

Adult Immunization

CHI Formulary Vaccination Scheme



**Treatment Algorithm – November
2023**

**Supporting Algorithm
(Immunization Schedule Scheme)
for Adult Immunization**

Figure 1 outlines a comprehensive Adult Immunization Scheme aimed at addressing the different available adult vaccinations after thorough review of medical and economic evidence by CHI committees.

For further evidence, please refer to CHI **Adult Immunization** full report. You can stay updated on the upcoming changes to our formulary by visiting our website at <https://chi.gov.sa/AboutCCHI/CCHIprograms/Pages/IDF.aspx>

Our Vaccination Scheme offers a robust framework for enhancing patient care and optimizing immunization practices, holding great promise for improving healthcare delivery.

Legend

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
--	---	--	----------------------------------

Vaccine	19-26 years	27-49 years	50-64 years	≥65 years
COVID-19 ⑩	2- or 3- dose primary series and booster (see notes)			
Influenza inactivated (IIV4) or Influenza recombinant (RIV4) ⑩	1 dose annually			
or Influenza live attenuated (LAIV4) ⑩	1 dose annually			
Tetanus, diphtheria, pertussis (Tdap or Td) ⑩	1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes)			
	1 dose Tdap, then Td or Tdap booster every 10 years			
Measles, mumps, rubella (MMR) ⑩	1 or 2 doses depending on indication (if born in 1957 or later)			For healthcare personnel, (see notes)
Varicella (VAR) ⑩	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV) ⑩	2 doses for immunocompromising conditions (see notes)		2 doses	
Human papillomavirus (HPV) ⑩	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PPSV23) ⑩	1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)			See Notes
Hepatitis A (HepA) ⑩	2, 3, or 4 doses depending on vaccine			
Hepatitis B (HepB) ⑩	2, 3, or 4 doses depending on vaccine or condition			
Meningococcal A, C, W, Y (MenACWY) ⑩	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB) ⑩	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
	19 through 23 years			
Haemophilus influenzae type b (Hib) ⑩	1 or 3 doses depending on indication			

Notes:

MMR for healthcare personnel:

- **Born before 1957 with no evidence of immunity to measles, mumps, or rubella:** Consider 2-dose series at least 4 weeks apart for protection against measles or mumps or 1 dose for protection against rubella
- **Born in 1957 or later with no evidence of immunity to measles, mumps, or rubella:** 2-dose series at least 4 weeks apart for protection against measles or mumps or at least 1 dose for protection against rubella

Zoster recombinant:

2-dose series recombinant zoster vaccine (RZV, Shingrix) 2–6 months apart (minimum interval: 4 weeks; repeat dose if administered too soon). For detailed information, see www.cdc.gov/shingles/vaccination/immunocompromised-adults.html

Tdap in pregnancy:

1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36.

Pneumococcal vaccination:

- Age 65 years or older who have:
 - Not previously received a dose of PCV13, PCV15, or PCV20 or whose previous vaccination history is unknown: 1 dose PCV15 OR 1 dose PCV20.
 - If PCV15 is used, administer 1 dose PPSV23 at least 1 year after the PCV15 dose (may use minimum interval of 8 weeks for adults with an immunocompromising condition,* cochlear implant, or cerebrospinal fluid leak).
 - Previously received only PCV7: follow the recommendation above.
 - Previously received only PCV13: 1 dose PCV20 OR 1 dose PPSV23.
 - If PCV20 is selected, administer at least 1 year after the last PCV13 dose.
 - If PPSV23 is selected, administer at least 1 year after the last PCV13 dose (may use minimum interval of 8 weeks for adults with an immunocompromising condition,* cochlear implant, or cerebrospinal fluid leak).
 - Previously received only PPSV23: 1 dose PCV15 OR 1 dose PCV20. Administer either PCV15 or PCV20 at least 1 year after the last PPSV23 dose.
 - If PCV15 is used, no additional PPSV23 doses are recommended.
 - Previously received both PCV13 and PPSV23 but NO PPSV23 was received at age 65 years or older: 1 dose PCV20 OR 1 dose PPSV23.
 - If PCV20 is selected, administer at least 5 years after the last pneumococcal vaccine dose.
 - If PPSV23 is selected, see dosing schedule at cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf.
 - Previously received both PCV13 and PPSV23, AND PPSV23 was received at age 65 years or older: Based on shared clinical decision-making, 1 dose of PCV20 at least 5 years after the last pneumococcal vaccine dose.
- Age 19–64 years with certain underlying medical conditions or other risk factors** who have:
 - Not previously received a PCV13, PCV15, or PCV20 or whose previous vaccination history is unknown: 1 dose PCV15 OR 1 dose PCV20.
 - If PCV15 is used, administer 1 dose PPSV23 at least 1 year after the PCV15 dose (may use minimum interval of 8 weeks for adults with an immunocompromising condition,* cochlear implant, or cerebrospinal fluid leak).
 - Previously received only PCV7: follow the recommendation
 - Previously received only PCV13: 1 dose PCV20 OR 1 dose PPSV23.
 - If PCV20 is selected, administer at least 1 year after the PCV13 dose.

- If PPSV23 is selected, see dosing schedule at [cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf](https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf)
 - Previously received only PPSV23: 1 dose PCV15 OR 1 dose PCV20. Administer either PCV15 or PCV20 at least 1 year after the last PPSV23 dose.
 - If PCV15 is used, no additional PPSV23 doses are recommended.
 - Previously received PCV13 and 1 dose of PPSV23: 1 dose PCV20 OR 1 dose PPSV23.
 - If PCV20 is selected, administer at least 5 years after the last pneumococcal vaccine dose.
 - If PPSV23 is selected, see dosing schedule at [cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf](https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf)
- For guidance on determining which pneumococcal vaccines a patient needs and when, please refer to the mobile app which can be downloaded here: [cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html](https://www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html)

**: Immunocompromising conditions include chronic renal failure, nephrotic syndrome, immunodeficiencies, iatrogenic immunosuppression, generalized malignancy, HIV infection, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplant, congenital or acquired asplenia, or sickle cell disease or other hemoglobinopathies.*

****: Underlying medical conditions or other risk factors include alcoholism, chronic heart/liver/lung disease, chronic renal failure, cigarette smoking, cochlear implant, congenital or acquired asplenia, CSF leak, diabetes mellitus, generalized malignancy, HIV infection, Hodgkin disease, immunodeficiencies, iatrogenic immunosuppression, leukemia, lymphoma, multiple myeloma, nephrotic syndrome, solid organ transplant, or sickle cell disease or other hemoglobinopathies.*

1

¹ <https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html>