

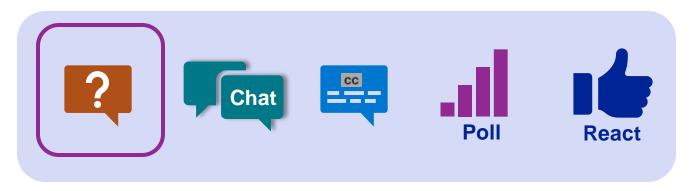
Immunizing for Two+: Enhancing Maternal Protection and Vaccine Uptake

Tuesday, December 10, 2024 12:00 pm – 1:00 pm





During today's webinar, please click and open the Q&A icon to ask your questions so CDPH panelists and subject matter experts (SMEs) can respond.





Links are in blue and underlined



Housekeeping

Reminder to Attendees:



Today's session is being recorded. For slides, webinar recordings, and other postings, see Webinars on EZIZ



To be added to the CDPH email messaging listserv for California Immunization providers, please email your request to blanca.corona@cdph.ca.gov.



If you have post-webinar-related questions, please email rebeca.boyte@cdph.ca.gov.



Webinar Objectives

By the end of this webinar, attendees will be able to:

- 1. Explain current disease rates of vaccinepreventable diseases that can impact pregnant persons and their babies.
- 2. Implement evidence-based strategies to boost prenatal vaccination rates.
- 3. Identify resources to improve their individual vaccination practice (e.g., billing /coding, free patient materials, etc.).

Agenda: Tuesday, December 10, 2024

No.	Topic	Presenters (CDPH)	Time (PM)
1	Welcome and Announcements	Leslie Amani (CDPH)	12:00 – 12:05
2	The Latest: Rising Vaccine-Preventable Disease Rates	Floria Chi, MD (CDPH)	12:05 – 12:10
3	Strategies and Tips to Increase Maternal Vaccination and Vaccination Uptake	Neil Silverman, MD (ACOG)	12:10 – 12:35
4	Resources	Rebeca Boyte, MAS (CDPH)	12:35– 12:40
5	Q&A	Leslie Amani and Subject Matter Experts	12:40 – 1:00

The Latest:
Rising VaccinePreventable Disease Rates

Floria Chi, MD, CDPH



CDPH Respiratory Virus Report

Т	he 2024-2025 Respiratory Virus Season co	overs June 30, 2024	through June	28, 2025.
		COVID-19	FLU	RSV
<u>\$</u>	Test Positivity (change)	2.2% (0.0)	7.5% (2.3)	6.0% (1.8)
	Percent of Total Admissions (change)	N/A	N/A	0.4% (0.2)
	Percent of Total Deaths (change)	1.0% (0.4)	0.0% (-0.3)	0.0% (0.0)
340	Total Season Pediatric Deaths (new)	3 (0)	1 (0)	0 (0)
	Wastewater Concentrations (trend)	LOW (PLATEAUING)	N/A	N/A

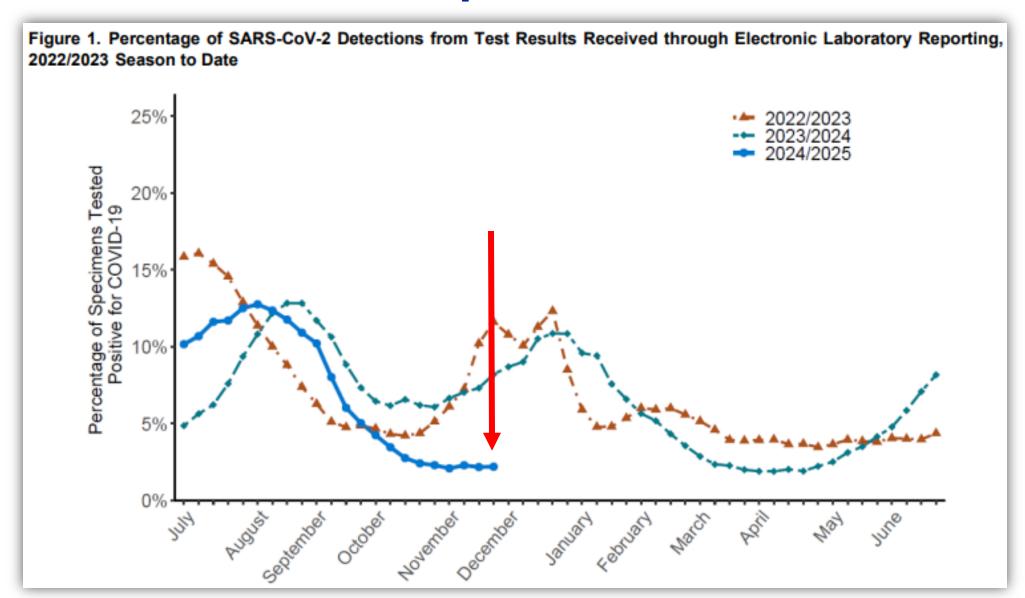
Key Messages

- RSV and influenza activity are low but increasing. COVID-19 is currently low in California.
- As of November 7, 2024, 9.6% of Californians have received an updated COVID-19 vaccine.
- Data reported to the California Immunization Registry show that many Californians who should receive an influenza vaccine have not yet been vaccinated.

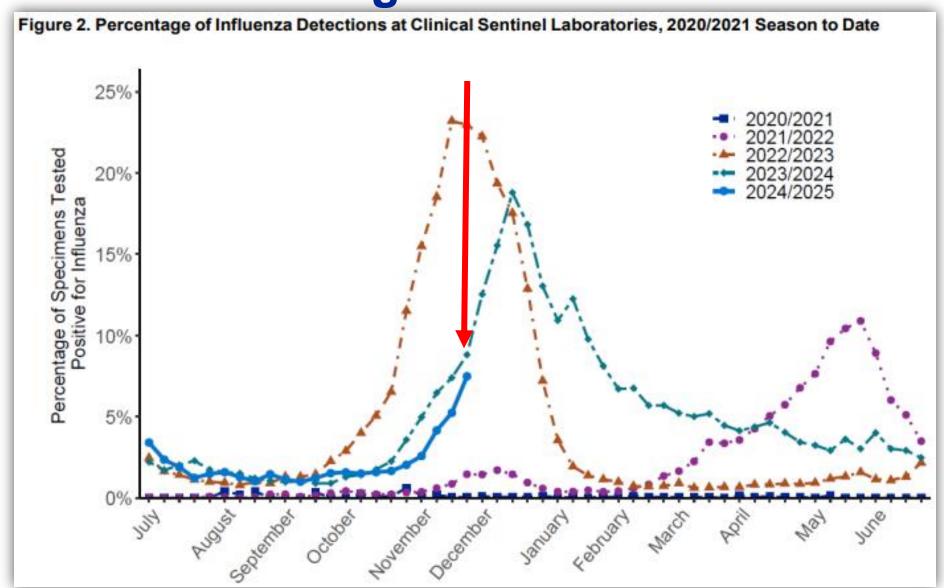
CDPH Respiratory Virus
Report contains weekly
California COVID-19,
influenza, RSV, and other
respiratory virus
surveillance metrics.

Data from November 24-30, 2024

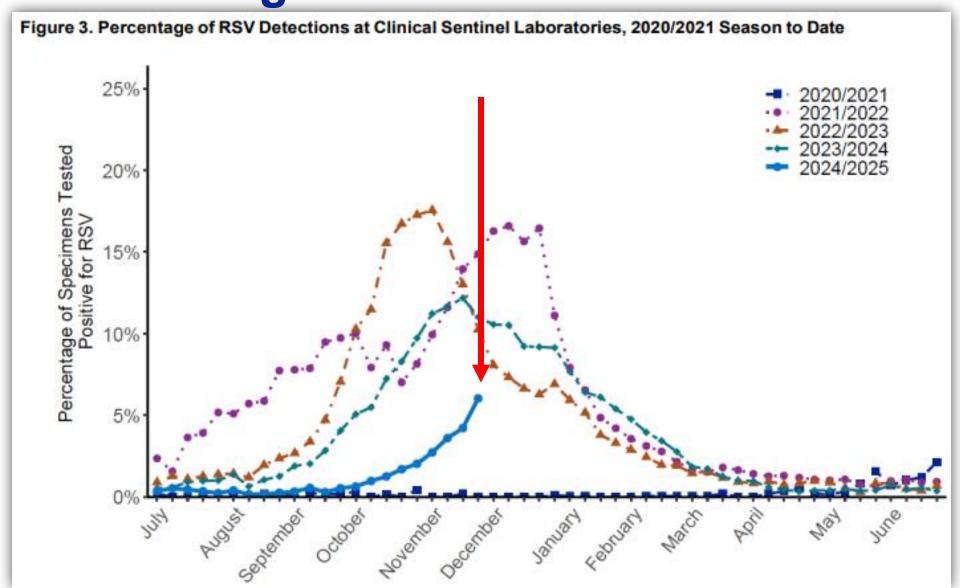
COVID-19: Low, Anticipated to Increase



Influenza: Increasing



RSV: Increasing

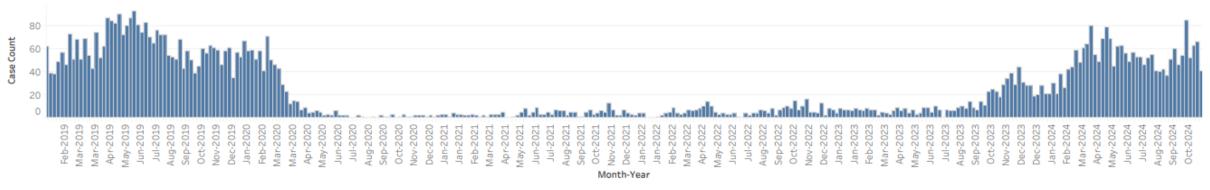


Pertussis: Returning to Pre-pandemic Levels

Pertussis activity is approaching pre-pandemic levels with greatest increases compared to last month seen in the Bay Area, Los Angeles and San Diego county.



