Last revised 11 March 2024


# STANDING ORDERS FOR IMMUNIZATIONS 2023–2024

Defense Health Agency
Immunization Healthcare Division

DHA
Defense Health Agency ®

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Every attempt was made by the project clinical working group to assure accuracy of content. Changes in immunization healthcare guidelines and vaccine-related alerts occur frequently. It is important for users of this resource to understand that full review of the vaccine package insert and relevant alerts at www.health.mil/vaccines are required by clinical staff responsible for vaccine administration. Competency training should not be limited to the use of this resource in the delivery of immunization healthcare.

**DEFENSE HEALTH AGENCY**
7700 ARLINGTON BOULEVARD, SUITE 5101
FALLS CHURCH, VIRGINIA 22042-5101

MEMORANDUM FOR RECORD

SUBJECT: Standing Orders for Immunizations and Appointment of Medical Director

REFERENCE: Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases
AR 40-562
BUMEDINST 6230.15B AFI 48-110_IP
CG COMDTINST M6230.4G
7 OCTOBER 2013

The following standing orders have been updated and will be the standard of care for administering vaccinations at the (name of clinic).

The following individual has been appointed as Medical Director:

Medical Director:

Title:

Phone:

Clinic:

Responsibilities for this individual and all immunization staff are outlined in the Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases regulation/instruction referenced above, and this resource should be reviewed in its entirety by the appointed individual.

This appointment is current as the above indicated date and shall remain valid until rescinded or removed from the appointment.

Signature Block

**ORGANIZATIONAL LETTERHEAD**

MEMORANDUM FOR RECORD

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REFERENCE: Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases
AR 40-562
BUMEDINST 6230.15B AFI 48-110_IP
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7 OCTOBER 2013

The following standing orders have been updated and will be the standard of care for administering vaccinations at the (name of the clinic).

The following individual has been appointed as Medical Director:

Medical Director:

Title:

Phone:

Clinic:

Responsibilities for this individual and all immunization staff are outlined in the Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases regulation/instruction referenced above, and this resource should be reviewed in its entirety by the appointed individual.

This appointment is current as the above indicated date and shall remain valid until rescinded or removed from the appointment.

Signature Block

INFORMATION PAPER

DHA-IHD

21 Mar 2022

SUBJECT: Standing Orders for Vaccine Delivery

1. Purpose. To provide an overview of Standing Orders for vaccine delivery within the DOD.

2. Facts.

   a. In the United States, federal law prohibits dispensing human vaccines or immune globulins without a prescription of a practitioner licensed by law to administer such drug (Federal Food, Drug, and Cosmetic Act, 21USC 353, 21CFR 610.60[a][6]).

   b. Standing Order programs authorize the administration of immunizations based on approved protocols without the need for a written physician order or referral from a primary care provider.

   c. Standing Orders are written protocols that delineate the circumstances under which appropriately trained healthcare personnel, other than a privileged provider, can engage in the legal practice of medicine. Standing Orders describe the specific type of medical practice that will be delegated, delineate the procedures that personnel must follow, identify the patient population that may be served, specify the level of provider supervision required, and govern the locations where the services may occur.

   d. Standing Orders are intended to remove administrative barriers to immunizations that are routinely administered in low-risk settings. They are recommended for use by properly trained health care personnel working within their scope of practice as determined by their license and each Service and/or the Defense Health Agency (DHA). Individuals must be trained in screening patients for contraindications, administering vaccines, and monitoring patients for adverse events in accordance with DOD, United States Coast Guard, and Centers for Disease Control and Prevention (CDC) guidelines. Training standards include documentation of comprehensive orientation and annual refresher training IAW Service and/or DHA requirements.

   e. Standing Orders do not dictate immunization requirements. Rather, they provide guidance by the privileged physician with medical oversight over the immunization activity to the immunization personnel, for the vaccines administered by that activity. As such, Standing Orders facilitate high quality immunization healthcare by reducing unnecessary barriers. DOD vaccine requirements are established by DOD Health Affairs, the Multi-Service Regulation on Immunizations and Chemoprophylaxis, as well as the various Service-specific polices and Combatant Commands' force health protection policies.

   f. Successful Standing Order programs for immunizations should include protocols that:

      (1) Identify persons eligible for vaccination based on age,vaccination status, occupational or travel requirements and/or medical conditions that put them at high risk for infection.

(2) Provide adequate information to patients or their guardians regarding the risks and benefits of a vaccine (e.g., Vaccine Information Statements) and documentation of that information in compliance with Federal, DOD,and Service-specific guidelines.

(3) Record patient refusals or medical and administrative exemptions in the appropriate, Service-specific Immunization Tracking System (ITS) and the individual medical record.

(4) Document vaccine administration within DOD and Service-specific ITS (e.g., MEDPROS (Army), ASIMS (Air Force), MRRS (Navy, Marine Corps), SAMS (ships afloat)) and any post-vaccination adverse events to the Vaccine Adverse Event Reporting System. Immunizations and adverse events should also be documented in the patient's Electronic Health Record.

(5) Address a quality assurance process to maintain appropriate standards of care for immunization delivery by health care personnel.

g. A Standing Order must be available for every vaccination that is administered without an individual order made by a privileged provider. The smallpox vaccine, ACAM2000, is ineligible to have standing orders, as each individual must be screened by a privileged provider to ensure there is not a contraindication to administration of this unique vaccine. Standing Orders must be signed by a privileged physician with medical oversight over any clinic or activity that administers immunizations. In order to remain valid, standing orders must be renewed at least annually, or changes in oversight responsibilities, vaccine administration methods, and/or when updates in vaccine recommendations are made by the CDC's Advisory Committee on Immunization Practices.

h. Examples of Standing Orders (not all-inclusive) may be found at https://health.mil/standingorders.

3. References.


a. Army Regulation (AR) 40-562, BUMEDINST 6230.15B, AFI 48-110_IP, CG COMDTINST M6230.4G, Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases, 7 October 2013.

b. Kroger AT, Duchin J, Vázquez M. Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP):Vaccine Programs. https://www.cdc.gov/vaccines/hcp/acip-recs/general- recs/index.html. Accessed on 20 March 2022.

c. Immunization Action Coalition. Using Standing Orders for Administering Vaccines and Standing Order Templates. http://www.immunize.org/standing-orders/. Last updated 11 March 2022.

d. Centers for Disease Control and Prevention. Adult Immunization programs in nontraditional settings: quality standards and guidance for program evaluation – a report of the NVAC and Use of Standing Orders programs to increase adult vaccination rates: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000; 49(RR01); 15-26.

e. National Vaccine Advisory Committee. Recommendations from the National Vaccine Advisory Committee: Standards for Adult Immunization Practice. Public Health Reports. March-April 2014. Volume 129.

f. Federal Food, Drug, and Cosmetic Act, 21USC 353, 21CFR 610.60 [a][6].

g. Multiple resources assembled by DHA-IHD: https://www.health.mil/vaccines.

South Atlantic Region Vaccine Safety Hub
Approved: Deputy Chief, Immunization Healthcare Division
877-438-8222 (DSN 761-4245)

# Anatomic Site Maps

Suggested Sites
for Immunization

# Anatomic Site Map

Suggested sites for immunizations

## 2 & 4 Months

Oral
Rotavirus

Right Vastus Lateralis (IM)
Hib
PCV13

Left Vastus Lateralis (IM)
DTaP+IPV+HepB
(Combination Vaccine)

Hib—*Haemophilus influenza type b* Vaccine
PCV13—Pneumococcal Conjugate Vaccine
DTaP—Diphtheria Toxoid, Tetanus Toxoid and Acellular Pertussis Vaccine
IPV—Inactivated Polio Vaccine
HepB—Hepatitis B Vaccine
IM—Intramuscular

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

Photo ShutterStock. Retrieved 09 April 2020 from
https://www.shutterstock.com/image-photo/3-months-old-baby-boy-dressed-123453358

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# Anatomic Site Map

Suggested sites for immunizations

## 6 Months

Right Vastus Lateralis (IM)
PCV13

Left Vastus Lateralis (IM)
DTaP+IPV+HepB
(Combination Vaccine)

PCV13—Pneumococcal Conjugate Vaccine
DTaP—Diphtheria Toxoid, Tetanus Toxoid and Acellular Pertussis Vaccine
IPV—Inactivated Polio Vaccine
HepB—Hepatitis B Vaccine
IM—Intramuscular

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

*6 months and older: flu vaccine (if indicated) in left vastus lateralis (IM) and/or opposite of PCV13

Photo.Shutterstock. Retrieved 09 April 2020 from
https://www.shutterstock.com/image-photo/smiling-child-walking-hand-mom-97281155

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# Anatomic Site Map

Suggested sites for immunizations

## 12 Months

Right Vastus Lateralis (IM)
PCV13

Right Fatty Tissue Overlying Anterolateral Muscle (SC)
Varicella

Left Vastus Lateralis (IM)
HepA

Left Fatty Tissue Overlying Anterolateral Muscle (SC)
MMR (Combination Vaccine)

PCV13—Pneumococcal Conjugate Vaccine
HepA—Hepatitis A Vaccine
MMR—Measles, Mumps, and Rubella Vaccine
IM—Intramuscular
SC—Subcutaneous

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

*6 months and older: flu vaccine (if indicated) in left vastus lateralis (IM) and/or opposite of PCV13

Photo. Shutterstock. Retrieved 09 April 2020 from
https://www.shutterstock.com/image-photo/beautiful-baby-boy-on-white-background-723436909

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# Anatomic Site Map

Suggested sites for immunizations

## 15 Months

Right Vastus Lateralis (IM)
Hib

Left Vastus Lateralis (IM)
DTaP
(Combination Vaccine)

Hib—*Haemophilus influenzae type b* Vaccine

DTaP—Diphtheria Toxoid, Tetanus Toxoid and Acellular Pertussis Vaccine

IM—Intramuscular

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

*6 months and older: flu vaccine (if indicated) in left vastus lateralis (IM)

Photo. ShutterStock. Retrieved 09 April 2020 from
https://www.shutterstock.com/image-photo/standing-baby-girl-isolated-on-white-175002521

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# Anatomic Site Map

Suggested sites for immunizations

## 18 Months

Right Vastus Lateralis (IM)
HepA

HepA - Hepatitis A Vaccine

IM—Intramuscular

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

*6 months and older: flu vaccine (if indicated) in left vastus lateralis (IM)

Photo. ShutterStock. Retrieved 09 Apiril 2020 from
https://www.shutterstock.com/image-photo/baby-girl-diaper-over-white-background-18970339

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# Anatomic Site Map

Suggested sites for immunizations

## 4-6 Years

Right Fatty Tissue Overlying Tricep (SC)
MMRV (Combination Vaccine)

Left Deltoid (IM)
DTaP+IPV
(Combination Vaccine)

MMRV—Measles, Mumps, and Rubella and Varicella Vaccine
DTaP—Diphtheria Toxoid, Tetanus Toxoid and Acellular Pertussis Vaccine
IPV—Inactivated Polio Vaccine
IM—Intramuscular
SC—Subcutaneous

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

*6 months and older: flu vaccine (if indicated) in left deltoid (IM)

Photo. CDC. Retrieved 18 March 2020 from
https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/preschoolers.html

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# Anatomic Site Map

Suggested sites for immunizations

## 11-12 Years

Right Deltoid (IM)
HPV
Tdap

Left Deltoid (IM)
MCV4

HPV—Human Papillomavirus Vaccine
Tdap—Tetanus and Diphtheria Toxoids and Acellular Pertussis Vaccine
MCV4—Meningococcal (A,C,W,Y) Vaccine
IM—Intramuscular

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

*6 months and older: flu vaccine (if indicated) in left deltoid (IM)

Photo. ShutterStock. Retrieved 09 April 2020 from
https://www.shutterstock.com/image-photo/portrait-student-girl-isolated-over-white-137298671

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# Anatomic Site Map

Suggested sites for immunizations

## 16-18 Years

Right Deltoid (IM)
Tdap
(Combination Vaccine)


Left Deltoid (IM)
MCV4

Tdap—Tetanus and Diphtheria Toxoids and Acellular Pertussis Vaccine

MCV4—Meningococcal (ACWY) Vaccine

IM—Intramuscular

Note: "If more than 2 vaccines are in injected in a single limb, the injections should be sufficiently separated (separate anatomic sites [i.e. ≥1 inch] if possible) so that any local reactions can be differentiated" (ACIP)

*6 months and older: flu vaccine (if indicated) in left deltoid (IM)

Photo. ShutterStock. Retrieved 09 April 2020 from
https://www.shutterstock.com/image-photo/tan-skin-asian-black-hair-handsome-535858828

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# CDC Injection Safety Guidelines

# Rx for Safe Injections in Healthcare

1 Needle
1 Syringe
+ 1 Time

0 Infections

Safe injection practices prevent transmission of infectious diseases. Patients and healthcare providers must insist on nothing less than ***One Needle, One Syringe, Only One Time*** for each and every injection.

For more information, please visit:
**www.cdc.gov/injectionsafety/1anonly.html**

**The *One & Only Campaign* is a public health effort to eliminate unsafe medical injections. To learn more about safe injection practices, please visit www.cdc.gov/injectionsafety/1anonly.html**

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA
CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

1 ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.

Safe Injection Practices Coalition

306089-M

# Injection Safety Guidelines from CDC

- Follow proper infection control practices and maintain aseptic technique during the preparation and administration of injected medications (e.g., perform hand hygiene).
- Never administer medications from the same syringe to more than one patient, even if the needle is changed.
- Never enter a vial with a used syringe or needle.
- Do not use medications packaged as single-dose or single-use for more than one patient.
- Do not use bags of intravenous solution as a common source of supply for more than one patient.
- Limit the use of multi-dose vials and dedicate them to a single patient whenever possible.
- Always use facemasks when injecting material or inserting a catheter into the epidural or subdural space.

Adapted from: Guideline for isolation precautions: preventing transmission of infectious agents in health care settings
2007 Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at: http://www.cdc.gov/hicpac/pdf/isolation/isolation2007.pdf

# Pediatric Standing Orders

Diphtheria Tetanus and Pertussis Vaccine
Hepatitis A Vaccine
Hepatitis B Vaccine
Haemophilus influenzae type b Vaccine
Human Papillomavirus Vaccine
Inactivated Polio Vaccine
Influenza Vaccine
Japanese Encephalitis Vaccine
Measles Mumps Rubella Vaccine
Measles Mumps Rubella Varicella Vaccine
Meningococcal Vaccine (ACWY)
Meningococcal Vaccine (Group B)
Pneumococcal Conjugate (PCV15, PCV20, PPSV23)
Rabies Pre-Exposure Prophylaxis (PrEP) Vaccine
Rotavirus Vaccine
Tetanus Diphtheria and Pertussis Vaccine
Tick-Borne Encephalitis Vaccine
Typhoid Vaccine
Varicella (Chickenpox) Vaccine
Yellow Fever Vaccine

**Standing Orders for Administering Diphtheria, Tetanus, and Acellular Pertussis (DTaP) Vaccine (Pediatric)**

**Purpose:** To reduce morbidity and mortality from tetanus, diphtheria and pertussis disease by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify patients 2 months to 6 years of age in need of vaccination against tetanus, diphtheria, and pertussis based on the following criteria:
    - Lack of documentation of completion of a 5-dose series of diphtheria, tetanus and pertussis-containing vaccine (DTaP)

2. Using DD Form 3110, screen all patients for contraindications and precautions to DTaP:

**Contraindications:**

- History of a serious reaction (e.g., anaphylaxis) after a previous dose of a vaccine containing tetanus or diphtheria toxoid or to a vaccine component (to include neomycin, polymyxin B, streptomycin, or yeast)
- For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.
- History of encephalopathy (e.g. coma, decreased level of consciousness, prolonged seizures) within 7 days following a pertussis-containing vaccine not attributable to another identifiable cause

**Precautions:**

- History of Guillain-Barré syndrome within 6 weeks of a previous dose of tetanus toxoid-containing vaccine
- History of an Arthus-type hypersensitivity reaction after a previous dose of tetanus or diphtheria toxoid-containing vaccine: defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine
- Moderate or severe acute illness with or without fever
- Progressive or unstable neurologic disorder, uncontrolled seizures or progressive encephalopathy: defer vaccination until a treatment regimen has been established and the condition has stabilized
- The tip caps of the prefilled syringes of Infanrix®, Kinrix®, and Pediarix® contain natural rubber latex and may cause allergic reactions in latex sensitive individuals. The vials of Infanrix®, Kinrix®, and Pediarix® do not contain latex. Daptacel® does not contain latex
- Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope

- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Follow dosing schedule as below. DTaP consists of a 3-dose primary series (2, 4, and 6 months of age) and 2 boosters (15-18 months and 4-6 years of age). DTaP may be given as a stand-alone vaccine, or as part of a combination vaccine (a type of vaccine that combines more than one vaccine together into one shot).
   - Administer 0.5mL intramuscularly in the preferred site (anterolateral thigh for infants and toddlers or in the deltoid for children and adolescents). The alternate site (anterolateral thigh muscle or deltoid muscle) may be used if the preferred site is inadequate. Choose needle gauge and length appropriate to administration route and the patient's age and/or body mass according to the IM injection table below.

**Schedule for routine vaccination:**

**TABLE 1. Currently Licensed Vaccines containing Diphtheria, Tetanus, & Acellular Pertussis (DTaP)**

| Vaccine type | Trade name | Manufacturer | 2 mos | 4 mos | 6 mos | 15-18 mos | 4-6 yrs |
|---|---|---|---|---|---|---|---|
| DTaP | Infanrix/ Daptacel | GlaxoSmith-Kline/Sanofi Pasteur | X | X | X | X | X |
| DTaP-IPV-HepB *(3 dose series)* | Pediarix *(6 wks – 6 yrs)* | GlaxoSmithKline | X | X | X | | |
| DTaP-IPV-Hib *(4 dose series)* | Pentacel *(6 wks – 4 yrs)* | Sanofi Pasteur | X | X | X | X | |
| DTaP-IPV-Hib-HepB *(3 dose series)* | Vaxelis *(6 wks – 4 yrs)* | Sanofi Pasteur | X | X | X | | |
| DTaP-IPV | Kinrix/ Quadracel | GlaxoSmith-Kline/Sanofi Pasteur | | | | | X |
| DT | No trade name | Sanofi Pasteur | X | X | X | X | X |

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to the patient's age. | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Infants (1-12 months) | 1 inch | Anterolateral thigh |
| Toddlers (1-2 years) | 1 - 1.25 inch | Anterolateral thigh* |
| | 5/8† - 1 inch | Deltoid muscle of arm |
| Children (3-10 years) | 5/8† - 1 inch | Deltoid muscle of arm* |
| | 1 - 1.25 inch | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
†If skin is stretched tightly and subcutaneous tissues are not bunched
*Preferred site

5. For persons who did not receive DTaP at the ages/intervals specified in #4, provide catch-up doses according to the following:

| TABLE 3. Catch-Up Schedule | | | | |
|---|---|---|---|---|
| **Dose** | **Recommended age** | **Minimum age** | **Recommended interval to next dose** | **Minimum interval to next dose** |
| DTaP #1 | 2 months | 6 weeks | 8 weeks | 4 weeks |
| DTaP #2 | 4 months | 10 weeks | 8 weeks | 4 weeks |
| DTaP #3 | 6 months | 14 weeks | 6-12 months† | 6 months† |
| DTaP #4 | 15-18 months | 15 months | 3 years | 6 months |
| DTaP #5* | 4-6 years | 4 years | | |

†If a child age ≥12 months received dose #4 with an interval of less than 6 months but more than 4 months, the dose does not need to be repeated
*Dose #5 is not necessary if dose 4 was administered at age ≥4 years and at least 6 months after dose #3

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Hepatitis A Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from hepatitis A virus infection by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons 6 months – 17 years of age in need of vaccination against hepatitis A virus (HAV) based on the following criteria:
    - No documented receipt of a complete series of hepatitis A vaccine (HepA) at the appropriate ages and intervals.
    - Age 6 - 11 months traveling to countries with high or intermediate endemic HAV:
        - This is an off-label use covered under this standing order.
        - Doses given before 12 months of age do not count towards the routine HepA series.
    - Individuals at increased risk for HAV infection due to:
        - Chronic liver disease (e.g., hepatitis B and C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, ALT or AST level greater than twice the upper limit of normal)
        - Close, personal contact with international adoptee in the first 60 days after arrival from a country with high or intermediate endemic HAV
        - Current or recent use of street drugs (injection or noninjection)
        - HIV infection
        - Men who have sex with men
        - Occupational risk (e.g., laboratory or research staff routinely exposed to HAV)
        - Individuals experiencing homelessness
        - Individuals who are incarcerated
        - Pregnancy (if at risk for infection or severe outcome from infection during pregnancy)
        - Residents and staff of facilities for developmentally disabled persons, nonresidential day care, or providing services to injection or noninjection drug users
        - Travel to countries with high/intermediate endemic HAV (see CDC Traveler's Health/Yellow Book)
    - Any other individual who wants to be protected from HAV

2. Using DD Form 3110, screen all patients for contraindications and precautions to HepA:

    **Contraindications:**

    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of HepA or to a vaccine component (including neomycin)
    - For information on vaccine components, refer to the package insert for Havrix, Vaqta, or The CDC Pink Book Appendix B.

**Precautions:**

- Moderate or severe acute illness with or without fever
- Certain HepA presentations contain latex, which may cause allergic reactions:
  - Havrix: tip caps of prefilled syringes contain natural rubber latex
  - Vaqta: vial stopper, syringe plunger stopper, and tip cap contain dry natural latex rubber
- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Administer the appropriate HepA intramuscularly (IM) according to Tables 1 & 2.
   - Booster doses, challenge doses, and post-exposure prophylaxis (PEP) are not covered under this standing order: these patients must obtain a written order from a privileged provider.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient age | Needle Length | Injection Site |
|---|---|---|
| Infants, 1-12 months | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers, 1-2 years | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children, 3-10 years | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children & Adolescents, 11-18 years | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

| TABLE 2. Schedule for hepatitis A vaccine primary series by vaccine type, 12 months – 17 years | | |
|---|---|---|
| | **Havrix** | **Vaqta** |
| **Dose volume** | 0.5 mL | |
| **Number of doses** | 2 | |
| **Recommended age** | 12 – 23 months | |
| **Recommended intervals*** | 0, 6-12 months | 0, 6-18 months |
| **Minimum intervals** | Dose 1 to dose 2: 6 months | |

* Time in months from first dose.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Hepatitis B Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from hepatitis B virus infection (HBV) by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under these standing orders, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons birth - 17 years of age in need of vaccination against HBV based on the following criteria:
    - All individuals without documented receipt of ≥ 3 doses of hepatitis B vaccine (HepB) at the appropriate ages and intervals

2. Using DD Form 3110, screen all patients for contraindications and precautions to HepB:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of HepB or to a vaccine component (including yeast)
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Certain HepB products contain latex, which may cause allergic reactions:
        - Engerix-B, Pediarix: tip caps of prefilled syringes contain natural rubber latex
        - Recombivax HB: vial stopper, syringe plunger stopper, and tip cap contain dry natural latex rubber
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - Administer the appropriate HepB intramuscularly (IM) according to Tables 1 & 2.
    - Administration of 4 doses of hepatitis B-containing vaccine is permitted when combination vaccines are given after the monovalent HepB birth dose.
    - Although individuals aged 18-19 years receive the smaller ("pediatric") dose of certain HepB

products, they are not covered here: please reference the DHA-IHD adult HepB standing order for information.

- Certain situations are not covered under this standing order: these patients must obtain a written order from a privileged provider. This includes:
  - Use of Heplisav-B and PreHevbrio in pregnancy
  - Primary series administration to pediatric hemodialysis patients
  - Revaccination and booster doses for:
    - Infants born to HBsAg-positive or HBsAg-unknown women
    - Post-exposure prophylaxis
    - Travelers to high-risk areas
    - Healthcare and public safety workers
    - Hemodialysis and other immunocompromised patients

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient age | Needle Length | Injection Site |
|---|---|---|
| Neonates (0 – 28 days) | 5/8 inch (16 mm)* | Anterolateral thigh |
| Infants, 1-12 months | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers, 1-2 years | 1-1.25 inch (25-32 mm) | Anterolateral thigh† |
| | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children, 3-10 years | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm† |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children & Adolescents, 11-18 years | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm† |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
If skin is stretched tightly and subcutaneous tissues are not bunched.
† Preferred site.

| TABLE 2. Schedule for hepatitis B vaccine primary series by vaccine type, 0-17 years of age | | | | |
|---|---|---|---|---|
| | **Monovalent vaccine*** | | **Combination vaccine** | |
| | Engerix | Recombivax | Pediarix† | Vaxelis‡ |
| **Dose volume** | 0.5 mL | 0.5 mL | 0.5 mL | 0.5 mL |
| **Number of doses** | 3 | 3 | 3 | 3 |
| **Recommended intervals§** | 0, 1, 6 months | 0, 1, 6 months | 0, 2, 4 months | 0, 2, 4 months |
| **Minimum intervals** | Dose 1 to dose 2: 4 weeks<br>Dose 2 to dose 3: 8 weeks<br>Dose 1 to dose 3: 16 weeks AND at ≥ 24 weeks of age | | See current ACIP guidelines | |

Use monovalent vaccine for doses administered before age 6 weeks.

† Pediarix is approved for use in persons aged 6 weeks through 6 years (prior to the 7th birthday).

‡ Vaxelis is approved for use in persons aged 6 weeks through 4 years (prior to the 5th birthday).

§ Time in months from first dose.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering *Haemophilus influenzae* type b Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from disease caused by *Haemophilus influenzae* type b by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals 6 weeks – 17 years of age in need of vaccination against *Haemophilus influenzae* type b based on the following criteria:
    - Age 2 – 59 months and no documented receipt of a complete series of *Haemophilus influenzae* type b vaccine (Hib) at the appropriate ages and intervals
    - At increased risk for *Haemophilus influenzae* type b disease due to:
        - Anatomic or functional asplenia (including sickle cell disease)
        - Chemotherapy or radiation treatment
        - Elective splenectomy
        - Hematopoietic stem cell transplant (HSCT)
        - History of invasive *Haemophilus influenzae* type b disease
        - HIV infection
        - Immunoglobulin deficiency or early component complement deficiency

2. Using DD Form 3110, screen all patients for contraindications and precautions to Hib:

    **Contraindications:**

    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of Hib or to a vaccine component, to include neomycin, streptomycin, polymyxin B, or yeast, or to vaccines containing:
        - Diphtheria toxoid (Pentacel, Vaxelis)
        - Hepatitis B (Vaxelis)
        - Pertussis (Pentacel, Vaxelis)
        - Poliovirus (Pentacel, Vaxelis)
        - Tetanus toxoid (Hiberix, Pentacel, Vaxelis)
    - Vaxelis only:
        - History of encephalopathy (e.g., coma, decreased LOC, prolonged seizures) within 7 days of a dose of a pertussis-containing vaccine, that is not attributable to another cause
        - Progressive neurologic disorder (e.g., infantile spasms, uncontrolled epilepsy, or progressive encephalopathy) until the condition has stabilized
    - For information on vaccine components, refer to the package insert for ActHIB, Hiberix, PedvaxHIB, Pentacel, Vaxelis, or The CDC Pink Book Appendix B.

    **Precautions:**

    - Moderate or severe acute illness with or without fever
    - PedvaxHIB only: vial stopper contains dry natural latex rubber
    - Pentacel and Vaxelis only: history of fever ≥ 40.5°C / 104.9°F, hypotonic-hyporesponsive episode

(HHE), persistent, inconsolable crying lasting ≥ 3 hours within 48 hours after a pertussis-containing vaccine, or seizures within 3 days after a pertussis-containing vaccine

- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

**Special Populations:**

- **American Indian/Alaska Native:** Hib meningitis incidence peaks at a younger age in this population. Use of a PRP-OMP (PedvaxHIB) 2 dose primary series is preferred (but not required) to provide early protection as this vaccine produces a protective antibody response after the first dose.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide Hib vaccine as follows:
   - Administer the appropriate vaccine intramuscularly (IM) according to Tables 1 - 3.
   - ActHIB, Hiberix, Pentacel, or Vaxelis*: 4-dose series (3-dose primary series at age 2, 4, and 6 months, booster dose at age 12–15 months)
   - *Vaxelis is not recommended for use as a booster dose.
   - PedvaxHIB: 3-dose series (2-dose primary series at age 2 and 4 months, booster dose at age 12–15 months)
   - Unvaccinated / undervaccinated individuals at increased risk for *Haemophilus influenzae* type b disease may receive any otherwise-appropriate Hib vaccine according to the schedule in Table 3.
   - Monovalent Hib vaccines are interchangeable: the same product is recommended, but not required, for all doses (primary and booster). If different products are used, the number of doses to complete the series is determined by the product with the most doses (e.g., if more than one brand is used, follow a 3-dose primary schedule with a booster).
   - Ensure minimum ages and intervals have been met for all components of combination vaccines.
   - For more information, refer to the CDC Vaccine Catch-Up Guidance: https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html.

| TABLE 1. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient age** | **Needle Length** | **Injection Site** |
| Infants, 1-12 months | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers, 1-2 years | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children, 3-10 years | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children & Adolescents, 11-18 years | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

| TABLE 2. Hib Vaccine Schedule for Unvaccinated* Individuals Who Are NOT at Increased Risk | | | |
|---|---|---|---|
| **Vaccine Type** | **Age at Dose 1 (months)** | **Primary Series (minimum interval)** | **Booster** |
| **Monovalent vaccine** | | | |
| PRP-T: 4-dose series<br>ActHIB (age 2 months – 5 years) Hiberix (age 6 weeks – 4 years) | 2 - 6 | 3 doses (≥ 8 weeks) | Age 12 – 15 months **and** ≥ 8 weeks after last dose |
| | 7 - 11 | 2 doses (≥ 4 weeks) | |
| | 12 - 14 | 1 dose | ≥ 8 weeks after last dose |
| | 15 - 59 | 1 dose | NA |
| PRP-OMP: 3-dose series PedvaxHIB (age 2 months – 5 years) | 2 - 6 | 2 doses (≥ 8 weeks) | Age 12 – 15 months **and** ≥ 8 weeks after last dose |
| | 7 - 11 | 2 doses (≥ 4 weeks) | |
| | 12 - 14 | 1 dose | ≥ 8 weeks after last dose |
| | 15 - 59 | 1 dose | NA |

*

| Combination vaccine† | | |
|---|---|---|
| DTaP-IPV/Hib: 4-dose series Pentacel (age 6 weeks – 4 years) | See PRP-T primary series dosing<br><br>Not recommended for use as a booster dose | Age 12 – 15 months **and** ≥ 6 months after last dose |
| DTaP-IPV-Hib-HepB: 4-dose series Vaxelis (age 6 weeks – 4 years) Minimum age for dose 3: 6 months (due to HepB component) | | Not recommended for use as a booster dose |

"Unvaccinated" refers to individuals who have not received a Hib primary series and booster dose or ≥ 1 dose after age 14 months.

† Intervals based on DTaP component.

**TABLE 3. Hib Vaccine Schedule for Unvaccinated* Individuals Who ARE at Increased Risk**

| Risk Factor | Patient Age | Number of Doses (minimum interval) |
|---|---|---|
| Anatomic or functional asplenia | ≥ 5 years | 1 dose |
| Anatomic or functional asplenia (including sickle-cell disease), chemotherapy, early complement component deficiency, HIV infection, or immunoglobulin deficiency | 12 – 59 months | 0 -1 dose received before age 12 months: 2 doses (8 weeks) |
| | | ≥ 2 doses received before age 12 months: 1 dose |
| Elective splenectomy | ≥ 15 months | 1 dose ≥ 14 days before procedure |
| Hematopoietic stem cell transplant (regardless of Hib vaccination history) | ≥ 6 weeks | 3 doses (≥ 4 weeks) beginning 6-12 months after transplant |
| HIV | 5 – 17 years | 1 dose |
| Invasive *Haemophilus influenzae* type b disease (regardless of Hib vaccination history) | < 24 months | Administer complete series for age as soon as possible during convalescent phase |
| Received Hib vaccine within 14 days of starting or during chemotherapy or radiation treatment | < 5 years | Repeat dose(s) ≥ 3 months after therapy completion |

"Unvaccinated" refers to individuals who have not received a Hib primary series and booster dose or ≥ 1 dose after age 14 months.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional VAERS information is available by telephone at (800) 822-7967.

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Human Papillomavirus Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from human papillomavirus (HPV) infection by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure**

1. Identify all persons ages 9-17 years who have not completed the HPV vaccination series.

***Note: HPV vaccine is FDA-approved for individuals 9-45 years of age. Please see HPV adult standing orders if vaccinating an individual 18 years or older***

2. Using DD Form 3110, screen all patients for contraindications and precautions to HPV vaccine:

   **Contraindications:**

   - A history of a severe allergic reaction (e.g., anaphylaxis) after a previous dose of HPV vaccine or to one of its components (including yeast)
   - Pregnancy: delay vaccination until after completion of pregnancy
   - For information on vaccine components, refer to the package insert for Gardasil 9 or The CDC Pink Book Appendix B.

   **Precautions:**

   - Moderate or severe acute illness with or without fever
   - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
   - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Routine vaccination is recommended at 11-12 years of age, but can start at 9 years of age if appropriate (i.e., history of sexual abuse or assault, parent/guardian wishes, etc.). The HPV vaccine (GARDASIL 9®) consists of a 2- or 3-dose series depending on age at time of initial vaccination:
     - Age 9-14 years at initial vaccination: a 2-dose series at 0 and 6-12 months (minimum interval 5 months; repeat dose if given too soon)
     - Age 15-26 years at initial vaccination (or ages 9-26 with impaired immunity): a 3-dose series at

0, 2, and 6 months (observe a minimum interval of 4 weeks between the 1st and 2nd doses, 12 weeks between the 2nd and 3rd doses, and at least 5 months between the 1st and 3rd dose: repeat dose if administered too soon)
- Administer 0.5mL of HPV vaccine intramuscularly in the deltoid for adolescents and adults

| TABLE 1. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Children (3-10 years) | 5/8† inch- 1 inch | Deltoid muscle of arm* |
| | 1-1.25 inches | Anterolateral thigh |
| Children (11-18 years) | 5/8† – 1 inch | Deltoid muscle of arm* |
| | 1-1.5 inches | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
†If skin is stretched tightly and subcutaneous tissues are not bunched

*Preferred site

5. For persons 9-17 years of age who did not complete the HPV vaccine series as specified in #4:
   - Administer one dose at the earliest opportunity and then schedule subsequent doses to complete the age-appropriate schedule
   - Minimum intervals are specified in #4

***Note: these minimum intervals are per ACIP recommendations and represent the current standard of care. These minimum intervals may not be reflected on the package insert of the HPV vaccine.***

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Inactivated Polio Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from poliomyelitis by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons 2 months – 17 years of age who have not completed an inactivated poliomyelitis vaccine (IPV) series.

2. Using DD Form 3110, screen all patients for contraindications and precautions to polio vaccine:

   **Contraindications:**

   - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of polio vaccine or to a vaccine component (to include neomycin, streptomycin, or polymyxin B)
   - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

   **Precautions:**

   - Moderate or severe acute illness with or without fever
   - Pregnancy: no information is available on the safety of polio vaccine in pregnancy. IPV should be given to a pregnant woman only if the benefit outweighs potential risks
   - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
   - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:

   - The monovalent polio vaccine (IPOL®) consists of a four dose series given at 2, 4, 6-18 months, and 4-6 years of age. If a catch-up schedule is required after 6 months of age, the minimum interval between dose 1 and dose 2 is 4 weeks; the minimum interval between dose 2 and dose 3 is 4 weeks; a minimum interval of 6 months should precede the final dose given after age 4 years

***Note: In the first 6 months of life, minimum ages and intervals should only be used for travel to a polio-endemic region or during an outbreak. Such use is not covered under this standing order; patients must obtain an order from a privileged provider for this situation***

- If a child received 4 or more doses before the 4th birthday, an additional dose is still necessary after the 4th birthday and at least 6 months after the previous dose. If a child or teen received a 3rd dose at age 4 years or older, a 4th dose is not necessary as long as there is a 6-month interval between doses 2 and 3
- See table below for use of polio-containing combination vaccines. Administer 0.5mL of polio vaccine intramuscularly in the preferred site (anterolateral thigh for infants and toddlers or in the deltoid for children and adolescents). The alternate site (anterolateral thigh muscle or deltoid muscle) may be used if the preferred site is inadequate. Choose needle gauge and length appropriate to administration route and the patient's age and/or body mass according to the chart below

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Infants (1-12 months) | 1 inch | Anterolateral thigh |
| Toddlers (1-2 years) | 1-1.25 inch | Anterolateral thigh* |
| | 5/8† – 1 inch | Deltoid muscle of arm |
| Children (3-10 years) | 5/8† inch- 1 inch | Deltoid muscle of arm* |
| | 1-1.25 inches | Anterolateral thigh |
| Children (11-18 years) | 5/8† – 1 inch | Deltoid muscle of arm* |
| | 1-1.5 inches | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

†If skin is stretched tightly and subcutaneous tissues are not bunched

*Preferred site

**TABLE 2. Currently Licensed Vaccines containing Inactivated Poliovirus Vaccine (IPV)**

| Vaccine Composition | Trade Name | Manufacturer | Age for use | Comments |
|---|---|---|---|---|
| IPV | IPOL | Sanofi Pasteur | 2, 4, 6-18 mo, 4-6 yrs | Use in infants, children, and adults |
| DTaP-IPV-Hib-HepB | Vaxelis | Sanofi Pasteur | 2, 4, and 6 mos | Use for first 3 doses of IPV through age 4 yrs |
| DTaP-HepB-IPV | Pediarix | GlaxoSmithKline | 2, 4, and 6 mos | Use for first 3 doses of IPV through age 6 yrs |
| DTaP-IPV/Hib | Pentacel | Sanofi Pasteur | 2, 4, 6, and 15-18 mo | Use for 4 doses of IPV through age 4 yrs |
| DTaP-IPV | Kinrix/ Quadracel | GlaxoSmithKline/ Sanofi Pasteur | 4-6 yrs | Use for booster dose at age 4-6 yrs |

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Influenza Vaccine
## Northern & Southern Hemisphere (Pediatric)

**Purpose:** To reduce morbidity and mortality from disease caused by influenza virus by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under this standing order, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals aged 6 months – 17 years during influenza season (Northern Hemisphere: Oct - May; Southern Hemisphere: Apr - Sep) who do not have the recommended number of documented influenza vaccine doses during the current season, or who are unsure of their vaccination status.

2. Using DHA Form 116, screen all patients for contraindications and precautions to influenza vaccine:

**Contraindications (IIV, aIIV, ccIIV, RIV):**

- History of a severe allergic reaction (e.g., anaphylaxis) or diagnosed allergy to a previous dose or component of any influenza vaccine is a contraindication to that same influenza vaccine type/ platform (e.g., egg-based [IIV, aIIV], cell culture-based [ccIIV], recombinant [RIV], or live attenuated [LAIV]). However, per ACIP recommendations other flu vaccine platforms may be considered with appropriate precautions.

**Precautions (IIV, aIIV, ccIIV, RIV):**

- Moderate or severe acute illness with or without fever.
- History of Guillain-Barré syndrome within 6 weeks of receipt of any influenza vaccine.
- History of a severe allergic reaction to a previous dose of one type of influenza vaccine is a precaution to use of the others.
- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.

**Contraindications (LAIV):**

- Individuals < 2 years of age.
- Pregnancy in any trimester.
- Concomitant aspirin- or salicylate-containing therapy.
- 2 - 4 years of age diagnosed with asthma, or who have had wheezing or asthma in the last 12 months per a health care provider or their medical record.
- History of a severe allergic reaction (e.g., anaphylaxis) to any component of LAIV or to a prior dose of any influenza vaccine.
- Immunocompromise due to any cause (e.g., HIV, functional or anatomic asplenia, an active CSF shunt, cranial CSF leak, or cochlear implant).

- Close contacts and caregivers of severely immunosuppressed individuals who require a protective environment.
- Receipt of influenza antiviral medication within the last 48 hours (oseltamivir and zanamivir), last 5 days (peramivir), or last 17 days (baloxavir). Individuals who receive influenza antiviral medication within 2 weeks after receipt of LAIV should be revaccinated with an age appropriate IIV or RIV.

**Precautions (LAIV):**

- Moderate or severe acute illness with or without fever.
- History of Guillain-Barré syndrome within 6 weeks of receipt of any influenza vaccine.
- Asthma in persons aged ≥ 5 years.
- Other underlying medical conditions that might predispose to complications after wild-type influenza infection (e.g., chronic pulmonary, cardiovascular [except isolated hypertension], renal, hepatic, neurologic, hematologic, or metabolic disorders [including diabetes mellitus]).
- For information on vaccine components, refer to the vaccine-specific package insert or The CDC Pink Book Appendix B.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - Administer influenza vaccine according to Tables 1 & 2.
    - Administer live influenza vaccine according to the package insert. Active inhalation (e.g., sniffing) is not required during administration.
    - Two doses of influenza vaccine (separated by ≥ 4 weeks) are recommended for children 6 months - 8 years of age if they have not received 2 doses in prior seasons (does not need to be same or consecutive seasons). Both doses should be administered even if the child turns 9 years of age between receipt of dose 1 and dose 2.
    - Individuals may receive both Northern and Southern Hemisphere formulations if they will be present for ≥ 14 days during that hemisphere's influenza season. Northern and Southern Hemisphere influenza vaccines should be separated by ≥ 28 days.

| TABLE 1. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Infants (1-12 months) | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers (1-2 years) | 1 - 1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8† - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8† - 1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1 - 1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8† - 1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1 - 1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site

† If skin is stretched tightly and subcutaneous tissues are not bunched.

| TABLE 2. Influenza Vaccines, 2023- 2024 Season (Pediatric) | | | | |
|---|---|---|---|---|
| **Vaccine (Abbreviation)** | **Type** | **Patient Age** | **Dose** | **Route** |
| Afluria (IIV4) | Egg-based | 6 – 35 months | 0.25 mL | IM |
| | | ≥ 3 years | 0.5 mL | |
| Fluarix (IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| Flucelvax (ccIIV4) | Cell culture-based | ≥ 6 months | 0.5 mL | |
| FluLaval (IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| Fluzone (IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| Fluzone Southern Hemisphere (SH-IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| FluMist | Live attenuated, egg-based | 2 – 49 years | 0.2 mL (0.1 mL/ nostril) | NAS |

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Observation: All individuals who receive any vaccine should be monitored as follows:
    - 30 minutes - individuals with:
        - History of an immediate allergic reaction of any severity to a vaccine or injectable medication/ therapy.
        - History of anaphylaxis due to any cause.
    - 15 minutes: all other individuals.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Japanese Encephalitis Vaccine (Pediatric)

**Purpose:** To reduce the morbidity and mortality from Japanese encephalitis (JE) by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify all persons 2 months to 17 years of age in need of vaccination against JE based on the following criteria:
    - Vaccination is required for Service members and beneficiaries as indicated per Combatant Command (CCMD) force health protection requirements
    - Travelers who plan to spend 1 month or longer in endemic areas (per CDC Yellow Book, TRAVAX, or other travel medicine guidelines) during JE transmission season (including long-term travelers and recurrent travelers based in urban areas but likely to visit endemic or rural or agricultural areas)
    - Short-term (<1 month) travelers to endemic areas during the JE transmission season if they plan to travel outside of an urban area and will have increased risk for JE exposure
    - Travelers to an area with ongoing JE outbreak
    - Travelers to endemic area who are uncertain of specific destinations, activities, or duration of travel

2. Using DD Form 3110, screen all persons for contraindications and precautions to the JE vaccine (JE-VC):

    **Contraindications:**

    - A history of a serious allergic reaction (e.g., anaphylaxis) after a previous dose of JE-VC or to a vaccine component (to include protamine sulfate.) Ask parents of diabetic children about allergic reactions to their insulin (which also may contain protamine sulfate)
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**

    - Pregnancy: vaccination is generally deferred during pregnancy, though pregnant women traveling to a high-risk area may receive JE-VC if benefit outweighs risk

***Note: Although JE-VC vaccination during pregnancy may be warranted, this is an off- label use of the vaccine and is not covered under these standing orders. Patients must obtain a written order from a privileged provider for this situation***

- Moderate or severe acute illness with or without fever
- Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope

- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Follow dosing schedule as below. JE-VC (IXIARO®) consists of a 2-dose primary series and a single booster for continued risk. The primary series should be completed ≥1 week before travel. Follow the steps outlined in the package insert to prepare the 0.25 mL pediatric dose. Administer intramuscularly in the preferred site (anterolateral thigh for infants and toddlers or in the deltoid for children and adolescents). The alternate site (anterolateral thigh muscle or deltoid muscle) may be used if the preferred site is inadequate.

**TABLE 1. Pediatric Dosing Schedule for JE-VC Vaccine**

| Age | Dose | Route | Schedule | Booster† |
|---|---|---|---|---|
| 2-35 mo | 0.25 mL | IM | 0, 28 days | ≥1 y after primary series |
| 3–17 y | 0.5 mL | IM | 0, 28 days | ≥1 y after primary series |

†If potential for JEV exposure continues

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Infants (1-12 months) | 1 inch | Anterolateral thigh |
| Toddlers (1-2 years) | 1-1.25 inch | Anterolateral thigh* |
| | 5/8† – 1 inch | Deltoid muscle of arm |
| Children (3-10 years) | 5/8† inch- 1 inch | Deltoid muscle of arm* |
| | 1-1.25 inches | Anterolateral thigh |
| Children (11-18 years) | 5/8† – 1 inch | Deltoid muscle of arm* |
| | 1-1.5 inches | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
†If skin is stretched tightly and subcutaneous tissues are not bunched
*Preferred site

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the

person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Measles Mumps Rubella Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from measles, mumps, and rubella virus (MMR) infection by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals 6 months – 17 years of age in need of vaccination against MMR based on the following criteria:
    - No documented evidence of MMR immunity, which is:
        - Receipt of 2 doses of MMR vaccine at ≥ 12 months of age and ≥ 4 weeks apart
        - Laboratory evidence of immunity or disease
    - Age 6 - 11 months traveling OCONUS or during a measles outbreak:
        - This is an off-label use covered under this standing order.
        - Doses given before 12 months of age do not count towards the routine MMR series.
    - Age ≥ 12 months: history of two previous doses of MMR vaccine and identified by public health as being at increased risk during a mumps outbreak

2. Using DD Form 3110, screen all patients for contraindications and precautions to MMR vaccine:

    **Contraindications:**

    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of MMR vaccine or to a vaccine component, to include gelatin and neomycin. For information on vaccine components, refer to the M-M-R II or Priorix package insert or The CDC Pink Book Appendix B.
    - M-M-R II only: active untreated tuberculosis
    - Pregnancy, or may become pregnant in the next 30 days
    - Immunosuppression (e.g., cancer or malignant neoplasms, immunosuppressive therapy [to include prolonged high-dose steroid therapy], etc.)
    - HIV infection with severe immunosuppression (e.g., CD4+ T-lymphocyte count of < 200 cells per microliter or < 15%)
    - Congenital or hereditary immunodeficiency in 1st degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory

    **Precautions:**

    - Moderate or severe acute illness with or without fever
    - Recent (≤ 11 months) receipt of an antibody-containing blood product
    - History of thrombocytopenia or thrombocytopenic purpura
    - TB testing: live vaccines and testing (IPPD or IGRA) should be performed on the same day or separated by ≥ 4 weeks (before and after) to avoid false negative results

- Simultaneous use of aspirin or aspirin-containing products. Avoid use of these drugs for ≥ 6 weeks after vaccination.
- Alpha-gal allergy: may wish to consult their PCM before receiving a vaccine that contains gelatin
- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion following syncope.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide MMR vaccine as follows:
   - A 2-dose series recommended at ages 12-15 months and 4-6 years
   - Minimum interval: ≥ 4 weeks
   - During a mumps outbreak: one dose ≥ 4 weeks after the individual's 2nd MMR dose
   - Age 6-11 months: one dose prior to OCONUS travel or during a measles outbreak
   - Administer 0.5 mL of MMR vaccine as follows and according to Tables 1 & 2:
     - Age ≥ 12 months: M-M-R II may be given subcutaneously (SC) or intramuscularly (IM).
     - Age < 12 months: M-M-R II may only be given SC.
     - Priorix may only be given SC.

