

Prenatal Tdap Workgroup

March 29, 2018



Immunization Branch
California Department of Public Health

Agenda

I. Special Presentation (30 min)

- Dr. Thea Papasozomenos: Stanislaus County Pertussis Outreach

II. Announcements (15 min)

- Updates to CalREDIE: Sarah New
- More flexibility in State Tdap Program: Nisha Gandhi
- Best Practice Example from Partnership HealthPlan: Rebeca Boyte
- Additions to the Prenatal Tdap Toolkit: Rebeca Boyte

III. Feedback from the workgroup: (15 min): ALL

- Do you have enough information to proceed with prenatal Tdap efforts?
- What other information would be helpful as part of these group meetings?

Stanislaus County Pertussis Outreach 2018

Thea Papasozomenos, MD, MPH

Assistant Public Health Officer

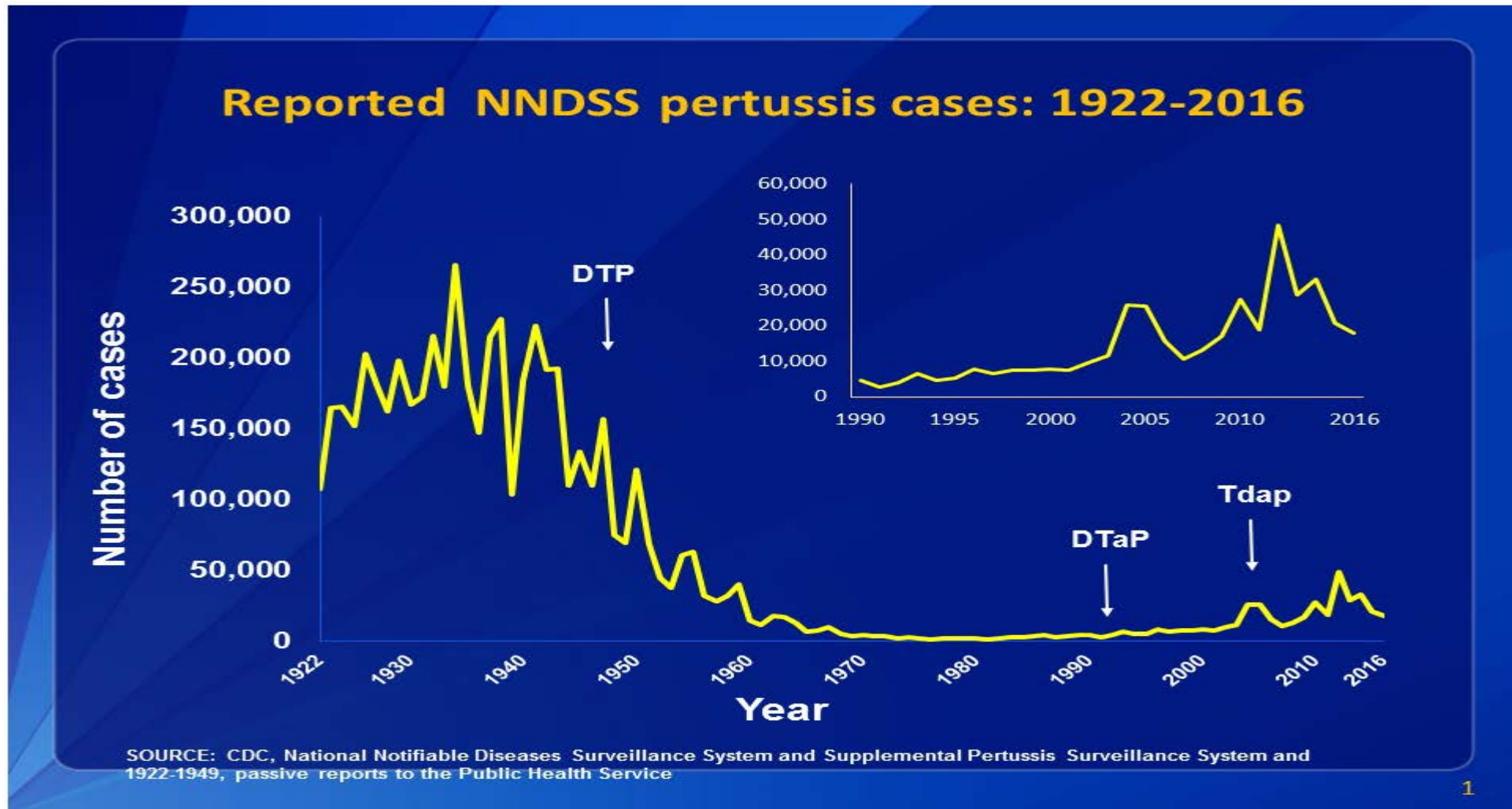
Stanislaus County Health Services Agency



