



Standing Orders for Immunizations

2020-2021

Defense Health Agency
Immunization Healthcare Division



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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

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This appointment is current as the above indicated date and shall remain valid until rescinded or removed from the appointment.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

SUBJECT: 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 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
19 May 2020

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.

- h. 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.

- i. Examples of Standing Orders (not all-inclusive) may be found at [https:// health.mil/standingorders](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 May 2020.
- c. Immunization Action Coalition. Using Standing Orders for Administering Vaccines and Standing Order Templates. <http://www.immunize.org/standing-orders/>. Last updated 12 Dec 2018.
- 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)

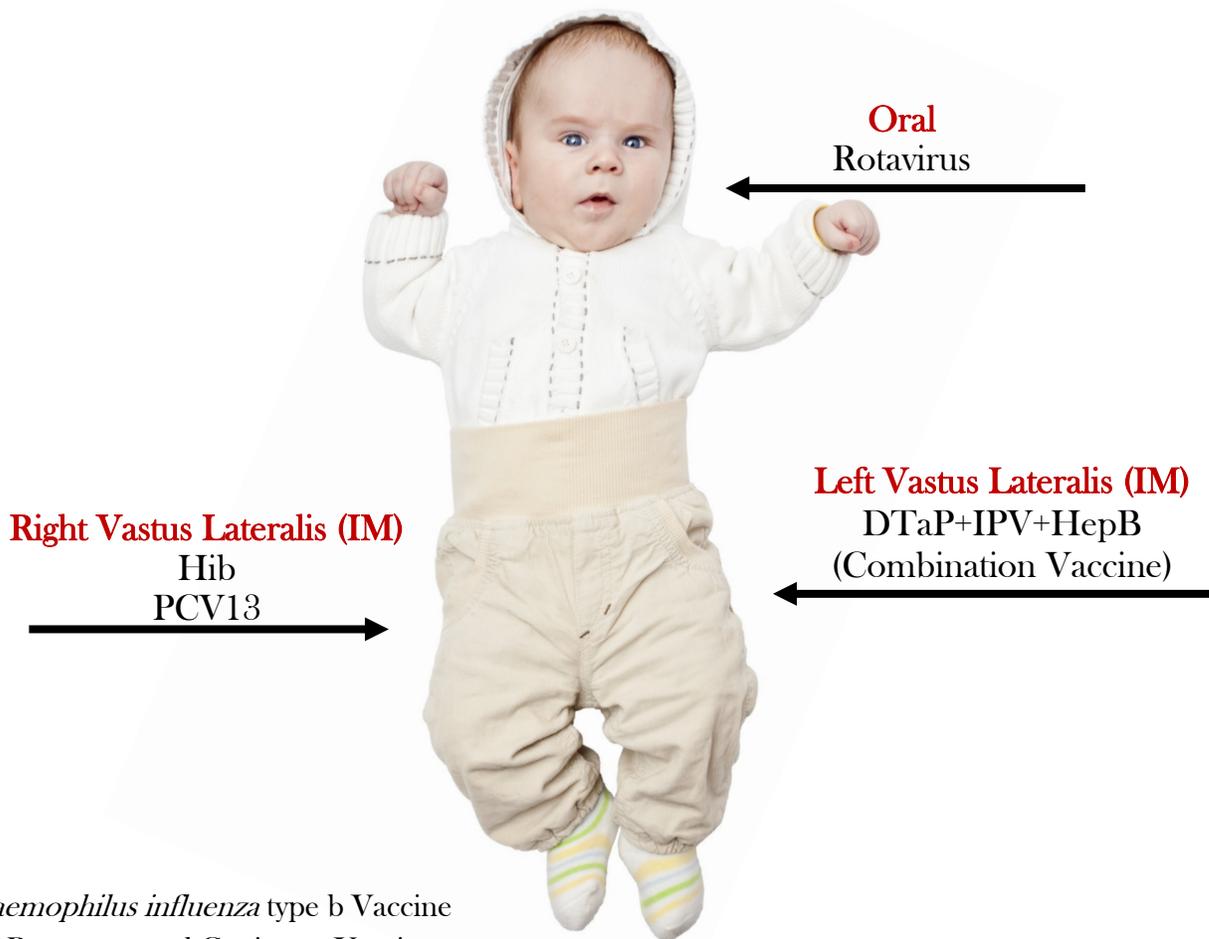
Anatomic Site Map

Suggested Sites
for Immunization

Anatomic Site Map

Suggested sites for Immunizations

2 & 4 Months



Hib—*Haemophilus influenzae* 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 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)

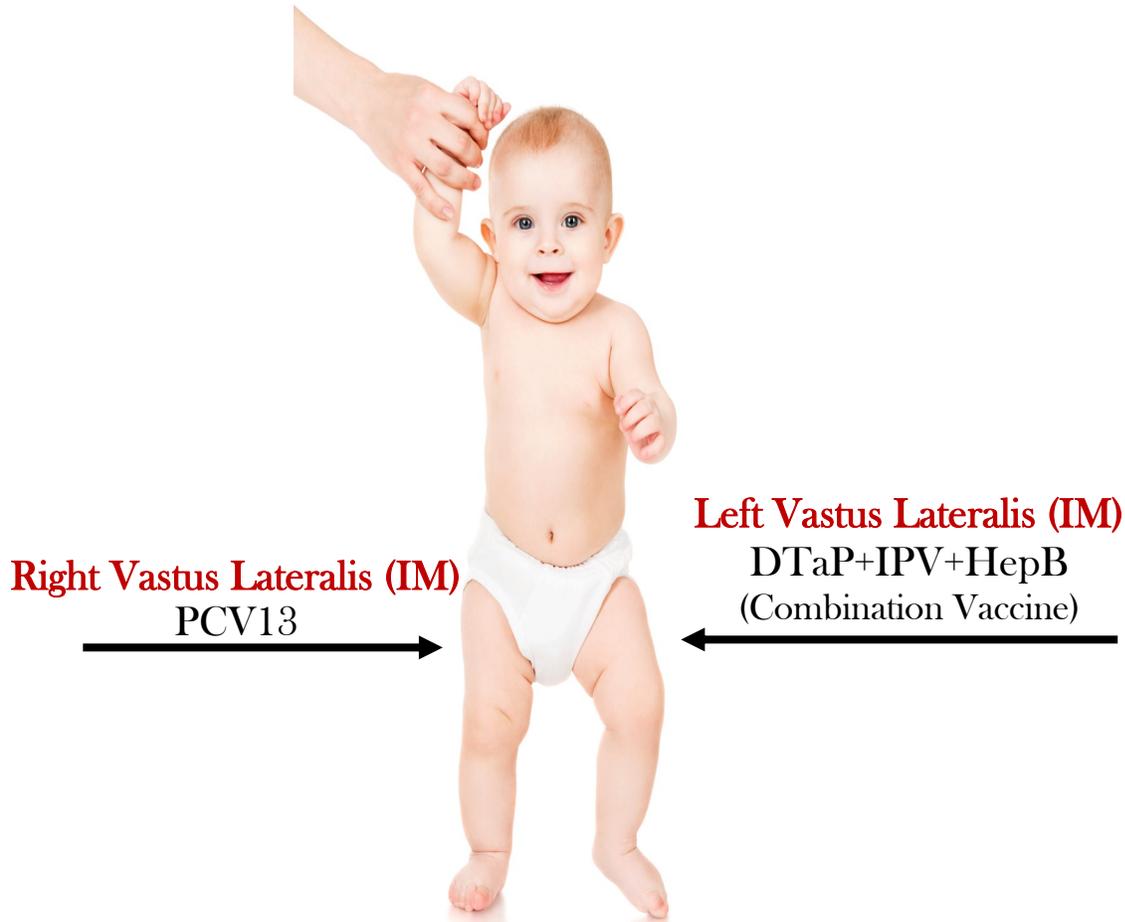


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Anatomic Site Map

Suggested sites for Immunizations

6 Months



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 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



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 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

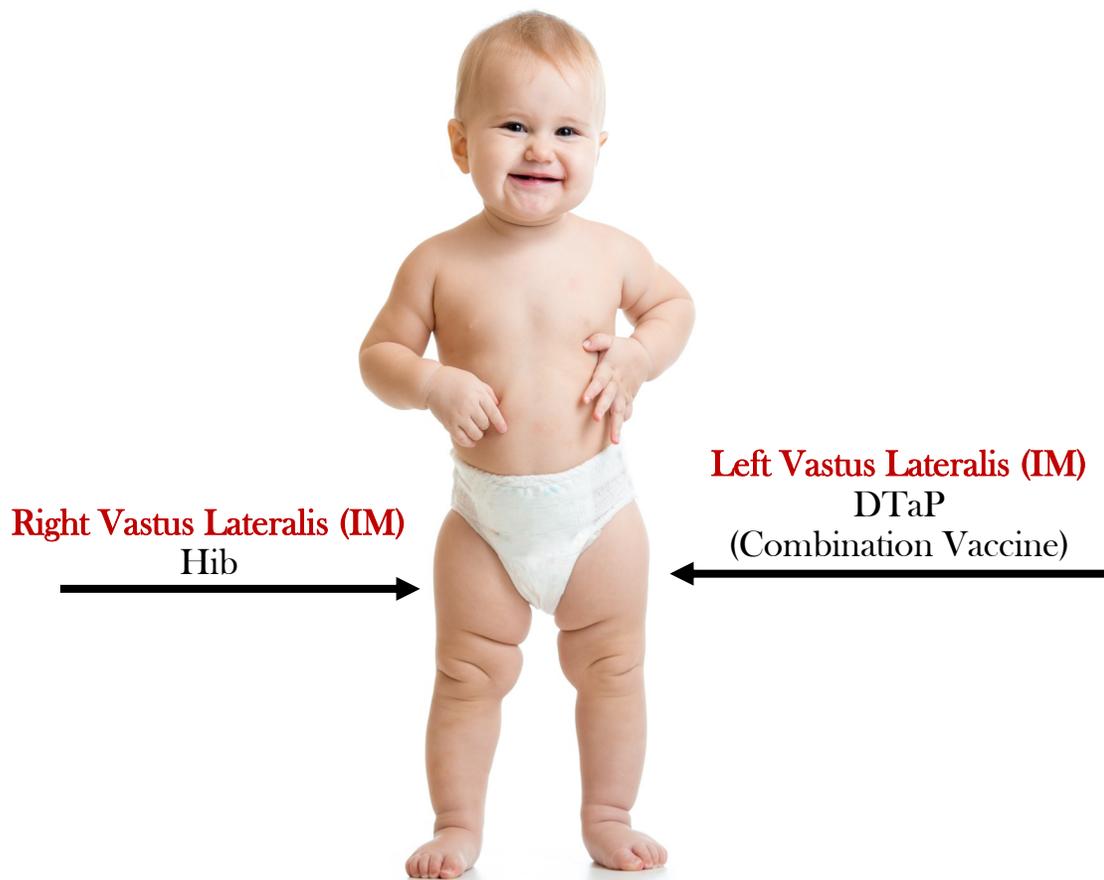


Photo: Shutterstock. Retrieved 09 April 2020 from <https://www.shutterstock.com/image-photo/beautiful-baby-boy-on-white-background-723436909>

Anatomic Site Map

Suggested sites for Immunizations

15 Months



Hib—*Haemophilus influenzae* type b Vaccine

DTaP—Diphtheria Toxoid, Tetanus Toxoid and Acellular Pertussis Vaccine

IM—Intramuscular

Note: “If more than 2 vaccines are 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)

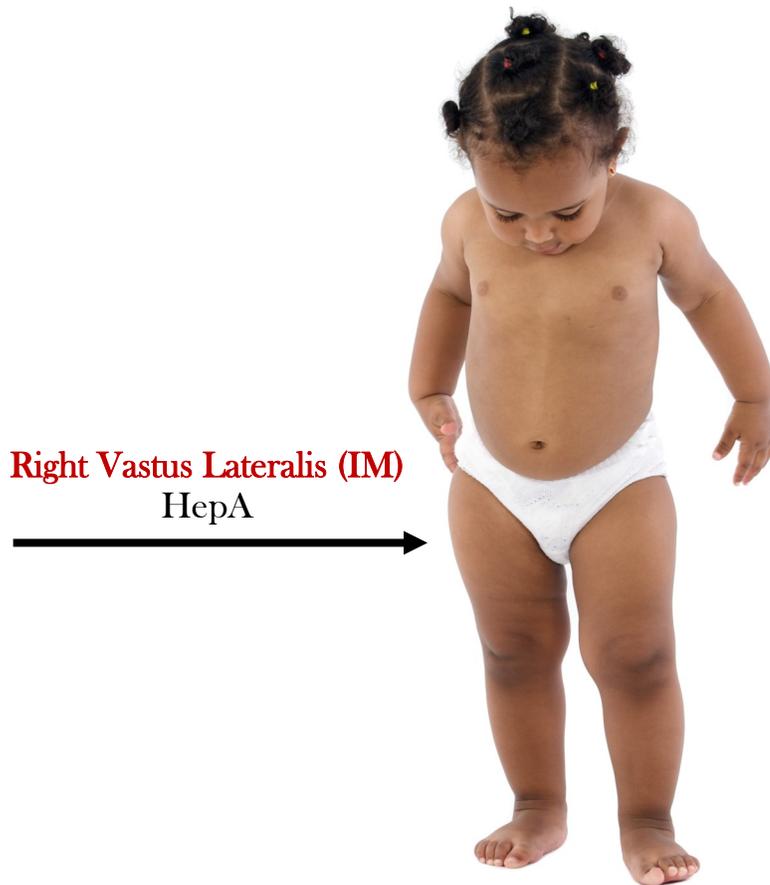


Photo. Shutterstock. Retrieved 09 April 2020 from <https://www.shutterstock.com/image-photo/standing-baby-girl-isolated-on-white-175002521>

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 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/baby-girl-diaper-over-white-background-18970339>

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 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)

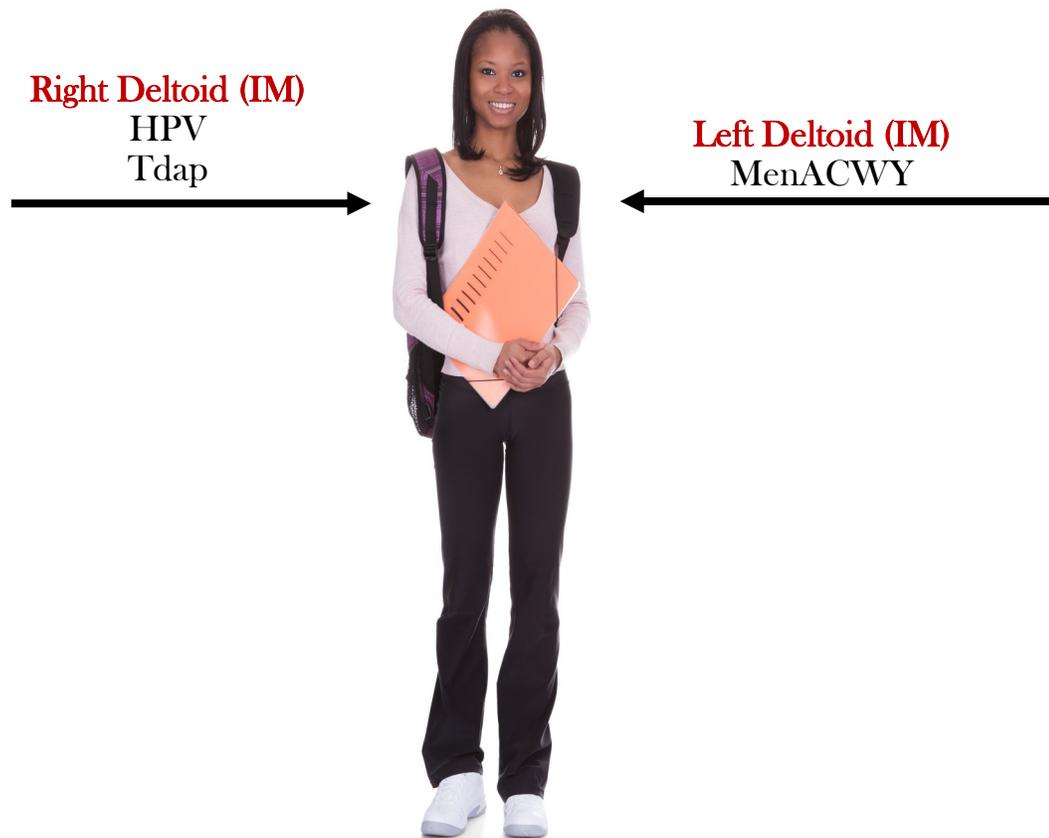


Photo. Centers for Disease Control and Prevention Saving Lives Protecting People. Child Development. Retrieved 18 March 2020 from <https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/preschoolers.html>

Anatomic Site Map

Suggested sites for Immunizations

11 - 12 years



Right Deltoid (IM)

HPV
Tdap

Left Deltoid (IM)

MenACWY

HPV—Human Papillomavirus Vaccine

Tdap—Tetanus and Diphtheria Toxoids and Acellular Pertussis Vaccine

MenACWY—Meningococcal (A,C,W,Y) Vaccine

IM—Intramuscular

Note: “If more than 2 vaccines are 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>

Anatomic Site Map

Suggested sites for Immunizations

16 - 18 years



Tdap—Tetanus and Diphtheria Toxoids and Acellular Pertussis Vaccine

MenACWY—Meningococcal (ACWY) Vaccine

IM—Intramuscular

Note: “If more than 2 vaccines are 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>

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



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>

2020 Updates to Pediatric and Adult Standing Orders

DHA-IHD Updates to Pediatric Standing Orders

All standing orders (pediatric and adult) are no longer brand specific and needle length and injection site information has been added to each order. Also, latex-specific information has been added. In addition, the following updates have been made:

VACCINE	2019	2020
DTaP	<ul style="list-style-type: none"> • Age 6 weeks - 6 years • Catch-up schedule for those who didn't receive DTaP at recommended ages not covered in this standing order 	<ul style="list-style-type: none"> • Age 2 months – 6 years to reflect routine use • Contraindications more detailed to include neomycin, polymycin B, streptomycin and yeast • Latex info included for each brand • Included routine and catch-up schedule for all licensed DTaP vaccines
HepA	<ul style="list-style-type: none"> • Age - 12-23 months & 2 years older • Age 2 years or older who live in communities, regions, or states where routine vaccination is recommended • Children aged 6-11 months with international travel off-label and is not covered under these standing orders 	<ul style="list-style-type: none"> • Age updated to 1-18 years who has not completed a complete series and those with: <ul style="list-style-type: none"> • Anticipated travel • Pregnant • Altered immunosuppression • Occupational exposure • Incarceration or homelessness • In settings such as group homes, nonresidential day care for developmentally disabled • Deleted diagnosis of a clotting-factor disorder, such as hemophilia • Added 6-11 months of age pending international travel • Latex info added • Dosing schedule for brands HAVRIX and VAQTA added
HepB		<ul style="list-style-type: none"> • Latex info added • Dosing schedule for all HepB vaccine brands (COMVAX no longer available)
Hib	<ul style="list-style-type: none"> • Age covered 2-71 months 	<ul style="list-style-type: none"> • Age more specific and updated to 2-59 months and 2 – 17years • Added 2-59 months (who didn't complete series) and are immunoglobulin deficient, complement deficiency, receiving chemotherapy or radiation therapy • Added 2-17 years who are HIV+, anatomic or functional asplenia, undergoing splenectomy, or recipient of a hematopoietic stem cell transplant

		<ul style="list-style-type: none"> • Latex info added • Dosing schedule for each brand - PedvaxHIB®, ActHIB®, Hiberix®, Pentacel® • Routine schedule, catch-up for immunocompetent, and high risk groups added
HPV	<ul style="list-style-type: none"> • Dosing schedule <ul style="list-style-type: none"> • 2 dose series - 2nd dose given minimum of 5 months after 1st – if given too soon give a 3rd dose at least 4 months after 2nd dose • 3 dose series (0,2, and 6 months) with minimal interval of 4 weeks between 1st and 2nd dose, 12 weeks between the 2nd and 3rd dose and at least 24 weeks between 1st and 3rd dose 	<ul style="list-style-type: none"> • Dosing schedule updated to: <ul style="list-style-type: none"> • 2 month dose series – minimum interval 5 months –if dose 2 given too soon repeat (no specified time indicated so deleted give 3rd dose) • Dosing for 3 dose changed to minimum of 5 months (20 weeks) between 1st and 3rd dose
Polio	New for 2020	
JEV	<ul style="list-style-type: none"> • Booster dose recommended for persons 14 months and older if more than 11 months have passed since completing the primary series and risk of exposure to the JE virus continues 	<ul style="list-style-type: none"> • Deleted the following precautions <ul style="list-style-type: none"> • Immunocompromised children • breastfeeding women • Booster is updated for ages 2 months to 17 years
MMR		<ul style="list-style-type: none"> • Procedure is more detailed to include age 4 years or older with no documentation; 6 months and older with international travel, 12 months or older with 1 dose given younger than 12 months; and history of 2 doses but identified as increased risk to mumps outbreak • Added TB skin test precautions
MMRV		<ul style="list-style-type: none"> • Added TB skin test precautions
Meningococcal ACWY	<ul style="list-style-type: none"> • Indicated for ages <ul style="list-style-type: none"> • 11-17 years unvaccinated • 17 years unvaccinated and 1st year college student living in a residence hall • 2 months through 17 years with a diagnosis of persistent complement component deficiency (an immune system disorder) 	<ul style="list-style-type: none"> • Age updated to 2 months – 18 years and not completed 2 dose series and risk based vaccination is indicated for those <ul style="list-style-type: none"> • Have not completed the recommended series by 2 yrs of age • Anticipated travel to country where meningococcal disease is hyperendemic

