1. Can I share these slides and presentation with other providers? Will this be on AAP’s website? How do I get CME?
   - Yes! Please share. The webinar recording will be posted to AAP’s [HPV Champion Toolkit](https://www.aap.org/cpsec/program/1132.htm) soon with enduring CME/CNE/MOC part 2. For the live webinar, see [slides 70 & 71](https://www.aap.org/cpsec/program/1132.htm) to claim CME.

2. Does prior exposure to HPV build antibodies and lessen the chance of reinfection?
   - Prior infection with an HPV strain does NOT lessen the chance of “reinfection” with a different HPV strain.
   - If a person is infected with an HPV strain that does not clear (i.e., the person remains infected) the question loses its meaning. The person cannot be re-infected because they are continuously infected.
   - If a person is infected with an HPV strain that clears some but not all persons will have a lower chance of reinfection with the same strain. Data suggest that females are more likely than males to develop immunity after clearance of natural infection.
   - References:

3. Can you give two vaccinations at the same visit?
   - The HPV vaccine can be given at the same time as any other vaccine (Tdap, meningococcal, flu).
   - Both doses of HPV vaccine cannot be given at the same time. For those younger than 15, the second dose should be given 6-12 months after the first. For those older than age 15, the CDC recommends three doses, the second given 1-2 months after the first, and the third after six months after the first (0, 1-2, 6 months)

4. Is oropharyngeal cancer the most rapidly increasing cancer or the most rapidly increasing cancer caused by HPV?
   - Oropharyngeal cancer is the most rapidly increasing cancer caused by HPV. It may also be one of the most rapidly increasing cancers as many types of cancer are decreasing in incidence.

5. Do the studies quoted about oropharyngeal cancer control for second hand smoke exposure and oral cancers?
   - Yes. The number of smokers and individuals with second hand smoke exposure has decreased, while the numbers of oropharyngeal cancers overall, and HPV-related ones in particular, has risen.
6. Is parent consent needed for the HPV vaccination? If a child is being seen at a school-based health center without a parent present, could they opt in themselves? Is it okay to talk to teens without their parents about the HPV vaccine and recommend it?
   - To provide the HPV vaccination to adolescents without their guardian depends on state law/regulation. Vaccinations for minors generally require parental consent, though may not if the child is an emancipated minor. In some states, if the vaccine is considered part of reproductive healthcare, that may also allow teens to consent for themselves (for example, NY state). Check the regulations where you are.

7. If a patient has already had cervical cancer (endocervical adenocarcinoma) can they receive the HPV vaccine? Would it be of any benefit at this point?
   - We do not have any data on whether vaccination after cancer can be helpful. It may not benefit, but also unlikely to cause harm. There are some data indicating that vaccination after treatment for pre-cancer can slightly reduce the risk of recurrence.

8. How has Australia been so successful in HPV immunizations?
   - Australia has a remarkable program for vaccinating children where they are: in school. Rather than focusing on getting pre-adolescents to healthcare, the healthcare is brought to pre-adolescents.

9. How do I “sell” this vaccine?
   - HPV vaccine prevents cancers! And it works better the earlier we give it.

10. For parents who desire data: If you could choose one study that best presents the evidence for the effectiveness of HPV vaccination, for boys and girls, what would that study be?
    - Most studies look at male and female outcomes separately so here are three resources.
      i. The CDC created a great one page handout on HPV vaccine safety and effectiveness.
11. For the slide on “Early Data Vaccine Protects Against Invasive HPV-associated Cancers”, that is based on those who completed the HPV vaccination, correct?

- Yes. The vast majority of girls in the clinical trials completed the series, so those data likely reflect completed vaccinations. However, subsequent data from an RCT in India have indicated that 2 doses of Gardasil are as effective as 3, and even 1 dose may work (though data are insufficient to be sure at this time).

- References:

12. For the slide on vaccine effectiveness among mid-adults, was "prior infection" defined as one of the 9 covered subtypes or any strain?

- One of the 9 covered subtypes only.

13. What does GRASP stand for again?

- Grow a pro-immunization culture within your practice
- Routines & Roles should be specific- who does what by when?
- Agreed-upon vaccine policies
- Standing orders for vaccination at all visits
- Provider Prompts for vaccination

14. Do you feel that it is important to include and interdisciplinary approach (dentists & dental hygienists screening for cancers) to vaccination promotion?

- Yes! I (Dr. Humiston) did a talk at a national dentistry convention because I want dentists to explain that they are looking for cancers caused by HPV, which are preventable. Oral surgeons and OB-GYNs are also speaking about the importance of the vaccine. A truly an interdisciplinary approach to vaccination promotion is necessary to prevent cancer.

15. If we want to normalize this vaccine for all youth, wouldn't it make more sense to discuss it using the same terms and metrics. Hep B is sexually transmitted, but it is not discussed or measured in terms of gender. As soon as you insert gender into the conversation, you bring in all the taboos and norms around gender that go with it which are deep and entrenched. If we want to promote and normalize this as a vaccine for everyone, shouldn't we start tooling conversations and education accordingly? It seems to me that the males vs females context works against this aim.
Agreed! Providers saying, “Today you are due for three vaccines...” is a lot better than bringing up sex/gender which is unnecessary. The focus should be on cancer prevention for all.

16. I understand these tactics for speaking to hesitant parents/guardians, but studies show that it's provider hesitancy that influences HPV vaccination rates the most. Providers believe that parents will be hesitant, and don't want to have that conversation, when studies show that most parents are in support of the vaccine. Doesn't this conversation just play to that fear? Shouldn't we be quelling those fears?

Agreed! Provider hesitancy is also a problem, that’s why we recommend all providers start with the strong same way/same day recommendation "Today your child is due for Tdap, HPV and meningitis vaccines. We will give them at the end of the visit". Most of the time there is no need for further discussion. But if a parent then has questions or concerns, these motivational interviewing techniques can help providers navigate conversations with hesitant parents.