Australian Government
Australian Institute of Health and Welfare

Perinatal mental health screening in Australia

Web report | Last updated: **15 Nov 2024** | Topic: Mothers & babies

About

National guidelines recommend that all women are screened for signs and risk factors of mental health conditions during the perinatal period. This report brings together the latest perinatal mental health screening data in 2022 from 4 state and territory health authorities and how these vary by maternal characteristics and behaviours, birth settings, and birth outcomes. For the first time, analysis of models of care provided to women in Queensland and detailed antenatal mental health and family violence risk factor screening data from New South Wales public health services are presented. Further, it describes how efforts to improve reporting and targeted initiatives that improve outcomes for mothers and their families may be possible through data development and integration opportunities.

Cat. no: PER 124

Findings from this report:

- Currently, there are no national data about perinatal mental health screening, service use or outcomes
- State and territories are continuing to make progress to implement perinatal mental health screening data items
- At least 7 in 10 women who gave birth in Qld, Tas and the ACT in 2022 received mental health screening during pregnancy
- Women are more likely to be screened if they are under 25, are First Nations women or give birth in a public hospital

Summary

For many women, having a baby is an exciting time. But for some, pregnancy and the first year of their baby's life (together known as the perinatal period) can be a challenging experience. While it's normal to sometimes experience ups and downs due to the challenges of adjusting to parenthood, having a perinatal mental health condition is different – it is more severe and will usually not improve without treatment.

Mental health conditions during the perinatal period are common, affecting an estimated 1 in 5 mothers and can have serious effects on the health and wellbeing of women, their babies and families. Depression and anxiety are common perinatal mental health conditions experienced during the perinatal period with impacts ranging from mild to severe. In 2019, these 2 conditions are estimated to have cost Australia $877 million from increased health care costs associated with increased service use, and productivity losses from reduced economic participation (Highet et al. 2023; PwC Consulting Australia 2019). Other severe mental health conditions, such as schizophrenia and bipolar disorder, are less common but have high comorbidity with other mental health conditions and are associated with a range of adverse outcomes (Highet et al. 2023).

National guidelines recommend that all women are screened for signs, symptoms and risk factors of mental health conditions during the perinatal period, to help ensure women receive timely support and treatment (Highet et al. 2023). However, there are currently no national data about perinatal mental health screening, service use or outcomes.

Perinatal mental health screening involves a range of health services, government and non-government organisations. State and territory health departments have an important strategic role in developing policies and guidelines relating to perinatal mental health assessment and treatment, these may be implemented differently within individual health services responsible for conducting screening. Opportunities to conduct perinatal mental health screening depend on the type and timing of maternity services accessed during the course of a mother's pregnancy.

Data about the mental health of parents in the perinatal period are collected by a range of health services, government and non-government organisations mostly as a by-product of delivering maternity services. This information is not collected consistently across Australia, with differences in how, when and if screening occurs. Previous research indicates that the proportion of mothers receiving mental health screening has increased over time but has highlighted particular cohorts that have been underrepresented, such as Aboriginal and Torres Strait Islander (First Nations) women, women born overseas, single or separated women, private patients and older mothers (Moss et al. 2020; San Martin Porter et al. 2019).

This report focuses on perinatal mental health screening, including whether screening occurred and identified risk factors, for 4 state and territory health authorities and explores how these vary by maternal characteristics and behaviours, birth settings, care types and birth outcomes. This includes, for the first time, analysis of models of care provided to women in Queensland and detailed antenatal mental health and family violence risk factor screening data from New South Wales public health services. It also describes efforts to improve data collection and reporting to build a national picture about perinatal mental health screening that can inform the development and evaluation of policies, services and initiatives to better support mothers and their families.

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What is perinatal mental health?

On this page:

Perinatal mental health generally refers to the social and emotional wellbeing of a woman from the time of conception through to the baby turning 12 months old.

> A perinatal mental health diagnosis is different from the 'baby blues', which occurs for approximately 80% of women between 3 and 5 days after birth. The baby blues can leave women feeling very distressed and/or emotional in the early days following the birth but will normally disappear within a few days without treatment, however, ongoing symptoms may be a sign of a mental health condition (COPE 2021).

Mental health conditions are the leading cause of disease burden in Australian women of child-bearing age (15 to 44 years) (AIHW 2022b), with the perinatal period considered to be a time of increased risk. Perinatal mental health conditions are those that present symptomatically as they would at other times of a woman's life (including depressive and anxiety disorders, schizophrenia, bipolar disorder and borderline personality disorder), in addition to perinatal period-specific disorders such as psychological birth trauma and postpartum psychosis (Highet et al. 2023). Many women experience changes in their mental health during this period – women with a current or previous mental health condition may be at increased risk of worsening symptoms or relapse, while other women may experience symptoms for the first time (Highet et al. 2023).

Effect of poor perinatal mental health on mothers and babies

Poor perinatal mental health has a significant impact on the woman and can also have a long-term impact on her baby. Mental health conditions during pregnancy have been associated with adverse obstetric and pregnancy outcomes, such as premature birth, independent of mental health-related medication use (Adane et al. 2021; Jarde et al. 2016; Mitchell and Goodman 2018). Perinatal mental health conditions are also associated with poorer child and adolescent development, including increased risk of poorer cognitive development, emotional problems and externalising behavioural difficulties (such as attention deficit hyperactivity disorder) (Rogers et al. 2020; Slomain et al. 2019; Stein et al. 2014). The relationship between having a perinatal mental health condition and the long-term outcomes for the baby is complicated, and may be due to a mix of genetic, epigenetic (how environmental influences and experiences affect a person's genes) and environmental factors, including through effects on parenting practices and mother-infant attachment (Rogers et al. 2020; Slomain et al. 2019; Stein et al. 2014).

Key risk and protective factors

Key risk factors for developing a perinatal mental health condition include a history of mental illness, history of abuse or intimate partner violence, limited social support and lower socioeconomic status (Bayrampour et al. 2018; Bedaso et al. 2021; Míguez and Vázquez 2021; Yang et al. 2022). Other risk factors may include poor sleep quality (Ladyman et al. 2021) and experiencing psychological childbirth-related trauma (Ayers et al. 2016; Kranenburg et al. 2023; Loxton et al. 2021). Conversely, factors such as personal resilience, positive childhood experiences and social support have a protective effect against perinatal mental health conditions and can mitigate the effects of some risk factors (Atzl et al. 2019; Carlin et al. 2021).

How common are perinatal mental health conditions?

Anxiety disorders are the most common mental health conditions in the perinatal period, with prevalence estimates ranging from around 10% to 20% of mothers (Dennis et al. 2017; Fawcett et al. 2019), and this often co-occurs with depression (Falah-Hassani et al. 2017). It is estimated that perinatal depression affects around 10% of mothers in high-income countries, and that prevalence is considerably higher in low- and middle-income countries (Woody et al. 2017). Research indicates rates of depression and/or anxiety tend to be higher during pregnancy compared with the first year after birth, and that having depression or anxiety during pregnancy is associated with postnatal depression and anxiety (Dennis et al. 2017; Liu et al. 2021; Underwood et al. 2016). It is estimated that childbirth-related post-traumatic stress disorder (PTSD) affects from 3% to 6% of mothers (Heyne et al. 2022).

Mental health conditions such as schizophrenia, postpartum psychosis (which includes symptoms such as hallucinations, delusions, mood swings, confusion and changes in behaviour), and bipolar disorder are less common but can have a significant impact on the health and wellbeing of women and families (Jones et al. 2014; Masters et al. 2022; VanderKruik et al. 2017).

Fathers and other parents

Traditionally, the focus of perinatal mental health research has been on the mother who gave birth. However, there is increasing evidence that fathers, partners and other non-birthing parents or guardians, such as adoptive parents and step-parents, can also be affected by poor mental health during the perinatal period, experiencing perinatal depression and depressive symptoms, anxiety disorders, and suicidal thoughts (Anthony et al. 2019; Cameron et al. 2016; Chhabra et al. 2020; Darwin et al. 2021; Giallo et al. 2023; Leach et al. 2016; Mott et al. 2011).