	<p>or diagnosis of anatomic or functional asplenia (including sickle-cell disease)</p> <ul style="list-style-type: none"> • age 2 months through 17 years who are part of an outbreak attributable to a vaccine serogroup • age 2 months through 17 years with anticipated travel to a country where meningococcal disease is hyperendemic or epidemic • Routine and catch-up schedule for ages 11-17 indicates 1 dose • Dosing schedule does not cover dose #2 in high-risk groups age 24 months and older 	<ul style="list-style-type: none"> • Exposure to meningitis as an outbreak • Routine and catch-up schedule has been updated to 2 doses for 11-18 years • Dosing schedule for high risk groups age 24 months and older have been added and updated • High-risk updated to include those with complement deficiency (an immune system disorder) or diagnosis of anatomic or functional asplenia (including sickle-cell disease)
MenB	<ul style="list-style-type: none"> • Indicated for ages 10-17 years with certain high-risk conditions 	<ul style="list-style-type: none"> • Indicated for ages updated to: <ul style="list-style-type: none"> • 10-18 years with certain high-risk conditions • Added healthy 16-18 yr olds not at increased risk but want protection • Ravulizumab (Ultomiris) added as high-risk condition under indications • Updated and added serious reaction to kanamycin as a contraindication • Latex info added for Bexsero® and Trumenba® • Added dosing for Trumemba • Added new ACIP recommendations <ul style="list-style-type: none"> • ≥10 years with complement deficiency or inhibitor use, asplenia, or microbiologists receive a booster 1 yr following the completion of MenB primary series followed by booster every 2-3 years if risk remains • Added ≥10 yrs who are at risk during outbreak – administer 1 time booster if it has been ≥1 yr since completing MenB primary series
PCV13		<ul style="list-style-type: none"> • Deleted indication/procedure to administer to persons with diabetes mellitus

		<ul style="list-style-type: none"> Added more detail routine dosing and catch-up schedule for healthy ages 2 months – 59 months and at-risk 24 months -71 months and 6 -17 years
PPSV23	New for 2020	
Rotarix	<ul style="list-style-type: none"> Indication to administer ROTARIX® after 24 weeks of age not covered under SO 	<ul style="list-style-type: none"> Indication updated to cover ages 24 weeks to 8 months who have not completed series Added latex info ROTARIX® and RotaTeq® Added more detailed dosing schedule for ROTARIX® and included RotaTeq® dosing schedule
Td/Tdap	<ul style="list-style-type: none"> Indications for dosing <ul style="list-style-type: none"> 10 years and older 10 yrs and older with no documentation of 1 dose of Tdap Use for ages 7-9 and pregnant females not covered in this SO Dosing schedule requires Tdap booster one time and all subsequent doses are to be administered with Td 	<ul style="list-style-type: none"> Indications for dosing updated to <ul style="list-style-type: none"> Can begin as early as age 7 Added pregnant females between 27-36 weeks Added latex info for Adacel® and Boostrix® Dosing schedule updated and added <ul style="list-style-type: none"> Td/Tdap can be used for boosters every 10 years Pregnant patients – 1 dose for each pregnancy during 27-36 weeks gestation Dosing schedule updated provided for DTaP, DT, Td, or Tdap for ages 7-18 yrs
Typhoid		<ul style="list-style-type: none"> Added contraindication of immunocompromised for oral typhoid Added precaution – oral typhoid should not be given within 3 days of antimicrobial agent Added dosing schedule for oral typhoid
Varicella		<ul style="list-style-type: none"> Added precautions - TB skin test and aspirin or aspirin containing products
Yellow Fever	New for 2020	

DHA-IHD Updates to Adult Standing Orders

All standing orders (pediatric and adult) are no longer brand specific and needle length and injection site information has been added to each order. Also, latex-specific information has been added. In addition, the following updates have been made:

VACCINE	2019	2020
Anthrax		<ul style="list-style-type: none"> Breastfeeding added to precautions Added latex info for BioThrax® Guillain-Barré Syndrome (GBS) deleted from precautions Added Anthrax vaccine pregnancy registry info/contact
HepA	Procedure/indication included <ul style="list-style-type: none"> age 18 years or older who live in communities, regions, or states where routine vaccination is recommended diagnosis of a clotting-factor disorder, such as hemophilia 	<ul style="list-style-type: none"> Procedure/indication updated to: <ul style="list-style-type: none"> Age updated to ≥19 years who has not completed series and persons age > 40 at increased risk Pregnant and those with Altered immunosuppression Occupational exposure Incarceration or homelessness In settings such as group homes, nonresidential day care for developmentally disabled Deleted diagnosis of a clotting-factor disorder, such as hemophilia as indication Latex info added for HAVRIX® and VAQTA® Added dosing schedule for VAQTA®
HepB		<ul style="list-style-type: none"> Procedure/Indications updated and added more details and travel to country with high endemicity of HBV, HIV infection, chronic liver disease, diabetes, use of injectable street drugs, person with exposure to STDs Added dosing schedule for Recombivax HB® and Heplisav-B
Twinrix		<ul style="list-style-type: none"> Procedure/indications added – end stage renal disease, hemodialysis, HIV infection, diabetes Latex info added for TWINRIX® Updated dosing schedule and added info for the interchangeability of TWINRIX® and single antigen HepA and B vaccines
Hib		New SO for 2020
HPV	<ul style="list-style-type: none"> Dosing schedule <ul style="list-style-type: none"> Provide 9vHPV vaccine in a 3-dose schedule at 0, 2, and 6 calendar months for all males and females aged 	<ul style="list-style-type: none"> Dosing schedule updated to: <ul style="list-style-type: none"> Age 15-26 initial vaccination and 9-26 with impaired immunity Updated to - 3 dose series at 0, 2, and 6 months (minimum interval of 4 weeks between dose 1 and 2, 12 weeks between 2-3 dose, and

	<p>15-45 years old and all immunocompromised patients (9-45 years) who have not been previously vaccinated</p> <ul style="list-style-type: none"> • 3 dose series at 0, 2, and 6 months (minimum interval of 4 weeks between dose 1 and 2, 12 weeks between 2-3 dose, and at least (24 weeks) between 1st and 3rd dose) 	<p>at least 5 months (20 weeks) between 1st and 3rd dose</p> <ul style="list-style-type: none"> • Added updated schedule for 27-45 years – no catch-up schedule
Polio		N/A
JEV		<ul style="list-style-type: none"> • Deleted breastfeeding and immunocompromised from precautions
MeaslesMumpsRubella	<ul style="list-style-type: none"> • Procedure/indication • Identify patients 18 years of age and older in need of vaccination against measles, mumps, and rubella 	<ul style="list-style-type: none"> • Procedure/Indication updated with clearer definition of who needs 2 doses <ul style="list-style-type: none"> • Lack of documentation of 2 doses, positive titer or born before 1957 (excludes HC workers) and those who have history of 2 doses but are at increased risk during mumps outbreak • Added possible interference of TB skin test to precautions
Meningococcal ACWY	<ul style="list-style-type: none"> • Procedure/indication • age 18 years and anticipated first-year college student living in a residence hall and unvaccinated • Dosing schedule • 2 dose for high risk patients 24 months and older and routine booster for teens ages 16-18 who did not receive initial Menveo dose at age 11-12, and a 2nd dose for those ages 18-55 is not covered in this SO 	<ul style="list-style-type: none"> • Procedure/indication updated to: <ul style="list-style-type: none"> • age 19-21 years and anticipated first-year college student living in a residence hall and last vaccinated before age 16 years of age • Added HIV infection • Dosing schedule updated to <ul style="list-style-type: none"> • Added booster every 5 years for travelers or residents of endemic area, during outbreak, or occupational exposure • Added 2 dose and booster every 5 years for immunocompromised, asplenia including sickle cell • Added that standard of care/ACIP recommends MenACWY for 56 and older at increased risk even though package insert indicates through age 55

MenB		<ul style="list-style-type: none"> • Procedure/indication added persons 18-23 years of age who are not at increased risk who want protection against MenB • Added dosing schedule for Trumemba®
PCV13/PPSV 23		<ul style="list-style-type: none"> • Procedure/indication updated to include: <ul style="list-style-type: none"> • organ or bone marrow transplant for procedure for PPSV23 (for 19-64 yr olds) • Updated dosing for 65 and older and PCV13 to 1 time dose based on shared clinical decision • Updated dosing charts for PCV13 and PPSV23 based on age, risk factors, and shared clinical decisions for ages 19-64 and 65 and older
Rabies		<ul style="list-style-type: none"> • N/A
Td/Tdap	<ul style="list-style-type: none"> • Procedure/indication <ul style="list-style-type: none"> • One time dose of Tdap in place of routine Td booster which is routinely given at the 11-12 years of age. All other booster doses should be completed with a Td vaccine at 10 year intervals • Tdap vaccine with every pregnancy (between 27-36 weeks gestation) is not covered under this standing order 	<ul style="list-style-type: none"> • Procedure/indication updated and include: <ul style="list-style-type: none"> • pregnant women who have not received Tdap during current pregnancy • Dosing updated to <ul style="list-style-type: none"> • Booster dose every 10 years of either Td or Tdap • Pregnant women should receive one dose of Tdap at each pregnancy during 27-36 weeks gestation
Typhoid		<ul style="list-style-type: none"> • Precaution updated and added - oral typhoid vaccine should not be given within 3 days (before or after) of an antimicrobial agent • Dosing schedule includes both Typhim Vi® and Vivotif®
Varicella		<ul style="list-style-type: none"> • Updated precaution and added <ul style="list-style-type: none"> • TB skin testing • use of aspirin or aspirin containing products
Yellow Fever		<ul style="list-style-type: none"> • Deleted precaution -individuals with a history of allergic reactions to eggs, chickens, and gelatin • Added precaution - asymptomatic HIV infection with CD4 T lymphocyte values 200-499 mm³ • Added note (recommendation) to separate MMR and YF vaccines at least 30 days apart
Zoster		<ul style="list-style-type: none"> • Added precaution that an acute episode of herpes zoster - RZV is not a treatment for herpes zoster or post-herpetic neuralgia

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

Japanese Encephalitis Vaccine

Meningococcal ACWY Vaccine

Meningococcal Group B Vaccine

Measles Mumps Rubella Vaccine

Measles Mumps Rubella Varicella Vaccine

Pneumococcal Conjugate (PCV13) Vaccine

Pneumococcal Polysaccharide (PPSV23) Vaccine

Rotavirus Vaccine

Tetanus Diphtheria and Pertussis 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. 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 go to <https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- 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; these can be found at www.immunize.org/vis.
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

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 vaccines							
DTaP	Infanrix/ Daptacel	GlaxoSmithKline/ Sanofi Pasteur	X	X	X	X	X
Combination vaccines with DTaP							
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	GlaxoSmithKline/ Sanofi Pasteur					X
DT vaccine							
DT	No trade name	Sanofi Pasteur	X	X	X	X	X

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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

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

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

- 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.
- 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.
- Adverse Events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
- This policy and procedure 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 A Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from Hepatitis A virus 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 healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

Procedure:

1. Identify all persons 1 to 18 years of age* in need of vaccination against hepatitis A virus (HAV) based on the following criteria:

- Has not completed a hepatitis A vaccine (HepA) series
- Anticipated international travel; see CDC Traveler's Health for updates
- Pregnant and non-pregnant persons identified to be at risk for an infection or severe outcome from HAV:
 - altered immunocompetence (e.g., congenital, drug-induced, or acquired, such as HIV)
 - use of injection or non-injection illegal drugs
 - occupational risk (i.e., in a HAV research lab or with primates)
 - close contact with an international adoptee during the first 60 days after the arrival of the adoptee in the United States
 - males who have sex with other males (MSM)
 - incarceration or homelessness
 - chronic liver disease (e.g., hepatitis B or C, cirrhosis, fatty or alcoholic liver disease, autoimmune hepatitis, or ALT/AST levels persistently greater than twice the upper limit of normal)
- In settings providing services for at-risk persons as defined above, such as group homes and nonresidential day care facilities for developmentally disabled persons
- At-risk persons (as defined above) during a hepatitis A outbreak
- Unvaccinated persons possibly exposed to HAV within the last two weeks. Persons younger than 12 months of age should be given immune globulin (IG 0.1mL/kg) instead of vaccine
- Any other child, adolescent or teen who wants to be protected from HAV
- *Persons 6-11 months of age pending international travel

***Note:** persons aged 6-11 months may receive HepA for international travel (children younger than 6 months of age should be given intramuscular IG instead of vaccine). Though an off-label use of the vaccine, this is consistent with best practices and current DoD and ACIP guidelines.

2. Screen all patients for contraindications and precautions to HepA:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of HepA or to a vaccine component (to include neomycin)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to

Precautions:

- Moderate or severe acute illness with or without fever
 - The tip caps of the prefilled syringes of HAVRIX® and VAQTA®, and the vials of VAQTA®, contain natural rubber latex and may cause allergic reactions in latex sensitive individuals. The vials of HAVRIX® do 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; these can be found at www.immunize.org/vis.
 4. Provide vaccine as follows:
HepA consists of a 2-dose series (HAVRIX®: 0, 6-12 months; VAQTA®: 0, 6-18 months) recommended between 12-23 months of age. Administer 0.5mL of HepA 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.

Note: Persons 12 months – 18 years of age receive a 0.5mL dose; persons 19 years of age and older receive a 1mL dose. Please see the appropriate standing order for administration of HepA to adults for details

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 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 birth - 19 years of age in need of vaccination against hepatitis B based on the following criteria:
 - Have not received at least 3 doses of hepatitis B vaccine (HepB) at the appropriate ages/intervals

2. Screen all patients for contraindications and precautions to HepB:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of HepB or to a vaccine component (to include yeast)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Moderate or severe acute illness with or without fever
 - The tip caps of the prefilled syringes of Engerix-B® and Recombivax HB®, and the vials of Recombivax HB®, contain natural rubber latex and may cause allergic reactions in latex sensitive individuals. The vials of Engerix-B® do 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; these can be found at www.immunize.org/vis.

4. Provide vaccine as follows:

HepB (Engerix-B®, Recombivax HB®) consists of a 3-dose series at 0, 1-2 and 6-18 months of age. 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 chart below

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
Neonates (0-28 days)	5/8 [†] inch	Anterolateral thigh
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

Note: persons birth – 19 years of age receive a 0.5mL dose; persons 20 years of age and older receive a 1mL dose. Please see the appropriate standing order for administration of HepB to adults for information

Heplisav-B®-2-dose series at 0 and 1 month may be administered to teens ages 18 years and older.

5. Provide subsequent doses of HepB to complete each patient’s 3-dose schedule by observing a minimum interval of 4 weeks between the 1st and 2nd doses; 8 weeks between the 2nd and 3rd doses; and at least 16 weeks between the 1st and 3rd doses. The last dose in the pediatric series should not be administered earlier than 24 weeks of age. Patients will receive a total of 4 doses of hepatitis B-containing vaccine when combination vaccines (e.g., Pediarix®) are given after the birth dose of HepB which is still consistent with best practices.

Note: revaccination may be recommended for certain populations, including:

- **Infants born to HBsAg-positive mothers**
- **Hemodialysis patients**
- **Other immunocompromised persons**

Patients must obtain a written order from a privileged provider for these situations

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
9. This policy and procedure 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 *Haemophilus influenzae* type b Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from *Haemophilus influenzae* type b 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 persons 2 months to 17 years of age in need of vaccination against *Haemophilus influenzae* type b based on the following criteria:
 - Age 2 - 59 months without prior Hib vaccination (or who did not complete the series), immunoglobulin deficiency, early component complement deficiency, or are receiving chemotherapy or radiation therapy
 - Age 2 months through 17 years with human immunodeficiency virus (HIV) infection, anatomic or functional asplenia (including sickle cell disease), undergoing elective splenectomy, or a recipient of a hematopoietic stem cell transplant
2. Screen all patients for contraindications and precautions to Hib:
Contraindications:
 - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of Hib or to one of its components.
 - For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
Precautions:
 - Moderate or severe acute illness with or without fever
 - The vial stoppers for PedvaxHIB® and the DTaP-IPV and ActHIB vaccine components of Pentacel® 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 \(VIS\)](#). 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; these can be found at www.immunize.org/vis.
4. Provide vaccine as follows:
Routine Hib vaccination consists of a 3-dose (PedvaxHIB® at 2, 4 and 12-15 months

of age) or 4-dose series (ActHIB®, Hiberix®, Pentacel® at 2, 4, 6, and 12-15 months of age). 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 chart below

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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

Routine Dosing				
Dose number	Recommended age for this dose	Minimum age for this dose	Recommended interval to next dose	Minimum interval to next dose
1	2 months	6 weeks	8 weeks	4 weeks
2	4 months	10 weeks	8 weeks	4 weeks
3†	6 months	14 weeks	6-9 months	8 weeks
4	12-15 months	12 months		

† ActHIB®, Hiberix®, Pentacel® only for dose # 3 at age 6 months

- For persons who did not receive Hib at the ages/intervals specified in #4, give one dose at the earliest opportunity and then schedule subsequent doses according to the following:

Catch-up Dosing (Immunocompetent)		
Current Age	# of Prior Doses ¹	Schedule
< 1 year	0 or unknown	Follow routine dosing schedule and intervals
12-14 months	0 or unknown	Give dose #1, followed by dose #2 (final) in ≥ 8 weeks
	1 dose before 12 months of age	Give dose #2, followed by dose #3 (final) in ≥ 8 weeks

	2 doses, #1 before 12 months of age	Give dose #3 (final) at least 8 weeks after dose #2
	1 dose at ≥12 months of age	Give dose #2 (final) at least 8 weeks after dose #1
	2 doses, #1 at ≥12 months of age	No additional doses needed
	3 doses before 12 months of age	Give dose #4 (final) at least 8 weeks after dose #3 (ActHib, Hiberix, or Pentacel series only)
15 – 59 months	1 dose before 12 months of age	Give dose #2 (final)
	1 dose at 12-14 months of age	Give dose #2 (final) at least 8 weeks after dose #1
	1 dose at age ≥15 months	No additional doses needed
	2 doses, #1 before 12 months of age and #2 before 15 months of age	Give dose #3 (final) at least 8 weeks after dose #2
	2 doses, #1 before 12 months of age and #2 after 15 months of age	No additional doses needed
	2 doses, #1 at ≥12 months of age	No additional doses needed
	3 doses before 12 months of age	Give dose #4 (final) at least 8 weeks after dose #3 (ActHib, Hiberix, or Pentacel only)
	0 or unknown by ≥ 15 months of age	Give dose #1 (final)

1. Previous doses must meet minimum age requirements and minimum intervals

Catch-up Dosing (High-risk Conditions)			
Medical Indication	Age and vaccination history		
	12–59 months with 0-1 dose before age 12 months	12–59 months with ≥2 doses before age 12 months	≥5 years of age and unvaccinated†
Functional or anatomic Asplenia; HIV infection	Give 2 doses, 8 weeks apart	Give 1 dose ≥ 8 weeks after previous dose	Give 1 dose
Immunoglobulin or early component complement deficiency; chemotherapy or radiation therapy§	Give 2 doses, 8 weeks apart§	Give 1 dose ≥8 weeks after previous dose§	
Hematopoietic stem cell transplant	Give 3 doses (at least 4 weeks apart) beginning 6–12 months after transplant, regardless of Hib vaccination history		
Elective splenectomy	For unvaccinated children age 15 months or older, give 1 dose, preferably at least 14 days before procedure		

†Persons who have not received a primary series and booster or at least 1 dose of Hib vaccine by ≥15 months of age are considered unvaccinated.

§Persons vaccinated within 14 days of starting immunosuppressive therapy should be revaccinated ≥3 months after completion of therapy.

Note: Previously unvaccinated children age 60 months or older who are not considered high risk do not require catch-up vaccination

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
9. This policy and procedure shall remain in effect for all patients of the _____ 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. 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 [manufacturers' package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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; these can be found at www.immunize.org/vis.

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

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.

9. This policy and procedure 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. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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; these can be found at www.immunize.org/vis.
 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

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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 persons (or their parent/legal representative) with a copy of the most current federal [Vaccine Information Statement \(VIS\)](#). You must document, in the person’s medical record, the publication date of the VIS and the date it was given to the person (or parent/legal representative). Provide non-English speaking persons with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis

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.

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

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	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 appropriate equipment and medications.
7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 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 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 pediatric patients in need of vaccination against measles, mumps, and rubella (MMR) based on the following criteria:

- Age 12 months or older with no documentation of MMR vaccine
- Age 4 years or older with no documentation of two doses of MMR vaccine
- Age 6 months or older with pending international travel
- Age 12 months or older with documentation of only 1 dose of MMR vaccine given when younger than age 12 months
- History of two previous doses of MMR and identified by public health as being at increased risk during a mumps outbreak

Note: *persons aged 6-11 months may receive MMR vaccine for international travel according to current ACIP recommendations. This is an off-label use of the vaccine but represents the current standard of care and is covered under this standing order. Any dose of MMR vaccine prior to 12 months of age does not count toward the routine childhood immunization series for MMR.*

2. Screen all patients for contraindications and precautions to MMR vaccine:

Contraindications:

- A 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 [manufacturer's package insert](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- 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 in children or teens who are severely immunosuppressed as determined by a CD4+ T-lymphocyte count of <200 cells per microliter (or less than 15%)
- A family history of congenital or hereditary immunodeficiency in first-degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory
- Patients with any concerns about possible immunosuppression (from medical conditions or medications) should be referred to a privileged provider before administration of any live-virus vaccine (such as MMR)

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

- To prevent potential interference between MMR vaccine and TB testing (skin testing or interferon-gamma release assay [IGRA] testing), possibly causing false-negative results, TB testing should be performed before, on the same day (preferred), or postponed for at least 4 weeks after MMR vaccination
 - 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; these can be found at www.immunize.org/vis.
 4. Provide vaccine as follows:
 - MMR vaccine (M-M-R II®) consists of a 2-dose series routinely given at 12-15 months and 4- 6 years of age. Administer 0.5mL of MMR vaccine 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.
 5. For persons who did not receive MMR at the ages specified in #4:
 - Give one dose at the earliest opportunity
 - Schedule the second dose (if needed) a minimum of 28 days later
 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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
 9. This policy and procedure 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 Measles Mumps Rubella Varicella Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from measles, mumps, rubella and varicella virus 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 healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

Procedure:

1. Identify all pediatric patients in need of vaccination against measles, mumps, rubella, and varicella (MMRV) based on the following criteria:
 - Age 12 months to 12 years with exactly one prior dose of MMR vaccine and one prior dose of VAR vaccine

Note: Unless the parent or caregiver expresses a preference for MMRV vaccine, due to an increased risk for fever and febrile seizures when MMRV is given as the 1st dose, ACIP recommends that separate MMR and VAR vaccines should be administered for the 1st dose in persons 12 – 47 months of age. 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.

