





# Vaccines in pregnancy and breastfeeding

Information in this leaflet is general in nature and should not take the place of advice from your health care provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect.

#### **Planning**

Vaccines are given to prevent specific serious infectious diseases. It is advised that a woman planning pregnancy should make sure she is up to date or immune to rubella (German measles) and varicella (chickenpox) as both these infections can have serious outcomes for babies if a pregnant mother contracts these diseases. She should also check her immunity to other infections (eg hepatitis B) if she is at risk due to occupation or lifestyle or is intending to travel. Therefore, when a woman is planning pregnancy, it is advisable for her to discuss this with her GP, who may organise blood tests to check her immune status. Women should also consider getting the seasonal influenza vaccine if they are likely to be pregnant during the flu season.

## Pregnancy

Once pregnant, there are specific vaccines that are advised and many that are avoided. Below is a summary of the use of specific vaccinations in pregnancy and while breastfeeding.

# Influenza vaccine

Influenza A is a highly infectious and serious viral infection. Pregnancy lowers a woman's immunity and as her baby gets bigger, a pregnant woman's lung capacity is reduced. This means a pregnant woman is more at risk of serious complications of influenza and has a higher risk of being hospitalised. Influenza also increases the risk of prematurity and severe illness for the baby. Influenza vaccine has been safely used in pregnant women worldwide for many years. Therefore, influenza vaccine is recommended at any stage of pregnancy including the 1<sup>st</sup> trimester. When given during pregnancy, influenza vaccine also provides some protection to the baby for the first few months of life. It is also recommended for women planning pregnancy and likely to be pregnant in the flu season.<sup>1</sup>

# Pertussis (whooping cough) vaccine

Whooping cough (pertussis) is an illness that can have serious consequences for young babies. It is most effectively prevented by the pertussis vaccine, which is safe to give in pregnancy. The pertussis vaccine is given in combination with diphtheria and tetanus vaccines (dTpa) and is recommended to be given, ideally between 20-32 weeks of pregnancy. It results in transfer of antibodies to the unborn baby which protect the baby from pertussis for the first few months of life (until the baby is old enough to receive the vaccine as part of the immunisation schedule). It is recommended that a woman receives the vaccine each pregnancy. If the woman has already been given the vaccine in the months before she fell pregnant, she should still have the vaccine but preferably after 28 weeks. This is to reduce the chance of the mother having a local reaction to the vaccine resulting in pain and swelling. If the woman received the vaccine while pregnant but before 20 weeks of pregnancy, she does not need to repeat the vaccine during the same pregnancy.

Pertussis vaccination for other people who will spend time with the baby (such as parents, grandparents and carers) is also recommended if they have not received the vaccine in the last







10 years, to further prevent the baby being exposed to whooping cough. They should receive the vaccine at least 2 weeks before contact with your baby.<sup>3</sup>

#### Live vaccines

Rubella and varicella are infections that can potentially cause birth defects and other serious complications in unborn babies. The varicella (chicken pox) vaccine and MMR vaccine (mumps measles and rubella- German measles) help protect against this if a woman is not already immune to either infection. However because they are **live** vaccines, it is **theoretically** possible for them to transmit the disease itself to the baby if given during pregnancy. Therefore the recommendation is to wait at least 1 month between receiving either of these vaccines and becoming pregnant. This is a theoretical risk only- if you have received the vaccine inadvertently while pregnant or become pregnant less than 1 month after receiving the vaccine, there is no evidence that this is actually harmful to your baby.<sup>3</sup>

## Other vaccines

Most other vaccines are not routinely recommended in pregnancy. However, if a pregnant women is at risk of contracting particular diseases, for example by travelling to an at-risk area, lifestyle factors or occupational exposure, certain vaccines may be considered. This includes hepatitis A vaccine, hepatitis B vaccine and typhoid vaccine (injectable version). For more information on these and any other specific vaccines, a pregnant woman should consult with her doctor or call MotherSafe for further advice.

# **Breastfeeding**

All vaccinations can be given safely to a mother while she is breastfeeding if the baby is well, except for yellow fever vaccine. If a mother was found to be non-immune to certain infections in pregnancy, it is recommended she has the vaccinations soon after her baby is born. In general, breastfeeding does not protect the baby from vaccine preventable infections.

## General measures to help prevent disease transmission.

As well as appropriate vaccination, the spread of infectious diseases to pregnant and breastfeeding can be reduced by hand washing, general cough hygiene measures and travel planning (see MotherSafe Travel factsheet).

#### References

- National Centre for Immunisation Research and Surveillance fact sheets: Vaccinations during pregnancy protect expectant mothers and their babies. NCIRS Fact sheet April 2019 <a href="http://ncirs.org.au/sites/default/files/2019-04/Pregnancy-fact-sheet\_April%202019\_Final.pdf">http://ncirs.org.au/sites/default/files/2019-04/Pregnancy-fact-sheet\_April%202019\_Final.pdf</a> Accessed May2019
- 2. NSW Government Health. Pertusssisvaccination: frequently asked questions. https://www.health.nsw.gov.au/immunisation/Pages/whoopingcough-FAQ.aspx\_Accessed May 2019
- 3. NSW Government Health. Pregnant w. omen- protect your newborn from whooping cough. https://www.health.nsw.gov.au/immunisation/Pages/wc-newborns.aspx Accessed May 2019.
- 4. Australian Technical Advisory Group on Immunisation (ATAGI). Australian Immunisation Handbook, Australian Government Department of Health, Canberra, 2018, immunisationhandbook.health.gov.au <a href="https://immunisationhandbook.health.gov.au/vaccination-for-special-risk-groups/vaccination-for-women-who-are-planning-pregnancy-pregnant-or">https://immunisationhandbook.health.gov.au/vaccination-for-special-risk-groups/vaccination-for-women-who-are-planning-pregnancy-pregnant-or</a> Accessed 20September2018.
- 5. National Centre for Immunisation Research and Surveillance: Immunisation recommendations for adults in Australia <a href="http://www.ncirs.org.au/sites/default/files/2018-11/Adult-schedule-table-September\_2018%20-%20to%20insert%20HB%20lin">http://www.ncirs.org.au/sites/default/files/2018-11/Adult-schedule-table-September\_2018%20-%20to%20insert%20HB%20lin</a>

#### Date of preparation July 2019