Reported as of October 31, 2024



Note: The case counts shown are preliminary and may change due to reporting delays.

- Infants too young for vaccination are at greatest risk for life-threatening cases of pertussis.
- Immunize pregnant persons to prevent infant hospitalizations and deaths.
- Prenatal immunization is the most important tool for preventing pertussis morbidity and mortality.

CDPH <u>Pertussis Webpage</u> (Surveillance Reports)

Strategies and Tips to Increase Maternal Vaccination and Vaccination Uptake

Neil Silverman, MD, The American College of Obstetricians and Gynecologists

Strategies and Tips to Increase Maternal Vaccination and Vaccination Uptake



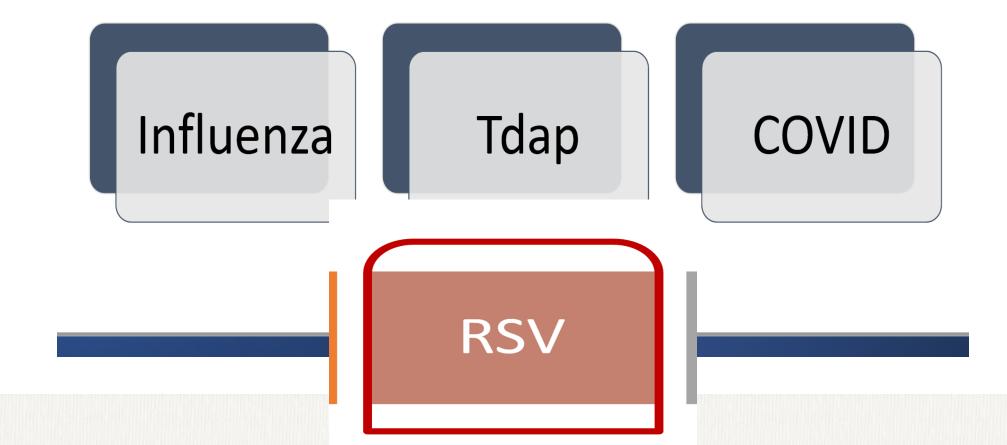


Neil S. Silverman, MD
Professor of Clinical Obstetrics and Gynecology
Director, MFM Fellowship Program
Director, Infections in Pregnancy Program
David Geffen School of Medicine at UCLA

Vaccine Importance and Strategies

- Children have benefited the most from vaccines in terms of declines in disability and death,
 primarily because vaccination programs are generally targeted to children
 - Each year, more than 50,000 adults in the United States die from vaccine-preventable diseases—largely from influenza and its complications. Vaccine-preventable diseases are significantly more common in adults than in children.
 - More than 50% of cases of significant vaccine-preventable illnesses reported to the CDC each year are in individuals > 15 years old
- Many of the most vulnerable adults are seen in practices that provide health care to women
 - Immunization services have not historically been part of ob-gyn care
- Need to address benefit of vaccination both for women and for the long-term health of their children

Currently recommended licensed vaccines



VACCINES AND PREGNANCY:

TALKING POINTS/EFFECTIVENESS

Pregnancy and Influenza Risks

- Pregnant women are disproportionately affected by severe disease in influenza pandemics
- Increased illness/hospitalization rates for pregnant women in every trimester compared to rates in nonpregnant persons *
 - When no comorbidities: risk ratio 1.7 (1st tri) − 5.1 (3rd tri)
 - With comorbidities: risk ratio 2.9 (1st tri) − 7.9 (3rd tri)
- Demonstrated benefit for mothers and newborns
- Live-attenuated nasal flu vaccine should not be given in pregnancy
- Immunization with the season-current inactivated flu vaccine is recommended for all pregnant women

Neonatal Benefits of Maternal Influenza Vaccination

- Flu vaccine not recommended for children < 6 months of age
- Pregnant women have been shown to have protective levels of antiinfluenza antibodies after vaccination
- Randomized study of flu vaccine during pregnancy to assess neonatal impact: NEJM 2008
 - 340 women received either flu vaccine or pneumococcal vaccine
 - 63% lower risk of lab-confirmed neonatal influenza in children of vaccinated moms, up to 6 months of age

RSV is the leading cause of hospitalization in U.S. infants¹

- Most (68%) infants are infected in the first year of life and nearly all (97%) by age 2 years²
- 2–3% of young infants will be hospitalized for RSV^{3,4,5}
- RSV is a common cause of lower respiratory tract infection in infants
- Highest RSV hospitalization rates occur in first months of life and risk declines with increasing age in early childhood^{3,5}
- 79% of children hospitalized with RSV aged <2 years had no underlying medical conditions³



Image: Goncalves et al. Critical Care
Research and Practice 2012

Each year in U.S. children aged less than 5 years, RSV is associated with...

100–300^{1,2} deaths

58,000–80,000^{3,4} hospitalizations

~520,000³ emergency department visits

~1,500,000³ outpatient visits

¹Thompson et al, JAMA, 2003; ²Hansen et al, JAMA Network Open, 2022; ³Hall et al, NEJM, 2009; ⁴McLaughlin et al, J Infect Dis, 2022 (*estimate 80,000 hospitalizations in infants

Primary Endpoint: Infant RSV-Positive Severe LRTD

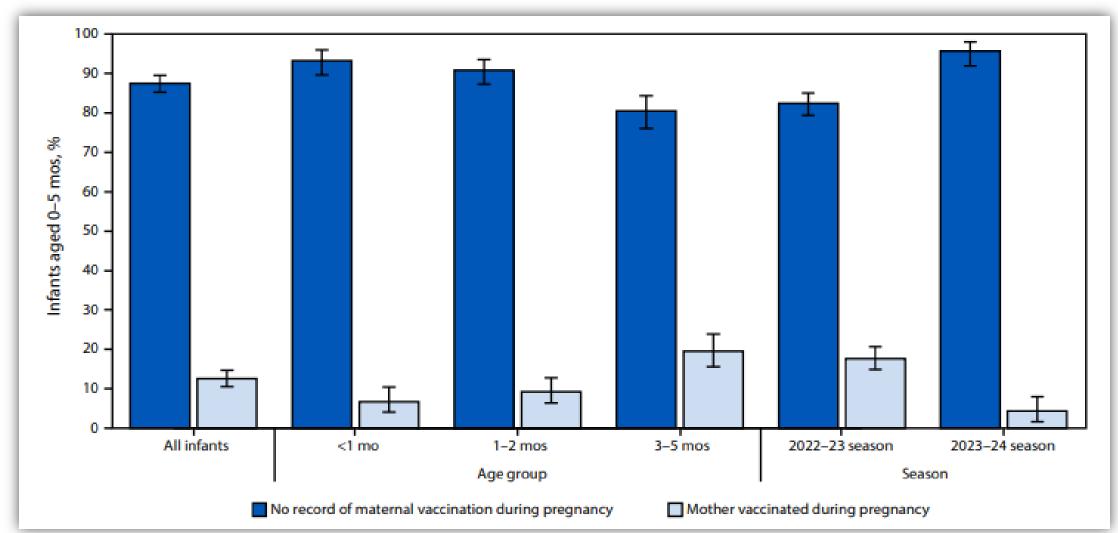
Maternal Vaccine Group (as Randomized)

Time Interval	RSVpreF 120 μg N = 3495 n	Placebo N = 3480 n	Vaccine Efficacy
0-90 Days after birth	6	33	81.8% (40.6, 96.3)
0-120 Days after birth	12	46	73.9% (45.6, 88.8)
0-150 Days after birth	16	55	70.9% (44.5, 85.9)
0-180 Days after birth	19	62	69.4% (44.3, 84.1)

Descriptive subgroup analysis - Immunization 32 through 36 weeks gestational age

Time Interval	RSVpreF 120 μg N = 1572	Placebo N = 1539	Vaccine Efficacy (95% CI)
0-90 Days after birth	1	11	91.1% (38.8, 99.8)
0-180 Days after birth	6	25	76.5% (41.3, 92.1)

Maternal Vaccination Status among Infants <6 Months Hospitalized with COVID-19, Oct. 2022 – April 2024

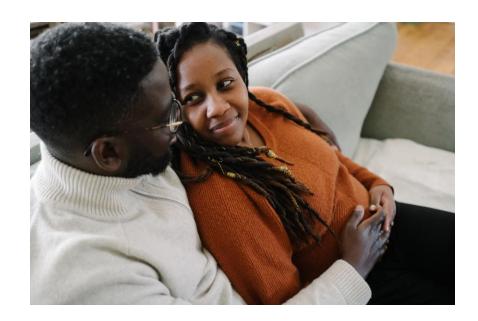


COVID-19 Hospitalizations & Maternal Vaccination Among Infants <6 Months — COVID-NET, 12 States, Oct. 2022–April 2024 | MMWR