Whilst there is less research available on paternal perinatal mental health, it is estimated that around 1 in 10 expecting or new fathers experience perinatal anxiety and/or depression (PANDA 2020; Giallo et al. 2012; Chhabra et al. 2020; Philpott et al. 2019). A recent review of paternal mental health research estimated similar rates of paternal anxiety (11%) and depression (7.3%), observing that many men experience anxiety throughout the perinatal period, starting as early as the first trimester (Leiferman et al. 2021).

The National Perinatal Mental Health Guideline covers important areas of screening and psychosocial assessment not only for women, but also recommends offering mental health screening to non-birthing parents during both the antenatal and postnatal periods (Highet et al. 2023).

For more information, see Key information gaps.

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Perinatal mental health and psychosocial screening

Health care is provided in many ways during and after pregnancy, depending on the woman's health care needs, personal preference, individual circumstances and where they live. Settings include public hospitals, private hospitals, antenatal clinics, maternal and child health services, local primary health care services, Aboriginal Community Controlled Health Services and outreach home visits.

Perinatal mental health and psychosocial screening involves asking women a series of questions about their current and past emotional and social wellbeing, to detect signs, symptoms and risk factors for having or developing a mental health condition. This can be done as part of routine pregnancy (antenatal or prenatal) and postnatal care by midwives, obstetricians, and other health care providers. Opportunities to conduct perinatal mental health screening vary depending on the type and timing of maternal services during the woman's pregnancy.

Perinatal mental health screening is an important tool to identify at-risk women who may benefit from further support and formal mental health assessment. Perinatal mental health conditions are underdiagnosed during routine pregnancy care without routine screening (Willey et al. 2020).

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When are women screened?

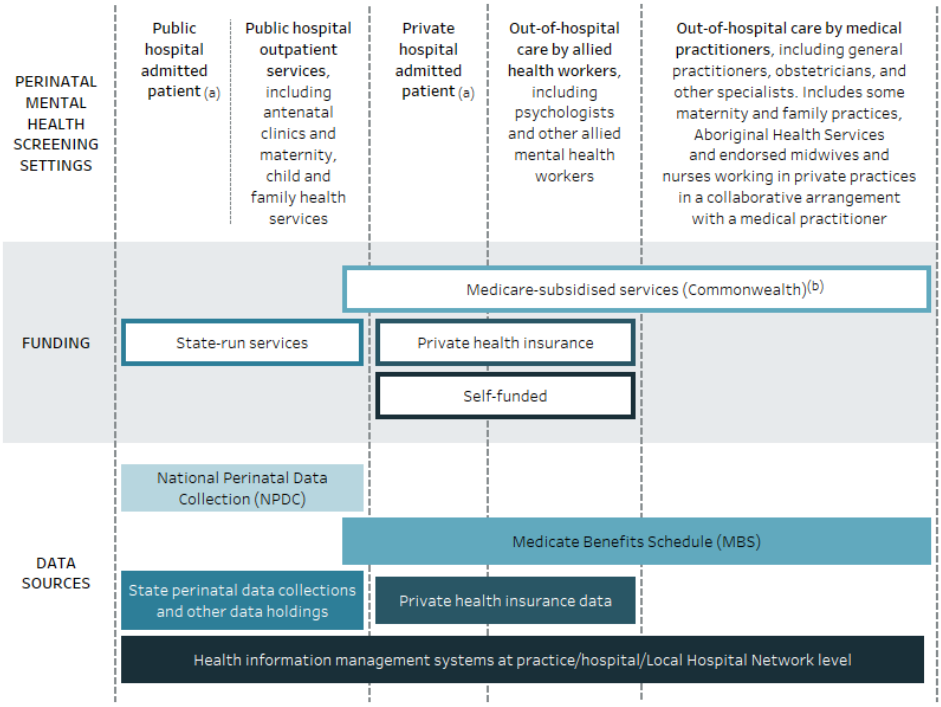
National guidelines recommend all women are routinely screened for depression and psychosocial risk factors at least twice during pregnancy and twice during the first year after birth (Highet et al. 2023).

In practice, women may not be routinely screened, or may be screened multiple times across a range antenatal and postnatal mental health settings (Figure 1). While there are national guidelines, there are differences across state and territories and health settings in how, when and if women are screened for perinatal mental health and psychosocial risk factors.

Although perinatal mental health screening has increased over time, research indicates that some groups have historically been under-represented including First Nations women, women born overseas, single or separated women, private patients and older mothers (Moss et al. 2020; San Martin Porter et al. 2019).

Figure 1: Services where women may be offered perinatal mental health screening, noting potential data sources and funding sources

See extended description



Notes:

a. Hospital admission includes admissions related to pregnancy and childbirth, as well as specialised mental health inpatient services. Local referral pathways may exist to ensure the mother receives appropriate care including screening at the right time. Screening for mental health risk factors, for example with the Edinburgh Postnatal Depression Scale (EPDS), may not be needed in these circumstances due to other processes being in place to assess the patient's mental health.
b. In 2021–22, 11% of all outpatient (non-admitted) service events in public hospitals were covered by the MBS.

Extended description for Figure 1

Perinatal mental health screening settings

Perinatal mental health screening settings include:

- public hospital admitted patient[(a)]
- public hospital outpatient services, including antenatal clinics and maternity, child and family health services
- private hospital admitted patient[(a)]

- out-of-hospital care by allied health workers, including psychologists and other allied mental health workers
- out-of-hospital care by medical practitioners, including general practitioners, obstetricians, and other specialists. Includes some maternity and family practices, Aboriginal Health Services and endorsed midwives and nurses working in private practices in a collaborative arrangement with a medical practitioner.

Funding

- State funding covers public admitted patient and outpatient services.
- Medicare subsidised services include out-of-hospital care by medical practitioners, and some public outpatient services, private hospital services and out-of-hospital care provided by allied health workers[(b)].
- Private health insurance funds some private hospital care, and out-of-hospital care provided by allied health workers.
- Some private hospital care, and out-of-hospital care provided by allied health workers is funded by the patient.

Data sources

Potential data sources include:

- the NPDC for public hospital settings
- State and territory perinatal data holdings for state funded services
- The Medicare Benefits Schedule (MBS) for MBS subsidised services
- Private health insurance data for services funded by private health insurance
- And local hospital network/hospital/practice level health information management systems (HIMS).

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Tools for perinatal mental health and psychosocial screening

Screening may take the form of a questionnaire with defined response options or may comprise of open-ended questions discussed with a health care provider. Screening is usually undertaken using pen and paper and more recently through digital tools such as the iCOPE digital perinatal mental health screening platform.

The iCOPE screening platform - external site opens in new window, developed by the Centre of Perinatal Excellent (COPE), includes the questions from the Edinburgh Postnatal Depression Scale (EPDS) and Antenatal Risk Questionnaire (ANRQ) and enables automated clinical scoring; it delivers timely reports to clinicians and patient record systems.

Mental health and psychosocial screening tools that have been validated are perceived as credible by health professionals, provide a framework for initiating conversations with mothers about sensitive topics and improve diagnosis and timely access to care (Willey et al. 2020). There are several established and validated screening tools that are recommended by the Australian clinical practice guidelines for mental health care in the perinatal period (National guideline) (Highet et al. 2023), which are routinely offered to women during pregnancy and in the postnatal period in Australia and aim to detect different aspects of mental health and psychosocial risk:

Depression risk

Depression risk is most commonly screened for using the Edinburgh Postnatal Depression Scale (EPDS) but may also be screened for using other tools such as the depression module of the Patient Health Questionnaire (PHQ-9), the Whooley Questions, the Kessler Psychological Distress Scale (K-10) and the Depression, Anxiety and Stress Scale (DASS). Perinatal mental health screening tools specific for First Nations women have also been developed including Part 1 of the Kimberley Mum's Mood Scale - external site opens in new window (KMMS), Baby Coming You Ready? - external site opens in new window (BCYR) and the Mount Isa Depression Scale.

