Consultative Council on Obstetric and Paediatric Mortality and Morbidity



# Victoria's mothers, babies and children 2019

**Perinatal mortality** 

# **About CCOPMM**



#### **About CCOPMM**

The Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM) is a statutory authority appointed by the Minister for Health

Chair: Adjunct Professor Tanya Farrell

Operates under the Public Health and Wellbeing Act 2008

#### **About CCOPMM**

Legislative responsibility for data collection

- Victorian Perinatal Data Collection (VPDC)
- Victorian Congenital anomalies register (VCAR)

Legislative responsibility for health surveillance

- Mortality collections and review of perinatal, child and adolescent, and maternal mortality
- Morbidity collections: severe acute maternal morbidity (SAMM)

# **Undertaking case reviews**

Four subcommittees report to CCOPMM:

- Stillbirth Chair: Professor Susan McDonald
- Neonatal Mortality and Morbidity (0-27 days) Chair: Professor Rod Hunt
- Maternal Mortality and Morbidity Chair: Professor Mark Umstad
- Child and Adolescent Mortality and Morbidity (28 days-17 years) Chair: Professor Paul Monagle

#### **Undertaking research**

CCOPMM conducts research itself and also provides data for research purposes

CCOPMM identifies research priorities by:

- analysis of our reports, data and through case reviews
- collaborating with external research projects

# Why do we do what we do?

Independent oversight of all deaths and severe maternal morbidity

Highlight areas that require improvement – hospital and community

Highlight areas for further research

Inform the development of policies and guidelines

Provide advice on areas for prioritisation and investment

# **Trends and comparisons: Perinatal mortality**



### **Perinatal mortality**

- Includes fetal deaths (stillbirths) and deaths of live-born babies within the first 28 days after birth (neonatal deaths)
- Excludes terminations of pregnancy for psychosocial indications
  - 'adjusted' perinatal mortality:
  - provides a more accurate assessment of avoidable mortality and assists comparisons with other jurisdictions
- Detailed data for perinatal mortality can be found in the online supplementary tables

#### Births in 2019

women gave birth in 2019







78,954 babies were born in 2019











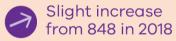






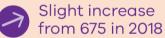
#### Perinatal deaths in 2019

860 perinatal deaths 2019

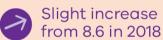




688 adjusted perinatal deaths 2019



8.7 per 1,000 births adjusted perinatal mortality rate 2019



31.7% of adjusted perinatal deaths in 2019 underwent an autopsy



Down from 35.5% in 2018

34.4% of stillbirths underwent an autopsy



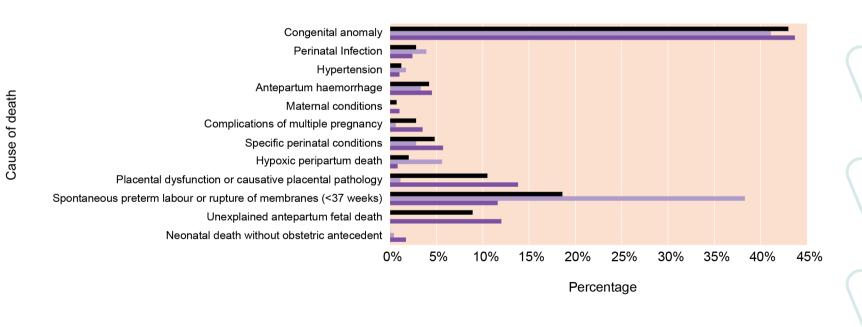
Down from 39.5% in 2018

23.9% of neonatal deaths underwent an autopsy



Down from 26% in 2018

Adjusted total perinatal deaths

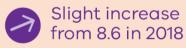


Neonatal deaths

Adjusted stillbirths

#### Perinatal mortality rates in 2019

8.7 per 1,000 births adjusted perinatal mortality rate 2019



**6.4** per 1,000 births adjusted stillbirth rate 2019 for babies born after 20 weeks' gestation



Compared with 6.0 per 1,000 in 2018

2.3 per 1,000 live births neonatal mortality rate 2019



Compared with 2.6 per 1,000 live births in 2018

#### **Smoking and outcomes in 2019**

**6,109** babies born to women who smoked at any time during their pregnancy in 2019. (7.7% of all adjusted births)



10.5 adjusted PMR per 1,000 births

47 stillbirths

17 neonatal deaths

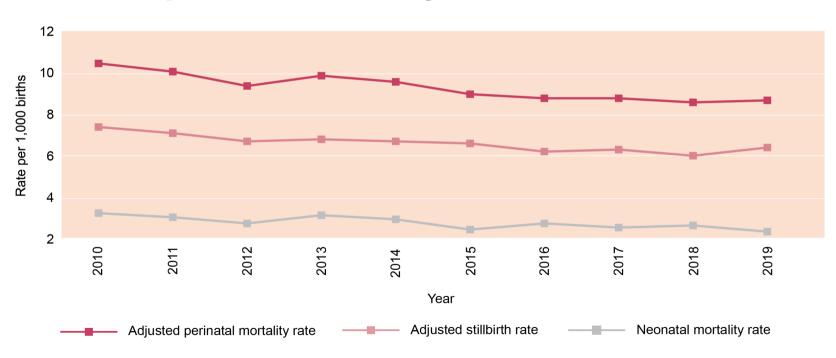
in women who smoked at any time during their pregnancy in 2019. 8.6
adjusted PMR
per 1,000 births

443 stillbirths

162 neonatal deaths

in women who did not smoke at any time during their pregnancy in 2019.

