Consultative Council on Obstetric and Paediatric Mortality and Morbidity

Safer Care Victoria

Victoria's mothers, babies and children 2021

Maternal Mortality and Morbidity

About CCOPMM

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

Chair: Professor Mark Umstad AM

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

CCOPMM has four subcommittees that undertake case reviews and report to CCOPMM.

- **Stillbirth** – Chair: Professor Susan McDonald
- **Neonatal** (0-27 days) – Chair: Professor Rod Hunt
- **Maternal**– Chair: Assoc. Prof. Glyn Teale
- **Child and Adolescent** (28 days-17 years) –
  Chair: Adjunct Clinical Associate Professor Rob Roseby

Undertaking research

CCOPMM conducts research itself and provides data for research purposes. The CCOPMM **Research and Reporting** subcommittee leads this work **-** Chair: Professor Caroline Homer.

CCOPMM identifies research priorities by:

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

Why 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

Maternal mortality and morbidity

Maternal mortality and morbidity

Include:

- All maternal deaths during pregnancy and within a year of birth
- All intensive care unit (ICU) admissions during pregnancy and up to 42 days after birth or pregnancy end.

Maternal mortality and morbidity

Maternal deaths occurring during pregnancy or within 42 days of the end of pregnancy are classified as:

- **Direct** – relating to the pregnancy or birth
- **Indirect** – relating to a pre-existing medical condition or newly diagnosed condition
- **Coincidental** – unrelated to the pregnancy or birth

Maternal deaths occurring after 42 days following pregnancy and up to one year post birth are classified as **late.**

Maternal mortality ratio (MMR)

The incidence of maternal deaths is expressed as the maternal mortality ratio (MMR), which is calculated using direct and indirect deaths combined, and excludes coincidental deaths (AIHW).

This includes direct and indirect deaths that occur during pregnancy or within 42 days of the end of pregnancy.

Severe Acute Maternal Morbidity (SAMM)

SAMM is measured as an admission to an ICU during pregnancy and up to 42 days after birth.

The criteria for ICU admission may vary across hospitals, and not all maternity services in Victoria have direct access to an ICU.

