

# Update from the ACIP Pertussis Vaccines Work Group

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Chair, ACIP Pertussis Vaccine Work Group

Advisory Committee for Immunization Practices

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# Work Group Members

(formation in April 2009)

## ACIP Members

Art Reingold, Chair

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Ruth Karron

## *Ex Officio* Members

Xin-Xing Gu (NIAID)

Ann Schwartz (FDA)

## Liaison Representatives

Richard Beigi (ACOG)

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Christine Hahn (CSTE)

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Mark Sawyer (PIDS)

## Invited Consultants

William Atkinson

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Paul Offit

Carol Baker

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Marietta Vázquez

Lance Chilton

Peter McIntyre (Australia)

## CDC Lead

Jennifer Liang

# Terms of Reference

- **Review existing statements on infants and young children (1997), adolescents (2006), adults (2006), and pregnant and postpartum women and their infants (2008) and consolidate into a single statement.**
- **Review new data on Tdap, including**
  - **Impact of ACIP recommendations**
  - **Interval between Td booster and Tdap**
  - **Use of Tdap in adults aged 65 yrs and older**
  - **Pregnant and breastfeeding women**
    - **Use of Tdap**
    - **Cocooning strategies**
  - **Vaccinated healthcare personnel and need for postexposure prophylaxis**
  - **Tdap revaccination**
    - **General population**
    - **Pregnant women**
    - **Healthcare personnel**
    - **“Cocooning”**
- **Review updated epidemiology of tetanus and diphtheria in the U.S.**

## **ACIP Tdap Recommendation for Pregnant Women**

- **Health-care personnel should administer a dose of Tdap during each pregnancy, irrespective of the patient's prior history of receiving Tdap**

### **Guidance for Use**

- **To maximize the maternal antibody response and passive antibody transfer to the infant, optimal timing for Tdap administration is between 27 and 36 weeks gestation**

# New Data on Timing of Maternal Tdap Vaccination

- **Three recently published studies with relevant data**
  1. Equal or higher antibody concentrations among infants whose mothers were vaccinated in 2<sup>nd</sup> trimester compared to those whose mothers vaccinated in 3<sup>rd</sup> trimester<sup>\*</sup>
  2. Higher pertussis toxin (PT) antibody levels in mothers vaccinated 28-32 wks compared to those vaccinated 33-36 wks<sup>¶</sup>
  3. No differences in titers of neonatal antibodies between mothers vaccinated in late 2<sup>nd</sup> trimester and during 3<sup>rd</sup> trimester<sup>‡</sup>
- **United Kingdom's Joint Committee on Vaccination and Immunization updated their maternal Tdap vaccination recommendation for women to receive the vaccine as early as 16 wks gestation; however, advising after the mid-pregnancy ultrasound (between 18 – 21 wk) [February 2016]**

# ACIP Pertussis Vaccines WG

## Next steps

- **Review new data related to Tdap in pregnancy**
  - Timing of vaccination during pregnancy
  - Tdap effectiveness of preventing pertussis in infants
  - Safety
  - Programmatic considerations
- **Review current guidance on Tdap vaccination of pregnant women**
- **October ACIP**
  - Timing of maternal Tdap vaccination
    - Summary of data, WG discussion and conclusions
  - Consolidated ACIP statement (*draft*)
    - Prevention of Pertussis, Tetanus and Diphtheria with Vaccines in the United States -- Recommendations of the Advisory Committee on Immunization Practices (ACIP)