2. Screen all patients for contraindications and precautions to MMRV vaccine:

Contraindications:

- A 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 [manufacturer’s package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- 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 in children or teens who are severely immunosuppressed as determined by a CD4+ T-lymphocyte count of <200 cells per microliter (or less than 15%)
- A family history of congenital or hereditary immunodeficiency in first-degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory
- Patients with any concerns about possible immunosuppression (from medical conditions or medications) should be referred to a privileged provider before administration of any live-virus vaccine (such as MMRV)

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
- A personal or family (i.e., sibling or parent) history of seizures of any etiology
- To prevent potential interference between MMRV vaccine and TB testing (skin testing or interferon-gamma release assay [IGRA] testing), possibly causing false-negative results, TB testing should be performed before, on the same day

(preferred), or postponed for at least 4 weeks after MMRV vaccination

- 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; these can be found at www.immunize.org/vis.
4. Provide vaccine as follows:
The MMRV vaccine (ProQuad®) is routinely given at 4-6 years of age. Administer 0.5mL of MMRV vaccine 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
5. For persons who did not receive MMRV at the ages specified in #4:
 - give one dose at the earliest opportunity
 - schedule the second dose (if needed), observing a minimum interval of 28 days after receipt of a measles-containing vaccine and 90 days after a varicella-containing 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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
9. This policy and procedure 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 Meningococcal ACWY Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from meningococcal disease caused by *Neisseria meningitides* serogroups A, C, Y, and W-135 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 healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

Procedure:

1. Identify persons 2 months – 18 years of age in need of vaccination against meningococcal disease based on the following criteria:
 - Routine meningococcal (MenACWY) vaccination
 - Have not completed the 2-dose series by 18 years of age
 - Risk-based meningococcal (MenACWY) vaccination
 - Have not completed the recommended series (2-4 doses) by 2 years of age
 - Anticipated travel to a country where meningococcal disease is hyperendemic or epidemic (e.g., the “meningitis belt” of sub-Saharan Africa), particularly if contact with the local population will be prolonged
 - Exposure to meningitis as part of an outbreak

2. Screen all patients for contraindications and precautions to MenACWY:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of MenACWY or to a vaccine component (to include diphtheria or tetanus toxoid)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Pregnancy should not preclude vaccination with MenACWY, if indicated
- 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; these can be found at www.immunize.org/vis.

4. Provide vaccine as follows:

Follow dosing schedule in table below. Administer 0.5mL of MenACWY 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

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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

Age	Routine or Catch-Up Schedule	
>10 years	Received 1 dose of MenACWY: follow routine schedule below	
11 - 12 years	Give dose #1 of 2-dose series (dose #2 due at age 16 yrs)	
13 - 15 years	Give catch-up dose #1 of 2-dose series (dose #2 due at age 16 yrs)	
16 years	Give dose #2 (minimum interval: 8 weeks)	
17 - 18 years	Give catch-up dose #2 (≥8 weeks after dose #1)	
16 - 18 years	No history of prior vaccination: give 1 dose	
Risk Based Dosing: travelers to/residents of countries where meningococcal disease is hyperendemic or epidemic (including countries in the African meningitis belt or during the Hajj); during outbreaks; occupational exposure; persistent complement component deficiencies or complement inhibitor use (e.g., eculizumab, ravulizumab); HIV infection; or functional or anatomic asplenia (including sickle cell disease)		
Age	Primary Dose(s)	Booster
2 - 6 months	Give 3 doses of Menveo 8 weeks apart, and #4 at age 12–18 months. If possible, begin vaccination at age 2 months.	Initial booster after 3 years; repeat boosters every 5 years**
7 - 23 months	Give 2 doses of Menveo (if 9–23 months, may give Menactra*) Dose #2 of series should be 12 weeks after dose 1 and after 12 months of age	
2 years and older	Give 1 dose of MenACWY (either vaccine). If immunosuppressed, give 2 doses, 8 weeks apart.	

*When using Menactra in immunosuppressed children: give dose #1 at least 4 weeks **after** completion of pneumococcal vaccine (PCV13) series and dose #2 at least 12 weeks after dose #1

** A booster dose should be administered every 5 years; children who receive the primary series before their seventh birthday should receive the first booster dose in 3 years and subsequent booster doses every 5 years

Note: While the MenACWY package inserts recommend a single dose of MenACWY after 2 years of age (Menveo allows for 2 doses in high-risk persons aged 2-5 years), the ACIP recommends a 2-dose primary series, 8-12 weeks apart for all high-risk patients 2 years of age and older. This represents the current standard of care and is permissible under this standing order.

Note: While MenACWY package inserts recommend only a single booster dose, the ACIP recommends a booster dose every 5 years for high-risk patients, as well as a booster dose for international travelers visiting parts of sub-Saharan Africa if the last dose was administered ≥ 5 years previously. This represents the current standard of care and is permissible under this standing order.

Note: In persons with anatomic or functional asplenia and/or HIV infection, MenACWY-D, (Menactra[®]) and pneumococcal conjugate vaccine (PCV13, (Pevnar13) should not be administered simultaneously PCV13 should be administered first and MenACWY-D should be administered 4 weeks later.

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 Meningococcal Group B Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from serogroup B meningococcal 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 persons 10 - 18 years of age in need of vaccination against meningococcal disease based on the following criteria:
 - Persons 10 – 18 years of age with:
 - Diagnosis of persistent complement component deficiency (e.g., deficiencies in C3, C5-9, factor D, factor H, or properdin)
 - Anatomic or functional asplenia
 - Taking eculizumab (Soliris®) or ravulizumab (Ultomiris®)
 - Laboratory workers routinely exposed to *Neisseria meningitidis*
 - Increased risk due to serogroup B meningococcal disease outbreak
 - Persons 16 – 18 years of age not at increased risk who want protection against serogroup B meningococcal disease*

****Note: the decision to vaccinate persons not at increased risk should be based on shared clinical decision-making and is not covered under these standing orders. Patients must obtain a written order from a privileged provider for this situation***

2. Screen all patients for contraindications and precautions to meningococcal B vaccine (MenB):

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of MenB or to a vaccine component (to include kanamycin)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Moderate or severe acute illness with or without fever
- The tip caps of the prefilled syringes of Bexsero® contain natural rubber latex and may cause allergic reactions in latex sensitive individuals. Trumenba® 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

Note: available data are not sufficient to assess the effects of MenB on persons who are pregnant or nursing. MenB should be used during pregnancy or nursing only if benefit clearly outweighs risk, and is not covered under this standing order. Patients must obtain a written order from a privileged provider for this situation

- 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; these can be found at www.immunize.org/vis.
- Provide vaccine as follows:
Follow dosing schedule in table below. 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 chart below

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	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

Vaccine	Dose	Schedule
Bexsero* (MenB-4c, GlaxoSmithKline)	0.5mL	Two doses, 4 weeks apart ^{#,†}
Trumenba* (MenB-FHbp, Pfizer)	0.5mL	Two doses at 0 and 6 months ^{#,§}
		Three doses at 0, 1–2, and 6 months [†]

*The two brands of MenB vaccine are not interchangeable: the series must be started and completed with the same brand of vaccine

[#]The 2-dose schedules of either Bexsero or Trumenba may be used in healthy adolescents

[†]Either the 2-dose schedule of Bexsero or the 3-dose schedule of Trumenba should be given to persons at increased risk for meningococcal serogroup B disease

[§]If Dose #2 of the 2-dose Trumenba series is administered earlier than 6 months after Dose #1, a third dose should be administered at least 4 months after Dose #2.

Note: ACIP recommends:

- **For persons aged ≥ 10 years with complement deficiency, complement inhibitor use, asplenia, or who are microbiologists:**
 - **Booster dose 1 year following completion of a MenB primary series followed by booster doses every 2-3 years as long as increased risk remains**

- **For persons aged ≥ 10 years determined by public health officials to be at increased risk during an outbreak:**
 - **One-time booster dose if it has been ≥ 1 year since completion of a MenB primary series**

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 Pneumococcal Conjugate (PCV13) Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from pneumococcal 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 healthcare 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 in need of vaccination with pneumococcal conjugate vaccine (PCV13) based on the following criteria:
 - Age 2 - 59 months of age and generally healthy
 - Age 2 – 17 years of age with any of the following underlying conditions (see Table 1):
 - Candidate for or recipient of cochlear implant; cerebrospinal fluid leak
 - Sickle cell disease, hemoglobinopathies, functional or anatomic asplenia (e.g., splenic dysfunction, splenectomy)
 - Immunocompromising condition (e.g., congenital immunodeficiency, HIV infection, hematologic cancers, malignant neoplasms)
 - Immunosuppressive therapy (e.g., chemotherapy agents, antimetabolites, biologics, high-dose corticosteroids, radiation therapy)
 - Chronic renal failure or nephrotic syndrome; organ or bone marrow transplantation
2. Screen all patients for contraindications and precautions to PCV13:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of PCV13 vaccine or to a vaccine component
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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

- 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; these can be found at www.immunize.org/vis.
- Provide vaccine as follows:
Follow dosing schedule in Table 2. Administer 0.5mL of PCV13 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.

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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

Do not give PCV13 and PPSV23 at the same visit
Complete all doses of PCV13 before administering PPSV23 (if indicated)

Note: In persons with anatomic or functional asplenia and/or HIV infection, MenACWY-D (Menactra®) and PCV13 (Prevnar13®) should not be administered simultaneously. PCV13 should be administered first and MenACWY-D should be administered 4 weeks later

Note: Routine use of PCV13 is not recommended for healthy children ≥ 5 years

- 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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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

Table 1. Underlying Medical Conditions that are Indications for Pneumococcal Vaccination

Risk Group	Underlying Condition
1. Immunocompetent children and teens with risk condition(s)	<ul style="list-style-type: none"> • chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure) • chronic lung disease (asthma excluded unless treated with high-dose corticosteroids) • diabetes mellitus; cerebrospinal fluid leak; cochlear implant
2. Children and teens with functional or anatomic asplenia	<ul style="list-style-type: none"> • sickle cell disease and other hemoglobinopathies • congenital or acquired asplenia, or splenic dysfunction
3. Children and teens with immunocompromising condition(s)	<ul style="list-style-type: none"> • HIV infection • chronic renal failure, nephrotic syndrome • diseases associated with treatment with immunosuppressive drugs or radiation therapy (e.g., malignant neoplasms, leukemias, lymphomas, and Hodgkin's disease; solid organ transplantation) • congenital immunodeficiency (includes B- [humoral] or T- lymphocyte deficiency; complement deficiencies, particularly C1, C2, C3, or C4 deficiency; and phagocytic disorders [excluding chronic granulomatous disease])

Adapted from <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5911a1.htm>

Table 2. Recommended Schedule for Administering Pneumococcal Conjugate Vaccine (PCV)

Patient's age now	Previous doses of PCV7 and/or PCV13	Recommended PCV13 Schedule (For minimum interval guidance for catch-up vaccination, see * below)	Total doses needed
2 through 6 months (Minimum age for receipt of first dose is 6 weeks)	0 doses	3 doses, 8 weeks* apart; 4th dose at age 12–15 months	4
	1 dose	2 doses, 8 weeks* apart; 4th dose at age 12–15 months	4
	2 doses	1 dose, 8 weeks* after the most recent dose; 4th dose at age 12–15 months	4
7 through 11 months	0 doses	2 doses, 8 weeks* apart; 3 rd dose at age 12–15 months	3
	1 or 2 doses before age 7 months	2 doses: 1 dose at age 7–11 months and a 2nd dose at age 12–15 months, at least 8* weeks after the most recent dose	3 or 4
	1 dose at age 7-11 months	2 doses: 1 dose at age 7–11 months and a 2nd dose at age 12–15 months, at least 8* weeks after the most recent dose	3
	2 doses at age 7-11 months	1 dose at age 12–15 months	3
12 through 23 months	0 doses	2 doses, at least 8 weeks apart	2
	1 dose before age 12 months	2 doses, at least 8 weeks apart	3
	2 or 3 doses before age 12 months	1 dose, at least 8 weeks after the most recent dose	3 or 4
	1 dose at or after age 12 months	1 dose, at least 8 weeks after the most recent dose	2
	2 doses at or after age 12 months	0 additional doses	2
24 through 59 months (healthy children)	0 doses or any incomplete schedule	1 dose, at least 8 weeks after the most recent dose	1
	4 doses of PCV7 or other age-appropriate complete PCV7 schedule	1 dose, at least 8 weeks after the most recent dose	1
24 through 71 months in Risk Group 1, 2, or 3 (see specific conditions in Table 1 above)	Unvaccinated or any incomplete schedule of less than 3 doses	2 doses: 1st dose at least 8 weeks after the most recent dose, and a 2nd dose at least 8 weeks later	3 or 4
	Any incomplete schedule of 3 doses, or any age-appropriate complete PCV7 schedule	1 dose, at least 8 weeks after the most recent dose	4
6 through 17 years in Risk Group 2 or 3 (see specific conditions in Table 1 above); with CSF leak, or cochlear implant	No history of PCV13 (regardless of previous PCV7 or PPSV23 receipt)	1 dose, at least 8 weeks after the most recent dose	1

*Minimum interval between doses – Adapted from Immunization Action Coalition: www.immunize.org/catg.d/p2016.pdf · Item #P2016 (10/18)
 For patients younger than 12 months of age: 4 weeks.
 For patients 12 months of age and older: 8 weeks.

Standing Orders for Administering Pneumococcal Polysaccharide (PPSV23) Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from pneumococcal 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 persons 2 – 18 years of age in need of vaccination with pneumococcal polysaccharide vaccine (PPSV23) based on the following criteria:
 - No or unknown history of prior receipt of PPSV23 and any of the following underlying conditions (see table below):
 - Chronic cardiovascular disease (particularly cyanotic congenital heart disease and cardiac failure)
 - Chronic pulmonary disease (asthma is excluded unless treated with high-dose corticosteroid therapy)
 - Diabetes mellitus
 - Chronic liver disease (cirrhosis), or alcoholism (patients 6 - 18 years of age only)
 - Candidate for or recipient of cochlear implant; cerebrospinal fluid leak
 - Sickle cell disease, hemoglobinopathies, anatomic or functional asplenia (splenectomy, splenic dysfunction)
 - Immunocompromising condition (e.g., congenital immunodeficiency, HIV infection, hematologic cancers, malignant neoplasms)
 - Immunosuppressive therapy (e.g., antineoplastic agents, antimetabolites, biologics, high-dose corticosteroids, radiation therapy)
 - Chronic renal failure or nephrotic syndrome; organ or bone marrow transplantation
 - Environments or settings with increased risk (e.g., long-term care facility)
2. Screen all patients for contraindications and precautions to PPSV23:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of PPSV23 vaccine or to a vaccine component
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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; these can be found at www.immunize.org/vis.

4. Provide vaccine as follows:

- Follow dosing schedule as below. Administer 0.5mL of PPSV23 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.

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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 [†] 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

Underlying Condition	Primary PPSV23 Series	PPSV23 Booster
<ul style="list-style-type: none"> • chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure) • chronic lung disease (asthma excluded unless treated with high-dose corticosteroids) • alcoholism, chronic liver disease • diabetes mellitus; cerebrospinal fluid leak; cochlear implant 	1 dose ≥8 weeks after the last dose of PCV13	Not recommended
<ul style="list-style-type: none"> • sickle cell disease and other hemoglobinopathies • congenital or acquired asplenia, or splenic dysfunction • HIV infection • chronic renal failure, nephrotic syndrome • diseases commonly treated with immunosuppressive drugs or radiation therapy (e.g., malignant neoplasms, leukemias, lymphomas, and Hodgkin's disease; solid organ transplantation) • congenital immunodeficiency (includes B- [humoral] or T-lymphocyte deficiency; complement deficiencies, particularly C1, C2, C3, or C4 deficiency; and phagocytic disorders [excluding chronic granulomatous disease]) 	1 dose ≥8 weeks after the last dose of PCV13	1 dose ≥5 years after the first dose of PPSV23

Adapted from Immunization Action Coalition: www.immunize.org

Do not give PCV13 and PPSV23 at the same visit
Complete all doses of PCV13 before administering PPSV23

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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; these can be found at www.immunize.org/vis.
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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
9. This policy and procedure 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

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. 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 go to <https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- 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; these can be found at www.immunize.org/vis.
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.

IM Injection Needle Length and Site (Pediatrics)		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
Children (3-10 years)	5/8 [†] - 1 inch	Deltoid muscle of arm*
	1 - 1.25 inch	Anterolateral thigh
Adolescents (11-18 years)	5/8 [†] - 1 inch	Deltoid muscle of arm*
	1 - 1.5 inch	Anterolateral thigh

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

*Preferred site

Adapted from <https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html>

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
	2	Dose 1 given <12 months of age	It has been at least 4 weeks since Dose 2	Dose 1 was not Tdap	Give Dose 2 (Tdap) today	Give Dose 4 (Td or Tdap) at least 6 months after Dose 3
				Dose 2 was Tdap*	Give Dose 3 (Td or 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 of age*†
				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 4 th birthday	→	No dose today	Give Tdap at 11-12 years of age*†
			No DTaP or Tdap given after 4 th 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 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	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 7 th birthday	→	No Tdap given after 10 th birthday	Give a dose of Tdap today§	Give Td or Tdap 10 years after Tdap dose
			Tdap given after 7 th birthday				

* 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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.

9. This policy and procedure 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. 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](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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; these can be found at www.immunize.org/vis.
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.

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	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 [†] 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

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 Varicella (Chickenpox) Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from varicella 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 healthcare professionals working within their scope of practice may vaccinate patients who meet the criteria below.

Procedure:

1. Identify all persons 12 months to 17 years of age in need of varicella vaccination (VAR) based on the following criteria:
 - Lack of acceptable evidence of varicella immunity (e.g., documentation of 2 doses of VAR vaccine at the appropriate age/interval, positive serologic testing, or diagnosis/verification of a history of varicella or herpes zoster by a healthcare provider)
2. Screen all patients for contraindications and precautions to VAR vaccine:

Contraindications:

- A 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 [manufacturer's package insert](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- Pregnancy (or may become pregnant in the next 30 days)
- Immunosuppression (e.g., HIV/AIDS, cancer or malignant neoplasms)
- High-dose immunosuppressive therapy (eg., two weeks or more of daily receipt of 20 mg or more [or 2mg/kg body weight or more] of prednisone or equivalent)
- HIV-infected persons with CD4+ T-lymphocyte percentages <15% and total CD4 cell count <200/mm³
- Family history of congenital or hereditary immunodeficiency in 1st degree relatives (e.g., parents and siblings) unless the immune competence of the potential vaccine recipient has been clinically substantiated or verified by a laboratory

Note: Do not give combination MMRV (ProQuad®) to a patient with primary or acquired immunodeficiency, including immunosuppression associated with AIDS or other clinical manifestations of HIV infections, cellular immunodeficiencies, hypogammaglobulinemia, or dysgammaglobulinemia.

Precautions:

- Moderate or severe acute illness with or without fever
- Recent (≤11 months) receipt of an antibody-containing blood product
- Need for tuberculosis (TB) screening by skin testing or interferon-gamma release assay (IGRA) testing. To prevent potential interference between varicella vaccine

and TB testing (possibly causing false-negative TB results), TB testing may be performed before varicella vaccination, on the same day as varicella vaccination (preferred), or postponed for at least 4 weeks after varicella vaccination

- Use of aspirin or aspirin-containing products
- Recent receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination
- 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; these can be found at www.immunize.org/vis.
4. Provide vaccine as follows:
The VAR vaccine (VARIVAX®) consists of a 2-dose series at 12-15 months and 4-6 years of age. Administer 0.5mL of VAR vaccine 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.
5. For persons who did not receive VAR at the ages specified in #4:
 - Give one dose at the earliest opportunity
 - Schedule the second dose (if needed): the minimum interval is 3 months for patients 12 months - 12 years of age; 4 weeks for patients ≥ 13 years of age
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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.

9. This policy and procedure 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 at <http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/yellow-fever.aspx>.
2. 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 $<200/\text{mm}^3$ 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Moderate or severe acute illness with or without fever
- Asymptomatic HIV infections with a CD4 count of $200\text{-}499/\text{mm}^3$ (or $15\text{-}24\%$ 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 persons (or their parent/legal representative) with a copy of the most current federal [Vaccine Information Statement \(VIS\)](#). You must document, in the person's medical record, the publication date of the VIS and the date it was given to the person (or parent/legal representative). Provide non-English speaking persons with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis
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 \geq 500/ mm³ or \geq 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 or 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 appropriate equipment and medications.
10. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
11. This policy and procedure 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

Hepatitis A/Hepatitis B Combination Vaccine

Haemophilus influenzae type b Vaccine

Human Papillomavirus Vaccine

Inactivated Polio Vaccine

Japanese Encephalitis Vaccine

Meningococcal ACWY Vaccine

Meningococcal Group B Vaccine

Measles Mumps Rubella Vaccine

Pneumococcal (PCV13 & PPSV23) Vaccine

Pneumococcal Vaccine Timing Chart- For Adults

Pre-Exposure Rabies Vaccine

Tetanus Diphtheria and Pertussis 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- Pregnancy: defer vaccination until completion of pregnancy
- History of anthrax disease

Precautions:

- Moderate or severe acute illness with or without fever
- Breastfeeding
- The vials of BioThrax® 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; these can be found at www.immunize.org/vis.