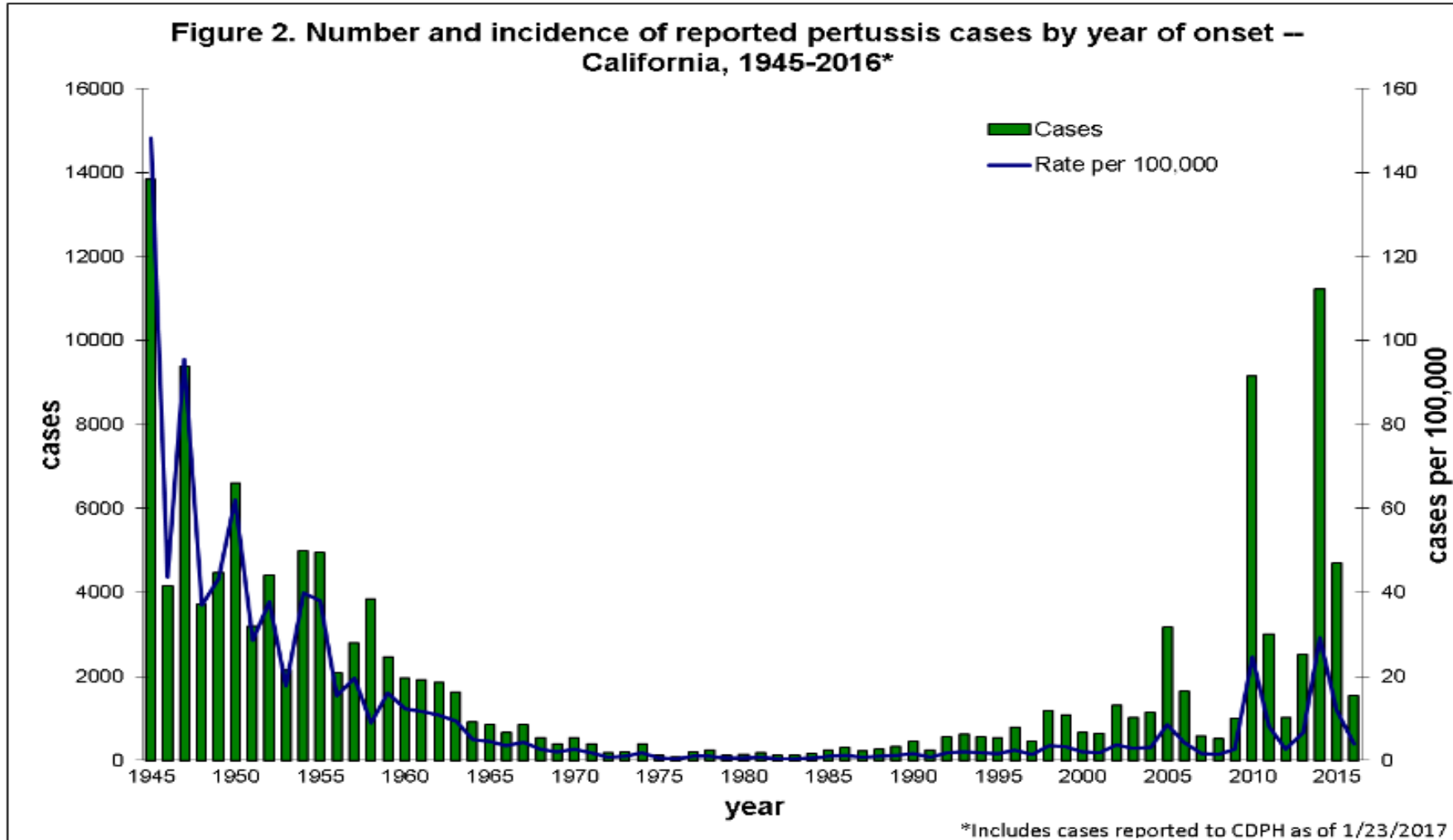
Pertussis: Infection, Vaccination, and Immunity

- Neither infection- nor vaccination-acquired immunity to pertussis are life-long
- DTwP: first combination vaccine, licensed 1948
- In the US, aP vaccine licensed for use in 1997 (1st 3 doses)
- 2005 study estimated:
 - **Infection-acquired immunity** from further infection wanes after **4-20 years**;
Protective Immunity (asymptomatic infection) wanes after **7-20 yrs**.
 - **Protective Immunity** after **whole cell (wP) vaccination** wanes after **4-12 years** of last dose
 - wP vs. aP: some studies suggest longer protective immunity from wP

