

## **Perinatal and Maternal Mortality Review Committee (PMMRC) Annual Report**

### **Frequently Asked Questions**

#### **What is New Zealand's perinatal death rate?**

In 2011 there were 665 deaths of babies aged from 20 weeks gestation to less than 28 days old (or weighing at least 400g if gestation was unknown). This is a rate of 10.6 deaths per 1000 births, using the New Zealand definition for these deaths.

#### **How does New Zealand's perinatal death rate compare internationally?**

Using the World Health Organization (WHO) definition (which includes babies of 28 weeks or greater, and excludes deaths associated with congenital abnormalities) this amounts to 3 deaths per 1000 births. In 2007, there were 3.6 deaths per 1000 births using this same definition. Using the WHO definition, this amounts to 188 deaths in 2011 compared with 237 in 2007.

However, there has been a significant increase in perinatal mortality of babies born in multiple births, from 32 per 1000 births in 2007 to 53 per 1000 births in 2011.

#### **How many deaths were avoidable?**

Nineteen percent of perinatal deaths were reported by mortality reviews carried out by district health boards (DHBs) to be potentially avoidable. The most common contributing factors to these deaths were barriers to access or engagement with care – most commonly, late or infrequent access to antenatal care. These were followed by personnel factors – most commonly, failure to follow recommended best practice.

#### **Are there any groups that are more at risk of losing a baby?**

Māori and Pacific and Indian mothers were significantly more likely to lose a baby than New Zealand European mothers (figure 22, page 50).

Young mothers and older mothers were significantly more likely to lose a baby than mothers aged 25 to 35 (figure 20, page 47).

The risk of losing a baby from potentially avoidable causes increased significantly with increasing socioeconomic deprivation and for Māori and Pacific mothers (figure 36, page 87; figure 34, page 85).

#### **How many babies who died with identifiable congenital abnormalities had antenatal screening?**

An audit of cases of babies who died in 2010 with identifiable congenital abnormalities found that one in four women who sought care with a primary health provider before 20 weeks was not offered first or second trimester antenatal screenings.

The PMMRC recommends all GPs and midwives be adequately informed to be able to offer antenatal screening before 20 weeks. Antenatal screening screens for chromosomal

abnormalities such as Down syndrome and other structural congenital abnormalities. (For more information on antenatal screening, visit the National Screening Unit website at: <http://www.nsu.govt.nz/>).

### **How many babies had neonatal encephalopathy?**

Between 2010 and 2011, 149 babies born alive were identified as having neonatal encephalopathy, a syndrome usually resulting from lack of oxygen to the brain around the time of birth. Seventy-six percent of these babies survived the first 28 days. In 16 percent of cases, the neonatal resuscitation was believed to have been inadequate and to have contributed to the baby's illness.

The PMMRC has recommended continual improvement to the standard of neonatal resuscitation by all health professionals involved in caring for newborn babies.

There was a significantly higher rate of babies with neonatal encephalopathy identified among babies born in the Waikato region (2.25 deaths per 1000 births at term in Waikato, compared to 1.27 deaths per 1000 births at term nationally) (figure 49, page 121). The committee has recommended that Waikato DHB review these births.

### **Were many pregnant women taking folic acid to prevent birth defects?**

Not all pregnant women were taking folic acid to prevent birth defects, or taking it early enough. About half of pregnancies are unplanned, so women are unlikely to have been taking folic acid before pregnancy. There is also poor recording by health professionals of whether pregnant women are taking folic acid, and for how long.

Between 2007 and 2011, 198 babies died from neural tube defects such as spina bifida. (This figure refers to babies from 20 weeks gestation to less than 28 days old, or weighing at least 400g if gestation was unknown.) Some of these deaths could have been prevented by folic acid supplements. The PMMRC data suggests that as many as 15 deaths associated with neural tube defects such as spina bifida could be prevented with folic acid in one year.

The PMMRC has recommended that New Zealand starts fortifying bread with folic acid.

### **What was the maternal death rate?**

In 2011, there were eight maternal deaths. There has been no statistically significant change in the maternal death rate since PMMRC began analysing maternal mortality data in 2006.

### **Were any of the maternal deaths preventable?**

Between 2006 and 2011, 35 percent of maternal deaths were identified as potentially avoidable. In 55 percent of all maternal deaths, there were contributing factors relating to organisation and management, personnel, and barriers to access and engagement with care.

### **Have there been any changes in maternal mental health services?**

The 2012 PMMRC report included a number of recommendations aimed at reducing maternal suicides, which are a leading cause of maternal deaths. The Ministry of Health

carried out a review and published a report, *Healthy Beginnings*, calling for an increase in maternal and perinatal mental health services.

The 2013 budget announced new funding to implement the report's recommendations, which the PMMRC welcomes.

### **Has progress been made on previous PMMRC recommendations?**

Progress on previous recommendations includes:

- **Early booking.** The PMMRC has recommended all pregnant women should start maternity care before 10 weeks. Many DHBs have initiated media and social media campaigns, and recently the New Zealand College of Midwives – supported by the Ministry of Health – launched the Find Your Midwife website.
- **DHB disparities.** Counties Manukau DHB commissioned an independent review of its excess perinatal related mortality. The review was published in late 2012.
- **Access to care.** The PMMRC recommended that the Ministry of Health, DHBs and professional colleges collaboratively explore barriers to early booking to increase the number of women who book with a lead maternity carer. A number of DHBs are researching barriers to access as part of local maternity quality and safety programmes. One of the National Maternity Monitoring Group's priorities for 2012-13 is timely registration with primary maternity services.
- **Screening.** The PMMRC recommended that lead maternity carers follow the Ministry of Health pregnancy guidelines for diabetes screening, smoking cessation and family violence screening. The Ministry is now developing evidence-based guidelines for the screening, diagnosis and management of gestational diabetes. Once completed, these guidelines will be implemented by all DHBs as part of their maternity quality and safety programmes. The PMMRC will be collaborating with the Family Violence Death Review Committee to further identify strategies to improve screening for family violence in the maternity setting.
- **Maternal information.** The PMMRC recommended improved communications between primary and secondary services. The National Health IT Board is progressing this recommendation by developing and rolling out a nationally standardised maternity clinical information system.

### **Where does PMMRC's data come from?**

Before the PMMRC was established in 2005, perinatal and maternal death data was sourced from administrative data sources. PMMRC believed levels of morbidity and mortality were under-reported, and that clinical staff should contribute data.

Only eight of New Zealand's then 21 DHBs carried out mortality reviews before the PMMRC was established. Now all DHBs carry out mortality reviews.

Since 2005, the PMMRC has set up a web-based system that all maternity providers can use to report on maternal and perinatal mortality and morbidity. The PMMRC has also

established a process for reporting potentially avoidable perinatal and maternal deaths that can be used to identify areas for improvement in clinical care.