**TABLE 1. SC Needle Length and Injection Site Guide**

| Use a 5/8 inch 23 – 25-gauge needle | |
|---|---|
| **Patient Age** | **Injection Site** |
| Infants (6-11 months) | Fatty tissue over anterolateral thigh* |
| | Fatty tissue over triceps |
| Children/Adolescents (≥12 months) | Fatty tissue over triceps* |
| | Fatty tissue over anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* Preferred site.

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* Preferred site.
† If skin is stretched tightly and subcutaneous tissues are not bunched.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Measles Mumps Rubella Varicella Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from measles, mumps, rubella, and varicella virus (MMRV) infection by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals 12 months – 12 years of age in need of vaccination against MMRV based on the following criteria:
    - No documented evidence of MMRV immunity, which is:
    - Receipt of 2 doses of MMR-containing vaccine and 2 doses of varicella (VAR)-containing vaccine at ≥ 12 months of age and at the product-specific/age-appropriate intervals
    - Laboratory evidence of immunity or disease
    - VAR only: diagnosis or verification of a history of varicella or herpes zoster disease by a licensed healthcare provider

2. Using DD Form 3110, screen all patients for contraindications and precautions to MMRV vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of MMRV vaccine or to a vaccine component, to include gelatin and neomycin. For information on vaccine components, refer to the package insert or The CDC Pink Book Appendix B.
    - Active untreated tuberculosis
    - Pregnancy, or may become pregnant in the next 30 days:
        - Although the package insert recommends avoiding conception for 3 months, ACIP Best Practices advise that waiting 1 month after vaccination before conception is sufficient.
    - Immunosuppression (e.g., cancer or malignant neoplasms, immunosuppressive therapy [to include prolonged high-dose steroid therapy], etc.)
    - HIV infection, regardless of immunocompetence status
    - Congenital or hereditary immunodeficiency in 1st degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Recent receipt (≤ 11 months) of an antibody-containing blood product
    - History of thrombocytopenia or thrombocytopenic purpura
    - TB testing: live vaccines and testing (IPPD or IGRA) should be performed on the same day or separated by ≥ 4 weeks (before and after) to avoid false negative results.

- Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before
- vaccination. Avoid use of these drugs for ≥ 14 days after vaccination.
- Simultaneous use of aspirin or aspirin-containing products. Avoid use of these drugs for ≥ 6
- weeks after vaccination.
- Alpha-gal allergy: may wish to consult their PCM before receiving a vaccine that contains gelatin
- Personal or family history of seizures of any etiology
- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion following syncope.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide MMRV vaccine as follows:
    - A 2-dose series recommended at ages 12-15 months and 4-6 years
    - Minimum intervals:
        - ≥ 3 months after receipt of a VAR-containing vaccine:
            - Doses inadvertently given ≥ 4 weeks may be counted as valid
        - ≥ 4 weeks after receipt of any other live vaccine
    - Age 12-47 months: due to an increased risk for febrile seizures, ACIP recommends administering the 1st dose of MMR and VAR vaccines separately. Administering MMRV as the 1st dose is not covered under this standing order: patients must obtain a written order from a privileged provider for this situation.
    - Administer 0.5 mL of MMRV vaccine subcutaneously (SC) or intramuscularly (IM) according to Tables 1 & 2:

| TABLE 1. SC Needle Length and Injection Site Guide | |
|---|---|
| Use a 5/8 inch 23 – 25-gauge needle | |
| **Patient Age** | **Injection Site** |
| Children/Adolescents (≥12 months) | Fatty tissue over triceps* |
| | Fatty tissue over anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* Preferred site.

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* Preferred site.
† If skin is stretched tightly and subcutaneous tissues are not bunched.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Meningococcal ACWY Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from meningococcal disease by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals 2 months – 18 years of age in need of vaccination against meningococcal serogroups A, C, W, and Y based on the following criteria:
    - Age 11 – 18 years without documented receipt of a complete series of meningococcal ACWY vaccine (MenACWY) at the appropriate ages and intervals.
        - Age 2 months – 18 years at increased risk due to:
        - Asplenia (anatomic or functional) or sickle cell disease (SCD)
        - HIV infection
        - Microbiologists routinely exposed to Neisseria meningitidis
        - Men who have sex with men (MSM)
        - Military recruits
        - Persistent (e.g., genetic) complement deficiency or using a complement inhibitor medication
        - Travel to or living in countries where meningococcal disease is hyperendemic or epidemic
        - Unvaccinated or undervaccinated 1st year college students living in residence halls
        - Meningococcal outbreaks
2. Using DD Form 3110, screen all patients for contraindications and precautions to MenACWY:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of meningococcal vaccine or to a vaccine component
    - MenACWY-CRM (Menveo): severe allergic reaction to a diphtheria toxoid– or CRM197–containing vaccine
    - MenACWY-TT (MenQuadfi) and MenABCWY (Penbraya): severe allergic reaction to a tetanus toxoid-containing vaccine
    - Penbraya: severe allergic reaction to yeast
    - For information on vaccine components, refer to the package inserts for MenQuadfi, Menveo, and Penbraya, and The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Menveo: preterm birth if < 9 months of age
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 312-761-4245.

**Special Populations:**

- Pregnancy and Lactation: Pregnant and lactating women should receive MenACWY vaccine if indicated.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide MenACWY as follows:
   - Administer the appropriate vaccine intramuscularly (IM) according to Tables 1 - 3.
   - Off-label ACIP recommendations covered under this standing order:
     - Age ≥ 2 years: a 2-dose primary series in persons at increased risk due to certain underlying medical conditions
     - Repeated booster doses for persons who remain at increased risk
   - MenACWY vaccines are interchangeable; the same product is recommended, but not required, for all doses (primary and booster).
   - MenACWY and meningococcal B vaccine (MenB) may be administered simultaneously (at different anatomic sites) if indicated.
   - Penbraya may only be used when both MenACWY and MenB are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing. Vaccination of healthy individuals aged 16–18 years with MenB is based on shared clinical decision-making (SCDM) and is not covered under this standing order. These individuals must obtain a written order from a privileged provider.
   - Production of Menactra (MenACWY-D) was discontinued in 2022. Remaining stock may be used according to previous schedules through the expiry date or until it is no longer FDA-licensed, whichever is earlier.

**TABLE 1. Current Meningococcal ACWY Vaccines**

| | MenQuadfi (MenACYW-TT) | Menveo / 1-vial (MenACWY-CRM) | Menveo / 2-vial (MenACWY-CRM) | Penbraya (MenABCWY) |
|---|---|---|---|---|
| **Age** | ≥ 2 years | 10 – 55 years | 2 mo - 55 years | 10 – 25 years |
| **Dilute** | No: single-dose vial | No: single-dose vial (pink cap) | Yes: MenA vial (orange cap) & MenCWY vial (gray cap) | Yes: MenACWY vial & MenB syringe |

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Infants (1-12 months) | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

| TABLE 3: MenACWY Vaccine Schedule by Patient Age and Risk Factor, Pediatric 2 months – 18 years | | | |
|---|---|---|---|
| **Age Group** | **Risk Factor** | **Primary series: MenACWY CRM (Menveo), MenACWY TT (MenQuadfi), or MenABCWY (Penbraya)*** | **MenACWY Booster dose** |
| **10 - 18 years** | • 1st year college living in residence halls | • Did not receive a dose on/after 16th birthday, within 5 years of college entry, or received only 1 dose before 16th birthday:<br>◦ Menveo or MenQuadfi: single dose | • Not recommended unless person becomes at increased risk due to another indication |
| | • Military recruit | • Menveo or MenQuadfi: single dose | • Every 5 years based on exposure risk |
| **11 - 18 years** | • None (routine schedule) | • 1st dose at 11-15 years (recommended at 11- 12):<br>◦ Menveo or MenQuadfi: 1 dose plus booster<br>• 1st dose at 16-18 years:<br>◦ Menveo or MenQuadfi: 1 dose, no booster | • At age 16 years (minimum interval 8 weeks) |
| | | • Age 16-18 only, when SCDM favors administration of MenB also:<br>◦ Penbraya: 2 doses at 0 & 6 months* | • Not recommended unless person becomes at increased risk due to another indication |

<table>
<tr><th colspan="4">Individuals with underlying medical conditions or additional risk factors:</th></tr>
<tr><td>2 – 23 months</td><td>• Asplenia/ SCD<br>• Complement deficiency<br>• HIV<br>• Outbreak<br>• Travel</td><td>• Menveo - if first dose at age:<br>◦ 2 months: 4 doses at 2, 4, 6, & 12 months<br>◦ 3–6 months: See catch-up schedule†<br>◦ 7–23 months: 2 doses (second dose ≥ 12 wks after first dose AND after the 1st birthday)<br><br>• MenQuadfi: Not recommended</td><td>NA</td></tr>
<tr><td rowspan="2">2 – 9 years</td><td>• Asplenia/ SCD<br>• Complement deficiency<br>• HIV</td><td>• Menveo: single dose<br>• MenQuadfi: 2 doses ≥ 8 wks apart</td><td rowspan="2">• Age < 7 years: Single dose 3 years after primary vaccination and every 5 years thereafter<br><br>• Age ≥ 7 years: Single dose 5 years after primary vaccination and every 5 years thereafter</td></tr>
<tr><td>• Outbreak<br>• Travel</td><td>• Menveo or MenQuadfi: single dose</td></tr>
<tr><td rowspan="4">10 – 18 years</td><td>• Asplenia/ SCD<br>• Complement deficiency</td><td>• Menveo: single dose<br>• MenQuadfi: 2 doses ≥ 8 wks apart<br>• Penbraya: 2 doses at 0 & 6 months*</td><td rowspan="4">• Single dose 5 years after primary vaccination and every 5 years thereafter</td></tr>
<tr><td>• HIV</td><td>• Menveo: single dose<br>• MenQuadfi: 2 doses ≥ 8 wks apart</td></tr>
<tr><td>• Microbiologist<br>• Outbreak</td><td>• Menveo or MenQuadfi: single dose<br>• Penbraya: 2 doses at 0 & 6 months*</td></tr>
<tr><td>• Travel</td><td>• Menveo or MenQuadfi: single dose</td></tr>
</table>

* Penbraya may only be used when both MenACWY and MenB vaccination are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing.

† Dose 1 at age 3–6 months: 3- or 4- dose series (dose 2 [and dose 3 if applicable] ≥ 8 weeks after previous dose until a dose is received at age ≥ 7 months, followed by an additional dose ≥ 12 weeks later AND after age 12 months)

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Meningococcal B Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from meningococcal disease by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals 10 – 18 years of age in need of vaccination against meningococcal serogroup B based on increased risk due to:
    - Asplenia (anatomic or functional) or sickle cell disease (SCD)
    - Microbiologists routinely exposed to Neisseria meningitidis
    - Persistent (e.g., genetic) complement deficiency or using a complement inhibitor medication
    - Meningococcal outbreaks (e.g., in community or organizational settings, and among men who have sex with men [MSM])

2. Using DD Form 3110, screen all patients for contraindications and precautions to MenB vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component
    - MenB-4C (Bexsero): severe allergic reaction to kanamycin
    - MenABCWY (Penbraya): severe allergic reaction to a tetanus toxoid-containing vaccine or yeast
    - For information on vaccine components, refer to the package inserts for Bexsero, Penbraya, and Trumenba, and The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Bexsero: latex sensitivity
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 312-761-4245.

**Special Populations:**
- Pregnancy and Lactation: defer vaccination. Individuals at increased risk may receive MenB after speaking with their provider, but that is not covered under this standing order. These individuals must obtain an order from a privileged provider.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide MenB as follows:

- Administer the appropriate vaccine intramuscularly (IM) according to Tables 1 - 3.
- Off-label ACIP recommendations covered under this standing order:
  - Age 10- 18 years: booster doses for persons who remain at increased risk
- Vaccination of healthy individuals aged 16–23 years (preferred at 16-18 years) with a 2-dose MenB series is based on shared clinical decision-making (SCDM) and is not covered under this standing order. These individuals must obtain a written order from a privileged provider.
- MenB vaccines are not interchangeable; the same product must be used for all doses (primary and booster).
- MenB and meningococcal ACWY vaccine (MenACWY) may be administered simultaneously (at different anatomic sites) if indicated.
- Penbraya may only be used when both MenACWY and MenB are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing.

**TABLE 1. Current Meningococcal B Vaccines**

| | Bexsero (MenB-4C) | Trumenba (MenB-FHbp) | Penbraya (MenABCWY) |
|---|---|---|---|
| **Age** | 10 – 25 years | | 10 – 25 years |
| **Dilute** | No: single-dose prefilled syringe | | Yes: MenACWY vial & MenB syringe |

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Infants (1-12 months) | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

| TABLE 3: MenB Vaccine Schedule by Patient Age and Risk Factor, Pediatric 10 -18 years | | | |
|---|---|---|---|
| **Age Group** | **Risk Factor** | **Primary series: MenB-4C (Bexsero), MenB-FHbp (Trumenba), or MenABCWY (Penbraya)*** | **MenB Booster dose** |
| **10 – 18 years** | • None (routine schedule) | • Age 16-18 only, when SCDM favors administration of MenB:<br>◦ Bexsero: 2 doses, ≥ 1 month apart<br>◦ Trumenba: 2 doses at 0 & 6 months<br>◦ Penbraya: 2 doses at 0 & 6 months* | • Not recommended unless person becomes at increased risk due to another indication |
| **Individuals with underlying medical conditions or additional risk factors:** | | | |
| **10 - 18 years** | • Asplenia/ SCD<br>• Complement deficiency<br>• Microbiologist | • Bexsero: 2 doses, ≥ 1 month apart<br>• Trumenba: 3 doses at 0, 1-2, & 6 months<br>• Penbraya: 2 doses at 0 & 6 months* | • Single dose 1 year after primary series and every 2-3 years thereafter |
| | • Outbreak | • Bexsero: 2 doses, ≥ 1 month apart<br>• Trumenba: 3 doses at 0, 1-2, & 6 months<br>• Penbraya: 2 doses at 0 & 6 months* | • Single dose ≥ 1 year after primary series completion (≥ 6- month interval may be considered by public health professionals) |

* Penbraya may only be used when both MenACWY and MenB vaccination are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Pneumococcal Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from pneumococcal disease by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under this standing order, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals 2 months - 18 years of age in need of vaccination against pneumococcus infection based on the following criteria:
    - All individuals 2 – 59 months of age
    - Individuals 6 – 18 years of age with certain risk factors:
        - Cerebrospinal fluid (CSF) leak
        - Chronic heart disease (especially cyanotic congenital heart disease and cardiac failure)
        - Chronic kidney disease (excluding maintenance dialysis and nephrotic syndrome, which are included in immunocompromising conditions)
        - Chronic liver disease
        - Chronic lung disease (including moderate persistent or severe persistent asthma)
        - Cochlear implant
        - Diabetes mellitus
        - Immunocompromising conditions (e.g., on maintenance dialysis or with nephrotic syndrome; congenital or acquired asplenia or splenic dysfunction; congenital or acquired immunodeficiencies; diseases and conditions treated with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and solid organ transplant; HIV infection; and sickle cell disease or other hemoglobinopathies).

2. Using DD Form 3110, screen all patients for contraindications and precautions to pneumococcal vaccine:

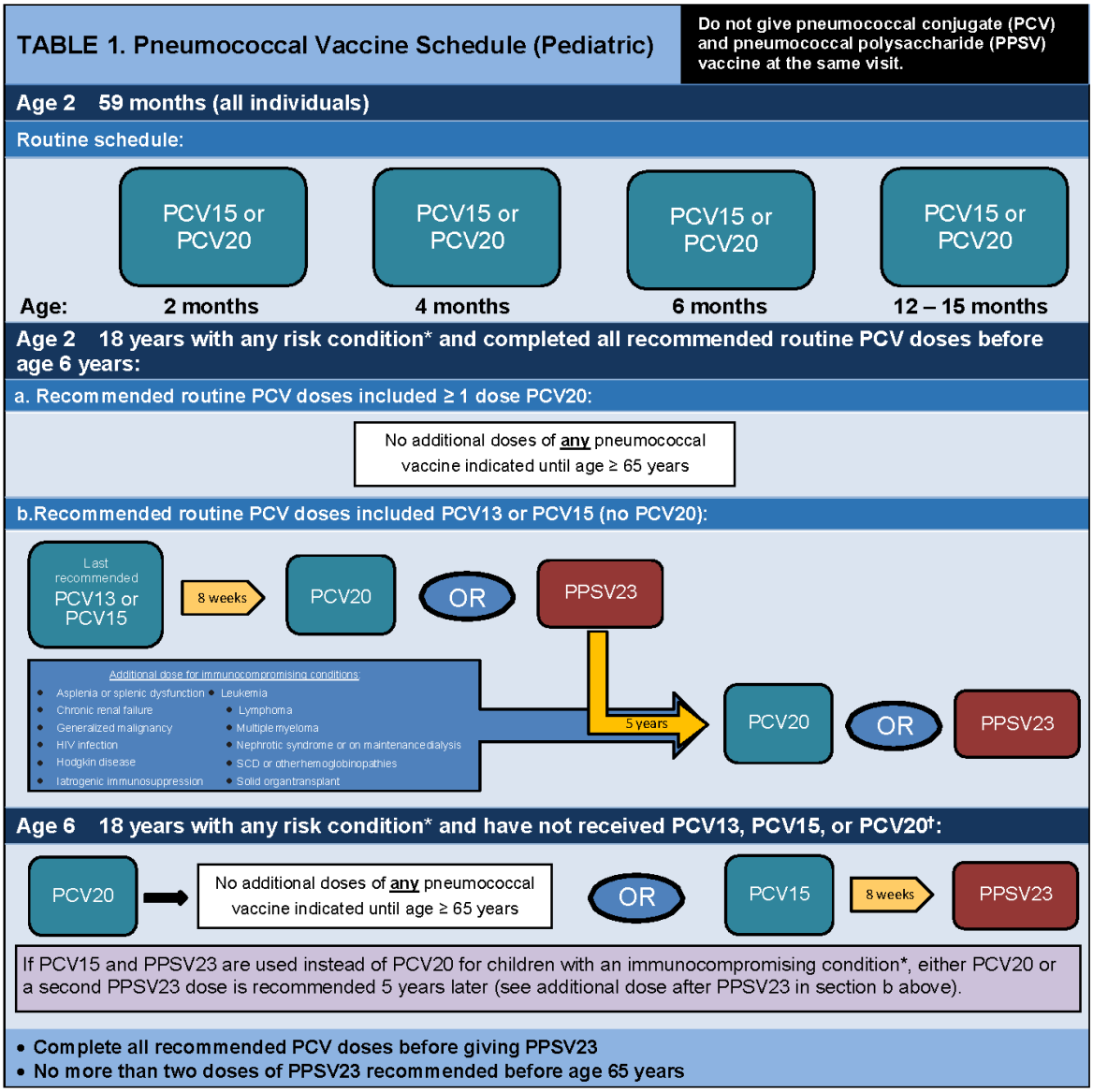
    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of a pneumococcal vaccine, any vaccine containing diphtheria toxoid, or to a vaccine component (including yeast)
    - For information on vaccine components, refer to the package insert for PCV13, PCV15, PCV20, PPSV23, and The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 312-761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine

Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Administer 0.5mL of the appropriate pneumococcal vaccine according to Tables 1 - 3.
   - PCV 13 is no longer part of the recommended routine childhood schedule; however, if only PCV13 is available when the patient is scheduled to receive a PCV, it may be given as previously recommended.
   - A series started with PCV13 may be completed with PCV15 or PCV20 without additional doses; the PCV series does not need to be restarted.
   - PCV13, PCV15, and PCV20 are given intramuscularly (IM); PPSV23 may be given IM or subcutaneously (SC).
   - Individuals with anatomic or functional asplenia and/or HIV: PCV vaccines and Menactra (MenACYW-D) should not be given concomitantly. Administer Menactra ≥ 4 weeks after completion of all PCV doses.




Adapted from California Department of Public Health, Immunization Branch #IMM-1152 (3/23)

* See Section 1, page 1

† If the individual previously received PCV7 or PPSV23, the PCV dose should be given ≥ 8 weeks after the most recent pneumococcal vaccination.

5. Dosing and schedule for individuals who receive their first routine PCV dose after age 6 months:
    - Age 7-11 months: 3 PCV doses, with the first 2 doses ≥ 4 weeks apart and the third dose at age 12–15 months and ≥ 8 weeks after the second PCV dose.
    - Age 12-23 months: 2 PCV doses ≥ 4 weeks apart
    - Age 24-71 months: healthy individuals, 1 PCV dose; individuals with any risk condition, 2 PCV doses ≥ 8 weeks apart.
    - Age 6-18 years with any risk condition: 1 PCV dose. If PCV15 is used, it should be followed by PPSV23 ≥ 8 weeks later. Individuals with immunocompromising conditions should receive an additional dose of PPSV23 or a dose of PCV20 five years later (see Table 1). Routine use of PCV is not recommended for healthy individuals aged ≥ 5 years who have not yet received a dose of PCV.
    - For additional information, refer to the CDC Vaccine Catch-Up Guidance: https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html.

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Infants (2-11 months) | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

**TABLE 3. SC Needle Length and Injection Site Guide**

Use a 5/8 inch 23 – 25-gauge needle

| Patient Age | Injection Site |
|---|---|
| Infants (2-11 months) | Fatty tissue over anterolateral thigh |
| Children/Adolescents (1-18 years) | Fatty tissue over triceps* |
| | Fatty tissue over anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Pre-Exposure Prophylaxis (PrEP) Rabies Vaccine (Adult and Pediatric)

**Purpose:** To reduce morbidity and mortality from disease caused by Rhabdoviridae lyssavirus by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals of any age (birth to adult) in need of vaccination with pre- exposure prophylaxis (PrEP) rabies vaccine based on one or more risk categories below (see Table 1 for expanded guidance):
    - **Risk category 1 (highest):** People who work with live or concentrated rabies virus in laboratories.
    - **Risk category 2:** People who frequently handle or have contact with bats, enter high-density bat environments like caves, or perform animal necropsies.
    - **Risk category 3:** People who interact (or are at risk to interact) with mammals other than bats that could be rabid, for a period longer than three years after they receive PrEP. This can include:
        - Veterinarians, veterinary technicians, and animal control officers (and their students/trainees); wildlife biologists, rehabilitators, trappers; and spelunkers (cave explorers).
        - Travelers to regions outside the United States where canine rabies virus variant (CRVV) or wildlife rabies virus variants (RVV) are endemic.
    - **Risk category 4:** Same as risk category 3, but for ≤ 3 years after receiving PrEP.
    - **Risk category 5 (lowest):** General U.S. population.

***Note: This standing order does not cover post-exposure cases, which are a medical urgency. Rabies is associated with the highest case fatality rate of any infectious disease. All patients with a suspected rabid bite or non- bite exposure should seek immediate medical care at their local Emergency Department to begin post-exposure treatment and Public Health surveillance.***

2. Using DD Form 3111 (Adult) or DD Form 3110 (Pediatric), screen all individuals for contraindications and precautions to PrEP rabies vaccine:

    **Contraindications:**

    - A history of a serious reaction (e.g., anaphylaxis) after vaccination or to any vaccine component, to include neomycin.
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**

    - Moderate or severe acute illness with or without fever.
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g. observation after administration) and to restore cerebral perfusion following syncope.

- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

**Special Populations:** These individuals should discuss vaccine receipt timing and medication management with their primary or specialty healthcare provider(s).

- **Pregnancy:** There is no evidence of adverse fetal effects from vaccinating pregnant women with inactivated virus, bacterial vaccines, or toxoids, and a growing body of data demonstrate the safety of such use.
- **Lactation:** Inactivated vaccines have not been shown to affect the safety of breastfeeding for women or their infants.
- **Immunocompromised:** In persons with primary or secondary immunodeficiencies, delay PrEP vaccination (when possible) until a temporary immunocompromising condition has resolved or immunosuppressive medications can be withheld.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows (see Table 1 and Table 2):
   - Rabies vaccine (Imovax®, RabAvert®) for pre-exposure prophylaxis consists of a 2-dose primary series given intramuscularly (IM) at 0 and 7 days. Both vaccines are supplied by the manufacturer in a pre-packaged single-dose (1mL) kit.
   - Administer booster doses based on risk category and titer level. For Risk Category 3, patients may elect to receive a booster dose between 21 days and 3 years after the primary series in lieu of a one-time titer check.
   - Do not start PrEP if series cannot be completed before travel.

**TABLE 1. ACIP Rabies Pre-Exposure Prophylaxis (PrEP) Recommendations**

| Risk Category | Typical population* | Primary Series (2 doses) | Titer / Booster (1 dose) |
|---|---|---|---|
| 1. Elevated risk for unrecognized† or recognized†† exposures, including unusual or high- risk exposures | Work with live rabies virus in research or vaccine production facilities; perform rabies testing in diagnostic laboratories | Vaccine on days 0 and 7 | Titer: every 6 months<br>Booster: if titer < 0.5 IU/mL§‖ |
| 2. Elevated risk for unrecognized† or recognized†† exposures | Frequently handle or have contact with bats; enter high- density bat environments; perform animal necropsies (e.g., biologists who frequently enter bat roosts or who collect suspected rabies samples) | Vaccine on days 0 and 7 | Titer: every 2 years<br>Booster: if titer < 0.5 IU/mL§‖ |

| | | | |
|---|---|---|---|
| 3. Elevated risk for recognized†† exposures, sustained risk¶ | Interact with animals that could be rabid# (e.g., veterinarians, vet techs, animal control officers; wildlife biologists, rehabilitators, and trappers); spelunkers | Vaccine on days 0 and 7 | Titer: once, 1–3 years after PrEP Booster: if titer < 0.5 IU/mL§‖<br><br>**OR**<br><br>These patients may elect to receive a booster dose 3 weeks-3 years after PrEP in lieu of a one- time titer check.‖ |
| | Travelers with increased risk for exposure to potentially rabid animals (particularly dogs) who might not have prompt access to safe PEP (e.g., rural area, far from closest PEP clinic) | | |
| 4. Elevated risk for recognized†† exposures, risk not sustained¶ | Same as Risk Category 3, but risk duration ≤ 3 years (e.g., short-term animal care, no expected high-risk travel > 3 years after PrEP) | Vaccine on days 0 and 7 | None |
| 5. Low risk for exposure | Typical person living in the United States | None | None |

Adapted from CDC MMWR 71, 619-627 (06 May 2022): https://www.cdc.gov/mmwr/volumes/71/wr/mm7118a2.htm

Abbreviations: IU = international units; PEP = post-exposure prophylaxis

* Nature of exposure is the most important variable to consider when determining risk category. Examples provided are only a guide; categorizations should be done on a case-by-case basis. If an individual falls into more than one category, follow guidance for the highest-risk category. Risk categories may change over an individual's lifetime.

† Example: a small scratch during an inconspicuous personal protective equipment breach while testing neural tissue from a rabid animal or conducting studies on bats in the field, etc.

†† Noticed because the exposure is unusual (e.g., contact with a bat, splash with contaminated fluids) or painful (e.g., bite or scratch from a raccoon).

§ Give a booster when rabies antibody titers are < 0.5 IU/mL. For immunocompetent patients, titers to verify booster response are not needed. For immunocompromised patients, verify response with a titer ≥ 1 week (ideally, 2–4 weeks) after every booster dose.

¶ Elevated risk for rabies > 3 years after the completion of the primary rabies PrEP series.

# Rabies virus is unlikely to persist outside a deceased animal's body for an extended time. Risk of transmission to persons handling animal products (e.g., hunters or taxidermists) is unknown but presumed to be low (risk category 5); direct skin contact with saliva or neural tissue of mammals should be avoided regardless of profession or activity.

‟ Titer after recommended booster dose(s) not indicated unless patient has altered immunity.

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| **Children & Adolescents (birth-18 years)** | | |
| Neonates* | 5/8 inch (16 mm)† | Anterolateral thigh |
| Infants (1-12 months) | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh‡ |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |

| | | |
|---|---|---|
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm‡ |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm‡ |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| **Adults (≥19 years)** | | |
| Men and women, <60 kg (130 lbs) | 1 inch (25 mm)§ | Deltoid muscle of arm |
| Men and women, 60-70 kg (130-152 lbs) | 1 inch (25 mm) | |
| Men, 70-118 kg (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women, 70-90 kg (152-200 lbs) | | |
| Men, >118 kg (260 lbs) | 1.5 inches (38 mm) | |
| Women, >90 kg (200 lbs) | | |
| Men and women, any weight | 1.5 inches (38 mm)¶ | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* First 28 days of life.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

‡ Preferred site: the alternate site may be used if the muscle mass at the preferred site is inadequate. Do not administer vaccine into the gluteal muscle.

§ Some experts recommend a 5/8-inch needle for men and women who weigh <60 kg. If used, skin must be stretched tightly (do not bunch subcutaneous tissue).

¶ Some experts recommend a 1-inch needle if the skin is stretched tightly and subcutaneous tissues are not bunched.

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Rotavirus Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from disease caused by rotavirus by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons 2 – 8 months of age in need of vaccination against rotavirus based on the following criteria:
    - Lacking documentation of at least 2 doses of rotavirus vaccine (RV) at the appropriate ages/intervals
    - Age 2 - 3 months (14 weeks/6 days) who have not started a series of rotavirus vaccine
    - Age 8 months/0 days or younger who have not completed a series of rotavirus vaccine

2. Using DD Form 3110, screen all patients for contraindications and precautions to rotavirus vaccine:

    **Contraindications:**
    - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of RV or to a vaccine component
    - History of intussusception
    - Severe combined immunodeficiency (SCID)
    - Uncorrected congenital gastrointestinal tract malformation (such as Meckel's diverticulum)
    - The tip caps of prefilled oral applicators of Rotarix® contain natural rubber latex and may cause allergic reactions in latex sensitive individuals. The plastic dosing tube and cap of RotaTeq® do not contain latex
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever (including diarrhea and vomiting)
    - Altered immunocompetence (e.g., HIV/AIDS, cancer or malignant neoplasms, immunosuppressive therapy, etc.)
    - Chronic gastrointestinal disease
    - For Rotarix® only, spina bifida or bladder exstrophy
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - The RV consists of a 2-dose (ROTARIX® 1mL at 2 and 4 months of age) or 3-dose (RotaTeq® 2mL at 2, 4, and 6 months of age) series
    - Note that ROTARIX® must be reconstituted before use
    - Administer the RV orally:
    - Gently squeeze the liquid into the patient's mouth toward the inner cheek until dosing tube is empty (a residual drop may remain in the tip of the tube)
    - If for any reason an incomplete dose is administered (e.g., infant spits or regurgitates the vaccine), a replacement dose is not recommended. The infant should continue to receive any remaining doses in the recommended series
5. Provide subsequent doses of RV to complete each patient's schedule. For patients who did not receive RV at the ages specified in #4, give one dose at the earliest opportunity and then schedule subsequent doses according to the following:
    - Give the first dose no later than **14 weeks and 6 days of age**
    - Minimum interval between doses is 4 weeks
    - **Maximum age for the final dose is 8 months and 0 days**
    - If any dose in the series is RotaTeq or unknown, complete a 3-dose series

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Tetanus, Diphtheria and Pertussis Vaccines (Pediatric)

**Purpose:** To reduce morbidity and mortality from tetanus, diphtheria and pertussis disease by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify patients 7-18 years of age in need of vaccination against tetanus, diphtheria, and pertussis based on the following criteria:
    - Lack of documentation of at least 4 doses of diphtheria and tetanus toxoids and pertussis vaccine (DTaP), with at least one dose given after age 4 years and with the most recent dose given a minimum of 4 calendar months after the preceding dose
    - Lack of documentation of at least 3 doses of diphtheria and tetanus toxoid- containing vaccine (e.g., DT, Tdap, Td)
    - Lack of documentation of a pertussis-containing vaccine given at age 10 years or older
    - Currently pregnant (preferably between 27 and 36 weeks gestation) and no documentation of Tdap given during the current pregnancy
    - Completion of a 3-dose primary series of diphtheria and tetanus toxoid-containing vaccine (DTaP, DT, Tdap, Td) with receipt of the last dose being 10 years ago or longer

2. Using DD Form 3110, screen all patients for contraindications and precautions to Td / Tdap vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of a tetanus or diphtheria toxoid-containing vaccine or to a vaccine component
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.
    - A history of encephalopathy (e.g. coma, decreased level of consciousness, prolonged seizures) within 7 days following DTP/DTaP/Tdap not attributable to another identifiable cause

    **Precautions:**
    - History of Guillain-Barré syndrome within 6 weeks of a previous dose of tetanus toxoid-containing vaccine
    - History of an Arthus-type hypersensitivity reaction after a previous dose of tetanus or diphtheria toxoid-containing vaccine: defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine
    - Progressive or unstable neurologic disorder, uncontrolled seizures or progressive encephalopathy: defer vaccination until a treatment regimen has been established and the condition has stabilized (Tdap only)
    - Moderate or severe acute illness with or without fever
    - Tip caps of prefilled syringes of Adacel®† and Boostrix® contain natural rubber latex and may cause

allergic reactions in latex-sensitive individuals († tip caps of some lots of Adacel® prefilled syringes contain latex while others do not - please refer to package insert)

- Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at 877-438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccination as follows:
   - The routine schedule for Tdap vaccination in pediatric patients is one dose at age 11-12 years, followed by a booster (either Td or Tdap) every 10 years
   - Pregnant patients should receive 1 dose of Tdap during each pregnancy, regardless of number of years since prior DTaP, Tdap, DT, DTP or Td vaccination. Tdap should be administered at 27–36 weeks' gestation, preferably during the earlier part of this period (to maximize the maternal antibody response/passive antibody transfer to the infant), although it may be administered at any time during pregnancy
   - Administer 0.5mL intramuscularly in the preferred site (deltoid for children and adolescents). The alternate site (anterolateral thigh muscle) may be used if the preferred site is inadequate.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

5. For persons who did not receive DTaP, DT, Td, or Tdap at the recommended ages/intervals, provide catch-up dose(s) according to the tables below. Previous doses must meet minimum age and minimum interval requirements.

| IF current age is | AND # of previous doses of DTaP, DT, Td, or Tdap is | AND | AND | AND | THEN | Next dose due |
|---|---|---|---|---|---|---|
| 7 – 9 years* | Unknown or 0 | → | → | → | Give Dose 1 (Tdap) today | Give Dose 2 (Td or Tdap) at least 4 weeks after Dose 1 |
| | 1 | Dose 1 given <12 months of age | → | → | Give Dose 2 (Tdap) today | Give Dose 3 (Td or Tdap) at least 4 weeks after Dose 2 |
| | | Dose 1 given ≥12 months of age | It has been at least 4 weeks since Dose 1 | Dose 1 was Tdap | Give Dose 2 (Td or Tdap) today | Give Dose 3 (Td or Tdap) at least 6 months after Dose 2 |
| | | | | Dose 1 was not Tdap | Give Dose 2 (Tdap) today | |
| | 2 | Dose 1 given <12 months of age | It has been at least 4 weeks since Dose 2 | Dose 2 was Tdap* | Give Dose 3 (Td or Tdap) today | Give Dose 4 (Td or Tdap) at least 6 months after Dose 3 |
| | | | | No dose was Tdap | Give Dose 3 (Tdap) today | |
| | | Dose 1 given ≥12 months of age | It has been at least 6 months since Dose 2 | Any dose was Tdap* | Give Dose 3 (Td or Tdap) today | Give Tdap at 11-12 years ofage*,† |
| | | | | No dose was Tdap | Give Dose 3 (Tdap) today | |
| | 3 | Dose 1 given <12 months of age | It has been at least 6 months since Dose 3 | Any dose was Tdap* | Give Dose 4 (Td or Tdap) today | Give Tdap at 11-12 years of age*,† |
| | | | | No dose was Tdap | Give Dose 4 (Tdap) today | |
| | | Dose 1 given ≥12 months of age | No dose was Tdap | → | Give Dose 4 (Tdap†) today | Give Tdap at 11-12 years of age*,† |
| | | | Any dose was Tdap | → | No dose today | |
| | 4 | → | Dose of DTaP or Tdap given after 4th birthday | → | No dose today | Give Tdap at 11-12 years of age*,† |
| | | | No DTaP or Tdap given after 4th birthday | → | Give a dose of Tdap today | Give Tdap at 11-12 years of age*,† |

* For persons 7-9 years of age who receive a dose of Tdap, the routine adolescent Tdap dose should still be administered at 11-12 years of age

† Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine Adapted from https://www.cdc.gov/vaccines/schedules/downloads/child/job-aids/tdap-1.pdf

| IF current age is | AND # of previous doses of DTaP, DT, Td, or Tdap is | AND | AND | AND | THEN | Next dose due |
|---|---|---|---|---|---|---|
| 10-18 years | Unknown or 0 | → | → | → | Give Dose 1 (Tdap) today | Give Dose 2 (Td or Tdap) at least 4 weeks after Dose1 |
| | 1 | Dose 1 given <12 months of age | → | → | Give Dose 2 (Tdap) today | Give Dose 3 (Tdor Tdap) at least 4 weeks after Dose 2 |
| | | Dose 1 given ≥12 months of age | It has been at least 4 weeks since Dose 1 | Dose 1 was Tdap | Give Dose 2 (Td or Tdap) today | Give Dose 3 (Tdor Tdap) at least 6 months after Dose 2 |
| | | | | Dose 1 was not Tdap | Give Dose 2 (Tdap) today | |
| | 2 | Dose 1 given <12 months of age | It has been at least 4 weeks since Dose 2 | Any dose was Tdap* | Give Dose 3 (Td or Tdap) today± | Give Dose 4 (Td or Tdap) at least 6 months after Dose 3 |
| | | | | No dose was Tdap± | Give Dose 3 (Tdap) today | |
| | | Dose 1 given ≥12 months of age | It has been at least 6 months since Dose 2 | Any dose was Tdap* | Give Dose 3 (Td or Tdap) today± | Give Td or Tdap 10 years after Dose 3 |
| | | | | No dose was Tdap† | Give Dose 3 (Tdap) today | |
| | 3 | Dose 1 given <12 months of age | It has been at least 6 months since Dose 3 | Any dose was Tdap* | Give Dose 4 (Td or Tdap) today† | Give Td or Tdap 10 years after Dose 3 |
| | | | | No dose was Tdap± | Give Dose 4 (Tdap) today | |
| | | Dose 1 given ≥12 months of age | No dose was Tdap* | → | Give Dose 4 (Tdap) today | Give Td or Tdap 10 years after Dose 3 |
| | | | Any dose was Tdap† | → | No dose today | |
| | 4 | → | No Tdap given after 7th birthday | → | Give a dose of Tdap today§ | Give Td or Tdap 10 years after Tdap dose |
| | | | Tdap given after 7th birthday | No Tdap given after 10th birthday | | |
| | | | | Tdap given after 10th birthday | No dose today | Give Td or Tdap 10 years after Dose 4§ |

* Given at 10 years of age or older

† If the previous Tdap dose(s) was administered before the 10th birthday, then a dose of Tdap is recommended now
± Or Tdap administered at 9 years of age or younger
§ The preferred age at administration for this dose is 11-12 years. However, if Tdap is administered at 10 years of age, the Tdap dose may count as the adolescent Tdap dose
Adapted from https://www.cdc.gov/vaccines/schedules/downloads/child/job-aids/tdap-2.pdf

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Tick-Borne Encephalitis Vaccine (Adults & Children ≥ 1 year of age)

**Purpose:** To reduce morbidity and mortality from tick-borne encephalitis by vaccinating all individuals ≥ 1 year of age, who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) licensure, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals in need of vaccination with TICOVAC based on the following criteria:
    - Persons ≥1 year of age who are:
        - Moving overseas or traveling to a TBE-endemic area and will have extensive exposure to ticks based on their outdoor activities and itinerary
        - Laboratory workers with a potential for exposure to TBE virus
        - Traveling during TBE virus transmission season (Spring through Fall) with the potential exposure to ticks in a TBE-endemic area
        - Persons at risk through consuming unpasteurized dairy products

2. Using the routine immunization screening form DD Form 3110 or DD Form 3111 screen all patients for contraindications and precautions to TICOVAC:

    **Contraindications:**
    - A history of a serious reaction (e.g., anaphylaxis) of a previous dose of TICOVAC or any excipient of TICOVAC
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**
    - History of severe allergic reaction (e.g. anaphylaxis) to any injectable medication
    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g. observation after administration) and to restore cerebral perfusion following syncope Some individuals with altered immunocompetence may have reduced immune responses to TICOVAC™
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide TICOVAC vaccine as follows:

| TABLE 1. Primary Vaccination Schedule | | |
|---|---|---|
| **Dose** | **Age 1 through 15 years** | **Age 16 years and older** |
| 1st | Day 0 | Day 0 |
| 2nd | 1 - 3 months after 1st dose | 14 days to 3 months after 1st dose |
| 3rd | 5 - 12 months after 2nd dose | 5 to 12 months after 2nd dose |

- When possible, it is optimal to complete the primary immunization series at least 1 week prior to potential exposure to TBEV (tick-borne encephalitis virus).
- A single booster dose (4th dose) may be given at least 3 years after completion of the primary immunization series if ongoing exposure of re-exposure to TBEV is expected.
- Bring the vaccine to room temperature before administration. Shake well prior to administration to thoroughly mix the vaccine suspension. After shaking, the vaccine should be a homogenous off-white, opalescent suspension.
- Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. Do not administer if particulate matter or discoloration remains after shaking.
- Administer vaccine by intramuscular injection.

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Toddlers (1-2 years) | 1 - 1.25 inch | Anterolateral thigh* |
| | 5/8† - 1 inch | Deltoid muscle of arm |
| Children (3-10 years) | 5/8† - 1 inch | Deltoid muscle of arm* |
| | 1 - 1.25 inch | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| Men and Women (<130 lbs) | 1 inch† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch | |
| Men (152-260 lbs) | 1-1.5 inches | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

- When vaccinating 1 through 15 years of age, attach a sterile needle to the 0.25 mL single-dose pre-filled TICOVAC syringe, ensuring the needle size is appropriate for the age or size of the patient.
- When vaccinating 16 years of age and older, attach a sterile needle to the 0.5 mL single-dose pre-filled TICOVAC syringe, ensuring the needle size is appropriate for the age or size of the patient.
- Separate multiple injection sites by 1 inch or more and if possible, administer vaccines that may be more likely to cause a local reaction in different limbs.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Typhoid Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from disease caused by Salmonella enterica serotypes Typhi and Paratyphi by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons 2 – 17 years of age in need of vaccination against typhoid fever based on the following criteria:
    - Anticipated travel to areas where there is a recognized risk for exposure to S. typhi
    - Persons with intimate exposure (e.g., household contact) to a documented S. typhi chronic carrier
    - Laboratory workers routinely exposed to specimens of S. typhi, or who work in laboratory environments where these specimens are routinely handled

2. Using DD Form 3110, screen all patients for contraindications and precautions to typhoid vaccine:

    **Contraindications:**
    - Oral typhoid vaccine should not be given to immunocompromised persons
    - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of typhoid vaccine or to a vaccine component
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**
    - Oral typhoid vaccine should not be given within 3 days (before or after) of an antimicrobial agent
    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

***Note: available data are not sufficient to assess the effects of typhoid vaccine on persons who are pregnant or nursing. Typhoid vaccine should be used during pregnancy or nursing only if benefit clearly outweighs risk; if indicated, inactivated vaccine (ViCPS) may be considered. This is not covered under this standing order; patients must obtain a written order from a privileged provider for this situation***

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - Follow dosing schedules in table below. Patients should complete the Vivotif® regimen
    - ≥1 week prior to exposure; Typhim VI® should be completed 2 weeks prior to exposure. Vivotif® is given orally; Typhim VI® is given intramuscularly in the preferred site (anterolateral thigh for infants and toddlers or in the deltoid for children and adolescents). The alternate site (anterolateral thigh muscle or deltoid muscle) may be used if the preferred site is inadequate.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

**TABLE 2. Vaccination Schedule**

| Vaccination | Age | Dose/Route | # of Doses | Interval | Booster |
|---|---|---|---|---|---|
| **Oral, Live, Attenuated Ty21a Vaccine (Vivotif)†** | | | | | |
| Primary series | ≥6 years | 1 capsule,§ oral | 4 | 48 hours | N/A |
| Booster | ≥6 years | 1 capsule,§ oral | 4 | 48 hours | Every 5 years |
| **Vi Capsular Polysaccharide Vaccine (Typhim Vi)** | | | | | |
| Primary series | ≥2 years | 0.5mL, IM | 1 | N/A | N/A |
| Booster | ≥2 years | 0.5mL, IM | 1 | N/A | Every 2 years |

†The vaccine must be kept refrigerated (35.6 - 46.4°F, 2 - 8°C)

§Administer with cool liquid no warmer than 98.6°F (37°C)

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Varicella Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from varicella virus (VAR) infection by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals 12 months – 17 years in need of vaccination against VAR based on the following criteria:
    - No documented evidence of VAR immunity, which is:
        - Receipt of 2 doses of VAR-containing vaccine at ≥ 12 months of age and at the age- appropriate interval (see #4)
        - Laboratory evidence of immunity or disease
        - Diagnosis or verification of a history of varicella or herpes zoster disease by a licensed healthcare provider

2. Using DD Form 3110, screen all patients for contraindications and precautions to VAR vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of VAR vaccine or to a vaccine component, to include gelatin and neomycin. For information on vaccine components, refer to the package insert or The CDC Pink Book Appendix B.
    - Active untreated tuberculosis or febrile illness > 101.3°F / > 38.5°C
    - Immunosuppression (e.g., cancer or malignant neoplasms, immunosuppressive therapy [to include prolonged high-dose steroid therapy], etc.)
    - HIV infection with severe immunosuppression (e.g., CD4+ T-lymphocyte count of < 200 cells per microliter or < 15%)
    - Pregnancy, or may become pregnant in the next 30 days:
    - Although the package insert recommends avoiding conception for 3 months, ACIP Best Practices advise that waiting 1 month after vaccination before conception is sufficient.
    - Congenital or hereditary immunodeficiency in 1st degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Recent (≤ 11 months) receipt of an antibody-containing blood product
    - Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination. Avoid use of these drugs for ≥ 14 days after vaccination.
    - Simultaneous use of aspirin or aspirin-containing products. Avoid use of these drugs for ≥ 6 weeks after vaccination.
    - Alpha-gal allergy: may wish to consult their PCM before receiving a vaccine that contains gelatin

- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion following syncope.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide VAR vaccine as follows:
   - A 2-dose series recommended at ages 12-15 months and 4-6 years
   - Minimum intervals:
     - Age 12 months - 12 years: ≥ 3 months
       - Doses inadvertently given ≥ 4 weeks may be counted as valid
     - Age ≥ 13 years: ≥ 4 weeks
   - Administer 0.5 mL of VAR vaccine subcutaneously (SC) or intramuscularly (IM) according to Tables 1 & 2:

**TABLE 1. SC Needle Length and Injection Site Guide**

Use a 5/8 inch 23 – 25-gauge needle

| Patient Age | Injection Site |
|---|---|
| Children/Adolescents (≥ 12 months) | Fatty tissue over triceps* |
| | Fatty tissue over anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh* |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* Preferred site.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Yellow Fever Vaccine (Pediatric)

**Purpose:** To reduce morbidity and mortality from yellow fever disease by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify all persons 9 months – 17 years of age in need of vaccination against yellow fever virus (YF) based on the following criteria:
    - Vaccination is required for Service members and beneficiaries as indicated per Combatant Command (CCMD) force health protection requirements
    - Persons traveling or transiting in areas at risk for YF transmission such as South America and Africa: travelers and providers can obtain updated travel information from the CDC.