Pertussis in US: Historical Data



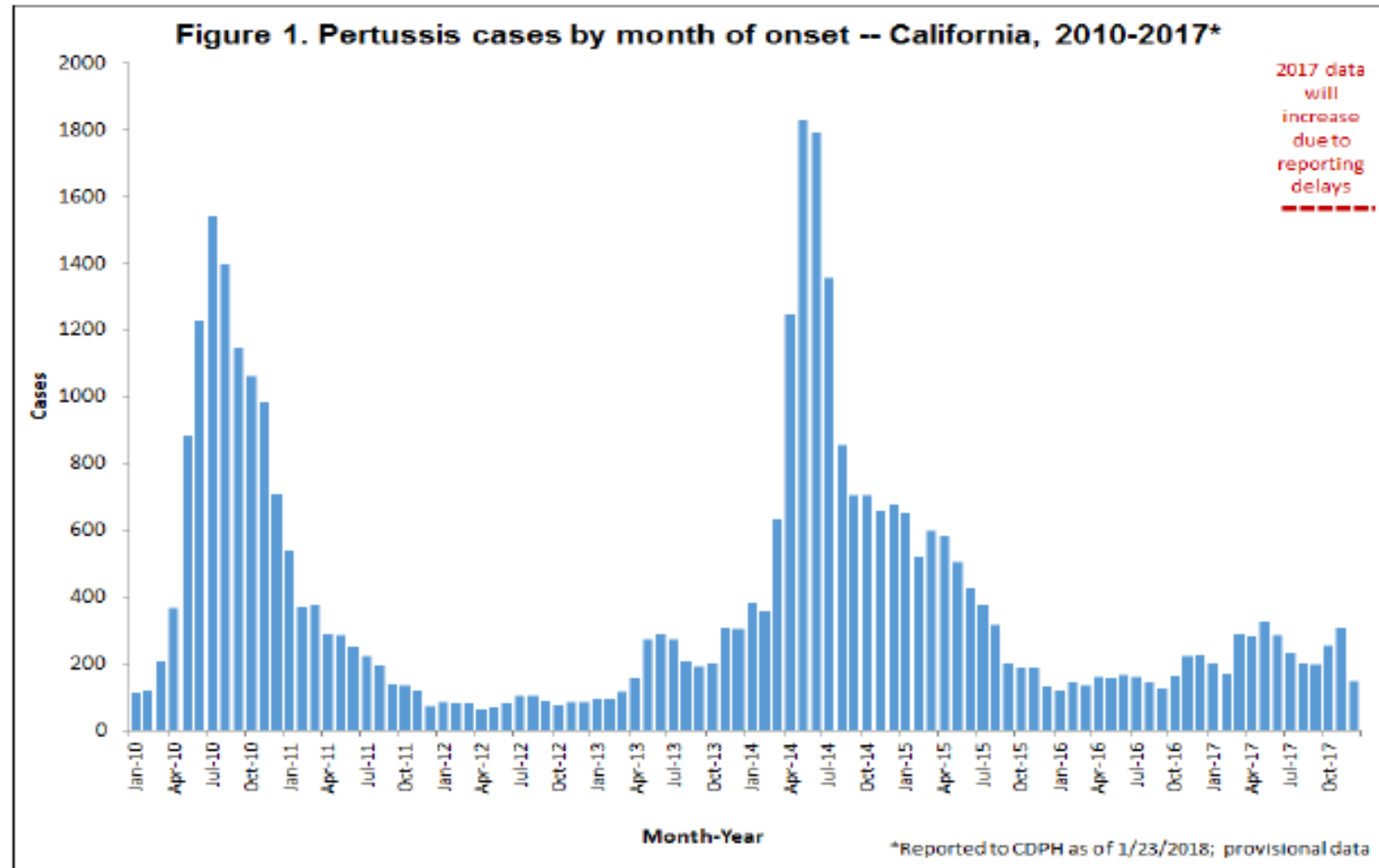
Pertussis in CA: Historical data



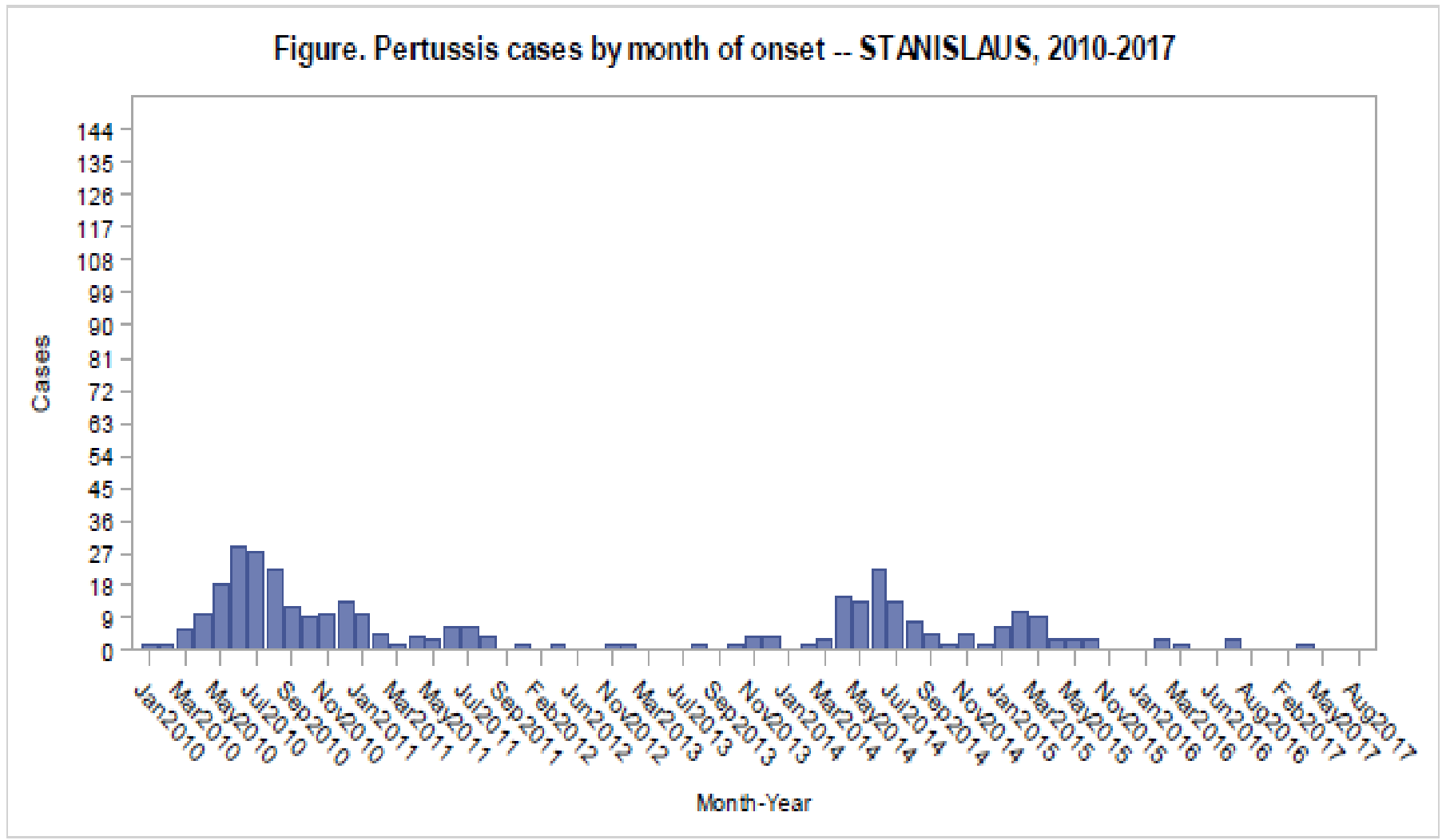
Graph prepared by CDPH, Immunization branch

