



RECOMMENDATION FOR PEDIATRIC IMMUNIZATION

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Importance of immunization

- A simple, successful and very cost effective public health method of prevention and control of some infectious diseases.
- Global eradication of smallpox.
- Virtual elimination of poliomyelitis, tetanus and diphtheria.
- Decreased incidence of diseases and their complications.

National Immunization Programme Nepal

- Nepal initiated Expanded Programme on Immunization (EPI) in the fiscal year 1977/78 i.e. 2034 BS
- First started with BCG, DPT, Oral Polio and measles vaccine
- HBV was introduced in 2002
- Hib was introduced in 2009/ MR in 2013/ IPV in September 2014.
- PCV-10 was introduced in 2015/Rotavirus vaccine in July 2020
- Typhoid vaccine from 2022

Immunization Schedule of NEPAL

 **राष्ट्रिय खोप-तालिका**

पटक/भेट	कृन उमेरमा	कृन खोप
१	 जन्मने वित्तकै	बि. सि. जी. 
२	 ६ हप्तामा	रोटा पोलियो पि. सि. मी. डि.पि.टी.-हेप बी-हिब 
३	 १० हप्तामा	रोटा पोलियो पि. सि. मी. डि.पि.टी.-हेप बी-हिब 
४	 १४ हप्तामा	पोलियो एफ.आइ.पि.मी. डि.पि.टी.-हेप बी-हिब 
५	 ९ महिनामा	एफ.आइ.पि.मी. पि.सि.मी. दादुरा-रुबेला 
६	 १२ महिनामा	जापानिज इन्सेफलाइटिस 
७	 १५ महिनामा	दादुरा-रुबेला टाइफाइड 

खोप लगाएता पनि सधै सररफाईका सबै व्यवहारहरूको पालना गरौं ।

खोप निःशुल्क पाइन्छ

खोप सुरक्षित छ

खोपले जीवन रक्षा गर्छ

	Age recommended	Vaccine
1	At birth	BCG
2	6 weeks	RV1, OPV1, PCV1, DPTHibHBV1
3	10 weeks	RV2, OPV2, PCV2, DPTHibHBV2
4	14 weeks	OPV3, FIPV1, DPTHibHBV3
5	9 months	FIPV2, PCV3, MR1
6	12 months	JE
7	15 months	MR2, TCV



नेपाल सरकार
स्वास्थ्य तथा जनसंख्या मन्त्रालय
स्वास्थ्य सेवा विभाग
परिवार कल्याण महाशाखा
बाल स्वास्थ्य तथा खोप सेवा शाखा
के०, काठमाडौं

Indian National Immunization schedule

Age	Vaccines
Birth	BCG, Hepatitis B, OPV0
6 weeks	Pentavalent-1 (DTwP + Hib + Hepatitis B), OPV1, Rotavirus-1, PCV-1, fIPV-1
10 weeks	Pentavalent-2 (DTwP + Hib + Hepatitis B), OPV2, Rotavirus-2,
14 weeks	Pentavalent-3 (DTwP + Hib + Hepatitis B), OPV3, Rotavirus-3, PCV-2, fIPV-1
9–12 months	MR-1, JE-1, PCV-3
16–24 months	MR-2, JE-2, OPV4
5–6 years	DTwP
10 and 15 years	dT

Current Indian Academy of Pediatrics (IAP) immunization schedule

Age	Vaccines
Birth	BCG, hepatitis B, OPV0
6 weeks	DTwP/DTaP + Hib + Hepatitis B + IPV-1, Rotavirus-1, PCV-1
10 weeks	DTwP/DTaP + Hib + Hepatitis B + IPV-2, Rotavirus-2, PCV-2
14 weeks	DTwP/DTaP + Hib + Hepatitis B + IPV-3, Rotavirus-3, PCV-3
6 months	Typhoid conjugate vaccine (TCV), Influenza-1
7 months	Influenza-2
9 months	MMR-1
12 months	Hepatitis-A 1
15 months	MMR-2, Varicella-1
18 months	DTwP/DTaP + Hib + IPV-B1, PCV-4, Varicella-2, Hepatitis-A 2
2years, 3 years and 4 years	Yearly influenza
4-6 years	MMR 3, DTwP/DTaP + IPV-B2
10 years	Tdap/ Td , HPV-1
10 and 12 years	HPV-2

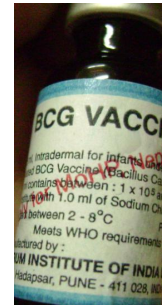
Table 1 Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2024

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2).