2. Using DD Form 3110, screen all patients for contraindications and precautions to the yellow fever vaccine:

    **Contraindications:**
    - A history of a serious allergic reaction (e.g., anaphylaxis) after a previous dose of YF vaccine or to a vaccine component (to include egg, chicken, or gelatin)
    - Immunosuppression (e.g., HIV/AIDS [including those with a CD4 T lymphocyte count <200/mm3 or <15% of total lymphocytes for children < 6 years], cancer or malignant neoplasms, immunosuppressive therapy, etc.)
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Asymptomatic HIV infections with a CD4 count of 200-499/mm3 (or 15-24% of total lymphocytes for children aged <6 years)
    - Pregnancy (or may become pregnant in the next 30 days). The safety of YF vaccine has not been studied in any large trials. YF vaccine should be given to a pregnant woman only if clearly needed
    - Nursing: because of the potential for serious adverse reactions in nursing infants from YF vaccine, a decision should be made whether to discontinue nursing or not to administer the vaccine, taking into account the importance of the vaccine to the mother
    - Need for tuberculosis (TB) screening by skin testing or interferon-gamma release assay (IGRA) testing. To prevent potential interference between yellow fever vaccine and TB testing (possibly causing false-negative TB results), TB testing may be performed before yellow fever vaccination, on the same day as yellow fever vaccination (preferred), or postponed for at least 4 weeks after yellow fever vaccination
    - Asymptomatic HIV infection with CD4 T lymphocyte values 200-499 mm3 (or 15-24% of total lymphocytes for children aged <6 years)

- Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

***Note: Yellow fever vaccine may be administered as young as 6 months of age in some circumstances. However, that is not covered under this standing order: patients must obtain a written order from a privileged provider for this situation. Providers considering vaccinating an infant 6-8 months of age are encouraged to contact DHA-IHD at (877) 438-8222, Option 1 prior to doing so***

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - YF vaccine (YF-Vax®) consists of a 1-dose series. Administer 0.5mL subcutaneously in the preferred site (fatty tissue over the anterolateral thigh muscle for infants and toddlers or the fatty tissue over the triceps for children and adolescents). The alternate site (fatty tissue over anterolateral thigh muscle or triceps) may be used if the preferred site is inadequate. Use a 23–25 gauge 5/8" needle.
    - Boosters are not routinely recommended for most travelers. Per the World Health Organization (WHO) and ACIP, a single primary dose of YF vaccine provides long-lasting protection and is adequate for most travelers. However, providers may consider administering a booster dose of YF vaccine for travelers who received their last dose ≥10 years ago if they are going to higher risk settings based on season, location, activities and duration of travel
    - AFRICOM, SOCOM, and SOUTHCOM do not require booster doses for force health protection requirements
    - Women who were pregnant when they received their initial dose of YF vaccine should receive 1 additional dose before they are next at risk for YF
    - Persons who received a hematopoietic stem cell transplant after a dose of YF vaccine should be revaccinated before they are next at risk for YF (as long as they are sufficiently immunocompetent)
    - Persons infected with HIV when they received their last dose of YF vaccine should receive a dose every 10 years if they continue to be at risk for YF as long as they are sufficiently immunocompetent (CD4 T lymphocyte values > 500/ mm3 or >25% of total lymphocytes for children <6 years)
    - Laboratory workers who routinely handle wild-type yellow fever virus should have yellow fever virus-specific neutralizing antibody titers measured at least every 10 years to determine the need for additional doses of YF vaccine

***Note: Booster doses are not covered under this standing order. Patients must obtain a written order from a privileged provider familiar with appropriate indications for YF vaccine booster doses in this situation.***

***Note: If possible, it is recommended to separate MMR and yellow fever vaccines by at least 30 days due to limited data suggesting a decreased immune response to most antigens when co-administered.***

5. The vaccine powder must be reconstituted immediately before use with the diluent supplied. Allow the reconstituted vaccine to sit for 1-2 minutes and then carefully swirl mixture until uniform suspension is achieved. Avoid vigorous shaking as this tends to cause foaming of the suspension. Once reconstituted, the vaccine should be maintained at 2°C–8°C and should be used or discarded within 1 hour. YF vaccine

should be administered at least 10 days before travel.

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. International health regulation requires persons who receive YF vaccine to provide proof of vaccination on an International Certificate of Vaccination of Prophylaxis (ICVP). The CDC 731 form fulfills this requirement for vaccines received in the US, which must have a certified uniform stamp. A certificate of vaccination is considered valid 10 days after vaccination and for the life of the patient.

8. International health regulation requires additional documentation from persons with contraindications to receipt of YF vaccine before travel to yellow-fever endemic areas.

9. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

10. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

11. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

# Adult Standing Orders

Anthrax Vaccine
Hepatitis A Vaccine
Hepatitis B Vaccine
Haemophilus influenzae type b Vaccine
Human Papillomavirus Vaccine
Inactivated Polio Vaccine
Influenza Vaccine
Japanese Encephalitis Vaccine
Measles Mumps Rubella Vaccine
Meningococcal Vaccine (ACWY)
Meningococcal Vaccine (Group B)
Pneumococcal (PCV13, PCV15, PCV20 & PPSV23) Vaccine
Pre-Exposure (PrEP) Rabies Vaccine
Respiratory Syncytial Virus (RSV) Vaccine - Pregnancy
Tetanus Diphtheria and Pertussis Vaccine
Tick-Borne Encephalitis Vaccine
Typhoid Vaccine
Varicella (Chickenpox) Vaccine
Yellow Fever Vaccine
Zoster Vaccine

## Standing Order for Administering Anthrax Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from anthrax by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify all persons 18 - 65 years of age in need of vaccination against anthrax based on the following criteria:
    - Required for individuals as indicated per Combatant Command (CCMD) force health protection requirements
    - Voluntary for individuals who have received at least one previous dose
    - Occupational exposure to Bacillus anthracis in the laboratory

2. Screen all patients for contraindications and precautions to the anthrax vaccine (AVA):

**Contraindications:**

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of AVA or to a vaccine component
- For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.
- Pregnancy: defer vaccination until completion of pregnancy
- History of anthrax disease

**Precautions:**

- Moderate or severe acute illness with or without fever
- BioThrax® vials contain natural rubber latex and may cause allergic reactions in latex sensitive individuals
- Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS) and the DOD brochure titled "What You Need to Know About Anthrax Vaccine." You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - AVA (BioThrax®) consists of a 3-dose priming series at 0, 1, and 6 months, with booster doses at 12 and 18 months and annually thereafter.
    - Administer 0.5mL intramuscularly in the deltoid muscle for adults

| TABLE 1. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Men and Women (<130 lbs) | 1 inch (25 mm)† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches (38 mm) | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

5. Observe a minimum interval of 4 weeks between the 1st and 2nd dose; 150 days between the 2nd and 3rd dose; and at least 180 days between the 3rd, 4th, and 5th doses. DO NOT compress the minimum interval between doses. Do not restart the primary series for any reason; resume the series with administration of the next dose.

6. Refer women who were inadvertently vaccinated while pregnant to the BioThrax (Anthrax) Vaccine in Pregnancy Registry via email at nhrc-VaccineRegistry@med.navy.mil or by calling (619) 553-9255.

7. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

8. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

9. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

10. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Hepatitis A Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from hepatitis A virus infection by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons ≥ 18 years of age in need of vaccination against hepatitis A virus (HAV) based on the following criteria:
    - No documented receipt of a complete series of hepatitis A vaccine (HepA) at the appropriate ages and intervals.
    - Individuals at increased risk for HAV infection due to:
        - Chronic liver disease (e.g., hepatitis B and C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, ALT or AST level greater than twice the upper limit of normal)
        - Close, personal contact with international adoptee in the first 60 days after arrival from a country with high or intermediate endemic HAV
        - Current or recent use of street drugs (injection or noninjection)
        - HIV infection
        - Individuals aged > 40 years
        - Men who have sex with men
        - Occupational risk (e.g., laboratory or research staff routinely exposed to HAV)
        - Individuals experiencing homelessness
        - Individuals who are incarcerated
        - Pregnancy (if at risk for infection or severe outcome from infection during pregnancy)
        - Residents and staff of facilities for developmentally disabled persons, nonresidential day care, or providing services to injection or noninjection drug users
        - Travel to countries with high or intermediate endemic HAV (see CDC Traveler's Health/Yellow Book)
    - Any other adult who wants to be protected from HAV

2. Using DD Form 3111, screen all patients for contraindications and precautions to HepA:

    **Contraindications:**

    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of HepA or to a vaccine component (including neomycin and yeast)
    - For information on vaccine components, refer to the package insert for Havrix, Vaqta, Twinrix, or The CDC Pink Book Appendix B.

    **Precautions:**

    - Moderate or severe acute illness with or without fever
    - Certain HepA presentations contain latex, which may cause allergic reactions:
        - Havrix, Twinrix: tip caps of prefilled syringes contain natural rubber latex

- Vaqta: vial stopper, syringe plunger stopper, and tip cap contain dry natural latex rubber

- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Administer the appropriate HepA intramuscularly (IM) according to Tables 1 & 2.
   - Booster doses, challenge doses, and post-exposure prophylaxis (PEP) are not covered under this standing order: these patients must obtain a written order from a privileged provider.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Children/Adolescents (11-18 years) | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm† |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| **Adults (≥ 19 years)** | | |
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* If skin is stretched tightly and subcutaneous tissues are not bunched.

† Preferred site.

| TABLE 2. Schedule for hepatitis A vaccine primary series by vaccine type, ≥ 18 years of age | | | |
|---|---|---|---|
| | Monovalent vaccine | | Combination vaccine |
| | Havrix | Vaqta | Twinrix |
| Dose volume: 18 years of age | 0.5 mL | 0.5 mL | 1 mL |
| Dose volume: ≥ 19 years of age | 1 mL | 1 mL | |
| Number of doses | 2 | 2 | 3 – 4* |
| Recommended intervals† | 0, 6 -12 months | 0, 6 - 18 months | 0, 1, 6 months |
| Minimum intervals | Dose 1 to dose 2: 6 months | | Dose 1 to dose 2: 4 weeks<br>Dose 2 to dose 3: 5 months |

May be given on an accelerated 4-dose schedule (0, 7, 21-30 days, and 12 months). The four-day grace period does not apply to the first three doses in the accelerated schedule.

† Time in months from first dose.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Hepatitis B Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from hepatitis B virus infection by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons ≥ 18 years of age in need of vaccination against hepatitis B virus (HBV) based on the following criteria:
    - All individuals 18 – 59 years of age without documented receipt of a complete series of hepatitis B vaccine (HepB) at the appropriate ages and intervals.
    - Individuals ≥ 60 years of age with risk factors for HBV infection:
        - At risk for infection by sexual exposure, seeking evaluation or treatment for a sexually transmitted infection, sexually active and not in a monogamous relationship, men who have sex with men, sex partner of a person with chronic hepatitis B infection
        - Occupational risk (e.g., healthcare and public safety personnel)
        - Household contact of a person with chronic HBV infection
        - Current or recent use of injectable street drugs
        - Residents and staff of facilities for developmentally disabled persons
        - International travel to countries with high or intermediate levels of endemic HBV infection (see CDC Traveler's Health/Yellow Book)
        - Chronic liver disease (including hepatitis C), end-stage renal disease (predialysis or maintenance dialysis), HIV infection, diabetes (at provider discretion)
        - Persons who are incarcerated
        - Any other adult who wants to be protected from HBV

2. Using DD Form 3111, screen all patients for contraindications and precautions to HepB:

    **Contraindications:**

    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of HepB or to a vaccine component (including yeast and neomycin)
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**

    - Moderate or severe acute illness with or without fever
    - Certain HepB presentations contain latex, which may cause allergic reactions:
        - Engerix-B, Twinrix: tip caps of prefilled syringes contain natural rubber latex
        - Recombivax HB: vial stopper, syringe plunger stopper, and tip cap contain dry natural latex rubber
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to

restore cerebral perfusion.

- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Administer the appropriate HepB intramuscularly (IM) according to Tables 1 & 2.
   - Certain situations are not covered under this standing order: these patients must obtain a written order from a privileged provider. This includes:
     - Use of Heplisav-B and PreHevbrio in pregnancy
     - Revaccination and booster doses for:
       - Post-exposure prophylaxis
       - Travelers to high-risk areas
       - Healthcare and public safety workers
       - Hemodialysis and other immunocompromised patients

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Children/Adolescents (11-18 years) | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm† |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| **Adults (≥ 19 years)** | | |
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* If skin is stretched tightly and subcutaneous tissues are not bunched.

† Preferred site.

| TABLE 2. Schedule for hepatitis B vaccine primary series by vaccine type, ≥ 18 years of age | | | | | |
|---|---|---|---|---|---|
| | Monovalent vaccine | | | | Combination vaccine |
| | Engerix | Recombivax | PreHevbrio | Heplisav-B | Twinrix* |
| Dose volume: 18-19 years of age | 0.5 mL | 0.5 mL | 1 mL | 0.5 mL | 1 mL |
| Dose volume: ≥ 20 years of age | 1 mL | 1 mL | | | |
| Number of doses | 3 | 3 | 3 | 2 | 3 |
| Recommended intervals† | 0, 1, 6 months | 0, 1, 6 months | 0, 1, 6 months | 0, 1 months | 0, 1, 6 months |
| Minimum intervals | Dose 1 to dose 2: 4 weeks<br>Dose 2 to dose 3: 8 weeks<br>Dose 1 to dose 3: 16 weeks | | | ≥ 4 weeks | Dose 1 to dose 2: 4 weeks<br>Dose 2 to dose 3: 5 months |
| Hemodialysis dosing (≥ 20 years of age) | 4 doses (2 mL each) at 0, 1, 2, 6 months | 3 doses (1 mL each) at 0, 1, 6 months (Dialysis formulation) | NA | NA | NA |

May be given on an accelerated 4-dose schedule (0, 7, 21-30 days, 12 months). The four-day grace period does not apply to the first three doses in the accelerated schedule.
† Time in months from first dose.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering *Haemophilus influenzae* type b Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from disease caused by Haemophilus influenzae type b by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals ≥ 18 years of age in need of vaccination against Haemophilus influenzae type b based on increased risk due to the following criteria:
    - Anatomic or functional asplenia (including sickle cell disease)
    - Elective splenectomy
    - Hematopoietic stem cell transplant (HSCT)
    - HIV infection

2. Using DD Form 3111, screen all patients for contraindications and precautions to Hib vaccine (Hib):

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of Hib or to a vaccine component, or to a vaccine containing tetanus toxoid
    - For information on vaccine components, refer to the package insert for ActHIB, Hiberix, PedvaxHIB, or The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - PedvaxHIB only: vial stopper contains dry natural latex rubber
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide Hib vaccine as follows:
    - Administer the appropriate vaccine intramuscularly (IM) according to Tables 1 - 2.
    - Any FDA-licensed conjugate/monovalent Hib vaccine may be used. Although these vaccines are only licensed for use in individuals age 6 weeks – 5 years, this represents the current standard of care and is covered under this standing order.

| TABLE 1. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Children/Adolescents (11-18 years) | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm† |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| **Adults (≥ 19 years)** | | |
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm† |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* If skin is stretched tightly and subcutaneous tissues are not bunched.
† Preferred site.

| TABLE 2. Hib Vaccine Schedule for Unvaccinated* Individuals Who ARE at Increased Risk | | |
|---|---|---|
| **Risk Factor** | **Patient Age** | **Number of Doses (minimum interval)** |
| Anatomic or functional asplenia | ≥ 18 years | 1 dose |
| Elective splenectomy | ≥ 18 years | 1 dose ≥ 14 days before procedure |
| Hematopoietic stem cell transplant (regardless of Hib vaccination history) | ≥ 18 years | 3 doses (≥ 4 weeks), beginning 6-12 months after transplant |
| HIV | 18 years only | 1 dose |

"Unvaccinated" refers to individuals who have not received a Hib primary series and booster dose or ≥ 1 dose after age 14 months.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Human Papillomavirus Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from human papillomavirus (HPV) infection by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify all persons 18 – 45 years of age who have not completed the HPV vaccination series.

2. Using DD Form 3111, screen all patients for contraindications and precautions to HPV vaccine:

   **Contraindications:**

   - A history of a severe allergic reaction (e.g., anaphylaxis) after a previous dose of HPV vaccine or to one of its components (including yeast)
   - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.
   - Pregnancy: delay vaccination until after completion of pregnancy

   **Precautions:**

   - Moderate or severe acute illness with or without fever
   - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
   - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Routine vaccination is recommended at 11-12 years of age, but can start at 9 years of age if appropriate. The HPV vaccine (GARDASIL 9®) consists of a 2 or 3 dose series depending on age at time of initial vaccination:
     - **Age 9-14 years at initial vaccination:** a 2-dose series at 0 and 6-12 months (minimum interval 5 months; repeat dose if given too soon)

- **Age 15-26 years at initial vaccination (or ages 9-26 with impaired immunity):** a 3-dose series at 0, 2, and 6 months (observe a minimum interval of 4 weeks between the 1st and 2nd doses, 12 weeks between the 2nd and 3rd doses, and at least 5 months between the 1st and 3rd dose: repeat dose if administered too soon)

- Administer 0.5mL of HPV vaccine intramuscularly in the deltoid muscle for adults

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Men and Women (<130 lbs) | 1 inch (25 mm)† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches (38 mm) | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

5. For persons 18–26 years of age who did not receive HPV vaccine at the ages specified in #4:
   - Administer one dose at the earliest opportunity and then schedule subsequent doses as needed to complete the age-appropriate schedule
   - Minimum intervals are specified in #4

6. For persons 27–45 years of age who have not completed the HPV vaccine series:
   - Catch-up HPV vaccination is not recommended for all adults aged >26 years. Instead, shared clinical decision-making regarding HPV vaccination is recommended for some adults who are not adequately vaccinated
   - Patients should discuss this issue with a privileged provider before vaccination. If HPV vaccine is indicated, provide doses as specified in #5 after receiving a written order from the patient's provider. This standing order does not cover vaccination of persons 27-45 years of age due to the requirement for shared clinical decision making between the provider and the patient.

7. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

8. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

9. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

10. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Orders for Administering Inactivated Polio Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from poliomyelitis by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons ≥18 years of age in need of vaccination against poliovirus based on the following criteria:
    - Routine poliovirus vaccination of adults in the United States is not necessary. Most adults have a minimal risk for exposure to polioviruses and are immune as a result of childhood vaccination. Vaccination is recommended for certain adults who are at greater risk for exposure to polioviruses than the general population, including the following:
        - basic trainees and other accessions personnel*
        - military personnel outside of accessions settings**
        - travelers to areas or countries where polio is epidemic or endemic
        - members of communities or specific population groups with disease caused by wild polioviruses
        - laboratory workers who handle specimens that might contain polioviruses
        - healthcare workers who have close contact with patients who might be excreting wild polioviruses
        - unvaccinated adults

***Note: *Receipt of the primary series of IPV may be assumed unless there is a reason to believe otherwise (e.g., childhood spent in a developing country, childhood immunizations not received, etc.)***

*****Due to the high level of childhood immunization against the disease, do not screen immunization records for polio immunity after Initial Entry Training except during an outbreak or for clinical purposes***

2. Using DD Form 3111, screen all patients for contraindications and precautions to inactivated polio vaccine (IPV):

    **Contraindications:**

    - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of IPV or to a vaccine component (to include neomycin, streptomycin, or polymyxin B)
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**

    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope

- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide IPV (IPOL®) as follows:
   - Basic trainees and other accessions personnel: 1 dose
   - Individuals traveling OCONUS for > 4 weeks: 1 dose within 12 months of **DEPARTURE FROM** a polio-affected area (check with latest Force Health Protection guidelines or see CDC Traveler's Health for updates)
   - Unvaccinated adults: a 3-dose series (0, 1-2 and 6-12 months)
   - Administer 0.5mL intramuscularly in the deltoid muscle for adults

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Men and Women (<130 lbs) | 1 inch (25 mm)† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches (38 mm) | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

5. If three doses of IPV cannot be administered within the recommended intervals before protection is needed, the following alternatives are recommended:
   - If >8 weeks before protection is needed: 3 doses at least 4 weeks apart
   - If 4 – 8 weeks before protection is needed: 2 doses at least 4 weeks apart
   - If <4 weeks before protection is needed: 1 dose

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Influenza Vaccine
## Northern & Southern Hemisphere (Adult)

**Purpose:** To reduce morbidity and mortality from disease caused by influenza virus by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under this standing order, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals aged ≥ 18 years during influenza season (Northern Hemisphere: Oct - May; Southern Hemisphere: Apr - Sep) who do not have a documented dose of the appropriate influenza vaccine during the current season, or who are unsure of their vaccination status.

2. Using DHA Form 116, screen all patients for contraindications and precautions to influenza vaccine:

**Contraindications (IIV, aIIV, ccIIV, RIV):**

- History of a severe allergic reaction (e.g., anaphylaxis) or diagnosed allergy to a previous dose or component of any influenza vaccine is a contraindication to that same influenza vaccine type/ platform (e.g., egg-based [IIV, aIIV], cell culture-based [ccIIV], recombinant [RIV], or live attenuated [LAIV]). However, per ACIP recommendations other flu vaccine platforms may be considered with appropriate precautions.

**Precautions (IIV, aIIV, ccIIV, RIV):**

- Moderate or severe acute illness with or without fever.
- History of Guillain-Barré syndrome within 6 weeks of receipt of any influenza vaccine.
- History of a severe allergic reaction to a previous dose of one type of influenza vaccine is a precaution to use of the others.
- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.

**Contraindications (LAIV):**

- Individuals ≥ 50 years of age.
- Pregnancy in any trimester.
- History of a severe allergic reaction (e.g., anaphylaxis) to any component of LAIV or to a prior dose of any influenza vaccine.
- Immunocompromise due to any cause (e.g., HIV, functional or anatomic asplenia, an active CSF shunt, cranial CSF leak, or cochlear implant).
- Close contacts and caregivers of severely immunosuppressed individuals who require a protective environment.
- Receipt of influenza antiviral medication within the last 48 hours (oseltamivir and zanamivir), last 5 days (peramivir), or last 17 days (baloxavir). Individuals who receive influenza antiviral medication

within 2 weeks after receipt of LAIV should be revaccinated with an age appropriate IIV or RIV.

**Precautions (LAIV):**

- Moderate or severe acute illness with or without fever.
- History of Guillain-Barré syndrome within 6 weeks of receipt of any influenza vaccine.
- Asthma in persons aged ≥ 5 years.
- Other underlying medical conditions that might predispose to complications after wild-type influenza infection (e.g., chronic pulmonary, cardiovascular [except isolated hypertension], renal, hepatic, neurologic, hematologic, or metabolic disorders [including diabetes mellitus]).
- For information on vaccine components, refer to the vaccine-specific package insert and The CDC Pink Book Appendix B.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Administer influenza vaccine according to Tables 1 & 2.
   - Administer live influenza vaccine according to the package insert. Active inhalation (e.g., sniffing) is not required during administration.
   - Individuals may receive both Northern and Southern Hemisphere formulations if they will be present for ≥ 14 days during that hemisphere's influenza season. Northern and Southern Hemisphere influenza vaccines should be separated by ≥ 28 days.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm† |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* If skin is stretched tightly and subcutaneous tissues are not bunched.

† Preferred site.

| TABLE 2. Influenza Vaccines, 2023- 2024 Season (Adult) | | | | |
|---|---|---|---|---|
| **Vaccine (Abbreviation)** | **Type** | **Patient Age** | **Dose** | **Route** |
| Afluria (IIV4) | Egg-based | 6 – 35 months | 0.25 mL | IM |
| | | ≥ 3 years | 0.5 mL | |
| Fluad (aIIV4) | Adjuvanted, egg-based | ≥ 65 years | 0.5 mL | |
| Fluarix (IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| FluBlok (RIV4) | Recombinant, serum-free medium | ≥ 18 years | 0.5 mL | |
| Flucelvax (ccIIV4) | Cell culture-based | ≥ 6 months | 0.5 mL | |
| FluLaval (IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| Fluzone (IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| Fluzone High-Dose (HD-IIV4) | Egg-based | ≥ 65 years | 0.7 mL | |
| Fluzone Southern Hemisphere (SH-IIV4) | Egg-based | ≥ 6 months | 0.5 mL | |
| FluMist | Live attenuated, egg-based | 2 – 49 years | 0.2 mL (0.1 mL/ nostril) | NAS |

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, VIS date and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Observation: All individuals who receive any vaccine should be monitored as follows:
    - 30 minutes - individuals with:
        - History of an immediate allergic reaction of any severity to a vaccine or injectable medication/ therapy.
        - History of anaphylaxis due to any cause.
    - 15 minutes: all other individuals.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Japanese Encephalitis Vaccine (Adult)

**Purpose:** To reduce the morbidity and mortality from Japanese encephalitis (JE) by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify all persons ≥18 years of age in need of vaccination against JE based on the following criteria:
    - Vaccination is required for service members and beneficiaries as indicated per Combatant Command (CCMD) force health protection requirements
    - Travelers who plan to spend 1 month or longer in endemic areas (per CDC Yellow Book, TRAVAX, or other travel medicine guidelines) during JE transmission season (including long-term travelers and recurrent travelers based in urban areas but likely to visit endemic or rural or agricultural areas)
    - Short-term (<1 month) travelers to endemic areas during JE transmission season if they plan to travel outside of an urban area and will have increased risk for JE exposure
    - Travelers to an area with ongoing JE outbreak
    - Travelers to endemic area who are uncertain of specific destinations, activities, or duration of travel

2. Using DD Form 3111, screen all persons for contraindications and precautions to the JE vaccine (JE-VC):

    **Contraindications:**
    - A history of a serious allergic reaction (e.g., anaphylaxis) after a previous dose of JE-VC or to a vaccine component (to include protamine sulfate.) Ask diabetic patients about allergic reactions to their insulin (which may also contain protamine sulfate)
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**
    - Pregnancy: vaccination is generally deferred during pregnancy, though pregnant women traveling to high-risk areas may receive JE-VC if benefit outweighs risk
    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

***Note: although JE-VC vaccination during pregnancy may be warranted, this is an off label use of the vaccine and is not covered under these standing orders. Patients must obtain a written order from a privileged provider for this situation.***

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Follow dosing schedule as below
   - JE-VC (IXIARO®) consists of a 2-dose primary series and a single booster for continued risk
   - Primary series should be completed ≥1 week before travel. Administer 0.5mL intramuscularly in the deltoid muscle for adults.

**TABLE 1. Adult Dosing Schedule for JE-VC Vaccine**

| Age | Dose | Route | Schedule | Booster† |
|---|---|---|---|---|
| 18–65 y | 0.5 mL | IM | 0, 7-28 days | ≥1 y after primary series |
| >65 y | 0.5 mL | IM | 0, 28 days | ≥1 y after primary series |

† If potential for JEV exposure continues

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Men and Women (<130 lbs) | 1 inch (25 mm)† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches (38 mm) | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse

Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Measles Mumps Rubella Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from measles, mumps, and rubella virus (MMR) infection by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals ≥ 18 years of age in need of vaccination against MMR based on the following criteria:
    - No documented evidence of MMR immunity, which is:
        - Receipt of 2 doses of MMR vaccine at ≥ 12 months of age and ≥ 4 weeks apart
        - Laboratory evidence of immunity or disease
        - Born in the U.S. before 1957: does not apply to healthcare workers, pregnant women, and immunocompromised individuals
    - History of two previous doses of MMR vaccine at ≥ 12 months of age and identified by public health as being at increased risk during a mumps outbreak

2. Using DD Form 3111, screen all patients for contraindications and precautions to MMR vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of MMR vaccine or to a vaccine component, to include gelatin and neomycin. For information on vaccine components, refer to the M-M-R II or Priorix package insert or The CDC Pink Book Appendix B.
    - M-M-R II only: active untreated tuberculosis
    - Pregnancy, or may become pregnant in the next 30 days
    - Immunosuppression (e.g., cancer or malignant neoplasms, immunosuppressive therapy [to include prolonged high-dose steroid therapy], etc.)
    - HIV infection with severe immunosuppression (e.g., CD4+ T-lymphocyte count of < 200 cells per microliter or < 15%)
    - Congenital or hereditary immunodeficiency in 1st degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Recent (≤ 11 months) receipt of an antibody-containing blood product
    - History of thrombocytopenia or thrombocytopenic purpura
    - TB testing: live vaccines and testing (IPPD or IGRA) should be performed on the same day or separated by ≥ 4 weeks (before and after) to avoid false negative results.
    - Simultaneous use of aspirin or aspirin-containing products. Avoid use of these drugs for ≥ 6
    - weeks after vaccination.
    - Alpha-gal allergy: may wish to consult their PCM before receiving a vaccine that contains gelatin

- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion following syncope.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide MMR vaccine as follows:
   - A 2-dose series separated by ≥ 4 weeks
   - During a mumps outbreak: one dose ≥ 4 weeks after the individual's 2nd MMR dose
   - Administer 0.5 mL of MMR vaccine as follows and according to Tables 1 & 2:
     - M-M-R II may be given subcutaneously (SC) or intramuscularly (IM).
     - Priorix may only be given SC.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Children/Adolescents (11-18 years) | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm† |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| **Adults (≥ 19 years)** | | |
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* If skin is stretched tightly and subcutaneous tissues are not bunched.

† Preferred site.

| TABLE 2. SC Needle Length and Injection Site Guide | |
|---|---|
| Use a 5/8 inch 23 – 25-gauge needle | |
| **Patient Age** | **Injection Site** |
| Adults ≥ 18 years | Fatty tissue over triceps* |
| | Fatty tissue over anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* Preferred site.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Meningococcal ACWY Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from meningococcal disease by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals ≥ 19 years of age in need of vaccination against meningococcal serogroups A, C, W, and Y based on the following criteria:
    - No documented receipt of a complete routine series of meningococcal ACWY vaccine (MenACWY) at the appropriate ages and intervals.
    - At increased risk due to:
        - Asplenia (anatomic or functional) or sickle cell disease (SCD)
        - HIV infection
        - Microbiologists routinely exposed to Neisseria meningitidis
        - Men who have sex with men (MSM)
        - Military recruits
        - Persistent (e.g., genetic) complement deficiency or using a complement inhibitor medication
        - Travel to or living in countries where meningococcal disease is hyperendemic or epidemic
        - Unvaccinated or undervaccinated 1st year college students living in residence halls
        - Meningococcal outbreaks

2. Using DD Form 3111, screen all patients for contraindications and precautions to MenACWY:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of meningococcal vaccine or to a vaccine component
    - MenACWY-CRM (Menveo): severe allergic reaction to a diphtheria toxoid– or CRM197–containing vaccine
    - MenACWY-TT (MenQuadfi) and MenABCWY (Penbraya): severe allergic reaction to a tetanus toxoid-containing vaccine
    - Penbraya: severe allergic reaction to yeast
    - For information on vaccine components, refer to the package inserts for MenQuadfi, Menveo, and Penbraya, and The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 312-761-4245.

**Special Populations:**

- **Pregnancy and Lactation:** Pregnant and lactating women should receive MenACWY vaccine if indicated.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide MenACWY as follows:
   - Administer the appropriate vaccine intramuscularly (IM) according to Tables 1 - 3.
   - Off-label ACIP recommendations covered under this standing order:
     - A 2-dose primary series in persons at increased risk due to certain underlying medical conditions
     - Repeated booster doses for persons who remain at increased risk
     - ≥ 56 years: administration of MenACWY-D (Menactra) or Menveo in persons at increased risk
       - Production of Menactra was discontinued in 2022. Remaining stock may be used according to previous schedules through the expiry date or until it is no longer FDA- licensed, whichever is earlier.
   - MenACWY vaccines are interchangeable; the same product is recommended, but not required, for all doses (primary and booster).
   - MenACWY and meningococcal B vaccine (MenB) may be administered simultaneously (at different anatomic sites) if indicated.
   - Penbraya may only be used when both MenACWY and MenB are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing. Vaccination of healthy individuals aged 19–23 years (preferred at 16-18 years) with a 2-dose MenB primary series is based on shared clinical decision-making (SCDM) and is not covered under this standing order. These individuals must obtain a written order from a privileged provider.

**TABLE 1. Current Meningococcal ACWY Vaccines**

| | MenQuadfi (MenACYW-TT) | Menveo / 1-vial (MenACWY-CRM) | Menveo / 2-vial (MenACWY-CRM) | Penbraya (MenABCWY) |
|---|---|---|---|---|
| **Age** | ≥ 2 years | 10 – 55 years | 2 mo - 55 years | 10 – 25 years |
| **Dilute** | No: single-dose vial | No: single-dose vial (pink cap) | Yes: MenA vial (orange cap) & MenCWY vial (gray cap) | Yes: MenACWY vial & MenB syringe |

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* If skin is stretched tightly and subcutaneous tissues are not bunched.

| TABLE 3: MenACWY Vaccine Schedule by Patient Age and Risk Factor, Adult ≥ 19 years | | | |
|---|---|---|---|
| **Age Group** | **Risk Factor** | **Primary series: MenACWY CRM (Menveo), MenACWY TT (MenQuadfi), or MenABCWY (Penbraya)*** | **MenACWY Booster dose** |
| ≥ 19 years | • 1st year college living in residence halls | • Age 19–21 years and did not receive a dose on/after 16th birthday, within 5 years of college entry, or received only 1 dose before 16th birthday:<br>◦ Menveo or MenQuadfi: single dose | • Not recommended unless person becomes at increased risk due to another indication |
| | • Military recruit | • Age 19–21 years and did not receive a dose on/after 16th birthday:<br>◦ Menveo or MenQuadfi: single dose | • Every 5 years based on exposure risk |
| **Individuals with underlying medical conditions or additional risk factors:** | | | |
| ≥ 19 years | • Asplenia/SCD<br>• Complement deficiency | • Menveo: single dose<br>• MenQuadfi: 2 doses ≥ 8 wks apart<br>• Penbraya: 2 doses at 0 & 6 months* | • Single dose 5 years after primary vaccination and every 5 years thereafter |
| | • HIV | • Menveo: single dose<br>• MenQuadfi: 2 doses ≥ 8 wks apart | |
| | • Microbiologist<br>• Outbreak | • Menveo or MenQuadfi: single dose<br>• Penbraya: 2 doses at 0 & 6 months* | |
| | • Travel | • Menveo or MenQuadfi: single dose | |

* Penbraya may only be used when both MenACWY and MenB vaccination are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing.

† Dose 1 at age 3–6 months: 3- or 4- dose series (dose 2 [and dose 3 if applicable] ≥ 8 weeks after previous dose until a dose is received at age ≥ 7 months, followed by an additional dose ≥ 12 weeks later AND after age 12 months)

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Meningococcal B Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from meningococcal disease by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals ≥ 19 years of age in need of vaccination against meningococcal serogroup B based on increased risk due to:
    - Asplenia (anatomic or functional) or sickle cell disease (SCD)
    - Microbiologists routinely exposed to Neisseria meningitidis
    - Persistent (e.g., genetic) complement deficiency or using a complement inhibitor medication
    - Meningococcal outbreaks (e.g., in community or organizational settings, and among men who have sex with men [MSM])

2. Using DD Form 3111, screen all patients for contraindications and precautions to Meningococcal B vaccine (MenB):

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component
    - MenB-4C (Bexsero): severe allergic reaction to kanamycin
    - MenABCWY (Penbraya): severe allergic reaction to a tetanus toxoid-containing vaccine or yeast
    - For information on vaccine components, refer to the package inserts for Bexsero, Penbraya, and Trumenba, and The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Bexsero: latex sensitivity
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 312-761-4245.

    **Special Populations:**
    - **Pregnancy and Lactation:** defer vaccination. Individuals at increased risk may receive MenB after speaking with their provider, but that is not covered under this standing order. These individuals must obtain an order from a privileged provider.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide MenB as follows:
    - Administer the appropriate vaccine intramuscularly (IM) according to Tables 1 - 3.
    - Off-label ACIP recommendations covered under this standing order:
        - Booster doses for persons who remain at increased risk
        - Age ≥ 26 years: MenB primary series administration in persons at increased risk
    - Vaccination of healthy individuals aged 19–23 years (preferred at 16-18 years) with a 2-dose MenB primary series is based on shared clinical decision-making (SCDM) and is not covered under this standing order. These individuals must obtain a written order from a privileged provider.
    - MenB vaccines are not interchangeable; the same product must be used for all doses (primary and booster).
    - MenB and meningococcal ACWY vaccine (MenACWY) may be administered simultaneously (at different anatomic sites) if indicated.
    - Penbraya may only be used when both MenACWY and MenB are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing.

**TABLE 1. Current Meningococcal B Vaccines**

| | Bexsero (MenB-4C) | Trumenba (MenB-FHbp) | Penbraya (MenABCWY) |
|---|---|---|---|
| **Age** | 10 – 25 years | | 10 – 25 years |
| **Dilute** | No: single-dose prefilled syringe | | Yes: MenACWY vial & MenB syringe |

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* If skin is stretched tightly and subcutaneous tissues are not bunched.

| TABLE 3: MenB Vaccine Schedule by Patient Age and Risk Factor, Adult ≥ 19 years | | | |
|---|---|---|---|
| **Age Group** | **Risk Factor** | **Primary series: MenB-4C (Bexsero), MenB-FHbp (Trumenba), or MenABCWY (Penbraya)*** | **MenB Booster dose** |
| 19 – 25 years | • None (routine schedule) | • Age 19-23 only, and when SCDM favors administration of MenB:<br>◦ Bexsero: 2 doses, ≥ 1 month apart<br>◦ Trumenba: 2 doses at 0 & 6 months<br>◦ Penbraya: 2 doses at 0 & 6 months* | • Not recommended unless person becomes at increased risk due to another indication |
| **Individuals with underlying medical conditions or additional risk factors:** | | | |
| ≥ 19 years | • Asplenia/SCD<br>• Complement deficiency<br>• Microbiologist | • Bexsero: 2 doses, ≥ 1 month apart<br>• Trumenba: 3 doses at 0, 1-2, & 6 months<br>• Penbraya: 2 doses at 0 & 6 months* | • Single dose 1 year after primary series and every 2-3 years thereafter |
| | • Outbreak | • Bexsero: 2 doses, ≥ 1 month apart<br>• Trumenba: 3 doses at 0, 1-2, & 6 months<br>• Penbraya: 2 doses at 0 & 6 months* | • Single dose ≥ 1 year after primary series completion (≥ 6-month interval may be considered by public health professionals) |

* Penbraya may only be used when both MenACWY and MenB vaccination are indicated at the same visit. Consult the age appropriate MenACWY and MenB standing orders for indications and dosing.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Pneumococcal Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from pneumococcal disease by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons ≥ 19 years of age in need of vaccination against pneumococcus infection based on the following criteria:
    - Individuals ≥ 65 years of age
    - Individuals 19–64 years of age with no or unknown PCV receipt and certain risk factors:
        - Alcoholism or cigarette smoking
        - Cerebrospinal fluid (CSF) leak
        - Chronic heart disease (e.g., heart failure and cardiomyopathies)
        - Chronic liver disease (e.g., cirrhosis)
        - Chronic lung disease (e.g., COPD, emphysema, and asthma)
        - Cochlear implant
        - Diabetes mellitus
        - Immunocompromising conditions (e.g., chronic renal failure; congenital or acquired asplenia; congenital or acquired immunodeficiencies [e.g., HIV, B or T-lymphocyte deficiency, complement deficiencies, and phagocytic disorders, excluding chronic granulomatous disease]; generalized malignancy; Hodgkin disease; iatrogenic immunosuppression [e.g., treatment with immunosuppressive drugs, including long- term systemic corticosteroids and radiation therapy]; leukemia; lymphoma; multiple myeloma; nephrotic syndrome; sickle cell disease or other hemoglobinopathies; and solid organ transplant)

2. Using DD Form 3111, screen all patients for contraindications and precautions to pneumococcal vaccine:

    **Contraindications:**

    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of pneumococcal vaccine, to any vaccine containing diphtheria toxoid, or to a vaccine component (including yeast)
    - For information on vaccine components, refer to the package insert for PCV15, PCV 20, PPSV23, or The CDC Pink Book Appendix B.

    **Precautions:**

    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 312-761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   - Administer 0.5 mL of the appropriate pneumococcal vaccine according to Tables 1 - 4.
   - PCV15 and PCV20 are given intramuscularly (IM); PPSV23 may be given IM or subcutaneously (SC).
   - Individuals with anatomic or functional asplenia and/or HIV: PCV vaccines and Menactra (MenACYW-D) should not be given concomitantly. Administer Menactra ≥ 4 weeks after completion of all PCV doses.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Children/Adolescents (11-18 years) | 5/8*-1 inch (16-25 mm) | Deltoid muscle of arm† |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| **Adults (≥ 19 years)** | | |
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* If skin is stretched tightly and subcutaneous tissues are not bunched.
† Preferred site.

**TABLE 2. SC Needle Length and Injection Site Guide**

Use a 5/8 inch 23 – 25-gauge needle

| Patient Age | Injection Site |
|---|---|
| Adults ≥ 18 years | Fatty tissue over triceps* |
| | Fatty tissue over anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* Preferred site.

## TABLE 3. Pneumococcal Vaccine Schedule (Adult) Age ≥ 65 years

**Do not give pneumococcal conjugate (PCV) and pneumococcal polysaccharide (PPSV) vaccine at the same visit.**

| Vaccine received previously (any age) | Any or no underlying condition<br>Option A:<br>PCV20 available | No immunocompromising condition, CSF leak, or cochlear implant*<br>Option B:<br>PCV15 and PPSV23 available | Immunocompromising condition, CSF leak, or cochlear implant*<br>Option B:<br>PCV15 and PPSV23 available |
|---|---|---|---|
| None/unknown or PCV7 only | PCV20 | PCV 15 → ≥ 1 year → PPSV 23 | PCV 15 → ≥ 8 wks → PPSV 23 |
| PPSV23 only | ≥ 1 year → PCV20 | ≥ 1 year → PCV15 | |
| PCV13 only | ≥ 1 year → PCV20 | ≥ 1 year → PPSV23 | ≥ 8wks → PPSV23 |
| Both PCV13 and PPSV23 (in any order) but no dose of PPSV23 at age ≥ 65 years | ≥ 5 years since last PCV13 or PPSV23 → PCV 20 | ≥ 1 year since PCV13 & ≥ 5 years since PPSV23 → PPSV 23 | ≥ 8 wks since PCV13 & ≥ 5 years since PPSV23 → PPSV 23 |
| Both PCV13 and PPSV23 (in any order) and the PPSV23 was at age ≥ 65 years | Using shared clinical decision making: ≥ 5 years since last PCV13 or PPSV23 → PCV20 | Not Recommended | |

* See Section 1, page 1.

## TABLE 4. Pneumococcal Vaccine Schedule (Adult) Age 19 – 64 years with risk factors

**Do not give pneumococcal conjugate (PCV) and pneumococcal polysaccharide (PPSV) vaccine at the same visit.**

| Vaccine received previously (any age) | Option A:<br>PCV20 available | Option B:<br>PCV15 and PPSV23 available |
|---|---|---|
| **Chronic medical condition*** | | |
| None/unknown or PCV7 only | PCV20 | PCV 15 → ≥ 1 year → PPSV 23 |
| PPSV23 only | ≥ 1 year since PPSV23 → PCV20 | ≥ 1 year since PPSV23 → PCV15 |
| PCV13 only | ≥ 1 year since PCV13 → PCV20 | ≥ 1 year since PCV13 → PPSV23 |
| PCV13 and PPSV23 | Not recommended: review recommendations again at 65 years of age | |
| **CSF leak or cochlear implant** | | |
| None/unknown or PCV7 only | PCV20 | PCV 15 → ≥ 8 wks → PPSV 23 |
| PPSV23 only | ≥ 1 year since PPSV23 → PCV20 | ≥ 1 year since PPSV23 → PCV15 |
| PCV13 only | ≥ 1 year since PCV13 → PCV20 | ≥ 8 wks since PCV13 → PPSV23<br>(Review recommendations again at 65 years of age) |
| PCV13 and 1 dose PPSV23 | ≥ 5 years since last dose → PCV20 | Not recommended: review recommendations again at 65 years of age |

| Immunocompromising condition* | | |
|---|---|---|
| None/unknown or PCV7 only | PCV20 | PCV 15 → ≥ 8 wks → PPSV 23 |
| PPSV23 only | ≥ 1 year since PPSV23 → PCV20 | ≥ 1 year since PPSV23 → PCV15 |
| PCV13 only | ≥ 1 year since PCV13 → PCV20 | ≥ 8 wks since PCV13 → PPSV23 → ≥ 5 years → PPSV23 |
| PCV13 and 1 dose PPSV23 (in any order) | ≥ 5 years since last dose → PCV20 | ≥ 8 wks since PCV13 & ≥ 5 years since PPSV23 → PPSV23<br>(Review recommendations again at 65 years of age) |
| PCV13 and 2 doses PPSV23 (in any order) | ≥ 5 years since last dose → PCV20 | Not recommended: review recommendations again at 65 years of age |

* See Section 1, page 1.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Pre-Exposure Prophylaxis (PrEP) Rabies Vaccine (Adult and Pediatric)

**Purpose:** To reduce morbidity and mortality from disease caused by Rhabdoviridae lyssavirus by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals of any age (birth to adult) in need of vaccination with pre- exposure prophylaxis (PrEP) rabies vaccine based on one or more risk categories below (see Table 1 for expanded guidance):
    - **Risk category 1 (highest):** People who work with live or concentrated rabies virus in laboratories.
    - **Risk category 2:** People who frequently handle or have contact with bats, enter high-density bat environments like caves, or perform animal necropsies.
    - **Risk category 3:** People who interact (or are at risk to interact) with mammals other than bats that could be rabid, for a period longer than three years after they receive PrEP. This can include:
        - Veterinarians, veterinary technicians, and animal control officers (and their students/trainees); wildlife biologists, rehabilitators, trappers; and spelunkers (cave explorers).
        - Travelers to regions outside the United States where canine rabies virus variant (CRVV) or wildlife rabies virus variants (RVV) are endemic.
    - **Risk category 4:** Same as risk category 3, but for ≤ 3 years after receiving PrEP.
    - **Risk category 5 (lowest):** General U.S. population.

***Note: This standing order does not cover post-exposure cases, which are a medical urgency. Rabies is associated with the highest case fatality rate of any infectious disease. All patients with a suspected rabid bite or non- bite exposure should seek immediate medical care at their local Emergency Department to begin post-exposure treatment and Public Health surveillance.***

2. Using DD Form 3111 (Adult) or DD Form 3110 (Pediatric), screen all individuals for contraindications and precautions to PrEP rabies vaccine:

    **Contraindications:**

    - A history of a serious reaction (e.g., anaphylaxis) after vaccination or to any vaccine component, to include neomycin.
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**

    - Moderate or severe acute illness with or without fever.
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g. observation after administration) and to restore cerebral perfusion following syncope.

- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

**Special Populations:** These individuals should discuss vaccine receipt timing and medication management with their primary or specialty healthcare provider(s).

- **Pregnancy:** There is no evidence of adverse fetal effects from vaccinating pregnant women with inactivated virus, bacterial vaccines, or toxoids, and a growing body of data demonstrate the safety of such use.
- **Lactation:** Inactivated vaccines have not been shown to affect the safety of breastfeeding for women or their infants.
- **Immunocompromised:** In persons with primary or secondary immunodeficiencies, delay PrEP vaccination (when possible) until a temporary immunocompromising condition has resolved or immunosuppressive medications can be withheld.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows (see Table 1 and Table 2):
   - Rabies vaccine (Imovax®, RabAvert®) for pre-exposure prophylaxis consists of a 2-dose primary series given intramuscularly (IM) at 0 and 7 days. Both vaccines are supplied by the manufacturer in a pre-packaged single-dose (1mL) kit.
   - Administer booster doses based on risk category and titer level. For Risk Category 3, patients may elect to receive a booster dose between 21 days and 3 years after the primary series in lieu of a one-time titer check.
   - Do not start PrEP if series cannot be completed before travel.