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

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
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)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
10. This policy and procedure 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 A Vaccine (Adult)

Purpose: To reduce morbidity and mortality from hepatitis A virus 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 ≥ 19 years of age in need of vaccination against hepatitis A virus (HAV) based on the following criteria:
 - Has not completed a hepatitis A vaccine (HepA) series (persons aged >40 years are at increased risk)
 - Anticipated international travel; see CDC Traveler's Health for updates
 - Pregnant and non-pregnant persons identified to be at risk for an infection or severe outcome from HAV:
 - altered immunocompetence (e.g., congenital, drug-induced, or acquired, such as HIV)
 - use of injection or non-injection illegal drugs
 - occupational risk (i.e., in a HAV research lab or with primates)
 - close contact with an international adoptee during the first 60 days after the arrival of the adoptee in the United States
 - males who have sex with other males (MSM)
 - incarceration or homelessness
 - chronic liver disease (e.g., hepatitis B or C, cirrhosis, fatty or alcoholic liver disease, autoimmune hepatitis, or ALT/AST levels persistently greater than twice the upper limit of normal)
 - In settings providing services for at-risk persons as defined above, such as group homes and nonresidential day care facilities for developmentally disabled persons
 - At-risk persons (as defined above) during a hepatitis A outbreak
 - Unvaccinated persons possibly exposed to HAV within the last two weeks
 - Any other adult who wants to be protected from HAV
2. Screen all patients for contraindications and precautions to hepatitis A vaccine:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of HepA or to a vaccine component (to include neomycin)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Moderate or severe acute illness with or without fever
- The tip caps of the prefilled syringes of HAVRIX® and VAQTA®, and the vials of VAQTA®, contain natural rubber latex and may cause allergic reactions in latex sensitive individuals. The vials of HAVRIX® do 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; these can be found at www.immunize.org/vis.
4. Provide vaccine as follows:
HepA consists of a 2-dose series (HAVRIX®: 0, 6-12 months; VAQTA®: 0, 6-18 months). Administer 1mL intramuscularly in the deltoid muscle for adults.

Note: persons 12 months – 18 years of age receive a 0.5mL dose; persons 19 years of age and older receive a 1mL dose. Please see the appropriate standing order for administration of HepA to pediatric patients for details

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 (Adult)

Purpose: To reduce morbidity and mortality from hepatitis B virus 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 persons ≥ 18 years of age in need of vaccination against hepatitis B virus (HBV) based on the following criteria:
 - Have not received at least 3 doses of hepatitis B vaccine (HepB) at the appropriate ages/intervals
 - Anticipated travel to a country with intermediate or high endemicity for HBV: see CDC Traveler's Health site (Yellow Book) for updates
 - End stage renal disease, hemodialysis; HIV infection; or chronic liver disease, diabetes mellitus (Note: for those age 60 and over with diabetes, at the discretion of the provider)
 - Diagnosis of HIV infection
 - Current or recent use of injectable street drugs
 - Persons at risk for infection by sexual exposure, seeking evaluation or treatment for sexually transmitted infection, sexually active and not in a monogamous relationship, male who has sex with males, sex partner or household member of a person chronically infected with hepatitis B
 - Diagnosis of chronic liver disease, including hepatitis C
 - Persons with occupational risk (e.g., healthcare workers)
 - Residents and staff of facilities for developmentally disabled persons
 - Any other adult who wants to be protected from HBV
2. Screen all patients for contraindications and precautions to HepB: **Contraindications:**
 - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of HepB or to a vaccine component (to include yeast)
 - For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Pregnancy: Heplisav-B should not be given to pregnant patients (see below)
- Moderate or severe acute illness with or without fever
- The tip caps of the prefilled syringes of Engerix-B® and Recombivax HB®, and the vials of Recombivax HB®, contain natural latex rubber and may cause allergic reactions in latex sensitive individuals. The vials of Engerix-B® do 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; these can be found at www.immunize.org/vis.
 4. Provide vaccine as follows:
Follow dosing schedules in tables below. Administer the appropriate product-specific dose intramuscularly in the deltoid muscle for adults.

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
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)

Type of Vaccine	Age Group	Dose
Hephisav-B®	18 yrs & older	0.5 mL
Pediatric formulation of Engerix-B® or Recombivax HB®	19 yrs & younger	0.5 mL
Adult formulation of Engerix-B® or Recombivax HB®	20 yrs & older	1.0 mL

History of Previous Vaccination	For patients whose previous brand of vaccine is known, continue with the same brand. If brand is unknown or not available, continue with a 3-dose schedule as indicated in the right-hand column	
	Hephisav-B	Engerix-B or Recombivax HB
None or unknown	2-dose series at 0 and 1 month	3-dose series at 0, 1, and 6 mo
1 dose	Dose #2 at least 4 wks after dose #1	Dose #2 ≥4 wks after #1; dose #3 ≥8 wks after dose #2 AND ≥16 wks after dose #1
2 doses		Dose #3 ≥8 wks after dose #2 AND ≥16 wks after dose #1

Note: safety data on administration during pregnancy are not available for HepB vaccine. Providers should vaccinate pregnant persons with a HepB vaccine from a different manufacturer

Note: revaccination may be recommended for certain populations, including:

- **Hemodialysis patients**
- **Other immunocompromised persons**
Patients must obtain a written order from a privileged provider for these situations

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 / Hepatitis B Combination Vaccine (Adult)

Purpose: To reduce morbidity and mortality from hepatitis A and hepatitis B 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 ≥ 18 years of age in need of vaccination against both hepatitis A and hepatitis B based on the following criteria:
 - Lacking documentation of at least 2 doses of hepatitis A vaccine (HepA) and lacking a completed series (2 or 3 doses depending on product) of hepatitis B vaccine (HepB) at the appropriate ages/intervals
 - Anticipated travel to a country with intermediate or high endemicity for hepatitis A and B (generally all except Canada, Japan, Australia, New Zealand, and most of Western Europe; see CDC Yellow Book, TRAVAX, or other travel medicine guidelines)
 - End stage renal disease, hemodialysis; HIV infection; or chronic liver disease, diabetes mellitus (Note: for those age 60 and over with diabetes, at the discretion of the provider)
 - Diagnosis of HIV infection
 - Current or recent use of injectable street drugs
 - Persons at risk for infection by sexual exposure, seeking evaluation or treatment for sexually transmitted infection, sexually active and not in a monogamous relationship, male who has sex with males, sex partner or household member of a person chronically infected with hepatitis B
 - Diagnosis of chronic liver disease, including hepatitis C
 - Persons with occupational risk (e.g., healthcare workers)
 - Residents and staff of facilities for developmentally disabled persons
 - Any other adult who wants to be protected from hepatitis A and B

Note: if patient has completed either the hepatitis A vaccination series or the hepatitis B vaccination series DO NOT give TWINRIX®: see the applicable monovalent standing order for information

2. Screen all patients for contraindications and precautions to TWINRIX® vaccine:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of any hepatitis A or B-containing vaccine, or to any component of the vaccine (including neomycin and yeast)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Moderate or moderate or severe acute illness with or without fever
- The tip caps of the prefilled syringes of Twinrix® contain natural rubber latex that 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 \(VIS\)](#). You must provide both the HepA and HepB VISs as there is no VIS for TWINRIX®. You must document, in the patient’s medical record, the publication date of the VISs and the date they were 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; these can be found at www.immunize.org/vis.

4. Provide vaccine as follows:

- The combination HepA/HepB vaccine (TWINRIX®) consists of a 3-dose series at 0, 1, and 6 months. Administer 1mL intramuscularly in the deltoid muscle for adults.

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

5. Provide subsequent doses of TWINRIX® vaccine to complete each patient’s 3-dose series by observing a minimum interval of 1 month between the 1st and 2nd dose, and 5 months between the 2nd and 3rd dose.

Note: TWINRIX® is also FDA-approved for accelerated dosing (0, 7days, 21-30 days, and 12 months) for impending travel in less than 28 days. This is not recommended by ACIP for routine dosing, and is not covered under these standing orders. Patients must obtain a written order from a privileged provider for this situation

Note: Interchangeability of TWINRIX® and single antigen Hepatitis A and B vaccines:

- A dose of TWINRIX® contains a standard adult dose of hepatitis B vaccine and a pediatric dose of hepatitis A vaccine. A dose of TWINRIX® can be substituted for any dose of the hepatitis B series but not for any dose of the hepatitis A series.
 - Any combination of 3 doses of adult hepatitis B or 3 doses of TWINRIX® is a complete series of hepatitis B vaccine
 - One dose of TWINRIX® and 2 doses of adult hepatitis A is a complete series of hepatitis A vaccine
 - Two doses of TWINRIX® and 1 dose of adult hepatitis A is a complete series of hepatitis A 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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
 9. This policy and procedure 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 *Haemophilus influenzae* type b Vaccine (Adult)

Purpose: To reduce morbidity and mortality from *Haemophilus influenzae* type b 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 persons ≥ 18 years of age in need of vaccination against *Haemophilus influenzae* type b based on the following criteria:
 - Diagnosis of anatomic or functional asplenia (including sickle cell disease) and no documented history of Hib vaccination
 - Patients undergoing elective splenectomy and no documented history of Hib vaccination
 - Recipient of a hematopoietic stem cell transplant

2. Screen all patients for contraindications and precautions to Hib:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of Hib or to one of its components. For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Moderate or severe acute illness with or without fever
 - The vial stoppers for PedvaxHIB® and the DTaP-IPV-Hib and ActHIB vaccine components of Pentacel® 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 \(VIS\)](#). 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; these can be found at www.immunize.org/vis.

4. Provide vaccine as follows:
Follow dosing schedules in table below. Administer 0.5 mL intramuscularly in the deltoid muscle for adults.

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
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)

Medical Indication	Dosing Schedule
Functional or anatomic asplenia	Give 1 dose
Elective splenectomy	Give 1 dose, preferably at least 14 days before procedure
Hematopoietic stem cell transplant	Give 3 doses (at least 4 weeks apart) beginning 6–12 months after transplant, regardless of Hib vaccination history

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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. 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 [manufacturers' package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- 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; these can be found at www.immunize.org/vis.

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

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
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)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
10. This policy and procedure 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. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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; these can be found at www.immunize.org/vis.

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

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
9. This policy and procedure 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. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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 persons (or their parent/legal representative) with a copy of the most current federal [Vaccine Information Statement \(VIS\)](#). You must document, in the person’s medical record, the publication date of the VIS and the date it was given to the person (or parent/legal representative). Provide non-English speaking persons with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis
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.

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

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

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 appropriate equipment and medications.
7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 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 years of age in need of vaccination against measles, mumps, and rubella (MMR) based on the following criteria:

- Lack of acceptable evidence of measles, mumps, and rubella immunity (e.g., documentation of 2 doses of MMR vaccine at the appropriate age/interval, positive serologic testing, or born before 1957*)
- History of two previous doses of MMR and identified by public health as being at increased risk during a mumps outbreak

*Does not apply to healthcare workers

2. Screen all patients for contraindications and precautions to MMR vaccine: **Contraindications:**

- A 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 [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- 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 in children or teens who are severely immunosuppressed as determined by a CD4+ T-lymphocyte count of < 200 cells per microliter (or less than 15%)
- A family history of congenital or hereditary immunodeficiency in first-degree relatives unless immune competence of the potential vaccine recipient has been clinically verified by a laboratory
- Patients with any concerns about possible immunosuppression (from medical conditions or medications) should be referred to a privileged provider before administration of any live-virus vaccine (such as MMR)

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
- To prevent potential interference between MMR vaccine and TB testing (skin testing or interferon-gamma release assay [IGRA] testing), possibly causing false-negative results, TB testing should be performed before, on the same day (preferred), or postponed for at least 4 weeks after MMR vaccination

- 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; these can be found at www.immunize.org/vis.
 4. Provide vaccine as follows:
 - MMR vaccine (M-M-R II®) consists of a 2-dose series at 0 and 28 days. Administer 0.5mL subcutaneously in the fatty tissue over the triceps for adults. Use a 23–25 gauge 5/8" needle. If indicated, give dose #2 at least 4 weeks after dose #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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
 8. This policy and procedure 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 Meningococcal ACWY Vaccine (Adult)

Purpose: To reduce morbidity and mortality from meningococcal disease caused by *Neisseria meningitidis* serogroups A, C, Y, and W-135 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 meningococcal disease based on any of the following criteria:
 - Diagnosis of persistent complement component deficiency (an immune system disorder which may also be caused by Soliris [eculizumab]), or diagnosis of anatomic or functional asplenia (including sickle-cell disease)
 - Diagnosis of HIV infection
 - Microbiologists who are exposed routinely to *N. meningitidis*
 - Persons with anticipated travel to a country where meningococcal disease is hyperendemic or epidemic (e.g., the "meningitis belt" of sub-Saharan Africa), particularly if contact with the local population will be prolonged (refer to current CDC Yellow Book, TRAVAX, or other travel medicine guidelines)
 - First-year college students 19 - 21 years of age living in a residence hall who were never vaccinated, or who were last vaccinated before 16 years of age
 - Persons who are part of an outbreak attributable to a vaccine serogroup
 - Military recruits

2. Screen all patients for contraindications and precautions to meningococcal vaccine:

Contraindication:

- A history of a serious allergic reaction (e.g., anaphylaxis) after a previous dose of meningococcal vaccine or to a vaccine component
- For information on vaccine components, refer to the [manufacturers' package inserts](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precaution:

- Moderate or severe acute illness with or without fever
- Pregnancy should not preclude vaccination, if indicated: consult the patient's PCM for an appropriate order
- 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 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 (or parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis.
4. Provide vaccine as follows:
 - Follow dosing schedules in table below
 - Administer 0.5 mL intramuscularly in the deltoid muscle for adults

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

Routine		
Military Recruits	If no history of prior vaccination with MenACWY, give 1 dose	
1 st year college students, 19-21 years of age, living in residence halls	If history of 1 dose of MenACWY given before 16 years of age, give dose #2; if no previous history of MenACWY, give single dose now	
Travelers to, or residents of, countries where meningococcal disease is epidemic, during an outbreak, or occupational exposure		
Adults 18 years and older	Give 1 dose of either MenACWY vaccine	Boost every 5 years
Persons with complement component deficiencies or with HIV infection or functional/anatomic asplenia (including sickle cell disease)		
Adults 18 years and older	Give 2 doses of either MenACWY vaccine 8 weeks apart	Boost every 5 years

Note: While MenACWY Package Inserts state the vaccine is indicated only through 55 years of age, the ACIP recommends meningococcal vaccine for individuals 56 years of age or older at increased risk for meningococcal disease. Either Menactra or Menveo may be used. This represents the current standard of care and is permissible under this standing order

Note: While MenACWY Package Inserts recommend a single booster vaccination, the ACIP recommends a booster dose every 5 years for high-risk patients, as well as a booster dose for international travelers visiting sub-Saharan Africa (if the last dose was administered 5 or more years previously). This represents the current standard of care and is permissible under this standing order.

Note: In persons with anatomic or functional asplenia and/or HIV infection, MenACWY-D, (Menactra®) and pneumococcal conjugate vaccine (PCV13, (Pevnar13) should not be administered simultaneously PCV13 should be administered first and MenACWY-D should be administered 4 weeks later.

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 appropriate equipment and medications.
7. Adverse Events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can only be submitted to VAERS online. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 Meningococcal Group B Vaccine (Adult)

Purpose: To reduce morbidity and mortality from serogroup B meningococcal 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 persons 18 – 25 years of age in need of vaccination against serogroup B meningococcal disease based on the following criteria:
 - Persons 18 – 25 years of age with:
 - Diagnosis of persistent complement component deficiency (e.g., deficiencies in C3, C5-9, factor D, factor H, or properdin)
 - Anatomic or functional asplenia
 - Taking eculizumab (Soliris®) or ravulizumab (Ultomiris®)
 - Laboratory staff routinely exposed to *Neisseria meningitides*
 - Increased risk due to serogroup B meningococcal disease outbreak
 - Persons 18 – 23 years of age not at increased risk who want protection against serogroup B meningococcal disease*

****Note: the decision to vaccinate persons not at increased risk should be based on shared clinical decision-making: these patients should speak with a privileged provider before vaccination***

2. Screen all patients for contraindications and precautions to serogroup B meningococcal vaccine (MenB):

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of MenB or to a vaccine component (to include kanamycin)
- For information on vaccine components, refer to the [manufacturer's package insert](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- Moderate or severe acute illness with or without fever
- The tip caps of the prefilled syringes of Bexsero® contain natural rubber latex and may cause allergic reactions in latex sensitive individuals. Trumenba® 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

Note: available data are not sufficient to assess the effects of MenB on persons who are pregnant or nursing. MenB should be used during pregnancy or nursing only if benefit clearly outweighs risk, and 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; these can be found at www.immunize.org/vis.
4. Provide vaccine as follows:
 - Follow dosing schedule in table below
 - Administer 0.5mL intramuscularly in the deltoid muscle for adults

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

Vaccine	Dose	Schedule
Bexsero ¹ (MenB-4c, GlaxoSmithKline)	0.5mL	Two doses, 4 weeks apart ^{2,3}
Trumenba ¹ (MenB-FHbp, Pfizer)	0.5mL	Two doses at 0 and 6 months ^{2,4}
		Three doses at 0, 1–2, and 6 months ³

1. The two brands of MenB vaccine are not interchangeable: the series must be started and completed with the same brand of vaccine

2. The 2-dose schedules of either Bexsero or Trumenba may be used in healthy persons

3. Either the 2-dose schedule of Bexsero or the 3-dose schedule of Trumenba should be given to persons at increased risk for meningococcal serogroup B disease

4. If Dose #2 of the 2-dose Trumenba series is administered earlier than 6 months after Dose #1, a third dose should be administered at least 4 months after Dose #2.

Note: ACIP recommends:

- **For persons aged ≥10 years with complement deficiency, complement inhibitor use, asplenia, or who are laboratory staff:**
 - **Booster dose 1 year following completion of a MenB primary series followed by booster doses every 2-3 years as long as increased risk remains**

- **For persons aged ≥ 10 years determined by public health officials to be at increased risk during an outbreak:**
 - **One-time booster dose if it has been ≥ 1 year since completion of a MenB primary series**

These recommendations are off-label uses of the vaccine and are not covered under these standing orders. Patients must obtain a written order from a privileged provider for these situations

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 Vaccines (Adult)

Purpose: To reduce morbidity and mortality from pneumococcal 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 persons in need of vaccination with pneumococcal conjugate vaccine (PCV13) based on the following criteria:
 - Age 19-64 years with no or unknown history of prior receipt of PCV13 and any of the following underlying conditions (see Table 1):
 - Candidate for or recipient of cochlear implant; cerebrospinal fluid leak
 - Sickle cell disease, hemoglobinopathies, functional or anatomic asplenia (e.g., splenic dysfunction, splenectomy)
 - Immunocompromising condition (e.g., congenital immunodeficiency, HIV infection, hematologic cancers, malignant neoplasms)
 - Immunosuppressive therapy (e.g., chemotherapy, antimetabolites, biologics, high-dose corticosteroids, radiation therapy, etc.)
 - Chronic renal failure or nephrotic syndrome; organ or bone marrow transplantation
2. Identify persons in need of vaccination with pneumococcal polysaccharide vaccine (PPSV23) based on the following criteria:
 - Age 65 years or older with no or unknown history of prior receipt of PPSV23
 - age 65 years or older and received PPSV23 before age 65 years
 - Age 19 - 64 years with no or unknown history of prior receipt of PPSV23 and any of the following underlying conditions (see Table 1):
 - Any of the conditions in #1
 - Chronic cardiovascular disease (particularly cyanotic congenital heart disease and cardiac failure)
 - Chronic pulmonary disease (asthma is excluded unless treated with high-dose corticosteroid therapy)
 - Diabetes mellitus
 - Chronic liver disease (cirrhosis), or alcoholism (patients 6 - 18 years of age only)
 - Candidate for or recipient of cochlear implant; cerebrospinal fluid leak
 - Sickle cell disease, hemoglobinopathies, anatomic or functional asplenia (splenectomy, splenic dysfunction)
 - Immunocompromising condition (e.g., congenital immunodeficiency, HIV infection, hematologic cancers, malignant neoplasms)
 - Immunosuppressive therapy (e.g., antineoplastic agents, antimetabolites, biologics, high-dose corticosteroids, radiation therapy)

- Chronic renal failure or nephrotic syndrome; organ or bone marrow transplantation
- Environments or settings with increased risk (e.g., long-term care facility)

Category of underlying medical condition or other risk factor		Recommended vaccines are marked “x” below		
		PCV13: 1 dose ¹	PPSV23: 1 dose ²	PPSV23 booster ^{2,3}
Non-immunocompromising	Chronic heart disease ⁴ , chronic lung disease ⁵		X	
	Diabetes mellitus		X	
	Chronic liver disease, cirrhosis		X	
	Cigarette smoking		X	
	Alcoholism		X	
	Cochlear implant, cerebrospinal fluid (CSF) leak	X	X	
Immunocompromising	Sickle cell disease, other hemoglobinopathy	X	X	X
	Congenital or acquired asplenia	X	X	X
	Congenital or acquired immunodeficiency ⁶ HIV	X	X	X
	Chronic renal failure, nephrotic syndrome	X	X	X
	Leukemia, lymphoma	X	X	X
	Generalized malignancy, Hodgkin disease	X	X	X
	Iatrogenic immunosuppression ⁷	X	X	X
	Solid organ transplant, multiple myeloma	X	X	X

Footnotes

1. PCV13 is recommended as a one-time dose among persons in a risk group not previously vaccinated with PCV13.
2. Administer PPSV23 unless PCV13 is also needed. In that case, give PCV13 first followed by PPSV23 at least 8 weeks later. If PPSV23 was previously given, administer PCV13 at least 1 year after PPSV23.
3. Give a second PPSV 23 at least 5 years after the first PPSV23 and at least 8 weeks after PCV13. However, for adults age 65 years and older, give only one dose of PPSV23.
4. Chronic heart disease includes congestive heart failure and cardiomyopathies; excludes hypertension.
5. Chronic lung disease includes chronic obstructive pulmonary disease, emphysema, and asthma.
6. Congenital or acquired immunodeficiency includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease).
7. Iatrogenic immunosuppression includes diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids, and radiation therapy.

Do not give PCV13 and PPSV23 at the same visit

3. Screen all patients for contraindications and precautions to PCV13 or PPSV23 vaccine:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of PCV13 or PPSV23 vaccine, or to a vaccine component. Yeast is now acknowledged as a component of PCV13.
- For information on vaccine components, refer to the [manufacturer’s package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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

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; these can be found at www.immunize.org/vis.
5. Provide vaccines as follows:
 - Follow the dosing schedules in Tables 2 & 3
 - Administer 0.5mL of the appropriate pneumococcal vaccine: both PCV13 and PPSV23 may be given intramuscularly (IM) in the deltoid muscle for adults

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
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)

Note: As of November 2019, PCV13 vaccine is no longer routinely recommended for all persons > 65 years. The decision to vaccinate should be based upon shared clinical decision making, and is not covered under these standing orders. Patients must obtain a written order from a privileged provider for this situation

Note: In persons with anatomic or functional asplenia and/or HIV infection, MenACWY-D, (Menactra®) and pneumococcal conjugate vaccine (PCV13 (Pevnar13) should not be administered simultaneously PCV13 should be administered first and MenACWY-D should be administered 4 weeks later.

