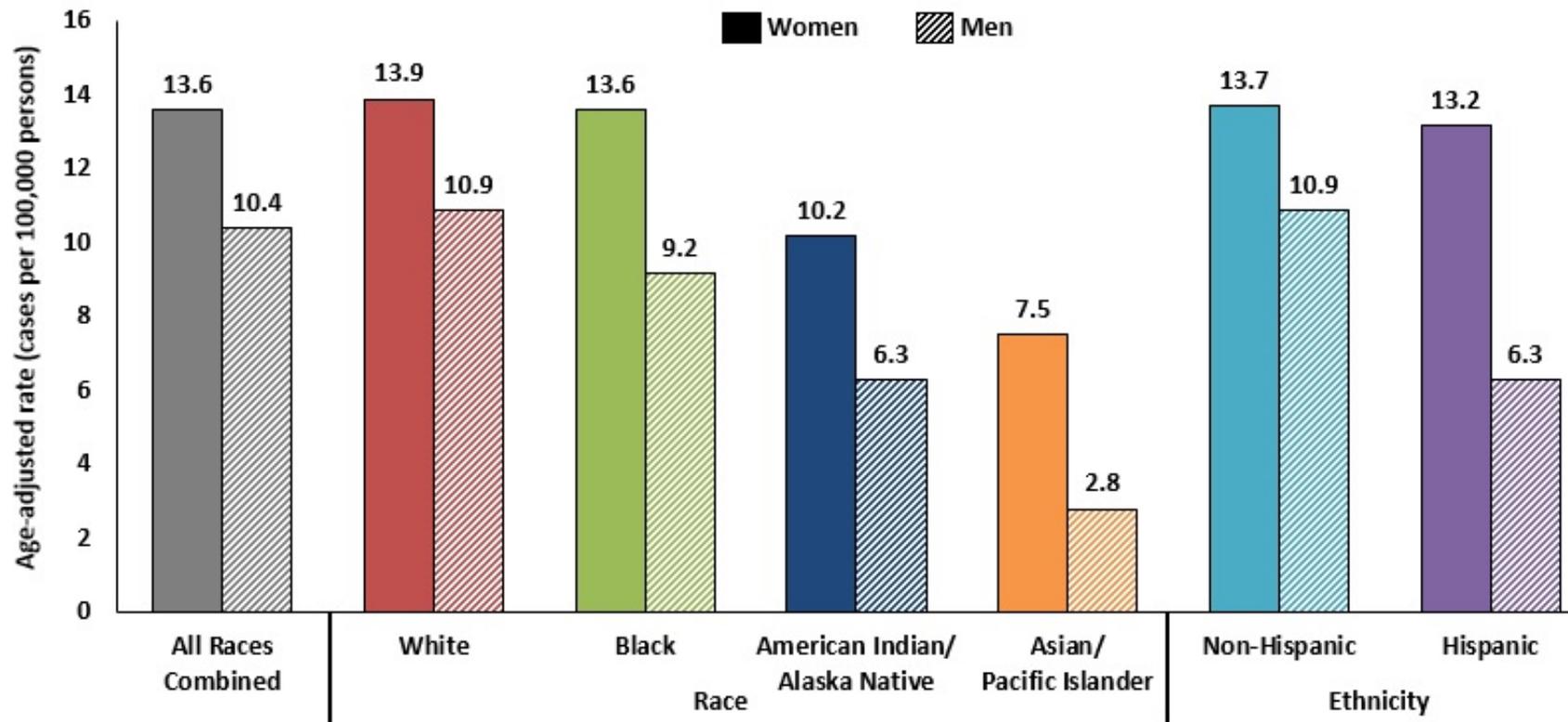
<sup>b</sup> Includes anal and rectal squamous cell carcinomas

For each cancer type, we estimated HPV-attributable cancers by multiplying the number of cancer cases by the percentage attributable to HPV based on a genotyping study. We estimated that 33,700 cancers (79%) were attributable to HPV each year during 2011–2015. Of these, we estimated that 31,200 cancers could have been prevented by the 9-valent HPV vaccine, including 27,100 caused by HPV types 16 and 18, and 4,100 caused by HPV types 31/33/45/52/58. HPV-negative cancers are not shown in the graph; it is estimated that about 10% of cervical and anal cancers, 30% of oropharyngeal, vaginal, and vulva cancers and 40% of penile cancers are HPV-negative.

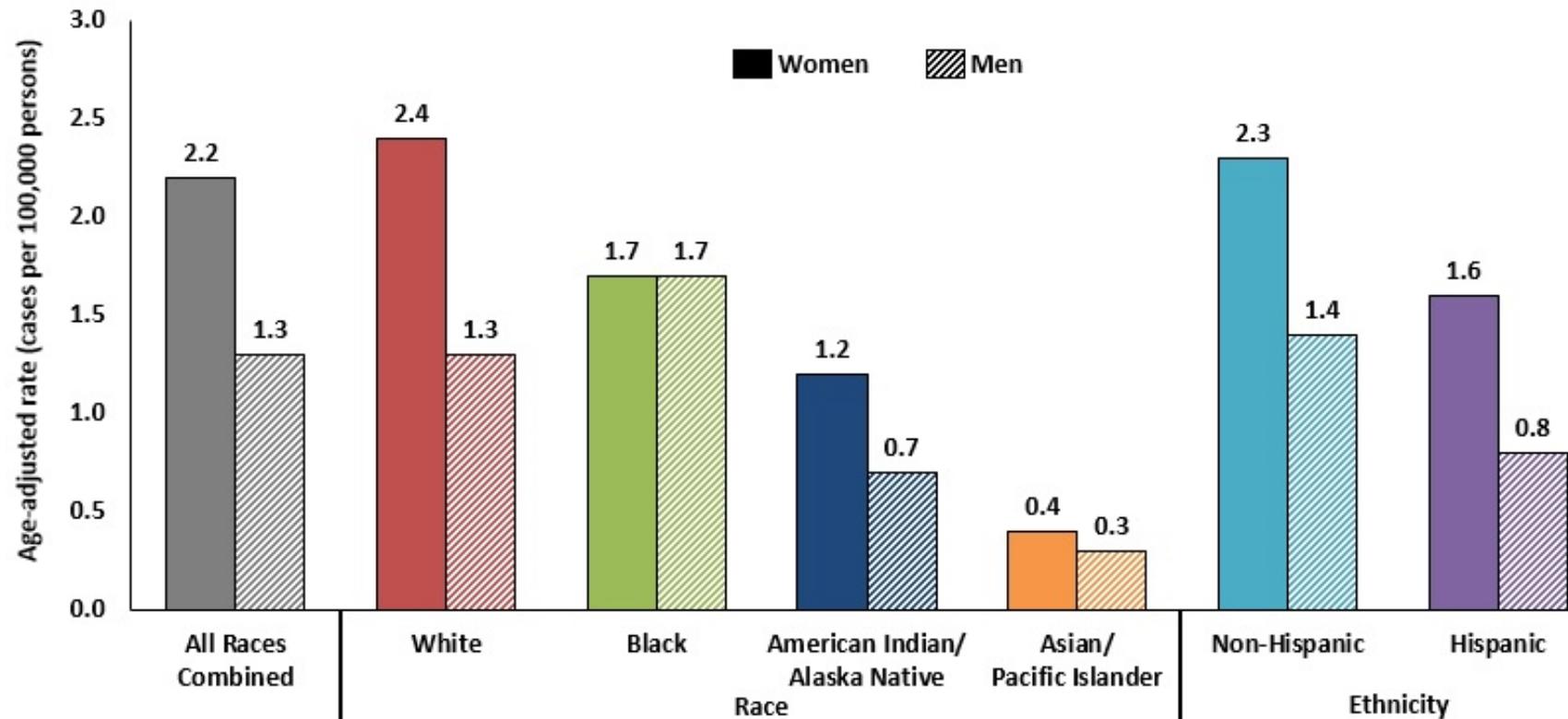
Sources: Data are from cancer registries participating in CDC’s National Program of Cancer Registries and/or NCI’s Surveillance, Epidemiology, and End Results program that met data quality criteria for 2011–2015, covering 100% of the U.S. population. The analysis and methods were based on: Viens et al. Human Papillomavirus- Associated Cancers—United States, 2008–2012. MMWR 2016;65(26):661-666. <https://www.cdc.gov/cancer/hpv/pdf/USCS-DataBrief-No4-August2018-508.pdf>



# HPV-Associated Cancer Rates by Sex, Race, and Ethnicity, United States, 2011–2015



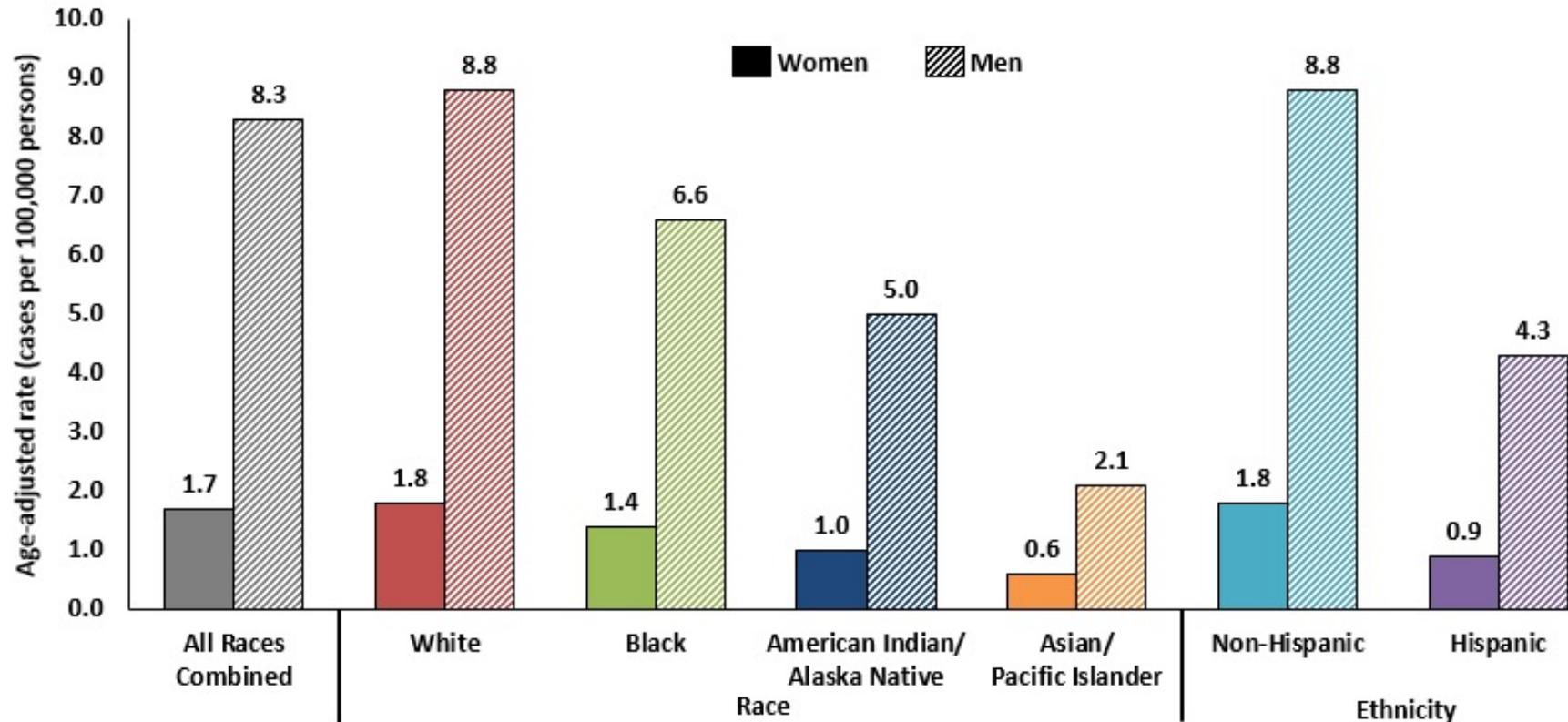
# HPV-Associated Anal\* Cancer Rates by Sex, Race, and Ethnicity, United States, 2011–2015



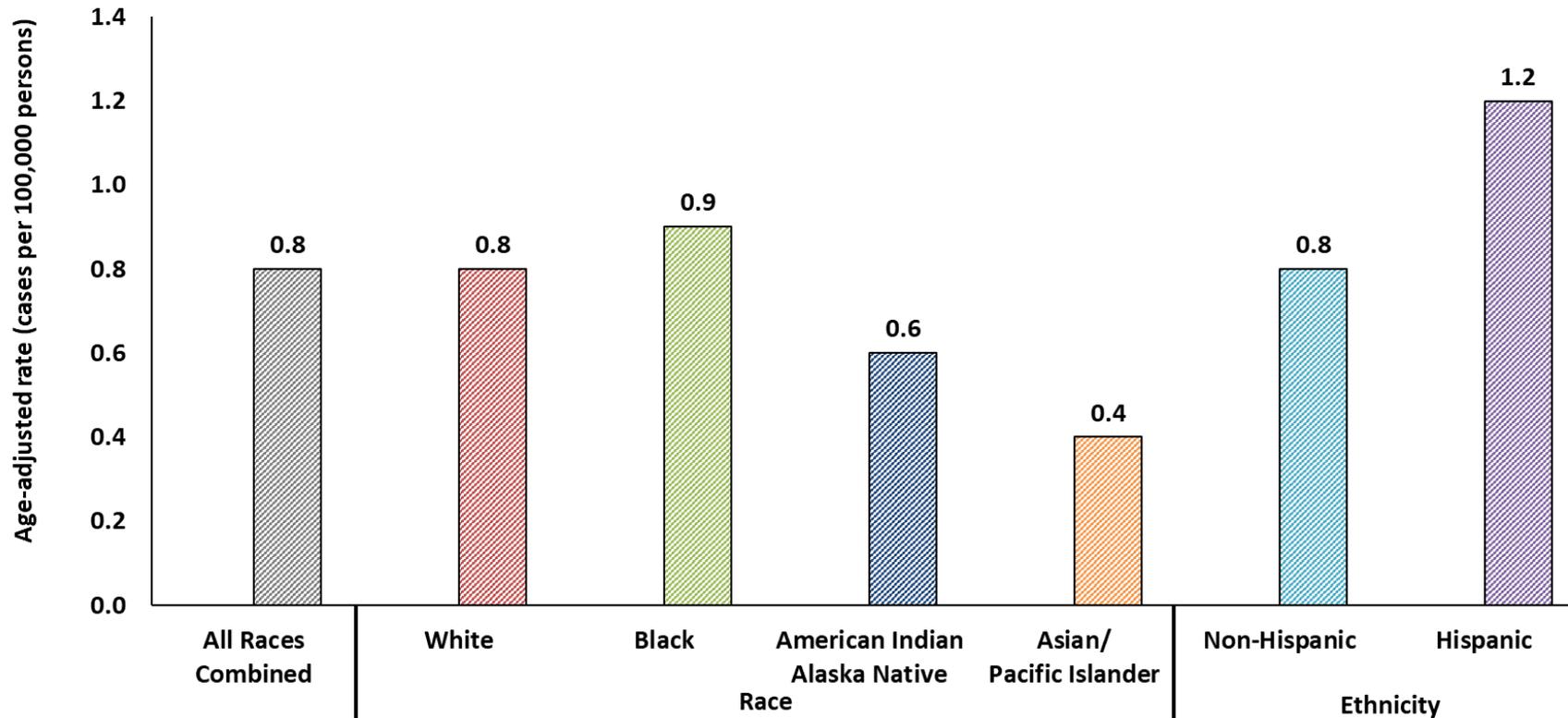
\*Includes anal and rectal squamous cell carcinomas.