**TABLE 1. ACIP Rabies Pre-Exposure Prophylaxis (PrEP) Recommendations**

| Risk Category | Typical population* | Primary Series (2 doses) | Titer / Booster (1 dose) |
|---|---|---|---|
| 1. Elevated risk for unrecognized† or recognized†† exposures, including unusual or high- risk exposures | Work with live rabies virus in research or vaccine production facilities; perform rabies testing in diagnostic laboratories | Vaccine on days 0 and 7 | Titer: every 6 months<br>Booster: if titer < 0.5 IU/mL§‖ |
| 2. Elevated risk for unrecognized† or recognized†† exposures | Frequently handle or have contact with bats; enter high- density bat environments; perform animal necropsies (e.g., biologists who frequently enter bat roosts or who collect suspected rabies samples) | Vaccine on days 0 and 7 | Titer: every 2 years<br>Booster: if titer < 0.5 IU/mL§‖ |

| | | | |
|---|---|---|---|
| 3. Elevated risk for recognized†† exposures, sustained risk¶ | Interact with animals that could be rabid# (e.g., veterinarians, vet techs, animal control officers; wildlife biologists, rehabilitators, and trappers); spelunkers | Vaccine on days 0 and 7 | Titer: once, 1–3 years after PrEP Booster: if titer < 0.5 IU/mL§‖<br><br>**OR**<br><br>These patients may elect to receive a booster dose 3 weeks-3 years after PrEP in lieu of a one- time titer check.‖ |
| | Travelers with increased risk for exposure to potentially rabid animals (particularly dogs) who might not have prompt access to safe PEP (e.g., rural area, far from closest PEP clinic) | | |
| 4. Elevated risk for recognized†† exposures, risk not sustained¶ | Same as Risk Category 3, but risk duration ≤ 3 years (e.g., short-term animal care, no expected high-risk travel > 3 years after PrEP) | Vaccine on days 0 and 7 | None |
| 5. Low risk for exposure | Typical person living in the United States | None | None |

Adapted from CDC MMWR 71, 619-627 (06 May 2022): https://www.cdc.gov/mmwr/volumes/71/wr/mm7118a2.htm

Abbreviations: IU = international units; PEP = post-exposure prophylaxis

* Nature of exposure is the most important variable to consider when determining risk category. Examples provided are only a guide; categorizations should be done on a case-by-case basis. If an individual falls into more than one category, follow guidance for the highest-risk category. Risk categories may change over an individual's lifetime.

† Example: a small scratch during an inconspicuous personal protective equipment breach while testing neural tissue from a rabid animal or conducting studies on bats in the field, etc.

†† Noticed because the exposure is unusual (e.g., contact with a bat, splash with contaminated fluids) or painful (e.g., bite or scratch from a raccoon).

§ Give a booster when rabies antibody titers are < 0.5 IU/mL. For immunocompetent patients, titers to verify booster response are not needed. For immunocompromised patients, verify response with a titer ≥ 1 week (ideally, 2–4 weeks) after every booster dose.

¶ Elevated risk for rabies > 3 years after the completion of the primary rabies PrEP series.

# Rabies virus is unlikely to persist outside a deceased animal's body for an extended time. Risk of transmission to persons handling animal products (e.g., hunters or taxidermists) is unknown but presumed to be low (risk category 5); direct skin contact with saliva or neural tissue of mammals should be avoided regardless of profession or activity.

‟ Titer after recommended booster dose(s) not indicated unless patient has altered immunity.

**TABLE 2. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| **Children & Adolescents (birth-18 years)** | | |
| Neonates* | 5/8 inch (16 mm)† | Anterolateral thigh |
| Infants (1-12 months) | 1 inch (25 mm) | Anterolateral thigh |
| Toddlers (1-2 years) | 1-1.25 inch (25-32 mm) | Anterolateral thigh‡ |
| | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm |

| | | |
|---|---|---|
| Children (3-10 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm‡ |
| | 1-1.25 inches (25-32 mm) | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm‡ |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| **Adults (≥19 years)** | | |
| Men and women, <60 kg (130 lbs) | 1 inch (25 mm)§ | Deltoid muscle of arm |
| Men and women, 60-70 kg (130-152 lbs) | 1 inch (25 mm) | |
| Men, 70-118 kg (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women, 70-90 kg (152-200 lbs) | | |
| Men, >118 kg (260 lbs) | 1.5 inches (38 mm) | |
| Women, >90 kg (200 lbs) | | |
| Men and women, any weight | 1.5 inches (38 mm)¶ | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

* First 28 days of life.

† If skin is stretched tightly and subcutaneous tissues are not bunched.

‡ Preferred site: the alternate site may be used if the muscle mass at the preferred site is inadequate. Do not administer vaccine into the gluteal muscle.

§ Some experts recommend a 5/8-inch needle for men and women who weigh <60 kg. If used, skin must be stretched tightly (do not bunch subcutaneous tissue).

¶ Some experts recommend a 1-inch needle if the skin is stretched tightly and subcutaneous tissues are not bunched.

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Respiratory Syncytial Virus (RSV) Vaccine (Abrysvo) During Pregnancy

**Purpose:** To reduce morbidity and mortality from disease caused by respiratory syncytial virus (RSV) by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under this standing order, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify pregnant individuals at 32 and 0 days – 36 weeks and 6 days of gestation who have not previously received any RSV vaccine:
    - Maternal RSV vaccination with Abrysvo is indicated for the prevention of RSV-associated lower respiratory tract disease in infants.
    - Abrysvo is currently the only RSV vaccine approved for use during pregnancy. For this reason, this standing order specifies the RSV vaccine by its brand name.
        - Abrysvo and Arexvy RSV vaccines are approved for use in individuals 60 years of age and older using shared clinical decision making.
        - Nirsevimab (Beyfortus) is recommended for infants whose mothers do not receive an effective dose of Abrysvo during pregnancy.
        - Due to the clinical judgment and discussion required, there are currently no DHA Immunization Healthcare Division (IHD) standing orders for these indications.

2. Using DD Form 3111, screen all patients for contraindications and precautions to RSV vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of RSV vaccine or to an RSV vaccine component
    - For information on vaccine components, refer to the package insert for Abrysvo and The CDC Pink Book Appendix B.

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion.
    - For questions or concerns, consider consulting the DHA-IHD Support Center at (877) 438- 8222, Option 1 or DSN 312-761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - Administer a single 0.5mL dose of Abrysvo RSV vaccine intramuscularly (IM) according to Table 1.
    - Abrysvo RSV vaccine:
        - Is for seasonal use (e.g., given September through January in the Northern Hemisphere).
        - Must be reconstituted prior to administration using only the manufacturer-supplied diluent.
        - After reconstitution, must be used immediately or stored at room temperature (15°C-30°C [59°F-86°F]) and discarded within 4 hours.
    - Areas where RSV seasonality differs from most of the continental US (e.g., Alaska and tropical climates [parts of Florida, Guam, Hawaii, Puerto Rico, U.S. Virgin Islands, and U.S.-affiliated Pacific Islands]) have flexibility to determine their administration timeframe.
    - Receipt of additional doses in subsequent pregnancies is not currently recommended.
    - Abrysvo can be given at the same visit or at any time before or after other recommended vaccines (e.g., Tdap, influenza, or COVID-19 vaccine), using different anatomic sites.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Less than 130 lbs | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| 130-200 lbs | 1 inch (25 mm) | |
| More than 200 lbs | 1.5 inches (38 mm) | |
| Any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* If skin is stretched tightly and subcutaneous tissues are not bunched.
† Preferred site.

5. There is a pregnancy exposure registry that monitors pregnancy outcomes in individuals exposed to Abrysvo during pregnancy. Individuals who received Abrysvo during pregnancy are encouraged to contact, or have their healthcare provider contact, 1-800-616-3791 to enroll in or obtain information about the registry.

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Tetanus, Diphtheria and Pertussis Vaccines (Adult)

**Purpose:** To reduce morbidity and mortality from tetanus, diphtheria and pertussis disease by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify patients ≥18 years of age in need of vaccination against tetanus, diphtheria, and pertussis based on the following criteria:
    - Lack of documentation of completion of a diphtheria, tetanus and pertussis toxoid- containing vaccine (DTaP) series
    - Lack of documentation of receiving a routine dose of diphtheria, tetanus and pertussis toxoid-containing vaccine (Tdap) at age 10 years or older
    - Pregnant women who have not received a dose of Tdap during their current pregnancy
    - Recent deep and dirty wound (e.g., contaminated with dirt, feces, saliva) and no record of having received a tetanus toxoid-containing vaccine in the previous 5 years

2. Using DD Form 3111, screen all patients for contraindications and precautions to Td / Tdap vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of a tetanus or diphtheria toxoid-containing vaccine or to a vaccine component
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.
    - A history of encephalopathy (e.g. coma, decreased level of consciousness, prolonged seizures) within 7 days following DTP/DTaP/Tdap not attributable to another identifiable cause

    **Precautions:**
    - History of Guillain-Barré syndrome within 6 weeks of a previous dose of tetanus toxoid- containing vaccine
    - History of an Arthus-type hypersensitivity reaction after a previous dose of tetanus or diphtheria toxoid-containing vaccine: defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine
    - Progressive or unstable neurologic disorder, uncontrolled seizures or progressive encephalopathy: defer vaccination until a treatment regimen has been established and the condition has stabilized (Tdap only)
    - Moderate or severe acute illness with or without fever
    - The tip caps of the prefilled syringes of Adacel®† and Boostrix® contain natural rubber latex and may cause allergic reactions in latex sensitive individuals († the tip caps of
    - some lots of Adacel® prefilled syringes contain latex while others do not –please refer to package insert)

- Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at 877-438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccination as follows:
   - See dosing as below. The routine schedule for Td or Tdap vaccination in adults with no lifetime history of receiving any diphtheria, tetanus, and/or pertussis-containing vaccine is to administer a 3-dose series at 0, 1, and 6–12 month intervals. One of the primary doses should be Tdap (preferably the first dose), followed by a booster (either Td or Tdap) every 10 years
   - Pregnant women should receive 1 dose of Tdap during each pregnancy, regardless of number of years since prior DTaP, DT, Td or Tdap vaccination. Tdap should be administered at 27–36 weeks' gestation, preferably during the earlier part of this period (to maximize the maternal antibody response/passive antibody transfer to the infant), although it may be administered at any time during pregnancy
   - Administer 0.5mL of Td or Tdap vaccine intramuscularly in the deltoid muscle for adults.

**TABLE 1. Dosing Schedules**

| History of previous DTP, DTaP, Td, or Tdap | Dose and schedule for administration of Td and Tdap** |
|---|---|
| 0 documented doses, or none known | Give Tdap as dose #1. Give dose #2 (Td or Tdap) at least 4 weeks later, and dose #3 (Td or Tdap) 6–12 months after dose #2 |
| 1 previous dose (not Tdap) | Give Tdap as dose #2 at least 4 weeks after dose #1 |
| 1 previous dose (Tdap) | Give Td or Tdap as dose #2 at least 4 weeks after dose #1 |
| 2 previous doses (none Tdap) | Give Tdap as dose #3 at least 6 months after dose #2 |
| 2 previous doses (including 1 Tdap) | Give dose #3 (Td or Tdap) at least 6 months after dose #2 |
| 3 or more previous doses (none Tdap) | Give Tdap as soon as possible (you do not need to wait 10 years from previous dose) |
| 3 or more previous doses (including 1 Tdap) | Give Td or Tdap booster every 10 years unless patient needs prophylaxis for wound management sooner |

Adapted from Immunization Action Coalition: Item #P3078 (3/20)

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Men and Women (<130 lbs) | 1 inch (25 mm)† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches (38 mm) | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Tick-Borne Encephalitis Vaccine (Adults & Children ≥ 1 year of age)

**Purpose:** To reduce morbidity and mortality from tick-borne encephalitis by vaccinating all individuals ≥ 1 year of age, who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) licensure, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals in need of vaccination with TICOVAC based on the following criteria:
    - Persons ≥1 year of age who are:
        - Moving overseas or traveling to a TBE-endemic area and will have extensive exposure to ticks based on their outdoor activities and itinerary
        - Laboratory workers with a potential for exposure to TBE virus
        - Traveling during TBE virus transmission season (Spring through Fall) with the potential exposure to ticks in a TBE-endemic area
        - Persons at risk through consuming unpasteurized dairy products

2. Using the routine immunization screening form DD Form 3110 or DD Form 3111 screen all patients for contraindications and precautions to TICOVAC:

    **Contraindications:**
    - A history of a serious reaction (e.g., anaphylaxis) of a previous dose of TICOVAC or any excipient of TICOVAC
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**
    - History of severe allergic reaction (e.g. anaphylaxis) to any injectable medication
    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g. observation after administration) and to restore cerebral perfusion following syncope Some individuals with altered immunocompetence may have reduced immune responses to TICOVAC™
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide TICOVAC vaccine as follows:

| TABLE 1. Primary Vaccination Schedule | | |
|---|---|---|
| **Dose** | **Age 1 through 15 years** | **Age 16 years and older** |
| 1st | Day 0 | Day 0 |
| 2nd | 1 - 3 months after 1st dose | 14 days to 3 months after 1st dose |
| 3rd | 5 - 12 months after 2nd dose | 5 to 12 months after 2nd dose |

- When possible, it is optimal to complete the primary immunization series at least 1 week prior to potential exposure to TBEV (tick-borne encephalitis virus).
- A single booster dose (4th dose) may be given at least 3 years after completion of the primary immunization series if ongoing exposure of re-exposure to TBEV is expected.
- Bring the vaccine to room temperature before administration. Shake well prior to administration to thoroughly mix the vaccine suspension. After shaking, the vaccine should be a homogenous off-white, opalescent suspension.
- Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. Do not administer if particulate matter or discoloration remains after shaking.
- Administer vaccine by intramuscular injection.

| TABLE 2. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Toddlers (1-2 years) | 1 - 1.25 inch | Anterolateral thigh* |
| | 5/8† - 1 inch | Deltoid muscle of arm |
| Children (3-10 years) | 5/8† - 1 inch | Deltoid muscle of arm* |
| | 1 - 1.25 inch | Anterolateral thigh |
| Children/Adolescents (11-18 years) | 5/8†-1 inch (16-25 mm) | Deltoid muscle of arm* |
| | 1-1.5 inches (25-38 mm) | Anterolateral thigh |
| Men and Women (<130 lbs) | 1 inch† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch | |
| Men (152-260 lbs) | 1-1.5 inches | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

- When vaccinating 1 through 15 years of age, attach a sterile needle to the 0.25 mL single-dose pre-filled TICOVAC syringe, ensuring the needle size is appropriate for the age or size of the patient.
- When vaccinating 16 years of age and older, attach a sterile needle to the 0.5 mL single-dose pre-filled TICOVAC syringe, ensuring the needle size is appropriate for the age or size of the patient.
- Separate multiple injection sites by 1 inch or more and if possible, administer vaccines that may be more likely to cause a local reaction in different limbs.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Typhoid Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from disease caused by Salmonella enterica serotypes Typhi and Paratyphi by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify persons ≥18 years of age in need of vaccination against typhoid fever based on the following criteria:
    - Anticipated travel to areas where there is a recognized risk for exposure to S. typhi
    - Persons with intimate exposure (e.g., household contact) to a documented S. typhi chronic carrier
    - Laboratory workers routinely exposed to specimens of S. typhi, or who work in laboratory environments where these specimens are routinely handled

2. Using DD Form 3111, screen all patients for contraindications and precautions to typhoid vaccine:

    **Contraindications:**
    - Oral typhoid vaccine should not be given to immunocompromised persons
    - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of typhoid vaccine or to a vaccine component
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

    **Precautions:**
    - Oral typhoid vaccine should not be given within 3 days (before or after) of an antimicrobial agent
    - Moderate or severe acute illness with or without fever
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
    - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

***Note: available data are not sufficient to assess the effects of typhoid vaccine on persons who are pregnant or nursing. Typhoid vaccine should be used during pregnancy or nursing only if benefit clearly outweighs risk; if indicated, inactivated vaccine (ViCPS) may be considered. This is not covered under this standing order; patients must obtain a written order from a privileged provider for this situation.***

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking

patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - Follow dosing schedules in table below
    - Patients should complete the Vivotif® regimen ≥1 week prior to exposure; Typhim VI® should be completed 2 weeks prior to exposure. Vivotif is given orally; Typhim is given intramuscularly in the deltoid muscle for adults

| TABLE 1. IM Needle Length and Injection Site Guide | | |
|---|---|---|
| Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age | | |
| **Patient Age** | **Needle Length** | **Injection Site** |
| Men and Women (<130 lbs) | 1 inch (25 mm)† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches (38 mm) | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

| TABLE 2. Dosing Schedule for Typhoid Vaccines | | | | | |
|---|---|---|---|---|---|
| **Vaccination** | **Age** | **Dose/Route** | **# of Doses** | **Interval** | **Booster** |
| **†Oral, Live, Attenuated Ty21a Vaccine (Vivotif)** | | | | | |
| Primary series | ≥6 years | 1 capsule,§ oral | 4 | 48 hours | N/A |
| Booster | ≥6 years | 1 capsule,§ oral | 4 | 48 hours | Every 5 years |
| **Vi Capsular Polysaccharide Vaccine (Typhim Vi)** | | | | | |
| Primary series | ≥2 years | 0.50 mL, IM | 1 | N/A | N/A |
| Booster | ≥2 years | 0.50 mL, IM | 1 | N/A | Every 2 years |

†The vaccine must be kept refrigerated (35.6 - 46.4°F, 2 - 8°C)
§ Administer with cool liquid no warmer than 98.6°F (37°C)

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written

emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Varicella Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from varicella virus (VAR) infection by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

**Policy:** Under this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify individuals ≥ 18 years of age in need of vaccination against VAR based on the following criteria:
    - No documented evidence of VAR immunity, which is:
        - Receipt of 2 doses of VAR-containing vaccine at ≥ 12 months of age and at the age-appropriate interval
        - Laboratory evidence of immunity or disease
        - Born in the U.S. before 1980: does not apply to healthcare workers, pregnant women, and immunocompromised individuals
        - Diagnosis or verification of a history of varicella or herpes zoster disease by a licensed healthcare provider

2. Using DD Form 3111, screen all patients for contraindications and precautions to VAR vaccine:

    **Contraindications:**
    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of VAR vaccine or to a vaccine component, to include gelatin and neomycin. For information on vaccine components, refer to the package insert or The CDC Pink Book Appendix B.
    - Active untreated tuberculosis or febrile illness > 101.3°F / > 38.5°C
    - Immunosuppression (e.g., cancer or malignant neoplasms, immunosuppressive therapy [to include prolonged high-dose steroid therapy], etc.)
    - HIV infection with severe immunosuppression (e.g., CD4+ T-lymphocyte count of < 200 cells per microliter or < 15%)
    - Pregnancy, or may become pregnant in the next 30 days:
        - Although the package insert recommends avoiding conception for 3 months, ACIP Best Practices advise that waiting 1 month after vaccination before conception is sufficient.
    - Congenital or hereditary immunodeficiency in 1st degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Recent receipt of an antibody-containing blood product (≤ 11 months)
    - Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination. Avoid use of these drugs for ≥ 14 days after vaccination.
    - Simultaneous use of aspirin or aspirin-containing products. Avoid use of these drugs for ≥ 6 weeks after vaccination.

- Alpha-gal allergy: may wish to consult their PCM before receiving a vaccine that contains gelatin
- Syncope (fainting) can occur in association with administration of injectable vaccines. Have procedures in place to avoid a falling injury (e.g., 15-minute observation after administration) and to restore cerebral perfusion following syncope.
- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 312-761-4245.

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide VAR vaccine as follows:
   - A 2-dose series separated by ≥ 4 weeks
   - Administer 0.5 mL of VAR vaccine subcutaneously (SC) or intramuscularly (IM) according to Tables 1 & 2:

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Men and women (130 lbs) | 5/8* - 1 inch (16-25 mm) | Deltoid muscle of arm |
| Men and women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (260 lbs) | 1.5 inches (38 mm) | |
| Women (200 lbs) | | |
| Men and women, any weight | 1 inch* - 1.5 inches (38 mm) | Anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* If skin is stretched tightly and subcutaneous tissues are not bunched.

**TABLE 2. SC Needle Length and Injection Site Guide**

Use a 5/8 inch 23 – 25-gauge needle

| Patient Age | Injection Site |
|---|---|
| Adults ≥ 18 years | Fatty tissue over triceps* |
| | Fatty tissue over anterolateral thigh |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
* Preferred site.

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

8. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Yellow Fever Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from yellow fever disease by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify all adults ≥18 years of age in need of vaccination against yellow fever virus (YF) based on the following criteria:
    - Vaccination is required for Service members and beneficiaries as indicated per Combatant Command (CCMD) force health protection requirements
    - Persons traveling or transiting in areas at risk for YF transmission such as South America and Africa: travelers and providers can obtain updated travel information from the CDC.

2. Using DD Form 3111, screen all patients for contraindications and precautions to the yellow fever vaccine

    **Contraindications:**
    - A history of a serious allergic reaction (e.g., anaphylaxis) after a previous dose of YF vaccine or to a vaccine component (to include egg, chicken, or gelatin)
    - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.
    - Immunosuppression (e.g., HIV/AIDS [including those with a CD4 T lymphocyte count <200/mm3 (or <15% of total lymphocytes for children <6 years), cancer or malignant neoplasms, immunosuppressive therapy, etc.) is a contraindication to receiving the yellow fever vaccine

    **Precautions:**
    - Moderate or severe acute illness with or without fever
    - Adults ≥60 years of age (rate of serious adverse reactions is increased)
    - Pregnancy (or may become pregnant in the next 30 days). The safety of YF vaccine has not been studied in any large trials. YF vaccine should be given to a pregnant woman only if clearly needed
    - Nursing: because of the potential for serious adverse reactions in nursing infants from YF vaccine, a decision should be made whether to discontinue nursing or not to administer the vaccine, taking into account the importance of the vaccine to the mother
    - Need for tuberculosis (TB) screening by skin testing or interferon-gamma release assay (IGRA) testing. To prevent potential interference between yellow fever vaccine and TB testing (possibly causing false-negative TB results), TB testing may be performed before yellow fever vaccination, on the same day as yellow fever vaccination (preferred), or postponed for at least 4 weeks after yellow fever vaccination
    - Asymptomatic HIV infection with CD4 T lymphocyte values 200-499 mm3 (or 15-24% of total lymphocytes for children aged <6 years)
    - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures

should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope

- For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
    - YF vaccine (YF-Vax®) consists of a 1-dose series. Administer 0.5mL subcutaneously in the preferred site (fatty tissue over the triceps muscle for adults). Use a 23–25 gauge 5/8" needle.
    - Boosters are not routinely recommended for most travelers. Per the World Health Organization (WHO) and ACIP, a single primary dose of YF vaccine provides long-lasting protection and is adequate for most travelers. However, providers may consider administering a booster dose of YF vaccine for travelers who received their last dose ≥10 years ago if they are going to higher risk settings based on season, location, activities and duration of travel
    - AFRICOM, SOCOM, and SOUTHCOM do not require booster doses for force health protection requirements
    - Women who were pregnant when they received their initial dose of YF vaccine should receive 1 additional dose before they are next at risk for YF
    - Persons who received a hematopoietic stem cell transplant after a dose of YF vaccine should be revaccinated before they are next at risk for YF (as long as they are sufficiently immunocompetent)
    - Persons infected with HIV when they received their last dose of YF vaccine should receive a dose every 10 years if they continue to be at risk for YF as long as they are sufficiently immunocompetent (CD4 T lymphocyte values
    - >500/ mm3 or >25% of total lymphocytes for children <6 years)
    - Laboratory workers who routinely handle wild-type yellow fever virus should have yellow fever virus-specific neutralizing antibody titers measured at least every 10 years to determine the need for additional doses of YF vaccine

***Note: Booster doses are not covered under this standing order. Patients must obtain a written order from a privileged provider familiar with appropriate indications for YF vaccine booster doses***

***Note: If possible, it is recommended to separate MMR and yellow fever vaccines by at least 30 days due to limited data suggesting a decreased immune response to most antigens when co-administered.***

5. The vaccine powder must be reconstituted immediately before use with the diluent supplied. Allow the reconstituted vaccine to sit for 1-2 minutes and then carefully swirl mixture until uniform suspension is achieved. Avoid vigorous shaking as this tends to cause foaming of the suspension. Once reconstituted, the vaccine should be maintained at 2°C–8°C and should be used or discarded within 1 hour. YF vaccine should be administered at least 10 days before travel.

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. International health regulation requires persons who receive YF vaccine to provide proof of vaccination on an International Certificate of Vaccination of Prophylaxis (ICVP). The CDC 731 form fulfills this requirement for vaccines received in the US, which must have a certified uniform stamp. A certificate of vaccination is considered valid 10 days after vaccination and for the life of the patient.

8. International health regulation requires additional documentation from persons with contraindications to receipt of YF vaccine before travel to yellow-fever endemic areas.

9. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

10. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

11. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

## Standing Order for Administering Zoster Vaccine (Adult)

**Purpose:** To reduce morbidity and mortality from herpes zoster (shingles) disease by vaccinating all individuals who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

**Policy:** Under these standing orders, eligible nurses and other healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

**Procedure:**

1. Identify adults ≥50 years of age in need of routine vaccination against shingles

2. Identify adults ≥19 years of age and older who are or will be immunodeficient or immunosuppressed and would benefit from vaccination against shingles.

***Note: As of Nov 2020, ZOSTAVAX® (ZVL) is no longer available in the U.S. ACIP recommends patients previously vaccinated with ZVL receive SHINGRIX® (RZV), observing a minimum interval of ≥8 weeks between ZVL and RZV doses.***

3. Using DD Form 3111, screen all patients for contraindications and precautions to RZV:

   **Contraindications:**

   - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of RZV or to a vaccine component (to include Quillaja saponaria [QS-21] or monophosphoryl A).
   - For information on vaccine components, refer to the manufacturer's package insert or The CDC Pink Book Appendix B.

   **Precautions:**

   - An acute episode of herpes zoster: RZV is not a treatment for herpes zoster or post- herpetic neuralgia.
   - Moderate or severe acute illness with or without fever.
   - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15- minute observation after administration) and to restore cerebral perfusion following syncope.
   - For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

   **Special Populations:**

   - **Pregnancy:** There is currently no ACIP recommendation for RZV use in pregnancy; therefore, providers should consider delaying RZV until after pregnancy. There is no recommendation for pregnancy testing before vaccination.
   - **Breastfeeding:** Recombinant vaccines such as RZV pose no known risk to mothers who are breastfeeding or to their infants.
   - **Immunocompromised:** Individuals aged ≥ 19 years who are or will be at increased risk for herpes

zoster (shingles) due to immunodeficiency or immunosuppression caused by known disease or therapy should receive RZV (Shingrix®). Licensed providers should use clinical judgment with highest priority for vaccination of individuals with hematopoietic stem cell transplants or hematologic malignancies and for individuals prior to solid organ transplant.

- **Previous history of herpes zoster:** Persons with a previous history of herpes zoster should receive RZV.

4. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

5. Provide vaccine as follows:
   - RZV (SHINGRIX®) consists of a 2-dose series at 0 and 2-6 months for routine vaccination in individuals 50 years and older.
   - **Immunocompromised individuals** 19 years and older who would benefit from a shorter vaccination schedule may receive the 2nd dose of RZV 1-2 months after the 1st dose.

***Note: If the 2nd dose in the shorter vaccination schedule is given less than 28 days after the 1st, it must be repeated (the 4-day grace period does not apply). Administer a valid 2nd dose at least 28 days after the invalid dose.***

- Administer 0.5mL intramuscularly in the deltoid muscle for adults.
- RZV can be administered concomitantly at different anatomic sites with other adult vaccines, including COVID-19 vaccines.
- The series does not need to be restarted if >6 months have elapsed since the 1st dose.

**TABLE 1. IM Needle Length and Injection Site Guide**

Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age

| Patient Age | Needle Length | Injection Site |
|---|---|---|
| Men and Women (<130 lbs) | 1 inch (25 mm)† | Deltoid muscle of arm |
| Men and Women (130-152 lbs) | 1 inch (25 mm) | |
| Men (152-260 lbs) | 1-1.5 inches (25-38 mm) | |
| Women (152-200 lbs) | | |
| Men (> 260 lbs) | 1.5 inches (38 mm) | |
| Women (>200 lbs) | | |

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html

† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

9. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

# Immunization Resources

Administering Vaccines: Dose, Route, Site, and Needle Size
How to Administer Intramuscular and Subcutaneous Vaccine Injections
Medical Management of Vaccine Reactions in Adult Patients
Medical Management of Vaccine Reactions in Children and Teens
Recommended and Minimum Ages and Intervals between Doses
Routine Screening Form – Pediatric
Routine Screening Form – Adult
Pediatric & Adult Influenza Screening Form
Offsite Vaccination Clinic Checklist – Best Practices
Recommended Immunization Schedules for Persons Aged 0 through 18 years
Recommended Adult Immunization Schedule

# Administering Vaccines to Adults: Dose, Route, Site, and Needle Size

| Vaccine | Dose | Route |
|---|---|---|
| **Anthrax** (AVA) | 0.5mL | IM |
| **Hepatitis A** (HepA) | ≤18 yrs: 0.5mL<br>≥19 yrs: 1mL | IM |
| **Hepatitis B** (HepB) | *Engerix-B; Recombivax HB*<br>≥20 yrs: 1mL<br>≤19 yrs: 0.5mL<br>*HEPLISAV-B*<br>≥18 yrs: 0.5mL | IM |
| **HepA and HepB** (HepA/B) | ≥18 yrs: 1mL | IM |
| **Human papillomavirus** (HPV) | 0.5mL | IM |
| **Influenza, live attenuated** (LAIV) | 0.2mL (0.1mL in each nostril) | NAS |
| **Influenza, inactivated** (IIV) and recombinant (RIV) | 0.5mL | IM |
| **Japanese encephalitis** (JE-VC) | 0.5mL | IM |
| **Measles, Mumps, Rubella** (MMR) | 0.5mL | SC |
| **Meningococcal serogroups A, C, W, Y** (MCV4) | 0.5mL | IM |
| **Meningococcal serogroup B** (MenB) | 0.5mL | IM |
| **Rabies** (RAB) | 0.5mL | IM |
| **Smallpox** (SPV) | 15 jabs | PC |
| **Tetanus, Diphtheria** (Td); **with Pertussis** (Tdap) | 0.5mL | IM |
| **Typhoid** (ViCPS) | 0.5mL | IM |
| **Varicella** (VAR) | 0.5mL | SC |
| **Yellow Fever** (YF-Vax) | 0.5mL | SC |

## Injection Site and Needle Size

**Subcutaneous (SC) injection** – Use a 23–25 gauge, 5/8" needle. Inject in fatty tissue over triceps.

**Intramuscular (IM) injection** – Use a 22–25 gauge needle. Inject in deltoid muscle of arm. Choose the needle length as indicated below:

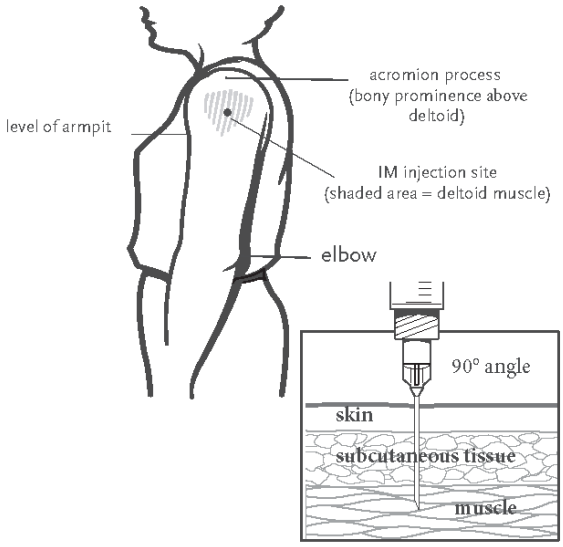
| Gender/Weight | Needle Length | |
|---|---|---|
| Female or male less than 130 lbs | 5/8"*–1" | * A 5/8" needle may be used for patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle **ONLY** if the subcutaneous tissue is not bunched **AND** the injection is made at a 90-degree angle. |
| Female or male 130–152 lbs | 1" | |
| Female 153–200 lbs<br>Male 153–260 lbs | 1–1 1/2" | |
| Female 200+ lbs<br>Male 260+ lbs | 1 1/2" | |

**Note:** Always refer to the package insert included with each biologic for complete vaccine administration information.

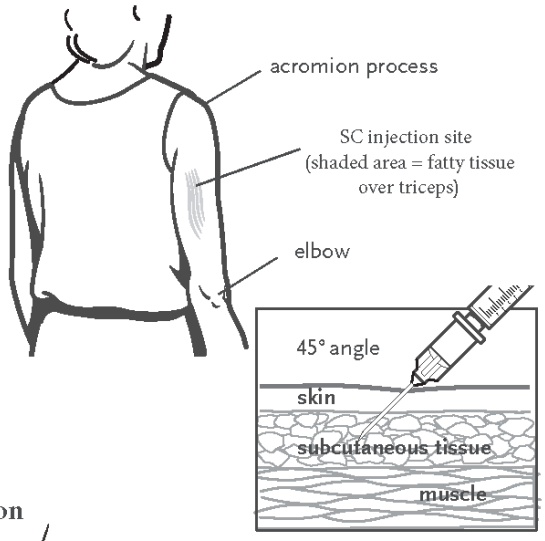
CDC's Advisory Committee on Immunization Practices (ACIP) recommendations for the particular vaccine should be reviewed as well: https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html.

Adapted from Immunization Action Coalition:
- Item #P2020a (1/18)
- Item #P3084 (10/18)

### Intramuscular (IM) injection

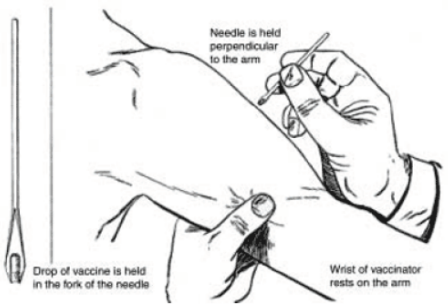



### Subcutaneous (SC) injection




### Intranasal (NAS) administration

### Percutaneous (PC) injection




*Reviewed by DHA Immunization Healthcare Division 6/1/2019*

# Administration by the Intramuscular (IM) Route

### Administer by IM route only

- COVID-19
- Dengue
- Diphtheria-tetanus-pertussis (DTaP, Tdap)
- Diphtheria-tetanus (DT, Td)
- *Haemophilus influenzae* type b (Hib)
- Hepatitis A (HepA)
- Hepatitis B (HepB)
- Human papillomavirus (HPV)
- Inactivated influenza vaccine (IIV)
- Meningococcal serogroups A,C,W, Y (MenACWY)
- Meningococcal serogroup B (MenB)
- Pneumococcal conjugate (PCV)
- Zoster (RZV)

### Administer by IM or Subcutaneous (Subcut) route

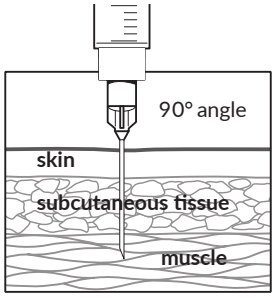
- Inactivated polio vaccine (IPV)
- Measles, mumps, and rubella (MMR II [Merck] only)
- Pneumococcal polysaccharide (PPSV23)
- Varicella (VAR)

| PATIENT AGE | INJECTION SITE | NEEDLE SIZE |
|---|---|---|
| Newborn (0–28 days) | Anterolateral thigh muscle | ⅝"* (22–25 gauge) |
| Infant (1–12 mos) | Anterolateral thigh muscle | 1" (22–25 gauge) |
| Toddler (1–2 years) | Anterolateral thigh muscle | 1–1¼" (22–25 gauge) |
| | Alternate site: Deltoid muscle of arm if muscle mass is adequate | ⅝*–1" (22–25 gauge) |
| Children (3–10 years) | Deltoid muscle (upper arm) | ⅝*–1" (22–25 gauge) |
| | Alternate site: Anterolateral thigh muscle | 1–1¼" (22–25 gauge) |
| Children and adults (11 years and older) | Deltoid muscle (upper arm) | ⅝†–1" (22–25 gauge) |
| | Alternate site: Anterolateral thigh muscle‡ | 1‡–1½" (22–25 gauge) |

* A ⅝" needle usually is adequate for neonates (first 28 days of life), preterm infants, and children ages 1 through 18 years if the skin is stretched flat between the thumb and forefinger and the needle is inserted at a 90° angle to the skin.

† A ⅝" needle may be used in patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin is stretched tightly and subcutaneous tissues are not bunched; a 1" needle is sufficient in patients weighing 130–152 lbs (60–70 kg); a 1–1½" needle is recommended in women weighing 153–200 lbs (70–90 kg) and men weighing 153–260 lbs (70–118 kg); a 1½" needle is recommended in women weighing more than 200 lbs (91 kg) or men weighing more than 260 lbs (118 kg).

‡ A 1" needle may be used for an IM injection in the anterolateral thigh muscle of an adult of any weight if the skin is stretched tightly and subcutaneous tissues are not bunched. For more information on how to administer an IM injection in the anterolateral thigh of an adult, see www.immunize.org/catg.d/p2030.pdf.




## Needle insertion

Use a needle long enough to reach deep into the muscle.

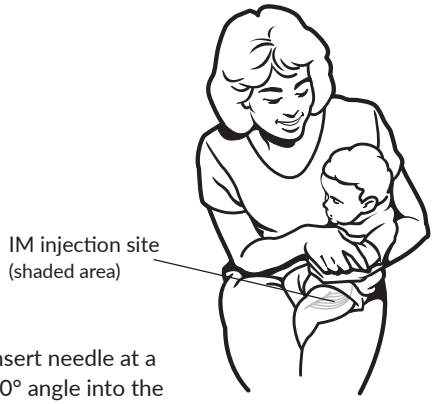
Insert needle at a 90° angle to the skin with a quick thrust.

(Before administering an injection of vaccine, it is not necessary to aspirate, i.e., to pull back on the syringe plunger after needle insertion.)

Multiple injections given in the same extremity should be separated by a minimum of 1", if possible.

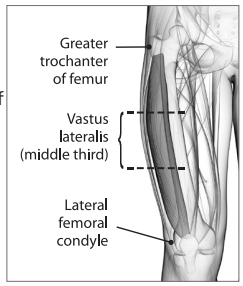
Reference: CDC. *Epidemiology and Prevention of Vaccine-Preventable Diseases.* Hall E., Wodi A.P., Hamborsky J., et al., eds. 14th ed. Washington, D.C., Public Health Foundation, 2021. "Vaccine Administration" at www.cdc.gov/vaccines/pubs/pinkbook/vac-admin.html

## Intramuscular (IM) injection site for infants and toddlers

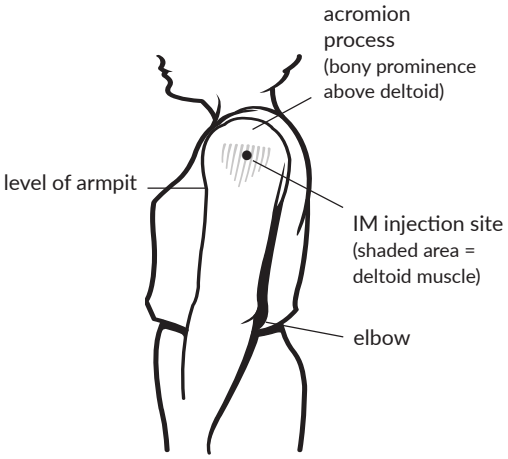



Insert needle at a 90° angle into the anterolateral thigh muscle.

Alternate injection site for adults (outer portion of middle third of thigh)




## Intramuscular (IM) injection site for children and adults




Give in the central and thickest portion of the deltoid muscle – above the level of the armpit and approximately 2–3 fingerbreadths (~2") below the acromion process. See the diagram. To avoid causing an injury, do not inject too high (near the acromion process) or too low.

# Administration by the Subcutaneous (Subcut) Route

### Administer by Subcut route only

- Dengue
- MMR (Priorix [GSK])

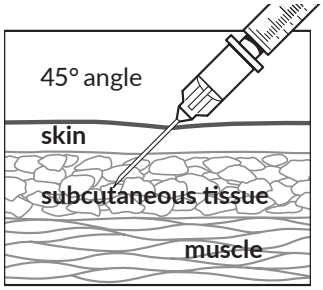
### Administer by Subcut or IM route

- Inactivated polio vaccine (IPV)
- MMR (MMR II [Merck])
- Pneumococcal polysaccharide (PPSV23)
- Varicella (VAR)

### Administer by Subcut or intradermal (ID) route

- Monkeypox vaccine (Jynneos)
  ***Note:*** *Subcut is indicated on the package insert. ID administration to adults (18+ years) is permitted under FDA emergency use authorization (see www.fda.gov/media/160774/download).*

| PATIENT AGE | INJECTION SITE | NEEDLE SIZE |
|---|---|---|
| Birth to 12 months | Fatty tissue overlying the anterolateral thigh muscle | ⅝" (23–25 gauge) |
| 12 months and older | Fatty tissue overlying the anterolateral thigh muscle or fatty tissue over triceps | ⅝" (23–25 gauge) |




## Needle insertion

Pinch up on subcutaneous tissue to prevent injection into muscle.

Insert needle at 45° angle to the skin.

(Before administering an injection of vaccine, it is not necessary to aspirate, i.e., to pull back on the syringe plunger after needle insertion.)

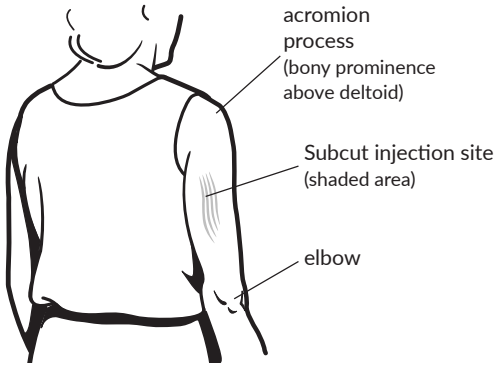
Multiple injections given in the same extremity should be separated by a minimum of 1".

## Subcutaneous (Subcut) injection site for infants

Subcut injection site
(shaded area)

Insert needle at a 45° angle into fatty tissue of the anterolateral thigh. Make sure you pinch up on subcutaneous tissue to prevent injection into the muscle.

## Subcutaneous (Subcut) injection site for children (after the 1st birthday) and adults




Insert needle at a 45° angle into the fatty tissue overlying the triceps muscle. Make sure you pinch up on the subcutaneous tissue to prevent injection into the muscle.

## Standing Order for Medical Management of Vaccine Reactions in Adults

**Purpose:** Administering any medication, including vaccines, has the potential to cause an adverse reaction. When adverse reactions do occur, they can vary from minor to the rare and serious. This document describes steps to take if an adverse reaction occurs following immunization.

**Policy:** Vaccine providers must be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications. Under these standing orders, eligible healthcare professionals working within their scope of practice may take steps as described below.

**Procedure:**

1. Assess signs and symptoms to determine reaction and actions.
    - Localized Reactions
        - Soreness, redness, itching, or swelling at the injection site
            - Apply a cold compress to the injection site
            - Recommend OTC analgesic pain reliever prn as needed
            - Recommend OTC antipruritic medication as needed
        - Slight Bleeding
            - Apply pressure and an adhesive compress over the injection site
        - Continuous bleeding
            - Place thick layer of gauze pads over site and maintain direct and firm pressure
            - Raise the bleeding injection site (e.g. arm) above the level of the patient's heart
    - Psychological fright, pre-syncope, and syncope (fainting)
        - Fright before injection is given
            - Have patient sit or lie down for the vaccination
        - Patient feels "faint" (e.g., light-headed, dizzy, weak, nauseated, or has visual disturbance).
            - Have patient lie flat
            - Loosen any tight clothing
            - Maintain open airway
            - Apply cool, damp cloth to patient's face and neck
            - Keep them under close observation until full recovery
        - Presentation: Fall, without loss of consciousness
            - Examine the patient to determine if injury is present before attempting to move the patient
            - Place patient flat on back with feet elevated
        - Presentation: Loss of consciousness.
            - Check to determine if injury is present before attempting to move the patient
            - Place patient flat on back with feet elevated
            - Call rapid response/ EMS 911 if patient does not recover immediately
    - Reaction: IgE-mediated event or Anaphylaxis
        - Skin and mucosal symptoms such as generalized hives, itching, or flushing; swelling of lips, face, throat, or eyes.
        - Respiratory symptoms such as nasal congestion, change in voice, sensation of throat closing, stridor, shortness of breath, wheeze, or cough

- Cardiovascular symptoms such as collapse, dizziness, tachycardia, hypotension
- Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain
  - If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms
  - If symptoms are generalized, the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient
  - A second person activates the emergency response system for your clinic setting (e.g., rapid response team, EMS via 911) and notifies the clinic provider
  - Vital signs should be monitored continuously

2. Drug dosing information: The first-line and most important therapy in anaphylaxis is epinephrine and there is no known equivalent substitute. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis
   - Administer epinephrine in a 1.0 mg/mL aqueous solution (1:1000 dilution)
   - Administer a 0.3 mg dose IM using a premeasured or prefilled syringe or an auto-injector in the mid-outer thigh
   - If using another epinephrine formulation, the recommended dose is 0.01 mg/kg, ranging for adults from 0.3 mg to maximum dose of 0.5 mg.
   - Epinephrine dose may be repeated once in as little as 5 minutes, IF there is no response or an inadequate response while waiting for rapid response/EMS to arrive. Seek a verbal order from a credentialed provider for any additional doses. More than 2 doses of epinephrine are not covered under these standing orders.
   - Optional treatment: One dose of oral H1 antihistamines may be administered to relieve itching and urticaria (hives). These medications DO NOT relieve upper or lower airway obstruction, hypotension, or shock. First-line therapy is epinephrine. Administer only if the airway and/or swallow are not affected. Administer diphenhydramine (Benadryl) 50 mgs orally one time

3. Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep patient in recumbent position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs. Monitor blood pressure and pulse every 5 minutes

4. Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and any other relevant clinical information. Notify the patient's primary care physician and complete a patient safety report.

5. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

6. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

Adapted from Immunization Action Coalition • Item #P3082 (4/23).

## Standing Order for Medical Management of Vaccine Reactions in Children and Teens

**Purpose:** Administering any medication, including vaccines, has the potential to cause an adverse reaction. When adverse reactions occur, they can vary from minor to rare and serious. This document describes steps to take if an adverse reaction occurs following immunization.

**Policy:** Vaccine providers must be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications. Under these standing orders, eligible healthcare professionals working within their scope of practice may take steps as described below.

**Procedure:**

1. Assess signs and symptoms to determine reaction and actions
    - Localized Reactions
        - Soreness, redness, itching, or swelling at the injection site
            - Apply a cold compress to the injection site
            - Recommend OTC analgesic pain reliver PRN
            - Recommend OTC antipruritic medication PRN
        - Slight Bleeding
            - Apply pressure and an adhesive compress over the injection site
        - Continuous bleeding
            - Place a thick layer of gauze pads over the site and maintain direct and firm pressure
            - Raise the bleeding injection site (e.g., arm) above the level of the patient's heart
    - Psychological fright, pre-syncope, and syncope (fainting)
        - Fright before the injection is given
            - Have patient sit or lie down for the vaccination
        - Presentation: Patient feels "faint" (e.g., light-headed, dizzy, weak, nauseated, or has visual disturbance)
            - Have the patient lie flat
            - Loosen any tight clothing
            - Maintain an open airway
            - Apply a cool, damp cloth to the patient's face and neck
            - Keep the patient under close observation until full recovery
        - Presentation: Fall, without loss of consciousness
            - Examine the patient to determine if injury is present before attempting to move the patient
            - Place patient flat on back with feet elevated
        - Presentation: Loss of consciousness
            - Check to determine if an injury is present before attempting to move the patient.
            - Place the patient flat on their back with feet elevated.
            - Call Rapid Response and/or EMS or 911 if the patient does not recover immediately.
            - Assess for other etiology, such as IgE mediated event or anaphylaxis.
    - Reaction: IgE-medicated event or anaphylaxis
        - Assess systems for symptoms of anaphylaxis:
            - Skin and mucosal symptoms such as generalized hives, itching, or flushing; swelling of the lips, face, throat, or eyes

        - Respiratory symptoms such as nasal congestion, change in voice, sensation of throat closing, stridor, shortness of breath, wheezing, or cough
        - Cardiovascular symptoms such as collapse, dizziness, tachycardia, hypotension
        - Gastrointestinal symptoms such as nausea, vomiting, diarrhea, abdominal cramping, or abdominal pain
    - If itching and swelling are confined to the injection site where the vaccine was given, observe the patient closely for the development of generalized symptoms.
    - If symptoms are generalized, the primary healthcare professional assesses the airway, breathing, circulation and the level of consciousness of the patient.
    - A second person activates the emergency response system for your clinic setting (e.g., rapid response team, EMS or 911) and notify the clinic provider.
    - Vital signs should be monitored closely.