California Pertussis Epidemiology

- Can occur any time in CA, but cyclical increases in disease incidence w/ epidemics occurring q 3-5 years
- Peak incidence usually in summer during epidemic year
- Last epidemic years in CA in 2010 and 2014: more than 9,000 and 11,000 respective cases reported
- 2016: low incidence year
- Next pertussis epidemic anticipated in 2018 or 2019



Graph prepared by CDPH, Immunization Branch



Graph prepared by CDPH, Immunization Branch

California Pertussis Epidemiology: Overall

All ages	2014 cases	2014 Rate*	2016 Cases	2016 Rate*	2017 Cases	2017 Rate*
CA	11,208	28.9	1938	4.9	2925	7.4
Stanis.	92	17.3	13	2.4	6	1.1

* Incident case rate per 100,000 persons



Figure 2. Pertussis incidence per 100,000 population, by county - California 2017*



*Reported to CDPH as of 1/23/2018; data still provisional.

2017 Pertussis Incidence per 100,000 by CA county, provisional data; Prepared by CDPH, Immunization Branch

Pertussis in Young Infants

- Pertussis in first 3 months of life frequently severe and often fatal
- Delay of diagnosis:
 - Illness onset often mild with no or minimal fever, chest initially clear on auscultation
 - Co-infection w/ respiratory viruses (RSV, adenoviruses) confuses diagnosis
- Leukocytosis with lymphocytosis due to Pertussis Toxin (PT)
- Infants < 3 months should be admitted to hospital; many require ICU care

Pertussis in Young Infants, cont.

- Severity of pertussis and rapidity of progression in young infants affected by factors, such as:
 - Presence of transplacentally acquired maternal antibodies
 - Infectious dose of bacteria received by infant
 - Co-infection w/ respiratory viruses
 - Genetic factors of pathogen or infant

California Pertussis Epidemiology: < 4 months age

< 4 mths	2014 #	2014 Rate*	2015 #	2015 Rate*	2016 #	2016 Rate*	2017 #	2017 Rate*
CA	534	3.17	326	1.92	118	1.0	119	1.0
Stan.	3	1.16	8	3.06	2	0.8	3	1.1

* Incident case rate per 1,000 births

< 1 year	2017 ICU	2017 Hosp.	2017 Death
Stanislaus	1	2	0

Figure 3. Pertussis incidence among infants <4 months of age per 1,000 population, by county - California 2017*