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

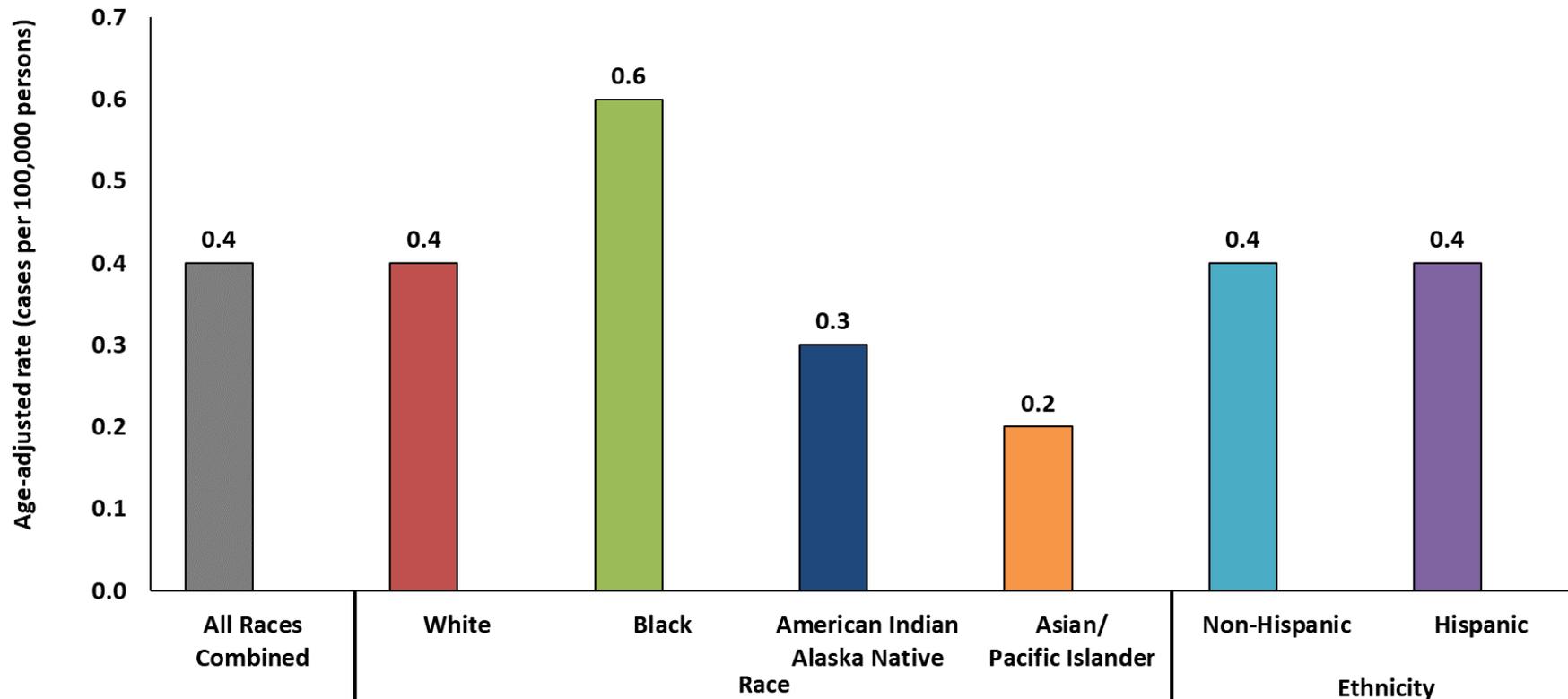
# HPV-Associated Oropharyngeal Cancer Rates by Sex, Race, and Ethnicity, United States, 2011–2015



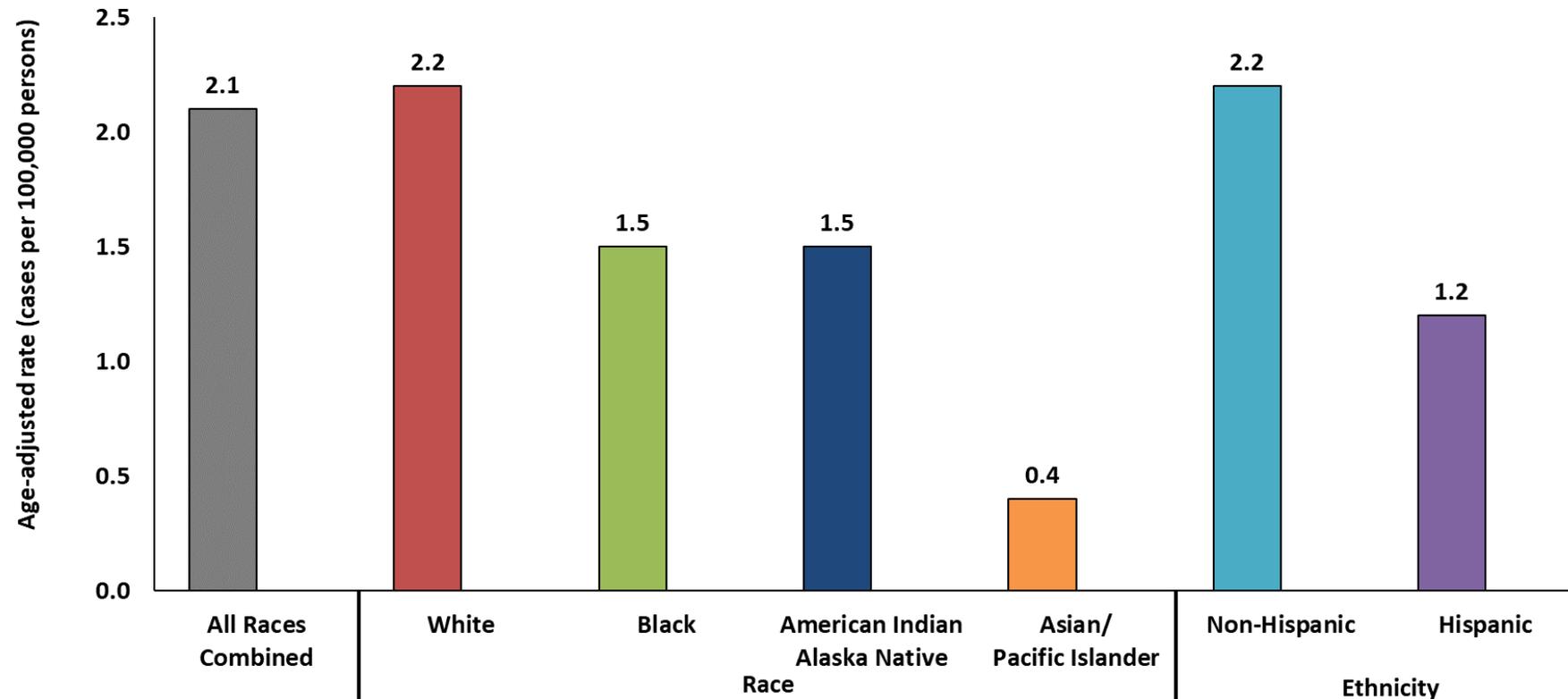
# HPV-Associated Penile Cancer Rates by Race, and Ethnicity, United States, 2011–2015



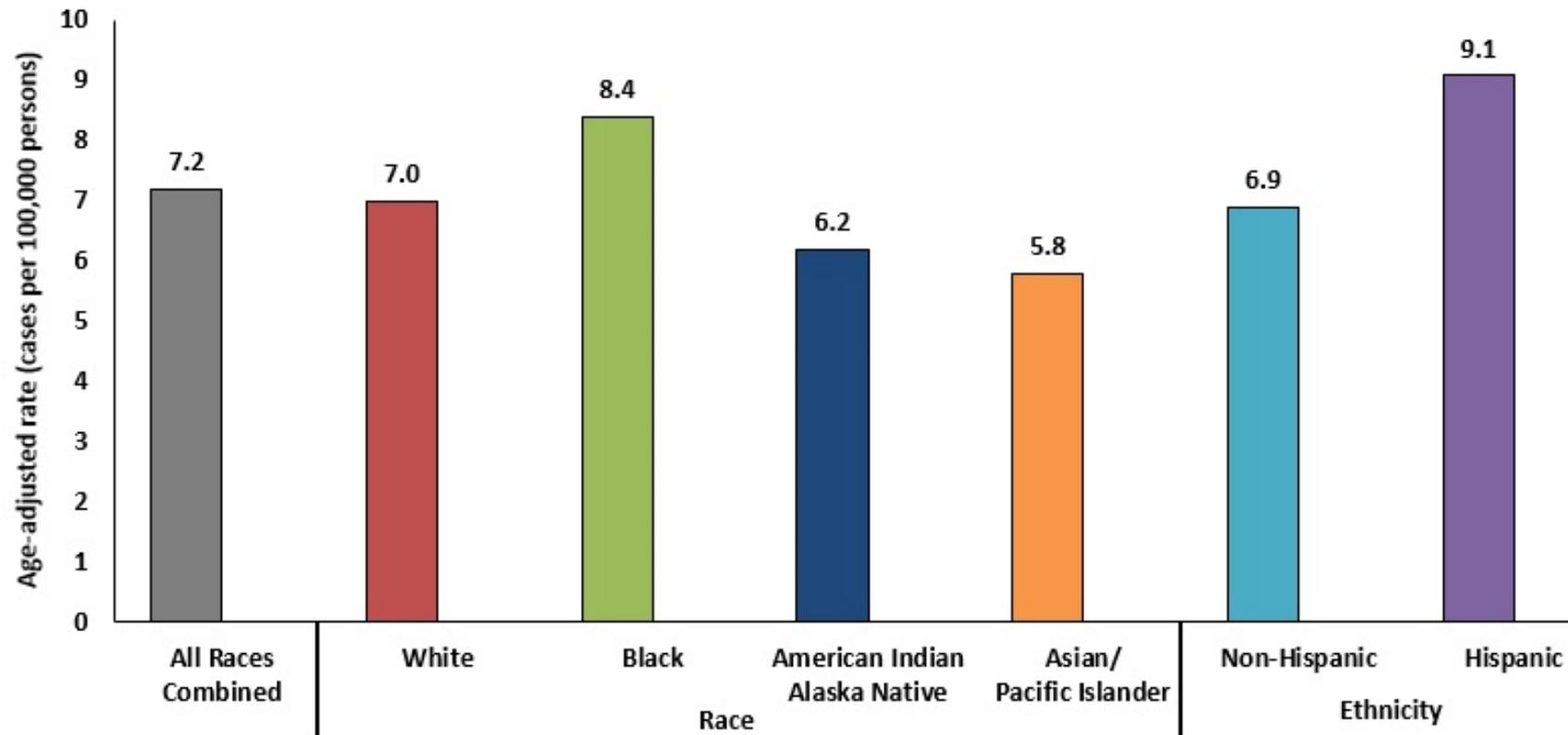
# HPV-Associated Vaginal Cancer Rates by Race, and Ethnicity, United States, 2011–2015



# HPV-Associated Vulvar Cancer Rates by Race, and Ethnicity, United States, 2011–2015



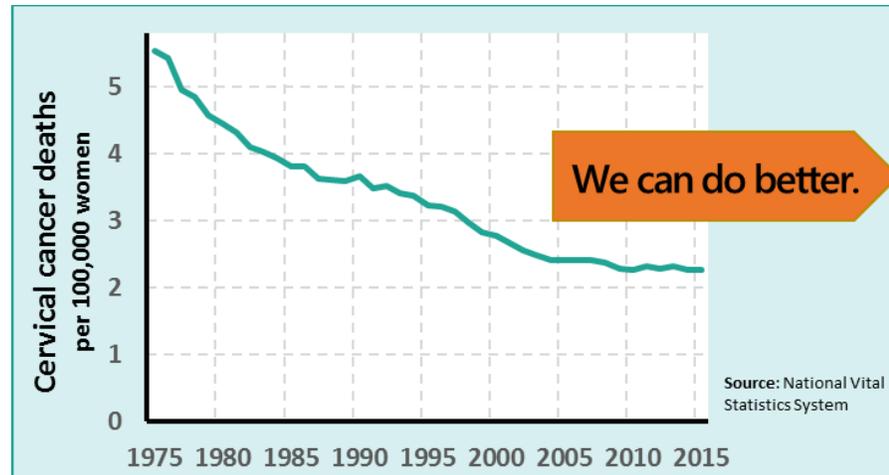
# HPV-Associated Cervical Cancer Rates by Race, and Ethnicity, United States, 2011–2015



# Cervical Cancer

## ➔ Cervical cancer is the most common HPV-associated cancer among women

- 528,000 new cases and 266,000 deaths worldwide in 2012
- In 2015 approx. 12,800 new cases and 4,000 deaths in the U.S.