Psychosocial risk

Psychosocial risk factor screening is commonly conducted using the Antenatal/ Postnatal Risk Questionnaire (ANRQ/PNRQ) or Safe Start psychosocial questions. (See Safe Start Guidelines: Improving Mental Health Outcomes for Parents & Infants - external site opens in new window) Other tools include the ANRQ-Revised (ANRQ-R) (Reilly et al. 2021), Part 2 of the KMMS and BCYR. These screening tools ask about a range of psychosocial risk factors, including the mother's mental health history, social support system and if they are experiencing or have ever experienced abuse or family violence.

Note – Family violence is a psychosocial risk factor that is not specifically asked by the ANRQ. To bridge this gap, the iCOPE screening platform, which includes the ANRQ, asks additional questions relating to perceptions of safety, and problems with drugs and alcohol within the relationship.

Anxiety risk

Anxiety risk is commonly determined through the anxiety-related items in the depression and psychosocial risk factor screening tool used. The Generalised Anxiety Disorder 7-Item Scale (GAD-7) may also be used.

Protective factors

Exploring and amplifying strengths and protective factors raised by a person may be a more effective way to promote mental health, rather than trying to reduce risk factors (KMMS 2023). For example, social support has been found to play a role in protecting against perinatal depression (Milgrom et al. 2019) and childbirth-related post-traumatic stress disorder (PTSD) (Ayers et al. 2016). Current research in Queensland is exploring the role of protective factors and potential benefits of their inclusion in perinatal mental health screening tools such as the iCOPE screening platform.

Things to consider

It should be noted that scoring high on a perinatal mental health screening tool does not represent a diagnosis.

Clinical screening tools allow health care providers to gather information about a patient to identify potential risk factors, and enable clinical decision-making to provide support, formal mental health assessment and referral.

Risk factors may be identified:

- by specific item(s) in the tool – for example, answering 'Yes' to the Antenatal Risk Questionnaire (ANRQ) question 'Have you ever been sexually or physically abused?' identifies a *history of abuse*.
- by a combination of items in the tool – for example, responses to items in the Edinburgh Postnatal Depression Scale (EPDS) are scored from zero to 3, and a combined score of 5 or higher for the items 'I have blamed myself unnecessarily when things went wrong,' 'I have been anxious or worried for no good reason,' and 'I have felt scared or panicky for no very good reason,' identifies a risk of anxiety.
- by overall score – for example, a total score for all items in the EPDS of 13 or higher identifies a risk of depression.
- by more than one tool – for example, both the ANRQ and EPDS have items that may identify a risk of anxiety.

Refer to the Glossary for more information about terms and clinical tools. This report focuses on mental health and psychosocial risk factor screening, which can also include screening for family violence. For more information about family violence data see *Family, domestic and sexual violence: National data landscape 2022*.

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Perinatal mental health screening and identifying risk of suicide and intentional self-harm

Suicide and intentional self-harm are complex issues and can have multiple contributing factors. Screening for mental and psychosocial risk factors plays an important role in providing timely support, further assessment and follow-up for women. In a study of women giving birth in Western Sydney between 2006 and 2016, women reporting intimate partner violence at their first antenatal care visit were more likely to have an Edinburgh Postnatal Depression Scale (EPDS) score above 13, to have had a history of anxiety and depression, or to have had thoughts of self-harm (Dahlen et al. 2018). Further assessment is recommended for any women who report thoughts of self-harm on the EPDS, regardless of total EPDS score (Highet et al. 2023). Experiencing one or more psychosocial risk factors does not mean a person will experience suicidal behaviours, and most people experiencing psychosocial risk factors will not experience suicidal behaviours (AIHW 2023).

While most individuals with a mental health condition do not report suicidal behaviours, suicidality is more prevalent for people with a mental health condition compared to those without (AIHW 2022c). In the 2007 National Survey of Mental Health and Wellbeing, almost 3 in 4 people exhibiting suicidality (72%) reported a mental health condition in the preceding 12 months (ABS 2008). Research indicates that individuals with a diagnosed mental illness such as borderline personality disorder, psychotic disorders and severe perinatal depression are at increased risk of suicidality and intentional self-harm (Cantwell et al. 2011; Kroger et al. 2011).

Death by suicide was the leading cause of death for women in Australia aged 15–44 between 2011 and 2023 (ABS 2013, 2014, 2015, 2016a, 2016b, 2017, 2018b, 2019, 2020, 2021b, 2022, 2023, 2024). Death by suicide was one of the leading causes of maternal death in Australia, accounting for 10% of maternal deaths (20 women) between 2012 and 2021 (AIHW 2024). Maternal death is defined as the death of a woman while pregnant or within 42 days of the end of pregnancy, irrespective of the duration and outcome of the pregnancy.

Research indicates the risk of death by suicide may be even higher between 43 and 365 days after the end of pregnancy. In Queensland between 2014 and 2019, 31 of the 130 deaths during pregnancy and up to one year postpartum (24%) were by suicide of which 27 (87%) occurred after 42 days postpartum (Queensland Health 2018, 2020, 2022).

Mental health screening is a critical tool for the early identification of women at risk of suicide, and can reduce the risk of perinatal suicide if supported by strong referral pathways that connect at-risk mothers to accessible mental health care and support (Chin et al. 2022).

For further information see: Australia's mothers and babies: Maternal deaths and Suicide & self-harm monitoring, and refer to the Glossary for more information about terms used.

Where to find help and support

If you or someone you know needs help, contact:

- Lifeline - external site opens in new window on 13 11 14
  - Text (SMS) 0477 13 11 14
  - Online chat - external site opens in new window
- Perinatal Anxiety & Depression Australia (PANDA) - external site opens in new window National Helpline on 1300 726 306
- Suicide Call Back Service - external site opens in new window on 1300 659 467
- Mindframe is a national program supporting safe media coverage and communication about suicide, mental ill health and alcohol and other drugs. Resources to support reporting and professional communication are available on Mindframe - external site opens in new window.

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Available treatment and support services

Data and discussion about the availability and efficacy of treatment and support services are out of scope for this report but a useful report to refer to is the Australian Institute of Health and Welfare's (AIHW) Resources for supporting psychosocial health in pregnancy for details of clinical guidelines, screening tools and information about services for supporting psychosocial health during pregnancy. There are also a range of treatment and support services provided by private providers like general practitioners (GP), as well as Primary Health Networks (PHN), state and territory government agencies, and non-government organisations. Mothers may also receive support for mental health and psychosocial issues through more general crisis and support services.

Importance and availability of national perinatal mental health screening data

Consistent, nationally collected perinatal mental health screening data helps build the evidence about women's exposure to risk and protective factors, presentation patterns (before, during and after pregnancy), and health outcomes for mothers and babies across Australia. It enables targeted initiatives, service coordination and delivery, and further research and evaluation to ensure that women and families receive the care they need when they need it, particularly for priority population groups.

Mental health and family violence Perinatal National Best Endeavours Data Set items

The Australian Institute of Health and Welfare (AIHW) started investigating the feasibility of including antenatal mental health and family violence screening data in the National Perinatal Data Collection (NPDC) in 2010. The NPDC includes the Perinatal National Minimum Data Set (NMDS), a collection of mandatory data items that state and territory health authorities have agreed to supply, and the Perinatal National Best Endeavours Data Set (NBEDS), a collection of data items that are not mandated for national collection but for which there is a commitment to provide data nationally on a best endeavours basis. Several antenatal mental health and family violence data items were developed and refined in consultation with subject matter and data experts between 2013 and 2019. Voluntary implementation of the following 4 mental health and family violence data items commenced July 2020 through the Perinatal NBEDS 2020–21 - external site opens in new window:

1. Antenatal mental health risk screening status (Metadata Online Registry (METEOR) identifier 733468 - external site opens in new window)
2. Indication of possible symptoms of depression at an antenatal care visit, Edinburgh Postnatal Depression Scale (EPDS) score (METEOR identifier 704384 - external site opens in new window)
3. Presence or history of mental health condition indicator (METEOR identifier 622450 - external site opens in new window)
4. Family violence screening status (METEOR identifier 733542 - external site opens in new window).

