
Each year, the California Medi-Cal Drug Use Review (DUR) program issues an annual summary of updates on immunization guidelines, products, and/or research in collaboration with the California Department of Public Health (CDPH) Immunization Branch. For reference, the recommended immunization schedules for 2020 in the United States can be accessed on the Centers for Disease Control and Prevention (CDC) website:

- **Persons 18 years of age or younger**
- **Persons 19 years of age or older**

**Learning Objectives:**

- Discuss strategies for improving vaccination rates and vaccine confidence, including catch-up strategies due to the coronavirus disease 2019 (COVID-19) pandemic
- Review updated Advisory Committee on Immunization Practices (ACIP) recommendations for influenza, hepatitis A (HepA) virus, and tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccines
- Describe the importance of influenza vaccination during the COVID-19 pandemic

**Routine Childhood Immunizations during the COVID-19 Pandemic**

On March 13, 2020, the president of the United States declared a national emergency in response to the COVID-19 pandemic. Six days later, California Governor Gavin Newsom issued a statewide Stay-at-Home order for all California residents to reduce the spread of COVID-19, which limited movement outside the home to only essential activities. While the statewide Stay-at-Home order helped to slow the spread of the COVID-19 pandemic, it also resulted in substantial disruptions to outpatient medical care and routine childhood vaccinations.

According to CDPH, the number of shots given to children 0 through 18 years of age in California during April 2020 decreased by more than 40 percent in comparison to April 2019. This decline in routine pediatric vaccinations has been documented across the country and leaves U.S. children and their communities at increased risk for outbreaks of vaccine-preventable diseases and additional strain on the healthcare system. Coordinated efforts between health care providers, patients and their caregivers, and public health officials will be necessary to ensure timely vaccination catch-up.

The American Academy of Pediatrics (AAP) and the CDC have issued recommendations and strategies for childhood immunizations during the COVID-19 pandemic, including the following:

- If well visits have been rescheduled, work with families to bring children up to date as quickly as possible. State-based immunization information systems and electronic health records may be able to support any catch-up immunizations.
- Separate well visits from sick visits (i.e., schedule well visits in the morning and sick visits in the afternoon) or separate patients spatially by placing patients with sick visits in different areas of the clinic or at separate clinics, when possible.

For more resources designed to guide vaccine planning during the COVID-19 pandemic, providers may refer to [Vaccination Guidance During a Pandemic](https://www.cdc.gov/vaccines/), which is available on the CDC website.
Strategies for Catch-up Vaccination during the COVID-19 Pandemic
The current immunization infrastructure remains sufficient to meet patient needs and ensure catch-up vaccination with the majority of providers able to administer vaccines during the critical back-to-school period. Strategies for catch up vaccinations include the following:

- Send vaccination reminder and recall notices via telephone, letters, postcards, emails, and/or texts.
- Use the Electronic Medical Record (EMR) or immunization registries to identify patients due or overdue for age-specific vaccinations.
- Implement standing orders for vaccinations.
- Communicate with and reassure patients and parents/caregivers the office or clinic is safe and is following all recommended infection control practices, including mask requirements, temperature checks, physical distancing requirements, and cleaning protocols.
- Limit the number of people within the office or clinic by having patients or family members wait outside of the office until they are called, if possible and within reason.
- Schedule high-risk patients at separate hours to minimize interaction.
- Promote awareness of Vaccines for Children (VFC) program among parents who may be recently eligible due to loss of insurance and not know their children are eligible for free vaccines.
- Take advantage of Resources for Encouraging Vaccinations During COVID-19 Pandemic, which are available on the CDC website.

Strategies to Strengthen Vaccine Confidence and Acceptance: Pandemic or No Pandemic

Vaccine with Confidence is CDC’s strategic framework for strengthening vaccine confidence and preventing outbreaks of vaccine-preventable diseases in the U.S. Vaccine with Confidence aims to strengthen public trust in vaccines by advancing the following three key priorities:

1. Protect Communities: The CDC will leverage immunization data to find and respond to communities at risk, work with trusted local partners to reach at-risk communities before outbreaks, and ensure vaccines are available, affordable, and easy to get in every community.
2. Empower Families: The CDC will expand resources for healthcare professionals to help them have effective vaccine conversations with parents, work with partners to start conversations before the first vaccine appointment, and help providers foster a culture of immunization in their practices.
3. Stop Myths: The CDC will work with local partners and trusted messengers to improve confidence in vaccines among key, at-risk age groups, establish partnerships to contain the spread of misinformation, and educate key new stakeholders (e.g., state policy makers) about vaccines.

Although patients frequently consult family members, friends, and websites for vaccine information, parents consistently rank their child’s doctor as their most trusted source for vaccine information. Acknowledging that there is no single, effective strategy in vaccine communication that will work for everyone, the CDC suggests providers use the tool-box approach to communication. Within the tool-box approach are the following strategies:

- Use a whole-team approach to vaccine communication, including consistent messaging throughout each visit across all staff, to empower families and create a culture of immunization within a practice.
• Build trust with patients and parents/caregivers early in the relationship by spending time with the patient and demonstrating a caring disposition.