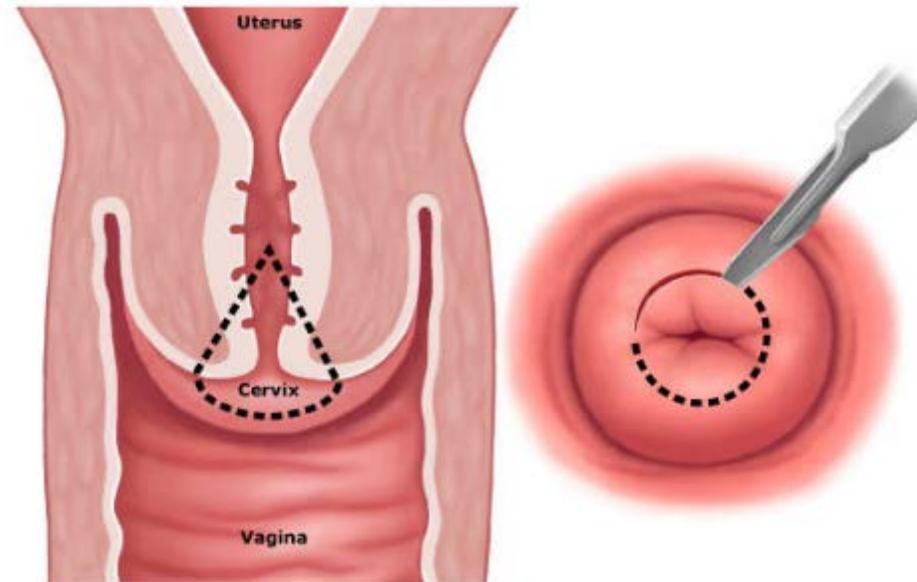


## ➔ Half of cervical cancers occur in women <50 years

- A quarter of cervical cancers occur in women 25-39 years

# Cervical Pre-Cancer in U.S. Females

➡ ~300,000 high grade cervical lesions every year





**HPV vaccine is cancer prevention.**

Talk to the doctor  
about vaccinating  
your 11–12 year old  
**sons and daughters**  
against HPV.

#UCanStopHPV

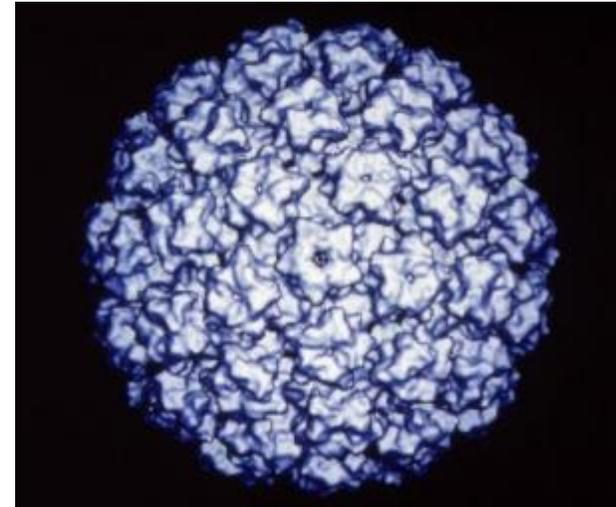
Evidence-Based HPV Disease Prevention

**HPV VACCINE**



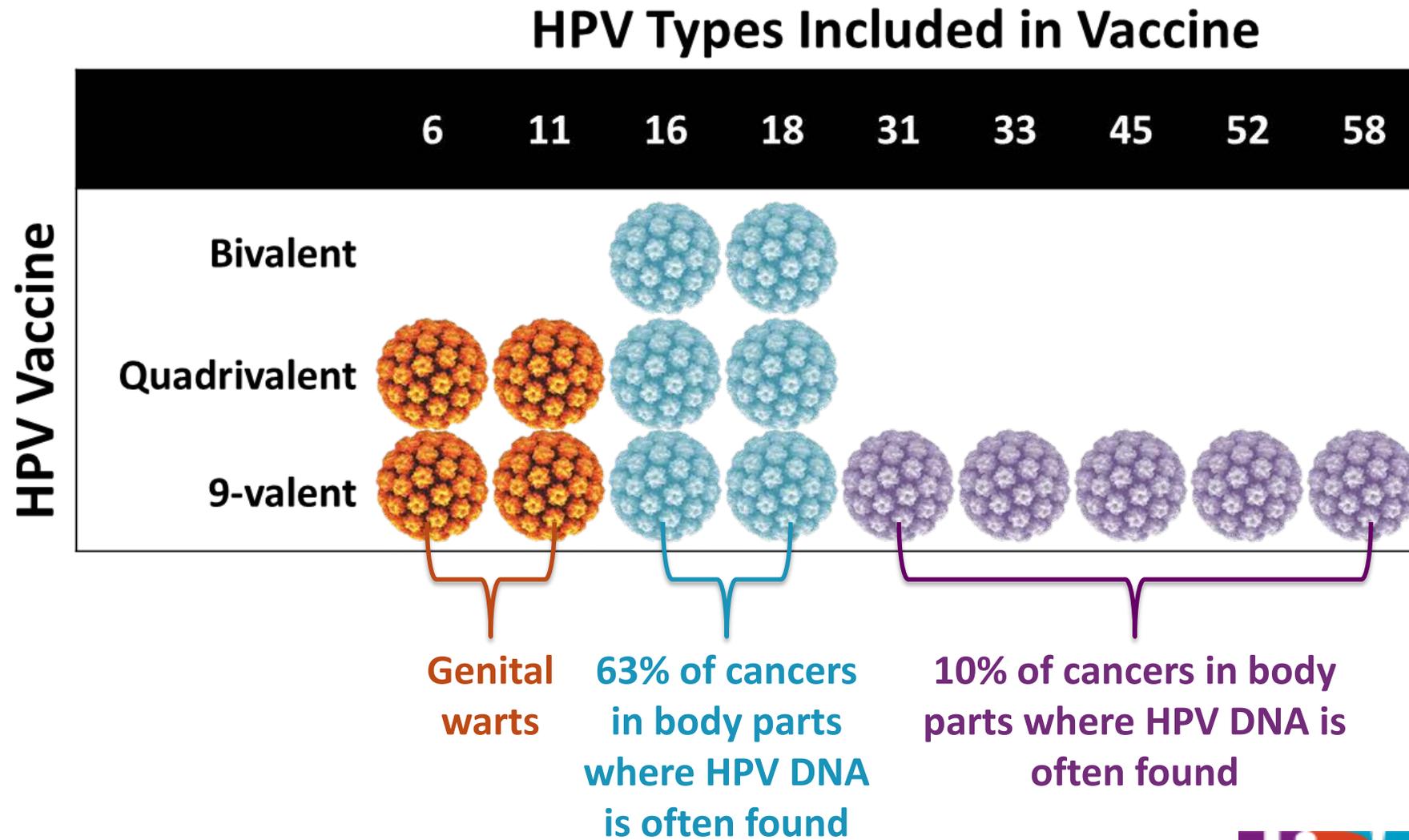
# HPV Prophylactic Vaccines

- ➔ Recombinant L1 capsid proteins that form “virus-like” particles (VLP)
- ➔ Non-infectious and non-oncogenic
- ➔ Produce higher levels of neutralizing antibody than natural infection



HPV Virus-Like Particle

# HPV Vaccine Comparison



# HPV Vaccine Recommendation

**CDC recommends routine vaccination  
at age 11 or 12 years to prevent HPV cancers**

- ➡ **The vaccination series can be started at age 9 years.**
- ➡ **2 doses of vaccine are recommended.**
- ➡ **The second dose of the vaccine should be administered 6 to 12 months after the first dose.**

# HPV Vaccine Recommendations: Catch-Up/Late

- **Vaccination for females through age 26 years and for males through age 21 years who were not previously adequately vaccinated. Males aged 22 through 26 years may be vaccinated.**
- **Vaccination is also recommended through age 26 for gay, bisexual, and other men who have sex with men (MSM), transgender people, and people with certain immunocompromising conditions (including HIV infection).**

# Dosing Schedules

## Starting the vaccine series before the 15<sup>th</sup> birthday

### Recommended schedule is 2 doses of HPV vaccine

- Second dose should be administered 6–12 months after the first dose (0, 6–12 month schedule)
- Minimum interval between dose 1 and dose 2 in a 2-dose schedule is 5 months

## Starting the vaccine series on or after the 15<sup>th</sup> birthday\*

### Recommended schedule is 3 doses of HPV vaccine

- Second dose should be administered 1–2 months after the first dose, and the third dose should be administered 6 months after the first dose (0, 1–2, 6 month schedule)
- Minimum interval between dose one and dose three in a 3-dose schedule is 5 months

\*And immunocompromised persons 9-26 years

# HPV Vaccine Administration

- ➔ **Administer HPV vaccines via intramuscular (IM) injection**
  - Needle size: 1- to 1½- inch, 22- to 25-gauge
  - Site: Deltoid muscle in the upper arm
- ➔ **Follow proper injection practices**
  - Use aseptic technique
  - Use a new needle and syringe for each injection
- ➔ **Administer at the same medical visit as other adolescent vaccines**

# HPV Vaccine Storage and Handling

- ▶ Store HPV vaccine in a refrigerator between 2°C - 8°C (36°F - 46°F)
- ▶ Store HPV vaccines:
  - In the original packaging with the lids closed
  - In a clearly labeled bin and/or area of the storage unit
- ▶ Do not freeze the vaccine

## 9vHPV (Gardasil 9)

Administer to females and males

**Use for:** 9 years through 26 years

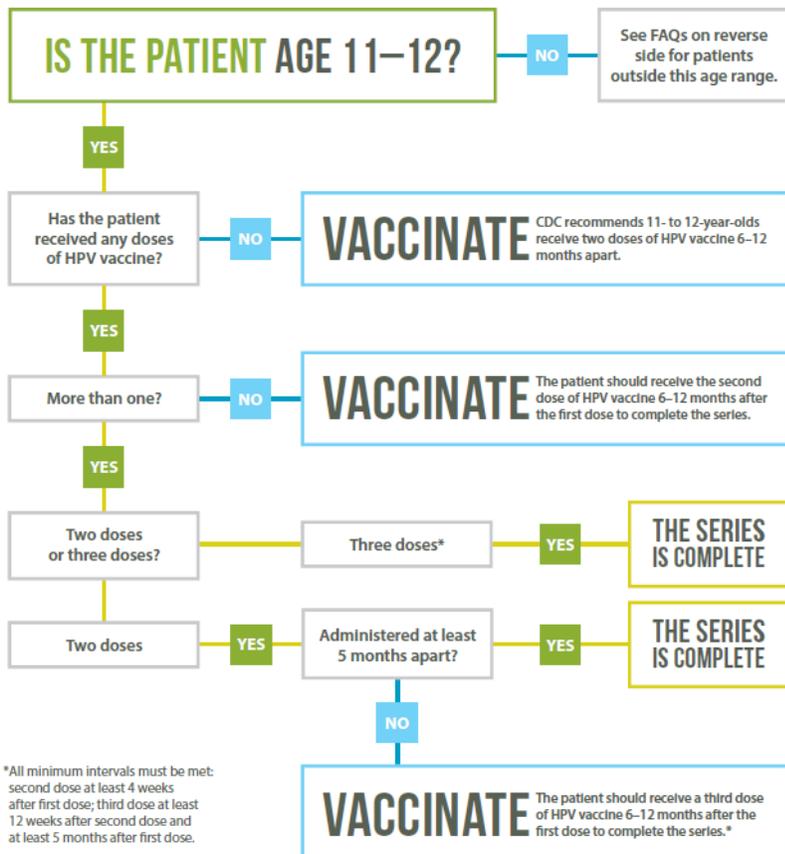
**Recommended ages:** 11 years or 12 years

**Catch-up ages:** 13 years through 26 years

**Route:** Intramuscular (IM) injection

# PREVENTING CANCER JUST GOT EASIER

HPV vaccine protects against cancers and other diseases caused by human papillomavirus (HPV). Follow the chart below to determine whether your patient needs two or three doses of HPV vaccine.



## CDC RECOMMENDS TWO HPV DOSES FOR YOUNGER ADOLESCENTS

The Centers for Disease Control and Prevention (CDC) now routinely recommends two doses of HPV vaccine for 11- or 12-year-olds to prevent HPV cancers. This recommendation makes it easier for parents to protect their children by reducing the number of doses and trips to the doctor. HPV vaccination is an important cancer prevention tool and two doses of HPV vaccine will provide safe, effective, and long-lasting protection. Some specifics of the recommendation include:

- A two-dose schedule is recommended for adolescents starting the schedule at ages 9 through 14 years. For this age group, follow the decision tree on the reverse side.
- Adolescents aged 9 through 14 years who have already received two doses of HPV vaccine less

than 5 months apart will require a third dose. The third dose should be given 6-12 months after the first dose to complete the series.

- A three-dose schedule is recommended for teens and young adults who start the series at ages 15 through 26 years. Under this schedule, the second dose of HPV vaccine should be given 1-2 months after the first dose, and the third dose should be given 6 months after the first dose.
- Three doses are recommended for people aged 9-26 years with certain immunocompromising conditions.

Read the full policy note: [www.cdc.gov/mmwr/volumes/65/wr/mm6549a5.htm](http://www.cdc.gov/mmwr/volumes/65/wr/mm6549a5.htm)

## TALKING TO PATIENTS AND THEIR PARENTS ABOUT 2-DOSE SCHEDULES FOR HPV VACCINATION

With patients aged 11-12 years, start the vaccine discussion with their parents by making the following recommendation: *"Now that your child is 11 (or 12) years old, they are due for three vaccines today to help protect them from the infections that cause meningitis, HPV cancers, and pertussis—or whooping cough."* Many parents are accepting of this bundled recommendation because it demonstrates that HPV vaccination is a normal part of adolescent vaccination. Parents may be interested in vaccinating, yet still have questions. Some parents might just need additional information from you, the clinician they trust. Clarify the parent's question or what additional information they need.

