

3.2 Frequently Asked Questions on the Immunization schedule

a) General queries

Why are vaccines administered at specific sites on the body?

Vaccines are administered at specific sites on the body to maintain uniformity and for helping you or anyone in checking that the vaccine was given. e.g BCG on left upper arm.

Why should there be a minimum gap of 4 weeks between two doses of most vaccines?

There should be a minimum of 4 weeks gap between two doses because decreasing the interval between doses may not achieve the needed antibody production to give protection.

How long can a bottle of Vitamin A be used, once opened?

A Vitamin A bottle, once opened, should be used within 8 weeks. Write the date of opening on the bottle. It is important that the date of opening is clearly written on the bottle. It must be kept away from direct sunlight.

What is the dose of Zinc to be used along with ORS in the treatment of diarrhoea?

The dose of zinc for infants aged 2–6 months is 10 mg of dispersible tablet in expressed breast milk for 14 days. For children 6 months to 5 years of age, it is 20 mg of dispersible tablet for 14 days.

b) Vaccine schedule related queries

If a child is brought late for a subsequent dose, should one re-start with the first dose of a vaccine?

No, do not restart the schedule again; pick up where the schedule was left off. For example, If a child who has received BCG, penta1 and OPV1 at 5 months of age returns at 11 months of age, then vaccinate the child with penta 2, OPV2, measles, Rotavirus vaccine (where applicable) and JE (where applicable).

If a child who has never been vaccinated is brought in at 9 completed months but before 12 completed months of age, then, can all the due vaccines be given to a child on the same day?

Yes, all the due vaccines can be given during the same session but at recommended injection sites, using separate AD syringes. It is safe and effective to give BCG, penta, OPV, IPV, MR, RVV (where applicable), PCV (where applicable) JE (where applicable) vaccines and Vitamin A at the same time to a 9-month-old child who has never been vaccinated. If more than one injection has to be given in one limb then ***ensure that the distance between the two injection sites is at least 1 inch apart.***

If a child who has never been vaccinated is brought in immediately after completing 12 months of age, (beyond one year) what vaccines would you give?

As per the national immunization schedule this child need not be given – BCG, Hepatitis B, Rotavirus, Penta and IPV. This child should be administered DPT 1, OPV 1, Measles 1, JE 1(if applicable) and also Vitamin A solution. The subsequent doses of DPT and OPV should be given at an interval of 4 weeks. Administer Measles 2, JE 2 (If applicable), Vitamin A and a booster dose of DPT at recommended age as per national immunization schedule.

Which vaccines can be given to a child between 1 and 5 years of age who has never been vaccinated?

Such a child will not receive BCG, Hepatitis B, Rotavirus, Penta and IPV. Give DPT1, OPV1, measles 1, JE 1 (where applicable) and 2ml of Vitamin A solution. Then follow with the second and third doses of DPT and OPV at 1-month intervals.

Give Measles 2 as per the schedule /1 month later*. Give booster dose of OPV/DPT at a minimum of 6 months after administering OPV 3/DPT 3. Also give Vit A at 6 months interval till 5 years of age.

**Note: In an unvaccinated child more than 16 months of age remember the interval between Measles 1 and Measles 2 is 4 weeks and for JE 1 and JE 2 (where applicable) the interval is 3 months.*

Which vaccines can be given to a child between 5 and 7 years of age who has never been vaccinated?

Give of DPT 1, 2 and 3 at 1-month intervals. Give booster dose of DPT at a minimum of 6 months after administering DPT 3 up to the age of 7 years.

Why are the DPT, HepB (birth dose), IPV and pentavalent vaccines given in the anterolateral mid-thigh and not the gluteal region (buttocks)?

This is done to prevent damage to the sciatic nerve. Moreover, vaccine deposited in the fat of the gluteal region does not bring about the appropriate immune response to protect the child.

c) BCG

Why is BCG given only up to 1 year of age?

Most children acquire natural clinical/sub-clinical tuberculosis infection by the age of 1 year. This protects against severe forms of childhood tuberculosis, e.g. TB meningitis and miliary disease.

If no scar appears after administering BCG, should one re-vaccinate the child?

There is no need to re-vaccinate the child even if there is no scar.

Why do we give 0.05 ml dose of BCG to new borns (below 1 month of age)?

This is because the skin of newborns is thin and an intra-dermal injection of 0.1 ml may break the skin or penetrate into the deeper tissue and cause local abscess and enlarged axillary lymph nodes. Dose of 0.05 ml is sufficient to elicit adequate protection.

d) Hepatitis B

What is the “birth dose” of hepatitis B?