2. Drug dosing information: Epinephrine is the first line and most important therapy for treatment for anaphylaxis; there is no known equivalent substitute. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.
    - Administer epinephrine in a 1.0 mg/mL aqueous solution (1:1000 dilution). You must determine correct dose to be used based on the child's weight.
    - If using an auto injector or pre-filled syringe, administer a dose of 0.1 mg,
    - 0.15 mg, or 0.3 mg IM (as appropriate for the patient's weight) into the anterolateral thigh.
    - If using another epinephrine format, the recommended dose is 0.01 mg/kg per dose, up to a maximum single dose of 0.5 mg.
    - Epinephrine dose may be repeated once in as little as 5 minutes, IF there is no response or an inadequate response while waiting for rapid response/EMS to arrive. Seek a verbal order from a credentialed provider for any additional doses. More than 2 doses of epinephrine are not covered under these standing orders.

**TABLE 1. Epinephrine Dose**
Recommended dose is 0.01 mg/kg body weight up to 0.5 mg maximum dose

| Age group | | Range of weight (lb) | Range of weight (kg)* | 1.0mg/mL aqueous solution (1:1000 dilution); intramuscular Minimum dose: 0.05mL | Epinephrine autoinjector or prefilled syringe (0.1mg, 0.15mg, 0.3mg) |
|---|---|---|---|---|---|
| Infants and children | 1-6 months | 9-19 lb | 4-8.5 kg | 0.05 mL (or mg) | off label** |
| | 7-36 months | 20-32 lb† | 9-14.5 kg† | 0.1 mL (or mg) | 0.1 mg† |
| | 37-59 months | 33-39 lb | 15-17.5 kg | 0.15 mL (or mg) | 0.15 mg/dose |
| | 5-7 years | 40-56 lb | 18-25.5 kg | 0.2-0.25 mL (or mg) | 0.15 mg/dose |
| | 8-10 years | 57-76 lb | 26-34.5 kg | 0.25-0.3 mL (or mg) | 0.15 mg or 0.3 mg/ dose |

| | | | | | |
|---|---|---|---|---|---|
| Teens | 11-12 years | 77-99 lb | 35-45 kg | 0.35-0.4 mL (or mg) | 0.3 mg/dose |
| | 13 years & older | 100+ lb | 46+ kg | 0.5 mL (or mg) | 0.3 mg/dose |

*Rounded weight at the 50th percentile for each age range
†0.1 mg autoinjector is licensed for use in 7.5 to 15 kg infants and children Source: Immunization Action Coalition, Item #P3082a (4/19/2023)
**Use of a Pediatric auto-injector for infants and children weighing less than the approved weight is at the discretion of the Medical Director.

- Optional treatment:
  - One dose of oral H1 antihistamines may be administered to relieve itching and urticaria (hives). These medications DO NOT relieve upper or lower airway obstruction, hypotension, or shock. First-line therapy is epinephrine. Administer only if the airway and/or swallow are not affected.
  - Maximum single dose for children age <12 years is 40 mgs.
  - Maximum single dose for children >12 years is 50 mgs.

**TABLE 2. Diphenhydramine dose calculations based on 1mg/kg†**
Recommended dose is 1-2 mg/kg body weight

| Age group | | Range of weight (lb) | Range of weight (kg)* | Liquid: 10 mg/5 mL Tablets: 10 mg or 25 mg |
|---|---|---|---|---|
| Infants and children | 7-36 months | 20-32 lb | 9-14.5 kg | 10-15 mg/dose† |
| | 37-59 months | 33-39 lb | 15-17.5 kg | 15-20 mg/dose† |
| | 5-7 years | 40-56 lb | 18-25.5 kg | 20-25 mg/dose† |
| | 8-12 years | 57-99 lb | 26-45 kg | 25-50 mg/dose† |
| Teens | 13 years & older | 100+ lb | 46- kg | 25-50 mg/dose |

†AP.Red Book: 2018–2021,31st ed.(p. 66). Diphenhydramine maximum single dose for children younger than age 12 years is 40 mg, for children age 12 years and older, 100 mg
*Rounded weight at the 50th percentile for each age range Source: Immunization Action Coalition, Item #P3082a (4/19/2023)

**TABLE 3. Hydroxyzine dose calculations based on 0.5mg/kg**
Recommended oral dose is 0.5-1 mg/kg body weight

| Age group | | Range of weight (lb) | Range of weight (kg)* | Liquid: 10 mg/5 mL Tablets: 10 mg or 25 mg |
|---|---|---|---|---|
| Infants and children | 7-36 months | 20-32 lb | 9-14.5 kg | 5-7.5 mg/dose |
| | 37-59 months | 33-39 lb | 15-17.5 kg | 7.5-10 mg/dose |
| | 5-7 years | 40-56 lb | 18-25.5 kg | 10-12.5 mg/dose |
| | 8-12 years | 57-76 lb | 26-34.5 kg | 12.5-15 mg/dose |

| | | | | |
|---|---|---|---|---|
| Teens | 11-12 years | 77-99 lb | 35-45 kg | 15-25 mg/dose |
| | 13 years & older | 100+ lb | 46+ kg | 25 mg/dose |

*Rounded weight at the 50th percentile for each age range Source: Immunization Action Coalition, Item #P3082a (4/19/2023)

3. Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain an open airway. Keep the patient in a recumbent position (flat on their back) unless he or she is having difficulty breathing. If breathing is difficult, the patient's head may be elevated, provided the blood pressure is adequate to prevent loss of consciousness. If their blood pressure is low, elevate their legs. Monitor their blood pressure and pulse at least every 5 minutes.

4. Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and any other relevant clinical information. Notify the patient's primary care physician and complete a patient safety report.

5. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) online at https://vaers.hhs.gov. Additional information about VAERS is also available by telephone (800-822-7967).

6. This standing order shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date

Adapted from Immunization Action Coalition • Item #P3082a (4/23).

# Appendix A

## Recommended and minimum ages and intervals between vaccine doses[a],[b],[c],[d]

| Vaccine and dose number | Recommended age for this dose | Minimum age for this dose | Recommended interval to next dose | Minimum interval to next dose |
|---|---|---|---|---|
| **DTaP-1**[e] | 2 months | 6 weeks | 8 weeks | 4 weeks |
| **DTaP-2** | 4 months | 10 weeks | 8 weeks | 4 weeks |
| **DTaP-3** | 6 months | 14 weeks | 6-12 months[f] | 6 months[f] |
| **DTaP-4** | 15-18 months | 15 months[f] | 3 years | 6 months |
| **DTaP-5**[g] | 4-6 years | 4 years | — | — |
| **HepA-1**[e] | 12-23 months | 12 months | 6-18 months | 6 months |
| **HepA-2** | ≥18 months | 18 months | — | — |
| **HepB-1**[h] | Birth | Birth | 4 weeks-4 months | 4 weeks |
| **HepB-2** | 1-2 months | 4 weeks | 8 weeks-17 months | 8 weeks |
| **HepB-3**[i] | 6-18 months | 24 weeks | — | — |
| **Hib-1**[j] | 2 months | 6 weeks | 8 weeks | 4 weeks |
| **Hib-2** | 4 months | 10 weeks | 8 weeks | 4 weeks |
| **Hib-3**[k] | 6 months | 14 weeks | 6-9 months | 8 weeks |
| **Hib-4** | 12-15 months | 12 months | — | — |
| **HPV-1 (Two-Dose Series)**[l] | 11-12 years | 9 years | 6 months | 5 months |
| **HPV-2** | 11-12 years (+6 months) | 9 years +5 months[m] | — | — |
| **HPV-1**[n] **(Three-Dose Series)** | 11-12 years | 9 years | 1-2 months | 4 weeks |
| **HPV-2** | 11-12 years (+1-2 months) | 9 years (+4 weeks) | 4 months | 12 weeks[n] |
| **HPV-3**[n] | 11-12 years (+6 months) | 9 years (+5 months) | — | — |
| **Influenza, inactivated**[o] | ≥6 months | 6 months[p] | 4 weeks | 4 weeks |
| **IPV-1**[e] | 2 months | 6 weeks | 8 weeks | 4 weeks |
| **IPV-2** | 4 months | 10 weeks | 8 weeks-14 months | 4 weeks |
| **IPV-3** | 6-18 months | 14 weeks | 3-5 years | 6 months |
| **IPV-4**[q] | 4-6 years | 4 years | — | — |
| **LAIV**[o] | 2-49 years | 2 years | 4 weeks | 4 weeks |
| **MenACWY-1**[r] | 11-12 years | 2 months[s] | 4-5 years | 8 weeks |
| **MenACWY-2** | 16 years | 11 years (+ 8 weeks)[t] | — | — |
| **MenB-1** | Healthy adolescents: 16-23 years | 16 years | Bexsero: 4 weeks<br>Trumenba: 6 months[c] | Bexsero: 4 weeks<br>Trumenba: 6 months[c] |
| **MenB-1** | Persons at increased risk: ≥10 years | 10 years | Bexsero: 4 weeks<br>Trumenba: 1–2 months[c] | Bexsero: 4 weeks<br>Trumenba: 1 month |
| **MenB-2** | Healthy adolescents: 16-23 years (+1 month) | 16 years (+1 month) | — | — |
| **MenB-2** | Persons at increased risk: ≥10 years (+1 month) | 10 years (+1 month) | Bexsero: — | Bexsero: — |
| | | | Trumenba: 4-5 month[c] | Trumenba: 4 months[c] |
| **MenB-3**[u] | Persons at increased risk: ≥10 years (+6 months[c]) | 10 years (+6 months[c]) | — | — |

A

| Vaccine and dose number | Recommended age for this dose | Minimum age for this dose | Recommended interval to next dose | Minimum interval to next dose |
|---|---|---|---|---|
| **MMR-1**[v] | 12-15 months | 12 months | 3-5 years | 4 weeks |
| **MMR-2**[v] | 4-6 years | 13 months | — | — |
| **PCV13-1**[j] | 2 months | 6 weeks | 8 weeks | 4 weeks |
| **PCV13-2** | 4 months | 10 weeks | 8 weeks | 4 weeks |
| **PCV13-3** | 6 months | 14 weeks | 6 months | 8 weeks |
| **PCV13-4** | 12-15 months | 12 months | — | — |
| **PPSV23-1** | — | 2 years | 5 years | 5 years |
| **PPSV23-2**[w] | — | 7 years | — | — |
| **Rotavirus-1**[x] | 2 months | 6 weeks | 8 weeks | 4 weeks |
| **Rotavirus-2** | 4 months | 10 weeks | 8 weeks | 4 weeks |
| **Rotavirus-3**[x] | 6 months | 14 weeks | — | — |
| **Td** | 11-12 years | 7 years | 10 years | 5 years |
| **Tdap**[y] | ≥11 years | 7 years | — | — |
| **Varicella-1**[v] | 12-15 months | 12 months | 3-5 years | 12 weeks[z] |
| **Varicella-2**[v] | 4-6 years | 15 months[aa] | — | — |
| **RZV-1** | ≥50 years | 50 years[bb] | 2-6 months | 4 weeks |
| **RZV-2** | ≥50 years (+2-6months) | 50 years | — | — |

**Abbreviations:** DTaP = diphtheria and tetanus toxoids and acellular pertussis; HepA = hepatitis A; HepB = hepatitis B; Hib = *Haemophilus influenzae* type b; HPV = human papillomavirus; IPV = inactivated poliovirus; LAIV = live, attenuated influenza vaccine; MenACWY = quadrivalent meningococcal conjugate vaccine; MenB = serogroup B meningococcal vaccine; MMR = measles, mumps, and rubella; MMRV = measles, mumps, rubella, and varicella; PCV13 = pneumococcal conjugate vaccine; PPSV23= pneumococcal polysaccharide vaccine; PRP-OMP = polyribosylribitol phosphate-meningococcal outer membrane protein conjugate; RZV = recombinant zoster vaccine; Td = tetanus and diphtheria toxoids; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis.

[a] Combination vaccines are available. Use of licensed combination vaccines is generally preferred to separate injections of their equivalent component vaccines. When administering combination vaccines, the minimum age for administration is the oldest age for any of the individual components. The minimum interval between doses is equal to the greatest interval of any of the individual components.

[b] Information on travel vaccines, including typhoid, Japanese encephalitis, and yellow fever, is available at https://www.cdc.gov/travel. Information on other vaccines that are licensed in the United States but not distributed, including anthrax and smallpox, is available at http://emergency.cdc.gov/bioterrorism/.

[c] "Months" refers to calendar months.

[d] Within a number range, a hyphen (-) should be read as "through."

[e] Combination vaccines containing the hepatitis B component are available (Twinrix and Pediarix). These vaccines should not be administered to infants aged <6 weeks because of the other vaccine components (i.e., Hib, DTaP, HepA, and IPV).

[f] The minimum recommended age for DTaP-4 is 15 months, with a recommended 6 months from DTaP-3 (the recommended interval between DTaP-3 and DTaP-4 is 6 months). However, DTaP4 need not be repeated if given on or after 12 months of age and at least 4 months after DTaP-3. The 4-day grace period can be applied when validating past doses and can be applied to the minimum age of 12 months and the minimum interval of 4 months between DTaP-3 and DTaP-4. The 4-day grace period can be used when planning doses ahead of time, but should be applied to the minimum age of 15 months and the minimum interval between DTaP-3 and DTaP-4 of 6 months.

[g] If a fourth dose of DTaP is given on or after the fourth birthday, a fifth dose is not needed if the interval between the third dose and fourth dose is at least 6 months.

[h] Adjuvanted Hepatitis B vaccine (HepB-CgG) can be administered to adults 18 years old and older on a two dose schedule, the first and second dose separated by 4 weeks.

[i] HepB-3 should be administered at least 8 weeks after HepB-2 and at least 16 weeks after HepB-1 and should not be administered before age 24 weeks.

[j] For Hib and PCV13, children receiving the first dose of vaccine at age ≥7 months require fewer doses to complete the series.

[k] If PRP-OMP (Pedvax-Hib, Merck Vaccine Division) was administered at ages 2 and 4 months, a dose at age 6 months is not necessary. The final dose has a minimum age of 12 months.

[l] A two-dose schedule of HPV vaccine is recommended for most persons beginning the series between 9 through 14 years of age. See HPV vaccine-specific recommendations for details. www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6549a5.pdf.

[m] If a patient is eligible for a 2-dose HPV series, and the second dose is given less than four weeks after the first dose, it is an invalid dose. Administer another dose 6-12 months after the first dose. If the second dose is given less than five months after the first dose, but more than four weeks after the first dose, the next dose should be administered at least 12 weeks after the second dose, and at least 6-12 months after the first dose. The 4-day grace period may be used. If the third dose was administered before December 16, 2016, and was administered 12 weeks after the 2nd dose, and 16 weeks after the first dose, it is a valid dose. The 4-day grace period may be used. If the third dose was administered on or after December 16, 2016, and was administered 12 weeks after the 2nd dose and 5 months after the first dose, it is a valid dose. The 4-day grace period may be used.

# Appendix A

[n] The minimum age for HPV-3 is based on the baseline minimum age for the first dose (i.e., 9 years) and the minimum interval of 5 months between the first and third dose. If the third dose was administered before December 16, 2016, and was administered 12 weeks after the 2nd dose, and 16 weeks after the first dose, it is a valid dose. The 4-day grace period may be used. If the third dose was administered on or after December 16, 2016, and was administered 12 weeks after the 2nd dose and 5 months after the first dose, it is a valid dose. The 4-day grace period may be used.

[o] One dose of influenza vaccine per season is recommended for most persons. To determine which children younger than 9 years should receive 2 doses in a single season, please see influenza vaccine-specific recommendations https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html.

[p] The minimum age for inactivated influenza vaccine varies by vaccine manufacturer. See package insert for vaccine-specific minimum ages.

[q] A fourth dose is not needed if the third dose was administered at ≥4 years and at least 6 months after the previous dose.

[r] Revaccination with meningococcal vaccine is recommended for previously vaccinated persons who remain at high risk for meningococcal disease. Cohn AC, MacNeil JR, Clark TA, et al. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep*. 2013;62(RR-2):1-28.

[s] MenACWY-D (Menactra) can be given as young as 9 months for high-risk persons. MenACWY-CRM (Menveo) can be given as young as 2 months for high-risk persons. Hib-MenCY can be given as young as 6 weeks for high-risk persons. Hib-MenCY is given as a 4-dose series at 2 months, 4 months, 6 months and 12-18 months. MenACWY-TT (MenQuadfi) can be given as young as 2 years for high-risk persons.

[t] For routine non-high risk adolescent vaccination, the minimum age for the booster dose is 16 years.

[u] This dose is not necessary if Bexsero is correctly administered, or if Trumenba is correctly administered to healthy adolescents.

[v] Combination MMRV vaccine can be used for children aged 12 months-12 years.

[w] A second dose of PPSV23 5 years after the first dose is recommended for persons aged ≤65 years at highest risk for serious pneumococcal infection and those who are likely to have a rapid decline in pneumococcal antibody concentration. See https://www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm.

[x] The first dose of rotavirus must be administered at age 6 weeks through 14 weeks and 6 days. The vaccine series should not be started for infants aged ≥15 weeks, 0 days. Rotavirus should not be administered to children older than 8 months, 0 days of age regardless of the number of doses received between 6 weeks and 8 months, 0 days of age. If 2 doses of Rotarix (GlaxoSmithKline) are administered as age appropriate, a third dose is not necessary.

[y] Only 1 dose of Tdap is recommended. Subsequent doses should be given as Td or Tdap. For management of a tetanus-prone wound in persons who have received a primary series of tetanus-toxoid–containing vaccine, the minimum interval after a previous dose of any tetanus-containing vaccine is 5 years.

[z] A special grace period of 2 months, based on expert opinion, can be applied to the minimum interval of 3 months, when evaluating records retrospectively, which results in an acceptable minimum interval of 4 weeks. An additional 4 days should not be added on to this grace period.

[aa] A special grace period of 2 months, based on expert opinion, can be applied to the minimum age of 15 months when evaluating records retrospectively, which results in an acceptable minimum age of 13 months. An additional 4 days should not be added on to this grace period.

[bb] If a 1st dose of recombinant zoster vaccine is administered to someone 18-49 years of age, the dose does not need to be repeated. A 4 day grace period can be added to the absolute minimum age of 18 years when evaluating records retrospectively.

**Adapted from Table 3-1, ACIP General Best Practice Guidelines for Immunization.** **January 2021**

Grace Period: Vaccine doses administered ≤4 days before the minimum interval or age are considered valid; however, local or state mandates might supersede this 4-day guideline.

# Routine Immunization Screening Form: Pediatric

| | |
|---|---|
| **AUTHORITY:** | 10 U.S.C. 1071-1085, Medical and Dental Care; Army Regulation 40-562, Immunizations and Chemoprophylaxis for the Prevention of Infectious Disease; DoDM 6025.18, Implementation of the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule in DoD Health Care Programs. |
| **PURPOSE:** | To determine whether your child can safely receive a routine immunization. |
| **ROUTINE USES:** | Use and disclosure of your child's records outside of DoD may occur in accordance with the Privacy Act of 1974, as amended (5 U.S.C. 552a(b)). Collected information may be shared with entities including the Departments of Health and Human Services, Veterans Affairs, and other Federal, State, local, or foreign government agencies, or authorized private business entities. To appropriate agencies, entities, and persons when (1) the DoD suspects or has confirmed that there has been a breach of the system of records; (2) the DoD has determined that as a result of the suspected or confirmed breach there is a risk of harm to individuals, the DoD (including its information systems, programs, and operations), the Federal Government, or national security; and (3) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist in connection with the DoD's efforts to respond to the suspected or confirmed breach or to prevent, minimize, or remedy such harm. |
| **APPLICABLE SORN:** | EDHA 07, Military Health Information System (November 18, 2013, 78 FR 69076) https://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570672/edha-07/ |
| **DISCLOSURE:** | Voluntary. If you choose not to provide the requested information, no penalty may be imposed; however, failure to provide the information may result in delays in assessing contraindications for receiving vaccinations. |

| Patient name: | DOB *(YYYYMMDD)*: |
|---|---|

**Screening Checklist for Contraindications to Vaccines for Children and Teens**

**For parents/guardians:** The following questions will help us determine which vaccines your child may be given today. If you answer "yes" to any question, it does not necessarily mean your child should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

| | | Yes | No | Don't Know |
|---|---|---|---|---|
| 1. | Is the child sick today? | ☐ | ☐ | ☐ |
| 2. | Has the child had a serious reaction after receiving a vaccination? | ☐ | ☐ | ☐ |
| 3. | Does the child have allergies to medication, food, a vaccine component, or latex? | ☐ | ☐ | ☐ |
| 4. | Has the child, a sibling, or a parent had a seizure; has the child had brain or other nervous system problems? | ☐ | ☐ | ☐ |
| 5. | Has the child had a health problem involving heart, lung (e.g. asthma), kidney, or metabolic disease (e.g., diabetes), anemia, or other blood disorder? Is he/she on long-term aspirin therapy? | ☐ | ☐ | ☐ |
| 6. | Does the child have cancer, leukemia, HIV/AIDS, or does the child or family members (parents or siblings) have an immune system problem? | ☐ | ☐ | ☐ |
| 7. | In the past 3 months, has the child taken medications that weaken his/her immune system, such as prednisone or other steroids; anticancer drugs; biologic drugs for autoimmune diseases such as rheumatoid arthritis, Crohn's disease, or psoriasis; or had radiation treatments? | ☐ | ☐ | ☐ |
| 8. | In the past year, has the child received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug? | ☐ | ☐ | ☐ |
| 9. | If your child is a baby, have you ever been told he/she has a malformation of the gastrointestinal tract (such as Meckel's diverticulum) that would predispose the infant for intussusception? | ☐ | ☐ | ☐ |
| 10. | If the child to be vaccinated is 2 through 4 years of age, has a healthcare provider told you that the child had wheezing or asthma in the past 12 months? | ☐ | ☐ | ☐ |
| 11. | Has the child had (or is a candidate for) his/her spleen removed, or do they have sickle cell anemia? | ☐ | ☐ | ☐ |
| 12. | Has the child ever passed out (had vasovagal syncope) during or after a previous immunization or blood draw? | ☐ | ☐ | ☐ |
| 13. | Has the child received any vaccinations in the past 4 weeks? | ☐ | ☐ | ☐ |
| 14. | Is the child/teen pregnant or is there a chance she could become pregnant during the next month? Not Applicable ☐ | ☐ | ☐ | ☐ |

Please list any medications the child is currently taking:

| Form completed by: | Date *(YYYYMMDD)*: |
|---|---|
| Form reviewed by: | Date *(YYYYMMDD)*: |

**Did you bring your immunization record/card with you?** **Yes** ☐ **No** ☐

It is important for you to have a personal record of your vaccinations. If you don't have a personal record, ask your healthcare provider to give you one. Keep this record in a safe place and bring it with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it. For questions or concerns regarding immunizations, providers, nurses and patients may call the DHA Immunization Healthcare Support Center 24/7 at 1-877-438-8222, Option 1.

## Information for Healthcare Professionals about the Screening Checklist for Contraindications (Children and Teens)

*Each screening question is explained in more detail below. For more information, please consult the sources referenced at the end.*

**1. Is the child sick today?** [*all vaccines*]

There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events.[1,2] However, as a precaution with moderate or severe acute illness, all vaccines should be delayed until the illness has improved. Mild illnesses (such as otitis media, upper respiratory infections, and diarrhea) are NOT contraindications to vaccination. Do not withhold vaccination if a person is taking antibiotics.

**2. Has the child ever had a serious reaction after receiving a vaccination?** [*all vaccines*]

History of anaphylactic reaction (see question 3) to a previous dose of vaccine or vaccine component is a contraindication for subsequent doses.[1] History of encephalopathy within 7 days following DTP/DTaP is a contraindication for further doses of pertussis-containing vaccine.There are other adverse events that might have occurred following vaccination that constitute contraindications or precautions to future doses. Under normal circumstances, vaccines are deferred when a precaution is present. However, situations may arise when the benefit outweighs the risk (e.g., during a community pertussis outbreak).

**3. Does the child have allergies to medications, food, a vaccine component, or latex?** [*all vaccines*]

An anaphylactic reaction to latex is a contraindication to vaccines that contain latex as a component or as part of the packaging (e.g., vial stoppers, prefilled syringe plungers or caps). If a person has anaphylaxis after eating gelatin, do not administer vaccines containing gelatin. For patients with known Alpha-gal syndrome (red meat allergy) caution should be exercised with gelatin-containing vaccines (i.e. MMR, VAR, YF-Vax), as some of these patients have demonstrated anaphylaxis with these vaccines. A local reaction to a prior vaccine dose or vaccine component, including latex, is not a contraindication to a subsequent dose or vaccine containing that component.[3,4] People with egg allergy of any severity can receive any recommended influenza vaccine (i.e., any IIV or RIV) that is otherwise appropriate for the patient's age. For people with a history of severe allergic reaction to egg involving any symptom other than hives (e.g., angioedema, respiratory distress), or who required epinephrine or another emergency medical intervention, the vaccine should be administered in a medical setting, such as a clinic, health department, or physician office. Vaccine administration should be supervised by a healthcare provider who is able to recognize and manage severe allergic conditions.[5]

**4. Has the child, a sibling, or a parent had a seizure; has the child had brain or other nervous system problems?** [*DTaP, Td, Tdap, IIV, LAIV, MMRV*]

DTaP and Tdap are contraindicated in children who have a history of encephalopathy within 7 days following DTP/DTaP. An unstable, progressive neurologic condition is a precaution to the use of DTaP and Tdap. For children with stable neurologic disorders (including seizures) unrelated to vaccination, or for children with a family history of seizures, vaccinate as usual (exception: children with a personal or family [i.e., parent or sibling] history of seizures generally should not be vaccinated with MMRV; they should receive separate MMR and VAR vaccines). A history of Guillain-Barre syndrome (GBS) is a precaution for the following:

1) Td/Tdap: if GBS has occurred within 6 weeks of a tetanus-containing vaccine and the decision is made to continue vaccination, if no history of prior Tdap, give Tdap instead of Td;

2) Influenza vaccine (IIV or LAIV): if GBS has occurred within 6 weeks of a prior influenza vaccination, vaccinate with IIV if at high risk for severe influenza complications.

**5. Has the child had a health problem involving heart, lung (e.g. asthma), kidney, or metabolic disease (e.g. diabetes), anemia, or other blood disorder? Is he/she on long- term aspirin therapy?** [*MMR, MMRV, LAIV*]

A history of thrombocytopenia or thrombocytopenic purpura is a precaution to MMR and MMRV vaccines. The safety of LAIV in pediatric patients with these conditions has not been established. These conditions, including asthma in children 5 years of age and older, are considered precautions for LAIV use. Patients on long-term aspirin therapy should not receive LAIV: they should receive IIV instead.

**6. Does the child or a family member have cancer, leukemia, HIV/AIDS, or any other immune system problem?** [*LAIV, MMR, MMRV, RV, Ty21a, VAR, YF-Vax*]

Live virus vaccines are usually contraindicated in immunocompromised patients; however, there are exceptions. MMR is recommended for asymptomatic HIV-infected children who do not have evidence of severe immunosuppression. VAR should be considered for HIV-infected children with age-specific CD4+ T-lymphocyte percentage at 15% or greater, or for children 6-18 years of age with CD4+ T-lymphocyte counts of greater than or equal to 200 cell/μL. MMR and VAR vaccines should not be given to a patient with a family history of congenital or hereditary immunodeficiency in first-degree relatives (i.e., parents, siblings) unless the immune competence of that patient has been clinically substantiated or verified by a laboratory. Immunosuppressed children should not receive LAIV. Infants who have been diagnosed with severe combined immunodeficiency (SCID) should not be given a live virus vaccine, including RV. Other forms of immunosuppression are a precaution, not a contraindication, to RV. For details, consult current ACIP recommendations.[1,6,7,8]

**7. In the past 3 months, has the child taken medications that weaken his/her immune system, such as prednisone or other steroids; anticancer drugs; biologic drugs for autoimmune diseases such as rheumatoid arthritis, Crohn's disease, or psoriasis; or had radiation treatments?** [*Adenovirus, MMR, MMRV, Ty21a, VAR, YF-Vax*]

Live virus vaccines should be postponed until after chemotherapy or long-term high- dose steroid therapy has ended. For details and length of time to postpone, consult the current ACIP statement [1] Some immune mediator and immune modulator drugs (especially the antitumor necrosis factor agents adalimumab, infliximab, and etanercept) may be immunosuppressive. The use of live vaccines should be avoided in persons taking these drugs.[1] Specific vaccination schedules for stem cell transplant (bone marrow transplant) patients can be found on the NIH website.[9] LAIV, when recommended, can be given only to healthy, non-pregnant people ages 2 through 49 years.

**8. In the past year, has the child received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?** [*MMR, MMRV, VAR*]

Certain live virus vaccines may need to be deferred, depending on several variables. Consult the most current ACIP recommendations or the current Red Book for information on intervals between receipt of antiviral drugs, immune globulin or blood products, and live virus vaccines.[1,2]

**9. If your child is a baby, have you ever been told he/she has had intussusception?** [*RV*]

Infants who have a congenital malformation of the gastrointestinal tract (such as Meckle's Diveriticulum) or have a history of intussusception (i.e., the telescoping of one portion of the intestine into another) should not be given RV.

**10. If the child to be vaccinated is 2 through 4 years of age, has a healthcare provider told you that the child had wheezing or asthma in the past 12 months?** [*LAIV*]

Children ages 2 through 4 years who have had a wheezing episode within the past 12 months should not be given LAIV. Instead, these children should be given IIV.

**11. Has the child had (or is a candidate for) his/her spleen removed, or do they have sickle cell anemia?** [*Hib, LAIV, PCV13, PPSV23, MCV4, MenB*]

Patients with anatomic or functional asplenia (i.e. sickle-cell disease) are at an increased risk of certain vaccine preventable diseases, including *Haemophilus influenzae* type b, meningococcal, and pneumococcal disease. LAIV is not recommended for people with anatomic or functional asplenia. Hib, PCV13, MCV4, and MenB vaccine should be given 14 days before splenectomy, if possible. Doses given during the 14 days prior to surgery can be counted as valid. Doses that cannot be given prior to surgery should be given as soon as the patient's condition has stabilized after surgery. For patients 2 years of age and up: the first dose of PPSV23 should be administered 8 weeks after the last dose of PCV13. A second dose of PPSV23 should be administered 5 years after the first dose.

**12. Has the child ever passed out (had vasovagal syncope) during or after a previous immunization or blood draw?** [*all vaccines*]

Providers should be aware of the potential for syncope (fainting) associated with vaccination, particularly among adolescents. Appropriate measures should be taken to prevent syncope, and to readily respond to the patient who feels faint. Observe all patients for 15 minutes after vaccination for signs and symptoms that precede syncope, such as weakness, dizziness, sweatiness, and pallor. For patients prone to syncope, make sure they are either seated or lying down at the time of vaccination. (If the patient is seated during vaccination, the immunizer should be seated as well, to minimize the risk of SIRVA). If a patient becomes pre-syncopal, have them lie flat or sit with head between knees for several minutes; loosen any tight clothing and maintain an open airway; apply cool, damp cloths to the patient's face and neck. Observe the patient until symptoms completely resolve.

**13. Has the child received any vaccinations in the past 4 weeks?** *[LAIV, MMR, MMRV,VAR, YF-Vax]*

Patients who were given either LAIV or an injectable live virus vaccine should wait 28 days before receiving another live vaccine. Inactivated vaccines may be given at the same time or at any spacing interval.

**14. Is the child/teen pregnant, or is there a chance she could become pregnant during the next month?** [*Adenovirus, HPV, IPV, MMR, MMRV, LAIV, VAR, Ty21a, possibly YF-Vax*]

Live virus vaccines are contraindicated one month before and during pregnancy because of the theoretical risk of virus transmission to the fetus. Sexually active young women who receive a live virus vaccine should be instructed to practice careful contraception for one month following receipt.[7,10] On theoretical grounds, HPV and IPV should not be given during pregnancy; however, IPV may be given if risk of exposure is imminent (e.g., travel to endemic areas). Inactivated influenza vaccine and Tdap are both recommended during pregnancy.


1. ACIP General Best Practice Guidelines for Immunization: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/downloads/general-recs.pdf.

2. AAP Red Book Report of the Committee on Infectious Diseases: www.aapredbook.org.

3. Latex in Vaccine Packaging: www.cdc.gov/vaccines/ pubs/pinkbook/downloads/appendices/B/latextable.pdf.

4. Table of Vaccine Components: www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

5. Prevention and control of seasonal influenza with vaccines: Recommendations of the Advisory Committee on Immunization Practices. www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html.

6. Measles, mumps, and rubella-vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps. MMWR 1998, 47(RR-8).

7. Prevention of varicella: Recommendations of the Advisory Committee on Immunization Practices. MMWR 2007, 56(RR-4).

8. Rubin L.G., Levin M.J., Ljungman P. (2014) IDSA Clinical practice guideline for vaccination of the immunocompromised host. *Clinical Infectious Diseases*, 58(3), 309-318.

9. Tomblyn M, Einsele H, et al. 2009. Guidelines for preventing infectious complications among hematopoietic stem cell transplant recipients: a global perspective. *Biology of Blood and Marrow Transplant 15*:1143-1238.

10. Revised ACIP recommendation for avoiding pregnancy after receiving a rubella-containing vaccine. MMWR 2001; 50 (49).


**Vaccine Abbreviations:**

- DTaP: diphtheria/tetanus toxoids, acellular pertussis
- DTP: diphtheria/tetanus toxoids, whole-cell pertussis
- Hib: *Haemophilus influenza* type b
- HPV: human papillomavirus
- IIV: inactivated influenza
- IPV: inactivated poliovirus
- LAIV: live attenuated influenza
- MCV4: meningococcal conjugate, quadrivalent, serogroups A, C, W, Y
- MenB: meningococcal serogroup B
- MMR: measles, mumps, rubella
- MMRV: measles, mumps, rubella, varicella
- PCV13: pneumococcal conjugate (13-valent)
- PPSV23: pneumococcal polysaccharide (23-valent)
- RIV: recombinant influenza
- RV: rotavirus
- SIRVA: shoulder injury related to vaccine administration
- Td: tetanus/diphtheria toxoids
- Tdap: tetanus toxoid, reduced diphtheria toxoid, acellular pertussis
- Ty21a: oral typhoid
- VAR: varicella
- YF-Vax: yellow fever

## Routine Immunization Screening Form: Adult

*NOTE: If cholera or smallpox vaccines are being considered, please complete their respective immunization screening forms.*

| | |
|---|---|
| **AUTHORITY:** | 10 U.S.C. 1071-1085, Medical and Dental Care; Army Regulation 40-562, Immunizations and Chemoprophylaxis for the Prevention of Infectious Disease; DoDM 6025.18, Implementation of the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule in DoD Health Care Programs. |
| **PURPOSE:** | To determine whether you can safely receive a routine immunization. |
| **ROUTINE USES:** | Use and disclosure of your records outside of DoD may occur in accordance with the Privacy Act of 1974, as amended (5 U.S.C. 552a(b)). Collected information may be shared with entities including the Departments of Health and Human Services, Veterans Affairs, and other Federal, State, local, or foreign government agencies, or authorized private business entities.<br><br>To appropriate agencies, entities, and persons when (1) the DoD suspects or has confirmed that there has been a breach of the system of records; (2) the DoD has determined that as a result of the suspected or confirmed breach there is a risk of harm to individuals, the DoD (including its information systems, programs, and operations), the Federal Government, or national security; and (3) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist in connection with the DoD's efforts to respond to the suspected or confirmed breach or to prevent, minimize, or remedy such harm. |
| **APPLICABLE SORN:** | EDHA 07, Military Health Information System (November 18, 2013, 78 FR 69076) https://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570672/edha-07/ |
| **DISCLOSURE:** | Voluntary. If you choose not to provide the requested information, no penalty may be imposed; however, failure to provide the information may result in delays in assessing contraindications for receiving vaccinations. |

| Patient name: | DOB *(YYYYMMDD)*: |
|---|---|

**Screening Checklist for Contraindications to Vaccines for Adults**

**For patients:** The following questions will help us determine which vaccines you may be given today. If you answer "yes" to any question, it does not necessarily mean you should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

| | | Yes | No | Don't Know |
|---|---|---|---|---|
| 1. | Are you sick today? | ☐ | ☐ | ☐ |
| 2. | Have you ever had a serious reaction after receiving a vaccination? | ☐ | ☐ | ☐ |
| 3. | Do you have allergies to medication, food, a vaccine component, or latex? | ☐ | ☐ | ☐ |
| 4. | Have you had a seizure or a brain or other nervous system problem? | ☐ | ☐ | ☐ |
| 5. | Have you had a health problem involving heart, lung (e.g., asthma), kidney, or metabolic disease (e.g., diabetes), anemia, or other blood disorder? | ☐ | ☐ | ☐ |
| 6. | Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem? | ☐ | ☐ | ☐ |
| 7. | In the past 3 months, have you taken medications that weaken your immune system, such as prednisone or other steroids; anticancer drugs; biologic drugs for autoimmune diseases such as rheumatoid arthritis, Crohn's disease, or psoriasis; or had radiation treatments? | ☐ | ☐ | ☐ |
| 8. | In the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug? | ☐ | ☐ | ☐ |
| 9. | Have you had (or are you a candidate for) your spleen removed, or do you have sickle cell anemia? | ☐ | ☐ | ☐ |
| 10. | Have you ever passed out (had vasovagal syncope) during or after a previous immunization or blood draw? | ☐ | ☐ | ☐ |
| 11. | Have you received any vaccinations in the past 4 weeks? | ☐ | ☐ | ☐ |
| 12. | Are you pregnant or is there a chance you could become pregnant during the next month? Not Applicable ☐ | ☐ | ☐ | ☐ |

Please list any medications you are currently taking:

| Form completed by: | Date *(YYYYMMDD)*: |
|---|---|
| Form reviewed by: | Date *(YYYYMMDD)*: |

**Did you bring your immunization record/card with you?** **Yes** ☐ **No** ☐

It is important for you to have a personal record of your vaccinations. If you don't have a personal record, ask your healthcare provider to give you one. Keep this record in a safe place and bring it with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it. For questions or concerns regarding immunizations, providers, nurses and patients may call the DHA Immunization Healthcare Support Center 24/7 at 1-877-438-8222, Option 1.

## Information for Healthcare Professionals about the Screening Checklist for Contraindications (Adult)

*Each screening question is explained in more detail below. For more information, please consult the sources referenced at the end.*

**1. Are you sick today?** *[all vaccines]*

There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events.[1] However, as a precaution with moderate or severe acute illness, all vaccines should be delayed until the illness has improved. Mild illnesses (such as otitis media, upper respiratory infections, and diarrhea) are NOT contraindications to vaccination. Do not withhold vaccination if a person is taking antibiotics.

**2. Have you ever had a serious reaction after receiving a vaccination?** *[all vaccines]*

History of anaphylactic reaction (see question 3) to a previous dose of vaccine or vaccine component is a contraindication for subsequent doses.[1] History of encephalopathy within 7 days following DTP/DTaP is a contraindication for further doses of pertussis-containing vaccine.There are other adverse events that may occur following vaccination that constitute contraindications or precautions to future doses. Under normal circumstances, vaccines are deferred when a precaution is present. However, situations may arise when the benefit outweighs the risk (e.g., during a community pertussis outbreak).

**3. Do you have allergies to medications, food, a vaccine component, or latex?** *[all vaccines]*

An anaphylactic reaction to latex is a contraindication to vaccines that contain latex as a component or as part of the packaging (e.g., vial stoppers, prefilled syringe plungers or caps). If a person has anaphylaxis after eating gelatin, do not administer vaccines containing gelatin. For patients with known Alpha-gal syndrome (red meat allergy), caution should be exercised with gelatin-containing vaccines (i.e. MMR, VAR, YF-Vax), as some of these patients have demonstrated anaphylaxis with these vaccines. A local reaction to a prior vaccine dose or vaccine component, including latex, is not a contraindication to a subsequent dose or vaccine containing that component.[2,3] People with egg allergy of any severity can receive any recommended influenza vaccine (i.e., any IIV or RIV) that is otherwise appropriate for the patient's age. For people with a history of severe allergic reaction to egg involving any symptom other than hives (e.g., angioedema, respiratory distress), or who required epinephrine or another emergency medical intervention, the vaccine should be administered in a medical setting, such as a clinic, health department, or physician's office. Vaccine administration should be supervised by a healthcare provider who is able to recognize and manage severe allergic conditions.[4]

**4. Have you had a seizure, or had brain or other nervous system problems?** *[IIV, LAIV, Td, Tdap]*

Tdap is contraindicated in patients who have a history of encephalopathy within 7 days following DTP/DTaP given as a child. An unstable, progressive neurologic condition is a precaution to the use of Tdap. For patients with stable neurologic disorders (including seizures) unrelated to vaccination, or for patients with a family history of seizures, vaccinate as usual. A history of Guillain-Barre syndrome (GBS) is a precaution for the following: 1) Td/Tdap: if GBS occurred within 6 weeks of a tetanus-containing vaccine and the decision is made to continue vaccination, if no history of prior Tdap, give Tdap instead of Td; 2) Influenza vaccine (IIV or LAIV): if GBS occurred within 6 weeks of a prior influenza vaccination, vaccinate with IIV if at high risk for severe influenza complications.

**5. Have you had a health problem involving heart, lung (e.g., asthma), kidney, or metabolic disease (e.g., diabetes), anemia, or other blood disorder?** *[MMR, LAIV, SPV]*

A history of thrombocytopenia or thrombocytopenic purpura is a precaution to MMR vaccine. The safety of LAIV in patients with these conditions has not been established. These conditions, including asthma in adults, should be considered precautions for LAIV use.

**6. Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem?** *[Adenovirus, Cholera, LAIV, MMR, SPV, Ty21a, VAR, YF-Vax, ZVL]*

Live virus vaccines are usually contraindicated in immunocompromised patients; however, there are exceptions. MMR is recommended and varicella should be considered for adults with CD4+ T-lymphocyte counts of greater than or equal to 200cell/µL. Immunosuppressed patients should not receive LAIV. For details, consult current ACIP recommendations.[1,6,7,8]

7. **In the past 3 months, have you taken medications that weaken your immune system, such as prednisone or other steroids; anticancer drugs; biologic drugs for autoimmune diseases such as rheumatoid arthritis, Crohn's disease, or psoriasis; or had radiation treatments?** [*Adenovirus, Cholera, MMR, SPV, Ty21a, VAR, YF-Vax, ZVL*]

Live virus vaccines should be postponed until after chemotherapy or long-term,high-dose steroid therapy has ended. For details and length of time to postpone, consult the current ACIP statement.[1] Some immune mediator and immune modulator drugs (especially the antitumor necrosis factor agents adalimumab, infliximab, and etanercept) may be immunosuppressive.The use of live vaccines should be avoided in persons taking these drugs.[1] Specific vaccination schedules for stem cell transplant (bone marrow transplant) patients can be found on the NIH website.[8] LAIV, when recommended, can be given only to healthy, non-pregnant people ages 2 through 49 years.

**8. In the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?**

[*MMR, VAR*]

Certain live virus vaccines may need to be deferred, depending on several variables. Consult the most current ACIP recommendations for information on intervals between receipt of antiviral drugs, immune globulin or blood products, and live virus vaccines.[1,7]

**9. Have you had (or are you a candidate for) your spleen removed, or do you have sickle cell anemia?** [*Hib, LAIV, PCV13, PPSV23, MCV4, MenB*]

Patients with anatomic or functional asplenia (i.e. sickle-cell disease) are at an increased risk of certain vaccine preventable diseases to include Haemophilus influenzae type b , meningococcal, and pneumococcal disease. LAIV is not recommended for people with anatomic or functional asplenia. Hib, PCV13, MCV4, and MenB vaccine should be given 14 days before splenectomy, if possible. Doses given during the 14 days prior to surgery can be counted as valid. Doses that cannot be given prior to surgery should be given as soon as the patient's condition has stabilized after surgery. For patients 2 years of age and up: the first dose of PPSV23 should be administered 8 weeks after the last dose of PCV13. A second dose of PPSV23 should be administered 5 years after the first dose. A third, final dose of PPSV23 should be administered after age 65 years, if both previous doses were before the age of 65.

**10. Have you ever passed out (had vasovagal syncope) during or after a previous immunization or blood draw?** [*all vaccines*]

Providers should be aware of the potential for syncope (fainting) associated with vaccination, particularly among adolescents. Appropriate measures should be taken to prevent syncope, and to readily respond to the patient who feels faint. Observe all patients for 15 minutes after vaccination for signs and symptoms that precede syncope, such as weakness, dizziness, sweatiness, and pallor. For patients prone to syncope, make sure they are either seated or lying down at the time of vaccination. (If the patient is seated during vaccination, the immunizer should be seated as well, to minimize the risk of SIRVA). If a patient becomes pre-syncopal, have them lie flat or sit with head between knees for several minutes; loosen any tight clothing and maintain an open airway; apply cool, damp cloths to the patient's face and neck. Observe the patient until symptoms completely resolve.

**11. Have you received any vaccinations in the past 4 weeks?** [*LAIV, MMR, SPV, VAR, YF-Vax, ZVL*]

Patients who were given either LAIV, SPV, or an injectable live virus vaccine should wait 28 days before receiving another live vaccine. Inactivated vaccines may be given at the same time or at any spacing interval.

**12. Are you pregnant, or is there a chance you could become pregnant during the next month?** [*Adenovirus, HPV, IPV, MMR, LAIV, VAR, SPV, Ty21a, possibly YF-Vax, ZVL*]

Live virus vaccines are contraindicated one month before and during pregnancy because of the theoretical risk of virus transmission to the fetus. Sexually active women who receive a live virus vaccine should be instructed to practice careful contraception for one month following receipt.[6,9] On theoretical grounds, HPV and IPV should not be given during pregnancy; however, IPV may be given if risk of exposure is imminent (e.g., travel to endemic areas). Inactivated influenza vaccine and Tdap are both recommended during pregnancy. Both vaccines may be given at any time during pregnancy, but the preferred time for Tdap administration is at 27-36 weeks gestation.[10]


1. ACIP General Best Practice Guidelines for Immunization: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/ downloads/general-recs.pdf.
2. Latex in Vaccine Packaging: www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/latextable.pdf.
3.Table of Vaccine Components: www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.
4. Prevention and control of seasonal influenza with vaccines: Recommendations of the Advisory Committee on Immunization Practices. www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html.
5. Measles, mumps, and rubella-vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps. MMWR 1998, 47(RR-8).
6. Prevention of varicella: Recommendations of the Advisory Committee on Immunization Practices. MMWR 2007, 56(RR-4).
7. Rubin L.G., Levin M.J., Ljungman P. (2014) IDSA Clinical practice guideline for vaccination of the immunocompromised host. *Clinical Infectious Diseases*; 58(3), 309–318
8. Tomblyn M, Einsele H, et al. 2009. Guidelines for preventing infectious complications among

perspective.
*15*:1143-1238.
9. Revised ACIP recommendation for avoiding pregnancy after receiving a rubella-containing vaccine. MMWR 2001; 50(49).
10. Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) in pregnant women: ACIP. MMWR 2012 62(07);131-135.


**Vaccine Abbreviations:**

- -Hib: *Haemophilus influenza* type b
- HPV: human papillomavirus
- IIV: inactivated influenza
- IPV: inactivated poliovirus
- LAIV: live attenuated influenza
- MCV4: meningococcal conjugate, quadrivalent, serogroups A, C, W, Y
- MenB: meningococcal serogroup B
- MMR: measles, mumps, rubella
- PPSV23: pneumococcal polysaccharide (23-valent)
- RIV: recombinant influenza
- SIRVA: shoulder injury related to vaccine administration
- SPV: vaccinia (smallpox)
- Td: tetanus/diphtheria toxoids
- Tdap: tetanus toxoid, reduced diphtheria toxoid, acellular pertussis
- Ty21a: oral typhoid
- VAR: varicella
- YF-Vax: yellow fever
- ZVL: zoster vaccine live

# PEDIATRIC AND ADULT INFLUENZA SCREENING AND IMMUNIZATION DOCUMENTATION

**PRIVACY ACT STATEMENT**

Information supplied using this form is protected by the Privacy Act of 1974, as amended. The applicable systems of records are: A0040-66b DASG, Health Care and Medical Treatment Record System (April 4, 2003, 68 FR 16484) available at https://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/569974/a0040-66b-dasg/, and NM06150-6, Medical Readiness Reporting System (August 23, 2013, 78 FR 52518) available at https://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570450/nm06150-6/.