Vaccine and other immunizing agents	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	
Respiratory syncytial virus (RSV-mAb [Nirsevimab])	1 dose depending on maternal RSV vaccination status. See Notes				1 dose (8 through 19 months). See Notes													
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										
Haemophilus influenzae type b (Hib)	1 st dose		2 nd dose	See Notes		← 3 rd or 4 th dose → See Notes												
Pneumococcal conjugate (PCV15, PCV20)	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	See Notes									
COVID-19 (1vCOV-mRNA, 1vCOV-aP5)	1 or more doses of updated (2023–2024 Formula) vaccine (See Notes)																	
Influenza (IIV4)	Annual vaccination 1 or 2 doses										Annual vaccination 1 dose only							
OR											Annual vaccination 1 or 2 doses							Annual vaccination 1 dose only
Influenza (LAIV4)											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)											1 dose							
Human papillomavirus (HPV)											See Notes							
Meningococcal (MenACWY-CRM ≥2 mos, MenACWY-TT ≥2years)											See Notes			1 st dose	2 nd dose			
Meningococcal B (MenB-4C, MenB-FHbp)											See Notes							
Respiratory syncytial virus vaccine (RSV [Abrysvo])											Seasonal administration during pregnancy. See Notes							
Dengue (DEN4CYD; 9–16 yrs)											Seropositive in endemic dengue areas (See Notes)							

BCG Vaccine

- 80% efficacy against disseminated, meningeal and miliary tuberculosis in children.
- Administered from 1st day until 6 weeks after birth
- If missed in the neonatal period, it can be given up to 5 years of age(IAP)



Pentavalent vaccine:

DPT (DTPw) + HepB + Hib

6, 10 and 14 weeks after birth, IM, at anterolateral thigh



Recommended schedule:

- ❖ DPT booster needed at 18 months and second booster of DPT at 4-6 y
- ❖ For delayed 2nd booster, Tdap can be given after 7 y of age
- ❖ A dose of Tdap is necessary at 10-12 y, irrespective of previous Tdap administration.

Rotavirus vaccines:

- Live Attenuated Human Rotavirus Vaccine —(RV1)- **Rotarix (Nepal government)**
 - Orally, 1.5 mL
 - Recommended is 2 doses at 6 and 10 weeks of age.



Catch up

- **First dose before 15 week/Final dose is 8 month (CDC)**
- **Nepal government – last dose 2 years**

Hepatitis B vaccine:

- Purified surface antigen of HepB virus
- 90% to 95% efficacy
 - **At 6, 10, 14 wks. Given IM. At anterolateral aspect of the thigh**
- Infants born to HBsAg +ve mothers:
 - At birth (<24 hr) HepB 1st dose + HBIG 0.5ml simultaneously IM (<12 hours) at 2 separate sites.
 - Then HepB regular doses to continue according to Nepal schedule

A booster is recommended at 18 months (HBV-4)

- In older children and adults:
 - 0, 1 and 6 mth

PCV-10

- Serotypes covered **1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F, and 23F.**

In Nepal - priming doses at 6 weeks and 10 weeks of age plus a booster at 9 months of age, and **with no catch-up campaign in older age groups.**

A booster PCV is recommended at 18 months

PCV-13 (Pevnar-13) / 23-valent Pneumococcal vaccine

- Added serotypes **3, 6A, and 19A in PCV-13** and **8, 10A, 11A, 12F, 15B, 22F and 33F in PCV-20**
- **PCV-23 in high risk children after 2 years of age**



Measles and Rubella

- Live attenuated measles virus (80-95%) efficacy
- 1st dose at 9 months and 2nd at 15 months



MMR Vaccine:



- Recommended schedule:
 - First dose at 9 months
 - Second dose at 15 months and third dose at 4-6 years of age or at the time of school entry

Catch up vaccination for child not vaccinated before

- two doses separated by at least 28 days.

