2019 CHILDHOOD STANDARD VACCINE SCHEDULE (age birth through 18 years)

Vaccine	Admin.	Birth	6wks-2m	4m	6m	12-15m	18m	19-23m	4-6yrs	11-18yrs
Hep B ¹	0.5 ml IM	Нер В		_						
DTaP ² and Tdap ¹¹	0.5 ml IM		Pediarix® 0.5ml IM	Pediarix® 0.5ml IM	Pediarix® 0.5 ml IM	Infanrix [®]			Kinrix®	Tdap
IPV^3	0.5 ml IM								0.5 ml IM	
Rotavirus ⁴	2 ml ORAL		RotaTeq®	RotaTeq [®]	RotaTeq®					
Pneumococcal ⁵	0.5 ml IM		Prevnar13®	Prevnar13®	Prevnar13®	Prevnar13®				
Hib ⁶	0.5 ml IM		PedvaxHib®	PedvaxHib [®]		PedvaxHib [®]				
MMR ⁷	0.5 ml SQ					MMR			MMR	
Varicella ⁷	0.5 ml SQ					Varivax [®]			Varivax®	
Hep A ⁸	0.5 ml IM					Нер А		Hep A		
HPV ⁹	0.5 ml IM									Gardasil9® 2 or 3 dose series
Meningococcal ¹⁰	0.5 ml IM		(Meningococcal - 2 months-18 years old high risk 10)				Menactra® 1 or 2 doses			

2019 ADULT STANDARD VACCINE SCHEDULE (age 19 years and older)

Vaccine	Name(s)	Name(s) Licensed Age Admin. Adult Recommendations		Adult Recommendations		
Tdap and Td ¹¹	Adacel [®]	10 yrs to 64 yrs	0.5 ml IM	Single dose Tdap in lifespan; except give Tdap dose during <i>each</i> pregnancy, preferably during early part of 27-36 weeks gestation. Td every 10 yrs after Tdap.		
	Boostrix®	10 yrs and older	0.3 IIII IIVI			
Pneumococcal ⁵	Pneumovax23®	2 yrs and older	0.5 ml IM	One dose PPSV23 for AK Native 50-64 years old if no previous PPSV23. Routine single dose PPSV23 for all ≥65 year olds, at least 5 years after previous PPSV23 (if given ≤64 years) & at least 1 year after PCV13. Single dose PCV13 for all ≥65		
	Prevnar13®	6 wks and older	0.5 ml IM	year olds if no previous PCV13; PCV13 prior to PPSV23 preferred. See footnote		
Zoster ¹³	Shingrix® (preferred)	50 yrs and older	0.5 ml IM	For immunocompetent adults ≥ 50 years old ¹³ . Two doses, given 2-6 months apart. Use of Shingrix® in immunocompromised adults is under review.		
	Zostavax®	60 yrs and older	0.65 ml SQ	For \geq 60 years old. 1 dose. Contraindicated in immunocompromised & pregnancy.		
HPV ⁹	Gardasil9®	9 yrs to 26 yrs	0.5 ml IM	Recommended for females through 26 years and males through 21 years (throug 26 years if MSM, transgender); males 22-26 years may receive. See footnote ⁹ .		
Meningococcal 10	Menactra [®]	9 mo to 55 yrs	0.5 ml IM	See footnote ¹⁰ for high risk recommendations, including MenB vaccine.		
MMR ⁷	MMR	12 mo and older	0.5 ml SQ	One or two doses for adults at least 4 weeks apart, depending upon indication.		
Varicella ⁷	Varivax®	12 mo and older	0.5 ml SQ	Two doses at least 4 weeks apart.		
Hepatitis B ¹²	RecombivaxHB®	birth to 19 yrs	0.5 ml IM	Three doses for adults at 0, 1, and 6 months. Minimum \geq 4 weeks between 1st and		
	or Engerix B®	20 yrs and older	1.0 ml IM	2^{nd} doses; ≥ 8 weeks between 2nd and 3rd doses; ≥ 16 week between 1^{st} and 3^{rd} doses. High risk recommendations, see footnote 12 .		
Hepatitis A ¹²	Havrix® or Vaqta®	19 yrs and older	1.0 ml IM	Two doses, at least 6 calendar months apart. High risk recs, see footnote ¹² .		

