ACIP HPV Vaccines Work Group

Next steps

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Questions being considered by ACIP HPV Vaccines WG

- **Wording of the recommendation for age at routine HPV vaccination**
- **Number of doses in the recommended HPV vaccination series**

ACIP HPV Vaccines WG, past and next steps

Wording of the age for routine HPV vaccination

October 2024 ACIP meeting

- Introduction and historical context
- Review of data regarding programmatic aspects of vaccination at age 9–10 instead of 11–12 years – no strong evidence of benefit
- Plan: modify wording of the routine age recommendation to 9–12 years.

April 2025 ACIP meeting

- EtR framework for changing wording to state that routine vaccination is recommended at age 9–12 years (part 1)

June 2025 ACIP meeting

- EtR framework for changing wording to state that routine vaccination is recommended at 9–12 years (part 2)

ACIP HPV Vaccines WG, past and next steps

Number of doses in the recommended HPV vaccination series

October 2024 ACIP meeting

- Introduction
- Review of main studies providing evidence for reducing the number of doses
- Status of global adoption of HPV vaccination

April 2025 ACIP meeting

- Updated review of data, KEN-SHE, U.S. HPV vaccination coverage, modeling

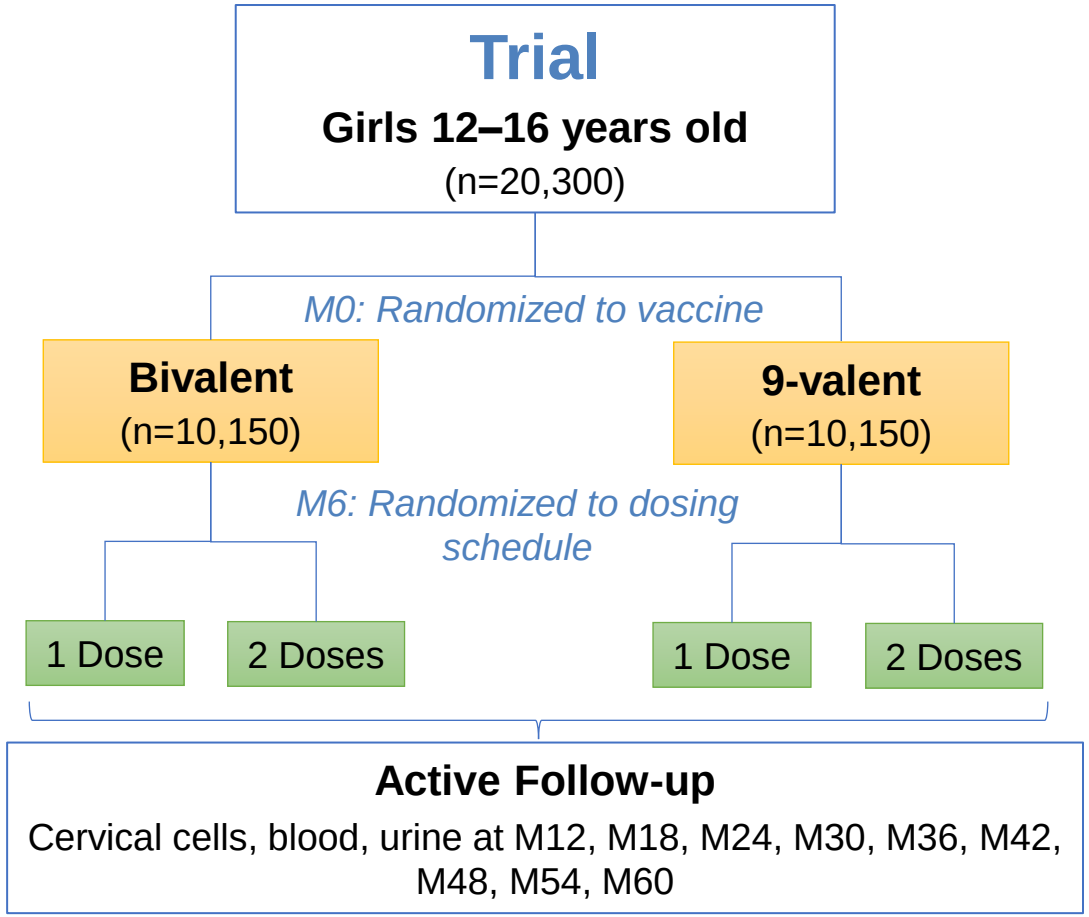
June 2025 ACIP meeting

- Data from ESCUDDO
- Additional data and information requested by ACIP
- EtR framework

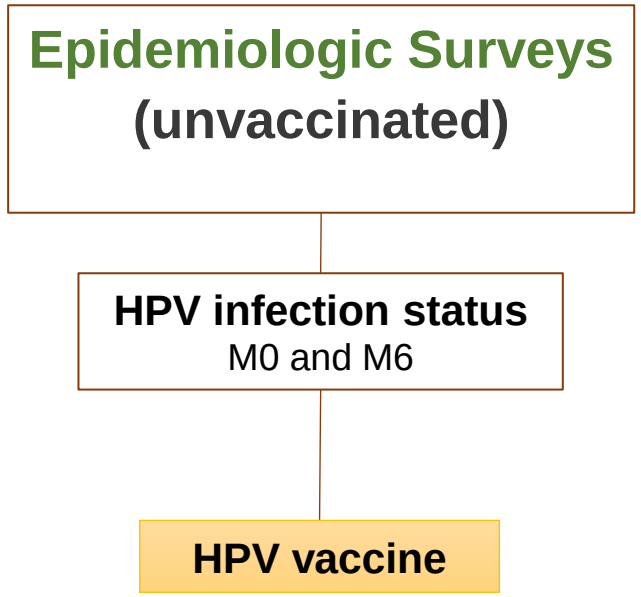
Plan for ACIP votes on both questions at the same meeting (June 2025)