Japanese Encephalitis Vaccine:

Cell Culture Derived LA SA-14-14-2 Vaccine (Chengdu)

- Live attenuated, **0.5ml SC, single dose (Routine immunization in Nepal at 12-24 months)**

JEEV (Japanese Encephalitis Inactivated vero cell vaccine)

- Inactivated vaccine, **2 doses one month apart after 12 months of age**



Typhoid Vaccine:



- Typbar- TCV is a vaccine containing polysaccharide of Salmonella typhi Ty2 conjugated to Tetanus Toxoid.
- **A single 0.5 mL dose injected intramuscularly at 15 months of age.**
- TCV can be administered to adults, children, and infants 6 months of age and older.

HPV(bi, quadri, nano valent)

- **Gardasil 9:** Types 6, 11, 16, 18, 31, 33, 45, 52, and 58
- **HPV or human papilloma virus vaccine** is used to prevent against cervical, vaginal, vulvar, oropharyngeal, anal, and penile cancers and genital warts.
- **Recommended Schedule:**
 - For age (boys and girls) 9 to 14 years 2 doses series 6 to 12 months apart.
 - After 15 years or in immuno-compromised patient 3 dose series at 0, 1-2months and 6-12 months is used.



Oral Cholera Vaccine

- Vaxchora
- Dukoral
- **ShanChol** and **Euvichol-Plus/Euvichol** given after 1 year of age 2 doses at least 2 week apart gives protection for 3 years.
- It can be given to children in high risk area.

Safety and immunogenicity of the Euvichol-S oral cholera vaccine for prevention of *Vibrio cholerae* O1 infection in Nepal: an observer-blind, active-controlled, randomised, non-inferiority, phase 3 trial

Katerina Rok Song, Ram Hari Chapagain et al
Lancet Glob Health 2024; 12: e826–3

Done at Kanti Children's Hospital (Kathmandu), Dhulikhel Hospital, Kathmandu University Hospital (Dhulikhel), BP Koirala Institute of Health Sciences (Dharan), and Nepalgunj Medical College (Nepalgunj).

- Conclusion: A two-dose regimen of **Euvichol-S** vaccine was non-inferior to the active control vaccine, Shanchol, in terms of seroconversion rates.

Hepatitis A vaccine

- **Recommended schedule:**
 - **2 doses 6 months apart for inactivated vaccine after 12 months of age.**

Especially important in children with chronic liver disease.

Varicella vaccine

- Recommended schedule: all or high risk group only
 - 2 dose series at 12 months and 15 months

IAP recommendation: 2nd dose of Varicella vaccine should be given 3-6 months of age after dose 1.

Globally about 36 countries had included the varicella vaccine in their NIP. Half of these preferred shorter interval between doses.

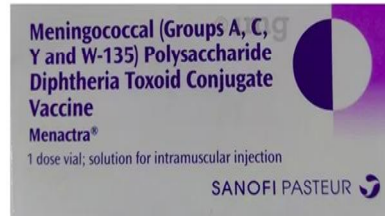


Influenza vaccine



- Everyone 6 months of age and older is recommended to get an annual influenza vaccine, including even healthy children.
- Recommended schedule:
 - At 6 and 7 months 2 doses
 - Yearly till 5 years of age in healthy children
 - Yearly till 18 years of age in high risk group

Meningococcal Vaccine



MCV4:

- 1 dose after 2 years
- 2 doses with gap of 3 months (9-23 months of age).
 - Epidemics or high risk group.
 - Booster 5 yearly in high risk group.

High risk group includes primary immunodeficiency esp complement deficiency, on complement inhibitors (Eculizumab) and asplenia/hyposplenia.

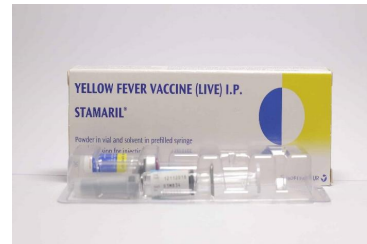
Meningococcal Meningitis: A Multicentric Hospital-based Study in Kathmandu, Nepal-2019 Sharma *et al.*

- Done in Bhaktapur Hospital, Bir hospital, Kanti Children's Hospital (KCH), Sukraraj Tropical and Infectious Diseases Hospital (STIDH) and Tribhuvan University Teaching Hospital (TUTH).
- **Methods:** This cross-sectional prospective study was conducted from January 2017 to December 2018 among 387 clinically suspected meningitis cases. Cerebrospinal fluid samples were collected by lumbar puncture technique at five referral hospitals of Kathmandu and processed by conventional cultural techniques. *Neisseria meningitidis* was identified by colony morphology, Gram staining and oxidase test. Serogrouping of meningococci was performed by slide agglutination test. Antibiotic susceptibility testing was done by the modified Kirby Bauer disc diffusion method.
- **Results:** Thirty-two samples were positive by culture for a bacterial pathogen with 2.3% of meningococci. **All except one meningococcal meningitis cases were aged below 15 years. All *N.meningitidis* isolates belonged to serogroup A.**
- **Conclusion:** The circulating serogroup of *N. meningitidis* in Kathmandu has not changed over the past 35 years.

