Immunization
Acknowledgements

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1. **When do we call a child fully Immunized?**

A child is considered fully immunized, when he/she has received one dose of BCG, three doses of DPT and OPV each and one dose of measles by the age of 12 months.

2. **In our country how many children have received full immunization?**

Periodic surveys conducted by Govt. of India namely National Family Health Survey (NFHS) and District Level Household Survey (DLHS) provide us with accurate information on immunization status of children. According to the NFHS-3 (2005-06), less than half (43.5%) of the children in the age group 12-23 months are fully immunized. Immunization coverage rates varies among different states: they are higher among several southern states such as Kerala, Tamil Nadu etc. and are lower in central/northern India including Madhya Pradesh, Rajasthan, Uttar Pradesh, Bihar and Orissa.
3. Why is BCG vaccine given on the left upper arm only?

BCG is given on the left upper arm to maintain uniformity and for helping surveyors in verifying the receipt of the vaccine (by checking the presence of a scar on the left upper arm).

4. Why do we give a lower dose (0.05 ml) of BCG to neonates below 1 month of age?

This is because the skin of newborns is thin and an intradermal injection of 0.1ml may penetrate into the deeper tissue and may cause local abscess and enlarged axillary lymph nodes.

5. If BCG vaccine is not given at birth, when should it be given?

If not given at birth or along with DPT-1, then it should be given as early as possible. BCG can be given any time before 1 year of age.

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

This is because most children acquire natural clinical/sub-clinical tuberculosis infection by the age of 1 year. This too protects against severe forms of childhood tuberculosis.

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

There is no need to revaccinate the child if there is no scar.

8. Why should DPT vaccine be given in the antero-lateral mid thigh and not the gluteal region (buttocks)?

DPT is given in the antero-lateral mid thigh and not the gluteal region to prevent damage to the sciatic nerve. In
addition, the vaccine deposited in the fat of gluteal region does not invoke the appropriate immune response.

9. Why should there be a minimum gap of 4 weeks between 2 doses of DPT?

This is because decreasing the interval between two doses may interfere with the antibody response and protection against the diseases.

10. What should one do if a child is found allergic to DPT or develops encephalopathy after DPT?

If a child is allergic or develops encephalopathy after DPT, he/she should be taken to a doctor immediately. Also the child should be given DT vaccine during the subsequent dose as it is usually the P (Pertussis) component of the vaccine which causes the allergy/encephalopathy.

11. If a child has received DPT-1 but comes late for receiving DPT-2, should one restart with the first dose of the vaccine?

Do not start the schedule all over again even if the child is brought late for a dose. Pick up where the schedule was left off. For example: if a child has received BCG, DPT-1 and OPV-1 at 5 months of age and returns at 11 months of age, vaccinate the child with DPT-2, OPV-2 and Measles and do not start from DPT-1 again.

12. If a child could not receive DPT 1, 2, 3 and OPV 1, 2, 3 as per the schedule, till what age can these vaccines be given?

DPT vaccine can be given till 2 years of age and OPV can be given till 5 years of age.
13. If not given at birth, when should OPV-0 be given?
   OPV-0 dose can be given up to 15 days after birth.

14. Can an infant be breast fed immediately after OPV?
   Yes

15. A child has received 3 doses of OPV as per the immunization schedule. Should this child still be given a dose of OPV during the Pulse Polio Campaign?
   All children up to the age of 5 years should be given a dose of polio vaccine during the pulse polio campaign, even when they have need all the doses of OPV as per the immunization schedule.

16. When can measles vaccine be given if the child has not received this between 9-12 months of age as per schedule?
   A single dose of measles vaccine can be given till 5 years of age if the child has not received the vaccine during 9-12 months of age as per the schedule.

17. Why should Measles vaccine be given on the right upper arm only?
   Measles vaccine is given on the right upper arm to maintain uniformity and to help surveyors in verifying the receipt of the vaccine.

18. If a child has received the Measles vaccine before 9 months of age, is it necessary to repeat the vaccine later?
   Yes, the Measles vaccine should be repeated even if a child has received it before the recommended age.
19. Until what age can Hepatitis B vaccine be given?

According to the National Immunization Schedule, Hepatitis B vaccine should be given with the first, second and third doses of DPT till 1 year of age.

20. Can Hepatitis B vaccine be mixed in the same syringe with DPT and given as one injection?

No, DPT and Hepatitis B vaccine (if supplied separately) cannot be mixed or administered through the same syringe.

21. If a girl received all doses of DPT, and TT as per the National Immunization Schedule till 16 years of age and she gets pregnant at 18 years, should she get one dose of TT during pregnancy?

Give 2 doses of TT during the pregnancy as per the schedule.

22. Why is it not advisable to clean the injection site with a spirit swab before vaccination?

This is because some of the live components of the vaccine are killed if they come in contact with spirit.

23. If a child who has never been vaccinated is brought for Immunization at 9 months of age, can all the due vaccines be given to him/her on the same day?

Yes, all the due vaccines can be given during the same session but at different injection sites using separate AD syringes. It is safe and effective to give BCG, DPT, Hepatitis B, OPV and Measles vaccines and Vitamin A at the same time to a 9 months old child who has never been vaccinated.
24. If the mother/caregiver permits administration of only one injection to a child who has come for Immunization at 9 months of age, which vaccine should be given?

At 9 months of age, the priority is to give measles vaccine with OPV and Vitamin-A.

25. Which vaccines can be given to a child between 1-2 years of age, who has never been vaccinated?

The child should be given DPT-1, OPV-1, Measles and 2ml of Vitamin A solution. He/ she should then be given the second and third doses of DPT and OPV at one month intervals till 2 years of age. The booster dose can be given at a minimum interval of 6 months after administering OPV-3/ DPT-3.

26. If a child comes between the age of 2 to 5 years without having received any vaccine, what vaccines should be given?

The child should be given two doses of DT with OPV with a minimum gap of 4 weeks (or 1 month). A single dose of measles vaccine also needs to be given with the first dose of DT.

27. What vaccines should one give to a child who is brought after 6 years of age for the first time?

Give the child only 2 doses of TT one month apart.

28. How should Vitamin A syrup be administered?

Vitamin A syrup should be administered using only the spoon/ dispenser provided with each bottle. The half mark in the spoon indicates 1,00,000/- IU and a level full spool contains 2,00,000/- IU of Vitamin A. A child less than 1 year of age should be given 1 ml, and a child older than 1 year should be given 2 ml of vitamin A.
29. What should be the minimum gap between two doses of Vitamin A?

   The minimum gap between any two doses of vitamin A should be 6 months.

30. What are the storage guidelines for un-opened bottles of Vitamin A solution?

   Vitamin A solution must be kept away from direct sunlight.

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

   Vitamin A bottle, once opened, should be used within 6-8 weeks. Write the date of opening on the bottle.