This refers to the dose given within 24 hours of birth. A child vaccinated with Hep B after more than 24 hours of birth is not considered to have received the birth dose.

Why is the birth dose of hepatitis B vaccine given only within 24 hours of birth?

The birth dose of hepatitis B vaccine is most effective in preventing peri-natal transmission of hepatitis B only if given within the first 24 hours.

Why is hepatitis B vaccine given only till 1 year of age in the UIP schedule?

Hepatitis B vaccine is given till 1 year of age because infections during first year of age have a 90% chance of becoming chronic as compared to 30% during 1–5 years and 6% after 5 years. Persons with chronic infection have 15–25% risk of dying prematurely due to HBV related liver cirrhosis and cancer.

Adult Hep B vaccination is not part of the UIP.

e) Pentavalent vaccine

What is pentavalent vaccine?

Pentavalent vaccine is a vaccine that contains five antigens (diphtheria + pertussis + tetanus+ hepatitis B + Haemophilus influenzae type b).

How is pentavalent vaccine more advantageous?

- The addition of Hib vaccine provides protection against Haemophilus influenzae type b related diseases (bacterial meningitis, pneumonia and others)
- The number of injections administered under UIP during the first year of life reduces.
- It does not require reconstitution.

What vaccine will be given to a child who has received at least one dose of pentavalent vaccine before his/her first birthday?

If a child has received at least one dose of pentavalent vaccine before his/her first birthday, the child should be administered the due pentavalent doses at a minimum interval of 4 weeks, at the earliest available opportunity.

After introduction of pentavalent vaccine, will DPT and Hep B be required?

Yes, Hep B birth dose (within 24 hours) for institutional deliveries and DPT boosters at 16–24 months and 5–7 years will continue as before introduction.

f) Rotavirus vaccine – Introduced in Feb 2016 – roll out in phases

How effective is the Rotavirus vaccine?

The available Rotavirus Vaccines are observed to be effective in preventing severe rotavirus diarrhea by 54-60%. The protective effect of Rotavirus vaccine lasts through 2nd year of life.

Will vaccination with Rotavirus vaccine prevent all diarrheas?

No it does not prevent all diarrheas. Diarrhea is caused by many organisms of which Rotavirus is one of the leading causes for diarrhea in children. Rotavirus vaccine is effective in preventing diarrhea due to Rotavirus only. So the child may still get diarrhea due to other germs and causes even after receiving Rotavirus vaccine.

What is the maximum age limit for giving the first dose of Rotavirus vaccine?

The upper age limit for the first dose of Rotavirus vaccine is one year of age. If a child has received only the first dose of Rotavirus vaccine by 12 months of age, two more doses of the vaccine should be given at an interval of 4 weeks between the two doses to complete the course.

Is a booster dose required for Rotavirus vaccine?

No booster dose of Rotavirus vaccine is recommended. Only three doses at 6, 10 and 14 weeks are required to complete the schedule of vaccination for a child.

Should Rotavirus vaccine be given to children who have already received first dose of OPV and Pentavalent vaccine?

No, during the initial period of Rotavirus vaccine introduction, only the infants coming for the first dose of OPV and pentavalent vaccine will be administered Rotavirus vaccine. These children will be given 2nd and 3rd doses in subsequent visits as per the schedule. Infants, who are coming for their second or third dose of OPV and pentavalent vaccine, will complete the schedule with OPV and pentavalent vaccine only. Rotavirus vaccine is not to be started with second or third dose of OPV and Pentavalent vaccine.

What should be done if a child has received one or two doses of Rotavirus vaccine in a private facility?

If the parents want to vaccinate their child from the public sector after receiving one or two doses of Rotavirus vaccine in a private facility, a new course of Rotavirus vaccine must be started with all three doses at one month intervals provided the child is less than one year old.

g) Inactivated Poliovirus vaccine

What is IPV?

IPV refers to Inactivated Polio Vaccine administered by injection. Evidence suggests that this vaccine, when used along with OPV, increases the protection to the individual as well as the community. IPV together with OPV prevents re-emergence and reinfection of wild poliovirus (WPV).

Will IPV (injection) replace OPV (drops)?

No, IPV (injection) will not replace OPV (polio drops), since IPV is recommended for administration in addition to OPV.

Is it safe to give IPV and OPV together?

Yes, it is absolutely safe to give IPV and OPV together. It is also important – and best – for a child to receive both IPV and OPV. Together, these two vaccines provide safe and strong protection against polio. If a child only receives one of the vaccines it will not be as well protected as the child that has received both the vaccines. Primary doses of OPV (OPV1, OPV2 and OPV 3) should be completed as per schedule.