Trends and comparisons

Births in 2021

80,322 women gave birth in 2021

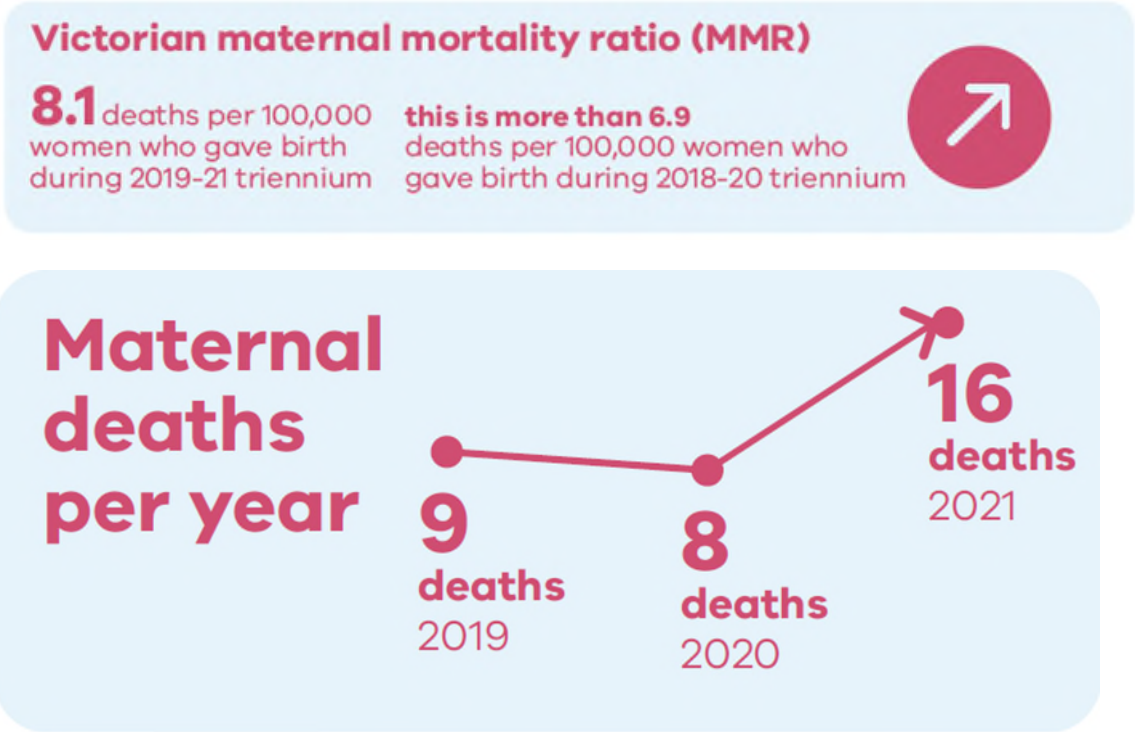
4,452 more than 2020

81,434 babies were born in 2021

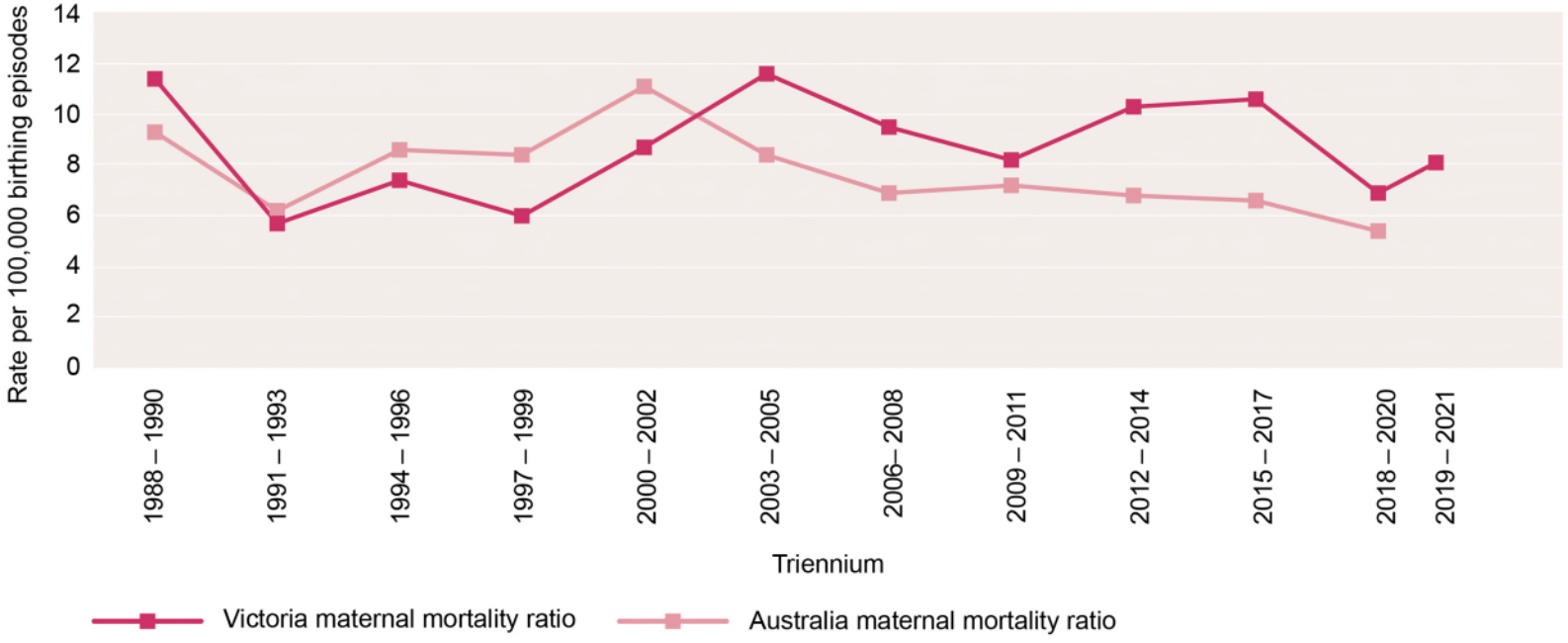
4,444 more than 2020

birthrate increased to 60.2 livebirths per 1,000 EFRP

Maternal mortality: 2019 to 2021