The following questions will help us determine if we should give you the influenza vaccination today. If you answer "yes" to any questions, we will ask additional questions to determine which vaccine, if any, you will receive. Please speak to your healthcare provider if you have any questions.

| 1. NAME: *(Last, First, Middle Initial)* | 2. DoD ID NUMBER: | 3. DATE OF BIRTH: *(YYYYMMDD)* | 4. AGE: |
|---|---|---|---|
| | | | |

5. CATEGORY: ☐ Service Member ☐ Beneficiary ☐ Civilian Contractor ☐ Civilian Employee ☐ Other

| **PART I – COMPLETED BY PATIENT** | **YES** | **NO** |
|---|---|---|
| (1) Are you currently sick, feel ill, or have a fever over 100°? | ☐ | ☐ |
| (2) Have you had a serious reaction, other than flu-like symptoms, following an influenza vaccine in the past? | ☐ | ☐ |
| (3) Have you ever experienced numbness or weakness of your legs or elsewhere (Guillain-Barré syndrome) within 6 weeks of receiving an influenza vaccine? | ☐ | ☐ |
| (4) Have you ever had, or been treated for, a severe allergic reaction (flushing, hives, wheezing, and/or low blood pressure) to any vaccine, or do you have a severe allergy to any of the following: gelatin, MSG,Gentamicin, Neomycin, Polymyxin-B, thimerosal, formaldehyde, latex, or other vaccine component? | ☐ | ☐ |
| (5) If your child is between 6 months and 8 years of age, has your child received at least two (2) previous doses of influenza vaccine? ☐ **NOT APPLICABLE** | ☐ | ☐ |
| (6) Have you received an influenza vaccine within the past 30 days? | ☐ | ☐ |
| (7) Are you, or might you be, pregnant? | ☐ | ☐ |

6. FORM COMPLETED BY:

a. (PRINT) NAME _____ b. DATE _____

**PART II – COMPLETED BY SCREENER**

7. ASSESSMENT:
- ☐ Give inactivated flu vaccine today
- ☐ Do not administer flu vaccine today
- ☐ Refer to experienced provider for further evaluation

8. Vaccine Information Statement provided: *(check box)*
- ☐ Inactivated Influenza Vaccine (IIV)

9 SCREENER INFORMATION:
a. NAME b. SIGNATURE c. DATE

**PART III – COMPLETED BY VACCINATOR**

10. VACCINE ADMINISTERED:

| | |
|---|---|
| ☐ Afluria Quad (IIV4) | 6-35mo (0.25mL), ≥ 36 mo (0.5 mL) |
| ☐ Fluad (aIIV4) | ≥ 65 yrs |
| ☐ Fluarix Quad (IIV4) | ≥ 6 mos |
| ☐ Flublok Quad (RIV4) | ≥ 18 yrs |
| ☐ Flucelvax Quad (ccIIV4) | ≥ 6 mos |
| ☐ Flulaval Quad (IIV4) | ≥ 6 mos |
| ☐ Fluzone Quad (IIV4) | ≥ 6 mos ☐ Northern ☐ Southern |
| ☐ Fluzone - HD (IIV4-HD) | ≥ 65 yrs |
| ☐ Other: | |

11. LOT #:

12. MANUFACTURER:

13. EXPIRATION DATE: *(YYYYMMDD)*

14. DOSE: ☐ 0.25 mL ☐ 0.5 mL ☐ 0.7 mL

15. SITE: ☐ Deltoid / ☐ Thigh ☐ Left / ☐ Right

16. OR PLACE STICKER HERE:

17. COMMENTS:

18. ADMINISTERED BY:

19. DATE: *(YYYYMMDD)*

**ASIMS / MEDPROS / MRRS Entry**

20. NAME:

21. DATE: *(YYYYMMDD)*

## Part 1 Screening Information for Healthcare Professionals

**(1) Are you currently sick, feel ill, or have a fever over 100°?**

There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events. People with a moderate or severe illness should not be vaccinated until their symptoms have improved. Minor illnesses with or without fever or taking antibiotics do not preclude use of influenza vaccine.

**(2) Have you ever had a serious reaction other than Flu-like symptoms following an influenza vaccine in the past?**

Patients reporting a serious reaction to a previous dose of inactivated influenza vaccine should be asked to describe their symptoms. Immediate – presumably allergic – reactions are usually a contraindication to further vaccination (see question 4). Flu-like symptoms (malaise, myalgia, other systemic symptoms), vaccination site reactions, and syncope have been reported with the influenza vaccine. These mild-to-moderate reactions are not a contraindication to future vaccination. However, moderate-to-severe non-allergic reactions including significant local reactions following vaccination should be evaluated by an experienced provider prior to revaccination.

**(3) Have you ever experienced numbness or weakness of your legs or elsewhere (Guillain-Barré syndrome) within 6 weeks of receiving the influenza vaccine?**

A history of Guillain-Barré syndrome (GBS) within 6 weeks of Influenza vaccination is a revaccination precaution.Individuals with history of GBS following vaccination may be considered for influenza vaccination as the likelihood of a GBS recurrence following vaccination is extremely low. However, it is prudent to consider the potential risks of vaccination especially in people who are not at high risk for severe influenza complications. Although data are limited, the benefits of influenza vaccination for the majority of people who have a history of GBS, and who are at high risk for severe complications from influenza, justify yearly vaccination. Because of the association of GBS with influenza disease, it may be prudent to vaccinate with the injectable vaccine rather than the nasal (live) vaccine.

**(4) Have you ever had, or been treated for, a severe allergic reaction (flushing, hives, wheezing, and/or low blood pressure) to any vaccine or do you have a severe allergy to any of the following: gelatin, MSG, Gentamicin, Neomycin, Polymyxin-B, thimerosal, formaldehyde, latex, or other vaccine components?**

All vaccines, including influenza vaccines, contain components that might cause allergic/ anaphylactic reactions(flushing, hives, wheezing, and/or low blood pressure). In the past, egg allergy was considered a contraindication to influenza vaccination. This is not the case today. Any influenza vaccine (egg-based or non-egg based) that is otherwise appropriate for the recipient's age and health status can be used. It is no longer recommended that persons who have had an allergic reaction to egg involving symptoms other than urticaria should be vaccinated in an inpatient or outpatient medical setting supervised by a health care provider who is able to recognize and manage severe allergic reactions if an egg-based vaccine is used. Egg allergy alone necessitates no additional safety measures for influenza vaccination beyond those recommended for any recipient of any vaccine, regardless of severity of previous reaction to egg. All vaccines should be administered in settings in which personnel and equipment needed for rapid recognition and treatment of acute hypersensitivity reactions are available.
A previous severe allergic reaction to flu vaccine itself is a contraindication to future receipt of that vaccine until evaluated by an experienced Allergist to determine the causal component. Once the allergic component has been identified, any flu vaccine that does not containing that component (check the package insert) may be safely administered.
Influenza vaccines provided in multi-dose vials contains thimerosal as a preservative. Most people who have reacted to thimerosal (e.g., contact lens solution sensitivity) do not have reactions to thimerosal used in vaccines.

**(5) If child is between 6 months and 8 years of age, has child received at least 2 doses of flu vaccine?**

Evidence from several studies indicates that children aged 6 months through 8 years require 2 doses of influenza vaccine (administered a minimum of 4 weeks apart) during their first season of vaccination for optimal protection. Children. Children aged 6 months through 8 years who have previously received ≥ 2 total doses of trivalent or quadrivalent influenza vaccine before July 1 of this flu season require only 1 dose. The two previous doses need not have been given during the same season or consecutive seasons. Children in this age group who have not previously received a total of ≥ 2 doses of trivalent or quadrivalent influenza vaccine before July 1 of this season require 2 doses for the this season. The interval between the 2 doses should be at least 4 weeks.

**(6) Have you received an influenza vaccine within the past 30 days?**

Multiple formulations of Northern hemisphere influenza vaccine and one vaccine for Southern hemisphere influenza are available in the United States. Personnel traveling to, or residing in, either the Northern or Southern Hemisphere during that hemisphere's influenza season should be vaccinated with the appropriate formulation. Northern and Southern Hemisphere Influenza vaccines, if both are received, should be separated by at least 28 days.

**(7) Are you, or might you be, pregnant?**

Some may be concerned that the mercury-based preservative, thimerosal,contained in multi-dose vials of influenza vaccine may be toxic to children less than 3 years of age and unborn babies. This potential risk has been investigated extensively and there is no evidence supporting this concern. However, in an effort to comply with the vaccination laws of a few States, facilities providing immunizations should make every effort to vaccinate pregnant women and children less than 3 years of age against influenza using preservative-free, pre-filled syringes. If thimerosal-free vaccine is not available in local communities that require them, do not withhold immunization, but obtain patients' consent for immunization, explaining the local statute, the scientific evidence showing that vaccines containing thimerosal are safe, and inform them of the potential risk of not receiving the vaccine.

# CHECKLIST
# Best Practices for Vaccination Clinics Held at Satellite, Temporary, or OFf-Site Locations

## OVERVIEW OF THIS DOCUMENT

This checklist is a step-by-step guide to help clinic supervisors overseeing vaccination clinics held at satellite, temporary, or off-site locations follow Centers for Disease Control and Prevention (CDC) and Department of Defense (DoD) guidelines and best practices for vaccine shipment, transport, storage, handling, preparation, administration, and documentation. It should be used in any non-traditional vaccination clinic setting, including but not limited to: workplaces, community centers, schools, makeshift clinics in remote areas, operational environments, aid stations, and even medical facilities when vaccination occurs in the public areas or classrooms. Temporary clinics also include mass vaccination events, and vaccination clinics held during pandemic preparedness exercises. This checklist outlines CDC and DoD guidelines and best practices that are essential for patient safety and vaccine effectiveness. **A clinic supervisor at the site should complete, sign, and date this checklist EACH TIME a vaccination clinic is held.** To meet accountability and quality assurance standards, all signed checklists should be kept on file by your supervisor/HQ element.

## INSTRUCTIONS

1. An Officer-in-Charge (OIC) who will be at the vaccination clinic should be designated as the clinic supervisor. (This individual will be responsible for completing the steps below and will be referred to as "you" in these instructions.)
2. Review this checklist during the planning stage of the vaccination clinic—well in advance of the date(s) when the clinic will be held. This checklist includes sections to be completed before, during, and after the clinic.
3. **Critical guidelines for patient safety and vaccine effectiveness are identified by the stop sign icon: STOP. If "NO" is checked in ONE OR MORE answer boxes that contain a STOP, DO NOT move forward with the clinic. Follow your organization's protocols and/or contact the Defense Health Agency-Immunization Healthcare Division (DHA-IHD) for guidance BEFORE proceeding with the clinic. Do not administer any vaccine until you have confirmed that it is acceptable to move forward with the clinic.**
4. Contact the DHA-IHD if you have any concerns about whether vaccine was transported, stored, handled, or administered correctly, concerns about whether patients' personal information was protected appropriately, or concerns about other responses that you have marked as "NO" on rows that do not have the STOP.
5. This checklist should be used in conjunction with DHA-IHD's Vaccine Storage and Handling Guide: https://health.mil/vaccineshguide and Toolkit: https://health.mil/Imm_Toolkit. For information about specific vaccines, consult the vaccine manufacturer's package insert.
6. This checklist applies ONLY to vaccines stored at REFRIGERATED temperatures (i.e., between 2–8° Celsius or 36–46°Fahrenheit).
7. Sign and date the checklist upon completion of the clinic or completion of your shift (whichever comes first). (If more than one clinic supervisor is responsible for different aspects of the clinic, you should complete only the section(s) for which you were responsible.)
8. Attach the staff sign-in sheet (with shift times and date) to the checklist (or checklists if more than one clinic supervisor is overseeing different shifts), and submit the checklist(s) to your organization to be kept on file for accountability.

Name and credentials of clinic supervisor: _____

Name of facility where clinic was held: _____

Address where clinic was held (street, city, state): _____

Time and date of vaccination clinic shift (the portion you oversaw): _____ Time (AM/PM) _____ Date (MM/DD/YYYY)

Time and date when form was completed: _____ Time (AM/PM) _____ Date (MM/DD/YYYY)

Signature of clinic supervisor: _____

CHECKLIST of

# Best Practices for Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations

## BEFORE THE CLINIC (Please complete each item before the clinic starts)

### VACCINE SHIPMENT

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ | | Vaccine was shipped directly to the facility/clinic site, where adequate storage is available. *(Direct shipment is preferred for cold chain integrity.)* |

### VACCINE TRANSPORT (IF IT WAS NOT POSSIBLE TO SHIP VACCINES DIRECTLY TO THE FACILITY/CLINIC SITE)

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | ☐ | **Vaccines were transported using a portable vaccine refrigerator or qualified container and pack-out** designed to transport vaccines within the temperature range recommended by the manufacturers (i.e., between 2–8° Celsius or 36–46° Fahrenheit for ALL refrigerated vaccines). Coolers available at general merchandise stores or coolers used to transport food are NOT ACCEPTABLE. See DHA-IHD's Vaccine Storage and Handling Guide for information on qualified containers and pack-outs. |
| ☐ | ☐ ⬢ | ☐ | The person transporting the vaccines confirmed that manufacturer instructions for packing configuration and proper conditioning of coolants were followed. Each vaccine container should include a completed Vaccine Inventory Issue/Return Receipt form. *(Your qualified container and pack-out should include packing instructions. If not, contact the company or DHA-IHD for guidance.)* |
| ☐ | ☐ | ☐ | The person transporting the vaccines confirmed that all vaccines were transported in the passenger compartment of the vehicle (NOT in the vehicle trunk). |
| ☐ | ☐ ⬢ | ☐ | Each vaccine storage unit had its own certified and calibrated temperature-monitoring device (TMD), placed directly with the vaccines and used to monitor temperatures during transport. The TMD was traceable to the standards maintained by the National Institute of Standards and Technology (NIST), and had a current and valid Certificate of Calibration Testing (or Report of Calibration). |
| ☐ | ☐ | ☐ | The amount of vaccine transported was limited to the amount needed for the workday. |

### VACCINE STORAGE AND HANDLING (UPON ARRIVAL AT FACILITY/CLINIC)

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | ☐ | If vaccines were shipped, the shipment arrived within the appropriate time frame (according to manufacturer or distributor guidelines) and in good condition. |
| ☐ | ☐ ⬢ | ☐ | If the vaccine shipment contained a cold chain monitor (e.g.,TempTale), it was checked upon arrival at the facility/clinic, and there was no indication of a temperature excursion (i.e., out-of-range temperature) during transit. A cold chain monitor may not be included when vaccines are shipped directly from the Prime Vendor. *Note: Follow instruction sheet with vaccine shipment for reading and/or returning TempTale monitors.* |
| ☐ | ☐ ⬢ | | Upon arrival at the facility/clinic (either by shipment or transport), vaccines were immediately unpacked and placed in proper storage equipment (i.e., a portable vaccine refrigerator or qualified container and pack-out specifically designed and tested to maintain the manufacturer-recommended temperature range). *Follow the guidance for unpacking and storing vaccines specified in DHA-IHD's Vaccine Storage and Handling Guide.* |
| ☐ | ☐ ⬢ | | Upon arrival at the facility/clinic, vaccines were still within the manufacturer-recommended temperature range *(i.e., between 2–8° Celsius or 36–46° Fahrenheit for ALL refrigerated vaccines)*. |
| ☐ | ☐ | | Upon arrival at the facility/clinic, vaccines remained protected from light (per manufacturer's package insert) until ready for use at the vaccination clinic. |
| ☐ | ☐ ⬢ | | Upon arrival at the facility/clinic, expiration dates of vaccines and any medical equipment (syringes, needles, alcohol wipes) being used were checked, and they had not expired. |

### CLINIC PREPARATION AND SUPPLIES

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ | | A contingency plan is in place in case vaccines need to be replaced. The plan addresses scenarios for vaccine compromised before arrival at the clinic and for vaccine compromised during clinic hours. |

» If you check "NO" in ONE OR MORE answer boxes that contain a ⬢, **DO NOT move forward with the clinic**.

– Follow your organization's protocols and/or contact your DoD Public Health Department or DHA-IHD for guidance *before* proceeding with the clinic.

– Do not administer any vaccine until you have confirmed that it is acceptable to move forward with the clinic.

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | | An emergency medical kit (including epinephrine and equipment for maintaining an airway) is at the site for the duration of the clinic. See paragraph 2-9 of the Joint Regulation (Army Regulation 40–562; BUMEDINST 6230.15B; AFI 48–110_IP; CG COMDTINST M6230.4G - *Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases*). |
| ☐ | ☐ ⬢ | | All on-site vaccination staff are certified in cardiopulmonary resuscitation (CPR), are familiar with the signs and symptoms of anaphylaxis, and know the location of epinephrine and are trained in its indications and use. DHA-IHD strongly suggests having a current Standing Order for anaphylaxis management available, which has been reviewed and discussed with all staff prior to the event. |
| ☐ | ☐ | | There is a designated area at the site for management of patients with urgent medical problems (e.g., fainting). |
| ☐ | ☐ | | Adequate infection control supplies are provided, including biohazard containers and supplies for hand hygiene. If administering injectable vaccines, gloves, adhesive bandages, individually packaged sterile alcohol wipes, and a sufficient number of sterile needles, syringes, and sharps containers are provided. |
| ☐ | ☐ | ☐ | Needles in a variety of lengths are available to optimize injection based on the prescribed route/technique and patient size. |
| ☐ | ☐ | ☐ | Reasonable accommodations (e.g., privacy screens) are available for patient privacy during vaccination. |
| ☐ | ☐ | | Staff members administering vaccines have reviewed vaccine manufacturer instructions for administration and have completed vaccine-specific competency training PRIOR to the event. |
| ☐ | ☐ | ☐ | If using a standing order protocol, the protocol is current and available at the clinic/facility site. *(See DHA-IHD website for examples.)* |
| ☐ | ☐ ⬢ | | A sufficient number of vaccine information statements (VISs) for each vaccine being offered are available at the clinic/facility site (*as required by Federal law*). |
| ☐ | ☐ | | A sufficient number of screening forms are available at the clinic/facility site (see DHA-IHD website for examples). The screening forms are vaccine and patient-specific, as needed (e.g., routine or readiness, adult or pediatric, etc.). |
| ☐ | ☐ | | A designated clean area for vaccine preparation has been identified and set up prior to the clinic, separate from the immediate administration and away from potentially contaminated items. Location physical space dictates placement (e.g., a separate table versus a separate room). |
| ☐ | ☐ | | A qualified individual has been designated to oversee infection control at the clinic. |

## DURING THE CLINIC (Please complete each item while the clinic is occurring, and review at the end of your shift)

### VACCINE STORAGE AND HANDLING (AT FACILITY/CLINIC)

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | | Vaccines are being kept in proper storage equipment that maintains the manufacturer-recommended temperature range (*i.e., a portable vaccine refrigerator or qualified container and pack-out specifically designed and tested to maintain correct temperatures when opened and closed during the clinic*). |
| ☐ | ☐ ⬢ | | Vaccine temperature is being monitored during the clinic using a certified and calibrated digital data logger or temperature-monitoring device placed directly with vaccines. *Follow the temperature monitoring guidance specified in DHA-IHD's Vaccine Storage and Handling Guide.* |
| ☐ | ☐ ⬢ | ☐ | If vaccines are being stored in a medical-grade refrigerator at the site, vaccine temperature data are being reviewed and documented a minimum of 2 times during each clinic workday (preferably at the beginning and middle of an 8-hour shift) to ensure they remain at correct temperatures (*i.e., between 2–8° Celsius or 36–46° Fahrenheit for ALL refrigerated vaccines*). |
| ☐ | ☐ ⬢ | ☐ | If vaccines cannot be stored in a medical-grade refrigerator, they are being kept in the portable vaccine refrigerator or qualified pack-out with a digital data logger or temperature-monitoring device placed as closely as possible to the vaccines, and temperatures are being read and recorded at least once an hour. The container is being kept closed/sealed as much as possible. |
| ☐ | ☐ | | Vaccines are being protected from light during the vaccination clinic per the manufacturer's package insert. |

» If you check "NO" in ONE OR MORE answer boxes that contain a ⬢, **DO NOT move forward with the clinic**.

– Follow your organization's protocols and/or contact your DoD Public Health Department or DHA-IHD for guidance *before* proceeding with the clinic.
– Do not administer any vaccine until you have confirmed that it is acceptable to move forward with the clinic.

# CHECKLIST of Best Practices for Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations

## VACCINE PREPARATION

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | | Expiration dates of vaccines (and diluents, if applicable) are being checked again during preparation, and only vaccines that have not expired are being administered. *(Of note: If you are using multidose vials, be sure to review beyond use dates, along with manufacturer expiration dates.)* |
| ☐ | ☐ | | Vaccines are being prepared in a designated clean area, away from immediate administration areas and potentially contaminated items. |
| ☐ | ☐ ⬢ | ☐ | If using reconstituted vaccines, they are being prepared according to the manufacturer's guidelines. |
| ☐ | ☐ | ☐ | Vaccines are being prepared at the time of administration. |
| ☐ | ☐ | ☐ | If vaccines are predrawn from a multidose vial, **only the contents of 1 multidose vial are being drawn up at one time by each staff member administering vaccines (the maximum number of doses per vial is described in the package insert).** |
| ☐ | ☐ | ☐ | If using single-dose or multidose vials, syringes are being labeled with the name of the vaccine and date/time of draw. |
| ☐ | ☐ ⬢ | | Once drawn up, vaccines are being kept in the recommended temperature range. *Questions about specific time limits for being out of the recommended temperature range should be referred to your Immunization Healthcare Specialist (IHS) and/or DHA-IHD via the PC-TSMP process at https://health.mil/coldchain.* |

## VACCINE ADMINISTRATION

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | | Vaccine information statements (VISs) are being provided to every patient or parent/guardian before vaccination (as required by Federal law). Although laminated copies, posters, and digital versions of VISs may also be used, hard-copy handouts are available for those patients who would like to take one home. |
| ☐ | ☐ ⬢ | | All patients are being screened for contraindications and precautions for the specific vaccine(s) in use before receiving that vaccine(s). |
| ☐ | ☐ | | taff is using proper hygiene techniques to clean hands before vaccine administration, between patients, and anytime hands become soiled. For additional guidance, see www.cdc.gov/handhygiene/providers/index.html. |
| ☐ | ☐ | ☐ | If gloves are being worn by staff administering vaccines, they are being changed and hands are being cleaned using proper hygiene techniques before and between each patient. |
| ☐ | ☐ | | Staff is triple-checking labels, contents, and expiration dates or beyond use dates (as noted in the manufacturer's package insert, if applicable) before administering vaccine. |
| ☐ | ☐ ⬢ | | Vaccines are normal in appearance (i.e., not discolored, without precipitate, and easily resuspended when shaken). |
| ☐ | ☐ | | Each staff member is administering only the vaccines they have prepared. |
| ☐ | ☐ | ☐ | If more than one vaccine type is being administered, separate preparation stations are set up for each vaccine type to prevent medication errors. |
| ☐ | ☐ ⬢ | | Vaccines are being administered using aseptic technique. |
| ☐ | ☐ ⬢ | | Staff is administering vaccine to the correct patient (e.g., if a parent/guardian and child or siblings are at the vaccination station at the same time, each patient's name and date of birth are verified prior to their individual vaccination). |
| ☐ | ☐ ⬢ | | Staff is administering vaccines using the correct route per manufacturer instructions. |
| ☐ | ☐ ⬢ | | Staff is administering the correct dosage (volume) of vaccine. |

» If you check "NO" in ONE OR MORE answer boxes that contain a ⬢, **DO NOT move forward with the clinic**.

– Follow your organization's protocols and/or contact your DoD Public Health Department or DHA-IHD for guidance *before* proceeding with the clinic.
– Do not administer any vaccine until you have confirmed that it is acceptable to move forward with the clinic.

| | | | |
|---|---|---|---|
| ☐ | ☐ ⬢ | | Staff has checked age indications for the vaccines and is administering vaccines to the correct age groups. |
| ☐ | ☐ ⬢ | ☐ | For vaccines requiring more than 1 dose, staff is administering the current dose at the correct interval, if applicable. *Follow the recommended guidelines in Table 3-1 of the "General Best Practice Guidelines on Immunization."* |
| ☐ | ☐ ⬢ | ☐ | If vaccine administration errors are observed, corrective action is being taken and incident is immediately reported to the clinic supervisor. |
| ☐ | ☐ | ☐ | Any persons with a needlestick injury, a vaccine administration error, or an urgent medical problem are being evaluated immediately by a licensed provider, and referred for additional medical care if needed. |
| ☐ | ☐ | | Patients are being instructed/encouraged to stay at the clinic for 15 minutes after vaccination to be monitored for adverse events. |

## ADMINISTRATION OF INJECTABLE VACCINES: *In this section, N.A. is ONLY an option if the clinic is EXCLUSIVELY using non-injectable vaccines, such as live, attenuated influenza vaccine (LAIV)*

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | ☐ | **A new needle AND new syringe are being used for each injection. (Needles and syringes are NEVER used to administer vaccine to more than one person.)** |
| ☐ | ☐ ⬢ | ☐ | Single-dose vials or manufacturer-filled syringes are being used for only one patient. |
| ☐ | ☐ ⬢ | ☐ | Vaccines are being administered following safe injection practices. |
| ☐ | ☐ | ☐ | Seats are provided so staff and patients are at the same level for optimal positioning of anatomic site and injection angle to ensure correct vaccine administration. |
| ☐ | ☐ ⬢ | ☐ | Staff is identifying injection site correctly. (For intramuscular route: deltoid muscle of arm [preferred] or vastus lateralis muscle of anterolateral thigh for adults, adolescents, and children aged ≥3 years; vastus lateralis muscle of anterolateral thigh [preferred] or deltoid muscle of arm for children aged 1–2 years; vastus lateralis muscle of anterolateral thigh for infants aged ≤12 months. For subcutaneous route: thigh for infants aged <12 months; upper outer triceps of arm for children aged ≥1 year and adults [can be used for infants if necessary].) |
| ☐ | ☐ | ☐ | Staff is inserting needles quickly at the appropriate angle: 90° for intramuscular injections (e.g., most inactivated vaccines such as influenza, typhoid, etc.) or 45° for subcutaneous injections (e.g., live vaccines such as MMR, etc.). |
| ☐ | ☐ ⬢ | ☐ | Multidose vials are being used only for the number of doses approved by the manufacturer. |
| ☐ | ☐ ⬢ | ☐ | Vaccines are never being transferred from one syringe to another. |
| ☐ | ☐ ⬢ | ☐ | Used needles and syringes are being immediately placed in a sharps container following administration. Needles are NOT being recapped. |

## VACCINE DOCUMENTATION

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ | | Each vaccination is being fully documented with name of person vaccinated; vaccination date; vaccine type, lot number, manufacturer; patient receipt of vaccine information statement (VIS), including edition date and date VIS was provided; injection site; vaccination route; dosage; and name, title, and unit/location address of person who administered the vaccine. |

» If you check "NO" in ONE OR MORE answer boxes that contain a ⬢, **DO NOT move forward with the clinic**.
- Follow your organization's protocols and/or contact your DoD Public Health Department or DHA-IHD for guidance *before* proceeding with the clinic.
- Do not administer any vaccine until you have confirmed that it is acceptable to move forward with the clinic.

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ | ☐ | Documentation is being completed in the patient's service-specific Immunization Tracking System (ITS) (e.g., MEDPROS, ASIMS, MRRS, etc.). |
| ☐ | ☐ | | Patients are given documentation of vaccines received for their personal records and to share with their medical providers. |

## AFTER THE CLINIC (Please complete each item after the clinic is over)

### POST-CLINIC ACTIONS

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ ⬢ | | Temperature of remaining vaccine is checked and recorded at the end of clinic. If not still at manufacturer-recommended temperature (*i.e., between 2–8° Celsius or 36–46° Fahrenheit for ALL refrigerated vaccines*), follow your organization's protocols and/or contact DHA-IHD for guidance. The Vaccine Inventory Issue/Return Receipt form is updated with the type/amount of remaining viable vaccine for turn-in. |
| ☐ | ☐ | ☐ | Any remaining vaccine in provider-predrawn syringes, opened multidose vials, or activated manufacturer-filled syringes (MFSs) is properly discarded. *An MFS is activated when the sterile seal is broken (i.e., cap removed from needle or needle added to the syringe). If absolutely necessary, a partially used multidose vial may be transported to or from an off-site/satellite facility operated by the same provider, as long as the cold chain is properly maintained, the vaccine is normal in appearance, and the maximum number of doses per vial indicated by the manufacturer has not already been withdrawn, or the beyond use date indicated by the manufacturer has not been met. However, a partially used vial cannot be transferred from one provider to another, across state lines, or returned to the supplier for credit.* |
| ☐ | ☐ ⬢ | ☐ | **Viable, unused vaccine is placed back in proper storage equipment that maintains the manufacturer-recommended temperature range at the end of the clinic day, and was not stored in a dormitory-style or bar-style combined refrigerator/freezer unit under any circumstances.** (This includes vaccine transported for a multi-day clinic to a remote location where adequate storage at the site is not available.) |
| ☐ | ☐ | ☐ | Any needlestick injuries were reported to the clinic supervisor and appropriate entities (e.g., Public Health/Preventive Medicine), and the injured person was sent for appropriate care (e.g., Emergency Department). |
| ☐ | ☐ | ☐ | Any vaccine administration errors were reported to all appropriate entities. |
| ☐ | ☐ | | All biohazardous material is disposed of properly. |

### POST-CLINIC DOCUMENTATION

| YES | NO | N/A | |
|---|---|---|---|
| ☐ | ☐ | ☐ | All vaccinations were recorded in the service-specific ITS (and Electronic Medical Record, as applicable). |
| ☐ | ☐ | ☐ | Any adverse events were reported to the Vaccine Adverse Event Reporting System (VAERS). |
| ☐ | ☐ ⬢ | | All patient medical information was placed in secured storage locations for privacy protection in accordance with Public Law 104-191, "Health Insurance Portability and Accountability Act of 1996" (HIPAA). |
| ☐ | ☐ | | The staff sign-in sheet is attached to this document (with shift times, clinic location, and date). |

» If you check "NO" in ONE OR MORE answer boxes that contain a ⬢, **DO NOT move forward with the clinic**.
  – Follow your organization's protocols and/or contact your DoD Public Health Department or DHA-IHD for guidance *before* proceeding with the clinic.
  – Do not administer any vaccine until you have confirmed that it is acceptable to move forward with the clinic.

» If you check "NO" in ONE OR MORE answer boxes that contain a ⬢ in the "After The Clinic" section, contact your DoD Public Health Department or DHA-IHD for guidance.

## ADDITIONAL INFORMATION AND RESOURCES

If you are concerned that CDC/ACIP guidelines were not followed during your vaccination clinic held at a satellite, temporary, or off- site location, contact your organization and/or DHA-IHD for further guidance.

**REGULATIONS AND POLICIES:**

- The Joint Regulation (Army Regulation 40–562; BUMEDINST 6230.15B; AFI 48–110_IP; CG COMDTINST M6230.4G - *Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases*) - http://www.health.mil/JointImmRegulation
- The 8 Standards for Military Immunization - https://health.mil/immunizationstandards
- Vaccine Recommendations by AOR - https://health.mil/CCMDvaccines
- Standing Orders - https://health.mil/standingorders
- The Defense Health Agency-Immunization Healthcare Division home page - https://health.mil/vaccines

**VACCINE INFORMATION/EDUCATION**

- Vaccine Information Statements (VISs) - https://health.mil/VIS
- Manufacturer's product information/package inserts - https://health.mil/packageinserts
- Information Papers - https://health.mil/vaccineinfopapers

**VACCINE STORAGE, HANDLING, AND ADMINISTRATION:**

- Vaccine storage and handling:
  - CDC Toolkit - https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf
  - DHA-IHD Vaccine Storage and Handling Guide - https://health.mil/vaccineshguide
  - DHA-IHD Immunization Tool Kit - https://health.mil/Imm_Toolkit
- Cold Chain Management:
  - DHA-IHD - https://health.mil/coldchain
  - USAMMA - https://www.amlc.army.mil/USAMMA/Logistics/Distribution-Operations-Center-Vaccine/
- Vaccine administration:
  - ACIP guidelines - https://health.mil/ACIPguidelines
  - https://www.cdc.gov/vaccines/hcp/admin/admin-protocols.html
  - https://www.cdc.gov/vaccines/pubs/pinkbook/index.html
  - https://www.cdc.gov/vaccines/hcp/admin/resource-library.html

**SCREENING/RECORDKEEPING:**

- Pediatric and Adult Influenza Screening and Immunization Documentation - https://health.mil/fluscreening
- DD Form 3110 Routine Immunization Screening Form: Pediatric - https://health.mil/pediatricscreening
- DD Form 3111: Routine Immunization Screening Form: Adult - https://health.mil/adultscreening
- Immunization Tracking Systems Resources - https://health.mil//ITS
- DHA Form 207 COVID Screening Form - https://health.mil/covidscreening

**TRAINING:**

- Initial/Annual Competency Checklist (Adult & Pediatric: Influenza) - https://health.mil/flucompetency
- Initial/Annual Competency Checklist (Adult & Pediatric) - https://health.mil/immscompetency
- JKO Immunization training - https://health.mil/IHBonlinetraining

**SAFETY/ADVERSE EVENTS:**

- https://www.cdc.gov/injectionsafety/providers.html
- https://health.mil/vaccinesafety
- Medical management of vaccine reactions in adults - http://www.immunize.org/catg.d/p3082.pdf
- Reporting an adverse event: VAERS - http://vaers.hhs.gov

**SMALLPOX RESOURCES:**

- https://health.mil/smallpoxresourcecenter

**COVID-19 RESOURCES:**

- https://health.mil/COVID19vaccineresources_HCP

This checklist is a valuable resource for use in temporary mass vaccination clinics and other vaccination exercises, such as those conducted in an operational environment or aid stations as part of force health protection or public health emergency preparedness (PHEP) program activities.

Medical waste disposal is regulated by DoD and state environmental agencies. Contact your installation or state immunization program/ environmental agency to ensure that your disposal procedures comply with state and federal regulations.

# Recommended Immunization Schedules for Persons Aged 0 through 18 years

United States, 2024

# Recommended Child and Adolescent Immunization Schedule
## for ages 18 years or younger

UNITED STATES
2024

### Vaccines and Other Immunizing Agents in the Child and Adolescent Immunization Schedule*

| Monoclonal antibody | Abbreviation(s) | Trade name(s) |
|---|---|---|
| Respiratory syncytial virus monoclonal antibody (Nirsevimab) | **RSV-mAb** | Beyfortus™ |
| **Vaccine** | **Abbreviation(s)** | **Trade name(s)** |
| COVID-19 | **1vCOV-mRNA** | Comirnaty®/Pfizer-BioNTech COVID-19 Vaccine |
| | | Spikevax®/Moderna COVID-19 Vaccine |
| | **1vCOV-aPS** | Novavax COVID-19 Vaccine |
| Dengue vaccine | **DEN4CYD** | Dengvaxia® |
| Diphtheria, tetanus, and acellular pertussis vaccine | **DTaP** | Daptacel®<br>Infanrix® |
| *Haemophilus influenzae* type b vaccine | **Hib (PRP-T)** | ActHIB®<br>Hiberix® |
| | **Hib (PRP-OMP)** | PedvaxHIB® |
| Hepatitis A vaccine | **HepA** | Havrix®<br>Vaqta® |
| Hepatitis B vaccine | **HepB** | Engerix-B®<br>Recombivax HB® |
| Human papillomavirus vaccine | **HPV** | Gardasil 9® |
| Influenza vaccine (inactivated) | **IIV4** | Multiple |
| Influenza vaccine (live, attenuated) | **LAIV4** | FluMist® Quadrivalent |
| Measles, mumps, and rubella vaccine | **MMR** | M-M-R II®<br>Priorix® |
| Meningococcal serogroups A, C, W, Y vaccine | **MenACWY-CRM** | Menveo® |
| | **MenACWY-TT** | MenQuadfi® |
| Meningococcal serogroup B vaccine | **MenB-4C** | Bexsero® |
| | **MenB-FHbp** | Trumenba® |
| Meningococcal serogroup A, B, C, W, Y vaccine | **MenACWY-TT/ MenB-FHbp** | Penbraya™ |
| Mpox vaccine | **Mpox** | Jynneos® |
| Pneumococcal conjugate vaccine | **PCV15**<br>**PCV20** | Vaxneuvance™<br>Prevnar 20® |
| Pneumococcal polysaccharide vaccine | **PPSV23** | Pneumovax 23® |
| Poliovirus vaccine (inactivated) | **IPV** | Ipol® |
| Respiratory syncytial virus vaccine | **RSV** | Abrysvo™ |
| Rotavirus vaccine | **RV1**<br>**RV5** | Rotarix®<br>RotaTeq® |
| Tetanus, diphtheria, and acellular pertussis vaccine | **Tdap** | Adacel®<br>Boostrix® |
| Tetanus and diphtheria vaccine | **Td** | Tenivac®<br>Tdvax™ |
| Varicella vaccine | **VAR** | Varivax® |
| **Combination vaccines** *(use combination vaccines instead of separate injections when appropriate)* | | |
| DTaP, hepatitis B, and inactivated poliovirus vaccine | **DTaP-HepB-IPV** | Pediarix® |
| DTaP, inactivated poliovirus, and *Haemophilus influenzae* type b vaccine | **DTaP-IPV/Hib** | Pentacel® |
| DTaP and inactivated poliovirus vaccine | **DTaP-IPV** | Kinrix®<br>Quadracel® |
| DTaP, inactivated poliovirus, *Haemophilus influenzae* type b, and hepatitis B vaccine | **DTaP-IPV-Hib-HepB** | Vaxelis® |
| Measles, mumps, rubella, and varicella vaccine | **MMRV** | ProQuad® |

*Administer recommended vaccines if immunization history is incomplete or unknown. Do not restart or add doses to vaccine series for extended intervals between doses. When a vaccine is not administered at the recommended age, administer at a subsequent visit. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

11/16/2023

## How to use the child and adolescent immunization schedule

**1** Determine recommended vaccine by age **(Table 1)**

**2** Determine recommended interval for catch-up vaccination **(Table 2)**

**3** Assess need for additional recommended vaccines by medical condition or other indication **(Table 3)**

**4** Review vaccine types, frequencies, intervals, and considerations for special situations **(Notes)**

**5** Review contraindications and precautions for vaccine types **(Appendix)**

**6** Review new or updated ACIP guidance **(Addendum)**

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American Academy of Pediatrics (www.aap.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), American College of Nurse-Midwives (www.midwife.org), American Academy of Physician Associates (www.aapa.org), and National Association of Pediatric Nurse Practitioners (www.napnap.org).

### Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to your state or local health department
- Clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or 800-822-7967

### Questions or comments

Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), in English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays

Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html

### Helpful information

- Complete Advisory Committee on Immunization Practices (ACIP) recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- ACIP Shared Clinical Decision-Making Recommendations: www.cdc.gov/vaccines/acip/acip-scdm-faqs.html
- *General Best Practice Guidelines for Immunization* (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual

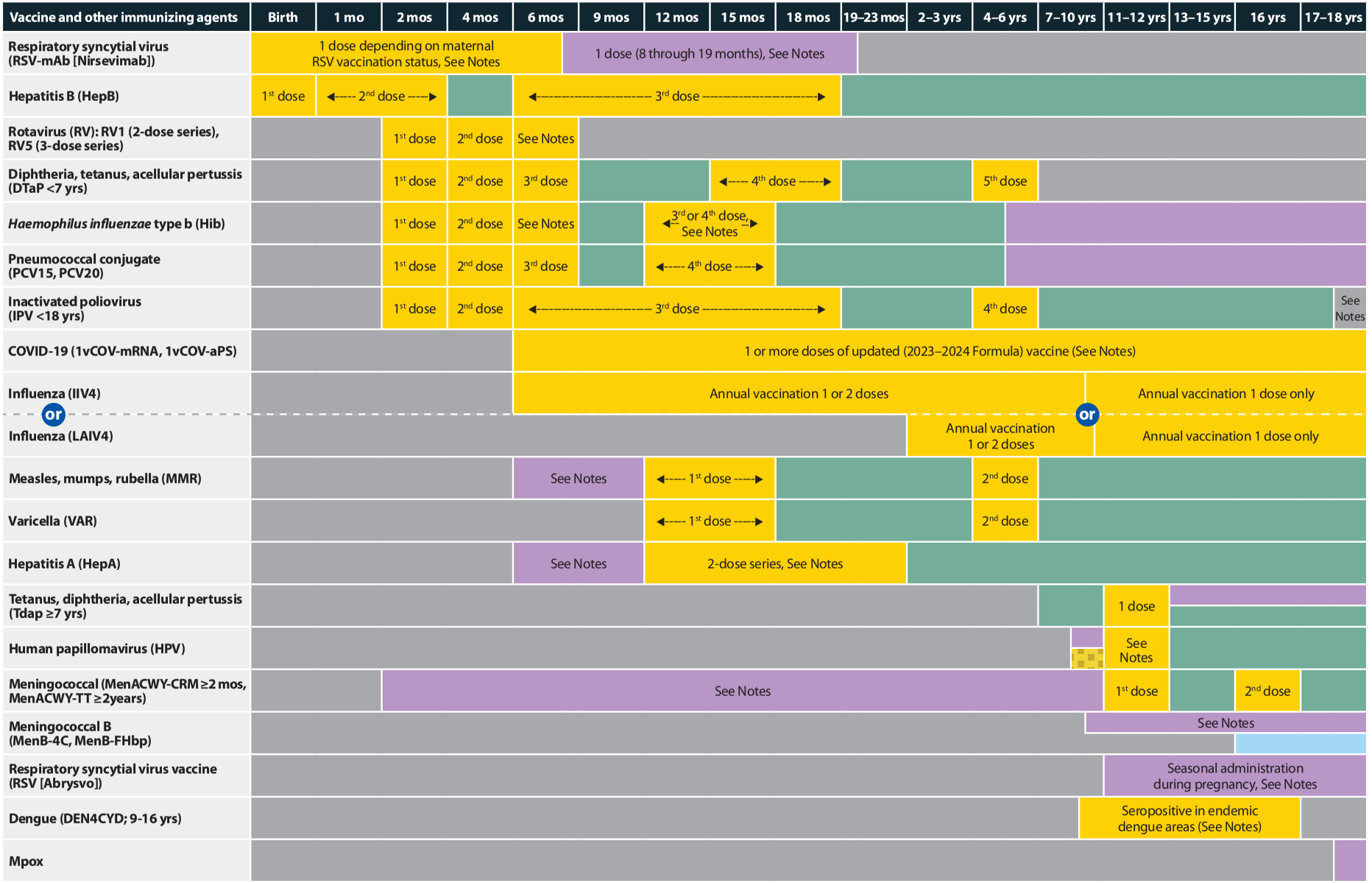
**U.S. Department of Health and Human Services**
Centers for Disease Control and Prevention

Scan QR code for access to online schedule

CS310020-D

# Table 1 Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2024

**These recommendations must be read with the notes that follow.** For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars.
To determine minimum intervals between doses, see the catch-up schedule (Table 2).



# Table 2 Recommended Catch-up Immunization Schedule for Children and Adolescents Who Start Late or Who Are More than 1 Month Behind, United States, 2024

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. **Always use this table in conjunction with Table 1 and the Notes that follow.**

| Children age 4 months through 6 years | | | | | |
|---|---|---|---|---|---|
| **Vaccine** | **Minimum Age for Dose 1** | **Minimum Interval Between Doses** | | | |
| | | **Dose 1 to Dose 2** | **Dose 2 to Dose 3** | **Dose 3 to Dose 4** | **Dose 4 to Dose 5** |
| Hepatitis B | Birth | **4 weeks** | **8 weeks *and* at least 16 weeks after first dose**<br>minimum age for the final dose is 24 weeks | | |
| Rotavirus | 6 weeks<br>Maximum age for first dose is 14 weeks, 6 days. | **4 weeks** | **4 weeks**<br>maximum age for final dose is 8 months, 0 days | | |
| Diphtheria, tetanus, and acellular pertussis | 6 weeks | **4 weeks** | **4 weeks** | **6 months** | **6 months**<br>A fifth dose is not necessary if the fourth dose was administered at age 4 years or older ***and*** at least 6 months after dose 3 |
| *Haemophilus influenzae* type b | 6 weeks | **No further doses needed**<br>if first dose was administered at age 15 months or older.<br>**4 weeks**<br>if first dose was administered before the 1st birthday.<br>**8 weeks (as final dose)**<br>if first dose was administered at age 12 through 14 months. | **No further doses needed**<br>if previous dose was administered at age 15 months or older<br>**4 weeks**<br>if current age is younger than 12 months ***and*** first dose was administered at younger than age 7 months ***and*** at least 1 previous dose was PRP-T (ActHib®, Pentacel®, Hiberix®), Vaxelis® or unknown<br>**8 weeks *and* age 12 through 59 months (as final dose)**<br>if current age is younger than 12 months ***and*** first dose was administered at age 7 through 11 months; **OR**<br>if current age is 12 through 59 months ***and*** first dose was administered before the 1st birthday ***and*** second dose was administered at younger than 15 months; **OR**<br>if both doses were PedvaxHIB® and were administered before the 1st birthday | **8 weeks (as final dose)**<br>This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday. | |
| Pneumococcal conjugate | 6 weeks | **No further doses needed** for healthy children if first dose was administered at age 24 months or older<br>**4 weeks**<br>if first dose was administered before the 1st birthday<br>**8 weeks (as final dose for healthy children)**<br>if first dose was administered at the 1st birthday or after | **No further doses needed**<br>for healthy children if previous dose was administered at age 24 months or older<br>**4 weeks**<br>if current age is younger than 12 months ***and*** previous dose was administered at <7 months old<br>**8 weeks (as final dose for healthy children)**<br>if previous dose was administered between 7–11 months (wait until at least 12 months old); **OR**<br>if current age is 12 months or older ***and*** at least 1 dose was administered before age 12 months | **8 weeks (as final dose)**<br>This dose is only necessary for children age 12 through 59 months regardless of risk, or age 60 through 71 months with any risk, who received 3 doses before age 12 months. | |
| Inactivated poliovirus | 6 weeks | **4 weeks** | **4 weeks**<br>if current age is <4 years<br>**6 months (as final dose)**<br>if current age is 4 years or older | **6 months (minimum age 4 years for final dose)** | |
| Measles, mumps, rubella | 12 months | **4 weeks** | | | |
| Varicella | 12 months | **3 months** | | | |
| Hepatitis A | 12 months | **6 months** | | | |
| Meningococcal ACWY | 2 months MenACWY-CRM<br>2 years MenACWY-TT | **8 weeks** | See Notes | See Notes | |
| **Children and adolescents age 7 through 18 years** | | | | | |
| Meningococcal ACWY | Not applicable (N/A) | **8 weeks** | | | |
| Tetanus, diphtheria; tetanus, diphtheria, and acellular pertussis | 7 years | **4 weeks** | **4 weeks**<br>if first dose of DTaP/DT was administered before the 1st birthday<br>**6 months (as final dose)**<br>if first dose of DTaP/DT or Tdap/Td was administered at or after the 1st birthday | **6 months**<br>if first dose of DTaP/DT was administered before the 1st birthday | |
| Human papillomavirus | 9 years | **Routine dosing intervals are recommended.** | | | |
| Hepatitis A | N/A | **6 months** | | | |
| Hepatitis B | N/A | **4 weeks** | **8 weeks *and* at least 16 weeks after first dose** | | |
| Inactivated poliovirus | N/A | **4 weeks** | **6 months**<br>A fourth dose is not necessary if the third dose was administered at age 4 years or older ***and*** at least 6 months after the previous dose. | A fourth dose of IPV is indicated if all previous doses were administered at <4 years **OR** if the third dose was administered <6 months after the second dose. | |
| Measles, mumps, rubella | N/A | **4 weeks** | | | |
| Varicella | N/A | **3 months** if younger than age 13 years.<br>**4 weeks** if age 13 years or older | | | |
| Dengue | 9 years | **6 months** | 6 months | | |

# Table 3 Recommended Child and Adolescent Immunization Schedule by Medical Indication, United States, 2024

**Always use this table in conjunction with Table 1 and the Notes that follow. Medical conditions are often not mutually exclusive. If multiple conditions are present, refer to guidance in all relevant columns. See Notes for medical conditions not listed.**

| Vaccine and other immunizing agents | Pregnancy | Immunocompromised (excluding HIV infection) | HIV infection CD4 percentage and count[a] | | CSF leak or cochlear implant | Asplenia or persistent complement component deficiencies | Heart disease or chronic lung disease | Kidney failure, End-stage renal disease or on Dialysis | Chronic liver disease | Diabetes |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | <15% or <200mm | ≥15% and ≥200mm | | | | | | |
| RSV-mAb (nirsevimab) | | 2nd RSV season | | 1 dose depending on maternal RSV vaccination status, See Notes | | | 2nd RSV season for chronic lung disease (See Notes) | 1 dose depending on maternal RSV vaccination status, See Notes | | |
| Hepatitis B | | | | | | | | | | |
| Rotavirus | | SCID[b] | | | | | | | | |
| DTaP/Tdap | DTaP<br>Tdap: 1 dose each pregnancy | | | | | | | | | |
| Hib | | HSCT: 3 doses | See Notes | | | See Notes | | | | |
| Pneumococcal | | | | | | | | | | |
| IPV | | | | | | | | | | |
| COVID-19 | | See Notes | | | | | | | | |
| IIV4 | | | | | | | | | | |
| LAIV4 | | | | | | | Asthma, wheezing: 2–4 years[c] | | | |
| MMR | * | | | | | | | | | |
| VAR | * | | | | | | | | | |
| Hepatitis A | | | | | | | | | | |
| HPV | * | 3 dose series. See Notes | | | | | | | | |
| MenACWY | | | | | | | | | | |
| MenB | | | | | | | | | | |
| RSV (Abrysvo) | Seasonal administration, See Notes | | | | | | | | | |
| Dengue | | | | | | | | | | |
| Mpox | See Notes | | | | | | | | | |

Recommended for all age-eligible children who lack documentation of a complete vaccination series

Not recommended for all children, but is recommended for some children based on increased risk for or severe outcomes from disease

Recommended for all age-eligible children, and additional doses may be necessary based on medical condition or other indications. See Notes.