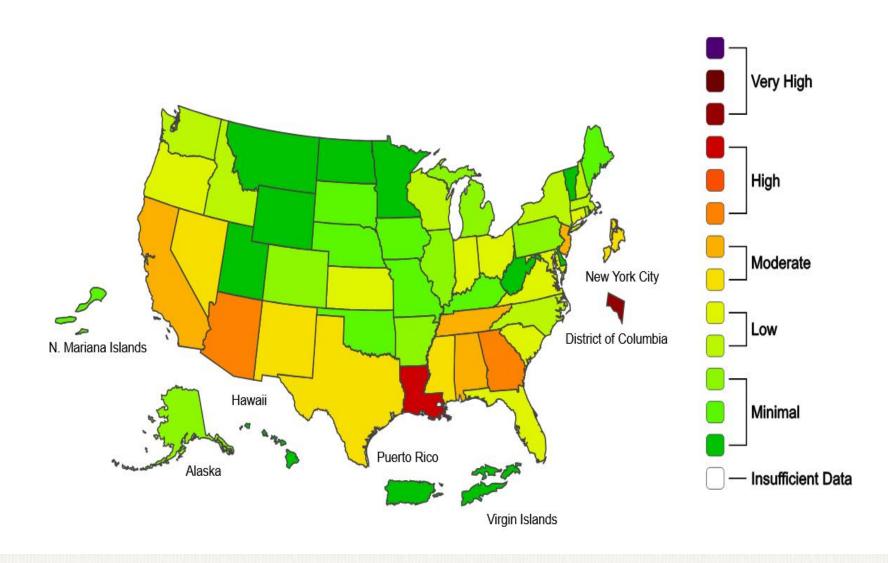
VACCINE BARRIERS AND RESULTS

So..why aren't more pregnant women vaccinated against influenza?

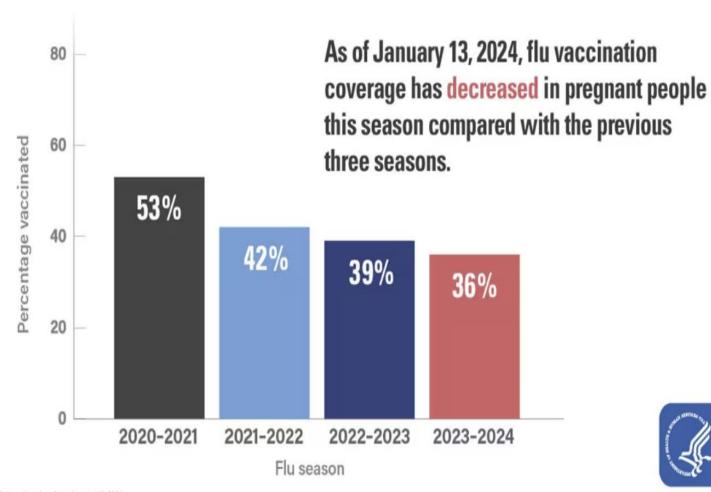
- Lack of information
- Variability in flu severity year-to-year
 - "Short memory" syndrome
- Concerns over risk for pregnancy
- Provider interest: concerns over reimbursement, litigation
- Confusion over recommendations



2024-25 Influenza Season Week 48 ending Nov 30, 2024 ILI Activity Level



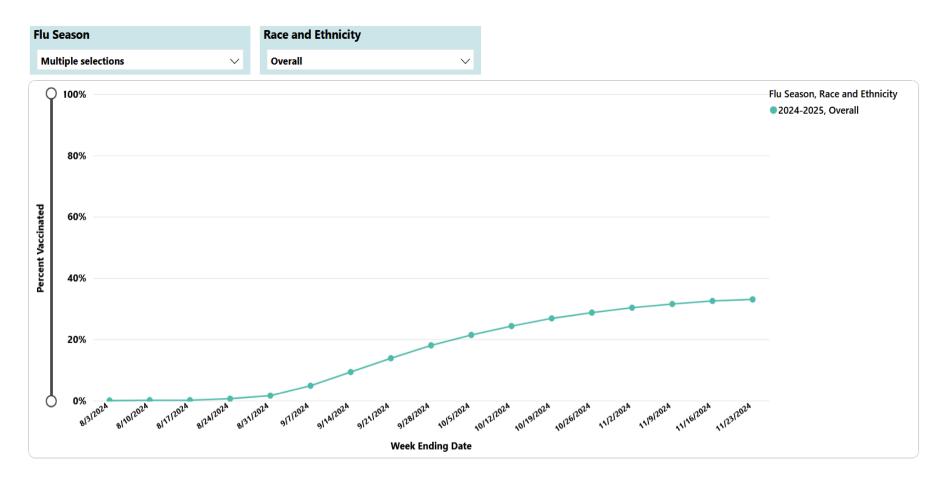
Flu Vaccination Coverage Among Pregnant People 18 to 49 Years of Age





Data Source: Vaccine Safety Datalink, based on data from January 13, 2024.

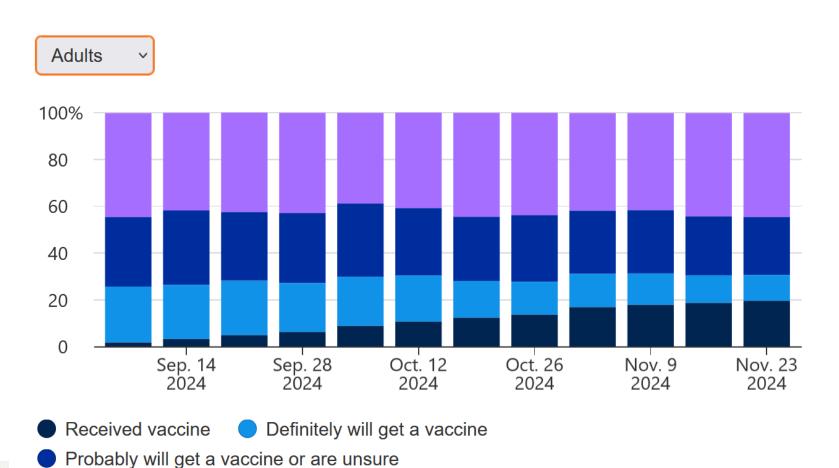
Figure 3A. Percent of Pregnant Persons Ages 18–49 Years Who Have Received an Influenza Vaccine Overall, by Race and Ethnicity, and Season Data Source: Vaccine Safety Datalink



Link: CDC Fluvax Dashboard

COVID-19 Vaccination Intent in the United States

Weekly intent for vaccination and cumulative percent of adults and children vaccinated with the updated 2024-25 COVID-19 vaccine. Refer to <u>data notes</u> for more details.



Probably or definitely will not get a vaccine

Figure 5. Percent of pregnant persons ages 18–49 years vaccinated[†] with RSV vaccine overall and by race and ethnicity — Vaccine Safety Datalink