Age of patient	Vaccine(s) indicated	History of prior vaccination	Schedule for administration of PCV13 & PPSV23
65 yrs or older	PPSV23 PCV13 can be considered for a 1-time dose based on shared clinical decision-making (SCDM)	None or unknown	Administer PPSV23. If PCV13 is also needed based on SCDM, give PCV13 first followed by PPSV23 1 year later
		PPSV23 when younger than age 65 years; 0 or unknown PCV13	Administer another PPSV23 after at least 5 years after previous PPSV23. If PCV13 is also needed based on SCDM, administer PCV13 first, followed by PPSV23 1 year later
		PPSV23 when younger than age 65 years; PCV13	Administer another PPSV23 at least 5 years after previous dose of PPSV23 and at least 1 year after previous dose of PCV13
		PPSV23 when age 65 years or older; 0 or unknown PCV13	Administer PCV13, if needed based on SCDM, at least 1 year after PPSV23
		0 or unknown PPSV23; PCV13	Administer PPSV23 at least 1 year after PCV13

Age of patient	Vaccine(s) indicated	History of prior vaccination	Schedule for administration of PCV13 & PPSV23
19–64 years	<i>For medical conditions and other risk factors for which only PPSV23 is indicated (see Table 1)</i>		
	1 dose PPSV23	None or unknown	Administer PPSV23
	<i>For non-immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)</i>		
	1 dose PCV13 and 1 dose PPSV23	0 or unknown	Administer PCV13 followed in 8 weeks by PPSV23
		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 at least 8 weeks after PCV13
		1 dose PPSV23; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23
	<i>For immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)</i>		
	1 dose PCV13 and 2 doses PPSV23	0 or unknown	Administer PCV13 followed in 8 weeks by PPSV23 #1. Administer PPSV23 #2 at least 5 years after PPSV23 #1
		1 dose PPSV23; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23 #1. Administer PPSV23 #2 at least 5 years after PPSV23 #1 and at least 8 weeks after PCV13
		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 #1 at least 8 weeks after PCV13. Administer PPSV23 #2 at least 5 years after PPSV23 #1
1 dose PPSV23; 1 dose PCV13		Administer PPSV23 #2 at least 5 years after PPSV23 #1 and at least 8 weeks after PCV13	
2 doses PPSV23; 0 or unknown PCV13		Administer PCV13 at least 1 year after PPSV23 #2	

65 years and older	<i>For medical conditions and other risk factors for which only PPSV23 is indicated (see Table 1)</i>		
	1 dose PPSV23	None or unknown	Administer PPSV23. If PCV13 is also needed based on SCDM, administer PCV13 first, followed by PPSV23 at least 1 year later
		1 dose PPSV23 given before age 65	Administer PPSV23 at least 5 years after previous PPSV23. If PCV13 is needed based on SCDM, administer PCV13 first at least 1 year after previous PPSV23; give PPSV23 at least 1 year after PCV13
	<i>For non-immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)</i>		
	1 dose PPSV23 and 1 dose PCV13	0 or unknown PPSV23; 0 or unknown PCV13	Administer PCV13 followed in at least 8 weeks by PPSV23
		1 PPSV23 before age 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after previous PPSV23; administer PPSV23 #2 at least 8 weeks after PCV13 and 5 years after previous PPSV23.
		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 at least 8 weeks after PCV13
		1 dose PPSV23 at/after 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23
	<i>For immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)</i>		
	1 dose PPSV23 and 1 dose PCV13	0 or unknown PPSV23; 0 or unknown PCV13	Administer PCV13 followed in 8 weeks by PPSV23
		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 at least 8 weeks after PCV13
		1 or 2 doses PPSV23 before age 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after prior PPSV23; administer PPSV23 at least 5 years after prior PPSV23 and at least 8 weeks after PCV13
		1 dose PPSV23 at/after 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23

All tables adapted with permission from www.immunize.org/catg.d/p3075.pdf • Item #P3075 (2/20)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
9. This policy and procedure 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

Pneumococcal Vaccine Timing for Adults

Make sure your patients are up to date with pneumococcal vaccination.

Two pneumococcal vaccines are recommended for adults:

- 13-valent pneumococcal conjugate vaccine (PCV13, Prevnar13[®])
- 23-valent pneumococcal polysaccharide vaccine (PPSV23, Pneumovax[®]23)

PCV13 and PPSV23 should not be administered during the same office visit.

When both are indicated, PCV13 should be given before PPSV23 whenever possible.

If either vaccine is inadvertently given earlier than the recommended window, do not repeat the dose.

One dose of PCV13 is recommended for adults:

- 19 years or older with certain medical conditions and who have not previously received PCV13. See *Table 1 for specific guidance.*
- Adults 65 years or older can discuss and decide, with their clinician, to receive PCV13 if they have not previously received a dose (shared clinical decision-making).

One dose of PPSV23 is recommended for adults:

- 65 years or older, regardless of previous history of vaccination with pneumococcal vaccines.
 - Once a dose of PPSV23 is given at age 65 years or older, no additional doses of PPSV23 should be administered.
 - 19 through 64 years with certain medical conditions.
 - A second dose may be indicated depending on the medical condition. See *Table 1 for specific guidance.*

Adults 65 years or older without an immunocompromising condition, CSF* leak, or cochlear implant

For those who have not received any pneumococcal vaccines, or those with unknown vaccination history

If patient and provider decide PCV13 is **not** to be given:

- Administer 1 dose of PPSV23.

If patient and provider decide PCV13 is to be given:



- Administer 1 dose of PCV13.
- Administer 1 dose of PPSV23 **at least 1 year** later.

For those who have previously received 1 dose of PPSV23 at ≥ 65 years and no doses of PCV13

If patient and provider decide PCV13 is **not** to be given:

- Series complete. No additional doses indicated.

If patient and provider decide PCV13 is to be given:



- Administer 1 dose of PCV13 **at least 1 year** after the dose of PPSV23 for all adults, regardless of medical conditions.

*Cerebrospinal fluid leak



Pneumococcal vaccine timing for adults with certain medical conditions

Indicated to receive 1 dose of PPSV23 at 19 through 64 years with no history of pneumococcal vaccination or unknown history



If the patient and provider decide (through shared clinical decision-making) PCV13 is **not** to be given at age 65 years or older:

- Administer 1 dose of PPSV23 at 19 through 64 years.
- Administer 1 final dose of PPSV23 at 65 years or older. This dose should be given at least 5 years after the most recent dose of PPSV23.



If the patient and provider decide (through shared clinical decision-making) PCV13 is to be given at age 65 years or older:

- Administer 1 dose of PPSV23 at 19 through 64 years.
- Administer 1 dose of PCV13 at 65 years or older. This dose should be given **at least 1 year** after PPSV23.
- Administer 1 final dose of PPSV23 at 65 years or older. This dose should be given **at least 1 year** after PCV13 and at least 5 years after the most recent dose of PPSV23.



At least 5 years apart

Includes adults with: chronic heart, lung, or liver disease • diabetes mellitus • alcoholism • Also includes adults who smoke cigarettes

Indicated to receive 1 dose of PCV13 at ≥ 19 years and 1 or 2 doses of PPSV23 at 19 through 64 years



Includes adults with:

- cerebrospinal fluid (CSF) leaks*
- cochlear implants*
- sickle cell disease or other hemoglobinopathies
- congenital or acquired immunodeficiencies
- HIV infection
- chronic renal failure
- nephrotic syndrome
- leukemia
- lymphoma
- Hodgkin disease
- generalized malignancy
- iatrogenic immunosuppression
- solid organ transplant
- multiple myeloma



For those who have **not** received any pneumococcal vaccines, or those with unknown vaccination history:

- Administer 1 dose of PCV13.
- Administer 1 dose of PPSV23 **at least 8 weeks** later.
- Administer a second dose of PPSV23 **at least 5 years** after the previous dose (*note: a second dose is *not indicated* for those with CSF leaks or cochlear implants).
- Administer 1 final dose of PPSV23 at 65 years or older. This dose should be given **at least 5 years** after the most recent dose of PPSV23.

Table 1. Medical conditions or other indications for administration of PCV13 and PPSV23 for adults

Medical indication	Underlying medical condition	PCV13 for ≥ 19 years		PPSV23* for 19 through 64 years		PCV13 at ≥ 65 years		PPSV23 at ≥ 65 years	
		Recommended	Recommended	Recommended	Revaccination	Recommended	Recommended	Recommended	Recommended
None	None of the below					Based on shared clinical decision-making		✓	If PCV13 has been given, then give PPSV23 ≥1 year after PCV13
	Alcoholism							✓	If PCV13 has been given, then give PPSV23 ≥1 year after PCV13
	Chronic heart disease [†]							✓	If PCV13 has been given, then give PPSV23 ≥5 years after any PPSV23 at < 65 years
	Chronic liver disease		✓			Based on shared clinical decision-making			
	Chronic lung disease [§]								
	Cigarette smoking								
	Diabetes mellitus								
	Cochlear implants	✓						✓	≥ 8 weeks after PCV13
	CSF leaks		✓					✓	If no previous PCV13 vaccination
								✓	≥ 8 weeks after PCV13
Persons with functional or anatomic asplenia	Congenital or acquired asplenia	✓						✓	≥ 8 weeks after PCV13
	Sickle cell disease/other hemoglobinopathies	✓						✓	If no previous PCV13 vaccination
Immunocompromised persons	Chronic renal failure							✓	≥ 5 years after first dose PPSV23
	Congenital or acquired immunodeficiencies							✓	≥ 8 weeks after PCV13
	Generalized malignancy							✓	≥ 5 years after first dose PPSV23
	HIV infection							✓	≥ 8 weeks after PCV13
	Hodgkin disease							✓	≥ 8 weeks after PCV13
	Iatrogenic immunosuppression [†]	✓						✓	If no previous PCV13 vaccination
	Leukemia							✓	≥ 8 weeks after PCV13
	Lymphoma							✓	≥ 5 years after first dose PPSV23
	Multiple myeloma							✓	≥ 8 weeks after PCV13
	Nephrotic syndrome							✓	≥ 5 years after any PPSV23 at < 65 years
Solid organ transplant							✓	≥ 8 weeks after PCV13	

*This PPSV23 column only refers to adults 19 through 64 years of age. All adults 65 years of age or older should receive one dose of PPSV23 5 or more years after any prior dose of PPSV23, regardless of previous history of vaccination with pneumococcal vaccine. No additional doses of PPSV23 should be administered following the dose administered at 65 years of age or older.
[†]Including congestive heart failure and cardiomyopathies
[‡]Including chronic obstructive pulmonary disease, emphysema, and asthma
[§]Includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease)
^{||}Diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids and radiation therapy

Additional scenarios: completing the pneumococcal vaccination series for adults recommended to receive PCV13 at ≥ 19 years

Adults recommended to receive PCV13 at ≥ 19 years who already received 1 dose of PPSV23 at < 65 years



Adults recommended to receive PCV13 at ≥ 19 years who already received 2 doses of PPSV23 at < 65 years and 1 dose of PPSV23 at ≥ 65 years



Adults recommended to receive PCV13 at ≥ 19 years who already received 2 doses of PPSV23 and 1 dose of PCV13 at < 65 years



Adults recommended to receive PCV13 at ≥ 19 years who already received 2 doses of PPSV23 at < 65 years and 1 dose of PCV13 at ≥ 65 years



- For those who have already received 1 or more doses of PPSV23, or those with unclear documentation of the type of pneumococcal vaccine received:
 - Administer 1 dose of PCV13 at **least 1 year** after the most recent pneumococcal vaccine dose.
 - Administer a second dose of PPSV23 at **at least 8 weeks** after PCV13 and at least 5 years after the previous dose of PPSV23 (*note: a second dose is not indicated for those with CSF leaks or cochlear implants*).
 - Administer 1 final dose of PPSV23 at 65 years or older. This dose should be given at **least 5 years** after the most recent dose of PPSV23.

- For those who have already received 1 dose of PCV13, do **not** administer an additional dose at 65 years or older.

Standing Order for Administering Pre-Exposure Rabies Vaccine (Adult)

Purpose: To reduce morbidity and mortality from disease caused by *Rhabdoviridae* Genus *Lyssavirus* 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 individuals (all ages from birth to adult) in need of the pre-exposure prophylaxis rabies vaccine based on the following criteria:
 - Travelers spending a month or longer in an endemic area (especially rural)
 - Frequent risk persons such as veterinarians and their staff, animal handlers, rabies researchers, laboratory staff, spelunkers, or animal control and wildlife officers in areas where rabies is enzootic/epizootic
 - Individuals in need of a booster dose for ongoing protection (e.g., when a rabies titer is non-protective)

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. Patients should be referred to the local Emergency Department to begin post-exposure treatment and prophylaxis and public health surveillance.*

2. Screen all patients for contraindications and precautions to rabies vaccine:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of rabies vaccine or to a vaccine component (to include neomycin)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- Immunosuppression (e.g., HIV/AIDS, cancer or malignant neoplasms, immunosuppressive therapy, etc.): patients should postpone pre-exposure vaccinations and consider avoiding activities for which rabies pre-exposure prophylaxis is indicated

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; these can be found at www.immunize.org/vis.
4. Provide vaccine as follows:
 - Rabies vaccine (Imovax®, RabAvert®) for pre-exposure prophylaxis consists of a 3-dose series at 0, 7, and 21-28 days
 - Administer 1mL intramuscularly in the deltoid muscle for adults

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
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)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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. 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 go to <https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- 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; these can be found at www.immunize.org/vis.

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.

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: www.immunize.org/catg.d/p3078.pdf • Item #P3078 (3/20)

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

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; these can be found at www.immunize.org/vis.
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

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	Needle Length	Injection Site
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)

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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 (Chickenpox) Vaccine (Adult)

Purpose: To reduce morbidity and mortality from varicella 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 ≥ 18 years of age in need of varicella vaccination (VAR) based on the following criteria:

- Lack of acceptable evidence of varicella immunity (e.g., documentation of 2 doses of VAR vaccine at the appropriate age/interval, positive serologic testing, born before 1980*, or diagnosis/verification of a history of varicella or herpes zoster by a healthcare provider)
- Household and close contacts of immunocompromised persons

* Does not apply to healthcare personnel

2. Screen all patients for contraindications and precautions to VAR:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of VAR or to a vaccine component (to include gelatin and neomycin)
- For information on vaccine components, refer to the [manufacturer's package insert](#) or go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- Pregnancy (or may become pregnant in the next 30 days)
- Immunosuppression (e.g., HIV/AIDS, cancer or malignant neoplasms, immunosuppressive therapy, etc.)
- HIV-infected persons with CD4+ T-lymphocyte < 200 cells/ μ L
- Family history of congenital or hereditary immunodeficiency in 1st degree relatives (e.g., parents and siblings) unless the immune competence of the potential vaccine recipient has been clinically substantiated or verified by a laboratory

Precautions:

- Moderate or severe acute illness with or without fever
- Recent (≤ 11 months) receipt of an antibody-containing blood product
- Need for tuberculosis (TB) screening by skin testing or interferon-gamma release assay (IGRA) testing. To prevent potential interference between varicella vaccine and TB testing (possibly causing false-negative TB results), TB testing may be performed before varicella vaccination, on the same day as varicella vaccination (preferred), or postponed for at least 4 weeks after varicella vaccination
- History of receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination
- Use of aspirin or aspirin-containing products

- 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; these can be found at www.immunize.org/vis.
 4. Provide vaccine as follows:
 - VAR (VARIVAX®) consists of a 2-dose series at 0 and 4 weeks (for persons ≥13 years of age)
 - Administer 0.5mL subcutaneously in the preferred site (fatty tissue over the triceps for adults). Use a 23–25 gauge 5/8" needle
 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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
 8. This policy and procedure 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 at <http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/yellow-fever.aspx>.
2. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>
- Immunosuppression (e.g., HIV/AIDS [including those with a CD4 T lymphocyte count $< 200/\text{mm}^3$ (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 persons (or their parent/legal representative) with a copy of the most current federal [Vaccine Information Statement \(VIS\)](#). You must document, in the person's medical record, the publication date of the VIS and the date it was given to the person (or parent/legal representative). Provide non-English speaking persons with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis.
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 appropriate equipment and medications.
10. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
11. This policy and procedure 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 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 adults ≥ 50 years of age in need of vaccination against shingles.

Note: *SHINGRIX® (RZV) is preferred over ZOSTAVAX® (ZVL). ACIP recommends patients previously vaccinated with ZVL receive RZV, observing a minimum interval of ≥ 8 weeks between ZVL and RZV doses*

2. 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 go to <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf>

Precautions:

- An acute episode of herpes zoster: RZV is not a treatment for herpes zoster or post-herpetic neuralgia
 - Pregnancy and breastfeeding: no available data. Consider delaying vaccination with RZV in such circumstances
 - 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; these can be found at www.immunize.org/vis.

4. Provide vaccine as follows:
- RZV (SHINGRIX®) consists of a 2-dose series at 0 and 2-6 months. Administer 0.5mL intramuscularly in the deltoid muscle for adults

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient’s age and body mass.		
Age Group	Needle Length	Injection Site
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)

Note: In the event of an invalid dose, RZV should be administered 28 days after the invalid dose to reduce the burden of adverse reactions which occur with this vaccine

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). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at <https://vaers.hhs.gov>.
8. This policy and procedure 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

Offsite Vaccination Clinic Checklist – Best Practices

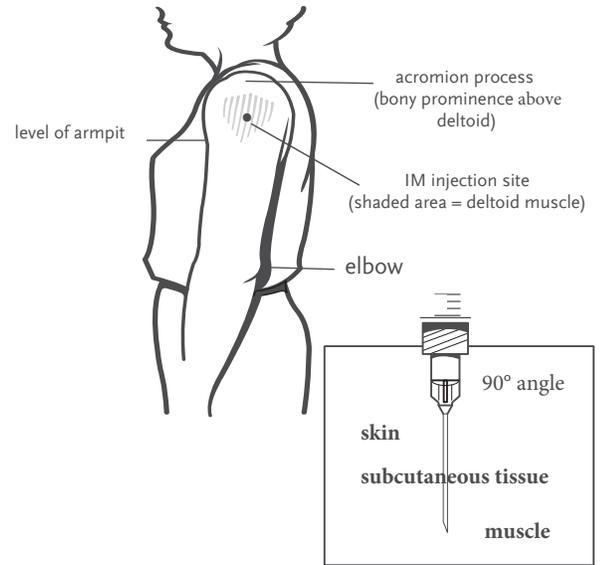
Recommended Immunization Schedules for Persons
Aged 0 through 18 years

Recommended Adult Immunization Schedule

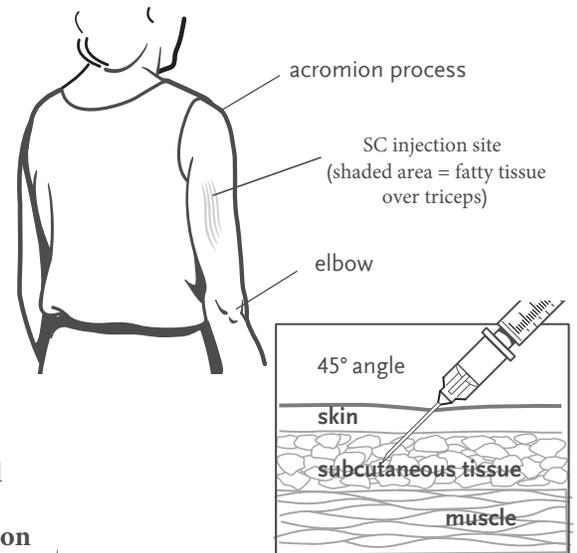
Administering Vaccines to Adults: Dose, Route, Site, and Needle Size

Vaccine	Dose	Route
Anthrax (AVA)	0.5mL	IM
Hepatitis A (HepA)	≤18 yrs: 0.5mL	IM
	≥19 yrs: 1mL	
Hepatitis B (HepB)	<i>Engerix-B; Recombivax HB</i> >20 yrs: 1mL ≤19 yrs: 0.5mL	IM
	<i>HEPLISAV-B</i> ≥18 yrs: 0.5mL	
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

Intramuscular (IM) injection



Subcutaneous (SC) injection



Injection Site and Needle Size

Subcutaneous (SC) injection – Use a 23–25 gauge, 5/8" needle. Inject in fatty tissue over triceps.