- **1 Hep B (ped/adol)**: first Hep B within 24 hours after birth. Use Pediarix® to complete the Hep B series. Final Hep B dose given no earlier than 24 weeks of age, and at least 8 weeks after prior dose & 16 weeks after first dose. A total of four doses of Hep B are permitted when a combination vaccine (Pediarix®) is used after birth dose.
- 2 DTaP: min. age 42 days. Pediarix® (DTaP-Hep B-IPV) is used for doses 1, 2 and 3 of DTaP. Don't use Pediarix® for DTaP doses 4 and 5 or if child is ≥7 yrs old. Give DTaP dose 4 at 12 mos of age if 6 mos interval after dose 3. Don't need DTaP dose 5 if dose 4 was given ≥4 yrs of age. Kinrix® (DTaP-IPV) is for 4 yr-6 yr olds only.
- 3 IPV: min. age 42 days. Pediarix® is used for doses 1, 2 and 3 of IPV. Final IPV dose must be given at 4 years of age or older and at least 6 months after previous dose.
- 4 Rotavirus (RotaTeq®): min. age 42 days. Maximum age for first dose is 14 weeks, 6 days. Don't start series if ≥15 weeks old. Give all doses by age 8 months, 0 days.
- 5 Pneumococcal High risk recommendations for children and adults: review CDC vaccine schedules and additional details in CDC MMWR: Pneumococcal Vaccine PCV13 (Prevnar 13*): min. 42 days. PPSV23 (Pneumovax23*) min. 2 yrs. For children and adults with cochlear implant, CSF leak, immunocompromised, HIV, chronic renal failure, nephrotic syndrome, asplenia and other high risk medical conditions such as chronic heart or lung disease, chronic liver disease, cirrhosis, diabetes, asthma (<19 years if treated with high-dose oral steroids), alcoholism, smokers (age >19 yrs): review CDC recommendations to determine specific recommendations.
- 6 Haemophilus influenza High risk recommendations for children and adults: review CDC vaccine schedules and additional details in CDC MMWR: Hib Vaccine Hib (PRP-OMP) (PedvaxHib*): min. 42 days. For children and adults with high risk medical conditions such as asplenia, hematopoietic stem cell transplant (HSCT), HIV (age ≤18 yrs), complement component deficiency, immunocompromised: review CDC recommendations.
- 7 MMR and Varicella: min. age 12 mos. Second dose of MMR and Varicella routine at 4-6 years old. Give MMR and Varicella to adults with no evidence of immunity, see CDC vaccine schedules. For MMR before international travel: review CDC vaccine schedules. Consult State if traveling to U.S. location with measles outbreak.
- see <u>CDC vaccine schedules</u>. For MMR before international travel: review <u>CDC vaccine schedules</u>. Consult State if traveling to U.S. location with measles outbreak. **8 Hep A (ped)**: *min. age 12 months*. Two doses of Hep A vaccine given at least 6 months apart. Give Hep A vaccine to persons >1 years old experiencing homelessness.
- 9 HPV (Gardasil9*): min age 9 yrs. Routine at 11-12 yrs of age. May start series at 9 yrs of age. If starting/started before age 15 years, 2-dose series, doses 6-12 months apart. If starting/started at age 15 years or older, 3-dose series at 0, 1-2, 6 months. If person age 9-26 years has 2 doses (at least 5 months apart) and started series before age 15 years, they are complete. If series started with 4vHPV, finish series with 9vHPV. Immunocompromised persons receive 3-dose series regardless of age initiation.
- 10 Meningococcal High risk recommendations for 2 months and older: review <u>CDC vaccine schedules</u> and additional details in CDC MMWR: <u>Meningococcal Vaccine</u> MenACWY (Menactra[®]): *min. age 9 mos.* Routine for 11-18 year olds. If first dose given at 11-15 yrs old, give booster at 16-18 yrs old (min. interval 8 weeks); if first dose given at ≥16 yrs old, dose 2 not recommended. High risk includes asplenia, HIV, complement deficiency, eculizumab, see CDC recommendations.