For parents who have a question or need more information about "why now/why 11-12?" *"As with all vaccine-preventable diseases, we want to protect your child early. If we start now, it's one less thing for you to worry about. Also, your child will only need two doses of HPV vaccine at this age. If you wait, your child may need three doses in order to get complete protection. We'll give the first dose today and then you'll need to bring your child back in 6 to 12 months from now for the second dose."*

If a parent asks, or needs more information about "How long can we wait and still give just two doses?" *"The two-dose schedule is recommended if the series is started before the 15th birthday. However, I don't recommend waiting to give this cancer-preventing vaccine. As children get older and have busier schedules, it becomes more difficult to get them back in. I'd feel best if we started the series today to get your child protected as soon as possible."*

For patients aged 9-14 who have already had two doses given less than 5 months apart *"The recommended schedule is two doses given 6 to 12 months apart. The minimum amount of time between those doses is 5 months. Because your child received two doses less than 5 months apart, we'll need to give your child a third dose."*

For parents asking about the duration of protection or how well the vaccine will work with just two doses *"Studies have shown that two doses of HPV vaccine work very well in younger adolescents and we expect the same long-lasting protection with two doses that we expect with three doses."* You can also access guidance on answering parents' questions about HPV vaccine by using our tip sheet, *Talking to Parents about HPV Vaccine*, at [www.cdc.gov/HPV](http://www.cdc.gov/HPV).



**HPV VACCINE**  
IS CANCER PREVENTION

MARCH 2017

# HPV Vaccination Is Recommended at Age 11 or 12 Years

Girls & Boys can start HPV vaccination at age 9

Preteens should finish the HPV vaccine  
series before their 13<sup>th</sup> birthday



Plus girls 13-26 years old who  
haven't started or finished  
HPV vaccine series



Plus boys 13-21 years old who  
haven't started or finished  
HPV vaccine series



# HPV VACCINE SAFETY

# United States Vaccine Safety System

System	Collaborators	Description
<b>Vaccine Adverse Event Reporting System (VAERS)</b>	CDC and FDA	Frontline, spontaneous reporting system to detect potential vaccine safety issues
<b>Vaccine Safety Datalink (VSD)</b>	CDC and 8 integrated health care systems	Large-linked database system used for active surveillance and research ~9.4 million members (~3% of US pop)
<b>Clinical Immunization Safety Assessment (CISA) Project</b>	CDC and 7 academic centers	Expert collaboration that conducts individual clinical vaccine safety assessments and clinical research
<b>Post-Licensure Rapid Immunization Safety Monitoring Program (PRISM)</b>	FDA and 6 partner organizations	Large distributed database system used for active surveillance and research ~170 million individuals (~53 of US pop)

# Over 10 Years of HPV Vaccine Safety Data

- ➔ **HPV vaccines are safe**
- ➔ **Reactions after vaccination may include:**
  - Injection site reactions: pain, redness, and/or swelling in the arm where the shot was given
  - Systemic: fever, headaches
- ➔ **HPV vaccines should not be given to anyone who has had a previous allergic reaction to the HPV vaccine or who has an allergy to yeast**
- ➔ **Brief fainting spells (syncope) and related symptoms (such as jerking movements) can happen soon after any injection, including HPV vaccine**
- ➔ **Patients should be seated (or lying down) during vaccination and remain in that position for 15 minutes**

# Evaluating and Monitoring 9-Valent HPV Vaccine Safety in the United States

## ➤ **Monitoring of VAERS reports**

- Clinical review of serious reports including deaths and other prespecified adverse events
- Data mining to identify disproportional reporting

## ➤ **Vaccine Safety Datalink**

- Near real-time monitoring of 10 prespecified outcomes
- Evaluation of spontaneous abortion

## ➤ **Sentinel System**

- Active surveillance and surveillance of serious, unexpected events
- Evaluation of spontaneous abortion

## ➤ **Manufacturer postmarketing commitments**

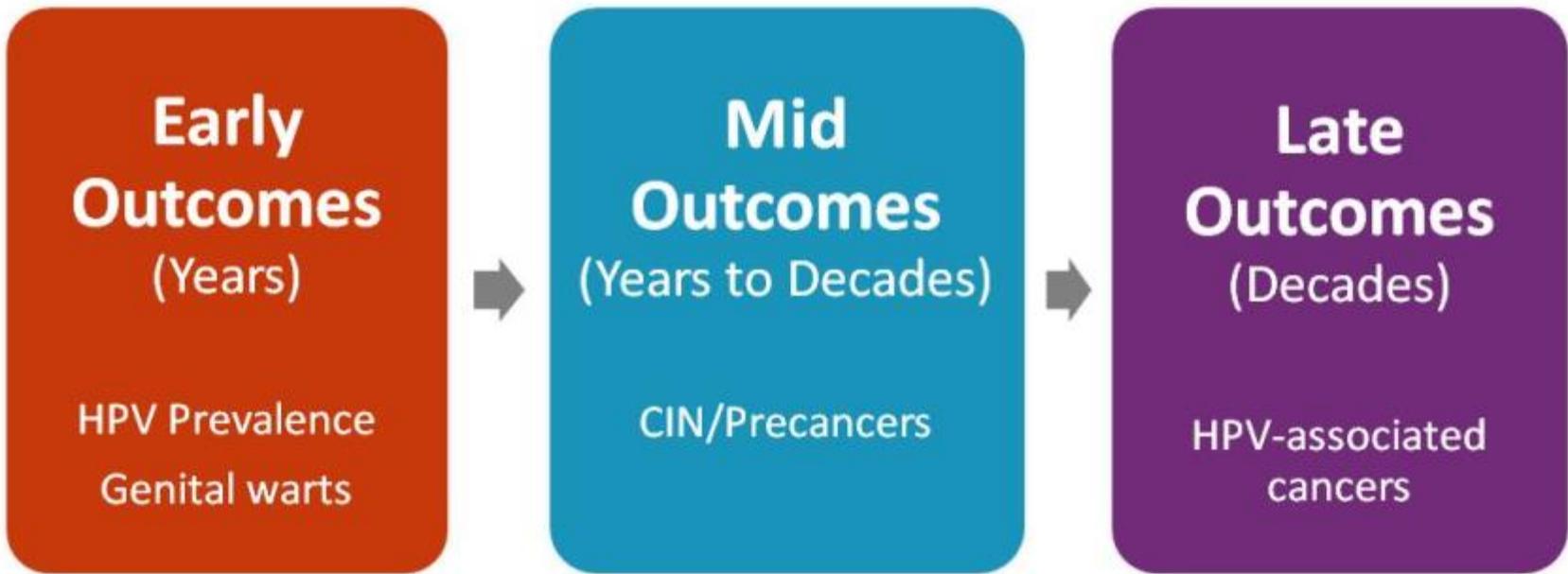
- Two 10-year studies to assess long-term safety
- Observational study to further characterize the safety profile in 10,000 persons
- Pregnancy registry

# HPV Vaccination Is Safe

HPV vaccine safety studies have been very reassuring: HPV vaccine has a good safety profile.

CDC and FDA continue to monitor and evaluate the safety of HPV vaccines, along with all vaccines.

Clinicians can reassure parents who may have concerns that HPV vaccination is safe.



Monitoring Impact of HPV Vaccine Programs on HPV-Associated Outcomes

## HPV VACCINE IMPACT

# HPV Vaccine Impact Monitoring

- ▶ Postlicensure evaluations are important to evaluate real-world effectiveness of vaccines
- ▶ Population impact against early and mid outcomes has been reported in many countries, including:

## *HPV prevalence*

- Australia, Norway, Denmark, Sweden, Switzerland, UK, U.S.

## *Genital warts*

- Australia, Belgium, New Zealand, Denmark, Sweden, Germany, Quebec, U.S.

## *Cervical lesions*

- Australia, British Columbia, Denmark, Scotland, Sweden, U.S.

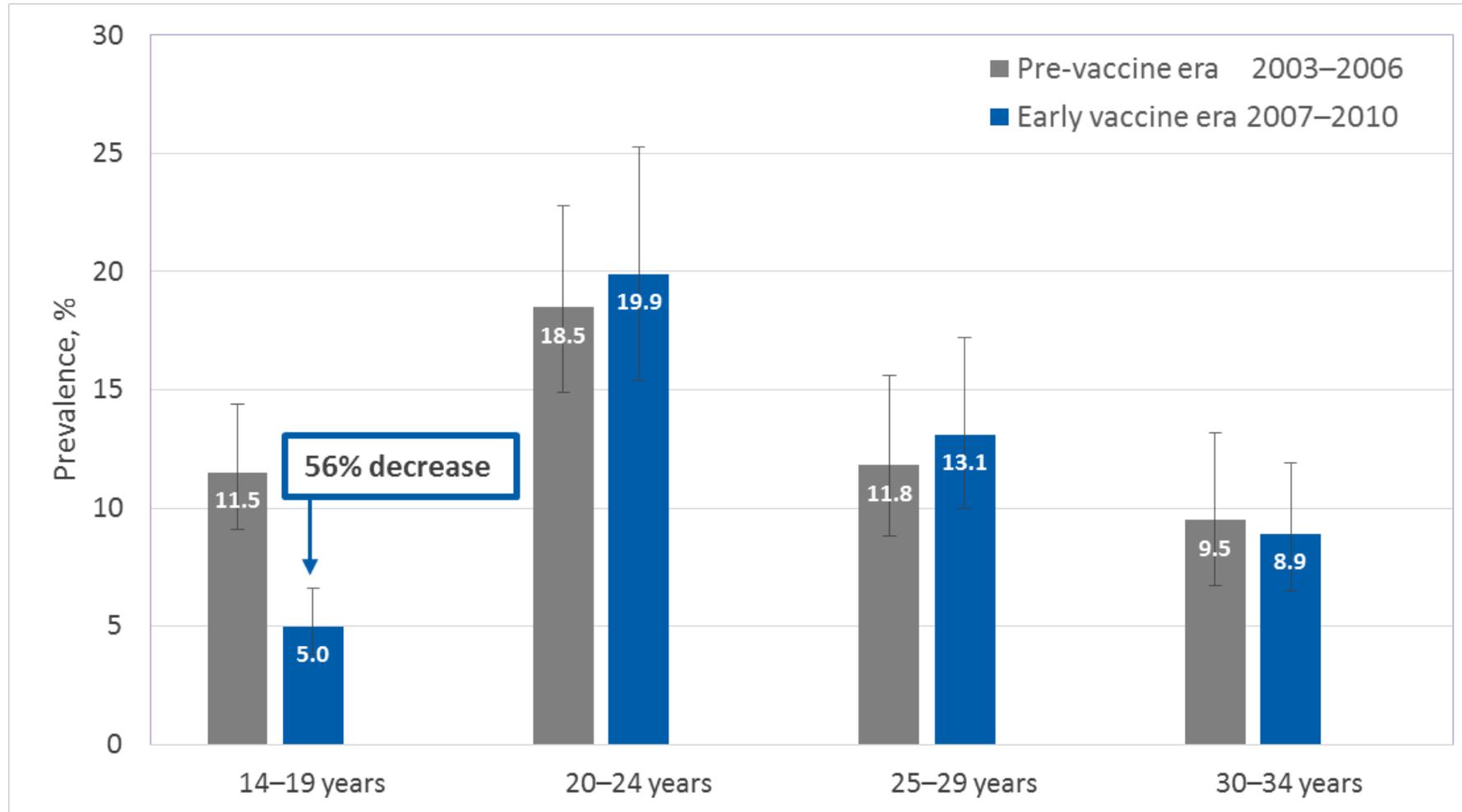
# HPV Vaccine Impact in the U.S.

## ➡ Declines observed in:

- Vaccine type prevalence
- Genital warts
- Cervical precancers

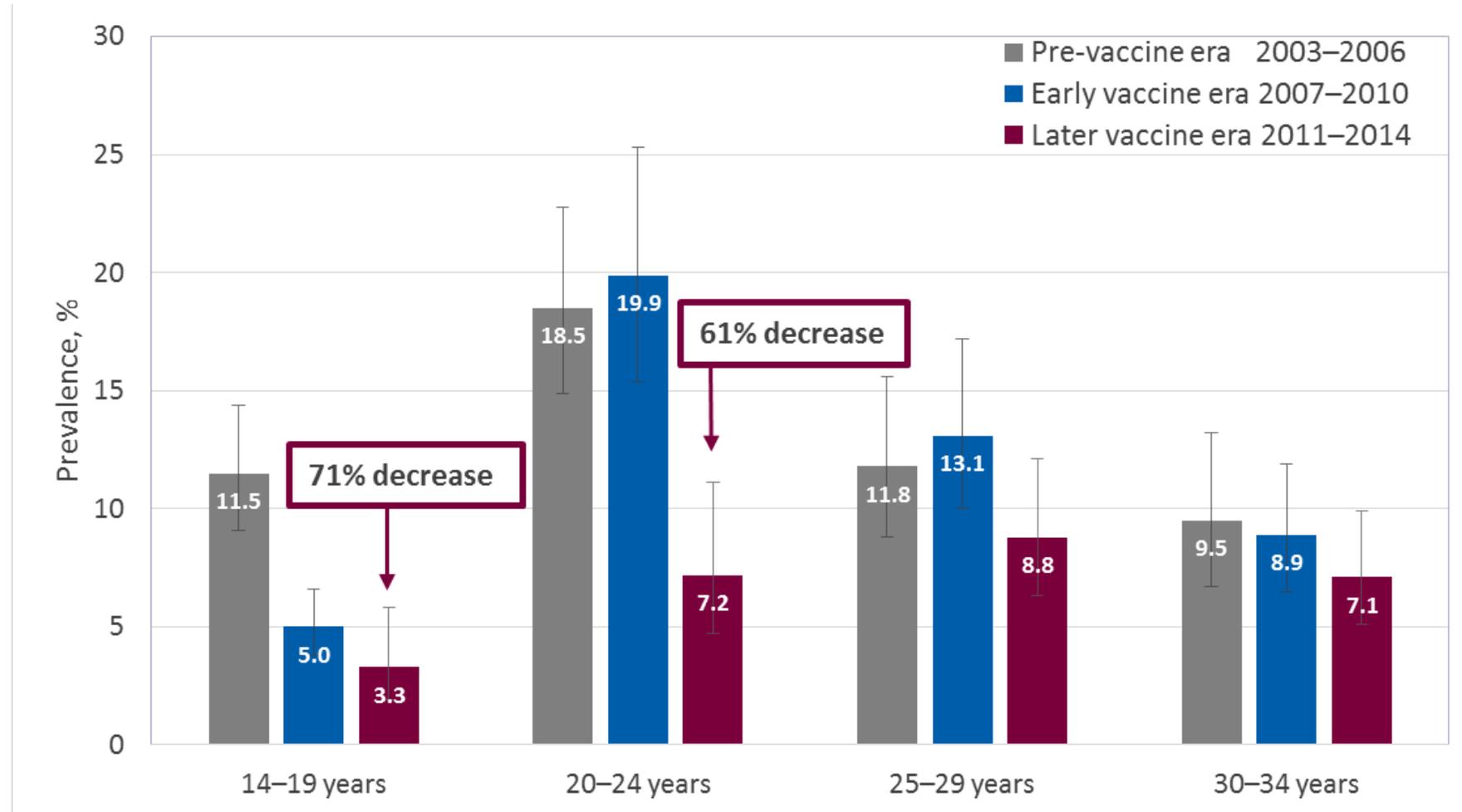
# Vaccine Type Prevalence Among Females, NHANES

