

Changes in the Immunization Schedule Recommended by the Japan Pediatric Society August 1, 2018



- 1) We have included a Diphtheria, Polio, Tetanus (DPT) vaccine and an inactivated polio vaccine (IPV) into the schedule due to the reintroduction of a DPT vaccine in the market in January, 2018. Accordingly, we have added to recommend a booster vaccine for pertussis and polio before entering elementary school to maintain protection against pertussis and polio (voluntary vaccine). For details, please refer to the perspective of the Japan Pediatrics Society and precautions (Footnotes 7 and 9) in the schedule.
- 2) We have moved the location of DT vaccine next to DPT-IPV and DPT vaccines in the schedule and described that we could use DPT vaccine instead of DT vaccine as a booster vaccine (voluntary vaccine : Footnote 8).



Vaccine	Type	Infantile Period										Early Childhood					School Age							
		Birth	6w	2m	3m	4m	5m	6m	7m	8m	9-11m	12-15m	16-17m	18-23m	2y	3y	4y	5y	6y	7y	8y	9y	≥10y	
<i>Haemophilus influenzae</i> type b	Inactivated			①	②	③						④ (Footnote 1)												
Pneumococcal (PCV13) (Footnote 2)	Inactivated			①	②	③						④	(Footnote 2)											
Hepatitis B virus (HBV)	Universal			①	②						③		(Footnote 3)											
	For offspring of carrier mother	①	②								③													
Rotavirus	Mono-valent			①	②						(Footnote 4)													
	Penta-valent			①	②	③					(Footnote 5)													
Diphtheria, Pertussis, Tetanus, Polio (DPT-IPV)	Inactivated			①	②	③					④ (Footnote 6)		(up to 7.5yrs)											
Diphtheria, Pertussis, Tetanus (DPT)	Inactivated			①	②	③					④ (Footnote 6)		(up to 7.5yrs)											
Diphtheria, Tetanus (DT)	Inactivated																				① 11yrs	② 12yrs		
Inactivated polio virus (IPV)	Inactivated			①	②	③					④ (Footnote 6)		(up to 7.5yrs)											
BCG	Live									①														
Measles, Rubella (MR)	Live											①						② (Footnote 10)						
Varicella	Live											①		②				(Footnote 11)						
Mumps	Live											①						② (Footnote 12)						
Japanese Encephalitis	Inactivated														①	②	③	(up to 7.5 yrs)			④ 9-12yrs			
Influenza	Inactivated																	Annually (October, November, etc.) ①②					① ≥13yrs	
Human Papilloma Virus (HPV)	Inactivated																				(Footnote 13)	Gr. 6	Junior High Gr.1 ①②③ (footnote 14)	Junior High Grade 2 - High School Grade 1

Recommended age range for routine vaccination
 Recommended age range for voluntary vaccination
 Period possible for routine vaccination
 Period possible for voluntary vaccination
 Not stated in package insert but recommended by the Japan Pediatric Society
 Period for the national health insurance coverage