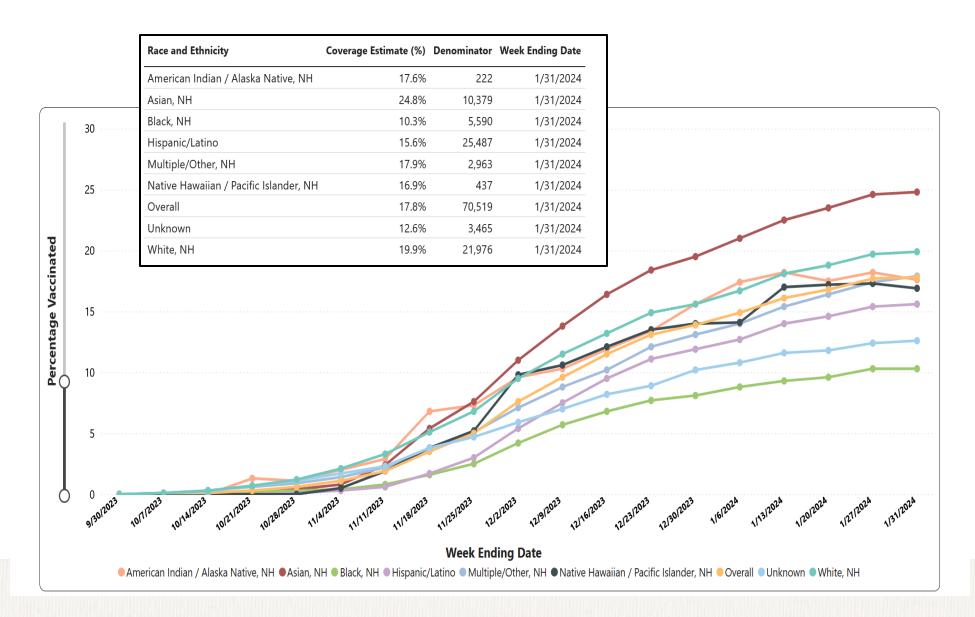
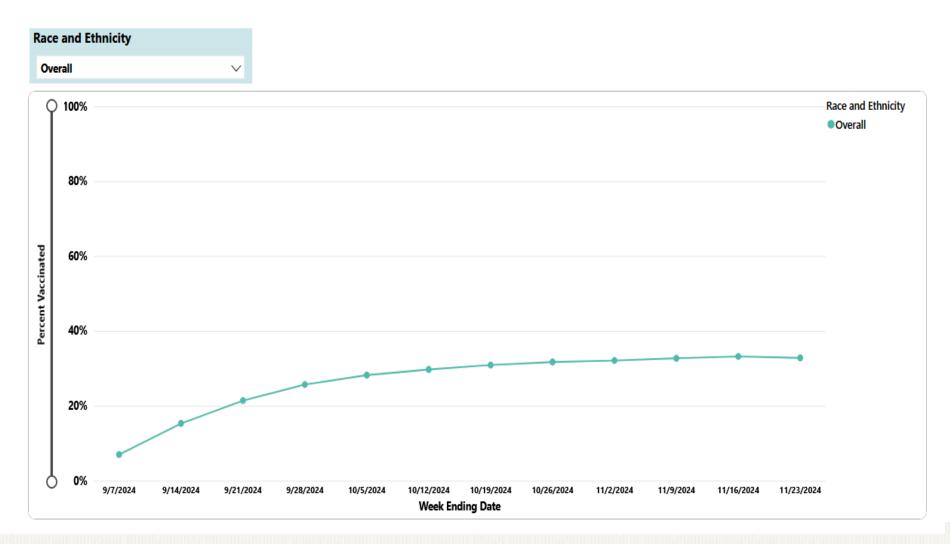
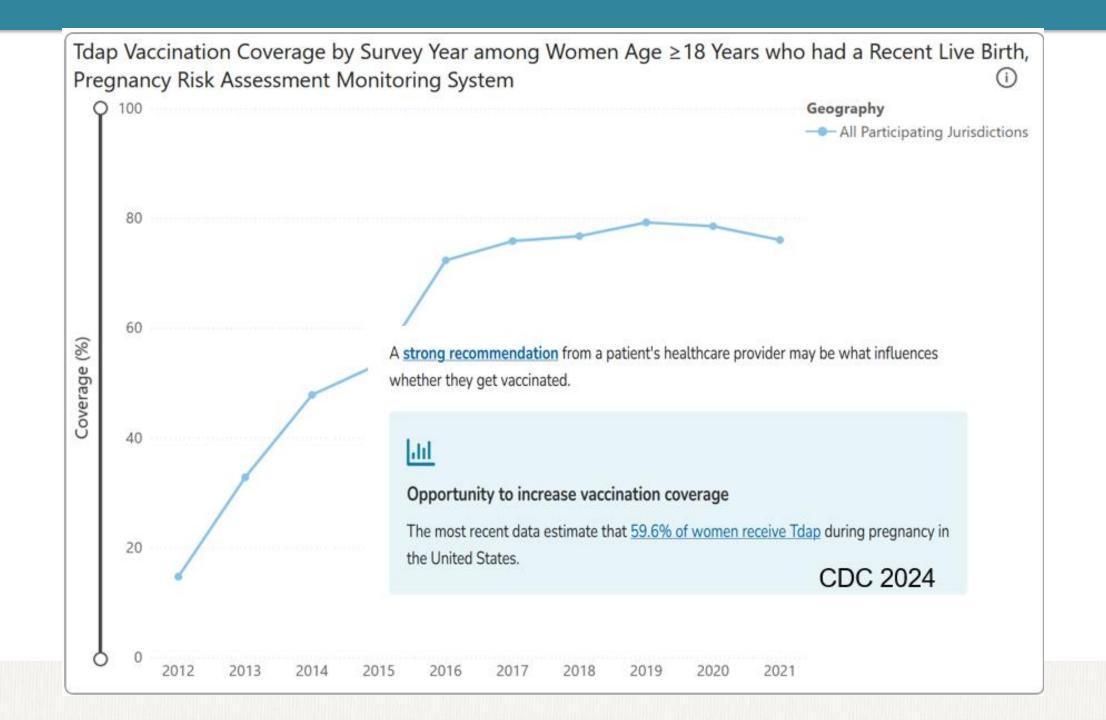


Figure 5A. Percent of Pregnant Persons Ages 18–49 Years Vaccinated with RSV Vaccine Overall and by Race and Ethnicity

Data Source: Vaccine Safety Datalink





IMPROVING ACCESS AND REIMBURSEMENT

Immunization Rates Increase With Access and Example

- Early studies showed higher rates of flu vaccine offering and uptake if physicians:
 - Aware of CDC guidelines (RR 2.6; 1.1-5.9)
 - Gave vaccinations in their office (RR 1.2; 1.01-1.4)
 - Had received vaccine themselves (RR 1.9; 1.3-2.8)¹
- Recent UCSF study of RSV vaccine uptake showed 69% acceptance rate in pregnant patients with vaccine available in clinic/office setting²

1. Silverman NS, Grief A, J Repro Med 2001; 2. Blauvelt CA et al, IDSOG 2024

Preventive care benefits for adults

All Marketplace health plans and many other plans must cover the following list of preventive services without charging you a copayment or coinsurance. This is true even if you haven't met your yearly deductible.

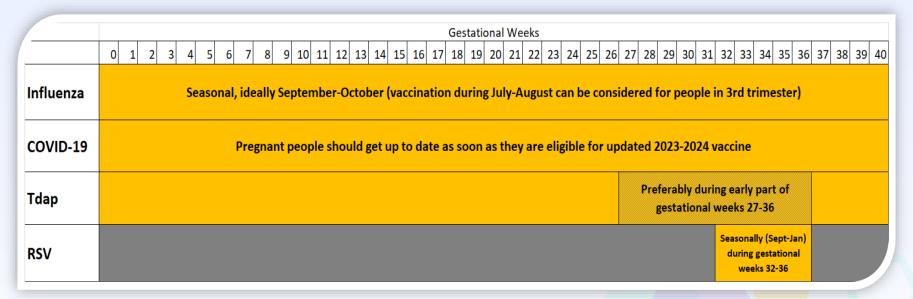
IMPORTANT

These services are free only when delivered by a doctor or other provider in your plan's network.

. <u>Immunizations</u> for adults — doses, recommended ages, and recommended populations vary:

- o Chickenpox (Varicella)
- o <u>Diphtheria</u>
- o <u>Flu (influenza)</u>
- <u>Hepatitis A</u>
- <u>Hepatitis B</u>
- o Human Papillomavirus (HPV)
- Measles
- Meningococcal
- o <u>Mumps</u>
- Whooping Cough (Pertussis)
- <u>Pneumococcal</u>
- o <u>Rubella</u>
- Shingles
- Tetanus

Increasing Complexity of Maternal Immunization Schedule



- Increasingly complex maternal immunization schedule, with different timing of vaccines based on season and/or gestational age (with seasonal timing varying in some locations)
- Limited window for RSV vaccine administration
- Unclear willingness of pregnant people to accept multiple vaccines in pregnancy

Insurance Coverage of Maternal RSV Vaccine

- Private insurance: 52% of pregnant people¹
 - The Affordable Care Act (ACA) requires insurers to cover all ACIP-routinely recommended immunizations for plan years that begin on or after the date that is one year after the date of the recommendation²
- Medicaid: 41% of pregnant people¹
 - After 10/1/23, when the Inflation Reduction Act provisions become effective, state Medicaid agencies will be required to cover vaccines and their administration without cost-sharing for nearly all fullbenefit adult beneficiaries covered under traditional Medicaid, if the CDC/ACIP recommendations apply³
- No insurance: 4% of pregnant people "self-pay" (likely uninsured)¹
 - If recommended, ACIP will vote on a Vaccines for Children resolution for maternal RSV vaccine in people aged <19 years
 - For people age 19+ years, limited availability (e.g., through 317 program)
- 1. Products Data Briefs Number 468 May 2023 (cdc.gov); insurance status refers to source of payment for delivery. Another ~3% used other types of coverage
- 2. 42 U.S. Code § 300gg-13 Coverage of preventive health services | Cornell Law School
- 3. Anniversary of the Inflation Reduction Act: Update on CMS Implementation | CMS

Billing for Immunization

- CPT codes
 - 90471 immunization administration
 - Vaccine specific CPT code

- Diagnosis codes
 - Z23 encounter for immunization

Influenza Vaccine Product List and Age Groups --- United States, 2024-2025 Season¹

DoD contracted NH vaccines (highlighted green), SH vaccine (highlighted blue); *DVD available vaccines (highlighted orange); Not available in DVD (white/not highlighted)

Manufacturer	Trade Name (Vaccine abbreviation)	NDC	Presentation	Mercury (thimerosal) μg/0.5 mL	Ovalbumin mcg/0.5 mL	Age Group	CVX	СРТ
Seqirus USA, Inc.		33332-0024-03	0.5-mL PFS	0	< 1	3+ yr.	140	90656
	Afluria®1,2,3,4,9 (IIV3)	33332-0124-10	5-mL MDV ² (0.25-mL dose for ages 6-35 mos.)	12.25	< 0.5	6+ mos.	141	90657
		33332-0124-10	5-mL MDV ² (0.5-mL dose for ages 3+ yr.)	24.5	< 1	011103.		90658
	Fluad ^{®1,7,9} (allV3)	70461-0024-03	0.5-mL PFS	0	≤ 0.4	65+ yr.	168	90653
		70461-0654-03	0.5-mL PFS	0	0		153	90661
	Flucelvax ^{®1,9} (ccllV3)	70461-0554-10	5-mL MDV (0.5-mL dose for ages 6+ mos.)	25	0	6+ mos.	320	90661
GlaxoSmithKline	Fluarix ^{®1,9} (IIV3)	58160-0884-52	0.5-mL PFS	0	≤ 0.05	6+ mos.	140	90656
ID Biomedical Corp (distributed by GlaxoSmithKline)	FluLaval ^{®1,9} (IIV3)	19515-0810-52	0.5-mL PFS	0	≤ 0.3	6+ mos.	140	90656
Sanofi Pasteur,		49281-0424-50	0.5-mL PFS	0	§§	6+ mos.	140	90656
Inc.	Fluzone®1,5,6,9 (IIV3)	49281-0641-15	5-mL MDV ^{5,6} (0.25-mL dose for ages 6-35 mos.)	12.5/0.25 mL	§§	G. maa	141	90657
		49281-0641-15	5-mL MDV ^{5,6} (0.5-mL dose for ages 6+ mos.)	25/0.5 mL	§§	6+ mos.	141	90658
	Fluzone® High-Dose ^{1,8,9} (HD-IIV3)	49281-0124-65	0.5-mL PFS	0	§§	65+ yr.	135	90662
	Fluzone® Southern Hemisphere¹ (SH-IIV4)	49281-0324-50	0.5-mL PFS	0	§§	6+ mos.	201	N/A
	FluBlok ^{®1,9} (RIV3)	49281-0724-10	0.5-mL PFS	0	0	18+ yr.	155	90673
MedImmune, Inc. (Astra7eneca)	FluMist®1,9 (LAIV3)	66019-0311-10	0.2-mL prefilled single-use intranasal sprayer	0	≤ 0.024	2-49 yr.	111	90660