State and territory health authorities are working to implement the four voluntary mental health and family violence Perinatal NBEDS items into their perinatal data collections, and the AIHW is working with them to refine specifications (where required) and progress the items to the mandatory Perinatal NMDS. Data about the postnatal period after discharge are out of scope for the NPDC.

Perinatal Mental Health pilot

The AIHW is working with state and territory health authorities to develop the Perinatal Mental Health pilot (PMHp), a novel collection of de-identified screening data from public antenatal and postnatal maternity health services. This project is piloting the collection of de-identified clinical data for research purposes in a faster way, compared to traditional data flow pathways, by collecting data through a range of sources. These include existing perinatal mental health data supplied directly from state and territory health authorities, and data collected from participating public maternity services using the Centre of Perinatal Excellence's (COPE) iCOPE screening platform. The iCOPE platform includes questions from the EPDS, Antenatal Risk Questionnaire (ANRQ) and other screening tools and facilitates automated clinical scoring and consistent data collection.

The PMHp is being established as Local Hospital Networks (LHNs) and state and territory health authorities confirm their interest to participate. The PMHp aims to complement and potentially support the refinement of the NPDC, by collecting data that is currently out of scope for the NPDC.

Initial findings from Queensland, Tasmania and the ACT

Initial findings from Queensland, Tasmania and the Australian Capital Territory

This section describes initial insights from the implementation of data collection on mental health and family violence screening in Australia.

Mental health and family violence Perinatal National Best Endeavours Data Set items

Queensland, Western Australia, Tasmania and the Australian Capital Territory (ACT) supplied antenatal mental health and family violence screening data for the 2020, 2021 and 2022 birth cohorts. The ACT's data for the 2022 birth cohort consists of their 2022 data for January to October, supplemented by their 2021 data for November and December.

For further information on the mental health and family violence data items supplied by Victoria, Queensland, Western Australia, Tasmania and the ACT, refer to Table 3 in the Technical notes.

For further information regarding Perinatal National Best Endeavours Data Set (NBEDS), refer to Mental health and family violence Perinatal NBEDS.

This section focuses on antenatal Edinburgh Postnatal Depression Scale (EPDS) screening status and score for the state and territory health authorities that contributed data for these items (Queensland, Tasmania and the ACT):

- *Antenatal mental health risk screening status* (Yes, Not offered, Declined)
- *Indication of possible symptoms of depression at an antenatal care visit (total EPDS score)*.

Analysis has not been presented for the following data items:

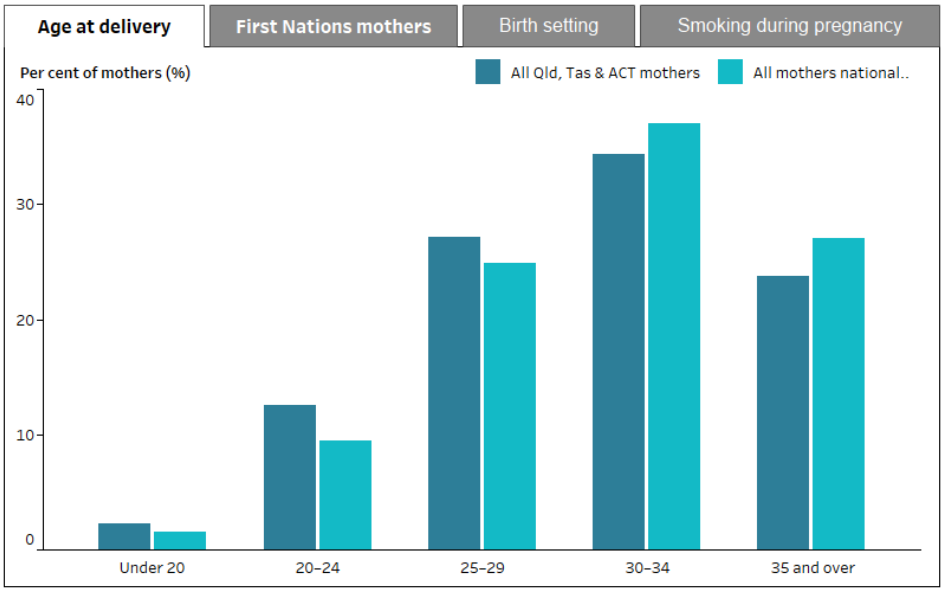
- *Presence or history of mental health condition indicator* (Yes, No) – due to high levels of variation between state and territory health authorities and health services in the criteria used to record the data item. Standardising how data are collected for this item would improve its reliability as an indicator and enable further analysis
- *Family violence screening status* (Yes, Not offered, Declined) – due to the small number of state and territory health authorities currently providing data for this data item.

Care should be taken when interpreting these findings as, due to differences between mothers who gave birth in Queensland, Tasmania and the ACT compared to all mothers nationally.

Mothers giving birth in Queensland, Tasmania and the ACT in 2022 tended to be younger, were more likely to be First Nations mothers, and were more likely to have smoked during their pregnancy compared to all mothers nationally (Figure 2).

Figure 2: Maternal and birth characteristics of mothers who gave birth in Queensland, Tasmania and the ACT and all mothers nationally, 2022

Mothers giving birth in Queensland, Tasmania and the ACT in 2022 tended to be younger, were more likely to be First Nations mothers, and were more likely to have smoked during their pregnancy compared to all mothers nationally.



Source: AIHW Analysis of the NPDC 2022

Detailed information on completeness, accuracy and other aspects of data quality for the NPDC is in the data quality statement - external site opens in new window. Additional detail about the NPDC is in the Availability of perinatal data.

The Australian Institute of Health and Welfare (AIHW) continues to engage and consult with technical and subject matter experts from state and territory health authorities to determine next steps to improve the consistent collection of these data items. See Data opportunities for more information.

Detailed information on completeness, accuracy and other aspects of data quality for the NPDC is in the data quality statement - external site opens in new window. Additional detail about the NPDC is in the Availability of perinatal data.

The Australian Institute of Health and Welfare (AIHW) continues to engage and consult with technical and subject matter experts from state and territory health authorities to determine next steps to improve the consistent collection of these data items. See Data opportunities for more information.

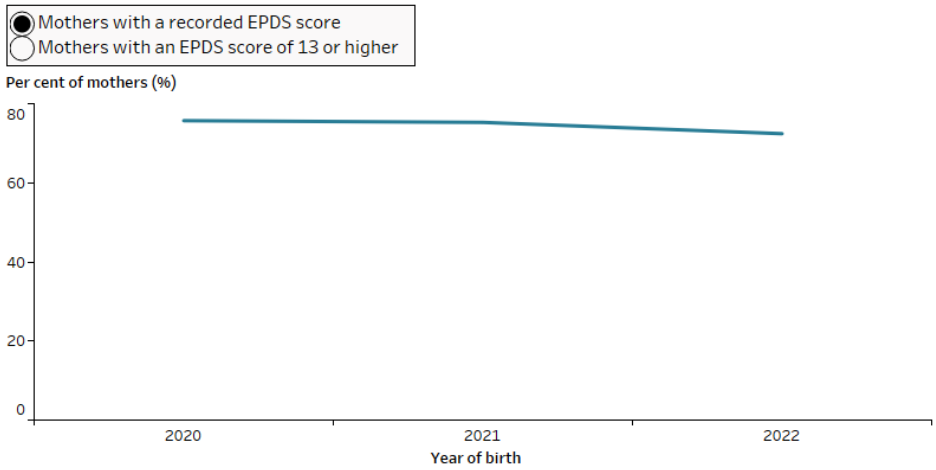
Characteristics of mothers getting screened across Queensland, Tasmania and ACT

As part of the Perinatal NBEDS (NPDC), the AIHW received data for the data items *Antenatal mental health screening status* and *Total EPDS score* from Queensland, Tasmania and the ACT in 2022, and found:

- Of the 72,516 mothers who gave birth in these states and territories, 52,511 (72%) received antenatal mental health screening with a recorded EPDS score during their pregnancy.
- The remaining mothers were either not offered screening (21%), declined screening (0.9%), received antenatal mental health screening but did not have an EPDS score recorded (0.8%) or their screening status was not stated 4.4%).