 MenB (Trumenba[®], Bexsero[®]): For high risk age ≥10 yrs (includes asplenia, complement deficiency, eculizumab). Persons 16-23 years not at increased risk may receive.
- 11 Tdap (Adacel*, Boostrix*): One dose Tdap routine at 11-12 yrs. Single dose Tdap in lifespan; except give Tdap dose during *each* pregnancy, preferably during early part of 27-36 weeks gestation. One Tdap dose for underimmunized 7-10 year olds. Td every 10 years after single dose of Tdap. Give Tdap regardless of interval from Td.
- 12 Hepatitis (adult): Hep B vaccine for sero-negative unvaccinated adults, high risk includes chronic liver disease, diabetes (age <60 yrs), hepatitis C, other exposure risks. Hep A vaccine for sero-negative unvaccinated adults, high risk includes chronic liver disease, clotting disorders, MSM, HIV, illicit drug use, homelessness. For travel, Heplisav-B[®], Twinrix[®] and other exposure risks: review CDC vaccine schedules and additional details in CDC MMWR: Hepatitis A and Hepatitis B Vaccine
- 13 Zoster RZV (Shingrix®): Give 2 doses RZV regardless of past episode of herpes zoster or receipt of ZVL (Zostavax®). If previous ZVL, give RZV >2 mos after ZVL.

Minimum Intervals for Persons Who Start Late or Who Are >1 Month Behind

Do not restart a vaccine series if extended time has elapsed between doses. Refer to the front page for administration information.

MINIMUM INTERVAL (CATCH UP) VACCINE SCHEDULE (age 4 months through 6 years)

Dose 1(M	inimum Age)	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to 5
Hep B ¹	(birth)	4 weeks	8 weeks <i>and</i> ≥16 weeks after 1st dose and minimum age ≥24 weeks		
DTaP ²	(6 weeks)	4 weeks	4 weeks	6 months	6 months
IPV ³	(6 weeks)	4 weeks	4 weeks if current age is <4 years; OR 6 months (as final dose) if ≥4 years old	6 months and minimum age 4 yrs for final dose	
	(6 weeks) if ≥ 15 weeks	4 weeks Don't give if 8 months 0 days or older	4 weeks Don't give if 8 months 0 days or older		
PedvaxHib [®]	4 (6 weeks)	4 weeks: if 1 st dose given at <12 months 8 weeks (as final dose): if 1 st dose given at age 12 through 14 months No further doses needed: if first dose given at age ≥15 months	8 weeks and age 12 through 59 months (as final dose) if both previous doses were given <12 months No further doses needed: if previous dose at age ≥15 months		
Prevnar13®	⁵ (6 weeks)	4 weeks: if 1 st dose given at <12 months 8 weeks (as final dose for healthy children): if 1 st dose given at age ≥12 months No further doses needed: for healthy children if 1 st dose given at age ≥24 months	4 weeks: if current age <12 months and previous dose given at <7 months old 8 weeks (as final dose for healthy children): if current age ≥12 months and ≥ one dose given before age 12 months; OR if previous dose given between age 7 months-11 months (wait until at least 12 months old) No further doses needed: for healthy children if previous dose given at age ≥24 months	8 weeks (final dose): this dose is only needed for children age 12 through 59 months who received 3 doses before age 12 months or for high risk children who received 3 doses at any age	
MMR ⁶	(12 months)	4 weeks			
Varicella ⁸	(12 months)	3 months (don't repeat if ≥ 4 weeks apart).			
Hep A ¹	(12 months)	6 months			

MINIMUM INTERVAL (CATCH UP) VACCINE SCHEDULE (age 7 years and older)