Practice Management

Coding

Coding Library

Coding for Hepatitis C

Coding for Obesity

Coding for STI Screening in Pregnancy

Immunization Coding for Obstetrician-Gynecologists

Introduction

Immunizations are recommended as part of comprehensive care for women. Under the Patient Protection and Affordable Care Act (ACA), vaccines recommended by the Advisory Committee on Immunization Practices are required to be provided with no cost sharing (ie, no co-pay) for children, adolescents, and adults. Check the <u>list of vaccines covered</u> for more information about the ACA.

Share X f in X | Print

Below are some of the most common ICD-10 diagnosis and CPT/HCPCS codes related to immunizations. These lists are not all inclusive. Additional characters may be required for appropriate code selection. For assistance with proper code selection/use, you may refer to the most recent official copies of each of the following: ICD-10-CM book, ACOG'S OB/GYN Coding Manual, American Medical Association Current Procedural Terminology Professional Book and Health Care Common Procedure Coding System books. Proper coding may require analysis of statutes, regulations or carrier policies and, as a result, the proper code result may vary from one payer to another.

Coding for Vaccinations

ICD-10-CM Diagnosis Codes for Vaccination Services

The diagnosis codes for an encounter for vaccinations are found in the Z code category (Factors Influencing Health Status and Contact With Health Services) of ICD-10-CM. If a patient is being seen for a specific disease or symptom, report the code for the disease or symptom as well as a code for the vaccination.

Diagnosis codes used for vaccinations are categorized as follows:

- Individuals with potential health hazards related to communicable diseases, including patients who have been exposed to or had contact with someone with a communicable disease
- Encounters for inoculations and vaccinations, including prophylactic administration of vaccines
- Encounters during which a planned immunization was not carried out

Table 1. The diagnosis codes most likely to be reported when vaccinations are administered to individuals with potential health hazards related to communicable diseases are listed as follows (excludes: carrier of infectious disease [Z22.-*], diagnosed current infectious or parasitic disease [Z22], and personal history of infectious and parasitic diseases [Z86.1-*]):

Z Code	Description
Z20	Contact with and (suspected) exposure to communicable diseases
Z20.1	Tuberculosis
Z20.3	Rabies
Z20.4	Rubella
Z20.82	Contact with and (suspected) exposure to other viral communicable diseases

Table 3. Current Procedural Terminology Codes for Vaccine Administration (Single or Combination Vaccine/Toxoid)

Code	Method	Route of Administration	Type of Service	Reporting Rules
90460	Any route	Percutaneous, intradermal, subcutaneous, or intramuscular	Primary	Report for each vaccine administered. Physician also provides counseling. Patient is 18 years or younger.
90461	Any route	Percutaneous, intradermal, subcutaneous, or intramuscular	Each additional	Report for each additional component in a vaccine in conjunction with 90460. Physician also provides counseling. Patient is 18 years or younger.
90471	Injection	Percutaneous, intradermal, subcutaneous, or intramuscular	Primary	Report only one primary vaccine administration per encounter.
+90472	Injection	Percutaneous, intradermal, subcutaneous, or intramuscular	Each additional	Report for secondary or subsequent vaccine administration. Report only with code 90460, 90471, or 90473.

Table 5. Vaccines Commonly Administered to Adolescents and Adults (Report an Administration Code and a Vaccine Code)*

Vaccine	Code for Vaccine Product	CPT Administration Code	Medicare Administration Code
Hepatitis A vaccine (HepA), adult dosage, for intramuscular use	90632	90471-90472	90471-90472
Hepatitis A vaccine (HepA), pediatric/adolescent dosage, -2 dose schedule, for intramuscular use	90633	90460-90472	90471-90472
Hepatitis A vaccine (HepA), pediatric/adolescent dosage, -3 dose schedule, for intramuscular use	90634	90460-90472	90471-90472
Hepatitis B vaccine (HepB), adolescent, 2dose schedule, for intramuscular use	90743	90460-90472	G0010

Resources

Rebeca Boyte, MAS, CDPH

California Immunization Coalition: ShotbyShot.org



London's Pertussis Story

"I sat down on the bed, and I cried because I just had zero control over what was happening to London."



Emily's RSV story

"I called my parents, and I said you guys need to get here soon; like, she's not okay..."

CDPH Prenatal Materials

PROTECT yourself & your growing family

Like most moms-to-be, you want to give your baby a healthy start in life.

Vaccines (also called immunizations) are a safe way to protect you and your baby from some harmful diseases.



Where can I get immunized?

I have a doctor.

Call your doctor and ask,

- Do you offer flu, Tdap, RSV, and CO-VID-19 vaccines?
- · How soon can you see me?

My doctor does NOT have the shots I need or can't see me soon enough.

Call the pharmacy where you usually pick up your prescriptions and ask,

- Do you offer flu, Tdap, RSV, and CO-VID-19 vaccines?
- Does my insurance cover these vaccines at your pharmacy?" (Note: If you have Medi-Cal, shots should be covered at this pharmacy.)
- What are your immunization clinic hours?

The pharmacy I usually go to for prescriptions does not offer the vaccines I need, or my insurance does not cover them there.

Call your health plan's member services. (This number is usually on the back of your insurance card.) Ask.

- What nearby pharmacies do you cover?
 Call the nearby pharmacies and ask,
- Do you offer flu, Tdap, RSV, and CO-VID-19 vaccines?
- · What are your immunization clinic hours?

Vaccines.gov ImmunizationForWomen.org (800) CDC-INFO/(800) 232-4636



IMM-887 (11/23) ADA

for a Healthy Pregnancy



Thinking of having a baby?

Get shots before you get pregnant Whether it is your first baby, or you are planning to have another child, get up-to-date on your vaccines to protect you and your family. Talk with your doctor about which vaccines are right for you.

Pre-Pregnancy Immunization Checklist

- MMR (measles, mumps, rubella)
- Flu (influenza)—as soon as vaccine is available
- Chickenpox
- ✓ Hepatitis B
- Updated COVID-19
- Other vaccines recommended by your doctor



Good News!

If you missed getting these vaccines before becoming pregnant, you can get them after your baby is born.

Now that you are pregnant...

Your baby counts on you for BEST protection!

Flu and COVID-19 are more likely to cause serious problems for you and your baby during your pregnancy. Whooping cough and Respiratory Syncytial Virus (RSV) can also be deadly for newborn babies.

Ask your doctor for these vaccines:

- Tdap (whooping cough vaccine)—at 27-36 weeks of pregnancy, even if you got it before pregnancy
- Flu—as soon as vaccine is available
- RSV vaccine—September–January, between 32 and 36 weeks of pregnancy
- Updated COVID-19 vaccine—if you haven't received it yet.

These vaccines are safe. The protection you get from these vaccines passes to your baby before birth. This will help protect your baby in early life.

Good News!

If you missed getting your RSV vaccine during pregnancy, your baby can get their own RSV immunization soon after birth.

After your baby is born...

Order FREE copies using this form.

Circle your baby with protection
Newborns are too young to get flu,
COVID-19 and whooping cough shots.
While getting your vaccines during
pregnancy is most protective, make sure
to get any shots you missed.

To further protect your baby:

- Keep your baby away from sick people.
- Ask family, friends, and caregivers to get their flu shot and make sure they are up to date on other shots, like whooping cough and COVID-19.
- Remind people around your baby to wash their hands often.

Good News!

Getting routine vaccines while you are breastfeeding is safe for you and your baby.



English & Spanish



CDPH Prenatal Materials



Expecting?

Protect yourself and your baby against flu, RSV, whooping cough, and COVID-19!

You may not realize that changes to your body during pregnancy can put you and your baby at risk for serious complications from flu and COVID-19. Getting COVID-19, flu, RSV (Respiratory Syncytial Virus) and whooping cough shots while you are pregnant can help protect you and your baby from these diseases. The protection you get from the shots passes to your baby in the womb. This helps protect your baby in early life when your baby is most vulnerable to serious infections.

Are these diseases really dangerous for me and my baby?

Yes. Even if you are healthy, you are at higher risk of getting very sick from flu and COVID-19 during pregnancy. Flu and COVID-19 can cause serious complications for both you and your baby such as high fever, pneumonia, hospitalization, pre-term birth, and even stillbirth or death. For babies, catching RSV or whooping cough can lead to trouble breathing, pneumonia, hospitalization, and death. These respiratory viruses are highly contagious and can easily spread from other people to you and your baby. In the first 6 months of life, babies are at highest risk of complications from infections because their immune systems are still developing.