Yellow fever Vaccine for travellers

Recommended for:

- Age ≥ 9 months
- ACIP voted to no longer recommend booster dose of yellow fever vaccine for most travelers, because a single dose of yellow fever vaccine provides long-lasting protection
- Additional doses of yellow fever vaccine are recommended for certain populations (i.e., **pregnant women, hematopoietic stem cell transplant recipients, and HIV-infected persons**) who might not have as robust or sustained immune response to yellow fever vaccine compared with other



Rabies vaccine



Recommended for children having pets at home.

- Pre-exposure

- It can be considered after 2 year of age. Given as 2 dose series at day 0 and 7. Booster between 3 weeks and 3 years following the first vaccine.
- IM. 0.5ml, deltoid region.

- Post-exposure (non-immunized)

- 4 dose series at 0, 3, 7, and 14 days.
- Rabies immunoglobulin-20 IU/ kg for Human RIG (HRIG) or 40 IU/ kg of Equine RIG (ERIG)

Dengue vaccine

- Dengvaxia, dengue tetravalent live vaccine (**DEN4CYD**)
 - Given after age of 6 years, for those living in endemic area and have confirmation of previous infection
 - 3 dose series at 0, 6, and 12 months, SC.
 - To date, it provides protection for at least 6 years.
 - Not recommended for children travelling/ visiting to endemic areas.



- Qdenga, Takeda's dengue live vaccine
 - Can be given after 4 years of age for prevention
 - 0.5 mL dose at a two-dose (0 and 3 months) schedule
 - SC in the upper arm



Covid Vaccine..CDC

- Age 6months to 4 years
 - 2 dose of Moderna, 25mcg, 0.25 ml at 0 and 4-8 week. **Blue cap**
 - 3 dose of Pfizer at 0, 3-8 week, and 11-16 week, 0.3ml (3 µg), IM. **Yellow vial with yellow cap.**
- Age 5-11 years
 - 1 dose 0.25ml, 25mcg Moderna updated formula 2023-2024
 - 1 dose, 0.3ml(10 µg)of updated Pfizer formula 2023-2024
- Age 12-18 years
 - 1 dose 0.5ml, 50mcg Moderna updated formula 2023-2024
 - 1 dose, 0.3ml(30 µg)of updated Pfizer formula 2023-2024

In Nepal it has not been given children <5year till now.



NEPAS recommendation for vaccines

- NEPAS fully and strongly supports and recommend National immunization Programme
- Some additional vaccines are still needed.
- **Helps provide continuing protection from diseases**
- **Helps to reduce disease occurrence and its consequences**

National Immunization schedule and additional NEPAS recommendation 2011

National immunization schedule		Additional NEPAS recommendation		Optional	
Vaccine	Schedule	Vaccine	Schedule	Vaccine	Schedule
BCG	Birth or first contact	Rotavirus	6,10,14 wk	Typhim Vi	2yr & 5 yr
DPT-HepB-Hib OPV	6,10,14wk	PCV13	6,10,14 wk & 15 mon	Hepatitis A	>12 mon & 16-18 mon
Measles	9 mon	MMR	15 mon & 5 yr	Varicella	>12 mon & 5 yr
JE in endemic zones	>1 yr	JE for all	>1 yr	Meningococcal A & C	
		DPT	16-18 mon	HPV for girls	10 yr
		Hib	16-18 mon		
		DT	5 yr		

Nepas Recommended Vaccine 2018

Name of Vaccines	Prevent against	Dose	Time of vaccination
Typhoid conjugate	Typhoid fever	Single dose	9 months onward
HPV	Cervical Cancer	2 doses	9 to 23 years
DPT/Polio Booster	Diphtheria, Whooping cough, Tetanus, Polio	2 doses	18 months and 5 years
Hepatitis A	Hepatitis A	2 doses	1 year onward
Varicella	Chicken pox	2 doses	1 Year onward
Meningococcal conjugate A and C	Meningococcal disease	1 dose 2-3 yearly	1 Year onward
Meningococcal conjugate	Meningococcal disease	Single dose	9 month onward
Influenza	Influenza	1 dose	yearly