MINIMON INTERVAL (CATCH OF) VACCINE SCHEDOLE (age 7 years and older)								
	Dose 1	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to				
	(Minimum Age)			Booster Dose				
Tdap and Td ⁷	7 years if DTaP incomplete, give 1 Tdap, then Td to	4 weeks	4 weeks if 1 st dose of DTaP/DT at <12 months	6 months if 1st dose of DTaP/DT at <12 months				
	complete primary series		6 months (as final dose) if 1^{st} dose of DTaP/DT or Tdap/Td at age ≥ 12 mos					
Shingrix [®]	50 years	2 months (don't repeat if \geq 4 wks apart)						
Hep B ¹	N/A	4 weeks	8 weeks (and ≥16 weeks after 1 st dose)					
Hep A ¹	N/A	6 months						
Gardasil9 ^{®10}	9 years (routine dosing intervals are recommended)	5 months (as final dose) if 1 st dose given age <15 years 4 weeks if 1 st dose given age ≥15 years	12 weeks (as final dose) if 1 st dose given age ≥15 yrs (and ≥5 months after 1 st dose) No further doses needed if started series at age <15 years and has 2 doses ≥5 months apart					
Menactra®9	N/A	8 weeks if 1st dose given age <15 yrs						
IPV ³	Not Applicable (N/A)	4 weeks	4 weeks (see footnote ³)	6 months				
MMR ⁶	N/A	4 weeks						
Varicella ⁸	N/A	3 months if < 13 years of age 4 weeks if ≥13 years of age						

- 1 Hepatitis: Hep B (ped/adol) For children through age 18 years who have not received Hep B containing vaccine should complete the hepatitis B series. Hep A (ped) Two doses of Hep A vaccine given at least 6 months apart. Hep B (adult) and Hep A (adult) For adult recommendations, see footnote 12 on other side.
- 2 DTaP: Fifth dose is not necessary if the fourth dose was given on/after the 4th birthday. Don't give DTaP to persons ≥7 years old, review CDC vaccine schedules
- **3 IPV**: Final dose should be given on/after the 4th birthday. The fourth dose is not necessary if third dose was given at ≥4 years old, minimum 6 months from previous dose.
- 4 Hib (PedvaxHib®): For unvaccinated children aged 15 through 59 months, give one dose. For child and adult high risk recommendations, see footnote 6 on other side.
- 5 PCV13 (Prevnar13®): For additional details about childhood and adult routine and high risk recommendations for PCV13 and PPSV23, see footnote 5 on other side.
- **6 MMR**: Give the two dose series to all children 12 months through 18 years of age. Second dose is recommended routinely at 4-6 years old. For special situations and MMR before international travel, see footnote 7 on other side.
- 7 Tdap &Td: One dose Tdap at age ≥11 yrs, regardless of interval from Td or DTaP. Td should be given every 10 years after single Tdap dose. Give Tdap dose during each pregnancy, preferably during early part of 27-36 weeks gestation. If Tdap given at 7-10 years of age, child should receive routine Tdap dose at 11-12 years of age.
- 8 Varicella (Varivax®): Give the two dose series to all children 12 months through 18 years of age. Second dose recommended routinely at 4-6 years old. For children under 13 years of age, if dose 2 is given 4 weeks after the first dose it may be counted. For adult recommendations for Varicella, see footnote 7 on other side.
- 9 MenACWY (Menactra[®]): If first dose given at 11-15 yrs old, give booster at 16-18 yrs old (min. interval 8 weeks); if first dose given at ≥16 yrs old, no further doses.

 10 HPV(Gardasil9[®]): Persons age 9-26 years with 2 doses who started the series before age 15 years and received the 2nd dose less than 5 months after 1st dose should receive a third dose at least 12 weeks after 2nd dose and at least 5 months after 1st dose. For immunocompromised and additional guidance, see footnote 9 on other side.

If not given on the same day, there is a 4 week minimum interval between live vaccines (MMR, Varicella, LAIV), and between live vaccines and PPD.

For risk conditions/special situations/pregnancy, consult the CDC vaccine schedules: http://www.cdc.gov/vaccines/schedules/index.html