## Early vaccine era compared to pre-vaccine era



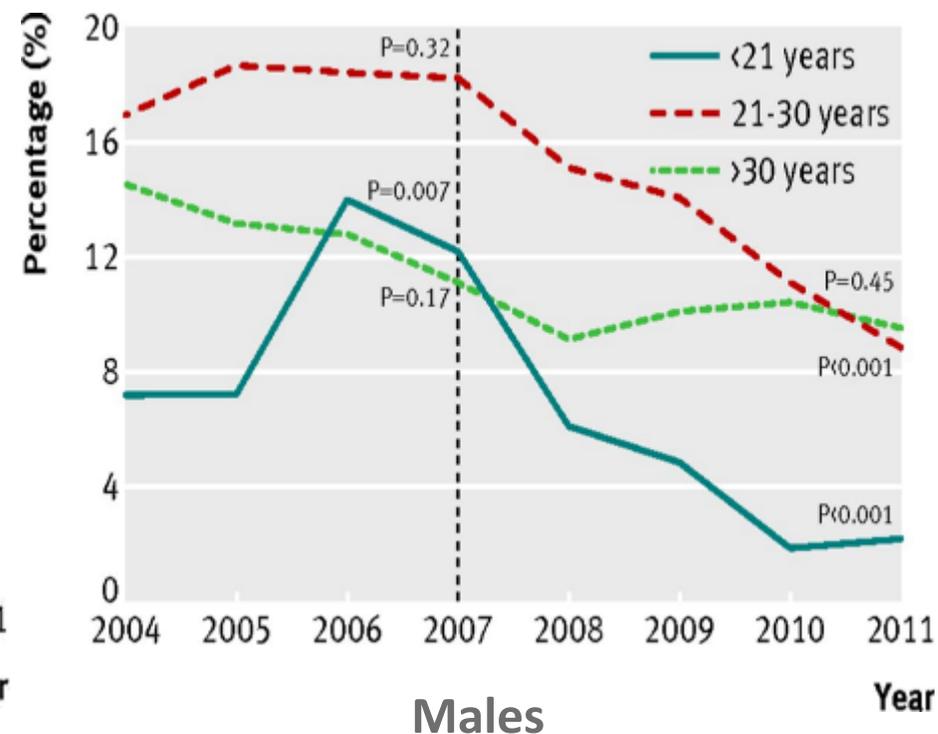
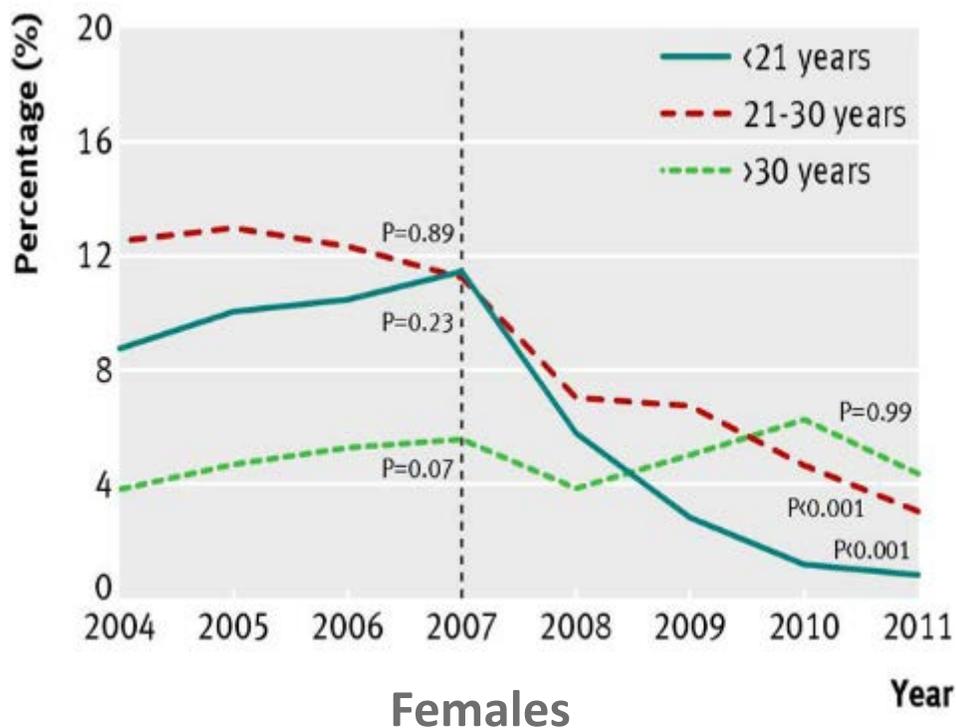
# Vaccine Type Prevalence Among Females, NHANES

Later vaccine era compared to pre-vaccine era



# Impact of HPV Vaccination in Australia

Proportion of Australian-born females and males diagnosed as having genital warts at first visit, by age group, 2004-11



# Systematic Review and Meta-Analysis: Population-Level Impact of HPV Vaccination

- ➔ Review of 20 studies in 9 high-income countries
- ➔ In countries with *>50% coverage*, among 13-19 year-olds
  - HPV 16/18 prevalence *decreased at least 68%*
  - Anogenital warts decreased by ~61%
- ➔ Evidence of herd effects
- ➔ Some evidence of cross protection against other types

# HPV Vaccine

## Duration of Protection

- **Studies suggest that vaccine protection is long-lasting**
- **No evidence of waning protection**
  - Available evidence indicates protection for *at least* 10 years
  - Multiple studies are in progress to monitor

# HPV Vaccination Is Safe, Effective, and Provides Lasting Protection

## HPV Vaccine Is SAFE

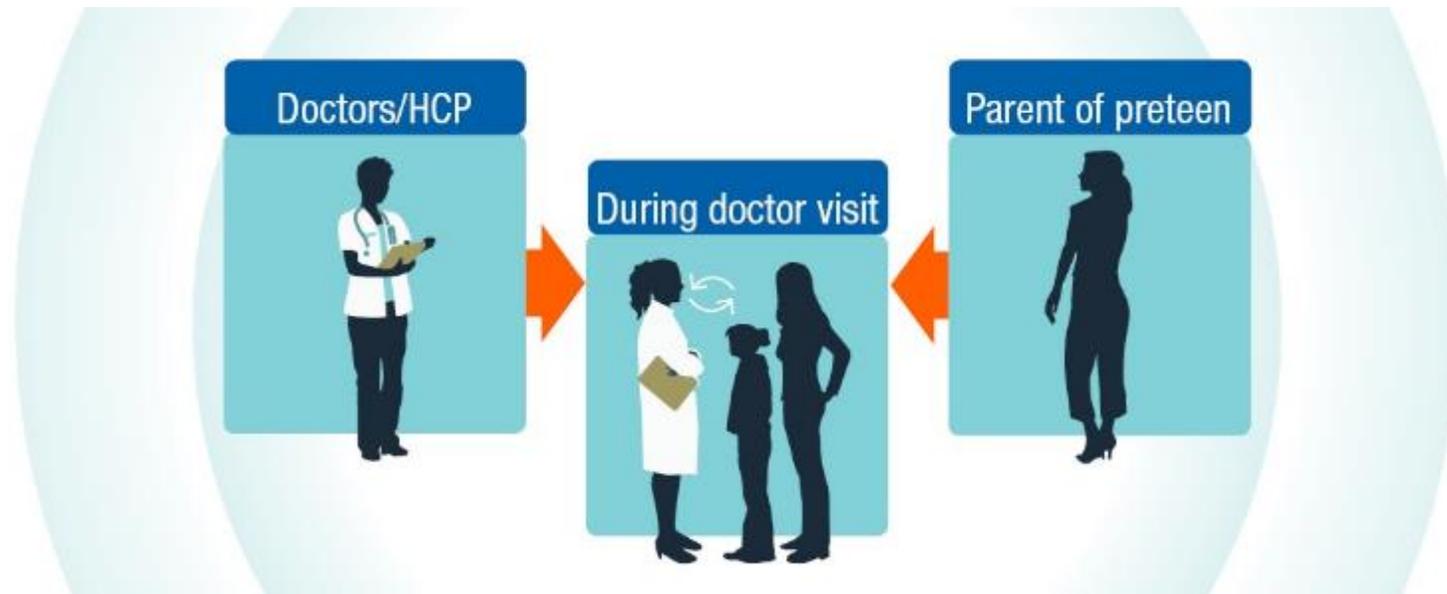
- Benefits far outweigh any potential risks
- Safety studies findings for HPV vaccination are reassuring and similar to MenACWY and Tdap vaccine safety reviews

## HPV Vaccine WORKS

- Population impact against early and mid outcomes has been reported in multiple countries

## HPV Vaccine Protection LASTS

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



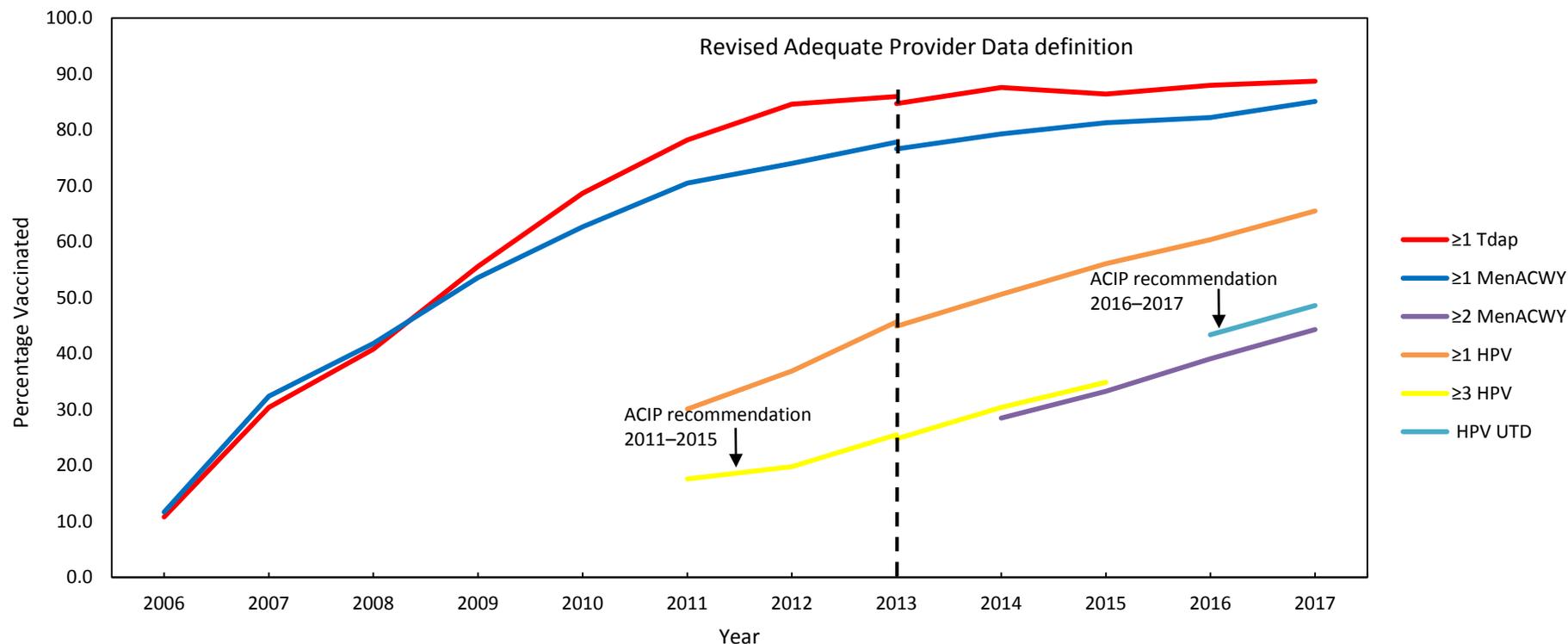
Talking About HPV Vaccine

## **FRAMING THE CONVERSATION**

# Adolescent Vaccination Coverage

## United States, 2006-2017

FIGURE. Estimated coverage with selected vaccines and doses\* among adolescents aged 13–17 years, by survey year and ACIP recommendations† — National Immunization Survey-Teen, United States, 2006–2017§



Abbreviations: ACIP = Advisory Committee on Immunization Practices; HPV = human papillomavirus; MenACWY = quadrivalent meningococcal conjugate vaccine; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; UTD = up to date.