These findings are similar to those found in 2020 and 2021 (Figure 3).

Figure 3: Mothers with a recorded EPDS score and mothers with an EPDS score indicating high risk of depression, Queensland, Tasmania and the Australian Capital Territory, 2020 to 2022

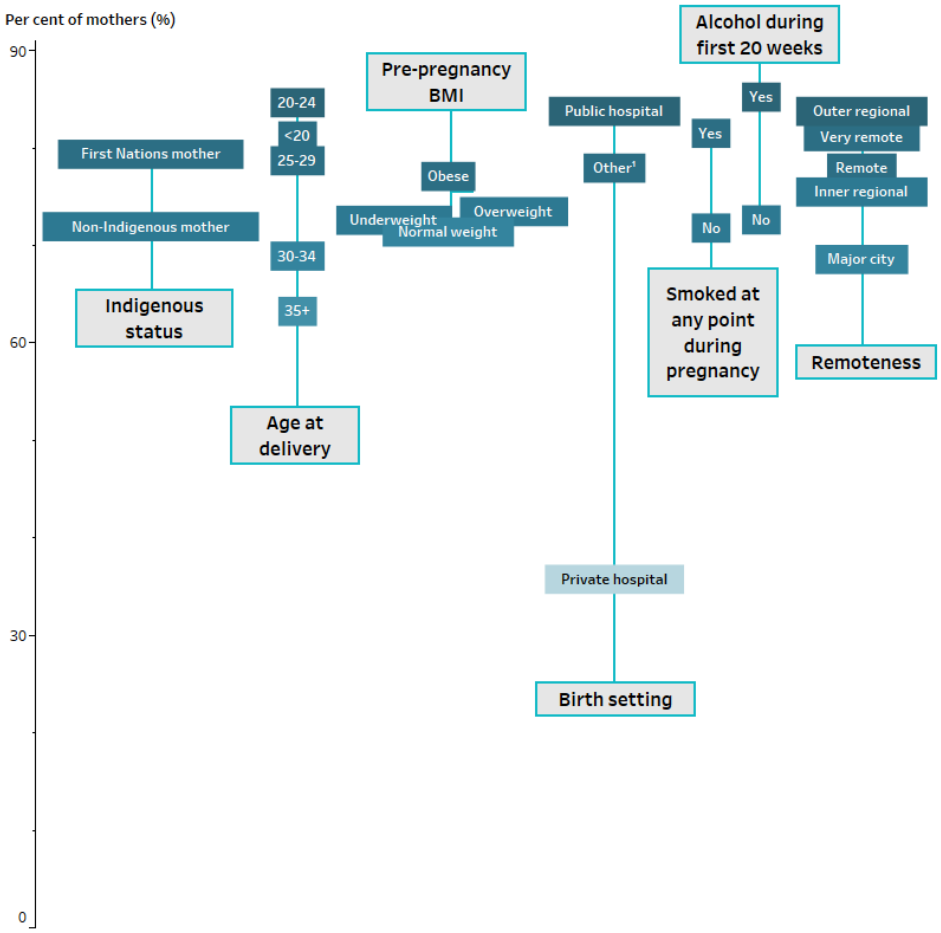


Source: AIHW analysis of NPDC data 2020 to 2022.

Mothers who received screening

In 2022, there were differences in some characteristics between women who had an EPDS score recorded and all women who gave birth. For example, compared with all mothers who gave birth in Queensland, Tasmania and the ACT, women with a recorded EPDS score were more likely to be aged under 30, give birth in a public hospital, report smoking at any point in their pregnancy, or were First Nations mothers (Figure 4).

Figure 4: Proportion of mothers with an EPDS score, by maternal and pregnancy characteristics, Queensland, Tasmania and the Australian Capital Territory, 2022



Source: AIHW Analysis of the NPDC 2022

Note:

1. Including home births and birthing centres

Mothers more likely to be identified as at risk

In 2022, 7.9% of mothers with a recorded EPDS score were assessed as scoring 13 or above, indicating a high risk of depression and/or anxiety.

Of the women with a recorded EPDS score during their pregnancy:

- a higher proportion of mothers aged under 20 years scored 13 or above (18%), compared with 9.4% of mothers in their 20s, and 6.1% of mothers aged 30 and over
- a higher proportion of mothers who smoked at any point during pregnancy had a score of 13 or above (17%), compared with mothers who did not report smoking at any point (6.6%)
- a higher proportion of mothers who gave birth in public hospitals scored 13 or above (8.4%), compared with mothers who gave birth in a private hospital (4.7%) or other setting including home births and birthing centre (5.5%).
- around 1 in 10 (9.9%) mothers who had 3 or more previous live births scored 13 or above, compared with 7.7% of first-time mothers and 7.5% of mothers who had 1-2 previous live births. A similar pattern was observed by parity with 1 in 10 (10%) mothers who had experienced 3 or more previous pregnancies scoring 13 or above, compared with 7.7% of mothers experiencing pregnancy for the first time, and 7.6% of mothers who had experienced 1–2 previous pregnancies.

Overall, findings for the 2022 birth cohort were similar to the birth cohort in 2020 and 2021.

Birth outcomes for at-risk mothers

The causes of adverse pregnancy outcomes, such as stillbirth or pre-term birth, are complex. Adverse birth outcomes are associated with a range of factors that may also be associated with higher EPDS scores, including previous experience of trauma, complications during pregnancy, smoking, and social disadvantage. Associations between adverse birth outcomes and scores of 13 or above on the EPDS do not imply a causal relationship. Despite this, there may be an opportunity to further explore the relationship between birth outcomes, perinatal mental health screening results, and common contributing factors as more data become available.

In 2022, for women with a recorded EPDS score during their pregnancy:

- a higher proportion of mothers who subsequently had a pre-term birth (less than 37 weeks gestation) scored 13 or above during pregnancy (11%), compared with 7.6% of mothers who subsequently gave birth to their babies at term (37 to 41 weeks)
- 9.3% of mothers who subsequently had a stillbirth scored 13 or above during pregnancy, compared with 7.8% of mothers who had all live births for the pregnancy.

Overall, findings for the 2022 birth cohort were similar to the birth cohort in 2020 to 2021.

Interpreting the data

Scoring high on the EPDS is not a diagnosis of mental illness, it is an indication that the woman may have experienced depressive and/or anxiety symptoms in the past 7 days. Interpreting a high EPDS score as a diagnosis would likely overestimate antenatal depression prevalence (Lyubenova et al. 2021). The total EPDS score is one measure that clinicians can use to understand when women may be at heightened risk of poor mental health and may need further assessment, support and follow up. Similarly, factors associated with a higher EPDS score provide some insight into what cohorts of women may require more support through targeted services, policies or programs.

This report explores data from 3 states and territories who have implemented the perinatal mental health screening data items in the Perinatal NBEDS/NPDC. This report includes NPDC data for women giving birth in Queensland, Tasmania and the ACT only. This is the second year that perinatal mental health screening data has been assessed as being suitable for reporting, providing a case study to demonstrate the insights to be gained from reporting perinatal mental health screening data. Data from other state and territory health authorities will be available progressively as national implementation of the Perinatal NBEDS continues.

A higher proportion of women who had an EPDS score recorded had demographic and health factors which have been associated with a higher risk of perinatal depression, compared with all mothers in the 3 supplying state and territory health authorities and nationally. As such, results are not generalisable nationally.

Variation in EPDS response rates and scores may be due to a range of factors, such as the willingness of women to disclose their concerns and symptoms, and the cultural appropriateness of the EPDS for the woman. The NPDC also only collects data for one occasion of screening per woman, even if they were screened multiple times during pregnancy. Screening uptake and results may also have been affected by the COVID-19 pandemic shutdowns and service disruptions. However, the impact of the pandemic cannot be examined because the collection of these NPDC data items only began in 2020 and the date of screening is not collected.

See Key information gaps and Data opportunities for further information.

