



## PATIENT INFORMATION LEAFLET

### VACCINATIONS DURING PREGNANCY

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Vaccination helps our body to fight off infections, by giving a boost to the immunity system. Pregnant women are more likely to have severe infections due to changes in their immunity, heart and lung functions during pregnancy. The immunity helps the pregnant lady and it is transferred from the mother to the unborn baby in the womb, so also helps the baby in the newborn period to overcome infections.

Vaccines contain either an inactive or live forms of the organism that causes the disease. During pregnancy, inactive vaccines are administered and live vaccines should not be given. It takes about 2 weeks after a vaccination for the body to develop special proteins called antibodies, to safeguards the mother and baby from infections.

Pregnancy vaccination schedules vary among different countries. In India, the Federation of Obstetric and Gynaecological societies of India (FOGSI) and Indian Academy of Paediatrics (IAP) recommend routine vaccination during pregnancy for tetanus, diphtheria, pertussis, influenza. Some additional vaccines maybe considered for special circumstances.

**Discuss with your doctor about vaccine preventable diseases, your past vaccinations and allergic reactions to vaccinations, if any. It's important to keep an accurate record of your vaccinations in your pregnancy notes**

#### **TETANUS, DIPHTHERIA, PERTUSSIS VACCINATION**

##### ***What is tetanus?***

Tetanus is a bacterial infection that causes muscle stiffness all over the body by affecting the nervous system. It occurs in people who have had a skin or deep tissue wound or puncture. It can also occur in the umbilical stump of infants. There has been more than a 90% reduction in tetanus in the last few decades, due to the tetanus vaccinations for infants and pregnant mothers. But many countries have still not eliminated tetanus. The occurrence increases during natural disasters like earthquakes and tsunamis.

##### ***What is Pertussis?***

This is a bacterial respiratory infection also called as whooping cough. It commonly affects infants and young children and can result in a serious illness. It starts as a cold and progresses to excess coughing, respiratory difficulty. The occurrence of this infection has increased in the recent years.



### ***What is Diphtheria?***

Diphtheria is a serious bacterial disease that can cause a thick coating in the back of the nose or throat and it affects breathing. A less severe type affects the skin (cutaneous diphtheria). Though this condition is less common small outbreaks occur regularly in many places

### ***What vaccine is required?***

Tetanus vaccination is available as tetanus toxoid injection (TT injection) or as combined vaccines - tetanus with diphtheria (Td Vac), tetanus with diphtheria and whooping cough (TDap). Safety of all these vaccines during pregnancy been confirmed in several studies.

### ***What is the recommended dose and timing of vaccine?***

Any of the following schedules can be followed. Combined vaccine TDaP or Td Vac as a single dose after 27 weeks, ideally given at 27- 32 weeks but can be given until 36 weeks, if earlier timing was missed.

Where resources/ availability do not permit Td or TDaP, 2 doses of tetanus toxoid injection 4 weeks apart can be administered after 13 weeks of pregnancy. Infants also require a vaccination course.

## **INFLUENZA VACCINATION**

### ***What is influenza?***

This is a viral infection affecting the respiratory system caused by type A (H1N1, H3N2 strains) and type B influenza virus. It affects all age groups. It usually occurs more during winter as clusters affecting an area (known as endemics), but it can occur all throughout the year. For the majority of people, flu is usually a self-limiting disease with recovery generally within a week.

Pregnant women are particularly vulnerable to life threatening disease for the mother and pregnancy complications especially those with medical diseases like asthma and diabetes.

### ***What is the recommended dose and timing of vaccine?***

The virus undergoes periodic changes called mutations hence every year a new batch of vaccine is prepared based on the viruses that caused infections in the previous year.

Single dose Influenza vaccination is recommended for mothers from 26 weeks onwards as per FOGSI guidance. Vaccination at all stages of pregnancy, were not associated with harmful side effects. In case of an outbreak (pandemic/ endemic), the influenza vaccine can be given earlier to protect the mother.

Influenza vaccination may be considered for a postnatal breastfeeding woman, if she missed the antenatal vaccination. It can help infants up to 6 months of age through the antibodies in the breast milk.



## VACCINATION SCHEDULE FOR SPECIAL SITUATIONS

**Hepatitis A:** For pregnant women with chronic liver disease, healthcare professionals are at increased risk for hepatitis A. If a pregnant woman is exposed to hepatitis A, immune globulin can be considered to prevent acute hepatitis infection.

**Hepatitis B:** Pregnant women having more than one sex partner during the previous 6 months, been evaluated or treated for sexually transmitted diseases (STD), recent or current injection drug use or having had an HBsAg-positive sex partner are at increased risk for hepatitis B infection. Hepatitis B vaccine is safe in pregnancy and is to be offered to the high risk groups. Those who started routine hepatitis B vaccination prior to pregnancy, the schedule can be completed.

**Meningitis:** In certain geographic areas like Sub-Saharan Africa, meningitis is prevalent with a high death risk. Meningitis bivalent (A,C) or tetravalent (A,C,Y,W-135) vaccines are safe in pregnancy. The World Health Organisation (WHO) recommends meningococcal vaccine in pregnancy. The main focus for a pregnancy vaccination, is for protecting the unborn child and help infant's immunity. In high incidence areas vaccine is routinely indicated for persons aged 1–29 years.

**Polio:** Immunization of adults with poliovirus vaccine is not routinely recommended if a series of poliovirus vaccinations has been completed in childhood. Immunization during pregnancy is advised if there is a high risk of endemic or epidemic exposure. United Kingdom offers Boostrix IPV (dTap combined with inactivated poliovirus vaccine) routinely in pregnancy.

**Rabies:** is virtually always life threatening. The vaccine is an inactivated vaccine. Hence pregnant women should be administered the vaccination if there is an exposure. Pre-exposure prophylaxis against rabies can be given, where the risk of exposure to rabies is substantial.

**Rubella** vaccine is a live vaccine hence not suitable for use in pregnancy. **If you are tested and not immune to Rubella, it is important to get the vaccination after delivery to prevent future pregnancy risks.** Rubella infection in pregnancy can cause fetal anomalies. Any rash in pregnancy and mild viral infections like symptoms must be assessed by the doctors to exclude rubella infection.

When women are already on a routine vaccination schedule for **human papilloma vaccine (HPV)** for cervical cancer prevention, completion of schedule is recommended after delivery. There is no identified risk from inadvertent HPV exposure in pregnancy.

**In India, TT/ Tdap/Td Vac and Influenza vaccination is to be repeated in every pregnancy irrespective of the status of previous immunization.**

**Health professionals, pre-existing medical diseases, history of vaccine allergy and those planning to travel should talk to their healthcare professionals to discuss about additional vaccines**