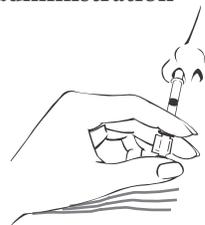
Intramuscular (IM) injection – Use a 22–25 gauge needle. Inject in deltoid muscle of arm. Choose the needle length as indicated below:

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	1–1 1/2"	
Male 153–260 lbs		
Female 200+ lbs	1 1/2"	
Male 260+ lbs		

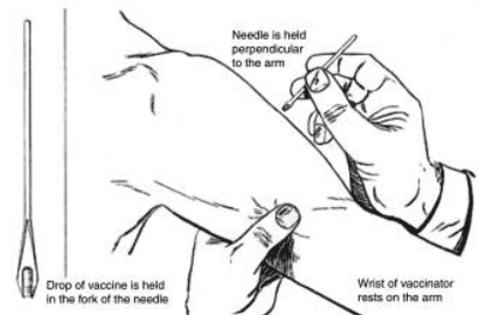
Note: Always refer to the package insert included with each biologic for complete vaccine administration information. CDC's Advisory Committee on Immunization Practices (ACIP) recommendations for the particular vaccine should be reviewed as well:

<https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html>

Intranasal (NAS) administration



Percutaneous (PC) injection



How to Administer Intramuscular and Subcutaneous Vaccine Injections to Adults

Intramuscular (IM) Injections

Administer these vaccines via IM route

- *Haemophilus influenzae* type b (Hib)
- Hepatitis A (HepA)
- Hepatitis B (HepB)
- Human papillomavirus (HPV)
- Influenza vaccine, injectable (IIV)
- Influenza vaccine, recombinant (RIV3; RIV4)
- Meningococcal conjugate (MenACWY)
- Meningococcal serogroup B (MenB)
- Pneumococcal conjugate (PCV13)
- Pneumococcal polysaccharide (PPSV23) – may also be given Subcut
- Polio (IPV) – may also be given Subcut
- Tetanus, diphtheria (Td), or with pertussis (Tdap)
- Zoster, recombinant (RZV; Shingrix)

Injection site

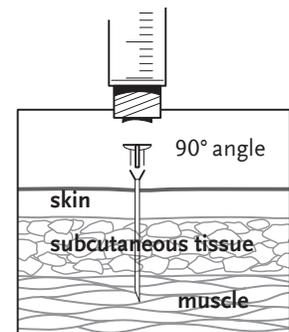
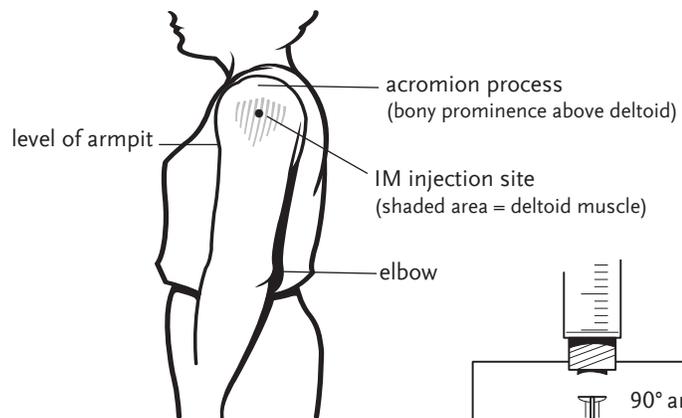
Give in the central and thickest portion of the deltoid muscle – above the level of the armpit and approximately 2–3 fingerbreadths (~2") below the acromion process. *See the diagram.* To avoid causing an injury, do not inject too high (near the acromion process) or too low.

Needle size

22–25 gauge, 1–1½" needle (*see note at right*)

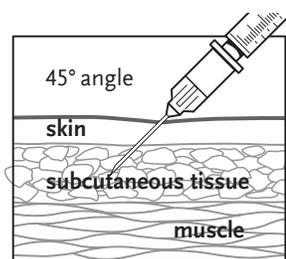
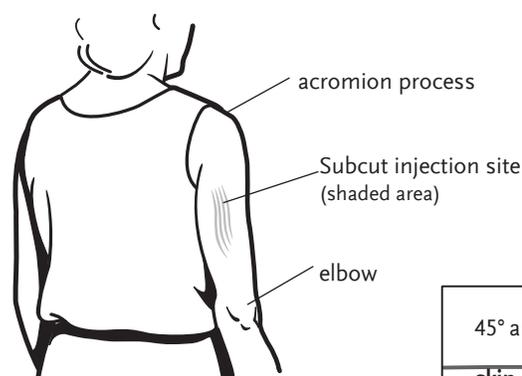
Needle insertion

- Use a needle long enough to reach deep into the muscle.
- Insert the needle at a 90° angle to the skin with a quick thrust.
- Separate two injections given in the same deltoid muscle by a minimum of 1".



Note: A 5/8" needle is sufficient in adults 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° angle; a 1" needle is sufficient in adults 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 (more than 118 kg).

Subcutaneous (Subcut) Injections



Administer these vaccines via Subcut route

- Measles, mumps, rubella (MMR)
- Pneumococcal polysaccharide (PPSV23) – may also be given IM
- Polio (IPV) – may also be given IM
- Varicella (Var; chickenpox)
- Zoster, live (ZVL; Zostavax)

Injection site

Give in fatty tissue over the triceps. *See the diagram.*

Needle size

23–25 gauge, 5/8" needle

Needle insertion

- Pinch up on the tissue to prevent injection into the muscle. Insert the needle at a 45° angle to the skin.
- Separate two injections given in the same area of fatty tissue by a minimum of 1".

Medical Management of Vaccine Reactions in Adults in a Community Setting

The table below describes steps to take if an adverse reaction occurs following vaccination.

Administering any medication, including vaccines, has the potential to cause an adverse reaction. To minimize the likelihood of an adverse event, screen patients for vaccine contraindications and precautions prior to vaccination (see “Screening Checklist for Contraindications to Vaccines for Adults” at www.immunize.org/catg.d/p4065.pdf). When adverse reactions do occur,

they can vary from minor (e.g., soreness, itching) to the rare and serious (e.g., anaphylaxis). Be prepared.

Vaccine providers should know how to recognize allergic reactions, including anaphylaxis. Have a plan in place and supplies available to provide appropriate medical care should such an event occur.

REACTION	SIGNS AND SYMPTOMS	MANAGEMENT
Localized	Soreness, redness, itching, or swelling at the injection site	Apply a cold compress to the injection site. Consider giving an analgesic (pain reliever) or antipruritic (anti-itch) medication.
	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, presyncope, 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 and maintain open airway. Apply cool, damp cloth to patient’s face and neck. Keep them under close observation until full recovery.
	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.
	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 911 if patient does not recover immediately.
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. Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain. Cardiovascular symptoms such as collapse, dizziness, tachycardia, hypotension.	See the emergency medical protocol on the next page for detailed steps to follow in treating anaphylaxis.

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Suggested Medications for Managing Anaphylaxis in a Community Immunization Clinic Setting

FIRST-LINE medication

Epinephrine 1.0 mg/mL aqueous solution (1:1000 dilution) in prefilled autoinjector or prefilled syringe (0.3 mg), prepackaged syringes, vials, or ampules. At least three epinephrine doses should be available onsite.

OPTIONAL medications: H₁ antihistamines

These relieve itching and hives only; they DO NOT relieve upper or lower airway obstruction, hypotension, or shock.

Diphenhydramine (e.g., Benadryl) oral, 12.5 mg/5 mL liquid, 25 or 50 mg tablets

Additional emergency supplies you may need

- Syringes (1 and 3 cc) and needles (22 and 25 g, 1", 1½", and 2") if needed for epinephrine
- Alcohol wipes
- Tourniquet
Applied on the extremity above the injection site to slow systemic absorption of antigen and anaphylactic mediators
- Stethoscope
- Blood pressure measuring device with adult-sized and extra-large cuffs
- Tongue depressors
- Light with extra batteries (for examination of the mouth and throat)
- A timing device, such as wristwatch, for checking pulse
- Cell phone or access to onsite phone

For remote areas without EMS support

- Adult airways (various sizes)
- Adult-sized pocket mask with one-way valve
- Oxygen (if available)

REFERENCES

* American Academy of Pediatrics. *Red Book: 2018–2021*, 31st ed (p. 66).

Campbell RL, Kelso JM. Anaphylaxis: Emergency treatment. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. November 2018.

Kroger AT, Duchin J, Vazquez M. General Best Practice Guidelines for Immunization. Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP) at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html.

Emergency medical protocol for management of anaphylactic reactions in adults in a community setting

- 1 If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms.
- 2 If symptoms are generalized, activate the emergency medical system (EMS; e.g., call 911) and notify the patient’s physician. This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.
- 3 **DRUG DOSING INFORMATION: The first-line and most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.**
 - a **First-line treatment: EPINEPHRINE is the first-line treatment for anaphylaxis, and there is no known equivalent substitute.** Use 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 autoinjector 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. Administer IM, preferably in the mid-outer thigh. Epinephrine dose may be repeated 2 additional times every 5–15 minutes (or sooner as needed) while waiting for EMS to arrive.
 - b **Optional treatment: H₁ ANTIHISTAMINES** relieve itching and urticaria (hives). These medications DO NOT relieve upper or lower airway obstruction, hypotension, or shock. Consider giving diphenhydramine (e.g., Benadryl) for relief of itching and hives. Administer orally 1–2 mg/kg every 4–6 hours, up to a maximum single dose of 100 mg.*
- 4 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.
- 5 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 other relevant clinical information.
- 6 Notify the patient’s primary care physician.
- 7 Report the incident to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov.

These standing orders for the medical management of vaccine reactions in adult patients shall remain in effect for patients of the

_____ until rescinded or until _____

NAME OF CLINIC DATE

MEDICAL DIRECTOR’S SIGNATURE DATE OF SIGNING

Medical Management of Vaccine Reactions in Children and Teens in a Community Setting

The table below describes steps to take if an adverse reaction occurs following vaccination.

Administering any medication, including vaccines, has the potential to cause an adverse reaction. To minimize the likelihood of an adverse event, screen patients for vaccine contraindications and precautions prior to vaccination (see “Screening Checklist for Contraindications to Vaccines for Children and Teens” at www.immunize.org/catg.d/p4060.pdf). When adverse reactions do

occur, they can vary from minor (e.g., soreness, itching) to the rare and serious (e.g., anaphylaxis). Be prepared.

Vaccine providers should know how to recognize allergic reactions, including anaphylaxis. Have a plan in place and supplies available to provide appropriate medical care should such an event occur.

REACTION	SIGNS AND SYMPTOMS	MANAGEMENT
Localized	Soreness, redness, itching, or swelling at the injection site	Apply a cold compress to the injection site. Consider giving an analgesic (pain reliever) or antipruritic (anti-itch) medication.
	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 and syncope (fainting)	Fright before injection is given	Have patient sit or lie down for the vaccination.
	Paleness, sweating, coldness of the hands and feet, nausea, light-headedness, dizziness, weakness, or visual disturbances	Have patient lie flat. Loosen any tight clothing and maintain open airway. Apply cool, damp cloth to patient’s face and neck. Keep them under close observation until full recovery.
	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.
	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 911 if patient does not recover immediately.
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. Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain. Cardiovascular symptoms such as collapse, dizziness, tachycardia, hypotension.	See the emergency medical protocol on the next page for detailed steps to follow in treating anaphylaxis.

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Suggested Medications for Managing Anaphylaxis in a Community Immunization Clinic Setting

FIRST-LINE medication

- Epinephrine** 1.0 mg/mL aqueous solution (1:1000 dilution) in prefilled autoinjector or prefilled syringe (various doses), prepackaged syringes, vials, or ampules. At least three epinephrine doses should be available on site, dosages as appropriate for patient population.

OPTIONAL medications: H₁ antihistamines

These relieve itching and hives only; they DO NOT relieve upper or lower airway obstruction, hypotension, or shock.

- Diphenhydramine** (e.g., Benadryl) oral, 12.5 mg/5 mL liquid; 25 or 50 mg tablets
- Hydroxyzine** (e.g., Atarax, Vistaril) oral, 10 mg/5 mL liquid, 10 mg or 25 mg tablets

Additional emergency supplies you may need

- Syringes (1 and 3 cc) and needles (22 and 25 g, 1", 1½", and 2") if needed for epinephrine
- Alcohol wipes
- Tourniquet
Applied on the extremity above the injection site to slow systemic absorption of antigen and anaphylactic mediators
- Stethoscope
- Blood pressure measuring device with multiple-sized cuffs depending on patient population
- Tongue depressors
- Light with extra batteries (for examination of the mouth and throat)
- A timing device, such as wristwatch, for checking pulse
- Cell phone or access to onsite phone

For remote areas without EMS support

- Pediatric- and adult-sized airways (various sizes)
- Various-sized pocket masks with one-way valve
- Oxygen (if available)

REFERENCES

*American Academy of Pediatrics. *Red Book: 2018–2021 Report of the Committee on Infectious Diseases*. 31st edition, p. 64–67.

Campbell RL, Kelso JM. Anaphylaxis: Emergency treatment. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. November 2018.

Kroger AT, Duchin J, Vazquez M. General Best Practice Guidelines for Immunization. Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP) at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html

Emergency medical protocol for management of anaphylactic reactions in children and teens in a community setting

- 1 If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms.
- 2 If symptoms are generalized, activate the emergency medical system (EMS; e.g., call 911) and notify the patient's physician. This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.
- 3 **DRUG DOSING INFORMATION: The first-line and most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.**
 - a **First-line treatment: EPINEPHRINE is the first-line treatment for anaphylaxis, and there is no known equivalent substitute.** Use epinephrine in a 1.0 mg/mL aqueous solution (1:1000 dilution). See page 3 to determine correct dose to be used based on child's weight. If using an autoinjector 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. Administer IM, preferably in the anterolateral thigh. Epinephrine dose may be repeated every 5–15 minutes (or sooner as needed) while waiting for EMS to arrive.
 - b **Optional treatment: H₁ ANTIHISTAMINES** relieve itching and urticaria (hives). These medications DO NOT relieve upper or lower airway obstruction, hypotension, or shock. Consider giving **diphenhydramine** (e.g., Benadryl) or **hydroxyzine** (e.g., Atarax, Vistaril) for relief of itching or hives.
 - Administer **diphenhydramine** orally, standard dose of 1–2 mg/kg every 4–6 hours. Maximum single dose is 40 mg for children age <12 years; for children age ≥12 years, 100 mg. See dosing chart on page 3.*
 - Administer **hydroxyzine** orally; the standard dose is 0.5–1 mg/kg/dose, up to 50–100 mg maximum per day in children and adolescents. See dosing chart on page 3.
- 4 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.
- 5 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 other relevant clinical information.
- 6 Notify the patient's primary care physician.
- 7 Report the incident to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov.

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For your convenience, approximate dosages based on weight and age are provided in the following charts. Please confirm that you are administering the correct dose for your patient.

First-Line Treatment: Epinephrine				Epinephrine Dose		
	Age group	Range of weight (lb)	Range of weight (kg)*	1.0 mg/mL aqueous solution (1:1000 dilution); intramuscular. Minimum dose: 0.05 mL	Epinephrine autoinjector or prefilled syringe (0.1 mg, 0.15 mg, 0.3 mg)	
Recommended dose is 0.01 mg/kg body weight up to 0.5 mg maximum dose. May be repeated every 5–15 minutes (or sooner) up to 3 times while waiting for EMS to arrive.	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) – max. dose	0.3 mg/dose	

NOTE: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate.

* Rounded weight at the 50th percentile for each age range

† 0.1 mg autoinjector is licensed for use in 7.5 to 14 kg infants and children

Optional Treatment: Diphenhydramine				Diphenhydramine dose calculations based on 1 mg/kg†	
	Age group	Range of weight (lb)	Range of weight (kg)*	Liquid: 12.5 mg/5 mL	Tablets: 25 mg or 50 mg
commonly known as Benadryl Recommended dose is 1–2 mg/kg body weight every 4–6 hrs†	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	50 mg/dose (up to 50 mg or 100 mg single dose) †

NOTE: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate.

* Rounded weight at the 50th percentile for each age range

† AAP. 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.

Optional Treatment: Hydroxyzine				Hydroxyzine dose calculations based on 0.5 mg/kg	
	Age group	Range of weight (lb)	Range of weight (kg)*	Liquid: 10 mg/5 mL	Tablets: 10 mg or 25 mg
commonly known as Atarax, Vistaril Recommended oral dose is 0.5–1 mg/kg body weight every 4–6 hrs†	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
		8–10 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 (50–100 mg, maximum per day)	

NOTE: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate.

* Rounded weight at the 50th percentile for each age range

This policy and procedure shall remain in effect for all patients of the name of practice _____ <small>NAME OF PRACTICE OR CLINIC</small> effective _____ until rescinded or until _____ <small>DATE</small> <small>DATE</small>	Medical Director _____ <small>PRINT NAME</small> _____ <small>SIGNATURE</small> <small>DATE</small>
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**Recommended and Minimum Ages and Intervals
Between Doses of Routinely Recommended Vaccines^{1,2,3,4}**

Vaccine and dose number	Recommended age for this dose	Minimum age for this dose	Recommended interval to next dose	Minimum interval to next dose
Diphtheria-tetanus-acellular pertussis (DTaP)-1 ⁵	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	6 months ⁶
DTaP-4	15-18 months	15 months ⁶	3 years	6 months
DTaP-5 ⁷	4-6 years	4 years	—	—
<i>Haemophilus influenzae</i> type b (Hib)-1 ⁸	2 months	6 weeks	8 weeks	4 weeks
Hib-2	4 months	10 weeks	8 weeks	4 weeks
Hib-3 ⁹	6 months	14 weeks	6-9 months	8 weeks
Hib-4	12-15 months	12 months	—	—
Hepatitis A (HepA)-1 ⁵	12-23 months	12 months	6-18 months	6 months
HepA-2	≥18 months	18 months	—	—
Hepatitis B (HepB)-1 ¹⁰	Birth	Birth	4 weeks-4 months	4 weeks
HepB-2	1-2 months	4 weeks	8 weeks-17 months	8 weeks
HepB-3 ¹¹	6-18 months	24 weeks	—	—
Herpes zoster Live (ZVL) ¹²	≥60 years	60 years ¹³	—	—
Herpes zoster Recombinant (RZV)-1	≥50 years	50 years ¹⁴	2-6 months	4 weeks
RZV-2	≥50 years (+2-6 months)	50 years	—	—
Human papillomavirus (HPV) – Two-Dose Series ¹⁵				
HPV-1	11-12 years	9 years	6 months	5 months
HPV-2	11-12 years (+ 6 months)	9 years (+ 5 months) ¹⁶	—	—
Human papillomavirus (HPV) – Three-Dose Series				
HPV-1 ¹⁷	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 ¹⁵
HPV-3 ¹⁷	11-12 years (+ 6 months)	9 years (+5 months)	—	—
Influenza, inactivated (IIV) ¹⁸	≥6 months	6 months ¹⁹	4 weeks	4 weeks
Influenza, live attenuated (LAIV) ¹⁸	2-49 years	2 years	4 weeks	4 weeks
Measles-mumps-rubella (MMR)-1 ²⁰	12-15 months	12 months	3-5 years	4 weeks
MMR-2 ²⁰	4-6 years	13 months	—	—
Meningococcal conjugate (MenACWY)-1 ²¹	11-12 years	2 months ²²	4-5 years	8 weeks
MenACWY-2	16 years	11 years (+ 8 weeks) ²³	—	—
Meningococcal B (<i>Healthy Adolescents</i>)				
MenB-1	16-23 years	16 years	Bexsero: 4 weeks Trumenba: 6 months ³	Bexsero: 4 weeks Trumenba: 6 months ³
MenB-2	16-23 years (+1 month)	16 years (+1 month)	—	—
Meningococcal B (<i>Persons at Increased Risk</i>)				
MenB-1	≥10 years	10 years	Bexsero: 4 weeks Trumenba: 1-2 months ³	Bexsero: 4 weeks Trumenba: 1 month
MenB-2	≥10 years (+1 month)	10 years (+1 month)	Bexsero: N/A Trumenba: 4-5 months ³	Bexsero: N/A Trumenba: 4 months ³
MenB-3 ²⁴	≥10 years (+6 months) ³	10 years (+6 months) ³	—	—
Pneumococcal conjugate (PCV13)-1 ⁸	2 months	6 weeks	8 weeks	4 weeks
PCV-2	4 months	10 weeks	8 weeks	4 weeks
PCV-3	6 months	14 weeks	6 months	8 weeks
PCV-4	12-15 months	12 months	—	—

Pneumococcal polysaccharide (PPSV)-1	—	2 years	5 years	5 years
PPSV-2 ²⁵	—	7 years	—	—
Poliovirus, Inactivated (IPV)-1 ⁵	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 ²⁶	4-6 years	4 years	—	—
Rotavirus (RV)-1 ²⁷	2 months	6 weeks	8 weeks	4 weeks
RV-2	4 months	10 weeks	8 weeks	4 weeks
RV-3 ²⁷	6 months	14 weeks	—	—
Tetanus-diphtheria (Td)	11-12 years	7 years	10 years	5 years
Tetanus-diphtheria-acellular pertussis (Tdap) ²⁸	≥11 years	7 years	—	—
Varicella (Var)-1 ²⁰	12-15 months	12 months	3-5 years	12 weeks ²⁹
Var-2 ²⁰	4-6 years	15 months ³⁰	—	—

- 1 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.
- 2 Information on travel vaccines including typhoid, Japanese encephalitis, and yellow fever, is available at www.cdc.gov/travel. Information on other vaccines that are licensed in the US but not distributed, including anthrax and smallpox, is available at <https://emergency.cdc.gov/bioterrorism/>.
- 3 “Months” refers to calendar months.
- 4 A hyphen used to express a range (as in “12-15 months”) means “through.”
- 5 Combination vaccines containing a hepatitis B component (Pediatrix and Twinrix) are available. These vaccines should not be administered to infants younger than 6 weeks because of the other components (i.e., Hib, DTaP, HepA, and IPV).
- 6 The minimum recommended interval between DTaP-3 and DTaP-4 is 6 months. However, DTaP-4 need not be repeated if administered at least 4 months after DTaP-3. This is a special grace period of 2 months, which can be used when evaluating records retrospectively. An additional 4 days should not be added to this grace period prospectively, but can be added retrospectively.
- 7 If a fourth dose of DTaP is given on or after the fourth birthday, a fifth dose is not needed.
- 8 Children receiving the first dose of Hib or PCV13 vaccine at age 7 months or older require fewer doses to complete the series.
- 9 If PedvaxHib is administered at ages 2 and 4 months, a dose at age 6 months is not necessary. The minimum age for the final dose is 12 months.
- 10 Adjuvanted Hepatitis B vaccine (HepB-B) can be administered to adults 18 years old and older on a two-dose schedule, the first and second doses separated by 4 weeks.
- 11 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 24 weeks of age.
- 12 Herpes zoster live vaccine (Zostavax) is recommended as a single dose for persons 60 years of age and older.
- 13 If a dose of Zostavax is administered to someone 50-59 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 50 years when evaluating records retrospectively.
- 14 If the first dose of recombinant zoster vaccine (Shingrix) 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.
- 15 A two-dose series of HPV vaccine is recommended for most persons who begin the series at 9 through 14 years of age. See HPV-specific recommendations for details. <https://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6549a5.pdf>
- 16 If a patient is eligible for a 2-dose HPV series and the 2nd dose is given too early, it is an invalid dose.