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NSW case study: Mental health and psychosocial risk factor screening

New South Wales case study: Mental health and psychosocial risk factor screening

On this page:

Safe Start

New South Wales (NSW) Health's Safe Start model aims to provide universal preventative screening during the perinatal period and delivers psychosocial, domestic violence and mental health screening for women birthing in public maternity services. Perinatal women are screened at least once during the antenatal and postnatal periods, with repeated screening when indicated, using the Safe Start psychosocial assessment tool, the Edinburgh Postnatal Depression Scale (EPDS) and domestic violence routine screening. Clinicians administer the screening tools in the context of a clinical interview and use the patient-reported responses with their own observations and clinical judgement to discuss and determine the woman's needs. Safe Start screening aims to identify women at higher risk of mental health and psychosocial concerns by screening for the following risk factors:

- high risk of depression
- thoughts of self-harm
- possible symptoms of anxiety
- lack of support (practical support with their baby* and emotional support from being able to talk about feelings and worries)
- major stressors in the past year (for example, financial stress, loss or grief, trauma)
- history of mental health problems
- adverse childhood experiences (physical, emotional or sexual abuse)
- current or recent domestic violence
- relationship problems or dysfunction*.

* Data for '*Lack of practical support*' and '*Relationship problems or dysfunction*' were not supplied to the AIHW due to confidentiality requirements.

Interpreting risk factors

The presence of one or more Safe Start risk factors does not on its own indicate severity or impact on the woman. Clinical decisions about whether a woman would benefit from additional supports or referral to specialist services are complex, and take into consideration the number, combination, intensity and impact of risk factors on mothers. Data about clinical judgements on risk and referral are captured in clinical notes but are not available for this report. Women with higher levels of risk receive further assessment in triaged processes, such as multidisciplinary meetings, always with the woman's informed consent and expressed choices.

Initial findings

Counting mothers

In this section, mothers with multiple screening records are counted once for *each pregnancy* they received screening for.

For more detail**,** see Technical notes.

New South Wales supplied de-identified antenatal mental health, psychosocial and domestic violence screening data from public maternity services between July 2019 and June 2022. This included data collected using Safe Start or the EPDS for 207,110 mothers. From 2020 to 2022, 204,880 mothers gave birth in public hospitals (excluding birthing centres) within the supplied local health districts

(referred to as Local Hospital Networks nationally).

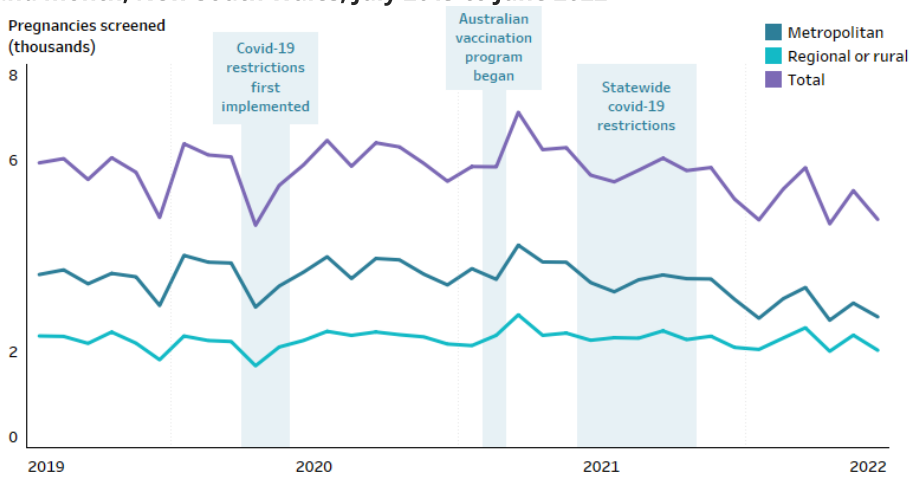
Data were supplied for all 6 metropolitan and 9 regional and rural Local Health Districts (LHDs). Data are not available for:

- mothers who exclusively received antenatal mental health and domestic violence screening in other settings, such as through antenatal care provided by their general practitioner (where this was not subsequently included in their public maternity care record)
- mothers who were not offered or declined mental health and/or domestic violence screening during their pregnancy
- mothers who received maternity care through speciality networks (St Vincent's Health Network, Sydney Children's Hospitals Network and Justice Health and Forensic Mental Health)
- mothers who did not access public maternity care – between 2020 and 2022, around 1 in 5 (22%) mothers in New South Wales gave birth in a private hospital (CEE 2024).

Limitations on the supplied data are not a reflection on statewide completion rates for Safe Start antenatal screening. Between January 2018 and June 2022, an internal New South Wales data report found high average completion rates for the EPDS (96%) and Safe Start psychosocial (94%) and domestic violence questions (91%) across 13 LHDs using the eMaternity information management system.

From July 2019 to June 2022, the number of mothers screened remained steady in regional and rural LHDs (Figure 6). While the number of mothers screened declined in metropolitan LHDs, which corresponds to a decline in the number of public hospital births across the supplied LHDs, from a peak of 36,538 in the first half of 2021 down to 32,327 in the second half of 2022. This decline was stronger in metropolitan LHDs, where a 14% reduction in the number of births was observed, compared to 7% in regional and rural LHDs. Further variation may be explained by public health responses to the COVID-19 pandemic, such as the drop in the number of mothers screened when New South Wales first implemented statewide COVID-19 restrictions from 6,071 in March 2020 to 4,644 in April 2020 (Figure 6).

Figure 6: Number of mothers screened in public maternity services, by metropolitan and regional or rural LHDs and month, New South Wales, July 2019 to June 2022



Source: AIHW analysis of NSW antenatal mental health and domestic violence screening data, July 2019 to June 2022.

Notes:

1. Regional/rural LHDs include Central Coast, Far West, Hunter New England, Illawarra Shoalhaven, Mid North Coast, Murrumbidgee, Northern NSW, Southern NSW and Western NSW LHDs. Metropolitan LHDs include Nepean Blue Mountains, Northern Sydney, South Eastern, South Western Sydney, Sydney and Western Sydney LHDs.
2. Mothers are counted for each separate pregnancy. Where multiple screening events occurred during the same pregnancy, mothers are reported as having a risk factor if it was recorded during any screening event for their pregnancy.

Representativeness and comparability

Care should be taken when interpreting the following data as there are notable demographic differences between mothers who gave birth in New South Wales public hospitals and those in other sectors or jurisdictions.

Between 2020 and 2022, mothers who gave birth in New South Wales public hospitals (Figure 7):

- were more likely to be younger, to live in more disadvantaged socio-economic areas or to be First Nations mothers, and less likely to live in major cities compared to mothers giving birth in New South Wales private hospitals
- were more likely to live in areas with higher socio-economic disadvantage compared to all mothers in Australia

- were more likely to be First Nations mothers compared to all mothers in Australia.

While these data may not be nationally representative, there is still value in exploring the differences between different cohorts within the available data.

Figure 7: Demographic differences between mothers giving birth in New South Wales public and private hospitals, public hospitals in other jurisdictions and all mothers nationally, 2020–2022

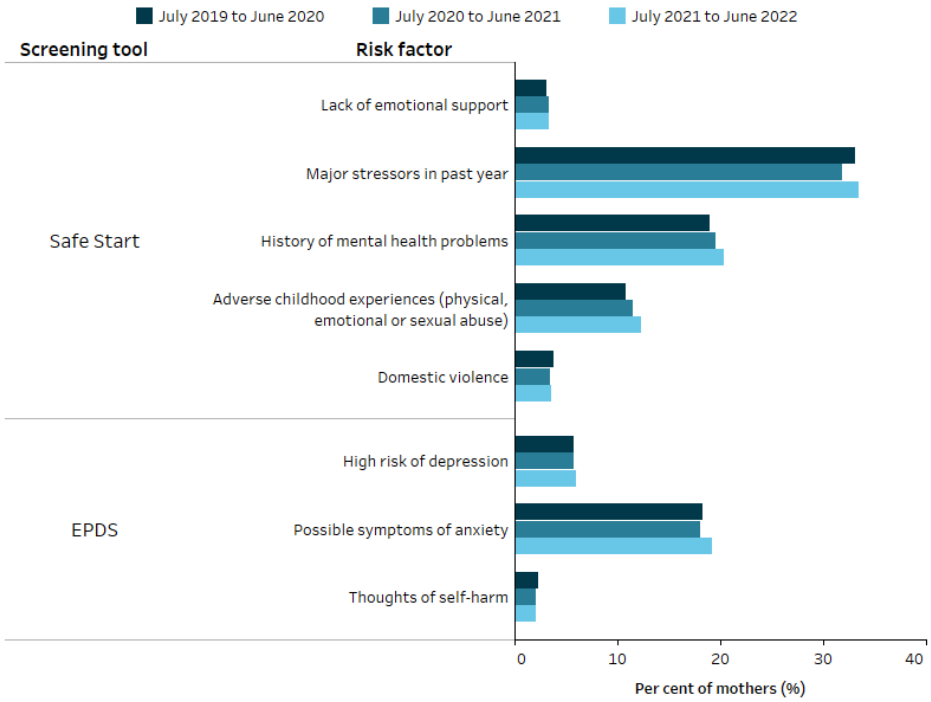
Source**:** AIHW analysis of NPDC data 2020 to 2022.