ESCUDDO, Costa Rica (data available June 2025)

- **Randomized trial to evaluate non-inferiority of one vs two doses of 2vHPV (Cervarix) and 9vHPV (Gardasil 9) for prevention of new cervical HPV16/18 infections that persist at least 6 months**



- **Evaluate one dose compared to zero doses**



proyecto escuddo

ClinicalTrials.gov: NCT03180034

Outstanding questions for number of doses

- **Longer term duration of efficacy and immunogenicity of 1 dose**
  - Longest efficacy data = IARC-India (15 years)
  - Longest immunogenicity data = Costa Rica Vaccine Trial (16 years)
- **Protection at sites other than the cervix**
  - No data on protection at sites other than the cervix
- **Efficacy and immunogenicity of 1 dose in males**
  - No efficacy data in males
  - Some evidence of lower antibody levels in adolescent males versus females after 1 dose

Merck clinical program updates

- **Merck announced plans for 1-dose HPV vaccination evaluation in March 2024***
- **Two international, randomized, double-blind, efficacy clinical trials are planned, one in males (16–26 y) and one in females (16–26 y)**
- **Planned trials include elements that regulators have deemed necessary**
  - Evaluate other endpoints besides persistent cervical infection
  - Conduct one study in males and one study in females
  - Compare 1-dose efficacy vs. 3-dose efficacy
  - Assess duration of protection
- **Since 2024 to present - Merck has been in discussions with FDA and EMA regarding trial design**
  - Regulatory feedback anticipated in 2Q2025

EMA, European Medicines Agency

*Merck Announces Plans to Conduct Clinical Trials of a Novel Investigational Multi-Valent Human Papillomavirus (HPV) Vaccine and Single-Dose Regimen for GARDASIL®9

Number of doses in the recommended HPV vaccination series

- **An ACIP recommendation for 1-dose vaccination at any age or 2-dose vaccination for persons aged ≥15 years would be off-label**
- **Off-label recommendations**
  - Anything that is not stated in the package insert
  - Something different than is explicitly stated in the package insert
  - Manufacturers can only promote and educate on licensed FDA indications
- **At least 46 licensed vaccine products have some off-label ACIP recommendation**

Off-label ACIP recommendations - examples

- **Age outside of licensed age range**
  - Hemopoietic stem cell transplant patients & other special groups (several)
  - Travelers or special situations (e.g., MMR and hepatitis A vaccine)
  - Catch-up or shared clinical decision-making (e.g., Tdap and MenABCWY)
- **Modified dosing schedules**
  - Immunocompromising conditions (hepatitis B vaccine)
  - Standard recommendation is 2-dose instead of 3-dose schedule (rabies vaccine pre-exposure)
- **Inactivated influenza vaccine use with egg allergy**
- **Tdap use in pregnancy**
  - No longer off-label but was for over 10 years

Options being discussed by the ACIP HPV Vaccines WG for modification to the current recommendations

2 doses

Expanding a **2-dose** recommendation from 9–14 years to 9–26 years, or through an older age

1 dose

Recommending **1 dose** for 9–14 years, 9–20 years or through another age

Note: No discussion about changing the 3-dose recommendation for persons with immunocompromising conditions

Possible revised recommendations – expansion of 2-dose recommendation

- **2 doses for 9–26 years; 3 doses for 27–45 years, or**
- **2 doses for 9–45 years**

Note: No discussion about changing the 3-dose recommendation for persons with immunocompromising conditions

Possible revised recommendations – including 1-dose

- 1 dose for 9–14 years; 3 doses for 15–45 years
- 1 dose for 9–14 years; 2 doses for 15–45 years
- 1 dose for 9–14 years; 2 doses for 15–26 years; 3 doses for 27–45 years

- 1 dose for 9–20 years; 3 doses for 21–45 years
- 1 dose for 9–20 years; 2 doses for 21–45 years
- 1 dose for 9–20 years; 2 doses for 21–26 years; 3 doses for 27–45 years

- 1 dose for 9–26 years; 3 doses for 27–45 years
- 1 dose for 9–26 years; 2 doses for 27–45 years

Note: No discussion about changing the 3-dose recommendation for persons with immunocompromising conditions

Discussion by Work Group members

- All Work Group members are in favor of some change to the number of doses in the HPV vaccination schedule
- Work Group members have different opinions about expanding the 2-dose schedule and/or recommending 1 dose in some age groups
- Work Group continues to review data and discuss the upper age range if there is a 1-dose recommendation and/or if the 2-dose schedule is expanded beyond age 9–14 years

Questions for ACIP

Does ACIP have any questions or comments regarding the policy questions to be addressed?

What additional information would ACIP like to see before potentially voting at the next meeting?

Thank you

For more information, contact CDC
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TTY: 1-888-232-6348 www.cdc.gov