How common are these diseases?

Very common, Each year, flu infects millions of Californians and sends hundreds of sick babies to the hospital. Thousands also catch whooping cough every year. In 2014, over 11,000 people in California became ill with whooping cough, hundreds were

hospitalized, and three infants died. In 2020 and 2021, 1 out of every 4 deaths among pregnant people was due to COVID-19. RSV is a common respiratory virus and is the leading cause of bronchiolitis and pneumonia in babies under a year old. The best way to protect yourself and your baby from these diseases is to get vaccinated.

How can I protect my baby and myself?

The American College of Obstetricians and Gynecologists (ACOG), the American Academy of Pediatrics (AAP), and the Centers for Disease Control and Prevention (CDC) recommend that all pregnant people get these life-saving shots:

- Flu vaccine—as soon as it becomes available during flu season
- Updated COVID-19 vaccine—if you haven't
- Whooping Cough vaccine (Tdap)—27 to 36 weeks of pregnancy, even if you got it earlier.
- Respiratory Syncytial Virus (RSV) vaccine— September-January, between 32 and 36 weeks of pregnancy

Getting COVID-19, flu, RSV and whooping cough shots during pregnancy is the only way to protect your baby before birth. If you didn't get your RSV vaccine during pregnancy, make sure to ask about the RSV immunization for your baby when you

Pass protection to your baby. Get immunized during pregnancy.



IMM-1146 (11/23)

English & Spanish

Where can I get immunized?

Your doctor's office may have these immunizations. If not, ask your doctor for a prescription to take to the pharmacy. While a prescription is usually not required, it may be helpful. Before you go, call your pharmacy to ask for their immunization hours and to make sure the shots are covered by your insurance. If you have Medi-Cal, shots should be covered at your pharmacy. You can also call your health plan to find out where your shots may be covered. After you get immunized, make sure to ask for a vaccine record and bring it to your next prenatal visit. You can also download your digital vaccine record at myvaccinerecord.cdph.ca.gov

How safe are these immunizations?

Millions of pregnant people have safely received flu, whooping cough (Tdap), and COVID-19 vaccines. Multiple studies have shown that getting flu, COVID-19, RSV, and Tdap immunizations during pregnancy are safe for mother and baby. The immunizations do not affect the growth or development of your baby. The most common side effect of these shots is a temporary sore arm. It is much riskier not to get immunized.

If your doctor refers you to a pharmacy, ask for a prescription for the shots you need. Make sure the pharmacist gives you a vaccine record to bring to your next prenatal visit! You can also download your digital vaccine record at myvaccinerecord.cdph.ca.gov.

For more information.

CDC website for prenatal vaccination (bit.lv/ CDCpregnantpeople)

California Department of Public Health, Immunization Branch . GetImmunizedCA.org This publication was supported by Grant Number H23/CCH922507 from the Centers for Disease Control

How effective are immunizations?

These immunizations are very effective for pregnant

- Getting a flu shot during pregnancy can lower your risk of breathing complications and your baby's risk of catching flu by about half.
- Getting a COVID-19 vaccine during pregnancy lowers the risk of the baby being hospitalized with COVID-19 by more than half.
- . Studies have shown that as many as 9 out of 10 babies will be protected against whooping cough if their mothers get a whooping cough shot while pregnant.
- · RSV vaccine given during pregnancy has been shown to protect babies through 6 months of age against RSV-associated lower respiratory infections. This means that if you get the RSV vaccine during pregnancy, your baby will most likely not need to get the RSV immunization

Babies benefit from prenatal immunizations because even if they get sick, the transferred antibodies helps protect from dangerous complications and hospitalization from these diseases

IMM-1146 (11/23)

$P_{\mathbf{X}}$	Prescriber Name, Address, Phone Number:
Patient Name:	Date:
Vaccines recommend	led during pregnancy:
0.5 mL IM x 1 Best if given at the ear Inactivated Influe 0.5 mL IM x 1 Updated COVID- Respiratory Sync between 32 and 3 0.5 mL IM x 1	
Prescriber's Signature:	License #:
	Title 16, section 1746.4), please notify us within 14 days of administration of the your pharmacy. Also, please give the patient a copy of the vaccine record and ask her ice:

Your baby is counting on you for protection. Get vaccinated.



Order FREE copies using this **form**.

CDC Prenatal Resource

From Me, To You.

Recommended vaccinations during pregnancy help protect both you and your baby.

Getting recommended vaccinations while you're pregnant helps your body create protective antibodies (proteins produced by the body to fight off illnesses) that you can pass on to your baby.

These antibodies help protect your baby from several illnesses during their first few months of life.





Talk to a healthcare provider you trust about the vaccines that are right for you during your pregnancy.



Flu

Flu is a contagious respiratory illness that infects the nose, throat, and lungs.

Why vaccination is important:

If you have the fluwhile you are pregnant, you are more likely to have complications that can affect your pregnancy and developing baby. Changes in your immune, heart, and lung functions during pregnancy can make you more likely to get seriously ill from flu. Babies are also more likely to get very sick from the flu and getting a flu vaccine helps protect your baby.

When to get vaccinated:

CDC recommends an annual flu vaccine during each flu season (fall/winter), for everyone 6 months and older in the United States, including pregnant people. A flu vaccine can be given during any trimester of pregnancy.

Whooping Cough

Whooping cough is a highly contagious illness that can cause uncontrollable, violent coughing that can make it hard to breathe.

Why vaccination is important:

Whooping cough (also called pertussis) can be life threatening for babies. Getting a Tdap vaccine helps protect your baby from whooping cough.

When to get vaccinated:

CDC recommends getting a Tdap vaccine between the 27th and 36th week of each pregnancy, preferably during the earlier part of this time period.

RSV

RSV is a respiratory virus that usually causes mild, cold-like symptoms, but can be very dangerous for bables.

Why vaccination is important:

RSV is a common cause of severe respiratory illness in infants. Vaccination during pregnancy is one way to help protect your baby.

When to get vaccinated:

CDC recommends getting an RSV saccine if you are 32–36 weeks pregnant during RSV season (fall/ winter). If you do not get the RSV vaccine during your pregnancy, it is recommended that your baby get an RSV immunization during their first RSV season, if they are younger than 8 months.

COVID-19

COVID-19 is a respiratory illness that causes coldflu-, or pneumonia-like respiratory symptoms.

Why vaccination is important:

If you have COVID-19 during pregnancy, you are more likely to have complications that can affect your pregnancy and developing baby. Getting a COVID-19 vaccination during pregnancy can help protect babies younger than 6 months old, when they are too young to be vaccinated themselves.

When to get vaccinated:

CDC recommends that everyone 6 months and older in the United States, including pregnant people, stay up to date on COVID-19 vaccines. A COVID-19 vaccine can be given during any trimester of pregnancy.

Hepatitis B

Hepatitis B is a liver infection caused by the hepatitis B virus.

Why vaccination is important:

A baby that is born to a pregnant person who has hepatitis B is at high risk for becoming infected with hepatitis B during delivery.

When to get vaccinated:

Talk to a healthcare provider you trust about getting tested for hepatitis B during each pregnancy and to discuss whether or not you should get a hepatitis B vaccine.

All recommended vaccines are held to the highest standards of safety—meaning they are carefully <u>studied and monitored for side</u> effects. Vaccines may have some side effects. However, most people who get vaccinated have no side effects or only mild side effects, such as redness, swelling, and tenderness at the site where the shot was given.

Strengthen your baby's immunity before they are even born. Talk to a healthcare provider you trust about the vaccines that are right for you during your pregnancy. Learn more about how getting vaccinated during pregnancy helps protect you and your baby:

https://www.cdc.gov/vaccines/pregnancy/ vacc-during-after.html

From Me, to You.: CDC Prenatal Resource

CDC Webpage: From Me, to You!



Immunization Branch

Social Media Campaigns

Risk Less. Do More. Campaign

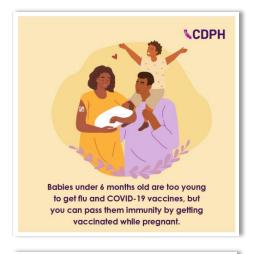


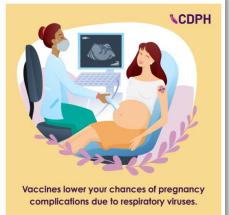






CDPH Pregnancy Toolkit

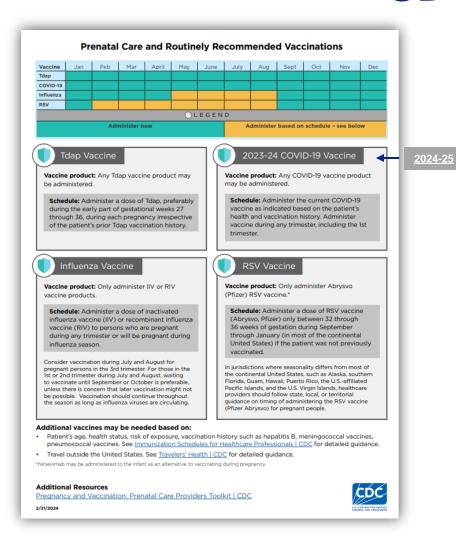








CDC Provider Resources



Respiratory Syncytial Virus vaccines (RSV) **Options for Infant RSV Prevention** At-a-Glance

Two immunization products are available for the prevention of severe Respiratory Syncytial Virus (RSV) disease in infants: maternal RSV vaccine and infant RSV monoclonal antibody. All infants should be protected against severe RSV disease through use of one of these products.