Mental health and psychosocial risk factors

In the supplied public antenatal screening data collected from July 2019 to June 2022 (Figure 8):

- a third of women reported major stressors in the past year (33%)
- possible symptoms of anxiety were identified for around 1 in 5 women (19%)
- 1 in 5 women (20%) reported a history of mental health problems
- 1 in 9 women (11%) reported a history of childhood abuse (physical, emotional or sexual)
- 5.8% of women screened with the EPDS scored 13 or above, indicating a high risk of depression.

Figure 8: Percentage of screened mothers with Safe Start and EPDS assessed risk factors in the antenatal period, available LHDs, New South Wales, July 2019 to June 2022



Source: AIHW analysis of NSW antenatal mental health and domestic violence screening data, July 2019 to June 2022.

Notes:

1. Mothers are counted for each separate pregnancy. Where multiple screening events occurred during the same pregnancy, mothers are reported as having a risk factor if it was recorded during any screening event for their pregnancy.
2. Metropolitan includes hospitals in Nepean Blue Mountains, Northern Sydney, South Eastern Sydney, South Western Sydney, Sydney and Western Sydney LHDs.
   Regional or rural includes hospitals in Central Coast, Hunter New England, Illawarra Shoalhaven, Far West, Mid North Coast, Murrumbidgee, Northern NSW, Southern NSW and Western NSW LHDs.
   Excludes records with unknown screening location.
3. Records with missing responses for items used to indicate specific risk factors are excluded when calculating the percentage of mothers with that risk factor.
4. See Technical notes for risk factor definitions.

Maternal age

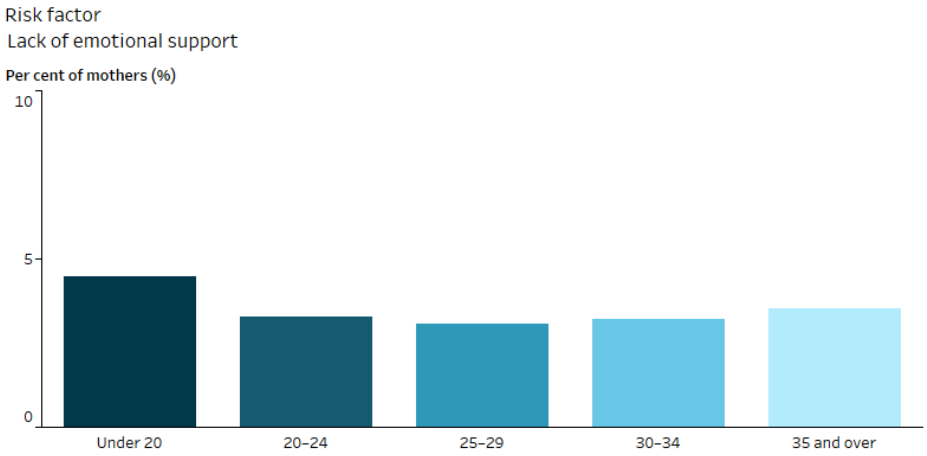
From July 2019 to June 2022, mothers aged under 20 were the most likely to be identified at risk for each individual Safe Start or EPDS risk factor (Figure 9), including having:

- major stressors in the past year (47% of women aged under 20 compared to 37% of women aged 20–24)
- a history of mental health problems (34% of women aged under 20 compared to 25% of women aged 20–24)
- experienced emotional, physical or sexual abuse in childhood (31% of women aged under 20 compared to 18% of women aged 20–24)
- possible symptoms of anxiety (36% of women aged under 20 compared to 28% of women aged 20–24)
- a high risk of depression (16% of mothers aged under 20 compared to 10% of mothers aged 20–24)

One in 12 mothers aged under 20 reported thoughts of self-harm (8.7%), proportionally more than for mothers aged 20–24 (4.2%) or over 25 (1.6%).

Meanwhile, mothers aged 35 and over were more likely to report having experienced major stressors in the past 12 months (35%) compared with mothers aged 25–29 or 30–34 (both 31%).

Figure 9: Percentage of screened mothers with Safe Start and EPDS assessed risk factors in the antenatal period, by maternal age at screening, available LHDs, New South Wales, July 2019 to June 2022



Source: AIHW analysis of NSW antenatal mental health and domestic violence screening data, July 2019 to June 2022.

Notes:

1. Mothers are counted for each separate pregnancy. Where multiple screening events occurred during the same pregnancy, mothers are reported as having a risk factor if it was recorded during any screening event for their pregnancy.
2. Excludes mothers with unknown age at screening, or whose calculated age at screening was less then 10 or greater than 60.
3. Records with missing responses for items used to indicate specific risk factors are excluded when calculating the percentage of mothers with that risk factor.
4. See Technical notes for risk factor definitions.

First Nations mothers

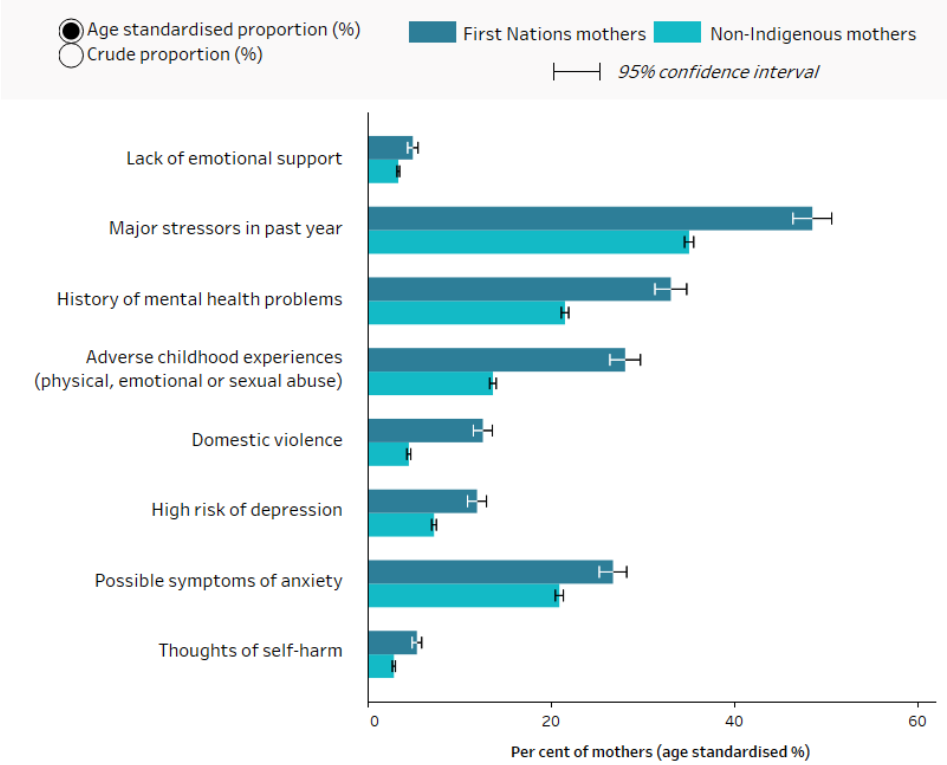
Supplied public antenatal data from July 2019 to June 2022 included 14,085 First Nations mothers, 6.8% of all mothers in the supplied data. From 2020 to 2022 there were 13,168 (6.4%) First Nations mothers who gave birth in public hospitals within the supplied LHDs.