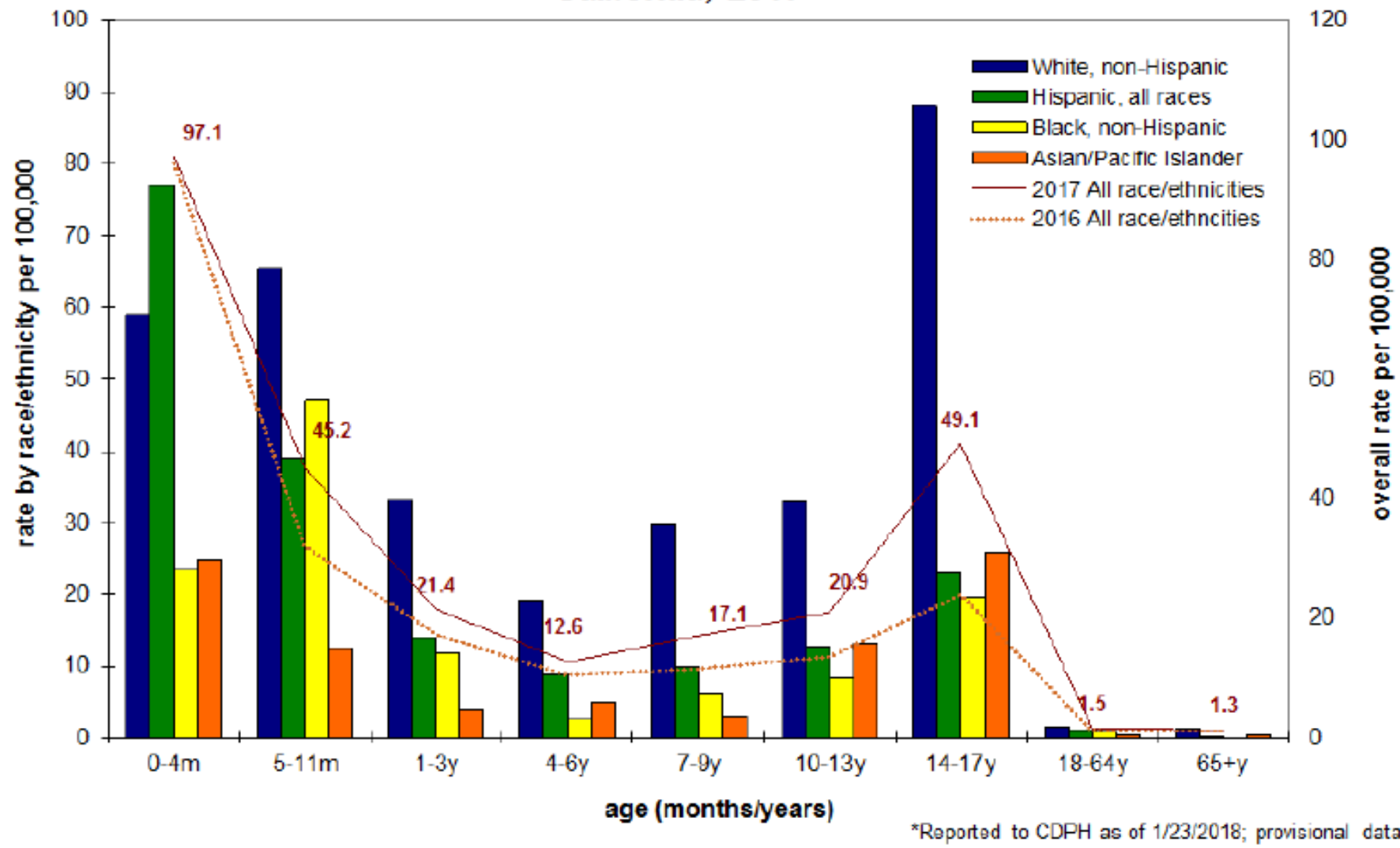
*Reported to CDPH as of 1/23/2018; data still provisional.

2017 Pertussis incidence among infants < 4 months of age per 1,000 by CA county, provisional data
Prepared by CDPH, Immunization Branch

Sources of Infant Pertussis Infection

- Numerous previous studies: unknown Source of Infection (SOI) \geq 50% infant cases; mothers most commonly cited SOI when identified
- A 2015 study: cases at Enhanced Pertussis Surveillance sites between January 1, 2006-December 31, 2013; identified SOI in 569/1306 cases:
 - More than 66% of SOIs were immediate family members
 - 35.5% siblings; 20.6% mothers; 10% fathers
 - Mothers predominated until transition to siblings beginning in 2008; median age for sibling SOI, 8

Figure 5. Year to date pertussis rates by age and race/ethnicity -- California, 2017*



Graph provided by CDPH, Immunization Branch

Pertussis: Infant prevention

- Primary prevention strategy: Prenatal Tdap for every pregnant woman in every pregnancy between 27 and 36 weeks gestation, optimally at first opportunity.
- Primary DTaP series administered to children on time, with subsequent Tdap booster according to recommended schedule
- Cocooning: everyone around baby, including household members, care-givers, healthcare workers up-to-date on pertussis vaccine

Stanislaus County HSA Pertussis Response Plan: Meeting Objectives

- Meetings on 1/10/18-3/7/18: 6 meetings total
- Prepare a public information campaign re expected increases in pertussis infections and need to vaccinate
 - Press release
- Provide education and recommendations for medical providers to prepare for possible pertussis outbreak
 - Stress importance of Tdap during pregnancy
 - Health Alert
- Organize a response to providers if a child has and/or dies from pertussis

Prenatal Tdap

- 2015 Maternal Infant Health Assessment (MIHA):
 - Overall CA (48.9%); Stanislaus County (56.8%)
 - MediCal (**36%**; 2016 LHJ enhanced surveillance, 44%) compared with Private Insurance (**65%**; 2016 LHJ enhanced surveillance, 69%)
 - Hispanic (39%); Black (46%); Asian (58%); White (62%)
- Funding of Tdap:
 - Pregnant patient should be covered by MediCal or private insurance
 - Cocooning: Per the CDC: “Tdap cocooning programs may not be funded with 317 vaccines. Vaccination of pregnant women and contacts of young infants, if part of pertussis outbreak response, may be conducted with 317 vaccine”

Prenatal Tdap

- Many OB providers do not have IZ on hand due to cost
- Look into creating a process to send pregnant patients to local pharmacies for Tdap
 - Tdap RX pad for providers to give to pregnant patients
- Called all county pharmacies to chronicle:
 - Tdap availability
 - Dispense to Pregnant patients? RX needed?
 - MediCal OK?
 - List given to nurse of the day at PH – Community Health Services and clerical staff answering phone to direct patient to appropriate pharmacy