Either maternal RSV vaccination or use of RSV monoclonal antibody in the infant is recommended. Administration of both products is not needed for most infants.

Maternal RSV vaccination: Use ONLY Pfizer RSVPreF vaccine (trade name Abrysvo™)

Maternal RSV Vaccine

RSVPreF vaccine (trade name Abrysvo™) is recommended for people during weeks 32 through 36 of pregnancy, using seasonal administration, to prevent severe RSV disease in infants. In clinical trials, there was a small increase in the number of preterm birth events in vaccinated pregnant people after vaccination. It is not clear if this is a true safety problem related to RSV vaccine or if this occurred for reasons unrelated to vaccination.

Infant RSV Monoclonal Antibody'

RSV monoclonal antibody (generic name nirsevimab, trade name Beyfortus™) is recommended for the following:

- . Infants less than 8 months of age born during or entering their first RSV season if:
 - Mother did not receive maternal RSV vaccine or it is unknown if mother received RSV vaccine

 - Infant was born less than 14 days after maternal RSV vaccination

In rare circumstances, nirsevimab may be considered for infants born to mothers vaccinated 14 or more days before birth when the health care provider believes the potential incremental benefit is warranted. These situations include, but are

- o Infants born to mothers who might not have mounted an adequate immune response to vaccination (e.g., people with immunocompromising conditions)
- Infants born to mothers who have conditions associated with reduced transplacental antibody transfer (e.g., people living
- Infants who might have experienced loss of maternal antibodies, such as those who have undergone cardiopulmonary bypass of extracorporeal membrane oxygenation (ECMO)
- Infants with substantial increased risk for severe RSV disease (e.g., hemodynamically significant congenital heart disease, intensive care admission with the requirement for oxygen at hospital discharge
- . Some infants and children aged 8 through 19 months who are at increased risk of severe RSV disease entering their second RSV season.
 - American Indian/Alaska Native children
 - * Children with chronic lung disease of prematurity who require medical support during the six months before the start of their second RSV season
 - Children with severe immunocompromise
 - Children with severe cystic fibrosis

*Note: A different monoclonal antibody, palivizumab, is used in children under 24 months of age with certain conditions that place them at high risk for severe RSV disease. Please see <u>AAP guidelines for palivirumab.</u> AAP has published considerations on the use of nirsevimab and palivirumab: <a href="https://

Clinical Considerations for Use of Maternal RSV Vaccine or Infant RSV Monoclonal Antibody

(Administration of both products is not needed for most infants)

Product	Maternal RSV Vaccine	RSV Monoclonal Antibody
Description	RSVPreF vaccine	Generic name nirsevimab
<u> </u>	Trade name: Abrysvo™	Trade name: Beyfortus™
Immunity	Mother – Active immunity Infant – Passive immunity	Passive immunity
Duration of Protection	Approximately 3 to 6 months for infant	Approximately 5 months or more
How Supplied	A kit that includes a vial of lyophilized antigen component, a prefilled syringe containing sterile water diluent, and a vial adapter. The lyophilized antigen component is reconstituted with the sterile water diluent to f	Single dose pre-filled syringe with a purple (for 50 mg dosage) or light blue (for 100 mg dosage) plunger rod. No reconstitution needed.
Recommended Dosage	0.5 mL Currently recommended for administration as a single dose. It is not yet known whether additional doses might be needed in later pregnancies.	Age less than 8 months • Less than 5 kg; 50 mg (0.5mL) • 5 kg and greater: 100 mg (1mL) Age 8 through 19 months ² • 200 mg (administered as two IM injections)
Number of Doses	One	One ⁵
How Administered	IM injection	IM injection
Coadministration	Can be administered without regard to timing of other routine immunizations, including simultaneous administration	Can be administered without regard to timing of other routine immunizations, including simultaneous administration
Gestation or Age for Immunization	32 through 36 weeks	Less than age 8 months depending or mother's RSV vaccination status Ages 8 through 19 months if at increased risk for severe RSV disease. [‡]
When to Administer (Seasonality)	Beginning of September through end of January in most of the continental United States.	Beginning of October through end of March in most of the continental United States.
	In jurisdictions with RSV seasonality that differs from most of the continental United States, including Alaska, southern Florida, Guam, Hawaii, Puerto Rico, U.Saffiliated Pacific Islands, and U.S. Virgin Islands, healthcare providers should follow state, local, or territorial guidance on timing of maternal RSV vaccination.	In jurisdictions with RSV seasonality that differs from most of the continental United States, including Alaska, southern Florida, Guam, Hawaii, Puerto Rico, U.Saffiliated Pacific Islands, and U.S. Virgin Islands, healthcare providers should follow state, local, or territorial guidance on timing of nirsevimab administration.
Contraindications (Product Should Not Be Administered)	History of severe allergic reaction (e.g., anaphylaxis) to any component of the maternal RSV vaccine	History of severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of nirsevimab

Infant RSV Prevention At-A-Glance (CDC)

CDC: Prenatal Care and Routinely Recommended Vaccinations



Prenatal Vaccination Declination Form



Order FREE gestational wheels!

attent's name:	Patier	it's medical record number:	
Recommended vaccine	Declined	Reason for declining	
☐ Flu vaccine—as soon as it is available			
☐ Tetanus, diphtheria, and acellular pertussis (Tdap) vaccine—at 27-36 weeks of pregnancy, even if you got it before pregnancy			
Respiratory Syncytial Virus (RSV) Vaccine—September–January, between 32 and 36 weeks of pregnancy			
My newborn baby becoming very sick wi	ed vaccine(s) e an increase eant to preve th the disease	d risk of: nt, which can affect my unbom baby and me. e that the vaccine is meant to prevent. (During e	arly life, ba
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Prenatal
Vaccination
Declination Form

RSV Immunization Communication Templates – NEW!

 Provider Letter and Robocall Script Templates for Maternal and Pediatric RSV Immunization (Spanish included)

Template Portal Script for Prenatal Patients

Dear Patient,

We strongly recommend that you get vaccinated against respiratory syncytial virus (RSV) to protect yourself and your baby as you near the end of your pregnancy. RSV is a serious respiratory illness that is the leading cause of hospitalization of babies in the U.S. RSV vaccine (Abrysvo) is recommended for those 32-36 weeks pregnant, now through January.

The protection you get from this vaccine passes on to your baby, continuing after birth when your baby is most vulnerable. RSV vaccine has been thoroughly tested and proven to be safe for you and your baby and can be given at the same time as other prenatal vaccines, including flu, COVID-19, and Tdap.

If stocking RSV vaccine, end with:

Protect yourself and your baby as soon as possible. Contact us today to schedule your RSV vaccine.

For more information, see Should I Get the RSV Vaccine during Pregnancy?

If not stocking RSV vaccine, end with:

Protect yourself and your baby as soon as possible. We recommend that you contact your local in-network pharmacy to make an RSV vaccine appointment today!

For more information, see **Should I Get the RSV Vaccine during Pregnancy?**

Spanish version:

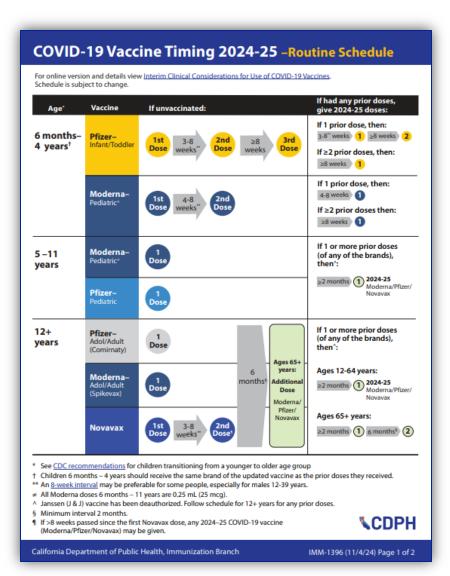
Estimado paciente,

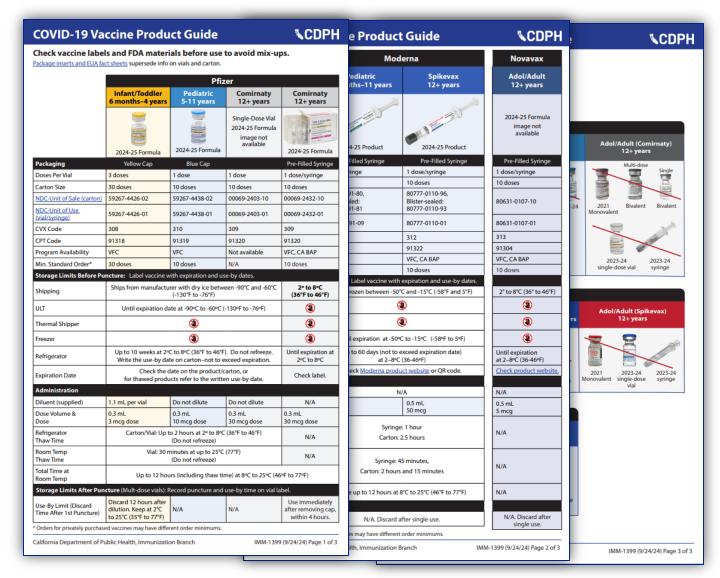
Le recomendamos ampliamente que se vacune contra el virus respiratorio sincitial (VRS) para protegerse a sí misma y a su bebé a medida que se acerca el final de su embarazo. El VRS es una enfermedad respiratoria grave y la principal causa de hospitalización de bebés en los EE. UU. La vacuna contra el VRS (Abrysvo) se recomienda para las mujeres que tienen entre 32 y 36 semanas de embarazo, desde ahora hasta enero.

