Immunisation and breastfeeding

A woman who is breastfeeding can be immunised safely with both inactive vaccines such as tetanus, hepatitis B, and human papillomavirus vaccines, and live vaccines such as measles/mumps/rubella (MMR) and varicella (chickenpox) vaccines.

Maternal antibodies passed across the placenta into the growing baby during late pregnancy provide the baby with the most significant passive protection during their early weeks to months of life. This is especially so for pertussis and influenza when the mother is immunised against these diseases during her pregnancy. Vaccinating in pregnancy is the best way to offer protection to the young infant when they are too young to have been fully vaccinated themselves.

After the baby is born, antibodies produced by the breastfeeding woman in response to immunisation may be secreted in breast milk. The type and quantity of these antibodies, and whether they provide any protection for the baby after they are swallowed, are dependent on the vaccine received and maternal factors that influence immune system function such as genes, age and health.

Maternal antibodies in breast milk have not been shown to reduce the infant’s response to their own immunisations. However, some studies suggest that breast milk may improve an infant’s immune response to some of the immunisations they receive.

The bacteria, viruses, or toxins (antigens) in vaccines such as the tetanus/diphtheria/pertussis vaccine and influenza vaccine have been inactivated. After the vaccine is administered the immune system recognises the antigens immediately and responds locally.

The viruses in the measles, mumps, rubella (MMR) and varicella (chickenpox) vaccines are alive but weakened so they can replicate in the body without causing the disease. After the vaccine is administered, these viruses have to replicate until there are enough for the immune system to recognise and respond to.

The measles, mumps, and varicella vaccine viruses have not been found in breast milk after maternal immunisation. The rubella vaccine virus has been found in breast milk. However, no symptomatic cases of vaccine-derived rubella have been identified in breastfed infants whose mother received a rubella containing vaccine. This group of infants have also been shown to have a normal immune response to a rubella containing vaccine in their second year of life.

It is important that a woman continue to receive age-appropriate catch-up vaccines during the postnatal period while breastfeeding for protection against diseases such as tetanus, diphtheria, polio, measles, mumps, rubella, and human papillomavirus. Influenza immunisation is recommended postnatally during influenza season if not received during pregnancy, and may reduce the risk the mother will expose her baby to influenza. Similarly, with tetanus/diphtheria/pertussis (Tdap) immunisation, if the Tdap immunisation was not received during pregnancy, immunisation in the postnatal period may reduce the risk the mother will expose her baby to pertussis.

A woman can continue her usual breastfeeding routine after her baby receives routine immunisations, including the rotavirus vaccine. A baby can breastfeed immediately after receiving their rotavirus vaccine dose, even if the mother has cracked nipples. No special precautions need to be taken by the mother.

References