Prospectively:

 - If the 2nd dose was given less than 4 weeks after the 1st dose, give an additional dose 6-12 months after the 1st dose.
 - If the 2nd dose was given more than 4 weeks but less than 5 months after the 1st dose, give an additional dose at least 12 weeks after the 2nd dose and at least 6-12 months after the 1st dose. The 4-day grace period may be used in either case.

Retrospectively:

 - If this additional dose was given before December 16, 2016, and was given 12 weeks after the 2nd dose and 16 weeks after the 1st dose, it may be counted as valid.
 - If it was given on or after December 16, 2016, and was given 12 weeks after the 2nd dose and 5 months after the 1st dose, it may be counted as valid. The 4-day grace period may be used in either case.

- 17 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 3rd dose was given before December 16, 2016 and was given 12 weeks after the 2nd dose and 16 weeks after the 1st dose, it may be counted as valid.
 - If the 3rd dose was given on or after December 16, 2016 and was given 12 weeks after the 2nd dose and 5 months after the 1st dose, it may be counted as valid. The 4-day grace period may be used in either case.
- 18 One dose of influenza vaccine per season is recommended for most people. Some children younger than 9 years of age should receive 2 doses in a single season. See current influenza recommendations for details.
- 19 The minimum age for inactivated influenza vaccine varies by vaccine manufacturer. See package inserts for vaccine-specific minimum ages.
- 20 Combination MMRV vaccine can be used for children 12 months through 12 years of age. See www.cdc.gov/mmwr/pdf/rr/rr5903.pdf for details.
- 21 Revaccination with meningococcal vaccine is recommended for previously vaccinated persons who remain at high risk for meningococcal disease. See www.cdc.gov/mmwr/pdf/rr/rr6202.pdf for details.
- 22 High-risk children can receive Menactra as young as 9 months and Menveo as young as 2 months. MenHibrix is given as a four-dose series at 2, 4, 6, and 12-18 months. It can be given as young as 6 weeks for high-risk children.
- 23 For routine, non-high risk adolescent vaccination, the minimum age for the booster dose is 16 years.
- 24 This dose is not necessary of Bexsero is correctly administered, or if Trumenba is correctly administered to healthy adolescents.
- 25 A second dose of PPSV23 5 years after the first dose is recommended for persons ≤ 65 years of age at highest risk for serious pneumococcal infection, and for those who are likely to have a rapid decline in pneumococcal antibody concentration. See www.cdc.gov/mmwr/PDF/rr/rr4608.pdf for details.
- 26 A fourth dose is not needed if the third dose was administered on or after the 4th birthday and at least 6 months after the previous dose.
- 27 The first dose of rotavirus must be administered no earlier than 6 weeks and no later than 14 weeks 6 days. The vaccine series should not be started for infants 15 weeks 0 days or older. Rotavirus vaccine should not be administered to children older than 8 months 0 days, regardless of the number of doses received before that age. If two doses of Rotarix are administered as age appropriate, a third dose is not necessary.
- 28 Only one dose of Tdap is recommended. Subsequent doses should be given as Td. For management of a tetanus-prone wound in a person who has received a primary series of a tetanus-toxoid containing vaccine, the minimum interval after a previous dose of any tetanus-containing vaccine is 5 years.
- 29 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 to this grace period.
- 30 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 will result in an acceptable minimum age of 13 months. An additional 4 days should not be added to this grace period.

Adapted from Table 3-1, ACIP General Best Practice Guidelines for Immunization.

May 2019

Grace Period

Vaccine doses administered up to 4 days before the recommended age or interval 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Has the child had a serious reaction after receiving a vaccination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Does the child have allergies to medication, food, a vaccine component, or latex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Has the child, a sibling, or a parent had a seizure; has the child had brain or other nervous system problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Does the child have cancer, leukemia, HIV/AIDS, or does the child or family members (parents or siblings) have an immune system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	If your child is a baby, have you ever been told he/she has had intussusception?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Has the child had (or is a candidate for) his/her spleen removed, or do they have sickle cell anemia?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Has the child ever passed out (had vasovagal syncope) during or after a previous immunization or blood draw?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Has the child received any vaccinations in the past 4 weeks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Is the child/teen pregnant or is there a chance she could become pregnant during the next month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 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, sweating, 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-syncope, 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.

Vaccine Abbreviations:

- DTaP: diphtheria/tetanus toxoids, acellular pertussis
- DTP: diphtheria/tetanus toxoids, whole-cell pertussis
- Hib: *Haemophilus influenzae* type b
- HPV: human papillomavirus
- IIV: inactivated influenza
- IPV: inactivated poliovirus
- LAIV: live attenuated influenza
- PCV13: pneumococcal conjugate (13-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
- serogroups A, C, W, Y
- MenB: meningococcal serogroup B
- MMR: measles, mumps, rubella
- MMRV: measles, mumps, rubella, varicella

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/latexable.pdf.

4. Table of Vaccine Components: www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/exipient-table-2.pdf.

5. Prevention and control of seasonal influenza with vaccines: www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html.

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.

infectious complications among hematopoietic stem cell transplant recipients: a global perspective. *Marrow Transplant* 15:1143-1238.

10. Revised ACIP recommendation for avoiding pregnancy after receiving a rubella-containing vaccine. MMWR 2001; 50 (49).

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.

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://dpcl.d.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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Have you ever had a serious reaction after receiving a vaccination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Do you have allergies to medication, food, a vaccine component, or latex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Have you had a seizure or a brain or other nervous system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Have you had (or are you a candidate for) your spleen removed, or do you have sickle cell anemia?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Have you ever passed out (had vasovagal syncope) during or after a previous immunization or blood draw?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Have you received any vaccinations in the past 4 weeks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Are you pregnant or is there a chance you could become pregnant during the next month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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/ μ L. 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, sweating, 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-syncope, 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/latex.html.
 3. Table of Vaccine Components: www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/exipient-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. Tomblin 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 influenzae* 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



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. **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:  . If “NO” is checked in ONE OR MORE answer boxes that contain a  , 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 .
5. This checklist should be used in conjunction with DHA-IHD’s Vaccine Storage and Handling Guide: <https://health.mil/vaccinesguide> 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: _____

BEFORE THE CLINIC (Please complete each item before the clinic starts)

VACCINE SHIPMENT			
YES	NO	N.A.	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Vaccine was shipped directly to the facility/clinic site, where adequate storage is available. <i>(Direct shipment is preferred for cold chain integrity.)</i>
VACCINE TRANSPORT (IF IT WAS NOT POSSIBLE TO SHIP VACCINES DIRECTLY TO THE FACILITY/CLINIC SITE)			
YES	NO	N.A.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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: https://health.mil/vaccineshguide .
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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. <i>(Your qualified container and pack-out should include packing instructions. If not, contact the company or DHA-IHD for guidance.)</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The person transporting the vaccines confirmed that all vaccines were transported in the passenger compartment of the vehicle (NOT in the vehicle trunk).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If vaccines were shipped, the shipment arrived within the appropriate time frame (according to manufacturer or distributor guidelines) and in good condition.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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. <i>Note: Follow instruction sheet with vaccine shipment for reading and/or returning TempTale monitors.</i>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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). <i>Follow the guidance for unpacking and storing vaccines specified in DHA-IHD's Vaccine Storage and Handling Guide: https://health.mil/vaccineshguide.</i>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Upon arrival at the facility/clinic, vaccines remained protected from light (per manufacturer's package insert) until ready for use at the vaccination clinic.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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.	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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 - <i>Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases</i>).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There is a designated area at the site for management of patients with urgent medical problems (e.g., fainting).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Needles in a variety of lengths are available to optimize injection based on the prescribed route/technique and patient size.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reasonable accommodations (e.g., privacy screens) are available for patient privacy during vaccination.

- » 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.	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Staff members administering vaccines have reviewed vaccine manufacturer instructions for administration and have completed vaccine-specific competency training PRIOR to the event.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If using a standing order protocol, the protocol is current and available at the clinic/facility site. (See DHA-IHD website for examples.)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A designated clean area for vaccine preparation has been identified and set up prior to the clinic, separate from the immediate administration area and away from potentially contaminated items. Location physical space dictates placement (e.g., a separate table versus a separate room).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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: https://health.mil/vaccinesguide .
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Vaccines are being protected from light during the vaccination clinic per the manufacturer's package insert.

VACCINE PREPARATION

YES	NO	N.A.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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.)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Vaccines are being prepared in a designated clean area, away from immediate administration areas and potentially contaminated items.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If using reconstituted vaccines, they are being prepared according to the manufacturer's guidelines.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vaccines are being prepared at the time of administration.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If using single-dose or multidose vials, syringes are being labeled with the name of the vaccine and date/time of draw.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	All patients are being screened for contraindications and precautions for the specific vaccine(s) in use before receiving that vaccine(s).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Staff 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 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.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vaccines are normal in appearance (i.e., not discolored, without precipitate, and easily resuspended when shaken).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Each staff member is administering only the vaccines they have prepared.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If more than one vaccine type is being administered, separate preparation stations are set up for each vaccine type to prevent medication errors.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vaccines are being administered using aseptic technique.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Staff is administering vaccines using the correct route per manufacturer instructions.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Staff is administering the correct dosage (volume) of vaccine.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Staff has checked age indications for the vaccines and is administering vaccines to the correct age groups.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For vaccines requiring more than 1 dose, staff is administering the current dose at the correct interval, if applicable. <i>Follow the recommended guidelines in Table 3-1 of the "General Best Practice Guidelines on Immunization" at https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/timing.html#t-01.</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If vaccine administration errors are observed, corrective action is being taken and incident is immediately reported to the clinic supervisor.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Single-dose vials or manufacturer-filled syringes are being used for only one patient.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vaccines are being administered following safe injection practices.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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].)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Multidose vials are being used only for the number of doses approved by the manufacturer.

- » 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.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vaccines are never being transferred from one syringe to another.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Documentation is being completed in the patient's service-specific Immunization Tracking System (ITS) (e.g., MEDPROS, ASIMS, MRRS, etc.).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Any remaining vaccine in provider-predrawn syringes, opened multidose vials, or activated manufacturer-filled syringes (MFSs) is properly discarded. <i>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.</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Any vaccine administration errors were reported to all appropriate entities.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All biohazardous material is disposed of properly.

POST-CLINIC DOCUMENTATION

YES	NO	N.A.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All vaccinations were recorded in the service-specific ITS (and Electronic Medical Record, as applicable).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Any adverse events were reported to the Vaccine Adverse Event Reporting System (VAERS): http://vaers.hhs.gov/index .
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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>
 - ASIP - <https://health.mil/ASIP>
- » 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 Toolkit - https://health.mil/Imm_Toolkit
 - Cold Chain Management:
 - DHA-IHD – <https://health.mil/coldchain>
 - USAMMA - <https://www.usamma.army.mil/Pages/DOC-CCM.aspx>
 - 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:
 - Screening form - <http://www.immunize.org/catg.d/p4065.pdf>
 - Immunization Tracking Systems Resources - <https://health.mil/ITS>
- » TRAINING:
 - Competency Checklist (Adult) - <https://health.mil/adultcompetency>
 - Competency Checklist (Pediatrics) - <https://health.mil/pediatriccompetency>
 - 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>

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, 2020

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger

UNITED STATES
2020

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccines	Abbreviations	Trade names
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	Daptacel® Infanrix®
Diphtheria, tetanus vaccine	DT	No trade name
<i>Haemophilus influenzae</i> type b vaccine	Hib (PRP-T) Hib (PRP-OMP)	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Multiple
Influenza vaccine (live, attenuated)	LAIV	FluMist® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R® II
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D MenACWY-CRM	Menactra® Menveo®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero® Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax® 23
Poliovirus vaccine (inactivated)	IPV	IPOL®
Rotavirus vaccine	RV1 RV5	Rotarix® RotaTeq®
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Tetanus and diphtheria vaccine	Td	Tenivac® 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 <i>Haemophilus influenzae</i> type b vaccine	DTaP-IPV/Hib	Pentacel®
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix® Quadracel®
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.

How to use the child/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 and other indications (**Table 3**)
- 4** Review vaccine types, frequencies, intervals, and considerations for special situations (**Notes**)

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), and American College of Nurse-Midwives (www.midwife.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

 Download the CDC Vaccine Schedules App for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Outbreak information (including case identification and outbreak response), see Manual for the Surveillance of Vaccine-Preventable Diseases: www.cdc.gov/vaccines/pubs/surv-manual



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS310020-A

Table 1 Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2020

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). School entry and adolescent vaccine age groups are shaded in gray.

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19–23 mos	2–3 yrs	4–6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16 yrs	17–18 yrs	
Hepatitis B (HepB)	1 st dose	2 nd dose			← 3 rd dose →													
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1 st dose	2 nd dose	See Notes													
Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs)		1 st dose	2 nd dose	3 rd dose				← 4 th dose →				5 th dose						
<i>Haemophilus influenzae</i> type b (Hib)		1 st dose	2 nd dose	See Notes			← 3 rd or 4 th dose, See Notes →											
Pneumococcal conjugate (PCV13)		1 st dose	2 nd dose	3 rd dose			← 4 th dose →											
Inactivated poliovirus (IPV <18 yrs)		1 st dose	2 nd dose		← 3 rd dose →							4 th dose						
Influenza (IIV)					Annual vaccination 1 or 2 doses								Annual vaccination 1 dose only					
Influenza (LAIV)												Annual vaccination 1 or 2 doses	Annual vaccination 1 dose only					
Measles, mumps, rubella (MMR)					See Notes		← 1 st dose →					2 nd dose						
Varicella (VAR)							← 1 st dose →					2 nd dose						
Hepatitis A (HepA)					See Notes		2-dose series, See Notes											
Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs)																	Tdap	
Human papillomavirus (HPV)																	See Notes	
Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM ≥2 mos)					See Notes										1 st dose	2 nd dose		
Meningococcal B																		See Notes
Pneumococcal polysaccharide (PPSV23)																		See Notes

Range of recommended ages for all children

Range of recommended ages for catch-up immunization

Range of recommended ages for certain high-risk groups

Recommended based on shared clinical decision-making or *can be used in this age group

No recommendation/not applicable

Table 2 Recommended Catch-up Immunization Schedule for Children and Adolescents Who Start Late or Who are More than 1 month Behind, United States, 2020

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. Minimum age for the final dose is 24 weeks.		
Rotavirus	6 weeks Maximum age for first dose is 14 weeks, 6 days	4 weeks	4 weeks 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
<i>Haemophilus influenzae</i> type b	6 weeks	No further doses needed if first dose was administered at age 15 months or older. 4 weeks if first dose was administered before the 1 st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months.	No further doses needed if previous dose was administered at age 15 months or older. 4 weeks 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, Hibrix) or unknown. 8 weeks and age 12 through 59 months (as final dose) if current age is younger than 12 months and first dose was administered at age 7 through 11 months; OR if current age is 12 through 59 months and first dose was administered before the 1 st birthday and second dose administered at younger than 15 months; OR if both doses were PRP-OMP (PedvaxHIB, Comvax) and were administered before the 1 st birthday.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1 st birthday.	
Pneumococcal conjugate	6 weeks	No further doses needed for healthy children if first dose was administered at age 24 months or older. 4 weeks if first dose was administered before the 1 st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1 st birthday or after.	No further doses needed for healthy children if previous dose administered at age 24 months or older. 4 weeks if current age is younger than 12 months and previous dose was administered at <7 months old. 8 weeks (as final dose for healthy children) if previous dose was administered between 7–11 months (wait until at least 12 months old); OR if current age is 12 months or older and at least 1 dose was given before age 12 months.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus	6 weeks	4 weeks	4 weeks if current age is < 4 years. 6 months (as final dose) 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 9 months MenACWY-D	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 if first dose of DTaP/DT was administered before the 1 st birthday. 6 months (as final dose) if first dose of DTaP/DT or Tdap/Td was administered at or after the 1 st birthday.	6 months if first dose of DTaP/DT was administered before the 1 st 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 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. 4 weeks if age 13 years or older.			

Table 3 Recommended Child and Adolescent Immunization Schedule by Medical Indication, United States, 2020

Always use this table in conjunction with Table 1 and the notes that follow.

VACCINE	INDICATION									
	Pregnancy	Immunocompromised status (excluding HIV infection)	HIV infection CD4+ count ¹		Kidney failure, end-stage renal disease, or on hemodialysis	Heart disease or chronic lung disease	CSF leaks or cochlear implants	Asplenia or persistent complement deficiencies	Chronic liver disease	Diabetes
			<15% and total CD4 cell count of <200/mm ³	≥15% and total CD4 cell count of ≥200/mm ³						
Hepatitis B										
Rotavirus		SCID ²								
Diphtheria, tetanus, & acellular pertussis (DTaP)										
<i>Haemophilus influenzae</i> type b										
Pneumococcal conjugate										
Inactivated poliovirus										
Influenza (IIV) or Influenza (LAIV)						Asthma, wheezing; 2–4yrs ³				
Measles, mumps, rubella										
Varicella										
Hepatitis A										
Tetanus, diphtheria, & acellular pertussis (Tdap)										
Human papillomavirus										
Meningococcal ACWY										
Meningococcal B										
Pneumococcal polysaccharide										

 Vaccination according to the routine schedule recommended
 Recommended for persons with an additional risk factor for which the vaccine would be indicated
 Vaccination is recommended, and additional doses may be necessary based on medical condition. See Notes.
 Not recommended/contraindicated—vaccine should not be administered
 Precaution—vaccine might be indicated if benefit of protection outweighs risk of adverse reaction
 Delay vaccination until after pregnancy if vaccine indicated
 No recommendation/not applicable

1 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 D) at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.

2 Severe Combined Immunodeficiency

3 LAIV 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, 2020

For vaccine recommendations for persons 19 years of age or older, see the Recommended Adult Immunization Schedule.

Additional information

- Consult relevant ACIP statements for detailed recommendations at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For information on contraindications and precautions for the use of a vaccine, consult the General Best Practice Guidelines for Immunization at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html and relevant ACIP statements at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- 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 3-1. 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 vaccine 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, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2018 Report of the Committee on Infectious Diseases*. 31st ed. Itasca, IL: American Academy of Pediatrics; 2018:67–111).
- For information regarding 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 routine child and adolescent vaccines are covered by VICP except for pneumococcal polysaccharide vaccine (PPSV23). For more information, see www.hrsa.gov/vaccinecompensation/index.html.

Diphtheria, tetanus, and pertussis (DTaP) vaccination (minimum age: 6 weeks [4 years for Kinrix or Quadracel])

Routine vaccination

- 5-dose series at 2, 4, 6, 15–18 months, 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 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.

Haemophilus influenzae type b vaccination (minimum age: 6 weeks)

Routine vaccination

- ActHIB, Hiberix, or Pentacel:** 4-dose series at 2, 4, 6, 12–15 months
- PedvaxHIB:** 3-dose series at 2, 4, 12–15 months

Catch-up vaccination

- Dose 1 at 7–11 months:** Administer dose 2 at least 4 weeks later and dose 3 (final dose) at 12–15 months or 8 weeks after dose 2 (whichever is later).
- Dose 1 at 12–14 months:** Administer dose 2 (final dose) at least 8 weeks after dose 1.
- Dose 1 before 12 months and dose 2 before 15 months:** Administer dose 3 (final dose) 8 weeks after dose 2.
- 2 doses of PedvaxHIB before 12 months:** Administer dose 3 (final dose) at 12–59 months and at least 8 weeks after dose 2.
- Unvaccinated at 15–59 months:** 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.

Special situations

Chemotherapy or radiation treatment:

- 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):**
 - 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:

- 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:**
 - 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 14 months) OR no doses (15 months or older)

Notes

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2020

Hepatitis A vaccination (minimum age: 12 months for routine vaccination)

Routine vaccination

- 2-dose series (minimum interval: 6 months) beginning at age 12 months

Catch-up vaccination

- Unvaccinated persons through 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 18 years and older may receive the combined HepA and HepB vaccine, **Twinrix**, as a 3-dose series (0, 1, and 6 months) or 4-dose series (0, 7, and 21–30 days, followed by a 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 12 and 23 months of age
 - Unvaccinated age 12 months and older:** Administer dose 1 as soon as travel is considered.

Hepatitis B vaccination (minimum age: birth)

Birth dose (monovalent HepB vaccine only)

- Mother is HBsAg-negative:** 1 dose within 24 hours of birth for all medically stable infants $\geq 2,000$ grams. Infants $< 2,000$ grams: Administer 1 dose at chronological age 1 month or hospital discharge.
- Mother is HBsAg-positive:**
 - Administer **HepB vaccine** and **hepatitis B immune globulin (HBIG)** (in separate limbs) within 12 hours of birth, regardless of birth weight. For infants $< 2,000$ grams, administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
 - Test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose.
- Mother's HBsAg status is unknown:**
 - Administer **HepB vaccine** within 12 hours of birth, regardless of birth weight.
 - For infants $< 2,000$ grams, administer **HBIG** in addition to HepB vaccine (in separate limbs) within 12 hours of birth. Administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
 - Determine mother's HBsAg status as soon as possible. If mother is HBsAg-positive, administer **HBIG** to infants $\geq 2,000$ grams as soon as possible, but no later than 7 days of age.

Routine series

- 3-dose series at 0, 1–2, 6–18 months (use monovalent HepB vaccine for doses administered before age 6 weeks)

- Infants who did not receive a birth dose should begin the series as soon as feasible (see Table 2).
- Administration of **4 doses** is permitted when a combination vaccine containing HepB is used after the birth dose.
- Minimum age** for the final (3rd or 4th) dose: 24 weeks
- Minimum intervals:** dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 8 weeks / dose 1 to dose 3: 16 weeks (when 4 doses are administered, substitute “dose 4” for “dose 3” in these calculations)

Catch-up vaccination

- Unvaccinated persons should complete a 3-dose series at 0, 1–2, 6 months.
- 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 18 years and older may receive a 2-dose series of HepB (**HepBisav-B***) at least 4 weeks apart.
- Adolescents 18 years and older may receive the combined HepA and HepB vaccine, **Twinrix**, as a 3-dose series (0, 1, and 6 months) or 4-dose series (0, 7, and 21–30 days, followed by a dose at 12 months).
- For other catch-up guidance, see Table 2.