Vaccination Schedule Recommended by the Japan Pediatric Society

Standard Period, Perspective of the Japan Pediatric Society, Precautions

August 1, 2018



 Routine Vaccination

 By Health Insurance

 Voluntary Vaccination

Vaccine	Type	Standard Age of Vaccination and Vaccination Period	Perspective of the Japan Pediatrics Society	Precautions
<i>Haemophilus influenzae</i> type b	Inactivated	27-56 days (4-8 wks) interval between ①-②-③ 7-13 mos interval between ③-④	(Footnote 1) ④: can obtain satisfactory immunity if administered from 12 mos of age	As a routine immunization, ≥27 days interval between ①-②-③, ≥7 mos interval between ③-④ If first dose administered between 7 mos and 11 mos: After ①-② an interval of ≥7 mos then ③ If the first dose administered between 1 yr and 4 yrs: only ① Vaccination possible for children ≥5 yrs if they have risk factors.
Pneumococcal, Conjugate (PCV13)	Inactivated	≥27 days (4 wks) interval between ①-②-③ ≥60 days (2 mos) interval between ③-④ and administered when the child is 1 yr - 1 yr 3 mos	(Footnote 2) A supplemental dose of PCV13 is recommended for children <6 yrs who completed appropriate numbers of PCV7 by the Immunization Law, apart from 8 wks from the last PCV7 (voluntary vaccination).	If first dose administered between 7 mos-11 mos: After ①, ② vaccination, an interval of ≥60 days and after 1 yr of age, followed by catch-up vaccination ③ If first dose administered between 1 yr-23 mos: ①, ② with ≥60 days interval If first dose administered between 2 yrs-4 yrs: only ① (Footnote 2) Administer PCV13 if they did not complete appropriate numbers of PCV7.
Hepatitis B Virus (HBV) Universal Vaccine	Inactivated	①2 mos ②3 mos ③7-8 mos ①-② Interval of ≥27 days (4 wks) ①-③ Interval of ≥139 days (20 wks)	In case of existence of family members with HBV careers other than mother, early immunization is warranted, not waiting till 2 mos of age.	(Footnote 3) Immunization schedule for children who do not receive vaccines during infancy is depending upon the one with universal vaccination.
Hepatitis B Virus (HBV) Vaccines for Prevention of Mother to Child Transmission	Inactivated	① At birth ② 1 mo ③ 6 mos		If mother is positive for HBs antigen, the child will receive vaccine and HB immunoglobulin simultaneously at birth. Vaccine fee is covered by the national health insurance. See in details at JPS Homepage "New strategies for the prevention of mother to child transmission of HBV." Refer http://www.jpeds.or.jp/modules/activity/index.php?content_id=141 (in Japanese)
Rotavirus	Live	Vaccination possible from 6 wks after birth. ①: recommended between 8 wks and under 15 wks RV1 vaccine (Rotarix®): For ①-② a total of 2 doses with an interval of ≥4 wks. For RV5 vaccine (RotaTeq®): ①-②-③: a total of 3 doses with ≥4 wks between doses		(footnote 4) Total 2 doses, ② to be completed within 24 th wk of age (footnote 5) Total 3 doses, ③ to be completed within 32 nd wk of age
Diphtheria, Pertussis, Tetanus, Polio (DPT-IPV, IPV)	Inactivated	Interval of 20-56 days between ①-②-③ (Footnote 6) ≥6 mos between ③ - ④ Generally, during 12-18 mos after ③		Interval of ≥20 days between ①-②-③ as a routine vaccination Please refer to vaccination schedule at http://www.mhlw.go.jp/bunya/kenkou/polio/dl/leaflet_120601.pdf (in Japanese) for persons who did not complete vaccination but was administered OPV vaccine and/or IPV prior to August 31, 2012.
Diphtheria, Pertussis, Tetanus (DPT)	Inactivated	Interval of 20-56 days between ①-②-③ (Footnote 6) ≥6 mos between ③-④ Generally, during 12-18 mos after ③		
Diphtheria, Pertussis, Tetanus (DPT) (For the prevention pertussis after entering elementary school)	Inactivated	⑤ ≥5 yrs, <7 yrs, ≥6 mo between ④-⑤ ⑥ 11-12 yrs	(Footnote 7) We recommend a booster vaccine before entering elementary school because low levels of antibody against pertussis in children before entering elementary school have been reported. (Footnote 8) It is possible to use DPT vaccine instead of DT vaccine to prevent pertussis.	Status of pertussis antibody in children in 2013 demonstrated that a rate of anti-PT antibody ≥10EU/mL was down to 40% in children 4-7 years (IASR 2017; 38: 31-33) Use 0.5mL. (0.1mL for DT vaccine)

Vaccine	Type	Standard Age of Vaccination and Vaccination Period	Perspective of the Japan Pediatrics Society	Precautions
Diphtheria, Tetanus (DT)	Inactivated	①: At 11 yrs until reaching 12 yrs		According to the Immunization Law, ≥11 yrs, <13 yrs
Inactivated polio vaccine (IPV)	Inactivated	Interval of 20-56 days between ①-②-③ (footnote 7) ≥6 mos between ③-④ Generally, during 12-18 mos after ③		Please refer to vaccination schedule at http://www.mhlw.go.jp/bunya/kenkou/polio/dl/leaflet_120601.pdf (in Japanese) for persons who did not complete vaccination but was administered OPV vaccine and/or IPV prior to August 31, 2012.
Inactivated polio vaccine (IPV) (For the prevention polio after entering elementary school)		⑤ ≥5 yrs, <7 yrs	(Footnote 9) We recommend inactivated polio vaccine before lowering antibodies against polio when children enter elementary school.	
BCG	Live	Administered under 12 mos of age, generally administered during the period from 5 mos to <8 mos	Early vaccination required in areas where incidence of tuberculosis is high	
Measles, Rubella (MR)	Live	①: 1 yr - <2 yrs ②: ≥5 yrs - <7 yrs (footnote 10) 1 year before entering elementary school		Vaccination possible ≥6mos for post-exposure prophylaxis; however, the vaccine is not counted, regular ① and ② need to be vaccinated.
Varicella	Live	①: 12-15 mos ②: 6-12 mos after ①	(Footnote 11) It is necessary to provide 2 doses of varicella vaccine for children who are not suffered from varicella and unvaccinated.	①-②: Leave an interval of ≥3 months as a routine vaccination ①-②: Leave an interval of ≥4 weeks if ≥13 yrs
Mumps	Live	① : ≥1 yr	(Footnote 12) To ensure vaccine efficacy, 2 doses are necessary. ①: early vaccination at 1 yr of age ②: simultaneous administration with 2 nd dose of MR (≥5 yrs - <7 yrs, 1 year before entering elementary school is recommended.)	
Japanese Encephalitis	Inactivated	①, ②: 3 yrs, leave a 6-28 days interval between ①-② ③: 4 yrs ④: 9 yrs (grade 3-4 elementary school)	We recommend vaccination for Japanese encephalitis (JE) vaccine from 6 months of age in children who will travel or stay in the endemic area of JE, or live in the area where high seroprevalence of JE virus in pigs is confirmed (Japan Pediatric Society Homepage, "Recommendation for JE vaccine from 6 months of age in children with high risks for JE. Refer to http://www.jpeds.or.jp/modules/activity/index.php?content_id=207 (in Japanese))	A dose per vaccination: 6mo- <3 yrs: 0.25mL; ≥3 yrs: 0.5mL For general routine vaccinations, first set administered from 6 mos to under 90 mos (7.5 yrs), and second set at age 9 to under 13 yrs. Interval of ≥6 days between ①-②, ≥6 mos between ② and ③. For children who were born from April 2, 2007 to October 1, 2009, it is possible to receive vaccine as a routine vaccine if they did not receive 1 st stage (①, ②, ③) during 6 mo-<90 mos (7 yr 6mos) or 9 yrs to <13 yrs. Due to the assertive recommendation to refrain from administration in May 2005, a detailed schedule for those who were born between April 2, 1995 and October 1, 2009, refer to the Ministry of Health, Labor, and Welfare Homepage http://www.mhlw.go.jp/bunya/kenkou/kekaku-kansenshou20/annai.html (in Japanese)
Influenza	Inactivated	Leave an interval of 4 wks between ① and ② (2-4 wks)		<13 yrs: 2 doses, ≥13 yrs: 1 or 2 doses Single dose: 6 mos - <3 yrs: 0.25 mL; ≥3 yrs: 0.5 mL

