Pertussis Vaccines Work Group

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ACIP Pertussis Vaccine Work Group
Advisory Committee for Immunization Practices
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# ACIP Pertussis Work Group Members

**(July 2016)**

## ACIP Members
- Art Reingold, Chair
- Laura Riley

## Ex Officio Members
- Xin-Xing Gu (NIAID)
- Ann Schwartz (FDA)

## Liaison Representatives
- Richard Beigi (ACOG)
- Carol Hayes (ACNM)
- Mark Sawyer* (PIDS)
- Peter McIntyre (Australia)
- Jennifer Liang
- Laura Riley
- Jennifer Liang
- Laura Riley

## Invited Consultants
- William Atkinson
- Carol Baker¶
- Kathleen Harriman¶
- Ruth Karron¶
- Marietta Vázquez¶
- Lance Chilton¶
- Mary Healy
- Peter McIntyre (Australia)
- Paul Offit

## CDC Lead
- Jennifer Liang

*Former ACIP WG Chair 2009--2013
¶ Former ACIP member during deliberations
Terms of Reference

- Review existing statements on infants and young children (1997), adolescent (2006), adults (2006), and pregnant and postpartum women and their infants (2008) and consolidate into a single statement.

- Review new data on Tdap including
  - Effectiveness 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 HCP and need for postexposure prophylaxis
  - Tdap revaccination
    - General population
    - Pregnant women
    - Healthcare personnel
    - “Cocooning”

- Review updated epidemiology of tetanus and diphtheria in the United States
Pertussis, tetanus and diphtheria vaccines

- **DTaP**
  - Diphtheria and tetanus toxoids and acellular pertussis
  - Pediatric vaccine

- **Tdap**
  - Tetanus toxoid, reduced diphtheria toxoid and acellular pertussis
    - Same as DTaP but reduced quantities
  - Adolescent/Adult vaccine
  - Licensed for single use only
Today’s session

1. Guidance on the use of Tdap in pregnant women

2. Updated ACIP statement for pertussis, tetanus and diphtheria (VOTE)
Preventing infant pertussis by vaccinating women with Tdap during pregnancy

2011

- ACIP recommended a single dose of Tdap for pregnant women*

2012

- ACIP expanded the recommendation to a dose of Tdap during *every* pregnancy*

*Use of Tdap in pregnant women is an off-label recommendation.
Tdap coverage among pregnant women, United States

- Michigan Medicaid
  - 14.3% (2011-2013)

- Wisconsin, insured women
  - 35.0% (2013-2014)

- Vaccine Safety Datalink sites; 7 health systems
  - 41.7% (2013)

- Internet Panel Survey of pregnant women, during flu season
  - 48.8% (2015-2016 flu season)


CDC. Internet Panel Survey. Women aged 18–49 years pregnant at any time since August of prior year (e.g. 2015 for the April 2016 survey).
Historical background of ACIP statements for pertussis, diphtheria and tetanus vaccines (1)

1991*
- First DTaP licensed by FDA and recommended by ACIP in place of DTP for 4th and 5th doses among children aged ≥15 months

1997¶
- ACIP recommended DTaP vaccines for all 5 doses in childhood vaccination schedule

2005±
- Tdap licensed by FDA and recommended by ACIP for a single dose for adolescents (aged 11–18 yrs) and adults (aged 19–64 yrs)

± CDC. MMWR 2006;55(No. RR-3) [adolescent]; CDC. MMWR 2006;55(No. RR-17) [adult]
Historical background of ACIP statements for pertussis, diphtheria and tetanus vaccines (2)

2010*
- Tdap should be administered regardless of interval since last tetanus- or diphtheria-toxoid containing vaccine
- Permissive Tdap recommendation for adults aged 65 years or older
- Catch-up schedule for children aged 7 through 10 years: receive a single dose of Tdap

2011¶
- A dose of Tdap during pregnancy for women who previously have not received Tdap

2012±, §
- Routinely recommend a dose of Tdap for adults aged 65 and older
- A dose of Tdap during every pregnancy

*CDC. MMWR 2011;60;13-5.
¶ CDC. MMWR 2011;60:1424-6.
± CDC. MMWR 2012;61;468-470.
Childhood DTaP Coverage and Tdap Coverage Among Adolescents and Adults

- 3+ Childhood DTaP
- 4+ Childhood DTaP
- Adolescent Tdap
- Adult Tdap

*CDC National Immunization Survey: DTaP among children aged 19 through 35 months, Tdap coverage among adolescents aged 13 through 17 years. Coverage among adults aged 19 through 64 years from National Health Information Survey.*
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