Tdap Rx Pad for Providers:

R_x	Prescriber Name, Address, Phone Number: _____	
	Patient Name: _____	Date: _____
Vaccines recommended during pregnancy:		
<input type="checkbox"/> Tdap (tetanus, diphtheria, pertussis [whooping cough]) at the beginning of the 3 rd trimester		
<input type="checkbox"/> Inactivated Influenza [flu]		
Prescriber's Signature: _____ License#: _____		
These vaccines are available at no cost to you at your local pharmacy and are covered by your health care plan. If you need help finding a pharmacy call Public Health at (209) 558-7400.		
Estas vacunas están disponibles sin costo para usted en su farmacia local y están cubiertas por su seguro médico. Si necesita ayuda para encontrar una farmacia llame a Salud Pública al (209) 558-7400.		
Your baby is counting on you for protection. Get vaccinated.		
BVM-1143 (2/18)		

Pertussis Toolkit for Medical Providers

- Will be sent mainly to ObGyn and other area prenatal providers, including non-MediCal
- Rx Pad, Pregnancy Wheel (with target dates for IZ/labs)
- Letter from LHO to prenatal Providers:
 - providing context for concern; recommendations of advisory groups for IZ and CDPH for facilitating Tdap IZ; mode of transmission; prevention measures
- Resources for healthcare professionals:
 - including Fact Sheets, info Tdap reimbursement, printable materials for patients

Pertussis: Additional Outreach

- LHO provided information from call: anticipate high school students will be primary group getting pertussis this year
 - Concern for infants that interact with teens
 - Compile a list of schools/other locations with on-site childcare where teens and infants may interact
- Prenatal classes through Healthy Birth Outcomes (HBO)
 - 10 sites throughout Stanislaus County
 - Educate providers and incorporate topics into educational sessions provided to pregnant patients

Pertussis Toolkit for Schools and Childcare Providers

- Assist schools and childcare center employees in identifying and addressing pertussis in school or childcare settings
- Contains materials for:
 - School nurses
 - Childcare facility staff
 - Parents/guardians of children attending school or childcare
- Reminder to notify PH Communicable Disease Prevention Section (contact info. provided) in event of concern for pertussis cases
- Letter from LHO describing the context for concern, mode of transmission, prevention measures (good cough hygiene)

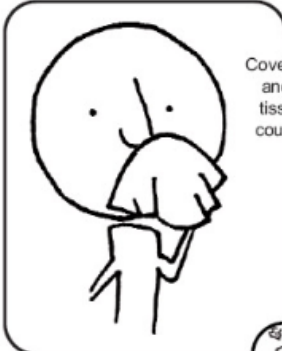
Pertussis Toolkit for Schools and Childcare Providers, cont.

- Management of cases in K-12 schools settings when pertussis is widespread in the community for school nurses
- Fact Sheets (easily photocopied for distribution) to parents/guardians (English and Spanish)
- Fact Sheets for childcare facility staff (English and Spanish)
- Sample Notification Letter to provide parents/guardians in case of outbreak
- Plan to send toolkit out by end of March 2018
 - LHO to meet with school nurses April 2018; follow up questions?


Messaging in toolkits to encourage good cough/respiratory hygiene

Stop the spread of germs that make you and others sick!


Cover your Cough




Cover your mouth and nose with a tissue when you cough or sneeze



or cough or sneeze into your upper sleeve, not your hands.




Put your used tissue in the waste basket.




You may be asked to put on a surgical mask to protect others.

Clean your Hands

after coughing or sneezing.



Wash hands with soap and warm water for 20 seconds



or clean with alcohol-based hand cleaner.

Pertussis Response Plan: Health Plans

- Reached out to area Health plans:
 - Working with Healthnet to schedule a lunch and learn for 30-40 staff of area prenatal provider offices
 - Working with Health Plan of San Joaquin (HPSJ) to incorporate educational materials for patients to their newsletter

Pertussis Response Plan: Modifications

- Health Alert:
 - Decided not to send out until increase in cases seen
 - Similar information in initial letter to providers
- Press Release:
 - Will be sent once there is a death
 - Tailored outreach to schools and places where infants may interact with older children
 - Included another toolkit for schools and infant-childcare provider

Phase II – Organize a response to providers if child has and/or dies from pertussis

- Coordinate with Vital Records to be informed on pertussis cases
- Send letter to prenatal providers of infant pertussis cases whose mothers did not receive Tdap
 - CDPH provided template letter

Template Letter to Prenatal Care Providers

Instructions: Please modify or delete areas in red as appropriate and include a confidentiality notice (sample provided below).

Provider Name
Provider Address

Date

Dear Dr. [Provider's Name]:

Recently, the infant of [Mother's First and Last Name], a patient who received prenatal care from your practice, was diagnosed with pertussis [and was hospitalized/died due to this infection]. It is our understanding that Ms. [Mother's Last Name] did not receive tetanus, diphtheria and acellular pertussis (Tdap) vaccine between 27-36 weeks gestation of pregnancy and is insured by [name of Medi-Cal Managed Care or Private Health Plan]. According to our records, [Mother's First Name] received Tdap on xx/xx/xxxx. If this information is incorrect, please let us know as soon as possible.