Vaccine	Type	Standard Age of Vaccination and Vaccination Period	Perspective of the Japan Pediatrics Society	Precautions
Human Papilloma Virus (HPV)	Inactivated	Junior high school Grade 1 HPV2 vaccine (Cervarix®): 1 mo interval between ①-②, leave 6 mos between ①-③ HPV4 vaccine (Gardasil®): 2 mos interval between ①-②, leave 6 mos between ①-③	Although active recommendation for HPV vaccine has been suspended since June, 2013, we recommend active immunization because we have strategies for the understanding and analyses of adverse events of HPV vaccine, establishment of reporting system and management/counseling for symptoms after vaccination, and rescue for recipients who received health issues (Refer to the Homepage by the Professional Promotion Council of Immunization http://vaccine-kyogikai.umin.jp/pdf/20160418_HPВ-vaccine-opinion.pdf (in Japanese))	Vaccine given as intramuscular injection (upper arm, deltoid area) By the Immunization Law, 12-16 yrs (elementary school grade 6 to high school grade 1) female (Footnote 13) HPV2 vaccine can be administered from ≥10 yrs, HPV4 vaccine ≥9 yrs (Footnote 14) Vaccination possible as routine vaccination with the interval below if not administered in regular schedule (Note the difference in the interval required for routine vaccination between the 2 vaccines). HPV2 vaccine: ≥1 mo between ①-②; ≥5 mos between ①-③ and ≥2.5 mos between ②-③; HPV4 vaccine: ≥1 mo between ①-②, and ≥3 mos between ②-③

Immunization Check List

Name : _____ Date of Birth: ____ / ____ / ____

Vaccines	Type	Dose 1	Dose 2	Dose 3	Dose 4	Dose 5	Dose 6
<i>Haemophilus influenzae</i> type b (Hib)	inactivated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)		
Pneumococcal conjugate (PCV13)	inactivated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /) Refer to Footnote 2	
Hepatitis B (HBV)	inactivated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)			
Rotavirus	live attenuated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /) Dose 2 final for RV1 (Rotarix)	<input type="checkbox"/> (/ /) Dose 3 final for RV5 (RotaTeq)			
Diphtheria, Pertussis, Tetanus, Poliovirus (DPT-IPV)	inactivated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)		
Diphtheria, Pertussis, Tetanus (DPT) (for pertussis)	inactivated					<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)
Diphtheria, Tetanus (DT)	inactivated					<input type="checkbox"/> (/ /)	
Polio (for polio)	inactivated					<input type="checkbox"/> (/ /)	
BCG	live attenuated	<input type="checkbox"/> (/ /)					
Measles, Rubella (MR)	live attenuated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)				
Varicella	live attenuated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)				
Mumps	live attenuated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)				
Japanese encephalitis	inactivated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)		
Influenza	inactivated	(Annual vaccination recommended, refer to the 2nd sheet)					
Human papillomavirus (HPV)	inactivated	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)			



Routine vaccine



Voluntary vaccine



Influenza Vaccination Checklist

Name: _____

Date of Birth: / /

Age	Dose 1	Dose 2	Age	Dose 1	Dose 2
6-11 mos	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	8 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)
1 yr	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	9 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)
2 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	10 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)
3 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	11 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)
4 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	12 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)
5 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	13 yrs	<input type="checkbox"/> (/ /)	
6 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	14 yrs	<input type="checkbox"/> (/ /)	
7 yrs	<input type="checkbox"/> (/ /)	<input type="checkbox"/> (/ /)	15 yrs	<input type="checkbox"/> (/ /)	

August 1, 2018, Japan Pediatrics Society