Precaution: Might be indicated if benefit of protection outweighs risk of adverse reaction

Contraindicated or not recommended
*Vaccinate after pregnancy, if indicated

No Guidance/ Not Applicable

**a.** For additional information regarding HIV laboratory parameters and use of live vaccines, see the General Best Practice Guidelines for Immunization, "Altered Immunocompetence," at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html and Table 4-1 (footnote J) at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.

**b.** Severe Combined Immunodeficiency

**c.** LAIV4 contraindicated for children 2–4 years of age with asthma or wheezing during the preceding 12 months

# Notes

## Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2024

For vaccination recommendations for persons ages 19 years or older, see the Recommended Adult Immunization Schedule, 2024.

### Additional information

- For calculating intervals between doses, 4 weeks = 28 days. Intervals of ≥4 months are determined by calendar months.
- Within a number range (e.g., 12–18), a dash (–) should be read as "through."
- Vaccine doses administered ≤4 days before the minimum age or interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum age or minimum interval should not be counted as valid and should be repeated as age appropriate. **The repeat dose should be spaced after the invalid dose by the recommended minimum interval.** For further details, see Table 3-2, Recommended and minimum ages and intervals between vaccine doses, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/timing.html.
- Information on travel vaccination requirements and recommendations is available at www.cdc.gov/travel/.
- For vaccination of persons with immunodeficiencies, see Table 8-1, Vaccination of persons with primary and secondary immunodeficiencies, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html, and Immunization in Special Clinical Circumstances (In: Kimberlin DW, Barnett ED, Lynfield Ruth, Sawyer MH, eds. *Red Book: 2021–2024 Report of the Committee on Infectious Diseases*. 32nd ed. Itasca, IL: American Academy of Pediatrics; 2021:72–86).
- For information about vaccination in the setting of a vaccine-preventable disease outbreak, contact your state or local health department.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All vaccines included in the child and adolescent vaccine schedule are covered by VICP except dengue, PPSV23, RSV, Mpox and COVID-19 vaccines. Mpox and COVID-19 vaccines are covered by the Countermeasures Injury Compensation Program (CICP). For more information, see www.hrsa.gov/vaccinecompensation or www.hrsa.gov/cicp.

### COVID-19 vaccination

(minimum age: 6 months [Moderna and Pfizer-BioNTech COVID-19 vaccines], 12 years [Novavax COVID-19 Vaccine])

### Routine vaccination

**Age 6 months–4 years**

- **Unvaccinated:**
  - 2-dose series of updated (2023–2024 Formula) Moderna at 0, 4-8 weeks
  - 3-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 3-8, 11-16 weeks
- **Previously vaccinated* with 1 dose of any Moderna:** 1 dose of updated (2023–2024 Formula) Moderna 4-8 weeks after the most recent dose.
- **Previously vaccinated* with 2 or more doses of any Moderna:** 1 dose of updated (2023–2024 Formula) Moderna at least 8 weeks after the most recent dose.
- **Previously vaccinated* with 1 dose of any Pfizer-BioNTech:** 2-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 8 weeks (minimum interval between previous Pfizer-BioNTech and dose 1: 3-8 weeks).
- **Previously vaccinated* with 2 or more doses of any Pfizer-BioNTech:** 1 dose of updated (2023–2024 Formula) Pfizer-BioNTech at least 8 weeks after the most recent dose.

**Age 5–11 years**

- **Unvaccinated:** 1 dose of updated (2023–2024 Formula) Moderna or Pfizer-BioNTech vaccine.
- **Previously vaccinated* with 1 or more doses of Moderna or Pfizer-BioNTech:** 1 dose of updated (2023–2024 Formula) Moderna or Pfizer-BioNTech at least 8 weeks after the most recent dose.

**Age 12–18 years**

- **Unvaccinated:**
  - 1 dose of updated (2023–2024 Formula) Moderna or Pfizer-BioNTech vaccine
  - 2-dose series of updated (2023–2024 Formula) Novavax at 0, 3-8 weeks
- **Previously vaccinated* with any COVID-19 vaccine(s):** 1 dose of any updated (2023–2024 Formula) COVID-19 vaccine at least 8 weeks after the most recent dose.

### Special situations

Persons who are moderately or severely immunocompromised**

**Age 6 months–4 years**

- **Unvaccinated:**
  - 3-dose series of updated (2023–2024 Formula) Moderna at 0, 4, 8 weeks
  - 3-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 3, 11 weeks.
- **Previously vaccinated* with 1 dose of any Moderna:** 2-dose series of updated (2023–2024 Formula) Moderna at 0, 4 weeks (minimum interval between previous Moderna and dose 1: 4 weeks).
- **Previously vaccinated* with 2 doses of any Moderna:** 1 dose of updated (2023–2024 Formula) Moderna at least 4 weeks after the most recent dose.
- **Previously vaccinated* with 3 or more doses of any Moderna:** 1 dose of updated (2023–2024 Formula) Moderna at least 8 weeks after the most recent dose.
- **Previously vaccinated* with 1 dose of any Pfizer-BioNTech:** 2-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 8 weeks (minimum interval between previous Pfizer-BioNTech and dose 1: 3 weeks).
- **Previously vaccinated* with 2 or more doses of any Pfizer-BioNTech:** 1 dose of updated (2023–2024 Formula) Pfizer-BioNTech at least 8 weeks after the most recent dose.

**Age 5–11 years**

- **Unvaccinated:**
  - 3-dose series of updated (2023–2024 Formula) Moderna at 0, 4, 8 weeks
  - 3-dose series updated (2023–2024 Formula) Pfizer-BioNTech at 0, 3, 7 weeks.
- **Previously vaccinated* with 1 dose of any Moderna:** 2-dose series of updated (2023–2024 Formula) Moderna at 0, 4 weeks (minimum interval between previous Moderna and dose 1: 4 weeks).
- **Previously vaccinated* with 2 doses of any Moderna:** 1 dose of updated (2023–2024 Formula) Moderna at least 4 weeks after the most recent dose.
- **Previously vaccinated* with 1 dose of any Pfizer-BioNTech:** 2-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 4 weeks (minimum interval between previous Pfizer-BioNTech and dose 1: 3 weeks)
- **Previously vaccinated* with 2 doses of any Pfizer-BioNTech:** 1 dose of 2023–2024 Pfizer-BioNTech at least 4 weeks after the most recent dose.

- **Previously vaccinated* with 3 or more doses of any Moderna or Pfizer-BioNTech:** 1 dose of updated (2023–2024 Formula) Moderna or Pfizer-BioNTech at least 8 weeks after the most recent dose.

**Age 12–18 years**

- **Unvaccinated:**
  - 3-dose series of updated (2023–2024 Formula) Moderna at 0, 4, 8 weeks
  - 3-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 3, 7 weeks
  - 2-dose series of updated (2023–2024 Formula) Novavax at 0, 3 weeks
- **Previously vaccinated* with 1 dose of any Moderna:** 2-dose series of updated (2023–2024 Formula) Moderna at 0, 4 weeks (minimum interval between previous Moderna dose and dose 1: 4 weeks).
- **Previously vaccinated* with 2 doses of any Moderna:** 1 dose of updated (2023–2024 Formula) Moderna at least 4 weeks after the most recent dose.
- **Previously vaccinated* with 1 dose of any Pfizer-BioNTech:** 2-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 4 weeks (minimum interval between previous Pfizer-BioNTech dose and dose 1: 3 weeks).
- **Previously vaccinated* with 2 doses of any Pfizer-BioNTech:** 1 dose of updated (2023–2024 Formula) Pfizer-BioNTech at least 4 weeks after the most recent dose.
- **Previously vaccinated* with 3 or more doses of any Moderna or Pfizer-BioNTech:** 1 dose of any updated (2023–2024 Formula) COVID-19 vaccine at least 8 weeks after the most recent dose.
- **Previously vaccinated* with 1 or more doses of Janssen or Novavax or with or without dose(s) of any Original monovalent or bivalent COVID-19 vaccine:** 1 dose of any updated (2023–2024 Formula) COVID-19 vaccine at least 8 weeks after the most recent dose.

There is no preferential recommendation for the use of one COVID-19 vaccine over another when more than one recommended age-appropriate vaccine is available.

Administer an age-appropriate COVID-19 vaccine product for each dose. For information about transition from age 4 years to age 5 years or age 11 years to age 12 years during COVID-19 vaccination series, see Tables 1 and 2 at www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#covid-vaccines.

Current COVID-19 schedule and dosage formulation available at www.cdc.gov/covidschedule. For more information on Emergency Use Authorization (EUA) indications for COVID-19 vaccines, see www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines

***Note:** Previously vaccinated is defined as having received any Original monovalent or bivalent COVID-19 vaccine (Janssen, Moderna, Novavax, Pfizer-BioNTech) prior to the updated 2023–2024 formulation.

****Note:** Persons who are moderately or severely immunocompromised have the option to receive one additional dose of updated (2023–2024 Formula) COVID-19 vaccine at least 2 months following the last recommended updated (2023–2024 Formula) COVID-19 vaccine dose. Further additional updated (2023–2024 Formula) COVID-19 vaccine dose(s) may be administered, informed by the clinical judgement of a healthcare provider and personal preference and circumstances. Any further additional doses should be administered at least 2 months after the last updated (2023–2024 Formula) COVID-19 vaccine dose. Moderately or severely immunocompromised children 6 months–4 years of age should receive homologous updated (2023–2024 Formula) mRNA vaccine dose(s) if they receive additional doses.

## Dengue vaccination (minimum age: 9 years)

### Routine vaccination

- Age 9–16 years living in areas with endemic dengue **AND** have laboratory confirmation of previous dengue infection
  - 3-dose series administered at 0, 6, and 12 months
- Endemic areas include Puerto Rico, American Samoa, US Virgin Islands, Federated States of Micronesia, Republic of Marshall Islands, and the Republic of Palau. For updated guidance on dengue endemic areas and pre-vaccination laboratory testing see www.cdc.gov/mmwr/volumes/70/rr/rr7006a1.htm?s_cid=rr7006a1_w and www.cdc.gov/dengue/vaccine/hcp/index.html
- Dengue vaccine should not be administered to children traveling to or visiting endemic dengue areas.

## Diphtheria, tetanus, and pertussis (DTaP) vaccination (minimum age: 6 weeks [4 years for Kinrix® or Quadracel®])

### Routine vaccination

- 5-dose series (3-dose primary series at age 2, 4, and 6 months, followed by a booster doses at ages 15–18 months and 4–6 years
  - **Prospectively:** Dose 4 may be administered as early as age 12 months if at least 6 months have elapsed since dose 3.
  - **Retrospectively:** A 4th dose that was inadvertently administered as early as age 12 months may be counted if at least 4 months have elapsed since dose 3.

### Catch-up vaccination

- Dose 5 is not necessary if dose 4 was administered at age 4 years or older and at least 6 months after dose 3.
- For other catch-up guidance, see Table 2.

### Special situations

- **Wound management** in children less than age 7 years with history of 3 or more doses of tetanus-toxoid-containing vaccine: For all wounds except clean and minor wounds, administer DTaP if more than 5 years since last dose of tetanus-toxoid-containing vaccine. For detailed information, see www.cdc.gov/mmwr/volumes/67/rr/rr6702a1.htm.

## Haemophilus influenzae type b vaccination (minimum age: 6 weeks)

### Routine vaccination

- **ActHIB®, Hiberix®, Pentacel®, or Vaxelis®:** 4-dose series (3-dose primary series at age 2, 4, and 6 months, followed by a booster dose* at age 12–15 months)
  - *Vaxelis® is not recommended for use as a booster dose. A different Hib-containing vaccine should be used for the booster dose.
- **PedvaxHIB®:** 3-dose series (2-dose primary series at age 2 and 4 months, followed by a booster dose at age 12–15 months)

### Catch-up vaccination

- **Dose 1 at age 7–11 months:** Administer dose 2 at least 4 weeks later and dose 3 (final dose) at age12–15 months or 8 weeks after dose 2 (whichever is later).
- **Dose 1 at age 12–14 months:** Administer dose 2 (final dose) at least 8 weeks after dose 1.
- **Dose 1 before age 12 months and dose 2 before age 15 months:** Administer dose 3 (final dose) at least 8 weeks after dose 2.
- **2 doses of PedvaxHIB® before age 12 months:** Administer dose 3 (final dose) at age12–59 months and at least 8 weeks after dose 2.
- **1 dose administered at age 15 months or older:** No further doses needed
- **Unvaccinated at age 15–59 months:** Administer 1 dose.

- **Previously unvaccinated children age 60 months or older who are not considered high risk:** Do not require catch-up vaccination

For other catch-up guidance, see Table 2. Vaxelis® can be used for catch-up vaccination in children less than age 5 years. Follow the catch-up schedule even if Vaxelis® is used for one or more doses. For detailed information on use of Vaxelis® see www.cdc.gov/mmwr/volumes/69/wr/mm6905a5.htm.

### Special situations

- **Chemotherapy or radiation treatment:**
  **Age 12–59 months**
  - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
  - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

  *Doses administered within 14 days of starting therapy or during therapy should be repeated at least 3 months after therapy completion.*
- **Hematopoietic stem cell transplant (HSCT):**
  - 3-dose series 4 weeks apart starting 6 to 12 months after successful transplant, regardless of Hib vaccination history
- **Anatomic or functional asplenia (including sickle cell disease):**
  **Age 12–59 months**
  - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
  - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

  ***Unvaccinated* persons age 5 years or older***
  - 1 dose
- **Elective splenectomy:**
  ***Unvaccinated* persons age 15 months or older***
  - 1 dose (preferably at least 14 days before procedure)
- **HIV infection:**
  **Age 12–59 months**
  - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
  - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

  ***Unvaccinated* persons age 5–18 years***
  - 1 dose
- **Immunoglobulin deficiency, early component complement deficiency:**
  **Age 12–59 months**
  - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
  - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

**Unvaccinated* = Less than routine series (through age 14 months) **OR** no doses (age 15 months or older)*

## Hepatitis A vaccination
(minimum age: 12 months for routine vaccination)

### Routine vaccination

- 2-dose series (minimum interval: 6 months) at age 12–23 months

### Catch-up vaccination

- Unvaccinated persons through age 18 years should complete a 2-dose series (minimum interval: 6 months).
- Persons who previously received 1 dose at age 12 months or older should receive dose 2 at least 6 months after dose 1.
- Adolescents age 18 years or older may receive the combined HepA and HepB vaccine, **Twinrix®**, as a 3-dose series (0, 1, and 6 months) or 4-dose series (3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months).

### International travel

- Persons traveling to or working in countries with high or intermediate endemic hepatitis A (www.cdc.gov/travel/):
  - **Infants age 6–11 months**: 1 dose before departure; revaccinate with 2 doses (separated by at least 6 months) between age 12–23 months.
  - **Unvaccinated age 12 months or older**: Administer dose 1 as soon as travel is considered.

## Hepatitis B vaccination
(minimum age: birth)

### Routine vaccination

- 3-dose series at age 0, 1–2, 6–18 months **(use monovalent HepB vaccine for doses administered before age 6 weeks)**
  - Birth weight ≥2,000 grams: 1 dose within 24 hours of birth if medically stable
  - Birth weight <2,000 grams: 1 dose at chronological age 1 month or hospital discharge (whichever is earlier and even if weight is still <2,000 grams).
- Infants who did not receive a birth dose should begin the series as soon as possible (see Table 2 for minimum intervals).
- Administration of 4 doses is permitted when a combination vaccine containing HepB is used after the birth dose.
- **Minimum intervals (see Table 2):** when 4 doses are administered, substitute "dose 4" for "dose 3" in these calculations
- **Final (3rd or 4th) dose:** age 6–18 months **(minimum age 24 weeks)**
- **Mother is HBsAg-positive**
  - **Birth dose (monovalent HepB vaccine only):** administer **HepB vaccine** and **hepatitis B immune globulin (HBIG)** (in separate limbs) within 12 hours of birth, regardless of birth weight.
  - **Birth weight <2000 grams:** administer 3 additional doses of HepB vaccine beginning at age 1 month (total of 4 doses)
  - **Final (3rd or 4th) dose:** administer at age 6 months **(minimum age 24 weeks)**
  - Test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose. Do not test before age 9 months.
- **Mother is HBsAg-unknown**

  If other evidence suggestive of maternal hepatitis B infection exists (e.g., presence of HBV DNA, HBeAg-positive, or mother known to have chronic hepatitis B infection), manage infant as if mother is HBsAg-positive
  - **Birth dose (monovalent HepB vaccine only):**
    - Birth weight ≥2,000 grams: administer **HepB vaccine** within 12 hours of birth. Determine mother's HBsAg status as soon as possible. If mother is determined to be HBsAg-positive, administer **HBIG** as soon as possible (in separate limb), but no later than 7 days of age.
    - Birth weight <2,000 grams: administer **HepB vaccine** and **HBIG** (in separate limbs) within 12 hours of birth. Administer 3 additional doses of **HepB vaccine** beginning at age 1 month (total of 4 doses)
  - **Final (3rd or 4th) dose:** administer at age 6 months **(minimum age 24 weeks)**
  - If mother is determined to be HBsAg-positive or if status remains unknown, test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose. Do not test before age 9 months.

### Catch-up vaccination

- Unvaccinated persons should complete a 3-dose series at 0, 1–2, 6 months. See Table 2 for minimum intervals
- Adolescents age 11–15 years may use an alternative 2-dose schedule with at least 4 months between doses (adult formulation **Recombivax HB®** only).
- Adolescents age 18 years may receive:
  - **Heplisav-B®:** 2-dose series at least 4 weeks apart
  - **PreHevbrio®:** 3-dose series at 0, 1, and 6 months
  - Combined HepA and HepB vaccine, **Twinrix®:** 3-dose series (0, 1, and 6 months) or 4-dose series (3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months).

### Special situations

- Revaccination is not generally recommended for persons with a normal immune status who were vaccinated as infants, children, adolescents, or adults.
- **Post-vaccination serology testing and revaccination** (if anti-HBs <10mIU/mL) is recommended for certain populations, including:
  - Infants born to HBsAg-positive mothers
  - Persons who are predialysis or on maintenance dialysis
  - Other immunocompromised persons
  - For detailed revaccination recommendations, see www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html.

**Note:** Heplisav-B and PreHevbrio are not recommended in pregnancy due to lack of safety data in pregnant persons

## Human papillomavirus vaccination (minimum age: 9 years)

### Routine and catch-up vaccination

- HPV vaccination routinely recommended at **age 11–12 years (can start at age 9 years)** and catch-up HPV vaccination recommended for all persons through age 18 years if not adequately vaccinated
- 2- or 3-dose series depending on age at initial vaccination:
  - **Age 9–14 years at initial vaccination**: 2-dose series at 0, 6–12 months (minimum interval: 5 months; repeat dose if administered too soon)
  - **Age 15 years or older at initial vaccination**: 3-dose series at 0, 1–2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon)
- No additional dose recommended when any HPV vaccine series **of any valency** has been completed using recommended dosing intervals.

### Special situations

- **Immunocompromising conditions, including HIV infection:** 3-dose series, even for those who initiate vaccination at age 9 through 14 years.
- **History of sexual abuse or assault:** Start at age 9 years
- **Pregnancy:** Pregnancy testing not needed before vaccination; HPV vaccination not recommended until after pregnancy; no intervention needed if vaccinated while pregnant

## Influenza vaccination (minimum age: 6 months [IIV], 2 years [LAIV4], 18 years [recombinant influenza vaccine, RIV4])

### Routine vaccination

- Use any influenza vaccine appropriate for age and health status annually:
  - **Age 6 months–8 years** who have received **fewer** than 2 influenza vaccine doses before July 1, 2023, or whose influenza vaccination history is unknown: 2 doses, separated by at least 4 weeks. Administer dose 2 even if the child turns 9 years between receipt of dose 1 and dose 2.
  - **Age 6 months–8 years** who have received **at least** 2 influenza vaccine doses before July 1, 2023: 1 dose
  - **Age 9 years or older:** 1 dose
- For the 2023-2024 season, see www.cdc.gov/mmwr/volumes/72/rr/rr7202a1.htm.
- For the 2024–25 season, see the 2024–25 ACIP influenza vaccine recommendations.

### Special situations

- **Close contacts (e.g., household contacts) of severely immunosuppressed persons who require a protected environment:** should not receive LAIV4. If LAIV4 is given, they should avoid contact with for such immunosuppressed persons for 7 days after vaccination.

**Note:** Persons with an egg allergy can receive any influenza vaccine (egg-based and non-egg-based) appropriate for age and health status.

## Measles, mumps, and rubella vaccination (minimum age: 12 months for routine vaccination)

### Routine vaccination

- 2-dose series at age 12–15 months, age 4–6 years
- MMR or MMRV* may be administered

***Note:*** For dose 1 in children age 12–47 months, it is recommended to administer MMR and varicella vaccines separately. MMRV* may be used if parents or caregivers express a preference.

### Catch-up vaccination

- Unvaccinated children and adolescents: 2-dose series at least 4 weeks apart*
- The maximum age for use of MMRV* is 12 years.

### Special situations

- **International travel**
  - **Infants age 6–11 months:** 1 dose before departure; revaccinate with 2-dose series at age 12–15 months (12 months for children in high-risk areas) and dose 2 as early as 4 weeks later.*
  - **Unvaccinated children age 12 months or older:** 2-dose series at least 4 weeks apart before departure*
- In mumps outbreak settings, for information about additional doses of MMR (including 3rd dose of MMR), see www.cdc.gov/mmwr/volumes/67/wr/mm6701a7.htm

***Note:** If MMRV is used, the minimum interval between MMRV doses is 3 months

## Meningococcal serogroup A,C,W,Y vaccination (minimum age: 2 months [MenACWY-CRM, Menveo], 2 years [MenACWY-TT, MenQuadfi]), 10 years [MenACWY-TT/MenB-FHbp, Penbraya])

### Routine vaccination

- 2-dose series at age 11–12 years; 16 years

### Catch-up vaccination

- Age 13–15 years: 1 dose now and booster at age 16–18 years (minimum interval: 8 weeks)
- Age 16–18 years: 1 dose

### Special situations

**Anatomic or functional asplenia (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use:**

- **Menveo®***
  - Dose 1 at age 2 months: 4-dose series (additional 3 doses at age 4, 6, and 12 months)
  - Dose 1 at age 3–6 months: 3- or 4-dose series (dose 2 [and dose 3 if applicable] at least 8 weeks after previous dose until a dose is received at age 7 months or older, followed by an additional dose at least 12 weeks later and after age 12 months)
  - Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
  - Dose 1 at age 24 months or older: 2-dose series at least 8 weeks apart
- **MenQuadfi®**
  - Dose 1 at age 24 months or older: 2-dose series at least 8 weeks apart

**Travel to countries with hyperendemic or epidemic meningococcal disease, including countries in the African meningitis belt or during the Hajj** (www.cdc.gov/travel/)**:**

- Children less than age 24 months:
  - **Menveo®* (age 2–23 months)**
    - Dose 1 at age 2 months: 4-dose series (additional 3 doses at age 4, 6, and 12 months)
    - Dose 1 at age 3–6 months: 3- or 4-dose series (dose 2 [and dose 3 if applicable] at least 8 weeks after previous dose until a dose is received at age 7 months or older, followed by an additional dose at least 12 weeks later and after age 12 months)
    - Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
- Children age 2 years or older: 1 dose Menveo®* or MenQuadfi®

**First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) or military recruits:**

- 1 dose **Menveo®*** or **MenQuadfi®**

**Adolescent vaccination of children who received MenACWY prior to age 10 years:**

- **Children for whom boosters are recommended** because of an ongoing increased risk of meningococcal disease (e.g., those with complement component deficiency, HIV, or asplenia): Follow the booster schedule for persons at increased risk.
- **Children for whom boosters are not recommended** (e.g., a healthy child who received a single dose for travel to a country where meningococcal disease is endemic): Administer MenACWY according to the recommended adolescent schedule with dose 1 at age 11–12 years and dose 2 at age 16 years.

**Menveo has two formulations: lyophilized and liquid. The liquid formulation should not be used before age 10 years. See www.cdc.gov/vaccines/vpd/mening/downloads/menveo-single-vial-presentation.pdf.*

**Note:** For MenACWY **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm.

Children age 10 years or older may receive a single dose of Penbraya™ as an alternative to separate administration of MenACWY and MenB when both vaccines would be given on the same clinic day (see "Meningococcal serogroup B vaccination" section below for more information).

## Meningococcal serogroup B vaccination (minimum age: 10 years [MenB-4C, Bexsero®; MenB-FHbp, Trumenba®; MenACWY-TT/MenB-FHbp, Penbraya™])

### Shared clinical decision-making

- **Adolescents not at increased risk** age 16–23 years (preferred age 16–18 years) based on shared clinical decision-making:
  - **Bexsero®:** 2-dose series at least 1 month apart
  - **Trumenba®:** 2-dose series at least 6 months apart (if dose 2 is administered earlier than 6 months, administer a 3rd dose at least 4 months after dose 2)

For additional information on shared clinical decision-making for MenB, see www.cdc.gov/vaccines/hcp/admin/downloads/isd-job-aid-scdm-mening-b-shared-clinical-decision-making.pdf

### Special situations

**Anatomic or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use:**

- **Bexsero®:** 2-dose series at least 1 month apart
- **Trumenba®:** 3-dose series at 0, 1–2, 6 months (if dose 2 was administered at least 6 months after dose 1, dose 3 not needed; if dose 3 is administered earlier than 4 months after dose 2, a 4th dose should be administered at least 4 months after dose 3)

**Note: Bexsero®** and **Trumenba®** are not interchangeable; the same product should be used for all doses in a series.

For MenB **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm.

Children age 10 years or older may receive a dose of Penbraya™ as an alternative to separate administration of MenACWY and MenB when both vaccines would be given on the same clinic day. For age-eligible children not at increased risk, if Penbraya™ is used for dose 1 MenB, MenB-FHbp (Trumenba) should be administered for dose 2 MenB. For age-eligible children at increased risk of meningococcal disease, Penbraya™ may be used for additional MenACWY and MenB doses (including booster doses) if both would be given on the same clinic day **and** at least 6 months have elapsed since most recent Penbraya™ dose.

## Mpox vaccination (minimum age: 18 years [Jynneos®])

### Special situations

- **Age 18 years and at risk for Mpox infection:** 2-dose series, 28 days apart.

  Risk factors for Mpox infection include:
  - Persons who are gay, bisexual, and other MSM, transgender or nonbinary people who in the past 6 months have had:
    - A new diagnosis of at least 1 sexually transmitted disease
    - More than 1 sex partner
    - Sex at a commercial sex venue
    - Sex in association with a large public event in a geographic area where Mpox transmission is occurring
  - Persons who are sexual partners of the persons described above
  - Persons who anticipate experiencing any of the situations described above
- **Pregnancy:** There is currently no ACIP recommendation for Jynneos use in pregnancy due to lack of safety data in pregnant persons. Pregnant persons with any risk factor described above may receive Jynneos.

For detailed information, see: www.cdc.gov/vaccines/acip/meetings/downloads/slides-2023-10-25-26/04-MPOX-Rao-508.pdf

## Pneumococcal vaccination (minimum age: 6 weeks [PCV15], [PCV 20]; 2 years [PPSV23])

### Routine vaccination with PCV

- 4-dose series at 2, 4, 6, 12–15 months

### Catch-up vaccination with PCV

- Healthy children ages 2–4 years with any incomplete* PCV series: 1 dose PCV
- For other catch-up guidance, see Table 2.

**Note:** For children **without** risk conditions, PCV20 is not indicated if they have received 4 doses of PCV13 or PCV15 or another age appropriate complete PCV series.

## Special situations

**Children and adolescents with cerebrospinal fluid leak; chronic heart disease; chronic kidney disease (excluding maintenance dialysis and nephrotic syndrome); chronic liver disease; chronic lung disease (including moderate persistent or severe persistent asthma); cochlear implant; or diabetes mellitus:**

**Age 2–5 years**

- Any incomplete* PCV series with:
  - 3 PCV doses: 1 dose PCV (at least 8 weeks after the most recent PCV dose)
  - Less than 3 PCV doses: 2 doses PCV (at least 8 weeks after the most recent dose and administered at least 8 weeks apart)
- Completed recommended PCV series but have not received PPSV23
  - Previously received at least 1 dose of PCV20: no further PCV or PPSV23 doses needed
  - Not previously received PCV20: administer 1 dose PCV20 OR 1 dose PPSV23 administer at least 8 weeks after the most recent PCV dose.

**Age 6–18 years**

- Not previously received any dose of PCV13, PCV15, or PCV20: administer 1 dose of PCV15 or PCV20. If PCV15 is used and no previous receipt of PPSV23, administer 1 dose of PPSV23 at least 8 weeks after the PCV15 dose.**
- Received PCV before age 6 years but have not received PPSV23
  - Previously received at least 1 dose of PCV20: no further PCV or PPSV23 doses needed
  - Not previously received PCV20: 1 dose PCV20 OR 1 dose PPSV23 administer at least 8 weeks after the most recent PCV dose.
- Received PCV13 only at or after age 6 years: administer 1 dose PCV20 OR 1 dose PPSV23 at least 8 weeks after the most recent PCV13 dose.
- Received 1 dose PCV13 and 1 dose PPSV23 at or after age 6 years: no further doses of any PCV or PPSV23 indicated.

**Children and adolescents on maintenance dialysis, or with immunocompromising conditions such as nephrotic syndrome; congenital or acquired asplenia or splenic dysfunction; congenital or acquired immunodeficiencies; diseases and conditions treated with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and solid organ transplant; HIV infection; or sickle cell disease or other hemoglobinopathies:**

**Age 2–5 years**

- Any incomplete* PCV series:
  - 3 PCV doses: 1 dose PCV (at least 8 weeks after the most recent PCV dose)
  - Less than 3 PCV doses: 2 doses PCV (at least 8 weeks after the most recent dose and administered at least 8 weeks apart)
- Completed recommended PCV series but have not received PPSV23
  - Previously received at least 1 dose of PCV20: no further PCV or PPSV23 doses needed
  - Not previously received PCV20: administer 1 dose PCV20 OR 1 dose PPSV23 at least 8 weeks after the most recent PCV dose. If PPSV23 is used, administer 1 dose of PCV20 or dose 2 PPSV23 at least 5 years after dose 1 PPSV23.

**Age 6–18 years**

- Not previously received any dose of PCV13, PCV15, or PCV20: administer 1 dose of PCV15 or 1 dose of PCV20. If PCV15 is used and no previous receipt of PPSV23, administer 1 dose of PPSV23 at least 8 weeks after the PCV15 dose.**
- Received PCV before age 6 years but have not received PPSV23
  - Previously received at least 1 dose of PCV20: no additional dose of PCV or PPSV23
  - Not previously received PCV20: administer 1 dose PCV20 OR 1 dose PPSV23 at least 8 weeks after the most recent PCV dose. If PPSV23 is used, administer either PCV20 or dose 2 PPSV23 at least 5 years after dose 1 PPSV23.
- Received PCV13 only at or after age 6 years: administer 1 dose PCV20 OR 1 dose PPSV23 at least 8 weeks after the most recent PCV13 dose. If PPSV23 is used, administer 1 dose of PCV20 or dose 2 PPSV23 at least 5 years after dose 1 PPSV23.
- Received 1 dose PCV13 and 1 dose PPSV23 at or after age 6 years: administer 1 dose PCV20 OR 1 dose PPSV23 at least 8 weeks after the most recent PCV13 dose and at least 5 years after dose 1 PPSV23.

**Incomplete series* = Not having received all doses in either the recommended series or an age-appropriate catch-up series. See Table 2 in ACIP pneumococcal recommendations at stacks.cdc.gov/view/cdc/133252

***When both PCV15 and PPSV23 are indicated, administer all doses of PCV15 first. PCV15 and PPSV23 should not be administered during the same visit.*

For guidance on determining which pneumococcal vaccines a patient needs and when, please refer to the mobile app, which can be downloaded here: www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html

## Poliovirus vaccination
(minimum age: 6 weeks)

### Routine vaccination

- 4-dose series at ages 2, 4, 6–18 months, 4–6 years; administer the final dose on or after age 4 years and at least 6 months after the previous dose.
- 4 or more doses of IPV can be administered before age 4 years when a combination vaccine containing IPV is used. However, a dose is still recommended on or after age 4 years and at least 6 months after the previous dose.

### Catch-up vaccination

- In the first 6 months of life, use minimum ages and intervals only for travel to a polio-endemic region or during an outbreak.
- **Adolescents age 18 years known or suspected to be unvaccinated or incompletely vaccinated:** administer remaining doses (1, 2, or 3 IPV doses) to complete a 3-dose primary series.* Unless there are specific reasons to believe they were not vaccinated, most persons aged 18 years or older born and raised in the United States can assume they were vaccinated against polio as children.

**Series containing oral poliovirus vaccine (OPV)**, either mixed OPV-IPV or OPV-only series:

- Total number of doses needed to complete the series is the same as that recommended for the U.S. IPV schedule. See www.cdc.gov/mmwr/volumes/66/wr/mm6601a6.htm?s_%20cid=mm6601a6_w.
- Only trivalent OPV (tOPV) counts toward the U.S. vaccination requirements.
  - Doses of OPV administered before April 1, 2016, should be counted (unless specifically noted as administered during a campaign).
  - Doses of OPV administered on or after April 1, 2016, should not be counted.
  - For guidance to assess doses documented as "OPV," see www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm?s_cid=mm6606a7_w.
- For other catch-up guidance, see Table 2.

### Special situations

- **Adolescents aged 18 years at increased risk of exposure to poliovirus and completed primary series*:** may administer one lifetime IPV booster

***Note:** Complete primary series consist of at least 3 doses of IPV or trivalent oral poliovirus vaccine (tOPV) in any combination.

For detailed information, see: www.cdc.gov/vaccines/vpd/polio/hcp/recommendations.html

## Respiratory syncytial virus immunization (minimum age: birth [Nirsevimab, RSV-mAb (Beyfortus™)

### Routine immunization

- **Infants born October – March in most of the continental United States***
  - Mother did not receive RSV vaccine OR mother's RSV vaccination status is unknown: administer 1 dose nirsevimab within 1 week of birth in hospital or outpatient setting
  - Mother received RSV vaccine **less than 14 days** prior to delivery: administer 1 dose nirsevimab within 1 week of birth in hospital or outpatient setting
  - Mother received RSV vaccine **at least 14 days** prior to delivery: nirsevimab not needed but can be considered in rare circumstances at the discretion of healthcare providers (see special populations and situations at www.cdc.gov/vaccines/vpd/rsv/hcp/child-faqs.html)
- **Infants born April–September in most of the continental United States***
  - Mother did not receive RSV vaccine OR mother's RSV vaccination status is unknown: administer 1 dose nirsevimab shortly before start of RSV season*
  - Mother received RSV vaccine **less than 14 days** prior to delivery: administer 1 dose nirsevimab shortly before start of RSV season*
  - Mother received RSV vaccine **at least 14 days** prior to delivery: nirsevimab not needed but can be considered in rare circumstances at the discretion of healthcare providers(see special populations and situations at www.cdc.gov/vaccines/vpd/rsv/hcp/child-faqs.html)

Infants with prolonged birth hospitalization** (e.g., for prematurity) discharged October through March should be immunized shortly before or promptly after discharge.

### Special situations

- **Ages 8–19 months with chronic lung disease of prematurity requiring medical support (e.g., chronic corticosteroid therapy, diuretic therapy, or supplemental oxygen) any time during the 6-month period before the start of the second RSV season; severe immunocompromise; cystic fibrosis with either weight for length <10th percentile or manifestation of severe lung disease (e.g., previous hospitalization for pulmonary exacerbation in the first year of life or abnormalities on chest imaging that persist when stable)**:**
  - 1 dose nirsevimab shortly before start of second RSV season*
- **Ages 8–19 months who are American Indian or Alaska Native:**
  - 1 dose nirsevimab shortly before start of second RSV season*
- **Age-eligible and undergoing cardiac surgery with cardiopulmonary bypass**:** 1 additional dose of nirsevimab after surgery. For additional details see special populations and situations at www.cdc.gov/vaccines/vpd/rsv/hcp/child-faqs.html

***Note:** While the timing of the onset and duration of RSV season may vary, nirsevimab may be administered October through March in most of the continental United States. Providers in jurisdictions with RSV seasonality that differs from most of the continental United States (e.g., Alaska, jurisdiction with tropical climate) should follow guidance from public health authorities (e.g., CDC, health departments) or regional medical centers on timing of administration based on local RSV seasonality. Although optimal timing of administration is just before the start of the RSV season, nirsevimab may also be administered during the RSV season to infants and children who are age-eligible.

****Note:** Nirsevimab can be administered to children who are eligible to receive palivizumab. Children who have received nirsevimab should not receive palivizumab for the same RSV season.

For further guidance, see www.cdc.gov/mmwr/volumes/72/wr/mm7234a4.htm and www.cdc.gov/vaccines/vpd/rsv/hcp/child-faqs.html

## Respiratory syncytial virus vaccination (RSV [Abrysvo™])

### Routine vaccination

- **Pregnant at 32 weeks 0 days through 36 weeks and 6 days gestation from September through January in most of the continental United States*:** 1 dose RSV vaccine (Abrysvo™). Administer RSV vaccine regardless of previous RSV infection.
  - Either maternal RSV vaccination or infant immunization with nirsevimab (RSV monoclonal antibody) is recommended to prevent respiratory syncytial virus lower respiratory tract infection in infants.
- **All other pregnant persons:** RSV vaccine not recommended.

There is currently no ACIP recommendation for RSV vaccination in subsequent pregnancies. No data are available to inform whether additional doses are needed in later pregnancies.

***Note:** Providers in jurisdictions with RSV seasonality that differs from most of the continental United States (e.g., Alaska, jurisdiction with tropical climate) should follow guidance from public health authorities (e.g., CDC, health departments) or regional medical centers on timing of administration based on local RSV seasonality.

## Rotavirus vaccination (minimum age: 6 weeks)

### Routine vaccination

- **Rotarix®:** 2-dose series at age 2 and 4 months
- **RotaTeq®:** 3-dose series at age 2, 4, and 6 months
- If any dose in the series is either **RotaTeq®** or unknown, default to 3-dose series.

### Catch-up vaccination

- Do not start the series on or after age 15 weeks, 0 days.
- The maximum age for the final dose is 8 months, 0 days.
- For other catch-up guidance, see Table 2.

# Notes



## Tetanus, diphtheria, and pertussis (Tdap) vaccination
(minimum age: 11 years for routine vaccination, 7 years for catch-up vaccination)

### Routine vaccination

- **Age 11–12 years:** 1 dose Tdap (adolescent booster)
- **Pregnancy:** 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36.

**Note:** Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine.

### Catch-up vaccination

- **Age 13–18 years who have not received Tdap:** 1 dose Tdap (adolescent booster)
- **Age 7–18 years not fully vaccinated* with DTaP:** 1 dose Tdap as part of the catch-up series (preferably the first dose); if additional doses are needed, use Td or Tdap.
- **Tdap administered at age 7–10 years:**
  - **Age 7–9 years** who receive Tdap should receive the adolescent Tdap booster dose at age 11–12 years.
  - **Age 10 years** who receive Tdap do not need the adolescent Tdap booster dose at age 11–12 years.
- **DTaP inadvertently administered on or after age 7 years**:
  - **Age 7–9 years**: DTaP may count as part of catch-up series. Administer adolescent Tdap booster dose at age 11–12 years.
  - **Age 10–18 years**: Count dose of DTaP as the adolescent Tdap booster dose.
- For other catch-up guidance, see Table 2.

### Special situations

- **Wound management** in persons age 7 years or older with history of 3 or more doses of tetanus-toxoid-containing vaccine: For clean and minor wounds, administer Tdap or Td if more than 10 years since last dose of tetanus-toxoid-containing vaccine; for all other wounds, administer Tdap or Td if more than 5 years since last dose of tetanus-toxoid-containing vaccine. Tdap is preferred for persons age 11 years or older who have not previously received Tdap or whose Tdap history is unknown. If a tetanus-toxoid-containing vaccine is indicated for a pregnant adolescent, use Tdap.
- For detailed information, see www.cdc.gov/mmwr/volumes/69/wr/mm6903a5.htm.

**Fully vaccinated* = 5 valid doses of DTaP OR 4 valid doses of DTaP if dose 4 was administered at age 4 years or older

## Varicella vaccination
(minimum age: 12 months)

### Routine vaccination

- 2-dose series at age 12–15 months, 4–6 years
- VAR or MMRV may be administered*
- Dose 2 may be administered as early as 3 months after dose 1 (a dose inadvertently administered after at least 4 weeks may be counted as valid)

**Note:* For dose 1 in children age 12–47 months, it is recommended to administer MMR and varicella vaccines separately. MMRV may be used if parents or caregivers express a preference.

### Catch-up vaccination

- Ensure persons age 7–18 years without evidence of immunity (see *MMWR* at www.cdc.gov/mmwr/pdf/rr/rr5604.pdf) have a 2-dose series:
  - **Age 7–12 years**: Routine interval: 3 months (a dose inadvertently administered after at least 4 weeks may be counted as valid)
  - **Age 13 years and older**: Routine interval: 4–8 weeks (minimum interval: 4 weeks)
  - The maximum age for use of *MMRV* is 12 years.

# Appendix Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2024

## Guide to Contraindications and Precautions to Commonly Used Vaccines

*Adapted from Table 4-1 in Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization:* Contraindication and Precautions, Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices—United States, 2023–24 Influenza Season | MMWR (cdc.gov), Contraindications and Precautions for COVID-19 Vaccination, and Contraindications and Precautions for JYNNEOS Vaccination

| Vaccines and other Immunizing Agents | Contraindicated or Not Recommended[1] | Precautions[2] |
|---|---|---|
| COVID-19 mRNA vaccines [Pfizer-BioNTech, Moderna] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of an mRNA COVID-19 vaccine[4] | • Diagnosed non-severe allergy (e.g., urticaria beyond the injection site) to a component of an mRNA COVID-19 vaccine[4]; or non-severe, immediate (onset less than 4 hours) allergic reaction after administration of a previous dose of an mRNA COVID-19 vaccine<br>• Myocarditis or pericarditis within 3 weeks after a dose of any COVID-19 vaccine<br>• Multisystem inflammatory syndrome in children (MIS-C) or multisystem inflammatory syndrome in adults (MIS-A)<br>• Moderate or severe acute illness, with or without fever |
| COVID-19 protein subunit vaccine [Novavax] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of a Novavax COVID-19 vaccine[4] | • Diagnosed non-severe allergy (e.g., urticaria beyond the injection site) to a component of Novavax COVID-19 vaccine[4]; or non-severe, immediate (onset less than 4 hours) allergic reaction after administration of a previous dose of a Novavax COVID-19 vaccine<br>• Myocarditis or pericarditis within 3 weeks after a dose of any COVID-19 vaccine<br>• Multisystem inflammatory syndrome in children (MIS-C) or multisystem inflammatory syndrome in adults (MIS-A)<br>• Moderate or severe acute illness, with or without fever |
| Influenza, egg-based, inactivated injectable (IIV4) | • Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, RIV, or LAIV of any valency)<br>• Severe allergic reaction (e.g., anaphylaxis) to any vaccine component[3] (excluding egg) | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Moderate or severe acute illness with or without fever |
| Influenza, cell culture-based inactivated injectable (ccIIV4) [Flucelvax Quadrivalent] | • Severe allergic reaction (e.g., anaphylaxis) to any ccIIV of any valency, or to any component[3] of ccIIV4 | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, RIV, or LAIV of any valency. If using ccIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist.<br>• Moderate or severe acute illness with or without fever |
| Influenza, recombinant injectable (RIV4) [Flublok Quadrivalent] | • Severe allergic reaction (e.g., anaphylaxis) to any RIV of any valency, or to any component[3] of RIV4 | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, ccIIV, or LAIV of any valency. If using RIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist.<br>• Moderate or severe acute illness with or without fever |
| Influenza, live attenuated (LAIV4) [Flumist Quadrivalent] | • Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, RIV, or LAIV of any valency)<br>• Severe allergic reaction (e.g., anaphylaxis) to any vaccine component[3] (excluding egg)<br>• Children age 2–4 years with a history of asthma or wheezing<br>• Anatomic or functional asplenia<br>• Immunocompromised due to any cause including, but not limited to, medications and HIV infection<br>• Close contacts or caregivers of severely immunosuppressed persons who require a protected environment<br>• Pregnancy<br>• Cochlear implant<br>• Active communication between the cerebrospinal fluid (CSF) and the oropharynx, nasopharynx, nose, ear or any other cranial CSF leak<br>• Children and adolescents receiving aspirin or salicylate-containing medications<br>• Received influenza antiviral medications oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Asthma in persons age 5 years old or older<br>• Persons with underlying medical conditions other than those listed under contraindications that might predispose to complications after wild-type influenza virus infection, e.g., chronic pulmonary, cardiovascular (except isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus)<br>• Moderate or severe acute illness with or without fever |

1. When a contraindication is present, a vaccine should **NOT** be administered. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization.
2. When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization.
3. Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. See Package inserts for U.S.-licensed vaccines.
4. See package inserts and FDA EUA fact sheets for a full list of vaccine ingredients. mRNA COVID-19 vaccines contain polyethylene glycol (PEG).