Note: Adverse events to be explained well. Individual and society does not bear responsibility

NEPAS Recommendation 2024

	At Birth	6 weeks	10 weeks	14 weeks	6 months	7 months	9 months	12 months	13 months	15 months	18 months
BCG											
OPV		1	2	3							
FIPV/IPV				1 (FIPV)			2(FIPV)				3(IPV)
DTwP/DTaP		1	2	3							4
RV		1	2								
HBV		1	2	3							4
Hib		1	2	3							4
PCV		1	2				3				4
COVID19					Start						
Influenza					Start						
MR/MMR							1			2	
Cholera								1	2		
JE								1			
Hepatitis A								1			2

Catch up Vaccines upto 7 years

- BCG
- DPT can be given upto 7 years
 - 4 week gap between dose 1,2 and 3.
 - 6 months gap between dose 3,4 and 5.
- RV: last dose upto 2 years as per our NIP.
- HBV: >4 wk gap between doses 1&2, >8wk between dose 2 &3, and >16wk between doses 1 and 3.
- Hib: last dose in >15 months old no further dose needed in healthy children.
- PCV : In healthy children no extra dose needed if vaccinated after 2 years of age.

Catch up Vaccines upto 7 years

- IPV: age < 4years -3 doses 4 week apart then 4th dose after 6 month of 3rd dose. Minimum age 4 years for final dose.
 - If > 4years gap between 2nd and 3rd dose is 6 months
- JE: after 1 year
- MMR: 2 doses 4 weeks apart
- Varicella: 2 doses 3 months apart
- Hepatitis A: 2 doses 6 months apart
- MCV4: 2 doses 8 week apart

Catch up Vaccines from 7-18 years

- Tdap after 7 years. Alternate Td.
- IPV: gap 4 week dose 1 and 2. 6 months dose 2 and 3. 4th dose needed if all dose <4 years or if 3rd dose <6months after 2nd dose.
- MMR: 2 doses 4 weeks apart
- Varicella: 2 doses 3 months apart if <13 years, 4 weeks if >13years
- Hepatitis A: 2 doses 6 months apart
- PCV: 1 dose
- HBV: 0, 1 and 6 months
- MCV4: 2 doses 8 week apart
- HPV: Same as recommended schedule



VACCINES IN SPECIAL SITUATIONS

Solid organ transplant recipients



To complete all age-appropriate immunizations prior to transplant.

Accelerate schedules if needed

Pre-transplant

- PCV regardless of age
- PPSV if 2 years or older
- Hib one dose after age 5 years regardless of Hib vaccination history
- Meningococcal conjugate vaccine
- HPV vaccine
- MMR
- Varicella

❖ **live vaccines** should be completed at least **4 weeks** prior transplant

❖ **inactivated vaccines** should be completed at **least 2 weeks** prior transplant

Solid organ transplant recipients



Post-transplant situation

- Inactivated vaccines after 6 months post-transplant
- Live vaccines at least one year post-transplant
- Influenza vaccine annually (inactivated Influenza vaccine may be administered as early as 1-2 months post-transplant)

Vaccines in Nephrotic syndrome: Ref. Sinha A et al. Steroid sensitive Nephrotic syndrome revised guidelines. *Ind pediatr* 2021;58:461-481

Vaccine	Age	Previously received	Vaccine	Schedule
PCV-10/13 PPSV23	6-72 months	Completely immunized (4 doses)	PCV-10/13	One dose >2 year old
			PPSV23	One dose >2 year old and >8wk after last PCV10/13
		No or incompletely immunized	PCV-10/13	2 doses 8 week apart
			PPSV23	One dose >2 year old and >8wk after last PCV10/13
	>72 months	Completely immunized (4 doses)	PPSV23	1 dose
		No or incompletely immunized	PCV-10/13	1 dose
			PPSV23	1 dose >8wk after last PCV10/13
Varicella	>15 months	No evidence of immunity	Live attenuated	2 doses 4-8 weeks apart
Influenza	>6 months		Inactivated	Annually
HepB	any	No, or anti-HBs<10mIU/ml	Subunit(10µg/0.5ml)	3 doses at 0,1 and 6 mo; or in an accelerated schedule.