La protección que usted obtiene con esta vacuna se transmite a su bebé y continúa después del nacimiento, cuando su bebé es más vulnerable. La vacuna RSV ha sido estudiada exhaustivamente y se ha demostrado que es segura para usted y su bebé. También se puede administrar al mismo tiempo que otras vacunas recomendadas durante el embarazo, incluyendo la vacuna contra la influenza (la gripe), el COVID-19 y Tdap.



CDPH COVID-19 Vaccine Timing & Product Guide

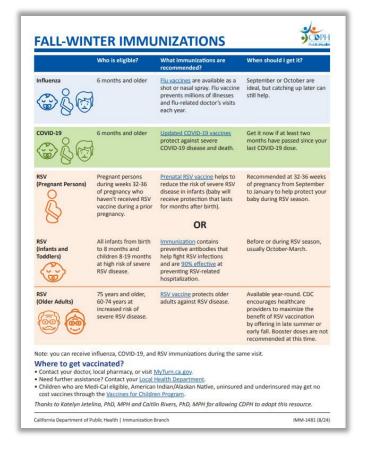




CDPH: COVID-19 Vaccine Timing Guide

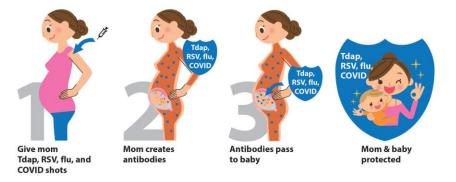
CDPH: COVID-19 Vaccine Product Guide

Additional Resources



Fall-Winter Immunizations (CDPH)

For more flu & respiratory disease prevention promotional materials, go to: EZIZ Flu Materials



Infographic on EZIZ

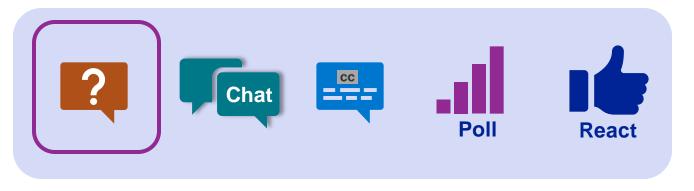
- Prenatal Toolkit
- MIHA Data Snapshots Dashboard
- RSV Resources
- RSV FAQs



COVID-19 Resources



During today's webinar, please click and open the Q&A icon to ask your questions so CDPH panelists and subject matter experts (SMEs) can respond.

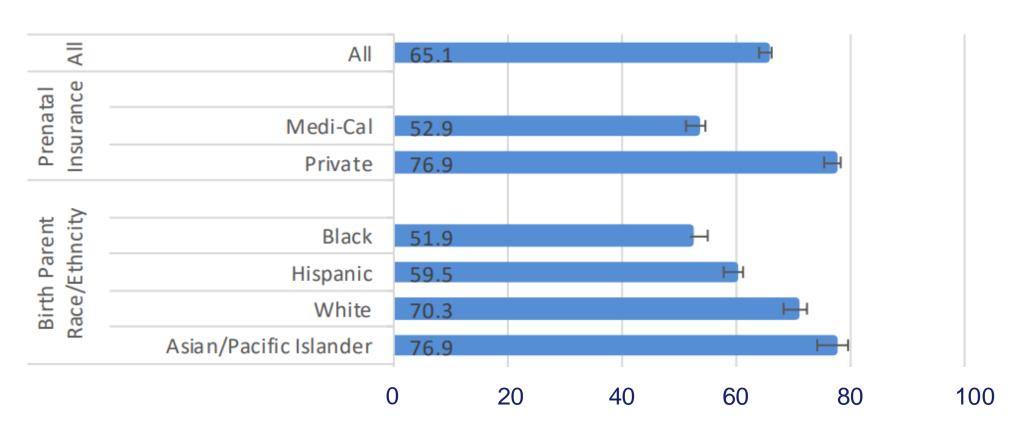


Q&A



Appendix

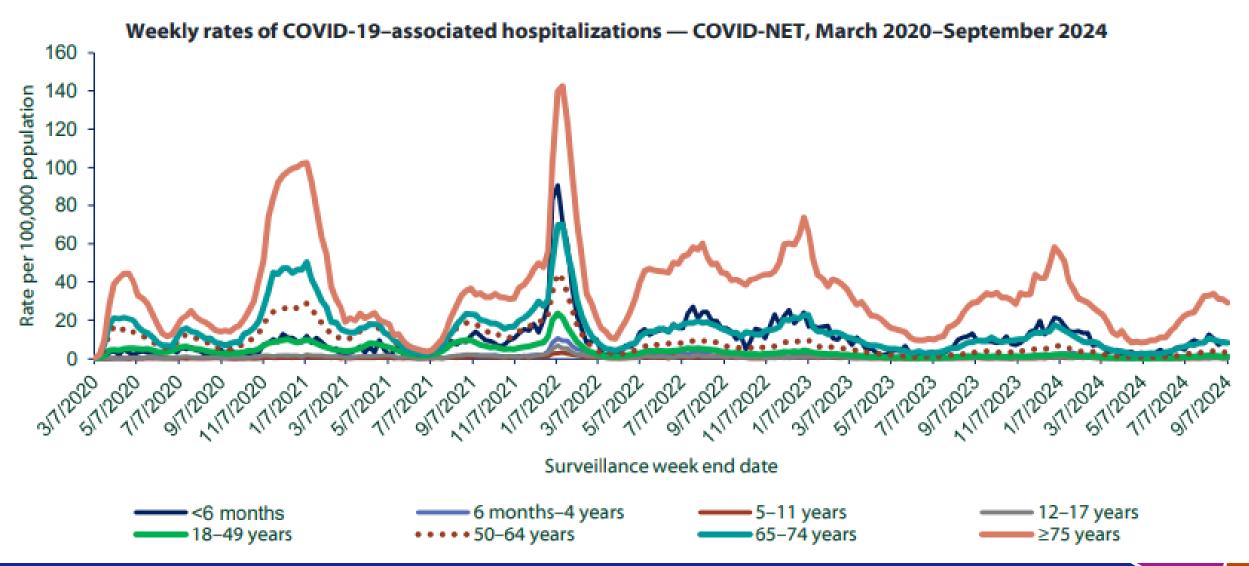
Tdap Coverage Estimates in California: Maternal and Infant Health Assessment, 2020-2021



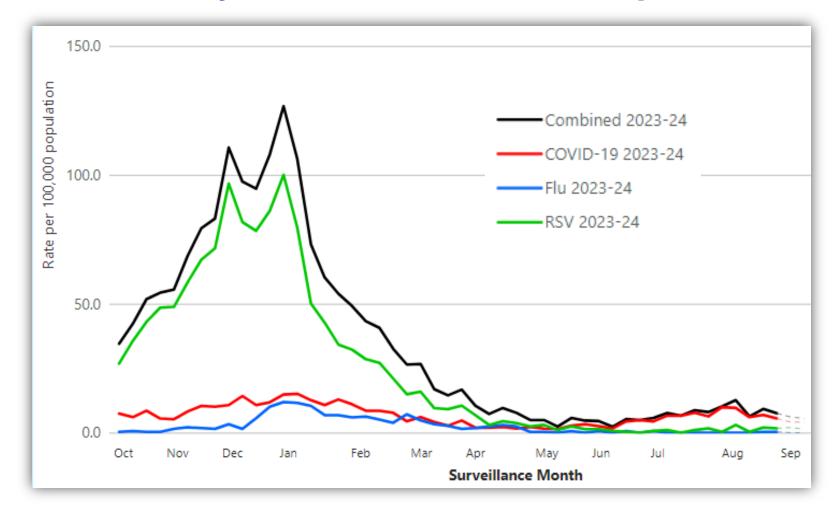
Receipt of Tdap vaccine during pregnancy (%)

Prenatal Vaccinations in California 2020-2021 Maternal and Infant Health Assessment Survey; CDPH Pertussis

<u>Infants <6 months</u> have High Rates of COVID-19 Hospitalizations, Second Only to Adults ≥75 years



Weekly Rates of Respiratory Virus-Associated Hospitalizations Infants <1 year old, Oct. 2023 – Sept. 2024



At its peak in the 2023 – 2024 season (week ending Dec. 30, 2023), RSV accounted for nearly 80% of all infant respiratory hospitalizations.

Data last updated September 27, 2024, Respiratory Virus Hospitalization Surveillance Network (RESP-NET) | RESP-NET | CDC

Additional Resources

- People Most Impacted by Respiratory Viruses | Respiratory Illnesses (CDC)
- Vaccine Fears Overturned by Facts Booklet (FINAL) (Back to the Vax)
- Vaccine Safety Resources on EZIZ (CDPH)
- Vaccine Safety (CDC)

Thank you for Attending!

Thank you to Drs. Neil Silverman and Hayley Miller, ACOG

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Webinar Support: Kamrynn Lawton and Catherine Flores, CIC, and Billie Dawn Greenblatt and Charles Roberts, CDPH



Website: CDPH Immunization Branch



Website: ACOG



About Us: California Immunization Coalition



CDPH Immunization Branch