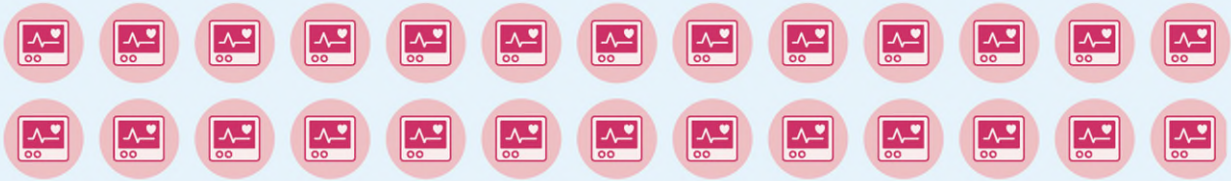


Maternal mortality ratios: Rolling triennia



Severe Acute Maternal Morbidity (SAMM) in 2021

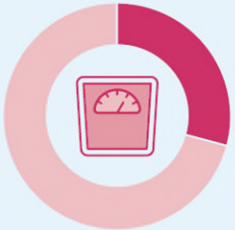
259
women were **admitted to an ICU with SAMM**



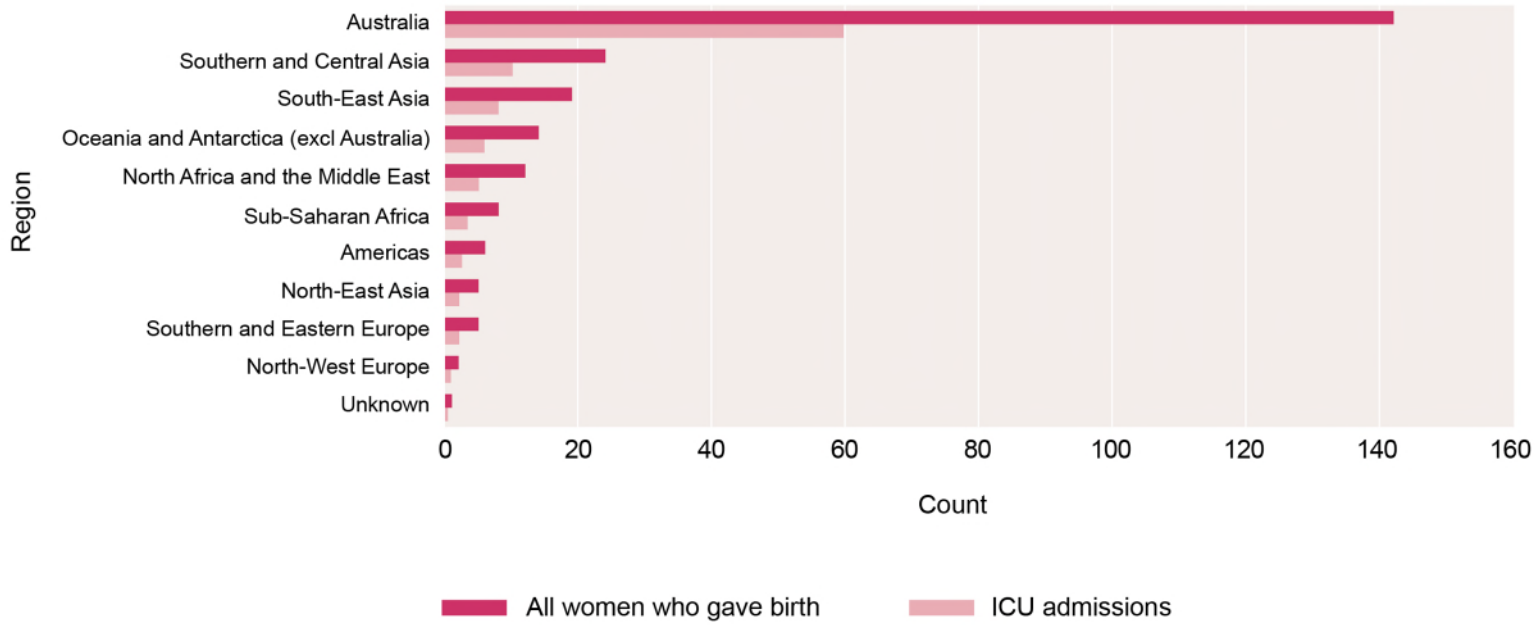
Of these 259 women
39.9% (95)
were born overseas