[ACOG](#), [CDC](#), and the [California Department of Public Health](#) (CDPH) recommend that women receive Tdap vaccine at the earliest opportunity between 27 and 36 weeks gestation of every pregnancy, regardless of their Tdap vaccination history.

References

1. Wendelboe AM, et al. Duration of Immunity Against Pertussis After Natural Infection or Vaccination. *The Pediatric Infectious Disease Journal*. May 2005; 24(5): 58-61.
2. CDPH Pertussis Report. May 11, 2017
3. CDC: Pertussis Surveillance and Reporting.
<https://www.cdc.gov/pertussis/surv-reporting.html>
4. CDPH Pertussis Report. January 23, 2018
5. CDPH Immunization Branch Data
6. CDPH, DCDC, California CD Brief, report of meeting as of 2/7/18

References cont.

7. Cherry JD, et al. Pertussis in Young Infants – Guidance for Clinicians. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/Pertussis-Cherry-YoungInfants2011-06-20.pdf>.
8. Skoff TH, et al. Sources of Infant Pertussis Infection in the United States. *Pediatrics*. Sept. 7, 2015; 136(4): 635-640.
9. CDC: Questions Answered on Vaccines purchased with 317 Funds. <https://www.cdc.gov/vaccines/imz-managers/guides-pubs/qa-317-funds.html>
10. CDPH. Tdap and Influenza Immunization in Pregnant Women: 2015 Maternal and Infant Health Assessment Survey

Announcements

Updates to CalREDIE

- New data fields were added to the pertussis case report form and the pertussis clinical tab medical history section in CalREDIE
- Adapted from the supplemental form used to follow up with mothers and prenatal care providers of cases <4 months of age with an onset in 2016
- Goal is to continue collecting Tdap information to identify barriers to maternal Tdap
- Aligned with the updated IZB's scope of work for local health departments

Local Health Department Scope of Work

Objective 6.1: Assist with the prevention, surveillance and control of vaccine preventable disease (VPD) within the jurisdiction.

Required Activities:

iv. Support investigation of infant pertussis cases. Inform LHD Maternal, Child and Adolescent Health (MCAH) Program of each new infant case, and work together to contact the mother's prenatal care provider to determine barriers to prenatal Tdap vaccination. Follow up and assist the provider to meet the standard of care including providing strong recommendations for Tdap and a strong referral (if Tdap is not offered on-site).

Updates to CalREDIE

- Case information to MCAH Staff will now include:
 - Immunization status of mother & timing
 - Patient Name
 - Provider's Name
 - Provider's participation in CPSP

Actions to Take if Mom did not get Tdap Appropriately

Determine if provider is in CPSP

If YES: Modify and send [letter](#) to provider. PSC may want to follow up during visit or call.
If NO: Modify and send [letter](#) to provider. Designate LHD staff to follow up.

ASK: Do you stock Tdap?

NO

Would you be interested in stocking Tdap? Inform provider of State Prenatal Tdap program.

YES

- Are you able to administer Tdap to *all* pregnant patients? (If provider is mandated to refer, tell us!)
- During which gestational week(s) do you offer Tdap? (Confirm it's at 27-36 wks.)

YES

Send provider agreement. Ensure provider has a referral plan in place until stocking begins. Provide technical assistance (TA) as needed.

NO

Do you have a list of pharmacies that can immunize your patients?

YES

- May I drop by with some FREE patient materials to encourage your patients to get immunized?

NO

May I send you a list of in-network pharmacies for your Medi-Cal Managed Care patients? (Confirm name of plan(s), call member services or visit their website to obtain lists). Other steps on how to make strong referrals are part of the [CDPH/DHCS letter](#).

SGF Prenatal Tdap Program

- **25,000 doses of Tdap** (Adacel[®], single dose vials) available now
- **Purpose:** To jumpstart provider offices not offering Tdap
- **Eligible patients:** pregnant women only (regardless of insurance)
- **Eligible sites** must have (a/an):
 - Written protocol for immunizing pregnant women with Tdap vaccine
 - On-site clinical staff experienced in administering vaccine to adults
 - Plan to continue to offer and bill for Tdap
 - Acceptable refrigerator-only units (see eziz.org)
 - Designated staff as clinic liaison to health department
 - Agreement to report at each LHD check-in



FAQs

- Can the doses be given to privately-insured women?
 - Yes! **All** pregnant women (regardless of insurance) are eligible to get Tdap. Tdap should be administered between 27-36 weeks gestation.
- Are for-profit *and* non-profit providers eligible for these doses?
 - Yes! For-profit and non-profit providers who do not yet stock Tdap are eligible. Please make sure the provider meets all other requirements on the previous slide.
- Is there a maximum number of doses a provider can receive?
 - No. The suggested limit is 100 doses/order, but we leave that up to your discretion. We recommend you start with a smaller amount and then offer additional doses if they can show they ordered vaccine as well. Remember: the intent of the “starter kits” is to start a sustainable prenatal Tdap program in offices.