When is IPV to be administered?

IPV has to be administered as a two-dose fractional intradermal schedule at 6 & 14 weeks.

How should you vaccinate if a child has not received the vaccine at 6th week?

If missed, the Fractional IPV 1st dose should be given as early as possible after the 6th week. The 2nd dose must be given with 8 weeks interval.

h) Measles / Rubella

What are Measles / Rubella diseases?

Measles is a highly infectious disease causing illness and death due to complications in the form of diarrhea, pneumonia or brain infection mostly among the children less than five years of age. Rubella is a mild disease but when infection occurs in early pregnancy, it has the potential to cause spontaneous abortions, fetal deaths, still births and serious congenital defects in the child causing lifelong disabilities.

What is CRS?

CRS, (Congenital Rubella syndrome) is a set of serious congenital defects a child may be born with when a pregnant women gets Rubella infection in early pregnancy, causing blindness, deafness, heart defects, mental retardation, liver disorders and other hematological disorder, incompatible with normal living.

Why is Measles-Rubella vaccine given?

This Measles –Rubella vaccine is given for preventing both measles and rubella disease in the child, as these diseases can be only prevented by vaccination.

Does a child need to be vaccinated if she or he has history of any fever-rash illness including measles or rubella disease?

Yes, every child must be vaccinated with two doses, as per the national immunization schedule with MR vaccine at the recommended ages, irrespective of any past fever-rash illness or measles/rubella disease.

If a child has received the Measles Rubella vaccine before 9 months of age, is it necessary to repeat the vaccine later?

Yes, the Measles Rubella vaccine needs to be administered, according to the National Immunization Schedule, after the completion of 9 months until 12 months of age as 1st dose and at 16-24 months as 2nd dose in RI.

If a child comes after 2 years for the first dose, then can he/she get the second dose?

All efforts should be made to immunize all children at the right age i.e. first dose at completed 9 months to 12 months and second dose at 16-24 months. However if a child comes late (beyond 2 years), then two doses of the vaccine can be given at one month interval until 5 years of age under UIP.

If a child has received all vaccines as per the national immunization schedule, dose she or he need to be vaccinated during supplementary MR campaigns?

Yes, in addition to the recommended national immunization schedule the child (if eligible as per age group targeted) must be vaccinated with supplementary MR vaccines during campaigns.

As measles and JE vaccine doses are recommended for the same age group, can they be given together?

Yes, two live injectable vaccines can be administered simultaneously at different sites.

Remember – if two live injectable vaccines are not given together as per schedule there must be a minimum interval of 28 days.

i) Japanese Encephalitis

What if someone misses receiving JE vaccine during catch-up campaigns?

Those children aged 9 months to 15 years who have missed receiving JE vaccine during the catch-up campaigns can receive it at the nearest PHC/CHC or district hospital.

If a child more than 9 months but less than 24 months who has never received any JE vaccine comes for immunization, how should JE vaccine be administered?

The first dose should be given at first contact and the second dose should be given with an interval of 3 months following the first dose.

J) Pneumococcal Conjugate Vaccine (PCV)

What should be done if a PCV dose is delayed?

The two primary doses and one booster dose of PCV should be given during the first year of life.

If the doses are delayed within the first year, Doses (both primary and booster) must be separated by a minimum interval of at least 2 months, to be given at the next scheduled immunization visit.

In delayed cases beyond 1 year of age, due doses can be given to a child only if a child has received at least one dose of PCV before his/her first birthday.

For those with at least one previous PCV dose, the series should be completed at the earliest available opportunity.

Can only two PCV doses be given?

No, two PCV doses are not sufficient to confer long lasting immunity, especially for protecting against pneumococcal colonization which is essential for the full public health benefit.

The benefit of the PCV booster dose is not only in providing additional duration of immunity against pneumococcal disease, but it also serves to reduce carriage, thus having an indirect benefit for the other community members.

Can PCV be given to a sick child?

Yes, PCV can be safely administered to a child with immunodeficiency (e.g., HIV/AIDS, congenital or acquired immunodeficiency, sickle cell disease), malnutrition, or other underlying illnesses, using the same schedule as for any other child.

These children are in particular need of PCV because their risk of pneumococcal disease is high.

Children with mild acute illnesses can and should be immunized with PCV on time

Are there any contraindications for use of PCV?

The pneumococcal vaccine should not be given to the following persons:

- those who have had severe allergic reactions to a prior dose.
- those who are known to have had a severe reaction to another vaccine containing diphtheria toxoid.
- those who have a severe illness; vaccination should be delayed until the condition improves in part so as to not mistakenly attribute any clinical changes with the vaccination.