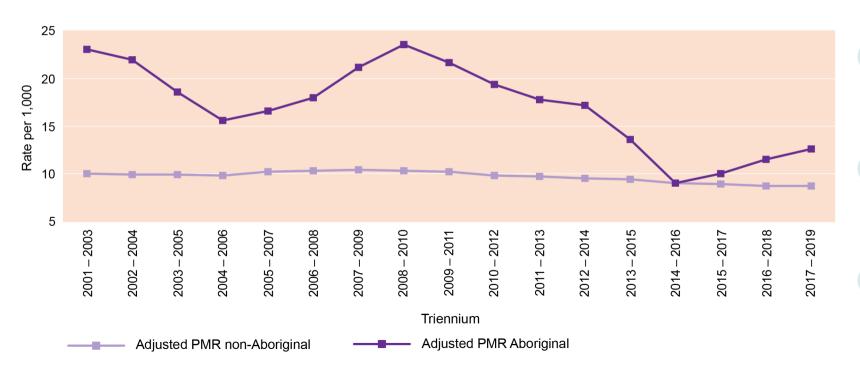
# Trends in perinatal mortality rates



# The gap: Aboriginal and Non-Aboriginal women

	Aboriginal women	Non-Aboriginal women
Perinatal Mortality Rate (PMR)	12.6 deaths per 1,000 births for 2017-2019 Compared with 11.5 in 2016-2018	8.7 deaths per 1,000 births for 2017-2019  Compared with 8.7 in 2016-2018
Stillbirth Mortality Rate	7.9 deaths per 1,000 births for 2017-2019 Compared with 7.1 in 2016-2018	deaths per 1,000 births for 2017-2019  Compared with 6.2 in 2016-2018
Neonatal Mortality Rate	4.7 per 1,000 live births for 2017-2019 Compared with 4.4 in 2016-2018	2.5 per 1,000 live births for 2017-2019 Compared with 2.6 in 2016-2018

# Perinatal mortality rate by Aboriginal status: Rolling triennia



#### **CCOPMM** recommendations: Perinatal



#### Recommendations

Maternity services must develop and regularly audit a **pathway that facilitates rapid access to an emergency operating theatre** 24/7 to prevent significant maternal or perinatal morbidity or mortality

For all Category 1 caesarean sections, services must record the time in which the decision was made to perform the caesarean section – to enable the accurate recording of the time taken from the 'decision to deliver' to the birth of the baby

#### Recommendations

Develop and implement a **formal time out process prior to every instrumental birth and emergency caesarean section**, whether in a birth room or in the operating theatre, to improve situational awareness and decision making about whether it is the right mode of birth, in the right location, with the right instrument/s, and the right clinical team in attendance

Develop and implement a **credentialing process for medical staff practising obstetrics** at all levels of training and experience who are undertaking instrumental births and complex caesarean sections

#### Recommendations

Formalise pathways for women to have timely access to specialist clinical consultations from a named tertiary (level 6) service for secondary and primary maternity services

Evaluate the effectiveness of current services in meeting the specific needs of women during pregnancy and in the year following birth. If gaps are identified, implement strategies to improve the health and wellbeing of women and families. The areas of mental health and family violence require specific focused attention



Good practice points reflect the findings of CCOPMM's review of all cases of maternal, perinatal and paediatric mortality, and severe acute maternal morbidity in a reporting year

They are designed to guide local improvements in clinical performance and can relate to our clinical care and/or the system or service we work in

Ensure **all staff** are upskilled in clinical management through PRactical Obstetric Multi-Professional Training (PROMPT) or alternative program to ensure clinicians are familiar with obstetric emergencies

Use your own clinical scenarios to routinely train staff

Use rare and high-risk emergencies in your training programs

**Monitoring - Twin to Twin Transfusion Syndrome** - In addition to growth and amniotic fluid assessment every 2 weeks from 16 weeks, **include** umbilical artery and mid cerebral artery (MCA) Dopplers from 20 weeks' gestation

If there is growth discordance or amniotic fluid level discordance, **include** assessment of the ductus venosus (DV) flow

Important component of the staging for twin to twin syndrome

The judicious, or non-use, of oxytocin infusion for augmentation of a multiparous woman who fails to progress in labour is recommended

To prevent significant maternal or perinatal morbidity or mortality, maternity services must have clear **pathways in place** that facilitate **timely access to an emergency theatre** 

Rapid access must be available where there is an immediate threat to life of a mother and/or baby – e.g. code green/category 1 caesarean section, management of uterine rupture, management of antepartum heamorrhage

These pathways need to be **audited** to monitor rapid access in services 24/7

Clear handover of care must occur between health services when transferring women during pregnancy

This **must be initiated** by the service/care provider initiating the transfer

This will remove the onus on women especially when they are vulnerable or at a late gestation in pregnancy

Women choosing to undergo prenatal testing with cell-free DNA testing should be offered an ultrasound at 11 to 13+6 weeks' gestation to assess early fetal structural development

Strengthen your service's relationships with maternal and child health nurse (MCHN) services - to ensure there is support for women that have complex psychosocial history and/or a history of catastrophic episodes

Ensure effective connection and handover to MCHNs



#### For more information

www.bettersafercare.vic.gov.au/publications/victorias-mothers-babies-and-children-2019

Refer to CCOPMM's other slide packs on:

- Mothers and babies
- Maternal mortality and morbidity
- Child and adolescent mortality
- 2019 recommendations

#### Connect with us



www.bettersafercare.vic.gov.au



tanya.farrell@safercare.vic.gov.au



@safercarevic @TanyaFarrell13



Safer Care Victoria