Of these 259 women
3.4% (8)
were Aboriginal

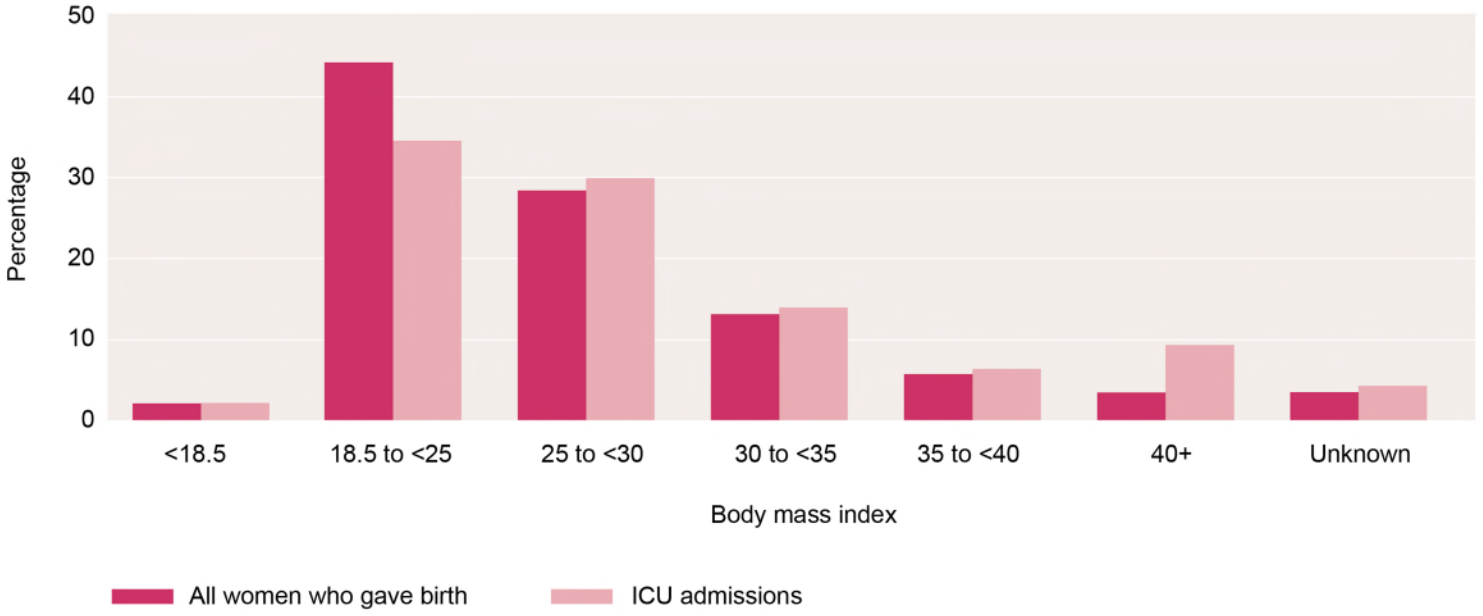
Of these 259 women
29.4% (70)
had a BMI of 30 or higher



Proportion of maternal ICU admissions by region of birth compared with all women who gave birth, 2021

