Kia Ora and welcome to the first edition of an immunisation newsletter for midwives by the Bay of Plenty Midwifery Immunisation Group. We are a group who meet regularly to discuss ways we can support and encourage vaccination uptake for our pregnant mothers and babies. We believe in the protection of immunisations and value its role in keeping our mothers, babies, and community safe.

Nature's Special Gift - Mother to Infant Immunity

The immune system protects the body from harmful infections and is essential for survival. The word *immune* derives from the Latin word 'immunis' and was used in the context of to be free or exempt from taxes or public service!

To immunise someone is to make them immune to a specific disease-causing germ or toxin. You can be immunised by catching the infection or by receiving part of the germ in a vaccine.

However, there is a special form of immunity, called passive immunity, which gives temporary protection. A mother will pass some of her specific protection (antibodies) to her infant before and after birth. These antibodies pass across the placenta from the start of the second trimester and increase until birth.



complications from infections due to their immature and inexperienced immune systems. The maternal antibodies are nature's gift in providing protection in the first few months of life until the baby is fully immunised after receiving their own vaccinations. The baby also receives some passive immunity from breast milk.

Maternal vaccinations enhance this natural phenomenon by boosting the mother's immunity for both her and her baby.

Note that the pertussis (whooping cough) and influenza vaccines are recommended for *each* pregnancy.

It is important to remind parents that the infant schedule begins at 6 weeks!

What is Currently Happening in the Bay of Plenty?

Pertussis: From the beginning of the current national outbreak from November 2017 to June 2019 the Bay of Plenty has had 458 cases of pertussis with a rate that is twice that of the national rate. Babies less than 6 months old are most at risk of complications from pertussis with research showing about 50% of this age group admitted to hospital for supportive and respiratory care. **Best protection is to vaccinate mum while pregnant,** allowing her natural protection to pass to the baby. This has been shown to reduce the risk of baby catching pertussis in the first 8 weeks of life by 90%! It is also important for the baby to have their first infant vaccinations on time at 6 weeks. Currently the recommendation and funding for this maternal vaccine is between 28-38 weeks gestation but Pharmac is proposing to extend this to include the 2nd trimester – watch this space for more information!

Measles: Bay of Plenty has had 22 confirmed measles cases this year with ages ranging from 5 months to 39 years old. Please click on this link to see information and advice for health professionals. If you were born after 1969, please take the time to check if you have had two MMR vaccinations to ensure you don't inadvertently pass on measles to pregnant women or babies in your care. People born before 1969 are considered to be immune as measles was a common childhood disease before the introduction of measles vaccines. MMR is a live vaccine and it is not recommended for pregnant women. Please advise mum to have MMR once baby is delivered; it is safe to have this while breastfeeding. If a pregnant woman is exposed to measles then human normal immunoglobulin is recommended as well as 18 days in quarantine. There were pregnant women exposed to measles in the Bay of Plenty in the past two months. It is also important to note that nearly 40% of our cases of measles were hospitalised, some with serious complications. Here is an interesting article on complications due to measles infection.

Influenza: Numbers of people infected with influenza are increasing as expected. Did you know 80% of people can be carriers of influenza and not show any symptoms (but will pass it on to others)? Influenza can be particularly serious for pregnant women due to their suppressed immune system. Also, a decreased lung volume places pregnant women at higher risk of pneumonia often requiring ICU admission. Influenza infection during pregnancy increases the risk of complications: premature birth, miscarriage, stillbirth, and low birth weight. Vaccination is free and prioritised for pregnant women (despite current shortages) and can be given at a GP clinic or pharmacy. Research shows babies also benefit as they receive protection for a few months after birth. Yes both the vaccines for pertussis and influenza are safe for mum and baby – lots of research demonstrates this.

For evidence informed information go to Immunisation Information for Midwives Editor Kerri.Lawrence@ebpha.org.nz