Special situations

- Revaccination is not generally recommended for persons with a normal immune status who were vaccinated as infants, children, adolescents, or adults.
- Revaccination** may be recommended for certain populations, including:
 - Infants born to HBsAg-positive mothers**
 - Hemodialysis patients**
 - Other immunocompromised persons**
- For detailed revaccination recommendations, see www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html.

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 through 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)
- If completed valid vaccination series with any HPV vaccine, no additional doses needed

Special situations

- Immunocompromising conditions, including HIV infection:** 3-dose series as above
- History of sexual abuse or assault:** Start at age 9 years.
- Pregnancy:** HPV vaccination not recommended until after pregnancy; no intervention needed if vaccinated while pregnant; pregnancy testing not needed before vaccination

Influenza vaccination

(minimum age: 6 months [IIV], 2 years [LAIV], 18 years [recombinant influenza vaccine, RIV])

Routine vaccination

- Use any influenza vaccine appropriate for age and health status annually:
 - 2 doses, separated by at least 4 weeks, for **children age 6 months–8 years** who have received fewer than 2 influenza vaccine doses before July 1, 2019, or whose influenza vaccination history is unknown (administer dose 2 even if the child turns 9 between receipt of dose 1 and dose 2)
 - 1 dose for **children age 6 months–8 years** who have received at least 2 influenza vaccine doses before July 1, 2019
 - 1 dose for **all persons age 9 years and older**
- For the 2020–21 season, see the 2020–21 ACIP influenza vaccine recommendations.

Special situations

- Egg allergy, hives only:** Any influenza vaccine appropriate for age and health status annually
- Egg allergy with symptoms other than hives** (e.g., angioedema, respiratory distress, need for emergency medical services or epinephrine): Any influenza vaccine appropriate for age and health status annually in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions
- LAIV should not be used** in persons with the following conditions or situations:
 - History of severe allergic reaction to a previous dose of any influenza vaccine or to any vaccine component (excluding egg, see details above)
 - Receiving aspirin or salicylate-containing medications
 - Age 2–4 years with history of asthma or wheezing
 - Immunocompromised due to any cause (including medications and HIV infection)
 - Anatomic or functional asplenia
 - Cochlear implant
 - Cerebrospinal fluid-opharyngeal communication
 - Close contacts or caregivers of severely immunosuppressed persons who require a protected environment
 - Pregnancy
 - Received influenza antiviral medications within the previous 48 hours

Measles, mumps, and rubella vaccination (minimum age: 12 months for routine vaccination)

Routine vaccination

- 2-dose series at 12–15 months, 4–6 years
- Dose 2 may be administered as early as 4 weeks after dose 1.

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 with dose 1 at 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 and older:** 2-dose series at least 4 weeks apart before departure

Meningococcal serogroup A,C,W,Y vaccination (minimum age: 2 months [MenACWY-CRM, Menvevo], 9 months [MenACWY-D, Menactra])

Routine vaccination

- 2-dose series at 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:

- **Menvevo**
 - Dose 1 at age 8 weeks: 4-dose series at 2, 4, 6, 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
- **Menactra**
 - **Persistent complement component deficiency or complement inhibitor use:**
 - Age 9–23 months: 2-dose series at least 12 weeks apart
 - Age 24 months or older: 2-dose series at least 8 weeks apart
 - **Anatomic or functional asplenia, sickle cell disease, or HIV infection:**
 - Age 9–23 months: Not recommended
 - Age 24 months or older: 2-dose series at least 8 weeks apart
 - **Menactra** must be administered at least 4 weeks after completion of PCV13 series.

Travel in 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:
 - **Menvevo (age 2–23 months):**
 - Dose 1 at 8 weeks: 4-dose series at 2, 4, 6, 12 months
 - Dose 1 at 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
 - **Menactra (age 9–23 months):**
 - 2-dose series (dose 2 at least 12 weeks after dose 1; dose 2 may be administered as early as 8 weeks after dose 1 in travelers)
- Children age 2 years or older: 1 dose **Menvevo** or **Menactra**

First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) or military recruits:

- 1 dose **Menvevo** or **Menactra**

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 deficiency, HIV, or asplenia): Follow the booster schedule for persons at increased risk (see below).
 - **Children for whom boosters are not recommended** (e.g., those 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.
- Note:** **Menactra** should be administered either before or at the same time as DTap. For MenACWY booster dose recommendations for groups listed under "Special situations" and in an outbreak setting and for additional meningococcal vaccination information, see www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/mening.html.

Meningococcal serogroup B vaccination (minimum age: 10 years [MenB-4C, Bexsero; MenB-FHbp, Trumenba])

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.

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

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 for additional meningococcal vaccination information, see www.cdc.gov/vaccines/acip/recommendations.html and www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/mening.html.

Pneumococcal vaccination (minimum age: 6 weeks [PCV13], 2 years [PPSV23])

Routine vaccination with PCV13

- 4-dose series at 2, 4, 6, 12–15 months

Catch-up vaccination with PCV13

- 1 dose for healthy children age 24–59 months with any incomplete* PCV13 series
- For other catch-up guidance, see Table 2.

Special situations

High-risk conditions below: When both PCV13 and PPSV23 are indicated, administer PCV13 first. PCV13 and PPSV23 should not be administered during the same visit.

Chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure), chronic lung disease (including asthma treated with high-dose, oral corticosteroids), diabetes mellitus:

Age 2–5 years

- Any incomplete* series with:
 - 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
 - Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 8 weeks apart)
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

Age 6–18 years

- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

Cerebrospinal fluid leak, cochlear implant:

Age 2–5 years

- Any incomplete* series with:
 - 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
 - Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 8 weeks apart)
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

Age 6–18 years

- No history of either PCV13 or PPSV23: 1 dose PCV13, 1 dose PPSV23 at least 8 weeks later
- Any PCV13 but no PPSV23: 1 dose PPSV23 at least 8 weeks after the most recent dose of PCV13
- PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent dose of PPSV23

Sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiency; HIV infection; chronic renal failure; nephrotic syndrome; malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and other diseases associated with treatment with immunosuppressive drugs or radiation therapy; solid organ transplantation; multiple myeloma:

Age 2–5 years

- Any incomplete* series with:
 - 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
 - Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 8 weeks apart)
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose) and a 2nd dose of PPSV23 5 years later

Age 6–18 years

- No history of either PCV13 or PPSV23: 1 dose PCV13, 2 doses PPSV23 (dose 1 of PPSV23 administered 8 weeks after PCV13 and dose 2 of PPSV23 administered at least 5 years after dose 1 of PPSV23)
- Any PCV13 but no PPSV23: 2 doses PPSV23 (dose 1 of PPSV23 administered 8 weeks after the most recent dose of PCV13 and dose 2 of PPSV23 administered at least 5 years after dose 1 of PPSV23 and at least 8 weeks after a dose of PCV13)
- PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent PPSV23 dose and a 2nd dose of PPSV23 administered 5 years after dose 1 of PPSV23 and at least 8 weeks after a dose of PCV13

Chronic liver disease, alcoholism:

Age 6–18 years

- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

**Incomplete series* = Not having received all doses in either the recommended series or an age-appropriate catch-up series. See Tables 8, 9, and 11 in the ACIP pneumococcal vaccine recommendations at www.cdc.gov/mmwr/pdf/rr/rr5911.pdf for complete schedule details.

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 at 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 at 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.
- IPV is not routinely recommended for U.S. residents 18 years and older.

Series containing oral polio 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?_cid=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?_cid=mm6606a7_w.
- For other catch-up guidance, see Table 2.

Rotavirus vaccination (minimum age: 6 weeks)

Routine vaccination

- **Rotarix:** 2-dose series at 2 and 4 months
- **RotaTeq:** 3-dose series at 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.

Tetanus, diphtheria, and pertussis (Tdap) vaccination (minimum age: 11 years for routine vaccination, 7 years for catch-up vaccination)

Routine vaccination

- **Adolescents age 11–12 years:** 1 dose Tdap
- **Pregnancy:** 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36
- Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine.

Catch-up vaccination

- **Adolescents age 13–18 years who have not received Tdap:** 1 dose Tdap, then Td or Tdap booster every 10 years
- **Persons 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 7–10 years:**
 - **Children age 7–9 years** who receive Tdap should receive the routine Tdap dose at age 11–12 years.
 - **Children age 10 years** who receive Tdap do not need to receive the routine Tdap dose at age 11–12 years.
- **DTaP inadvertently administered at or after age 7 years:**
 - **Children age 7–9 years:** DTaP may count as part of catch-up series. Routine Tdap dose at age 11–12 years should be administered.
 - **Children age 10–18 years:** Count dose of DTaP as the adolescent Tdap booster.
- For other catch-up guidance, see Table 2.
- For information on use of Tdap or Td as tetanus prophylaxis in wound management, see www.cdc.gov/mmwr/volumes/67/rr/r6702a1.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 12–15 months, 4–6 years
- Dose 2 may be administered as early as 3 months after dose 1 (a dose administered after a 4-week interval may be counted).

Catch-up vaccination

- Ensure persons age 7–18 years without evidence of immunity (see www.cdc.gov/mmwr/pdf/rr/rr5604.pdf) have 2-dose series:
 - **Age 7–12 years:** routine interval: 3 months (a dose administered after a 4-week interval may be counted)
 - **Age 13 years and older:** routine interval: 4–8 weeks (minimum interval: 4 weeks)
 - The maximum age for use of MMRV is 12 years.

Recommended Immunization Schedules for Adults

United States, 2020

Recommended Adult Immunization Schedule for ages 19 years or older

UNITED STATES
2020

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 and other indications (**Table 2**)
- 3 Review vaccine types, frequencies, and intervals and considerations for special situations (**Notes**)

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), and American College of Nurse-Midwives (www.midwife.org).

Vaccines in the Adult Immunization Schedule*

Vaccines	Abbreviations	Trade names
<i>Haemophilus influenzae</i> type b vaccine	Hib	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis A and hepatitis B vaccine	HepA-HepB	Twintrix®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB® Heplisav-B®
Human papillomavirus vaccine	HPV vaccine	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Many brands
Influenza vaccine (live, attenuated)	LAIV	FluMist® Quadrivalent
Influenza vaccine (recombinant)	RIV	Flublok® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R® II
Meningococcal serogroups A, C, W, Y vaccine	MenACWY	Menactra® Menveo®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero® Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax® 23
Tetanus and diphtheria toxoids	Td	Tenivac® Tdvax™
Tetanus and diphtheria toxoids and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Varicella vaccine	VAR	Varivax®
Zoster vaccine, recombinant	RZV	Shingrix
Zoster vaccine live	ZVL	Zostavax®

*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.

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to the local or state health department
- Clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov or 800-822-7967

Injury claims

All vaccines included in the adult immunization schedule except pneumococcal 23-valent polysaccharide (PPSV23) and zoster (RZV, ZVL) vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a vaccine injury claim is available at www.hrsa.gov/vaccinecompensation.

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 ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.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
- Travel vaccine recommendations: www.cdc.gov/travel
- Recommended Child and Adolescent Immunization Schedule, United States, 2020: www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

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Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2020

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV) ^{or}	1 dose annually			
Influenza live, attenuated (LAIV)				
Tetanus, diphtheria, pertussis (Tdap or Td)	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)			
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV) (preferred) ^{or}	2 doses			
Zoster live (ZVL)				
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal conjugate (PCV13)	1 dose			65 years and older
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses depending on indication			1 dose
Hepatitis A (HepA)	2 or 3 doses depending on vaccine			
Hepatitis B (HepB)	2 or 3 doses depending on vaccine			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
	19 through 23 years			
<i>Haemophilus influenzae</i> type b (Hib)	1 or 3 doses depending on indication			

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

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 and Other Indications, United States, 2020

Vaccine	Pregnancy	Immuno-compromised (excluding HIV infection)	HIV infection CD4 count		Asplenia, complement deficiencies	End-stage renal disease; or on hemodialysis	Heart or lung disease, alcoholism ¹	Chronic liver disease	Diabetes	Health care personnel ²	Men who have sex with men
			<200	≥200							
IIV or RIV or LAIV	1 dose annually										
Tdap or Td	1 dose Tdap each pregnancy	1 dose Tdap, then Td or Tdap booster every 10 years									
MMR	NOT RECOMMENDED		1 or 2 doses depending on indication								
VAR	NOT RECOMMENDED		2 doses								
RZV (preferred) or ZVL	DELAY										
	NOT RECOMMENDED		2 doses at age ≥50 years or 1 dose at age ≥60 years								
HPV	DELAY	3 doses through age 26 years			2 or 3 doses through age 26 years						
PCV13	1 dose										
PPSV23	1, 2, or 3 doses depending on age and indication										
HepA								2 or 3 doses depending on vaccine			
HepB								2 or 3 doses depending on vaccine			
MenACWY	1 or 2 doses depending on indication, see notes for booster recommendations										
MenB	PRECAUTION	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations									
Hib		3 doses HSCT ³ recipients only		1 dose							

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection
 Recommended vaccination for adults with an additional risk factor or another indication
 Precaution—vaccination might be indicated if benefit of protection outweighs risk of adverse reaction
 Delay vaccination until after pregnancy if vaccine is indicated
 Not recommended/contraindicated—vaccine should not be administered
 No recommendation/Not applicable

1. Precaution for LAIV does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.

Notes Recommended Adult Immunization Schedule, United States, 2020

Haemophilus influenzae type b vaccination

Special situations

- Anatomical or functional asplenia (including sickle cell disease):** 1 dose if previously did not receive Hib; 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

- Not at risk but want protection from hepatitis A** (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: 4 weeks between doses 1 and 2/5 months between doses 2 and 3])

Special situations

- At risk for hepatitis A virus infection:** 2-dose series HepA or 3-dose series HepA-HepB as above
- 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**
- 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

- Not at risk but want protection from hepatitis B** (identification of risk factor not required): 2- or 3-dose series (2-dose series Heplisav-B at least 4 weeks apart [2-dose series HepB only applies when 2 doses of Heplisav-B are used at least 4 weeks apart] or 3-dose series Engerix-B or Recombivax HB at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/8 weeks between doses 2 and 3/16 weeks between doses 1 and 3]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/5 months between doses 2 and 3])

Special situations

- At risk for hepatitis B virus infection:** 2-dose (Heplisav-B) or 3-dose (Engerix-B, Recombivax HB) series or 3-dose series HepA-HepB (Twinrix) as above
- 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 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; hemodialysis, peritoneal dialysis, home dialysis, and predialysis patients; persons with diabetes mellitus age younger than 60 years and, at discretion of treating clinician, those age 60 years or older)
- Incarcerated persons**
- Travel in countries with high or intermediate endemic hepatitis B**
- Pregnancy** if at risk for infection or severe outcome from infection during pregnancy (Heplisav-B not currently recommended due to lack of safety data in pregnant women)

Human papillomavirus vaccination

Routine vaccination

- HPV vaccination recommended for all adults through age 26 years:** 2- or 3-dose series depending on age at initial vaccination or condition:
 - Age 15 years or older at initial vaccination:** 3-dose series at 0, 1–2, 6 months (minimum intervals: 4 weeks between doses 1 and 2/12 weeks between doses 2 and 3/5 months between doses 1 and 3; repeat dose if administered too soon)
 - Age 9 through 14 years at initial vaccination and received 1 dose or 2 doses less than 5 months apart:** 1 dose
 - Age 9 through 14 years at initial vaccination and received 2 doses at least 5 months apart:** HPV vaccination complete, no additional dose needed.
 - If completed valid vaccination series with any HPV vaccine, no additional doses needed**
 - Shared clinical decision-making**
 - Age 27 through 45 years based on shared clinical decision-making:**
 - 2- or 3-dose series as above
- Special situations**
- Pregnancy through age 26 years:** HPV vaccination is not recommended until after pregnancy; no intervention needed if vaccinated while pregnant; pregnancy testing not needed before vaccination

Influenza vaccination

Routine vaccination

- **Persons age 6 months or older:** 1 dose any influenza vaccine appropriate for age and health status annually
- For additional guidance, see www.cdc.gov/flu/professionals/index.htm

Special situations

- **Egg allergy, hives only:** 1 dose any influenza vaccine appropriate for age and health status annually
- **Egg allergy more severe than hives** (e.g., angioedema, respiratory distress): 1 dose any influenza vaccine appropriate for age and health status annually in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions
- **LAIV should not be used** in persons with the following conditions or situations:
 - History of severe allergic reaction to any vaccine component (excluding egg) or to a previous dose of any influenza vaccine
 - Immunocompromised due to any cause (including medications and HIV infection)
 - Anatomic or functional asplenia
 - Cochlear implant
 - Cerebrospinal fluid-oro-pharyngeal communication
 - Close contacts or caregivers of severely immunosuppressed persons who require a protected environment
 - Pregnancy
 - Received influenza antiviral medications within the previous 48 hours
- **History of Guillain-Barré syndrome within 6 weeks of previous dose of influenza vaccine:** Generally should not be vaccinated unless vaccination benefits outweigh risks for those at higher risk for severe complications from influenza

Measles, mumps, and rubella vaccination

Routine vaccination

- **No evidence of immunity to measles, mumps, or rubella:** 1 dose
 - **Evidence of immunity:** Born before 1957 (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 women of childbearing age with no evidence of immunity to rubella:** 1 dose
- **HIV infection with CD4 count ≥ 200 cells/ μ L 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 in HIV infection with CD4 count < 200 cells/ μ L
- **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
- **Health care personnel:**
 - **Born in 1957 or later with no evidence of immunity to measles, mumps, or rubella:** 2-dose series at least 4 weeks apart for measles or mumps or at least 1 dose for rubella
 - **Born before 1957 with no evidence of immunity to measles, mumps, or rubella:** Consider 2-dose series at least 4 weeks apart for measles or mumps or 1 dose for 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 (Menactra, Menveo) at least 8 weeks apart and revaccinate every 5 years if risk remains
- **Travel in countries with hyperendemic or epidemic meningococcal disease, microbiologists routinely exposed to *Neisseria meningitidis*:** 1 dose MenACWY (Menactra, Menveo) 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) and military recruits:** 1 dose MenACWY (Menactra, Menveo)

Shared clinical decision-making for MenB

- **Adolescents and young adults age 16 through 23 years (age 16 through 18 years preferred) not at increased risk for meningococcal disease:** Based on shared clinical decision-making, 2-dose series MenB-4C at least 1 month apart or 2-dose series MenB-FHbp 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)

Special situations for MenB

- **Anatomical or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use, 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); 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

Pneumococcal vaccination

Routine vaccination

- **Age 65 years or older** (immunocompetent—see www.cdc.gov/mmwr/volumes/68/wr/mm6846a5.htm?s_cid=mm6846a5_w): 1 dose PPSV23
 - If PPSV23 was administered prior to age 65 years, administer 1 dose PPSV23 at least 5 years after previous dose

Shared clinical decision-making

- **Age 65 years and older** (immunocompetent): 1 dose PCV13 based on **shared clinical decision-making**
 - If both PCV13 and PPSV23 are to be administered, PCV13 should be administered first
 - PCV13 and PPSV23 should be administered at least 1 year apart
 - PCV13 and PPSV23 should not be administered during the same visit

Special situations

- (see www.cdc.gov/mmwr/volumes/68/wr/mm6846a5.htm?s_cid=mm6846a5_w)
- **Age 19 through 64 years with chronic medical conditions (chronic heart [excluding hypertension], lung, or liver disease, diabetes), alcoholism, or cigarette smoking:** 1 dose PPSV23
- **Age 19 years or older with immunocompromising conditions (congenital or acquired immunodeficiency [including B- and T-lymphocyte deficiency, complement deficiencies, phagocytic disorders, HIV infection], chronic renal failure, nephrotic syndrome, leukemia, lymphoma, Hodgkin disease, generalized malignancy, iatrogenic immunosuppression [e.g., drug or radiation therapy], solid organ transplant, multiple myeloma) or anatomical or functional asplenia (including sickle cell disease and other hemoglobinopathies):** 1 dose PCV13 followed by 1 dose PPSV23 at least 8 weeks later, then another dose PPSV23 at least 5 years after previous PPSV23; at age 65 years or older, administer 1 dose PPSV23 at least 5 years after most recent PPSV23 (note: only 1 dose PPSV23 recommended at age 65 years or older)

- **Age 19 years or older with cerebrospinal fluid leak or cochlear implant:** 1 dose PCV13 followed by 1 dose PPSV23 at least 8 weeks later; at age 65 years or older, administer another dose PPSV23 at least 5 years after PPSV23 (note: only 1 dose PPSV23 recommended at age 65 years or older)

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:** At least 1 dose Tdap followed by 1 dose Td or Tdap at least 4 weeks after Tdap and another dose Td or Tdap 6–12 months after last Td or Tdap (Tdap can be substituted for any Td dose, but preferred as first dose); Td or Tdap every 10 years thereafter
- **Pregnancy:** 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36
- For information on use of Td or Tdap as tetanus prophylaxis in wound management, see www.cdc.gov/mmwr/volumes/67/rr/rr6702a1.htm

Varicella vaccination

Routine vaccination

- **No evidence of immunity to varicella:** 2-dose series 4–8 months 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 women 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 count ≥ 200 cells/ μ L with no evidence of immunity:** Vaccination may be considered (2 doses, administered 3 months apart); VAR contraindicated in HIV infection with CD4 count < 200 cells/ μ L
- **Severe immunocompromising conditions:** VAR contraindicated

Zoster vaccination

Routine vaccination

- **Age 50 years or older:** 2-dose series RZV (Shingrix) 2–6 months apart (minimum interval: 4 weeks; repeat dose if administered too soon), regardless of previous herpes zoster or history of ZVL (Zostavax) vaccination (administer RZV at least 2 months after ZVL)
- **Age 60 years or older:** 2-dose series RZV 2–6 months apart (minimum interval: 4 weeks; repeat if administered too soon) or 1 dose ZVL if not previously vaccinated. RZV preferred over ZVL (if previously received ZVL, administer RZV at least 2 months after ZVL)

Special situations

- **Pregnancy:** ZVL contraindicated; consider delaying RZV until after pregnancy if RZV is otherwise indicated
- **Severe immunocompromising conditions (including HIV infection with CD4 count < 200 cells/ μ L):** ZVL contraindicated; recommended use of RZV under review