• Offer strong recommendations to inform patients their vaccines are due using the presumptive approach such as, “Today we will be protecting Annie against polio, hepatitis B, influenza, and pneumococcal disease.” This includes seasonal influenza, where the presumptive approach is to say, “I see that Annie hasn’t received her flu vaccine! Flu can be very dangerous for young children like Annie because it can cause pneumonia, hospitalization, or worse. I’ll get the shot ready now to make sure she is protected from the dangers of flu.”

• Use motivational interviewing techniques, a patient-centered, guided communication style for enhancing a person’s own motivation for change or behavioral action. Key components of motivational interviewing including empathy, collaboration, evocation, and support for autonomy.

• Tailor educational materials specific to individual questions. Personal stories, balanced information on risks and benefits, and other educational materials can be used to provide reassurance when questions or concerns arise.

• Reminder/recall systems can be used even when vaccines are refused. By maintaining rapport with patients and scheduling the next visit before they leave, there will be another opportunity for vaccine communication in the future.

Influenza Vaccine
As in prior years, routine annual influenza vaccination is recommended for everyone 6 months of age or older without contraindications. For the upcoming influenza season, widespread influenza vaccination will be critical to reduce the impact of respiratory illnesses in the population and the resulting burdens on the healthcare system during the COVID-19 pandemic. Any reduction in flu cases and their severity could make a difference for hospital capacity.

If possible, providers should offer vaccination by the end of October. Children 6 months through 8 years of age who require two doses should receive their first dose as soon as possible after vaccine becomes available to allow the second dose (which must be administered ≥4 weeks later) to be received by the end of October.

For the 2020 – 2021 season, inactivated influenza vaccines (IIVs), recombinant influenza vaccine (RIV4), and live attenuated influenza vaccine (LAIV4) are expected to be available. Most influenza vaccines available for the 2020 – 2021 season will be quadrivalent, with the exception of MF59-adjuvanted IIV, which is expected to be available in both quadrivalent and trivalent formulations.

Vaccine viruses in 2020 – 2021 U.S. trivalent egg-based influenza vaccines (i.e., vaccines other than ccIIV4 and RIV4) include:

• An A/Guangdong-Maonan/SWL1536/2019 (H1N1) pdm09-like virus (different strain from last season)
• An A/Hong Kong/2671/2019 (H3N2)-like virus (different strain from last season)
• A B/Washington/02/2019 (Victoria lineage)-like virus) (different strain from last season)

In addition to these viruses, quadrivalent influenza vaccines contain a B/Phuket/3073/2013-like virus (Yamagata lineage), which was in influenza vaccines last season.

U.S. cell culture–based inactivated (ccIIV4) and RIV4 influenza vaccines will contain hemagglutinin (HA) derived from an influenza A/Hawaii/70/2019 (H1N1) pdm09-like virus, an influenza A/Hong Kong/45/2019 (H3N2)-like virus, an influenza B/Washington/02/2019 (Victoria lineage)-like virus, and an influenza B/Phuket/3073/2013 (Yamagata lineage)-like virus.
Recommendations for persons with a history of egg allergy now state that additional measures for those with a history of severe allergic reaction to egg (i.e., vaccination in a medical setting supervised by a health care provider who is able to recognize and manage severe allergic reactions) are needed only if a vaccine other than ccIV4 or RIV4 is used.

For additional information about available formulations and dosing of influenza vaccine and recommendations for the timing of vaccination, providers may refer to the *Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2020 – 2021 Influenza Season*, published in the Morbidity and Mortality Weekly Report (*MMWR*), which is available on the CDC website.

The CDPH also offers *Flu & Respiratory Disease Prevention Promotional Materials* on the California Vaccines for Children Program website, including a *FLU Vaccination Action Plan*, which describes three habits of highly successful VFC clinics for improving influenza vaccination rates. *Families Fighting Flu* is another source for educational materials and resources, including a flu education toolkit designed for healthcare professionals.

**Hepatitis A (HepA) Vaccine**
A July 2020 report summarizes previously published recommendations from ACIP regarding the prevention of HepA virus infection in the United States. ACIP recommends routine vaccination of children 12 to 23 months of age and catch-up vaccination for children and adolescents 2 to 18 years of age who have not previously received HepA vaccine at any age. ACIP recommends HepA vaccination for adults at risk for HepA virus infection or severe disease from HepA virus infection and for adults requesting protection against HepA virus without acknowledgment of a risk factor. These recommendations also provide guidance for vaccination before travel, for postexposure prophylaxis, in settings providing services to adults, and during outbreaks.

For complete recommendations and CDC clinical guidelines, providers may refer to the *Prevention of Hepatitis A Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices, 2020*, published in the *MMWR*, which is available on the CDC website.

**Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis (Tdap) Vaccine**
In October 2019, ACIP recommended that either Tdap or tetanus and diphtheria toxoids (Td) vaccine could be used in situations where only Td was previously recommended. This includes the decennial Td booster, tetanus prophylaxis for wound management, and catch-up vaccination, including in pregnant women. While Tdap costs more than Td, utilization data show that Tdap was widely used in place of Td by clinicians in the United States, suggesting acceptability of Tdap to both patients and health care providers. ACIP concluded that allowing either Tdap or Td to be used in situations where Td only was previously recommended could increase provider point-of-care flexibility.

For complete recommendations, providers may refer to the *Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccines: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2019*, published in the *MMWR*, which is available on the CDC website.