On Immunosuppression with corticosteroids

- All inactivated vaccine may be given (but immunogenicity and efficacy will be lower)
- Household contacts of immunocompromised child should not receive transmissible vaccines like OPV
- All household contacts should be fully immunized including varicella and influenza

- Children on oral corticosteroid in high doses (prednisolone 2mg/kg/day body wt <10kg; 20mg/day or its equivalent body wt >10 kg) for >2 weeks should not receive live vaccines until steroids have been discontinued for at least one month.

- Children on oral corticosteroid in low doses (prednisolone <2mg/kg/day body wt <10kg; <20mg/day or its equivalent body wt >10 kg) can receive live vaccines while on therapy.

- Children on alternate day therapy may be given their age-appropriate vaccines

Primary Immunodeficiencies

- **Routine non-live vaccines** can be given.
- **Live vaccines** permitted as per diagnosis

- **Additional Vaccines recommended**
 - Inactivated Influenza vaccine
 - PCV13/ PPSV23
 - MCV4
 - MenB if complement deficiency

HIV infection

Vaccination of immune compromised children—an overview for physicians
[Laure F. Pittet](#) and [Klara M. Posfay-Barbe](#)
[Eur J Pediatr.](#) 2021; 180(7): 2035–2047

Non-live vaccine recommendation

- Delay vaccination until viral load < 50 copies/mL and CD4 > 15%.
- Use high-dose HBV vaccine (40 µg) in adolescents.
- Give Hib vaccine regardless of age if not immune.
- Td booster at least 1×/10y

Live vaccine recommendation

- Permitted only if CD4 > 200 cells/µl in >6yr, >1500 in < 1yr, >1000 in 1-6 yr

Additional vaccines

- (IIV)Influenza,
- PCV/PPSV23,
- MCV4 2 dose 2 month apart

Hematopoietic stem-cell transplantation

Non-live vaccine recommendation

- Revaccination starting 3m to 6m after HSCT (including Hib, regardless of age)

Live vaccine recommendation

- Revaccination permitted in certain condition as of 1.5y to 2y after HSCT

Additional vaccines

- IIV(Influenza)
- PCV 3dose (\pm PPSV23)
- MCV4 2dose
- Varicella
- MMR

On Immunosuppressive drugs

Live vaccines should not be administered in patients receiving

- IVIG, high dose steroid , immune-modulating drugs such as anti-B cell treatments (rituximab), high dose methotrexate, azathioprine or 6-mercaptopurine.
- Whenever possible, all live vaccines should be administered prior to long term immunosuppressant treatments. Accelerate the schedule.
- Live vaccines can be given 3 to 6 months after completion of chemotherapy
- Routine non-live vaccines can be given during chemotherapy (effectiveness doubtful) vaccines are to be re-started 3 to 6 months after completion of chemotherapy.
- Additional vaccine to give are influenza, Varicella, MMR, PCV or PPSV23 and MCV4.

After IVIG/ like in Kawasaki disease

- Give live vaccine after 6 months of completion of therapy with additional booster at 12 months.
- Monitor antibody titre before booster.

Source:

Live attenuated vaccine efficacy six months after intravenous immunoglobulin therapy for Kawasaki disease. Yoshihiko et al.

Asplenia/ hyposplenia/ Sickle cell disease/ CSF leaks/ Cochlear Implants

Non-live vaccine recommendation

Routine, catch-up Hib vaccination regardless of age

HBV vaccination highly recommended if frequent transfusion.

Anticipate 2w between vaccination and elective splenectomy

Live vaccine recommendation

Permitted, as of a few days after splenectomy

Additional vaccines

IIV(Influenza), PCV (\pm PPSV23), MCV4 2d 2m apart, then every 5y, MenB

Chronic cardiac/ liver/ Pulmonary/ kidney disease/ Diabetes

Non-live vaccine recommendation

Routine all to be given esp HBV in liver disease

Live vaccine recommendation

Permitted

Additional vaccines

IIV(Influenza), PCV (PPSV23), RSV

HAV and HBV in liver disease and HBV in CKD.

विश्व खोप सप्ताह
'पूर्ण खोप सुरक्षित भविष्य'

World Immunization Week
24 to 30 April



THANK

YOU