Updated Materials

- Our materials have been updated to reflect these changes:
 - [SGF Tdap Promotional Flyer](#)
 - [State Tdap Cover Letter \(1.11.18\)](#)
 - [2018 Guidelines for SGF Tdap Vaccine \(3.27.18\)](#)
 - [2018 SGF Tdap AOU \(3.27.18\)](#)
 - [1,3,and 6 month questionnaire \(updated 3.21.18\)](#)

Intern to the Rescue

- Do you need help identifying providers who need Tdap?
- Our intern may be able to help!
- Email: Rebeca.Boyte@cdph.ca.gov to request assistance.

Partnership HealthPlan Best Practice Example

SUBJECT: Important: State's FREE Prenatal Tdap Immunization Starter Kit



Dear Dr. [XXXXX],

As you may be aware, a pertussis epidemic is on the horizon. Partnership HealthPlan of California (PHC) is working to support prenatal care providers interested in stocking prenatal Tdap (tetanus, diphtheria, and pertussis) vaccine to immunize pregnant women at the earliest opportunity between 27 and 36 weeks gestation. This is the national recommendation and the best strategy to protect newborns until they can receive their own dose of pertussis-containing vaccine at 6-8 weeks of age. Studies show that pregnant women offered vaccination on site are more likely to be immunized than those referred elsewhere.

If you don't stock Tdap,

- Call your local health [jurisdiction's Immunization program](#) and ask to speak to the Immunization Coordinator. Ask if you are eligible for the State's **FREE Prenatal Tdap Immunization Starter Kit**. (The State is now giving FREE Tdap doses to providers who serve Medi-Cal patients and do not currently stock Tdap.)

The following counties agreed to participate in the State's program:

- o Del Norte
- o Humboldt
- o Lake
- o Lassen
- o Marin
- o Mendocino
- o Napa
- o Sonoma
- o Yolo

- Once you are ready to order your own supply, Partnership is here to help! We encourage you to purchase Tdap at a low cost through a [group purchasing organization](#). PHC reimburses **\$X** for Tdap. In addition, the Perinatal QIP will be incentivizing **\$50** for each Tdap vaccine that the provider administers to pregnant women!

To learn more or to get more information on how to bill for Tdap, please call PHC's Claims Desk at **707-863-4130**.

We hope you take advantage of these programs to protect our region's newborns from pertussis.

Best,
Perinatal QIP

- Partnership HealthPlan (PHP) is offering incentives to CPSP providers
- PHP agreed to help promote the State Tdap Program while offering help once providers are ready to stock
- Consider reaching out to plans and see if they can help!
- Plans can modify [Template Letter from Plans to Physicians](#)

Santa Cruz County Efforts

- Emailed all prenatal care providers with key points:
 - Pertussis epidemic is expected soon
 - Our county wants to **support prenatal care providers to provide prenatal Tdap**
 - Pregnant women offered vaccination **on site** are more likely to be immunized
 - Asked:
 1. Are you currently recommending Tdap immunization to every pregnant patient between 27-36 weeks gestation?
 2. How do you identify/flag/prompt when a pregnant patient is due for the vaccine?
 3. Do you provide the immunization at your office and keep Tdap stocked?
 4. If you do not immunize at your office, where do you send patients? How do you follow up?
 5. How do you document when a pregnant patient declines the Tdap immunization?
 - Closed with information about State Tdap Starter Kit.

Look out for template based on this model soon!

Prenatal Toolkit

Toolkit: <http://eziz.org/resources/pertussis-promo-materials/prenatal-tdap/>

- Included new tools under “Educational Materials for Prenatal Care Providers”
- Added New Section: “Tools and Information for Pharmacists”



Reminder: ACOG Antepartum Records

The image shows a portion of the ACOG Antepartum Record form. Key sections include:

- Demographics:** Patient name (Last, First, Middle), Date of Birth, Sex, Race, Ethnicity, Education, Occupation, Language, Religion, and Insurance information.
- Obstetric History:** Menstrual history (Onset, Duration, Frequency, Menarche), and Past Pregnancies (Last Five) with columns for Date, GA, Length of Labor, Birth Weight, Sex, Type of Delivery, Anos, Place of Delivery, Breastfeeding Duration, Lactation, and Complications.
- Medical History:** A grid for various conditions such as Allergies, Neurological, Endocrine, Hematologic, and Psychiatric disorders.

- New copies shipped
- Please send email: Rebeca.Boyte@cdph.ca.gov indicating desired quantity.

Immunizations	Yes (Month/Year) ___ / ___	No	If No, Vaccine Indicated?*	Immunizations	Yes (Month/Year) ___ / ___	No	If No, Vaccine Indicated?*
TDAP (Each pregnancy, between 27-36 weeks)				Hepatitis A (When Indicated)			
Influenza† (Each pregnancy as soon as vaccine is available)				Hepatitis B (When Indicated)			
Varicella†				Meningococcal (When Indicated)			
MMR (Rubella-containing vaccine)†				Pneumococcal (When Indicated)			
HPV							

*Yes/No & date to be administered



Feedback from the group

- Do you have enough information to proceed with prenatal Tdap efforts?
- What other information would be helpful as part of these group meetings?

Questions?

As always, these slides will be posted on Prenatal Tdap Toolkit page: <http://eziz.org/resources/pertussis-promo-materials/prenatal-tdap/>.

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