

# Vaccinations and Breastfeeding Mothers

*The information provided is taken from various reference sources. It is provided as a guideline. No responsibility can be taken by the author or the Breastfeeding Network for the way in which the information is used. Clinical decisions remain the responsibility of medical and breastfeeding practitioners. The data presented here is intended to provide some immediate information but cannot replace input from professionals.*

Vaccinations are poorly bio-available so levels reaching breastmilk are very restricted. Babies may be expected to receive additional antibodies following their mother's vaccination.

**Chicken pox (varicella):** breastfeeding is not a contraindication to varicella vaccine

**Hepatitis A:** There is no contra indication to having the vaccination and continuing to breastfeed.

**Hepatitis B:** Vaccinations are routinely offered to healthcare professionals who may come into contact with body fluids. There is no contra indication to having the vaccination and continuing to breastfeed.

**Influenza:** A breastfeeding mother can have an influenza vaccination whilst she is breastfeeding - see page 35 (also available on the drug information section of the BfN website).

**Meningococcal C:** Immunization of pregnant or lactating women with meningococcal vaccine increased the specific secretory IgA content of milk.

**MMR Injections:** A breastfeeding mother can have an MMR injection if she is not rubella immune. Although live vaccines multiply within the mother's body, the majority have not been demonstrated to be excreted in human milk (Bohlke K, Galil K, Jackson LA, et al. Postpartum varicella vaccination: is the vaccine virus excreted in breast milk? *Obstet Gynecol* 2003; 102:970--7). Although rubella vaccine virus might be excreted in human milk, the virus usually does not infect the infant. If infection does occur, it is well-tolerated because the virus is attenuated (182). Inactivated, recombinant, subunit, polysaccharide, conjugate vaccines and toxoids pose no risk for mothers who are breast feeding or for their infants.

**Pneumonia:** A breastfeeding mother can have a Pneumococcal vaccination whilst breastfeeding

**Polio:** The injectable polio vaccine is inactivated and poses no risk when given to mothers who are breastfeeding. The oral vaccine may reduce the production of antibodies by the infant and immunisation of the mother before the infant reaches 6 weeks of age is not recommended.

**Tetanus Vaccination:** One study of previously vaccinated infants found that at 21 to 40 months of age breastfed infants had higher IgG levels against diphtheria, higher secretory IgA levels in saliva against diphtheria and tetanus and higher fecal IgM against tetanus than formula-fed infants. There is no contra indication to a breastfeeding mother having this vaccination.

**Tuberculin and BCG:** There is no reason to avoid tuberculin testing during breastfeeding nor to avoid use of the BCG vaccine

**To talk to a mum who knows about breastfeeding call the National Breastfeeding Helpline 0300 100 0212**

*Calls to 0300 numbers cost no more than calls to UK numbers starting 01 and 02 and will be part of any inclusive minutes that apply to your provider and call package.*

**Typhoid Vaccination:** One study of previously vaccinated infants found that at 21 to 40 months of age breastfed infants had higher IgG levels against diphtheria, higher secretory IgA levels in saliva against diphtheria and tetanus and higher fecal IgM against tetanus than formula-fed infants. There is no contra indication to having the vaccination and continuing to breastfeed.

**Whooping Cough:** there is no evidence of risk of vaccinating breastfeeding mothers with the whooping cough (pertussis) vaccine as part of the campaign to protect new-born babies.

For those mothers who did not receive vaccination during pregnancy, administration after delivery, whilst the mother is breastfeeding, is acceptable.

The Health Minister recommended (28 Sept 2012) that all pregnant women should receive pertussis (whooping cough) vaccination in their third trimester in order to protect their baby from this condition prior to the baby receiving its own vaccination as part of the normal immunization schedule at 2 months of age.

Whooping cough is a disease that can cause long bouts of coughing and choking, which can make it hard to breathe. It can be very serious for young children, and even fatal for babies under one year old. New-born babies are likely to have little or no protection against whooping cough at delivery. Antibodies passed from the pregnant mother to her unborn child following vaccination, should provide some protection to the baby in the first few weeks of life. Maternal antibody levels will be low unless the mother developed whooping during pregnancy and the baby is vulnerable from delivery. It appears that antibodies passing through breastmilk are also unlikely to protect the baby.

The vaccine Repevax®, will also provide protection against diphtheria, tetanus and polio, in addition to whooping cough. There is no evidence to suggest that the use of this vaccine during pregnancy is unsafe for either the expectant mother or their unborn baby. The vaccine is not live and cannot cause whooping cough.

## **General recommendations on immunization**

Recommendations of the Advisory Committee on Immunization Practices (ACIP).

[www.ncbi.nlm.nih.gov/pubmed/17136024?dopt=Abstract](http://www.ncbi.nlm.nih.gov/pubmed/17136024?dopt=Abstract)

## **Breast Feeding and Vaccination**

Neither inactivated nor live vaccines administered to a lactating woman affect the safety of breast feeding for women or their infants. Breast feeding does not adversely affect immunization and is not a contraindication for any vaccine, with the exception of smallpox vaccine. Limited data indicate that breast feeding can enhance the response to certain vaccine antigens (Pickering LK, Granoff DM, Erickson JR, et al. Modulation of the immune system by human milk and infant formula containing nucleotides. Pediatrics 1998; 101:242-9. Breast-fed infants should be vaccinated according to recommended schedules.

## **Bibliography**

- Do mom's vaccines protect her breastfed baby? <http://kellymom.com/bf/can-i-breastfeed/meds/vaccine-protection/>
- Hale T. Medications and Mothers Milk
- HSC Public Health Agency [www.publichealth.hscni.net/news/pha-encourages-pregnant-women-get-whooping-cough-vaccine](http://www.publichealth.hscni.net/news/pha-encourages-pregnant-women-get-whooping-cough-vaccine)
- Jones W Breastfeeding and Medication. Routledge 2018
- Lactmed <http://toxnet.nlm.nih.gov/cgi-bin/sis/search/f?./temp/~UeYdNm:1>
- NHS Choices <http://www.nhs.uk/Conditions/pregnancy-and-baby/Pages/whooping-cough-vaccination-pregnant.aspx>

- Prevention of Pertussis, Tetanus, and Diphtheria Among Pregnant and Postpartum Women and Their Infants -. Recommendations of the Advisory Committee on Immunization Practices (ACIP). [www.cdc.gov/mmwr/preview/mmwrhtml/rr5704a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5704a1.htm)
- The Green Book (NHS) [www.wp.dh.gov.uk/immunisation/files/2012/09/Green-Book-updated-280912.pdf](http://www.wp.dh.gov.uk/immunisation/files/2012/09/Green-Book-updated-280912.pdf) P 277-294