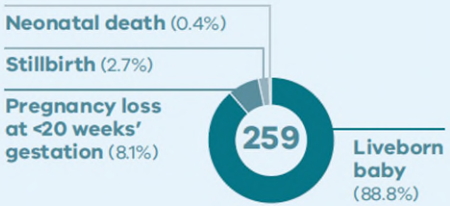


Proportion of maternal ICU admissions by BMI categories compared with all women who gave birth, 2021

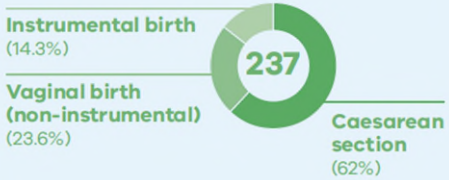


Birth Outcomes (SAMM cases) in 2021

SAMM cases
(birth outcomes)



SAMM cases
(Of the babies born ≥20 weeks' gestation)



Of these 237 births

35.5% were pre-term (<37 weeks' gestation)

64.5% born at or after 37 weeks' gestation

Of these 167 births at ≥ 37 weeks' gestation

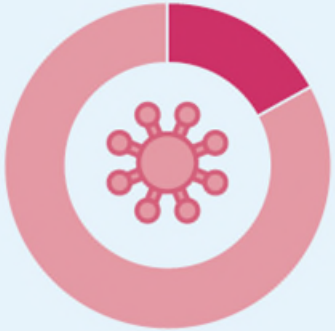
6.6% of babies **were born under the 10th percentile**

Covid-19 (SAMM cases) in 2021

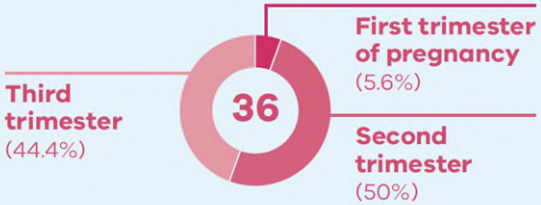
Of the 259 SAMM cases

17%

had COVID-19



COVID-19 ICU admissions during pregnancy



The remainder of women were admitted during the postpartum period.

Of the 44 women admitted to ICU with COVID-19

95.5% (42)

were unvaccinated

The remaining two women had partial (<2) COVID-19 vaccinations at the time of ICU admission.

13.6%

had a pre-term birth

(<37 weeks' gestation)

CCOPMM Recommandation: Maternal

Support Health Literacy and Shared Decision-Making Capability

Expectant mothers should be provided with the tools required to make informed decisions about their own care. CCOPMM recommendations have previously focused on improving the functioning of the healthcare system. It is essential to recognise the importance of health care literacy on the outcomes of expectant mothers and families.

Good practice points

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.**

Good practice point 1

Where there is heavy vaginal bleeding in the presence of a miscarriage early surgical management should be initiated to reduce the likelihood of clinical deterioration and the need for blood transfusion.

Good practice point 2

All women admitted with a pregnancy complication or readmitted in the postnatal period are reviewed by a senior clinician within 24 hours of admission.

Good practice point 3

Expand the use of multidisciplinary simulation training to improve the management of epidural complications including maternal collapse and maternal deterioration from sepsis.

Good practice point 4

The care of all women with suspected or confirmed mid-trimester preterm premature rupture of membranes (PPROM) at the limits of viability should involve a senior obstetric clinician. Where there is consideration of terminating a pregnancy, timely multidisciplinary discussion is recommended.

Good practice point 5

The Maternal subcommittee recommend that all women meeting criteria for severe acute maternal morbidity (SAMM) reporting are reviewed internally by the health facility to identify learning opportunities. This review is shared within 3 months with the Maternal subcommittee.

For more information

https://www.safercare.vic.gov.au/reports-and-publications/victorias-mothers-babies-and-children-2021-report-and-presentations

Refer to CCOPMM's other slide packs on:

- Mothers and babies
- Maternal mortality and morbidity
- Perinatal mortality
- 2020 recommendations

Connect with us

https://www.safercare.vic.gov.au/about/ccopmm,

ccopmm@safercare.vic.gov.au

@safercarevic

Safer Care Victoria