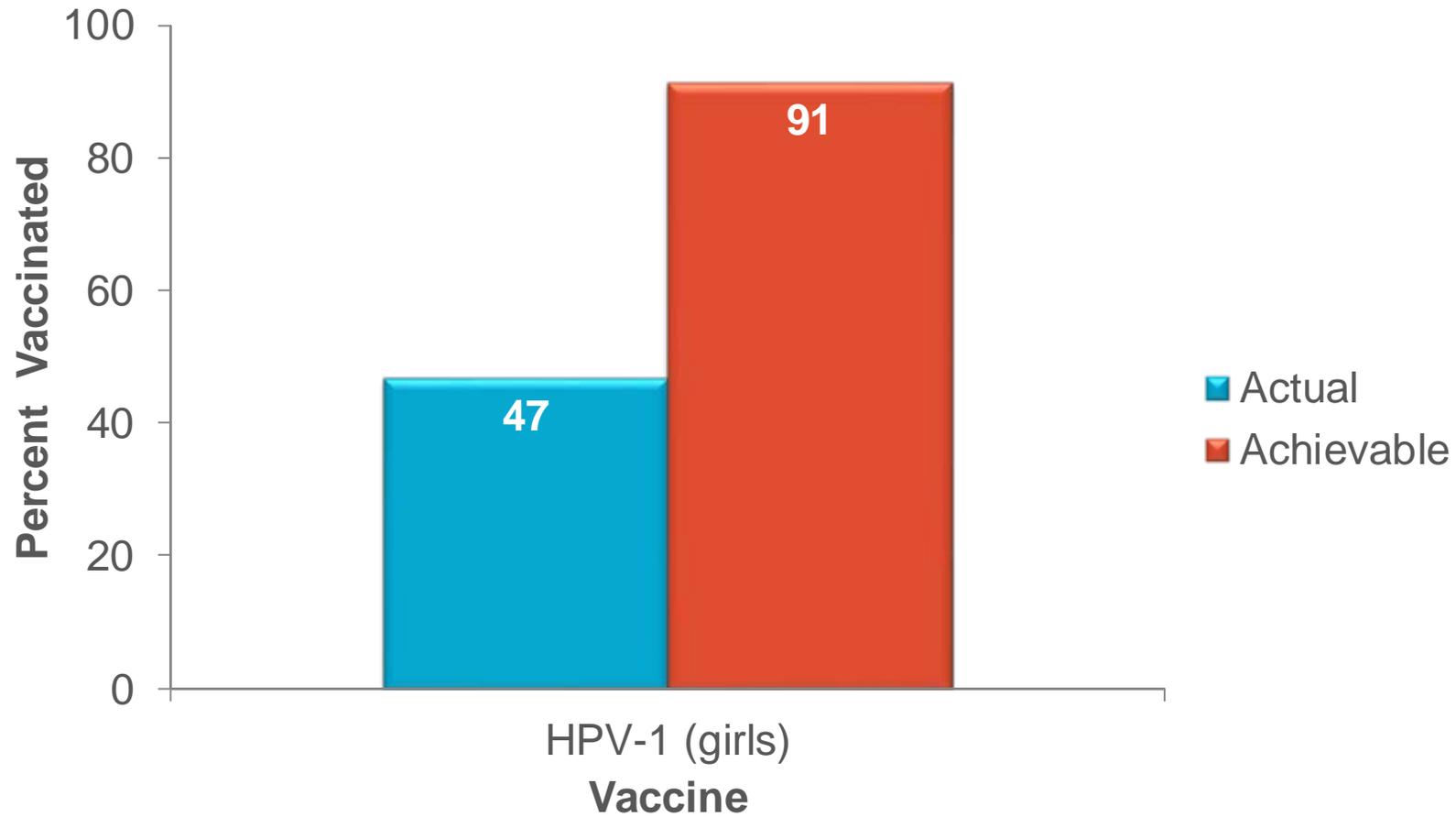
\*  $\geq 1$  dose Tdap at or after age 10 years;  $\geq 1$  dose MenACWY or meningococcal-unknown type vaccine;  $\geq 2$  doses MenACWY or meningococcal-unknown type vaccine, calculated only among adolescents aged 17 years at time of interview. Does not include adolescents who received their first and only dose of MenACWY at or after 16 years of age; HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV), or bivalent (2vHPV). The routine ACIP recommendation for HPV vaccination was made for females in 2006 and for males in 2011. Because HPV vaccination was not recommended for males until 2011, coverage for all adolescents was not measured before that year; HPV UTD includes those with  $\geq 3$  doses and those with 2 doses when the first HPV vaccine dose was initiated before age 15 years and at least 5 months minus 4 days elapsed between the first and second dose.

† ACIP revised the recommended HPV vaccination schedule in late 2016. The recommendation changed from a 3-dose to 2-dose series with appropriate spacing between receipt of the first and second dose for immunocompetent adolescents initiating the series before the 15th birthday. Three doses are still recommended for adolescents initiating the series between the ages of 15 and 26 years. Because of the change in recommendation, the graph includes estimates for  $\geq 3$  doses HPV from 2011 to 2015 and the HPV UTD estimate for 2016 and 2017. Because HPV vaccination was recommended for boys in 2011, coverage for all adolescents was not measured before that year.

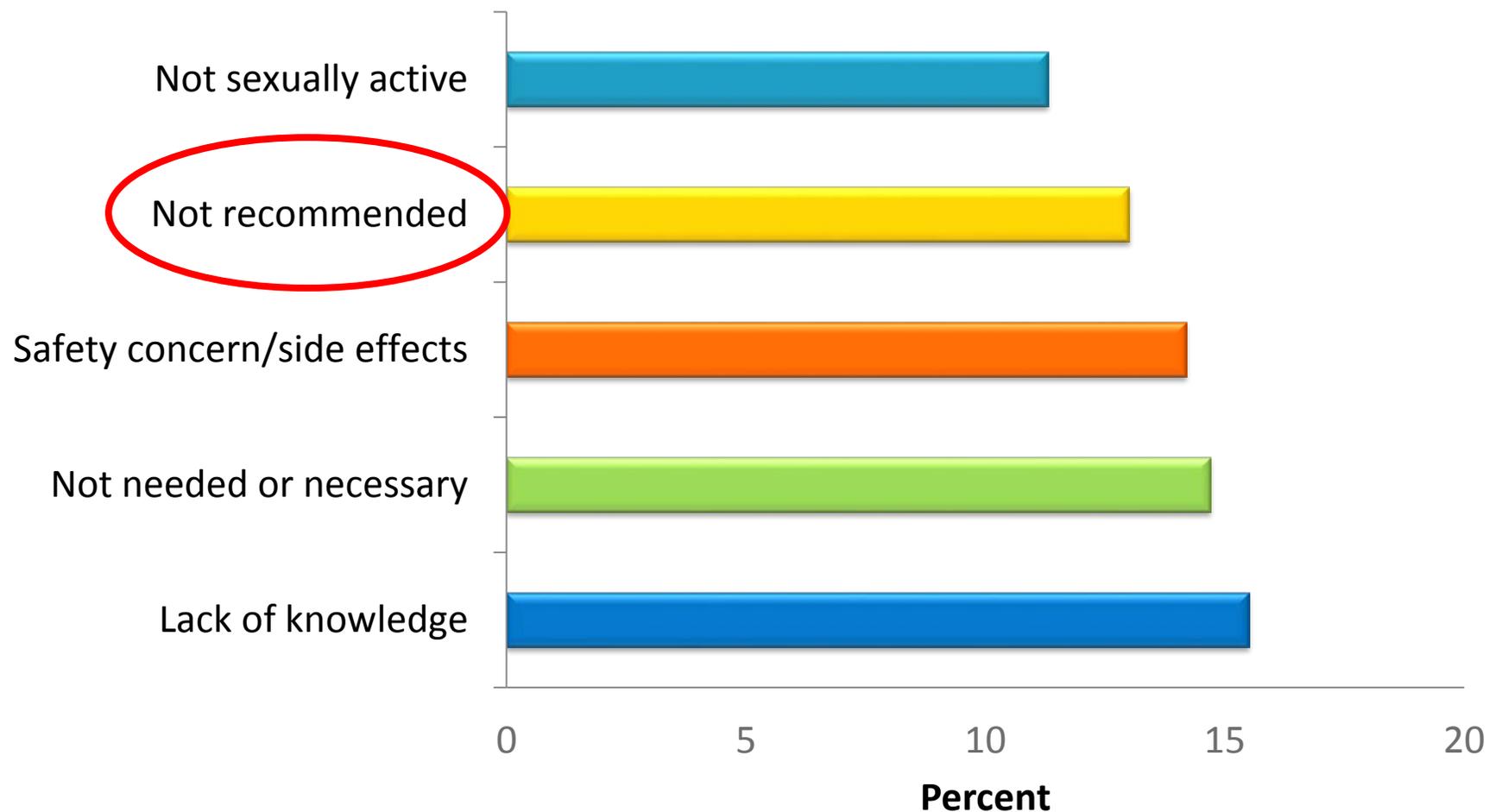
§ NIS-Teen implemented a revised adequate provider data definition (APD) in 2014, and retrospectively applied the revised APD definition to 2013 data. Estimates using different APD definitions may not be directly comparable.



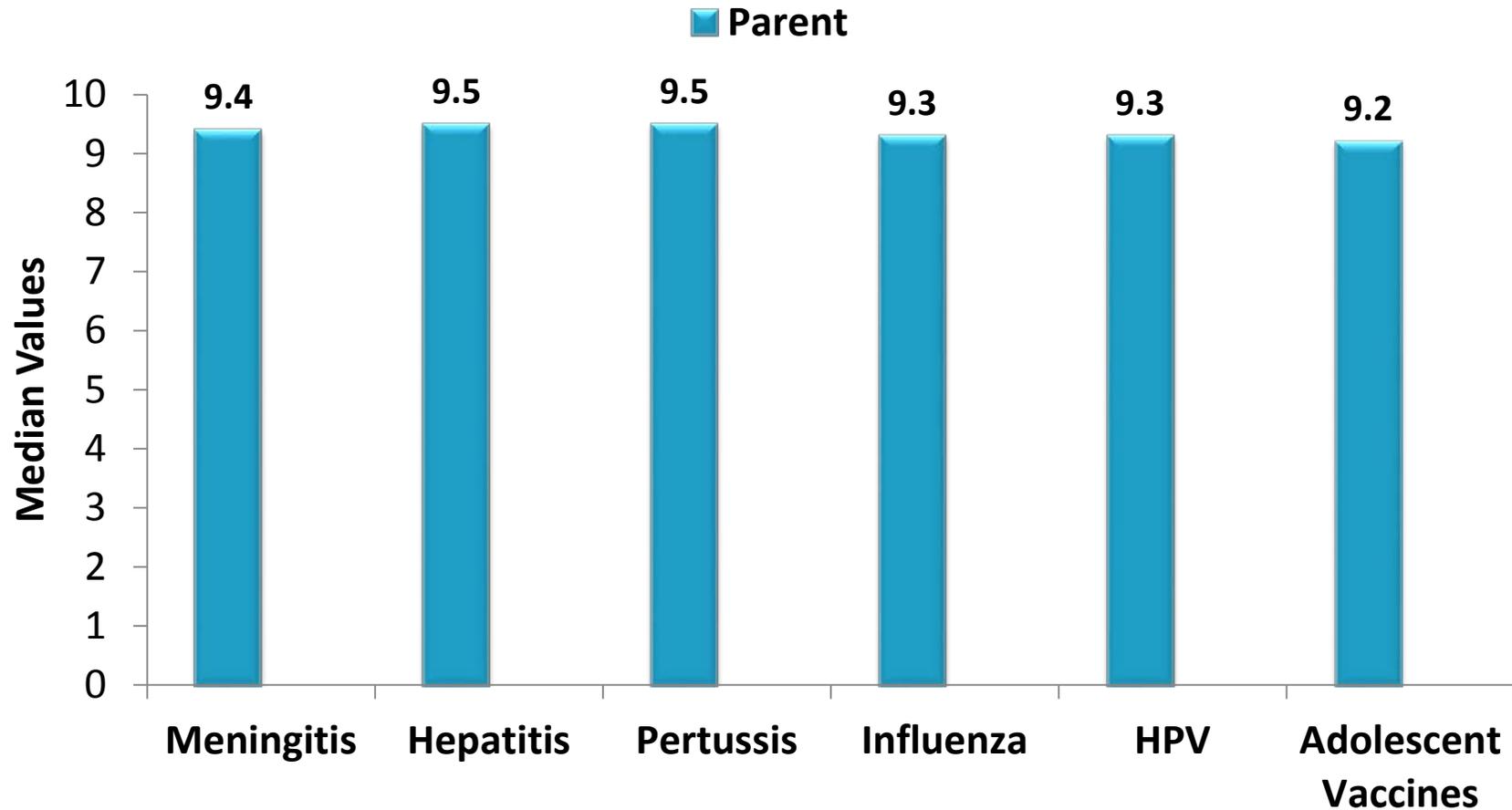
# Impact of Eliminating Missed Opportunities by Age 13 Years in Girls Born in 2000