# Appendix Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2024

| Vaccines and other Immunizing Agents | Contraindicated or Not Recommended[1] | Precautions[2] |
|---|---|---|
| Dengue (DEN4CYD) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised)<br>• Lack of laboratory confirmation of a previous Dengue infection | • Pregnancy<br>• HIV infection without evidence of severe immunosuppression<br>• Moderate or severe acute illness with or without fever |
| Diphtheria, tetanus, pertussis (DTaP) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• For DTaP only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP or DTaP | • Guillain-Barré syndrome (GBS) within 6 weeks after previous dose of tetanus-toxoid–containing vaccine<br>• History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid–containing or tetanus-toxoid–containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine<br>• For DTaP only: Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized<br>• Moderate or severe acute illness with or without fever |
| *Haemophilus influenzae* type b (Hib) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Less than age 6 weeks | • Moderate or severe acute illness with or without fever |
| Hepatitis A (HepA) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] including neomycin | • Moderate or severe acute illness with or without fever |
| Hepatitis B (HepB) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] including yeast<br>• *Pregnancy: Heplisav-B and PreHevbrio are not recommended due to lack of safety data in pregnant persons. Use other hepatitis B vaccines if HepB is indicated*[4]. | • Moderate or severe acute illness with or without fever |
| Hepatitis A-Hepatitis B vaccine (HepA-HepB) [Twinrix] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] including neomycin and yeast | • Moderate or severe acute illness with or without fever |
| Human papillomavirus (HPV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• *Pregnancy: HPV vaccination not recommended*. | • Moderate or severe acute illness with or without fever |
| Measles, mumps, rubella (MMR)<br>Measles, mumps, rubella, and varicella (MMRV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised)<br>• Pregnancy<br>• Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent | • Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)<br>• History of thrombocytopenia or thrombocytopenic purpura<br>• Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing<br>• Moderate or severe acute illness with or without fever<br>• For MMRV only: Personal or family (i.e., sibling or parent) history of seizures of any etiology |
| Meningococcal ACWY (MenACWY)<br>MenACWY-CRM [Menveo]<br>MenACWY-TT [MenQuadfi] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• For Men ACWY-CRM only: severe allergic reaction to any diphtheria toxoid—or CRM197—containing vaccine<br>• For MenACWY-TT only: severe allergic reaction to a tetanus toxoid-containing vaccine | • For MenACWY-CRM only: Preterm birth if less than age 9 months<br>• Moderate or severe acute illness with or without fever |
| Meningococcal B (MenB)<br>MenB-4C [Bexsero]<br>MenB-FHbp [Trumenba] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Pregnancy<br>• For MenB-4C only: Latex sensitivity<br>• Moderate or severe acute illness with or without fever |
| Meningococcal ABCWY (MenACWY-TT/MenB-FHbp) [Penbraya] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe allergic reaction to a tetanus toxoid-containing vaccine | • Moderate or severe acute illness, with or without fever |
| Mpox [Jynneos] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Moderate or severe acute illness, with or without fever |
| Pneumococcal conjugate (PCV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe allergic reaction (e.g., anaphylaxis) to any diphtheria-toxoid-containing vaccine or its component[3] | • Moderate or severe acute illness with or without fever |
| Pneumococcal polysaccharide (PPSV23) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Moderate or severe acute illness with or without fever |
| Poliovirus vaccine, inactivated (IPV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Pregnancy<br>• Moderate or severe acute illness with or without fever |
| RSV monoclonal antibody (RSV-mAb) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[5] | • Moderate or severe acute illness with or without fever |
| Respiratory syncytial virus vaccine (RSV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Moderate or severe acute illness with or without fever |
| Rotavirus (RV)<br>RV1 [Rotarix]<br>RV5 [RotaTeq] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe combined immunodeficiency (SCID)<br>• History of intussusception | • Altered immunocompetence other than SCID<br>• Chronic gastrointestinal disease<br>• RV1 only: Spina bifida or bladder exstrophy<br>• Moderate or severe acute illness with or without fever |
| Tetanus, diphtheria, and acellular pertussis (Tdap)<br>Tetanus, diphtheria (Td) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• For Tdap only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP, DTaP, or Tdap | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus-toxoid–containing vaccine<br>• History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid–containing or tetanus-toxoid–containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid–containing vaccine<br>• For Tdap only: Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized<br>• Moderate or severe acute illness with or without fever |
| Varicella (VAR) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised)<br>• Pregnancy<br>• Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent | • Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)<br>• Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)<br>• Use of aspirin or aspirin-containing products<br>• Moderate or severe acute illness with or without fever<br>• If using MMRV, see MMR/MMRV for additional precautions |

1. When a contraindication is present, a vaccine should NOT be administered. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
2. When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
3. Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at www.fda.gov/vaccines-blood-biologics/approved-products/vaccines-licensed-use-united-states.
4. For information on the pregnancy exposure registries for persons who were inadvertently vaccinated with Heplisav-B or PreHevbrio while pregnant, please visit heplisavbpregnancyregistry.com or www.prehevbrio.com/#safety.
5. Full prescribing information for BEYFORTUS (nirsevimab-alip) www.accessdata.fda.gov/drugsatfda_docs/label/2023/761328s000lbl.pdf

# Addendum Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2024

In addition to the recommendations presented in the previous sections of this immunization schedule, ACIP has approved the following recommendations by majority vote since October 26, 2023. The following recommendations have been adopted by the CDC Director and are now official. Links are provided if these recommendations have been published in *Morbidity and Mortality Weekly Report (MMWR)*.

| Vaccines | Recommendations | Effective Date of Recommendation* |
|---|---|---|
| No new vaccines or vaccine recommendations to report | | |



*The effective date is the date when the CDC director adopted the recommendation and when the ACIP recommendation became official.

# Recommended Immunization Schedules for Adults

United States, 2024

# Recommended Adult Immunization Schedule
## for ages 19 years or older

UNITED STATES
2024

### Vaccines in the Adult Immunization Schedule*

| Vaccine | Abbreviation(s) | Trade name(s) |
|---|---|---|
| COVID-19 vaccine | 1vCOV-mRNA | Comirnaty®/Pfizer-BioNTech COVID-19 Vaccine<br>Spikevax®/Moderna COVID-19 Vaccine |
| | 1vCOV-aPS | Novavax COVID-19 Vaccine |
| *Haemophilus influenzae* type b vaccine | Hib | ActHIB®<br>Hiberix®<br>PedvaxHIB® |
| Hepatitis A vaccine | HepA | Havrix®<br>Vaqta® |
| Hepatitis A and hepatitis B vaccine | HepA-HepB | Twinrix® |
| Hepatitis B vaccine | HepB | Engerix-B®<br>Heplisav-B®<br>PreHevbrio®<br>Recombivax HB® |
| Human papillomavirus vaccine | HPV | Gardasil 9® |
| Influenza vaccine (inactivated) | IIV4 | Many brands |
| Influenza vaccine (live, attenuated) | LAIV4 | FluMist® Quadrivalent |
| Influenza vaccine (recombinant) | RIV4 | Flublok® Quadrivalent |
| Measles, mumps, and rubella vaccine | MMR | M-M-R II®<br>Priorix® |
| Meningococcal serogroups A, C, W, Y vaccine | MenACWY-CRM<br>MenACWY-TT | Menveo®<br>MenQuadfi® |
| Meningococcal serogroup B vaccine | MenB-4C<br>MenB-FHbp | Bexsero®<br>Trumenba® |
| Meningococcal serogroup A, B, C, W, Y vaccine | MenACWY-TT/<br>MenB-FHbp | Penbraya™ |
| Mpox vaccine | Mpox | Jynneos® |
| Pneumococcal conjugate vaccine | PCV15<br>PCV20 | Vaxneuvance™<br>Prevnar 20™ |
| Pneumococcal polysaccharide vaccine | PPSV23 | Pneumovax 23® |
| Poliovirus vaccine | IPV | Ipol® |
| Respiratory syncytial virus vaccine | RSV | Arexvy®<br>Abrysvo™ |
| Tetanus and diphtheria toxoids | Td | Tenivac®<br>Tdvax™ |
| Tetanus and diphtheria toxoids and acellular pertussis vaccine | Tdap | Adacel®<br>Boostrix® |
| Varicella vaccine | VAR | Varivax® |
| Zoster vaccine, recombinant | RZV | Shingrix |

*Administer recommended vaccines if vaccination history is incomplete or unknown. Do not restart or add doses to vaccine series if there are extended intervals between doses. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

11/16/2023

## How to use the adult immunization schedule

1. Determine recommended vaccinations by age **(Table 1)**
2. Assess need for additional recommended vaccinations by medical condition or other indication **(Table 2)**
3. Review vaccine types, dosing frequencies and intervals, and considerations for special situations **(Notes)**
4. Review contraindications and precautions for vaccine types **(Appendix)**
5. Review new or updated ACIP guidance **(Addendum)**

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American College of Physicians (www.acponline.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), American College of Nurse-Midwives (www.midwife.org), American Academy of Physician Associates (www.aapa.org), American Pharmacists Association (www.pharmacist.com), and Society for Healthcare Epidemiology of America (www.shea-online.org).

### Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to the local or state health department
- Clinically significant adverse events to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov or 800-822-7967

### Questions or comments

Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), in English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays.

Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

### Helpful information

- Complete Advisory Committee on Immunization Practices (ACIP) recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- ACIP Shared Clinical Decision-Making Recommendations: www.cdc.gov/vaccines/acip/acip-scdm-faqs.html
- *General Best Practice Guidelines for Immunization* www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual

Scan QR code for access to online schedule

**U.S. Department of Health and Human Services**
Centers for Disease Control and Prevention

CS310021-D

# Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2024

| Vaccine | 19–26 years | 27–49 years | 50–64 years | ≥65 years |
|---|---|---|---|---|
| **COVID-19** | 1 or more doses of updated (2023-2024 Formula) vaccine (See Notes) | | | |
| **Influenza inactivated** (IIV4) or **Influenza recombinant** (RIV4) | 1 dose annually | | | |
| or | | | | |
| **Influenza live, attenuated** (LAIV4) | 1 dose annually | | | |
| **Respiratory Syncytial Virus** (RSV) | Seasonal administration during pregnancy. See Notes. | | | ≥60 years |
| **Tetanus, diphtheria, pertussis** (Tdap or Td) | 1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes) | | | |
| | 1 dose Tdap, then Td or Tdap booster every 10 years | | | |
| **Measles, mumps, rubella** (MMR) | 1 or 2 doses depending on indication (if born in 1957 or later) | | | For healthcare personnel, see notes |
| **Varicella** (VAR) | 2 doses (if born in 1980 or later) | | 2 doses | |
| **Zoster recombinant** (RZV) | 2 doses for immunocompromising conditions (see notes) | | 2 doses | |
| **Human papillomavirus** (HPV) | 2 or 3 doses depending on age at initial vaccination or condition | 27 through 45 years | | |
| **Pneumococcal** (PCV15, PCV20, PPSV23) | | | | See Notes |
| | | | | See Notes |
| **Hepatitis A** (HepA) | 2, 3, or 4 doses depending on vaccine | | | |
| **Hepatitis B** (HepB) | 2, 3, or 4 doses depending on vaccine or condition | | | |
| **Meningococcal A, C, W, Y** (MenACWY) | 1 or 2 doses depending on indication, see notes for booster recommendations | | | |
| **Meningococcal B** (MenB) | 19 through 23 years | 2 or 3 doses depending on vaccine and indication, see notes for booster recommendations | | |
| ***Haemophilus influenzae* type b** (Hib) | 1 or 3 doses depending on indication | | | |
| **Mpox** | | | | |

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of immunity

Recommended vaccination for adults with an additional risk factor or another indication

Recommended vaccination based on shared clinical decision-making

No recommendation/ Not applicable

# Table 2 Recommended Adult Immunization Schedule by Medical Condition or Other Indication, United States, 2024

**Always use this table in conjunction with Table 1 and the Notes that follow. Medical conditions or indications are often not mutually exclusive. If multiple medical conditions or indications are present, refer to guidance in all relevant columns. See Notes for medical conditions or indications not listed.**

| VACCINE | Pregnancy | Immunocompromised (excluding HIV infection) | HIV infection CD4 percentage and count | | Men who have sex with men | Asplenia, complement deficiency | Heart or lung disease | Kidney failure, End-stage renal disease or on dialysis | Chronic liver disease; alcoholism[a] | Diabetes | Healthcare Personnel[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | <15% or <200mm | ≥15% and ≥200mm | | | | | | | |
| COVID-19 | | See Notes | | | | | | | | | |
| IIV4 or RIV4 | 1 dose annually | | | | | | | | | | |
| LAIV4 | | | | | 1 dose annually if age 19 - 49 years | | 1 dose annually if age 19 - 49 years | | | | |
| RSV | Seasonal administration. See Notes | See Notes | | | | See Notes | | | | | |
| Tdap or Td | Tdap: 1 dose each pregnancy | 1 dose Tdap, then Td or Tdap booster every 10 years | | | | | | | | | |
| MMR | * | | | | | | | | | | |
| VAR | * | | See Notes | | | | | | | | |
| RZV | | See Notes | | | | | | | | | |
| HPV | * | 3 dose series if indicated | | | | | | | | | |
| Pneumococcal | | | | | | | | | | | |
| HepA | | | | | | | | | | | |
| Hep B | See Notes | | | | | | | | | Age ≥ 60 years | |
| MenACWY | | | | | | | | | | | |
| MenB | | | | | | | | | | | |
| Hib | | HSCT: 3 doses[c] | | | | Asplenia: 1 dose | | | | | |
| Mpox | See Notes | | | | See Notes | | | | | | See Notes |

Recommended for all adults who lack documentation of vaccination, **OR** lack evidence of immunity

Not recommended for all adults, but recommended for some adults based on either age **OR** increased risk for or severe outcomes from disease

Recommended based on shared clinical decision-making

Recommended for all adults, and additional doses may be necessary based on medical condition or other indications. See Notes.

Precaution: Might be indicated if benefit of protection outweighs risk of adverse reaction

Contraindicated or not recommended
*Vaccinate after pregnancy, if indicated

No Guidance/ Not Applicable

**a.** Precaution for LAIV4 does not apply to alcoholism.

**b.** See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations.

**c.** Hematopoietic stem cell transplant.

# Notes Recommended Adult Immunization Schedule for Ages 19 Years or Older, United States, 2024

For vaccination recommendations for persons ages 18 years or younger, see the Recommended Child and Adolescent Immunization Schedule, 2024: www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html

## Additional Information

- For calculating intervals between doses, 4 weeks = 28 days. Intervals of ≥4 months are determined by calendar months.
- Within a number range (e.g., 12–18), a dash (–) should be read as "through."
- Vaccine doses administered ≤4 days before the minimum age or interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum age or minimum interval should not be counted as valid and should be repeated. **The repeat dose should be spaced after the invalid dose by the recommended minimum interval.** For further details, see Table 3-2, Recommended and minimum ages and intervals between vaccine doses, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/timing.html.
- Information on travel vaccination requirements and recommendations is available at www.cdc.gov/travel/.
- For vaccination of persons with immunodeficiencies, see Table 8-1, Vaccination of persons with primary and secondary immunodeficiencies, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html
- For information about vaccination in the setting of a vaccine-preventable disease outbreak, contact your state or local health department.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All vaccines included in the adult immunization schedule except PPSV23, RSV, RZV, Mpox, and COVID-19 vaccines are covered by the National Vaccine Injury Compensation Program (VICP). Mpox and COVID-19 vaccines are covered by the Countermeasures Injury Compensation Program (CICP).For more information, see www.hrsa.gov/vaccinecompensation or www.hrsa.gov/cicp.

## COVID-19 vaccination

### Routine vaccination

**Age 19 years or older**

- **Unvaccinated:**
  - 1 dose of updated (2023-2024 Formula) Moderna or Pfizer-BioNTech vaccine
  - 2-dose series of updated (2023–2024 Formula) Novavax at 0, 3-8 weeks
- **Previously vaccinated* with 1 or more doses of any COVID-19 vaccine:** 1 dose of any updated (2023–2024 Formula) COVID-19 vaccine administered at least 8 weeks after the most recent COVID-19 vaccine dose.

### Special situations

**Persons who are moderately or severely immunocompromised****

- **Unvaccinated:**
  - 3-dose series of updated (2023–2024 Formula) Moderna at 0, 4, 8 weeks
  - 3-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 3, 7 weeks
  - 2-dose series of updated (2023–2024 Formula) Novavax at 0, 3 weeks
- **Previously vaccinated* with 1 dose of any Moderna:** 2-dose series of updated (2023–2024 Formula) Moderna at 0, 4 weeks (minimum interval between previous Moderna dose and dose 1: 4 weeks)
- **Previously vaccinated* with 2 doses of any Moderna:** 1 dose of updated (2023–2024 Formula) Moderna at least 4 weeks after most recent dose.
- **Previously vaccinated* with 1 dose of any Pfizer-BioNTech:** 2-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 4 weeks (minimum interval between previous Pfizer-BioNTech dose and dose 1: 3 weeks).
- **Previously vaccinated* with 2 doses of any Pfizer-BioNTech:** 1 dose of updated (2023–2024 Formula) Pfizer-BioNTech at least 4 weeks after most recent dose.
- **Previously vaccinated* with 3 or more doses of any Moderna or Pfizer-BioNTech:** 1 dose of any updated (2023–2024 Formula) COVID-19 vaccine at least 8 weeks after the most recent dose.
- **Previously vaccinated* with 1 or more doses of Janssen or Novavax with or without dose(s) of any Original monovalent or bivalent COVID-19 vaccine:** 1 dose of any updated (2023–2024 Formula) of COVID-19 vaccine at least 8 weeks after the most recent dose.

There is no preferential recommendation for the use of one COVID-19 vaccine over another when more than one recommended age-appropriate vaccine is available.

Current COVID-19 vaccine information available at www.cdc.gov/covidschedule. For information on Emergency Use Authorization (EUA) indications for COVID-19 vaccines, see www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines.

***Note:** Previously vaccinated is defined as having received any Original monovalent or bivalent COVID-19 vaccine (Janssen, Moderna, Novavax, Pfizer-BioNTech) prior to the updated 2023-2024 formulation.

****Note:** Persons who are moderately or severely immunocompromised have the option to receive one additional dose of updated (2023-2024 Formula) COVID-19 vaccine at least 2 months following the last recommended updated (2023-2024 Formula) COVID-19 vaccine dose. Further additional updated (2023-2024 Formula) COVID-19 vaccine dose(s) may be administered, informed by the clinical judgement of a healthcare provider and personal preference and circumstances. Any further additional doses should be administered at least 2 months after the last updated (2023-2024 Formula) COVID-19 vaccine dose.

## *Haemophilus influenzae* type b vaccination

### Special situations

- **Anatomical or functional asplenia (including sickle cell disease):** 1 dose if previously did not receive Hib vaccine; if elective splenectomy, 1 dose preferably at least 14 days before splenectomy.
- **Hematopoietic stem cell transplant (HSCT):** 3-dose series 4 weeks apart starting 6–12 months after successful transplant, regardless of Hib vaccination history.

## Hepatitis A vaccination

### Routine vaccination

- **Any person who is not fully vaccinated and requests vaccination** (identification of risk factor not required): 2-dose series HepA (Havrix 6–12 months apart or Vaqta 6–18 months apart [minimum interval: 6 months]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 5 months])

### Special situations

- **Any person who is not fully vaccinated and who is at risk for hepatitis A virus infection:** 2-dose series HepA or 3-dose series HepA-HepB as above. Risk factors for hepatitis A virus infection include:
  - **Chronic liver disease** (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
  - **HIV infection**
  - **Men who have sex with men**
  - **Injection or noninjection drug use**
  - **Persons experiencing homelessness**
  - **Work with hepatitis A virus** in research laboratory or with nonhuman primates with hepatitis A virus infection
  - **Travel in countries with high or intermediate endemic hepatitis A** (HepA-HepB [Twinrix] may be administered on an accelerated schedule of 3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months)
  - **Close, personal contact with international adoptee** (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival)
  - **Pregnancy** if at risk for infection or severe outcome from infection during pregnancy
  - **Settings for exposure,** including health care settings targeting services to injection or noninjection drug users or group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor screening not required)

## Hepatitis B vaccination

### Routine vaccination

- **Age 19 through 59 years:** complete a 2- or 3- or 4-dose series
  - 2-dose series only applies when 2 doses of Heplisav-B* are used at least 4 weeks apart
  - 3-dose series Engerix-B, PreHevbrio*, or Recombivax HB at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 8 weeks / dose 1 to dose 3: 16 weeks])
  - 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 5 months])
  - 4-dose series HepA-HepB (Twinrix) accelerated schedule of 3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months

*__Note:__ Heplisav-B and PreHevbrio are not recommended in pregnancy due to lack of safety data in pregnant persons.

- **Age 60 years or older without** known risk factors for hepatitis B virus infection **may** receive a HepB vaccine series.
- **Age 60 years or older with** known risk factors for hepatitis B virus infection **should** receive a HepB vaccine series.
- **Any adult age 60 years of age or older** who requests HepB vaccination should receive a HepB vaccine series.
  - **Risk factors for hepatitis B virus infection include:**
    - **Chronic liver disease** e.g., persons with hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase (ALT) or aspartate aminotransferase (AST) level greater than twice the upper limit of normal
    - **HIV infection**
    - **Sexual exposure risk** e.g., sex partners of hepatitis B surface antigen (HBsAg)-positive persons, sexually active persons not in mutually monogamous relationships, persons seeking evaluation or treatment for a sexually transmitted infection, men who have sex with men
    - **Current or recent injection drug use**
    - **Percutaneous or mucosal risk for exposure to blood** e.g., household contacts of HBsAg-positive persons, residents and staff of facilities for developmentally disabled persons, health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids; persons on maintenance dialysis (including in-center or home hemodialysis and peritoneal dialysis), persons who are predialysis, and patients with diabetes*
    - **Incarceration**
    - **Travel in countries with high or intermediate endemic hepatitis B**

*__Age 60 years or older with diabetes:__ Based on shared clinical decision making, 2-, 3-, or 4-dose series as above.

# Notes Recommended Adult Immunization Schedule for Ages 19 Years or Older, United States, 2024

### Special situations

- **Patients on dialysis:** complete a 3- or 4-dose series
  - 3-dose series Recombivax HB at 0, 1, 6 months (Note: Use Dialysis Formulation 1 mL = 40 mcg)
  - 4-dose series Engerix-B at 0, 1, 2, and 6 months (Note: Use 2 mL dose instead of the normal adult dose of 1 mL)

## Human papillomavirus vaccination

### Routine vaccination

- **All persons up through age 26 years:** 2- or 3-dose series depending on age at initial vaccination or condition
  - **Age 9–14 years at initial vaccination and received 1 dose or 2 doses less than 5 months apart:** 1 additional dose
  - **Age 9–14 years at initial vaccination and received 2 doses at least 5 months apart:** HPV vaccination series complete, no additional dose needed
  - **Age 15 years or older at initial vaccination:** 3-dose series at 0, 1–2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon)
- No additional dose recommended when any HPV vaccine series of any valency has been completed using the recommended dosing intervals.

### Shared clinical decision-making

- **Adults age 27–45 years:** Based on shared clinical decision-making, complete a 2-dose series (if initiated age 9-14 years) or 3-dose series (if initiated ≥15 years)

For additional information on shared clinical decision-making for HPV; see www.cdc.gov/vaccines/hcp/admin/downloads/isd-job-aid-scdm-hpv-shared-clinical-decision-making-hpv.pdf

### Special situations

- **Age ranges recommended above for routine and catch-up vaccination or shared clinical decision-making also apply in special situations**
  - **Immunocompromising conditions, including HIV infection**: 3-dose series, even for those who initiate vaccination at age 9 through 14 years.
  - **Pregnancy**: Pregnancy testing is not needed before vaccination. HPV vaccination is not recommended until after pregnancy. No intervention needed if inadvertently vaccinated while pregnant.

## Influenza vaccination

### Routine vaccination

- **Age 19 years or older:** 1 dose any influenza vaccine appropriate for age and health status annually.
  - **Age 65 years or older:** Any one of quadrivalent high-dose inactivated influenza vaccine (HD-IIV4), quadrivalent recombinant influenza vaccine (RIV4), or quadrivalent adjuvanted inactivated influenza vaccine (aIIV4) is preferred. If none of these three vaccines are available, then any other age-appropriate influenza vaccine should be used.
- For the 2023–2024 season, see www.cdc.gov/mmwr/volumes/72/rr/rr7202a1.htm
- For the 2024–2025 season, see the 2024–2025 ACIP influenza vaccine recommendations.

### Special situations

- **Close contacts (e.g., caregivers, healthcare workers) of severely immunosuppressed persons who require a protected environment:** should not receive LAIV4. If LAIV4 is given, they should avoid contact with/caring for such immunosuppressed persons for 7 days after vaccination.

**Note:** Persons with an egg allergy can receive any influenza vaccine (egg-based and non-egg based) appropriate for age and health status.

## Measles, mumps, and rubella vaccination

### Routine vaccination

- **No evidence of immunity to measles, mumps, or rubella:** 1 dose
  - **Evidence of immunity:** Born before 1957 (except for health care personnel, see below), documentation of receipt of MMR vaccine, laboratory evidence of immunity or disease (diagnosis of disease without laboratory confirmation is not evidence of immunity)

### Special situations

- **Pregnancy with no evidence of immunity to rubella:** MMR contraindicated during pregnancy; after pregnancy (before discharge from health care facility), 1 dose
- **Nonpregnant persons of childbearing age with no evidence of immunity to rubella:** 1 dose
- **HIV infection with CD4 percentages ≥15% and CD4 count ≥200 cells/mm$^3$ for at least 6 months and no evidence of immunity to measles, mumps, or rubella:** 2-dose series at least 4 weeks apart; MMR contraindicated for HIV infection with CD4 percentage <15% or CD4 count <200 cells/mm$^3$
- **Severe immunocompromising conditions:** MMR contraindicated
- **Students in postsecondary educational institutions, international travelers, and household or close, personal contacts of immunocompromised persons with no evidence of immunity to measles, mumps, or rubella:** 2-dose series at least 4 weeks apart if previously did not receive any doses of MMR or 1 dose if previously received 1 dose MMR
- **In mumps outbreak settings,** for information about additional doses of MMR (including 3rd dose of MMR), see www.cdc.gov/mmwr/volumes/67/wr/mm6701a7.htm

- **Health care personnel:**
  - **Born before 1957 with no evidence of immunity to measles, mumps, or rubella:** Consider 2-dose series at least 4 weeks apart for protection against measles or mumps or 1 dose for protection against rubella
  - **Born in 1957 or later with no evidence of immunity to measles, mumps, or rubella:** 2-dose series at least 4 weeks apart for protection against measles or mumps or at least 1 dose for protection against rubella

## Meningococcal vaccination

### Special situations for MenACWY

- **Anatomical or functional asplenia (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use:** 2-dose series MenACWY (Menveo or MenQuadfi) at least 8 weeks apart and revaccinate every 5 years if risk remains
- **Travel in countries with hyperendemic or epidemic meningococcal disease, or microbiologists routinely exposed to *Neisseria meningitidis*:** 1 dose MenACWY (Menveo or MenQuadfi) and revaccinate every 5 years if risk remains
- **First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) or military recruits:** 1 dose MenACWY (Menveo or MenQuadfi)
- For MenACWY **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting (e.g., in community or organizational settings, or among men who have sex with men) and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm

### Shared clinical decision-making for MenB

- **Adolescents and young adults age 16–23 years (age 16–18 years preferred) not at increased risk for meningococcal disease:** Based on shared clinical decision-making, 2-dose series MenB-4C (Bexsero) at least 1 month apart or 2-dose series MenB-FHbp (Trumenba) at 0, 6 months (if dose 2 was administered less than 6 months after dose 1, administer dose 3 at least 4 months after dose 2); MenB-4C and MenB-FHbp are not interchangeable (use same product for all doses in series).

For additional information on shared clinical decision-making for MenB, see www.cdc.gov/vaccines/hcp/admin/downloads/isd-job-aid-scdm-mening-b-shared-clinical-decision-making.pdf

### Special situations for MenB

- **Anatomical or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use, or microbiologists routinely exposed to *Neisseria meningitidis*:** 2-dose primary series MenB-4C (Bexsero) at least 1 month apart or 3-dose primary series MenB-FHbp (Trumenba) at 0, 1–2, 6 months (if dose 2 was administered at least 6 months after dose 1, dose 3 not needed; if dose 3 is administered earlier than 4 months after dose 2, a fourth dose should be administered at least 4 months after dose 3); MenB-4C and MenB-FHbp are not interchangeable (use same product for all doses in series); 1 dose MenB booster 1 year after primary series and revaccinate every 2–3 years if risk remains.
- **Pregnancy:** Delay MenB until after pregnancy unless at increased risk and vaccination benefits outweigh potential risks.
- For MenB **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting (e.g., in community or organizational settings and among men who have sex with men) and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm

**Note:** MenB vaccines may be administered simultaneously with MenACWY vaccines if indicated, but at a different anatomic site, if feasible.

Adults may receive a single dose of Penbraya as an alternative to separate administration of MenACWY and MenB when both vaccines would be given on the same clinic day. For adults not at increased risk, if Penbraya is used for dose 1 MenB, MenB-FHbp (Trumenba) should be administered for dose 2 MenB. For adults at increased risk of meningococcal disease, Penbraya may be used for additional MenACWY and MenB doses (including booster doses) if both would be given on the same clinic day **and** at least 6 months have elapsed since most recent Penbraya dose.

## Mpox vaccination

### Special situations

- **Any person at risk for Mpox infection:** 2-dose series, 28 days apart.

  **Risk factors for Mpox infection include:**
  - Persons who are gay, bisexual, and other MSM, transgender or nonbinary people who in the past 6 months have had:
    - A new diagnosis of at least 1 sexually transmitted disease
    - More than 1 sex partner
    - Sex at a commercial sex venue
    - Sex in association with a large public event in a geographic area where Mpox transmission is occurring
  - Persons who are sexual partners of the persons described above
  - Persons who anticipate experiencing any of the situations described above

- **Pregnancy:** There is currently no ACIP recommendation for Jynneos use in pregnancy due to lack of safety data in pregnant persons. Pregnant persons with any risk factor described above may receive Jynneos.
- **Healthcare personnel:** Except in rare circumstances (e.g. no available personal protective equipment), healthcare personnel who do not have any of the sexual risk factors described above should not receive Jynneos.

  For detailed information, see: www.cdc.gov/vaccines/acip/meetings/downloads/slides-2023-10-25-26/04-MPOX-Rao-508.pdf

## Pneumococcal vaccination

### Routine vaccination

- **Age 65 years or older who have:**
  - **Not previously received a dose of PCV13, PCV15, or PCV20 or whose previous vaccination history is unknown:** 1 dose PCV15 OR 1 dose PCV20.
    - If PCV15 is used, administer 1 dose PPSV23 at least 1 year after the PCV15 dose (may use minimum interval of 8 weeks for adults with an immunocompromising condition,* cochlear implant, or cerebrospinal fluid leak).
  - **Previously received only PCV7:** follow the recommendation above.
  - **Previously received only PCV13:** 1 dose PCV20 OR 1 dose PPSV23.
    - If PCV20 is selected, administer at least 1 year after the last PCV13 dose.
    - If PPSV23 is selected, administer at least 1 year after the last PCV13 dose (may use minimum interval of 8 weeks for adults with an immunocompromising condition,* cochlear implant, or cerebrospinal fluid leak).
  - **Previously received only PPSV23:** 1 dose PCV15 OR 1 dose PCV20. Administer either PCV15 or PCV20 at least 1 year after the last PPSV23 dose.
    - If PCV15 is used, no additional PPSV23 doses are recommended.
  - **Previously received both PCV13 and PPSV23 but NO PPSV23 was received at age 65 years or older:** 1 dose PCV20 OR 1 dose PPSV23.
    - If PCV20 is selected, administer at least 5 years after the last pneumococcal vaccine dose.
    - If PPSV23 is selected, see dosing schedule at www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf.
  - **Previously received both PCV13 and PPSV23, AND PPSV23 was received at age 65 years or older:** Based on shared clinical decision-making, 1 dose of PCV20 at least 5 years after the last pneumococcal vaccine dose.
- For guidance on determining which pneumococcal vaccines a patient needs and when, please refer to the mobile app, which can be downloaded here: www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html.

### Special situations

- **Age 19–64 years with certain underlying medical conditions or other risk factors** who have:**
  - **Not previously received a PCV13, PCV15, or PCV20 or whose previous vaccination history is unknown:** 1 dose PCV15 OR 1 dose PCV20.
    - If PCV15 is used, administer 1 dose PPSV23 at least 1 year after the PCV15 dose (may use minimum interval of 8 weeks for adults with an immunocompromising condition,* cochlear implant, or cerebrospinal fluid leak).
  - **Previously received only PCV7:** follow the recommendation above.
  - **Previously received only PCV13:** 1 dose PCV20 OR 1 dose PPSV23.
    - If PCV20 is selected, administer at least 1 year after the PCV13 dose.
    - If PPSV23 is selected, see dosing schedule at www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf
  - **Previously received only PPSV23:** 1 dose PCV15 OR 1 dose PCV20. Administer either PCV15 or PCV20 at least 1 year after the last PPSV23 dose.
    - If PCV15 is used, no additional PPSV23 doses are recommended.
  - **Previously received PCV13 and 1 dose of PPSV23:** 1 dose PCV20 OR 1 dose PPSV23.
  - If PCV20 is selected, administer at least 5 years after the last pneumococcal vaccine dose.
  - If PPSV23 is selected, see dosing schedule at www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf
- For guidance on determining which pneumococcal vaccines a patient needs and when, please refer to the mobile app which can be downloaded here: www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html

***Note:** Immunocompromising conditions include chronic renal failure, nephrotic syndrome, immunodeficiencies, iatrogenic immunosuppression, generalized malignancy, HIV infection, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplant, congenital or acquired asplenia, or sickle cell disease or other hemoglobinopathies.

****Note:** Underlying medical conditions or other risk factors include alcoholism, chronic heart/liver/lung disease, chronic renal failure, cigarette smoking, cochlear implant, congenital or acquired asplenia, CSF leak, diabetes mellitus, generalized malignancy, HIV infection, Hodgkin disease, immunodeficiencies, iatrogenic immunosuppression, leukemia, lymphoma, multiple myeloma, nephrotic syndrome, solid organ transplant, or sickle cell disease or other hemoglobinopathies.

## Poliovirus vaccination

### Routine vaccination

- **Adults known or suspected to be unvaccinated or incompletely vaccinated:** administer remaining doses (1, 2, or 3 IPV doses) to complete a 3-dose primary series.* Unless there are specific reasons to believe they were not vaccinated, most adults who were born and raised in the United States can assume they were vaccinated against polio as children.

### Special situations

- **Adults at increased risk of exposure to poliovirus who completed primary series*:** may administer one lifetime IPV booster

***Note:** Complete primary series consists of at least 3 doses of IPV or trivalent oral poliovirus vaccine (tOPV) in any combination.

For detailed information, see: www.cdc.gov/vaccines/vpd/polio/hcp/recommendations.html

## Respiratory syncytial virus vaccination

### Routine vaccination

- **Pregnant at 32 weeks 0 days through 36 weeks and 6 days gestation from September through January in most of the continental United States*:** 1 dose RSV vaccine (Abrysvo™). Administer RSV vaccine regardless of previous RSV infection.
  - Either maternal RSV vaccination or infant immunization with nirsevimab (RSV monoclonal antibody) is recommended to prevent respiratory syncytial virus lower respiratory tract infection in infants.
- **All other pregnant persons:** RSV vaccine not recommended

There is currently no ACIP recommendation for RSV vaccination in subsequent pregnancies. No data are available to inform whether additional doses are needed in later pregnancies.

### Special situations

- **Age 60 years or older:** Based on shared clinical decision-making, 1 dose RSV vaccine (Arexvy® or Abrysvo™). Persons most likely to benefit from vaccination are those considered to be at increased risk for severe RSV disease.** For additional information on shared clinical decision-making for RSV in older adults, see www.cdc.gov/vaccines/vpd/rsv/downloads/provider-job-aid-for-older-adults-508.pdf

For further guidance, see www.cdc.gov/mmwr/volumes/72/wr/mm7229a4.htm

***Note:** Providers in jurisdictions with RSV seasonality that differs from most of the continental United States (e.g., Alaska, jurisdiction with tropical climate) should follow guidance from public health authorities (e.g., CDC, health departments) or regional medical centers on timing of administration based on local RSV seasonality. Refer to the 2024 Child and Adolescent Immunization Schedule for considerations regarding nirsevimab administration to infants.

****Note:** Adults age 60 years or older who are at increased risk for severe RSV disease include those with chronic medical conditions such as lung diseases (e.g., chronic obstructive pulmonary disease, asthma), cardiovascular diseases (e.g., congestive heart failure, coronary artery disease), neurologic or neuromuscular conditions, kidney disorders, liver disorders, hematologic disorders, diabetes mellitus, and moderate or severe immune compromise (either attributable to a medical condition or receipt of immunosuppressive medications or treatment); those who are considered to be frail; those of advanced age; those who reside in nursing homes or other long-term care facilities; and those with other underlying medical conditions or factors that a health care provider determines might increase the risk of severe respiratory disease.

## Tetanus, diphtheria, and pertussis vaccination

### Routine vaccination

- **Previously did not receive Tdap at or after age 11 years*:** 1 dose Tdap, then Td or Tdap every 10 years

### Special situations

- **Previously did not receive primary vaccination series for tetanus, diphtheria, or pertussis:** 1 dose Tdap followed by 1 dose Td or Tdap at least 4 weeks later, and a third dose of Td or Tdap 6–12 months later (Tdap is preferred as first dose and can be substituted for any Td dose), Td or Tdap every 10 years thereafter.
- **Pregnancy:** 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36.
- **Wound management:** Persons with 3 or more doses of tetanus-toxoid-containing vaccine: For clean and minor wounds, administer Tdap or Td if more than 10 years since last dose of tetanus-toxoid-containing vaccine; for all other wounds, administer Tdap or Td if more than 5 years since last dose of tetanus-toxoid-containing vaccine. Tdap is preferred for persons who have not previously received Tdap or whose Tdap history is unknown. If a tetanus-toxoid-containing vaccine is indicated for a pregnant woman, use Tdap. For detailed information, see www.cdc.gov/mmwr/volumes/69/wr/mm6903a5.htm

***Note:** Tdap administered at age 10 years may be counted as the adolescent dose recommended at age 11-12 years

## Varicella vaccination

### Routine vaccination

- **No evidence of immunity to varicella:** 2-dose series 4–8 weeks apart if previously did not receive varicella-containing vaccine (VAR or MMRV [measles-mumps-rubella-varicella vaccine] for children); if previously received 1 dose varicella-containing vaccine, 1 dose at least 4 weeks after first dose.
  - **Evidence of immunity:** U.S.-born before 1980 (except for pregnant persons and health care personnel [see below]), documentation of 2 doses varicella-containing vaccine at least 4 weeks apart, diagnosis or verification of history of varicella or herpes zoster by a health care provider, laboratory evidence of immunity or disease.

### Special situations

- **Pregnancy with no evidence of immunity to varicella:** VAR contraindicated during pregnancy; after pregnancy (before discharge from health care facility), 1 dose if previously received 1 dose varicella-containing vaccine or dose 1 of 2-dose series (dose 2: 4–8 weeks later) if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980.

- **Health care personnel with no evidence of immunity to varicella:** 1 dose if previously received 1 dose varicella-containing vaccine; 2-dose series 4–8 weeks apart if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980.
- **HIV infection with CD4 percentages ≥15% and CD4 count ≥200 cells/mm$^3$ with no evidence of immunity:** Vaccination may be considered (2 doses 3 months apart); VAR contraindicated for HIV infection with CD4 percentage <15% or CD4 count <200 cells/mm$^3$
- **Severe immunocompromising conditions:** VAR contraindicated.

## Zoster vaccination

### Routine vaccination

- **Age 50 years or older*:** 2-dose series recombinant zoster vaccine (RZV, Shingrix) 2–6 months apart (minimum interval: 4 weeks; repeat dose if administered too soon), regardless of previous herpes zoster or history of zoster vaccine live (ZVL, Zostavax) vaccination.

***Note:** Serologic evidence of prior varicella is not necessary for zoster vaccination. However, if serologic evidence of varicella susceptibility becomes available, providers should follow ACIP guidelines for varicella vaccination first. RZV is not indicated for the prevention of varicella, and there are limited data on the use of RZV in persons without a history of varicella or varicella vaccination.

### Special situations

- **Pregnancy:** There is currently no ACIP recommendation for RZV use in pregnancy. Consider delaying RZV until after pregnancy.
- **Immunocompromising conditions (including persons with HIV regardless of CD4 count)**:** 2-dose series recombinant zoster vaccine (RZV, Shingrix) 2–6 months apart (minimum interval: 4 weeks; repeat dose if administered too soon). For detailed information, see www.cdc.gov/shingles/vaccination/immunocompromised-adults.html

****Note:** If there is no documented history of varicella, varicella vaccination, or herpes zoster, providers should refer to the clinical considerations for use of RZV in immunocompromised adults aged ≥19 years and the ACIP varicella vaccine recommendations for further guidance: www.cdc.gov/mmwr/volumes/71/wr/mm7103a2.htm

# Appendix Recommended Adult Immunization Schedule for Ages 19 Years or Older, United States, 2024

## Contraindications and Precautions to Commonly Used Vaccines

*Adapted from Table 4-1 in Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization:* Contraindication and Precautions, Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices—United States, 2023–24 Influenza Season | MMWR (cdc.gov), Contraindications and Precautions for COVID-19 Vaccination, and Contraindications and Precautions for Jynneos Vaccination

| Vaccines and Other Immunizing Agents | Contraindicated or Not Recommended[1] | Precautions[2] |
|---|---|---|
| COVID-19 mRNA vaccines [Pfizer-BioNTech, Moderna] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of an mRNA COVID-19 vaccine[4] | • Diagnosed non-severe allergy (e.g., urticaria beyond the injection site) to a component of an mRNA COVID-19 vaccine[4]; or non-severe, immediate (onset less than 4 hours) allergic reaction after administration of a previous dose of an mRNA COVID-19 vaccine<br>• Myocarditis or pericarditis within 3 weeks after a dose of any COVID-19 vaccine<br>• Multisystem inflammatory syndrome in children (MIS-C) or multisystem inflammatory syndrome in adults (MIS-A)<br>• Moderate or severe acute illness, with or without fever |
| COVID-19 protein subunit vaccine [Novavax] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of a Novavax COVID-19 vaccine[4] | • Diagnosed non-severe allergy (e.g., urticaria beyond the injection site) to a component of Novavax COVID-19 vaccine[4]; or non-severe, immediate (onset less than 4 hours) allergic reaction after administration of a previous dose of a Novavax COVID-19 vaccine<br>• Myocarditis or pericarditis within 3 weeks after a dose of any COVID-19 vaccine<br>• Multisystem inflammatory syndrome in children (MIS-C) or multisystem inflammatory syndrome in adults (MIS-A)<br>• Moderate or severe acute illness, with or without fever |
| Influenza, egg-based, inactivated injectable (IIV4) | • Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, RIV, or LAIV of any valency)<br>• Severe allergic reaction (e.g., anaphylaxis) to any vaccine component[3] (excluding egg) | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Moderate or severe acute illness with or without fever |
| Influenza, cell culture-based inactivated injectable (ccIIV4) [Flucelvax Quadrivalent] | • Severe allergic reaction (e.g., anaphylaxis) to any ccIIV of any valency, or to any component[3] of ccIIV4 | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, RIV, or LAIV of any valency. If using ccIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist.<br>• Moderate or severe acute illness with or without fever |
| Influenza, recombinant injectable (RIV4) [Flublok Quadrivalent] | • Severe allergic reaction (e.g., anaphylaxis) to any RIV of any valency, or to any component[3] of RIV4 | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, ccIIV, or LAIV of any valency. If using RIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist.<br>• Moderate or severe acute illness with or without fever |
| Influenza, live attenuated (LAIV4) [Flumist Quadrivalent] | • Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, RIV, or LAIV of any valency)<br>• Severe allergic reaction (e.g., anaphylaxis) to any vaccine component[3] (excluding egg)<br>• Anatomic or functional asplenia<br>• Immunocompromised due to any cause including, but not limited to, medications and HIV infection<br>• Close contacts or caregivers of severely immunosuppressed persons who require a protected environment<br>• Pregnancy<br>• Cochlear implant<br>• Active communication between the cerebrospinal fluid (CSF) and the oropharynx, nasopharynx, nose, ear, or any other cranial CSF leak<br>• Received influenza antiviral medications oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days. | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine<br>• Asthma in persons aged 5 years or older<br>• Persons with underlying medical conditions (other than those listed under contraindications) that might predispose to complications after wild-type influenza virus infection [e.g., chronic pulmonary, cardiovascular (except isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus)]<br>• Moderate or severe acute illness with or without fever |

1. When a contraindication is present, a vaccine should NOT be administered. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization.
2. When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization.
3. Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. See Package inserts for U.S.-licensed vaccines.
4. See package inserts and FDA EUA fact sheets for a full list of vaccine ingredients. mRNA COVID-19 vaccines contain polyethylene glycol (PEG).

# Appendix Recommended Adult Immunization Schedule for Ages 19 Years or Older, United States, 2024

| Vaccine | Contraindicated or Not Recommended[1] | Precautions[2] |
|---|---|---|
| *Haemophilus influenzae* type b (Hib) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Moderate or severe acute illness with or without fever |
| Hepatitis A (HepA) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] including neomycin | • Moderate or severe acute illness with or without fever |
| Hepatitis B (HepB) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] including yeast<br>• *Pregnancy: Heplisav-B and PreHevbrio are not recommended due to lack of safety data in pregnant persons. Use other hepatitis B vaccines if HepB is indicated*[4] | • Moderate or severe acute illness with or without fever |
| Hepatitis A-Hepatitis B vaccine (HepA-HepB) [Twinrix] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] including neomycin and yeast | • Moderate or severe acute illness with or without fever |
| Human papillomavirus (HPV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• *Pregnancy: HPV vaccination not recommended* | • Moderate or severe acute illness with or without fever |
| Measles, mumps, rubella (MMR) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised)<br>• Pregnancy<br>• Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent | • Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)<br>• History of thrombocytopenia or thrombocytopenic purpura<br>• Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing<br>• Moderate or severe acute illness with or without fever |
| Meningococcal ACWY (MenACWY) (MenACWY-CRM) [Menveo] (MenACWY-TT) [MenQuadfi] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• For MenACWY-CRM only: severe allergic reaction to any diphtheria toxoid–or CRM197–containing vaccine<br>• For MenACWY-TT only: severe allergic reaction to a tetanus toxoid-containing vaccine | • Moderate or severe acute illness with or without fever |
| Meningococcal B (MenB) MenB-4C [Bexsero] MenB-FHbp [Trumenba] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Pregnancy<br>• For MenB-4C only: Latex sensitivity<br>• Moderate or severe acute illness with or without fever |
| Meningococcal ABCWY (MenACWY-TT/MenB-FHbp) [Penbraya] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe allergic reaction to a tetanus toxoid-containing vaccine | • Moderate or severe acute illness, with or without fever |
| Mpox [Jynneos] | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Moderate or severe acute illness, with or without fever |
| Pneumococcal conjugate (PCV15, PCV20) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe allergic reaction (e.g., anaphylaxis) to any diphtheria-toxoid–containing vaccine or to its vaccine component[3] | • Moderate or severe acute illness with or without fever |
| Pneumococcal polysaccharide (PPSV23) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Moderate or severe acute illness with or without fever |
| Poliovirus vaccine, inactivated (IPV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Pregnancy<br>• Moderate or severe acute illness with or without fever |
| Respiratory syncytial virus vaccine (RSV) | • Severe allergic reaction (e.g., anaphylaxis) to a vaccine component | • Moderate or severe acute illness with or without fever |
| Tetanus, diphtheria, and acellular pertussis (Tdap) Tetanus, diphtheria (Td) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• For Tdap only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures), not attributable to another identifiable cause, within 7 days of administration of previous dose of DTP, DTaP, or Tdap | • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus-toxoid–containing vaccine<br>• History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid– containing or tetanus-toxoid–containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid–containing vaccine<br>• Moderate or severe acute illness with or without fever<br>• For Tdap only: Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized |
| Varicella (VAR) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3]<br>• Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised)<br>• Pregnancy<br>• Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent | • Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product)<br>• Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)<br>• Use of aspirin or aspirin-containing products<br>• Moderate or severe acute illness with or without fever |
| Zoster recombinant vaccine (RZV) | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component[3] | • Moderate or severe acute illness with or without fever<br>• Current herpes zoster infection |

1. When a contraindication is present, a vaccine should NOT be administered. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
2. When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
3. Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at www.fda.gov/vaccines-blood-biologics/approved-products/vaccines-licensed-use-united-states.
4. For information on the pregnancy exposure registries for persons who were inadvertently vaccinated with Heplisav-B or PreHevbrio while pregnant, please visit heplisavbpregnancyregistry.com/ or www.prehevbrio.com/#safety.

# Addendum Recommended Adult Immunization Schedule for Ages 19 Years or Older, United States, 2024

In addition to the recommendations presented in the previous sections of this immunization schedule, ACIP has approved the following recommendations by majority vote since October 26, 2023. The following recommendations have been adopted by the CDC Director and are now official. Links are provided if these recommendations have been published in *Morbidity and Mortality Weekly Report (MMWR)*.

| Vaccines | Recommendations | Effective Date of Recommendation* |
|---|---|---|
| No new vaccines or vaccine recommendations to report | | |

*The effective date is the date when the CDC director adopted the recommendation and when the ACIP recommendation became official.