Proposed HPV vaccination recommendations

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Proposed recommendations

- **Plan to publish in MMWR Policy Note format**
- **Specific sections addressed today**
  - Routine recommendations
  - Administration/intervals
  - Interchangeability
  - Vaccine in pregnancy registry
  - Future policy issues

Routine recommendations and age groups Considerations

- **Work Group proposes the same age groups as in current recommendations**
  - 9vHPV use in males older than age 15 yrs would be off-label at present
  - Immunogenicity data in males 16-26 yrs presented to ACIP and submitted to FDA
  - Compared with 4vHPV, 9vHPV would provide little additional benefit for males
  - Programmatic issues considered for male recommendations
    - Stocking
    - Transition from 4vHPV to 9vHPV

Draft wording:
Routine recommendations and age groups

"ACIP recommends routine HPV vaccination at age 11 or 12 years. The vaccination series can be started beginning at age 9 years. Vaccination is also recommended for females aged 13 through 26 years and for males aged 13 through 21 years who have not been vaccinated previously or who have not completed the 3-dose series. Males aged 22 through 26 years may be vaccinated.* Vaccination of females is recommended with 2vHPV, 4vHPV (as long as this formulation is available), or 9vHPV. Vaccination of males is recommended with 4vHPV (as long as this formulation is available) or 9vHPV."

*Recommendation for men who have sex with men and for immunocompromised persons (including those with HIV infection) are also included in "Special Populations":

"Vaccination is also recommended for men who have sex with men or for immunocompromised persons (including those with HIV infection) aged 22 through 26 years, if not vaccinated previously."

Draft wording (con't)

"2vHPV, 4vHPV and 9vHPV all protect against HPV 16 and 18, types that cause about 66% of cervical cancers and the majority of other HPV-attributable cancers in the United States. 9vHPV targets five additional cancer causing types, which account for about 15% of cervical cancers. 4vHPV and 9vHPV also protect against HPV 6 and 11, types that cause genital warts."

Administration Considerations

- Wording in current recommendations: “The second dose should be administered 1–2 months after the first dose and the third dose 6 months after the first dose.”*
- Studies of 4vHPV and 2vHPV show that longer intervals between doses do not result in lower antibody titers; some studies found higher titers after longer intervals.
- Work Group discussed the pros and cons of mentioning flexibility in schedules
  - Some felt this was important to mention
  - Others were concerned about possible confusion for providers

*Human Papillomavirus Vaccination; MMWR 2014;63 (RR-5)

Draft wording: Administration

2vHPV, 4vHPV and 9vHPV are each administered in a 3-dose schedule. The second dose ~~should be~~ is administered at least 1 to 2 months after the first dose, and the third dose at least 6 months after the first dose. If the vaccine schedule is interrupted~~, for either HPV4 or HPV2,~~ the vaccination series does not need to be restarted.

Interchangeability Considerations

- No study of interchangeability of the HPV vaccines
- Some data on 9vHPV after 3 doses of 4vHPV from Protocol 006
- Work Group considered programmatic issues related to transition to 9vHPV

Draft wording: Interchangeability

~~ACIP recommends that the HPV vaccination series for females be completed with the same HPV vaccine product, whenever possible. However,~~ If vaccination providers do not know or do not have available the HPV vaccine product previously administered, or are in settings transitioning to 9vHPV, for protection against HPV 16 and 18 ~~either~~ any HPV vaccine product may be used to continue or complete the series for females; ~~to provide protection against HPV 16 and HPV 18. Only HPV4 is licensed for use in males~~ 4vHPV or 9vHPV may be used to continue or complete the series for males.

Vaccination during pregnancy

- No change in recommendations
- Information on vaccine in pregnancy registries updated

"Patients and health care providers can report an exposure to HPV vaccine during pregnancy to Vaccine Adverse Event Reporting System (VAERS). A new registry has been established for 9vHPV. Pregnancy registries for 4vHPV and 2vHPV have been closed with concurrence from FDA. Exposure during pregnancy should be reported to the respective manufacturer."

4vHPV registry closed in 2013

2vHPV registry closed in 2015 http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm434787.htm

Future Policy Issues Considerations

- What should be included in a “Future Policy Issues” section in the Policy Note?
  - Ongoing trial of 2-dose schedules with 9vHPV
- Some Work Group members were concerned about possible confusion for providers
  - Concern about delay in vaccination

Draft wording: Future Policy Issues

"A clinical trial is ongoing to assess alternate dosing schedules of 9vHPV. ACIP will formally review the results as data become available. HPV vaccination should not be delayed pending availability of 9vHPV or of future clinical trial data."

9vHPV vaccination for persons who completed a HPV vaccination series: considerations

- The manufacturer did not seek an indication for 9vHPV vaccination in persons who previously received HPV vaccine
- One study evaluated 9vHPV in prior 4vHPV vaccinees (Protocol 006)
  - >98% of prior 4vHPV recipients became seropositive to all 5 types after 3 doses of 9vHPV
  - 9vHPV vaccine had an acceptable safety profile in prior 4vHPV recipients; most injection-site reactions, mild or moderate intensity
  - In a cross study comparision, GMTs to 5 additional types were lower; 25%–63% of the GMTs in females who received 9vHPV without prior 4vHPV vaccination in other 9vHPV studies; clinical significance of lower titers unknown
- Due to time limitations, this will be presented to ACIP at next meeting

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Discussion and Vote

- Routine recommendations and age groups
- Administration/intervals wording
- Interchangeability
- Future policy issues