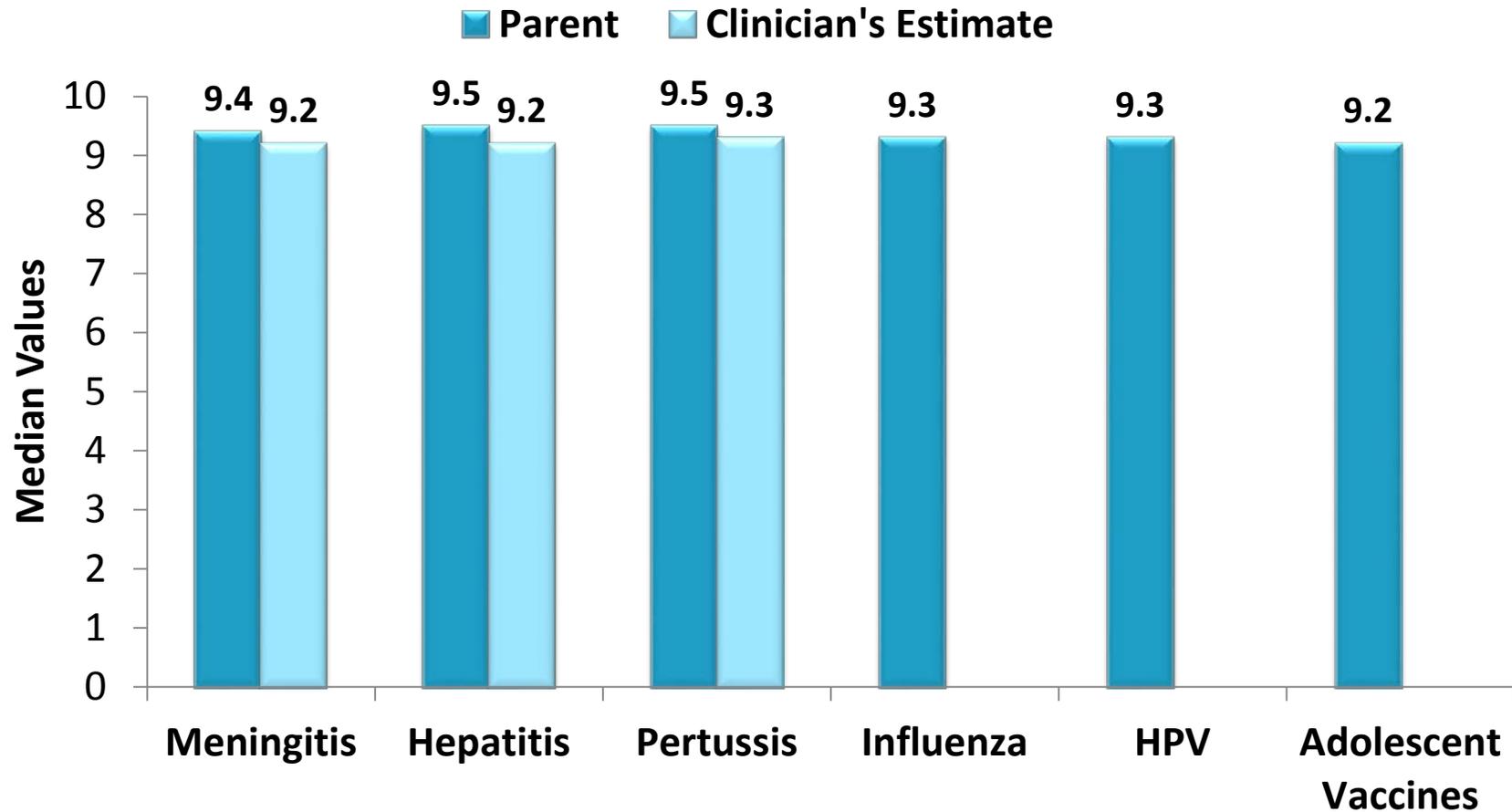
## Parents of unvaccinated girls – top reasons for not starting HPV vaccine series



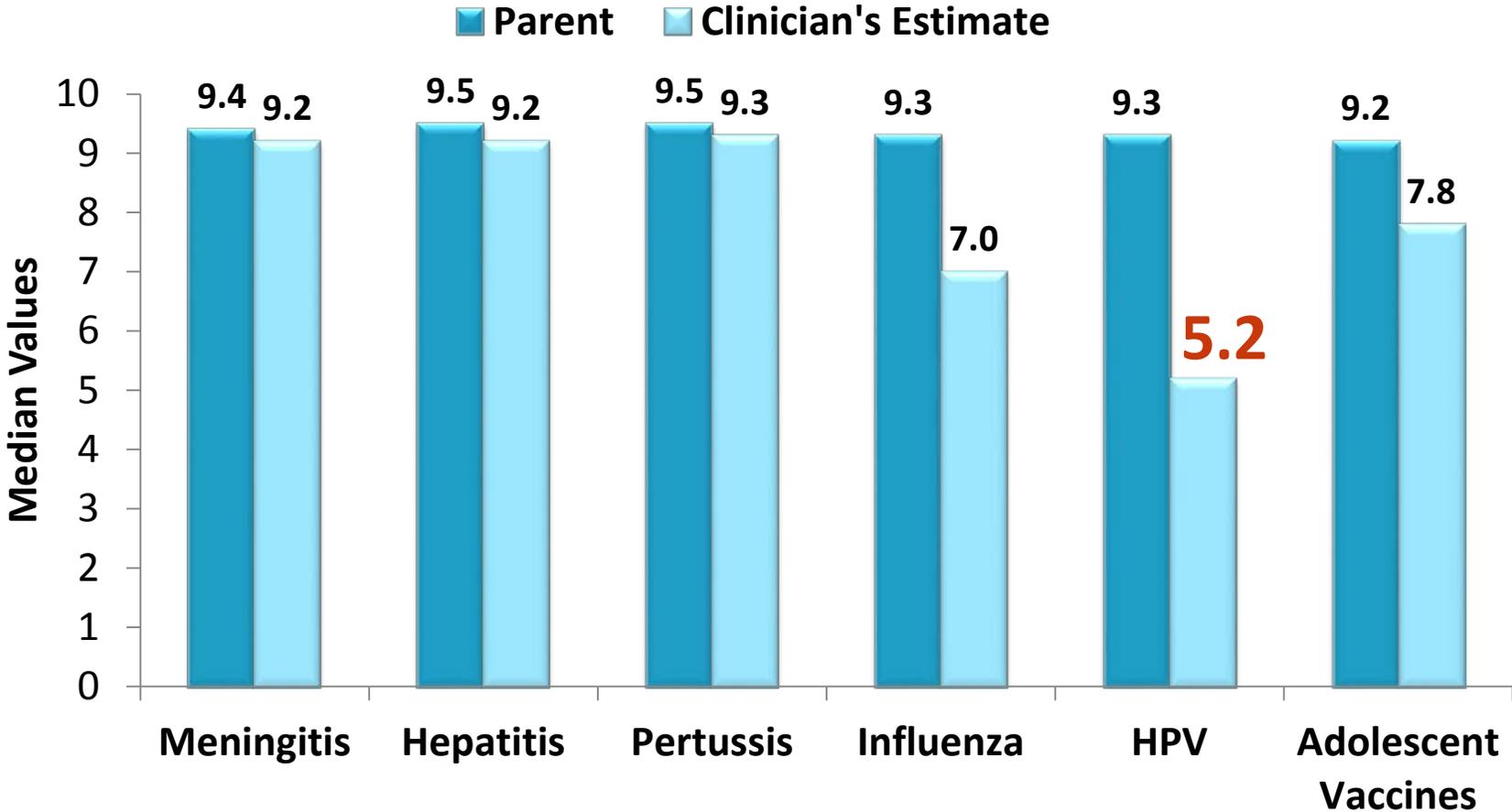
# Value Parents Place on the Vaccines



# Clinician Estimations



# Clinicians Underestimate the Value Parents Place on HPV Vaccine



Adapted from Healy et al. *Vaccine*. 2014.



“The **perceived** and **real** concerns of parents influence how clinicians **recommend HPV vaccine.**”

# Give an Effective Recommendation to Receive HPV Vaccine at Age 11 or 12

- ▶ *An effective recommendation from you is the main reason parents decide to vaccinate*
- ▶ Many moms in focus groups stated that they trust their child's clinician and would get the vaccine for their child as long as they received a recommendation from the clinician

What is an  
**EFFECTIVE**  
recommendation  
for HPV vaccination?

Same Way

Same Day

# Make an Effective Recommendation

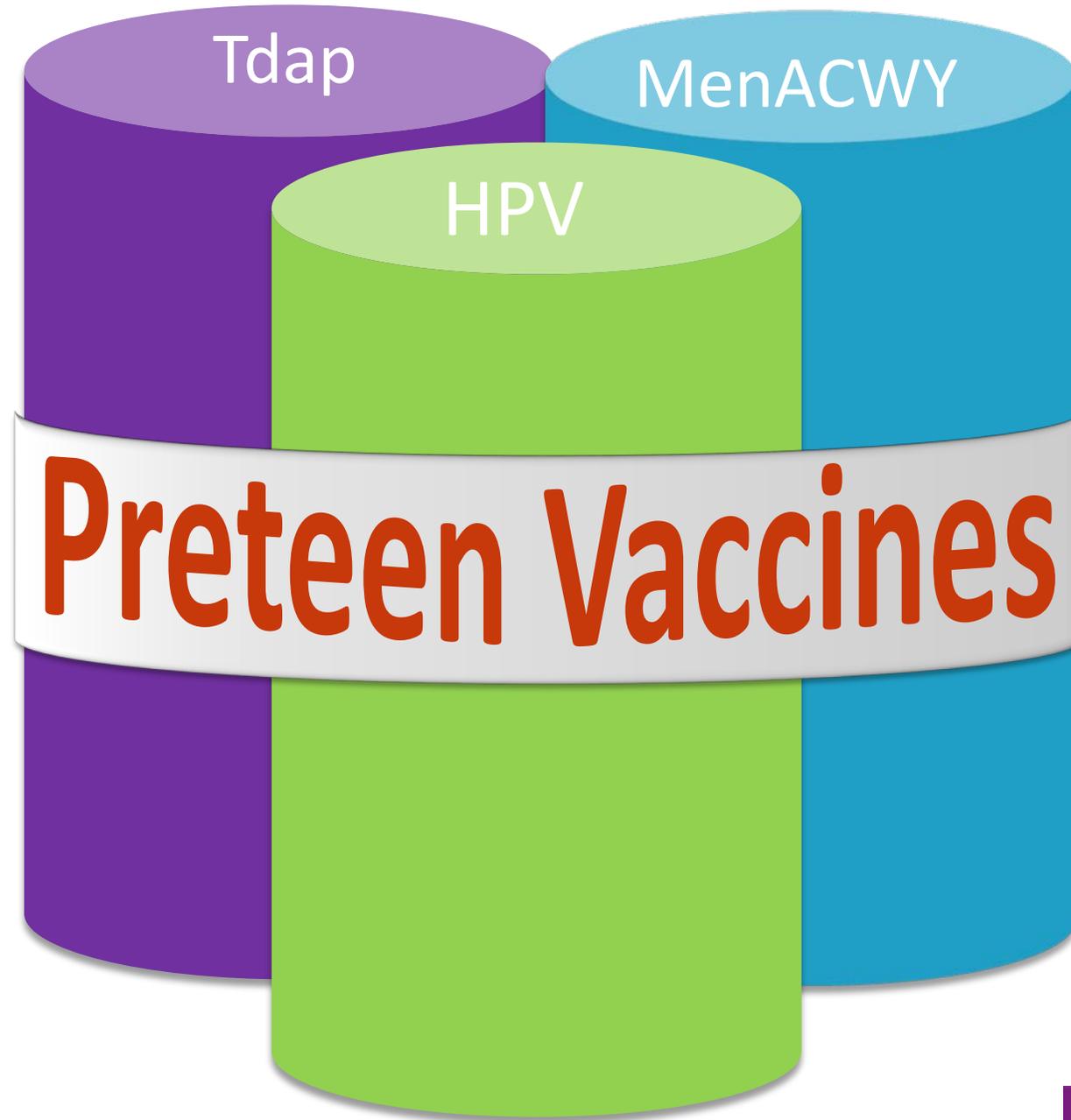
## ► Same way: Effective recommendations group all of the adolescent vaccines

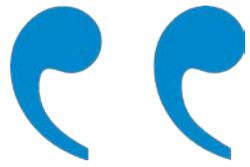
Recommend HPV vaccination the **same way** you recommend Tdap and meningococcal vaccines

## ► Same day: Recommend HPV vaccine **TODAY**

Recommend HPV vaccination the **same day** you recommend Tdap and meningococcal vaccines

*Your preteen  
needs three vaccines **today**  
to protect against  
**meningitis,**  
**HPV cancers,**  
and **pertussis.***



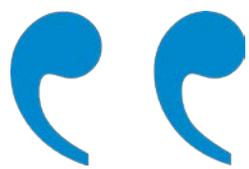


Now that Sophia is 11, she is due for three vaccines.

These will help protect her from the infections that can cause meningitis, HPV cancers, and pertussis.

We'll give those shots today.





Now that Sophia is 11, she is due today for three important vaccines.

The first is to help prevent an infection that can cause meningitis, which is very rare, but potentially deadly. The second is to prevent a very common infection, HPV, that can cause several kinds of cancer. The third is the tetanus booster which also protects against pertussis, so she doesn't get whooping cough.

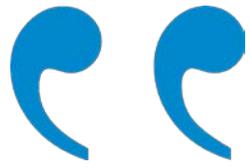
We'll give those shots at the end of the visit. Do you have any questions for me?



# Some Parents Need Reassurance

- Many parents simply accept this bundled recommendation
- Some parents may be interested in vaccinating, yet still have questions. Interpret a question as  
they need additional reassurance from YOU,  
the clinician they trust with their child's health care
- Ask parents about their main concern  
(be sure you are addressing their real concern)

*Why does my child need  
HPV vaccine?*



HPV vaccination is important  
because it prevents cancer.

That's why I'm recommending that  
your child start the HPV vaccine  
series today.



***What cancers are caused by  
HPV infection?***

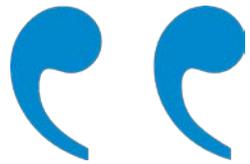


Persistent HPV infection can cause cancer of the cervix, vagina, and vulva in females, cancer of the penis in males, and cancers of the anus and the throat in both.

We can help prevent infection with the HPV types that cause these cancers by starting the HPV vaccine series today.



*Is my child really at risk for  
HPV?*



HPV is a very common virus that infects both females and males.

We can help protect your child from the cancers and diseases caused by the virus by starting HPV vaccination today.



***Why at 11 or 12 years old?***

# When should the bike helmet go on?

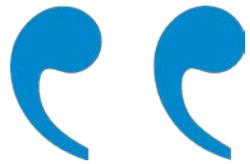


- A. Before they get on their bike
- B. When they are riding their bike in the street
- C. When they see the car heading directly at them
- D. After the car hits them

# When do we put our seat belts on?

- A. Before turning on car
- B. When leaving driveway
- C. After a near accident





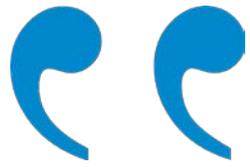
As with all vaccine-preventable diseases, we want to protect your child early. If we start now, it's one less thing for you to worry about.

Also, your child will only need 2 shots of HPV vaccine at this age. If you wait until 15, your child will need three shots.

We'll give the first shot today and then you'll bring your child back in 6 to 12 months for the second shot.



