

Introduction to the HPV Vaccines Work Group

Oliver Brooks, MD

Chair, HPV Vaccines Work Group

Advisory Committee on Immunization Practices

April 15, 2025

HPV vaccine is a critical public health tool

- HPV can cause cancer of the cervix, vagina, vulva, penis, anus, and oropharynx
- HPV vaccination provides lasting protection against the HPV types that most commonly cause cancer
- In the 19 years since HPV vaccine licensure, we have seen:
 - High vaccine efficacy in clinical trials
 - High population impact in real-world settings
 - Strong herd effects of vaccination programs

**[HPV VACCINE IS
CANCER PREVENTION.]**

Background

- **An ACIP HPV Vaccines Work Group met previously for many years, but had been inactive since 2019**
- **Re-formed ACIP HPV Vaccines Work Group was announced during June 2024 ACIP meeting and began meeting monthly in July 2024**
- **First presentation by new Work Group during October 2024 ACIP meeting**

Current HPV vaccination recommendations, United States

- **Routine vaccination**
 - Age 11 or 12 years
 - Can be started at age 9 years
- **Catch-up vaccination**
 - Through age 26 years
- **Shared clinical decision-making**
 - Age 27–45 years

Number of doses

2 doses (0, 6-12 months)
if starting series before 15th birthday

3 doses (0,1-2, 6 months)
if starting series on or after 15th birthday or if
immunocompromising condition

Work Group Terms of Reference

- **Wording of the age for routine HPV vaccination**
 - Some stakeholders interested in starting vaccination at age 9 years
 - Current ACIP recommendations are consistent with vaccination at age 9 years
 - Work Group is considering modification of wording to “*HPV vaccination is routinely recommended at age 9 to 12 years*” to allow more flexibility

Work Group Terms of Reference

- **Number of doses in the recommended HPV vaccination series**
 - Accumulating evidence on efficacy of HPV vaccination with fewer doses
 - Work Group is reviewing data to inform policy for:
 - two doses for persons aged 15 years and older
 - one dose for persons aged 9 years and older

Global HPV vaccine policy recommendations

- **2022: WHO recommended a 2-dose schedule for ages 9 and older, with an option for a 1-dose schedule in girls and boys aged 9–20 years**
- **Some of the first countries to change to a routine 1-dose recommendation**
 - UK and Australia
- **Some countries did not change to a 1-dose schedule, but changed from a 3-dose to a 2-dose schedule for persons ages >14 years**
 - e.g., Netherlands and Sweden
- **1-dose recommendations have been made by regional advisory groups**
 - PAHO in 2023 and AFRO in 2024
- **As of April 2025: in some age groups, 67 countries have adopted 1-dose and 77 countries have adopted 2-dose HPV vaccination schedules**

Summary of October 2024 presentation

- **Introduction to reduced number of HPV vaccine doses**
 - Summary of evidence on 1-dose HPV vaccination
- **Introduction to wording of age for routine HPV vaccination**
 - Interest in vaccination at age 9 years
- **Systematic review and narrative summary of literature about HPV vaccination at ages 9–10 years to increase coverage**

Today's agenda

**Reduced number of doses for HPV vaccination:
Work Group progress and literature update**

Dr. Carla DeSisto
CDC/NCIRD

KEN SHE trial

Dr. Ruanne Barnabas
Harvard University

HPV vaccination coverage

Ms. Cassandra Pingali
CDC/NCIRD

**Modeling of reduced number of doses for HPV
vaccination**

Dr. Jane Kim
Harvard University

**Modified EtR: Wording of the age for routine HPV
vaccination**

Dr. Ruth Stefanos
CDC/NCIRD

Next steps and Work Group considerations

Dr. Lauri Markowitz
CDC/NCIRD

ACIP HPV Vaccines Work Group

ACIP voting members

Oliver Brooks (chair)
Noel Brewer
Sybil Cineas
Robert Schechter

CDC Co-Leads

Carla DeSisto
Lauri Markowitz

Liaison members

Robin O'Meara (AAFP)
Angela Myers (AAP)
Linda Eckert (ACOG)
Alfonso Iorio (ACP)
Jamilia Sherls (AIM)
Sandra Fryhofer (AMA)
Sean O'Leary (IDSA)
Nicole Forbes (NACI)
Kevin Ault (NFID)
Alexandra Yonts (PIDS)
Nneka Holder (SAHM)

Ex-Officio members

Sixun Yang (FDA)
Aimée R. Kreimer (NIH)
Eleanore Chuang (NIH)

Consultant members

Deana Baptiste (ACS)
Peter Szilagyi
Rachel Winer
Elizabeth Moore (consumer rep)

ACIP HPV Vaccines Work Group - CDC Staff

Julia Gargano (DVD)

Ruth Stefanos (DVD)

Virginia Senkomago (DCPC)

Patrick Clay (DSTDP)

Harrell Chesson (DSTDP)

Shannon Stokley (ISD)

Cassandra Pingali (ISD)

Elizabeth R. Unger (DHCPP)

Gitika Panicker (DHCPP)

Christine Olson (ISO)

Julianne Gee (ISO)

Hannah Rosenblum (ACIP Secretariat)