*I'm just worried that my child  
will perceive this as a green  
light to have S-E-X.*

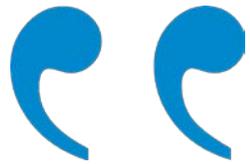


Numerous research studies have shown that getting the HPV vaccine does NOT make kids more likely to be sexually active or start having sex at a younger age.

Starting the HPV vaccine series today will give your child the best possible protection for the future.



*How long can we wait and  
still give just two doses?*



The two-dose schedule is recommended if the series is started before the 15th birthday.

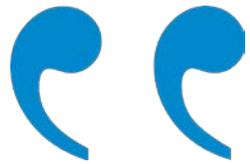
However, I don't recommend waiting to give this cancer-preventing vaccine. Older teens have busier schedules and it becomes more difficult to schedule an appointment.

It's best to start the series today so your child is protected as soon as possible.



*I'm concerned about the safety  
of the vaccine—I read things  
online that say HPV vaccine  
isn't safe.*

*Do you really know if it's safe?*

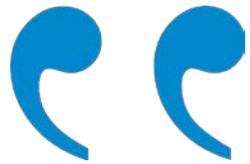


It sounds like you want what's best for your child and have concerns about the safety of HPV vaccine. Is that right?

We both want what's best for your child. Can you tell more about your concerns?

I have researched HPV vaccine including safety. Can I share with you what I have learned?





I know there are stories in both the media and online about vaccines. However, I want you to know that HPV vaccine has been carefully studied for many years by medical and scientific experts.

Based on all these studies, I believe HPV vaccine is very safe.



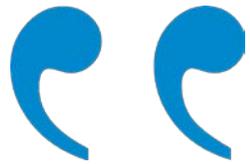


Vaccines, like any medication, can cause side effects. With HPV vaccination, this could include pain, swelling, and/or redness where the shot is given, or possibly a headache.

No serious side effects have been associated with HPV vaccine.



*Can HPV vaccine cause future  
fertility problems?*



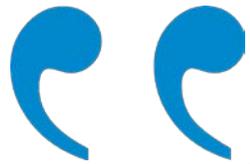
There is no evidence available to suggest that HPV vaccine will affect future fertility.

However, women who develop cervical cancer could require treatment that would limit their ability to have children.

Starting the HPV vaccine series today could prevent that from happening and protect your daughter's ability to bear children.



*How do you know if the  
vaccine works?*



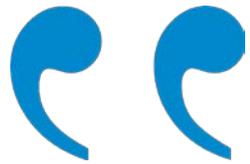
Ongoing studies continue to show that HPV vaccination works very well.

HPV infections, genital warts, and cervical precancers in young people have all decreased in the years since the vaccine has been available.

Starting the vaccine series today will help ensure your child gets the best protection possible.



***Why do boys need to be vaccinated?***



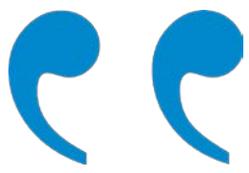
HPV infection can cause cancers of the penis, anus, and throat in men.

HPV infection can also cause genital warts.

Getting HPV vaccine today for your son can help prevent the infection that can lead to these diseases.



***We only want the vaccines  
needed for school.***

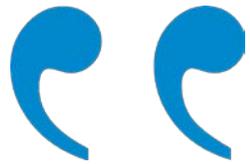


School-entry requirements don't always reflect the current recommendations to keep your child healthy.

HPV vaccine, along with other adolescent vaccines, will provide your child with the best protection.



***Would you give HPV vaccine  
to your kids?***

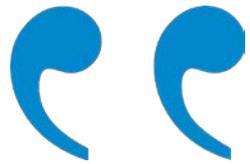


Yes, I have given HPV vaccine to my child.  
I believe strongly in the importance of  
this cancer-preventing vaccine.

Also, the American Academy of Pediatrics,  
the American Academy of Family Physicians,  
NIH cancer centers, and CDC agree that  
HPV vaccination is  
very important for your child.



***I heard there is a new HPV vaccine that works better. Should I be getting that for my child who already was vaccinated?***

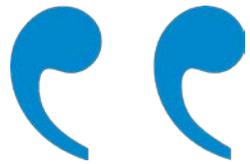


Currently there is no recommendation for additional vaccination for someone who has already completed an HPV vaccine series.

All HPV vaccines protect against the infections that cause most of the cancers.



*When do we need to come  
back?*



**Since your child is younger than 15, she will need a second shot in 6 months to a year.**

**When you check out, please make sure to make an appointment for the second shot and put that appointment on your calendar before you leave today!**



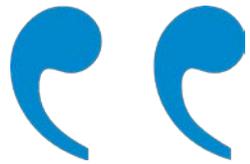


**Since your child is already 15, she will need a second shot in 1-2 months. The third shot is due 6 months from today.**

When you check out, please make sure to make an appointment for about 1-2 months from now and 6 months from now, and put those appointments on your calendar before you leave today!



***My child is less than 15 years old, so why does she need a third shot?***



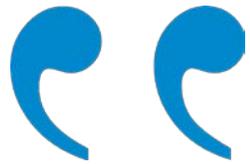
The recommended schedule is 2 shots given  
6 to 12 months apart.

The minimum amount of time between those  
shots is five months.

Because your child received two shots *less*  
than five months apart, we'll need to give  
your child a third shot.



***Will my child be protected  
with just two shots?***



**Yes!** Studies have shown that just two shots given at least six months apart, when the first dose is given between 9 and 14 years, worked as well or better than three shots given to older adolescents and young adults.



# If a Parent Doesn't Say Yes Today...

<b>Ask</b>	<ul style="list-style-type: none"><li>• Clarify and restate their concerns to make sure you understand</li></ul>
<b>Acknowledge</b>	<ul style="list-style-type: none"><li>• Emphasize it is the parents' decision</li><li>• Acknowledge risks and conflicting info sources</li><li>• Applaud them for wanting what is best for their child</li><li>• Be clear that you are concerned for the health of their child— not just public health safety</li></ul>
<b>Advise</b>	<ul style="list-style-type: none"><li>• Allow time to discuss the pros and cons of the vaccine</li><li>• Be willing to discuss parents' ideas</li><li>• Offer written resources for parents</li><li>• Tailor your advice using this presentation</li></ul>

# If a Parent Declines Today

- Declination is not final. The conversation can be revisited
- End the conversation with at least one action you both agree on
- Because waiting to vaccinate is the risky choice, many pediatricians ask the parent to sign a declination form

# Ensure ALL Your Patients are Protected

- ➔ Align office/clinic policy with mission
  - Immunize at every opportunity
  - Implement and utilize standing orders
  - Prompt the clinician to assess and administer the vaccine
    - EMRs, IIS, etc.
  - Reminder and recall

**Top 10 Tips for HPV Vaccination Success**  
Attain and Maintain High HPV Vaccination Rates

**1** Appreciate the significance of achieving high HPV vaccination rates. By boosting HPV vaccination rates among your patients, you will be preventing cancer.

**2** Acknowledge the importance your recommendation has when it comes to parents choosing to get their children vaccinated. Clinician recommendation is the number one reason parents decide to vaccinate. This is especially important for HPV vaccination.

**3** Use an effective approach by bundling your vaccine recommendation. Recommend the HPV vaccine the same day and the same way you recommend all other vaccines. For example, "Now that Danny is 11, he is due for vaccinations to help protect against meningitis, HPV cancers, and whooping cough. We'll give those shots during today's visit. Do you have any questions about these vaccines?"

**4** Motivate your team and encourage their immunization conversations with parents. Starting with your front office, ensure each team member is aware of HPV vaccine's importance and is educated on proper vaccination practices and recommendations, ready to answer parents' questions, and/or regularly remind and recall parents. Be sure staff regularly check immunization records, place calls to remind families about getting vaccines, and let you know if parents have additional questions.

**5** Implement systems to ensure you never miss an opportunity to vaccinate. Establish a policy to vaccinate at every visit. Create a system to check immunization status ahead of all visits. Before seeing the patient, staff should indicate if the patient is due for immunization, with special consideration to HPV vaccination. Use standing orders.

**6** Use your local health department's resources. Use the resources of the local health department to achieve your goals of protecting your patients.

**7** Know your rates of vaccination and refusal. Deputize your staff to assist you with knowing your actual vaccination rates and learning more about why some patients are behind on their vaccines. They can also help you facilitate solutions on how to bring these patients in and get or keep immunization rates up.

**8** Maintain strong doctor-patient relationships to help with challenging immunization conversations. It is extremely gratifying when parents who initially questioned immunization agree to get their child vaccinated on time. It's always nice to hear: "Okay, that makes sense and I trust you!"

**9** Learn how to answer some of parents' most common questions about HPV vaccine. Be prepared to answer parents' questions succinctly, accurately, and empathetically by using terms that they understand. A parent will often accept your explanations if presented with their child's best interests in mind.

**10** Use personal examples of how you choose to vaccinate children in your family. Providing personal examples shows you believe in the importance of immunizations, especially HPV vaccine. These examples—combined with an effective recommendation—can help parents better understand the benefits of HPV vaccination for cancer prevention.

For more info visit: [www.cdc.gov/hpv](http://www.cdc.gov/hpv) Last updated MAY 2018  
Adapted with Permission from: Khabib, S. (2015) The 10 Immunization Success Factors: Practical Strategies for Providers. Unpublished manuscript.

## Human Papillomavirus (HPV)

HPV Home

For Parents & Public +

**For Clinicians** -

Why is HPV Vaccine Important

Clinician Factsheets

Schedules & Recommendations

Answering Parents Questions

HPV Coverage Data +

Materials & Resources +

Speaking to Colleagues

HPV Vaccine Champions Award +

How I Recommend Videos

For Partners & Programs +

### Related Links

[Immunization Partners](#)

[Sexually Transmitted Diseases](#)

[HPV-Associated Cancers](#)

[Gynecologic Cancers](#)

[CDC](#) > [HPV Home](#)

For Clinicians



### WHY IS HPV VACCINE IMPORTANT?

HPV is so common that almost everyone will be infected with HPV at some point in their lives. Although most HPV infections are asymptomatic, some persistent infections can lead to cancer in both men and women. Hear stories of people who have been affected by HPV and clinicians who take care of them here.

### CLINICIAN FACTSHEETS AND GUIDANCE

Discover CDC's resources for clinicians that discuss the burden of HPV disease, HPV vaccine as a primary cancer prevention tool, effective communication with parents, state vaccination rates, and the most recent HPV vaccine recommendations.

### SCHEDULES AND RECOMMENDATIONS

Get vaccination schedules to order or print, recommendations to consult, and other helpful tools to download.

### ANSWERING THE QUESTIONS PARENTS MAY HAVE

Finding ways to answer parents HPV vaccination questions with straightforward messages based on CDC research with parents.

# Keeping All Staff On the Same Page

## ➔ Align communication with mission

- Give staff a cancer-prevention mission
- All staff need to be saying the same thing
- Share talking points
- Use the Tip Sheet
- Educate staff about HPV vaccine recommendations including schedule, administration, storage and handling

**Talking to Parents about HPV Vaccine**  **HPV VACCINE IS CANCER PREVENTION**

Recommend HPV vaccination in the **same way** and on the **same day** as all adolescent vaccines. You can say, "Now that your son is 11, he is due for vaccinations today to help protect him from meningitis, HPV cancers, and whooping cough. Do you have any questions?" Remind parents of the follow-up shots their child will need and ask them to make appointments before they leave.

<b>Why does my child need HPV vaccine?</b>	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.	<b>What diseases are caused by HPV?</b>
<b>How do you know the vaccine works?</b>	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.	<b>Is my child really at risk for HPV?</b>
<b>Why do they need HPV vaccine at such a young age?</b>	Like all vaccines, we want to give HPV vaccine earlier rather than later. Getting the vaccine now protects your child long before they are ever exposed. If you wait until your child is older, he/she may end up needing three shots instead of two.	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.	<b>I'm worried my child will think that getting this vaccine makes it OK to have sex.</b>
<b>Why do boys need the HPV vaccine?</b>	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.	<b>I'm worried about the safety of HPV vaccine. Do you think it's safe?</b>
<b>Are all of these vaccines actually required?</b>	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.	<b>Can HPV vaccine cause infertility in my child?</b>
<b>Would you get HPV vaccine for your kids?</b>	Yes, I gave HPV vaccine to my child (or grandchild, etc.) when he was 11, because I wanted to help protect him from cancer in the future.		

CC05H433  
Last updated MAY 2018

# Keeping All Staff On the Same Page

➔ Multiple education products available free through the CDC website:

- Immunization courses (webcasts and online self-study)
- Netconferences
- You Call the Shots self-study modules
- Continuing education available

Immunization Education & Training

Education and Training Home

You Call The Shots

Current Issues in Immunization NetConferences (CIINC)

Immunization Courses

Continuing Education

Pink Book Webinars

Patient Education

Quality Improvement Projects

Related Link

- Vaccines & Immunizations
- VIS
- ACIP Recommendations
- Schedules

Expert Commentary

Running Time: 5:07 mins

Date Released: 06/27/2011

[CDC Commentary - Make No Mistake: Vaccine Administration, Storage, and Handling 101](#)

Dr. Andrew Kruger offers 7 steps to help prevent vaccine administration errors and vaccine storage and handling errors.

**YOU CALL THE SHOTS**  
Series of modules that explain the latest recommendations for vaccine use that include self-test practice questions

**CURRENT ISSUES IN IMMUNIZATION NETCONFERENCE (CIINC)**  
Live, 1 hour presentations via conference call including question and answer session

**IMMUNIZATION COURSES**  
Webcasts, and self study education and training programs for healthcare personnel

**PATIENT EDUCATION**  
Educational materials that complement personal education and advice for patients

# Ensure ALL Your Patients are Protected

- Know your coverage rates– CDC's AFIX can help
- Clinic-level rates are great, but rates for individual clinicians are even better
- Other than coverage assessment and feedback (including AFIX), rates can come from:
  - Data from EHR
  - Immunization Information Systems (IIS) inputs





**HPV VACCINE IS  
CANCER PREVENTION**  
*And YOU are the key!*

**#WeCanStopHPV**

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