From July 2019 and June 2022:

- almost half of the First Nations mothers reported major stressors in the past year (crude proportion 47%, 6,084 mothers) (Figure 10)
- almost 1 in 8 First Nations mothers had an EPDS score indicating a high risk of depression (crude proportion 12%, 1,535 mothers), while 3 in 10 (crude proportion 29%, 3,377 mothers) reported possible symptoms of anxiety
- the number of First Nations mothers who reported having experienced physical, emotional or sexual abuse during childhood was 3,265, with a crude proportion of 27%
- the number of First Nations mothers who reported thoughts of self-harm was 707, with a crude proportion of 5.6%
- the number of First Nations mothers who reported experiencing domestic violence was 1,565, with a crude proportion of 12%.

After adjusting for differences in the age structure, First Nations women were twice as likely to report experiencing physical, emotional or sexual abuse during childhood (rate ratio of 2.1), and more than two and a half times as likely to report having experienced domestic violence (rate ratio of 2.8).

Figure 10: Percentage of screened First Nations and non-Indigenous mothers with Safe Start and EPDS assessed risk factors in the antenatal period, available LHDs, New South Wales, July 2019 to June 2022



Source: AIHW analysis of NSW antenatal mental health and domestic violence screening data, July 2019 to June 2022.

Notes:

1. Age-standardised proportions calculated using direct age-standardisation with the June 2001 Australian female estimated resident population aged 15–44 years as the standard population.
2. Mothers are counted for each separate pregnancy. Where multiple screening events occurred during the same pregnancy, mothers are reported as having a risk factor if it was recorded during any screening event for their pregnancy.
3. First Nations mothers are counted as those who ever indicated being of Aboriginal or Torres Strait Islander origin. Remaining mothers were counted as non-Indigenous if they indicated not being of Aboriginal or Torres Strait Islander origin, otherwise were excluded.
4. Records with missing responses for items used to indicate specific risk factors are excluded when calculating the percentage of mothers with that risk factor.
5. See Technical notes for risk factor definitions.

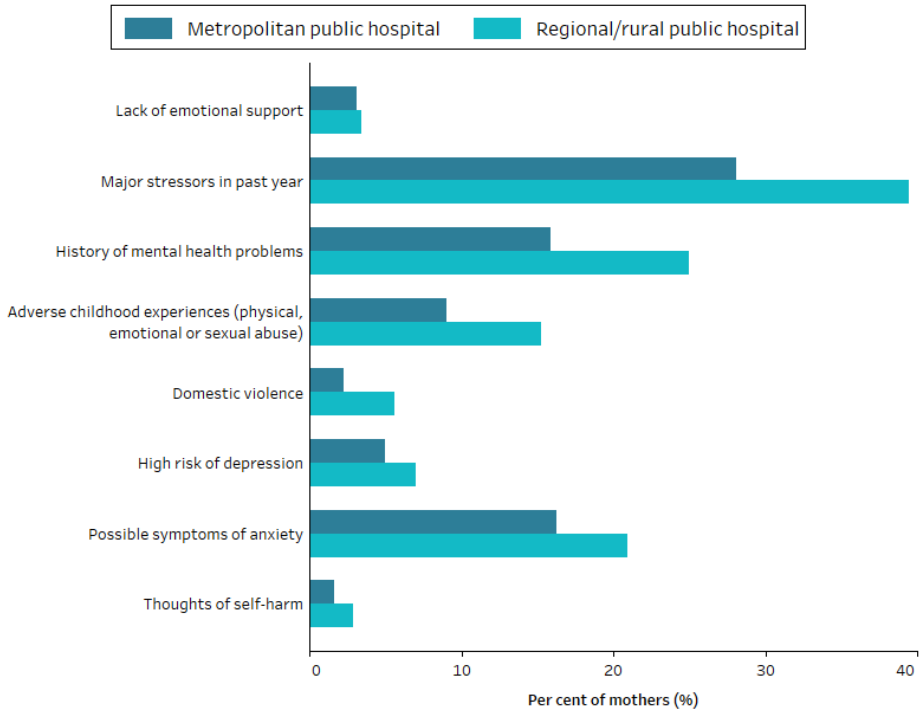
Regional and rural local health districts

Data were supplied for all regional and rural LHDs and all metropolitan LHDs. In the supplied data, 81,282 mothers (39%) were screened in regional or rural public hospitals, while births in regional and rural hospitals accounted for 39% of mothers giving birth in New South Wales public hospitals from 2020 to 2022.

Compared to mothers screened in regional or rural public hospitals, between July 2019 and June 2022, mothers screened in metropolitan public hospitals were less likely to report a high risk of depression (5.0% vs 7.0%), possible symptoms of anxiety (16% vs 21%) and were almost half as likely to report thoughts of self-harm (1.6% vs 2.9%) (Figure 11).

Mothers screened in metropolitan public hospitals were also less likely to report a history of mental health problems (16% vs 25%) or having experienced abuse during childhood (9.0% vs 15%) compared with mothers screened in regional or rural public hospitals.

Figure 11: Percentage of screened mothers with Safe Start and EPDS assessed risk factors in the antenatal period, metropolitan and regional or rural public hospitals, available LHDs, New South Wales, July 2019 to June 2022



Source: AIHW analysis of NSW antenatal mental health and domestic violence screening data, July 2019 to June 2022.

Notes:

1. Mothers are counted for each separate pregnancy. Where multiple screening events occurred during the same pregnancy, mothers are reported as having a risk factor if it was recorded during any screening event for their pregnancy.
2. Metropolitan includes hospitals in Nepean Blue Mountains, Northern Sydney, South Eastern Sydney, South Western Sydney, Sydney and Western Sydney LHDs.
   Regional or rural includes hospitals in Central Coast, Hunter New England, Illawarra Shoalhaven, Far West, Mid North Coast, Murrumbidgee, Northern NSW, Southern NSW and Western NSW LHDs.
   Excludes records with unknown screening location.
3. Records with missing responses for items used to indicate specific risk factors are excluded when calculating the percentage of mothers with that risk factor.
4. See Technical notes for risk factor definitions.

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Queensland case study: Maternity models of care

In Australia, there are many ways maternity care is provided to women during their pregnancy, birth and postnatal period, depending on where they live, their care needs and their individual circumstances, these are known as maternity models of care.

Maternity models of care can be grouped into one of 11 major model categories according to characteristics such as who the model is designed for, where care is provided, who provides and/or coordinates care and the specific roles of maternity carers. Two items relating to maternity models of care were added to the National Perinatal Data Collection in 2020, for which Queensland provided complete data in 2021 and 2022. Table 1 describes the antenatal care provided for the most common major model categories for Queensland births in 2022.

Table 1: Antenatal care in major model categories of maternity care, Queensland 2022

Major model of care group	Antenatal care	% of mothers who gave birth in Queensland
Public hospital maternity care	Provided in public hospital outpatient clinics (either onsite or outreach) by midwives and/or doctors. Care could also be provided by a multidisciplinary team.	38
Private obstetrician (specialist) care	Coordinated by a private specialist obstetrician.	21
Midwifery group practice caseload care	Provided within a publicly funded caseload model with a designated primary midwife providing and coordinating care within a team of midwives. Usually provided in the hospital, community or home.	18
Shared care	Provided by a community maternity service provider (doctor and/or midwife) in collaboration with hospital medical and/or midwifery staff under an established agreement and can occur both in the community and in hospital outpatient clinics.	14
Other major models of care	Includes: • public hospital high risk maternity care • general practitioner (GP) obstetrician care • remote area maternity care • combined care • private midwifery care • team midwifery care • private obstetrician privately practising midwife joint care	7.0
Not stated	Includes mothers whose model of care was missing, inadequately described, whose care was primarily received outside of Queensland (interstate or overseas) and planned home births with unknown characteristics of care.	1.7

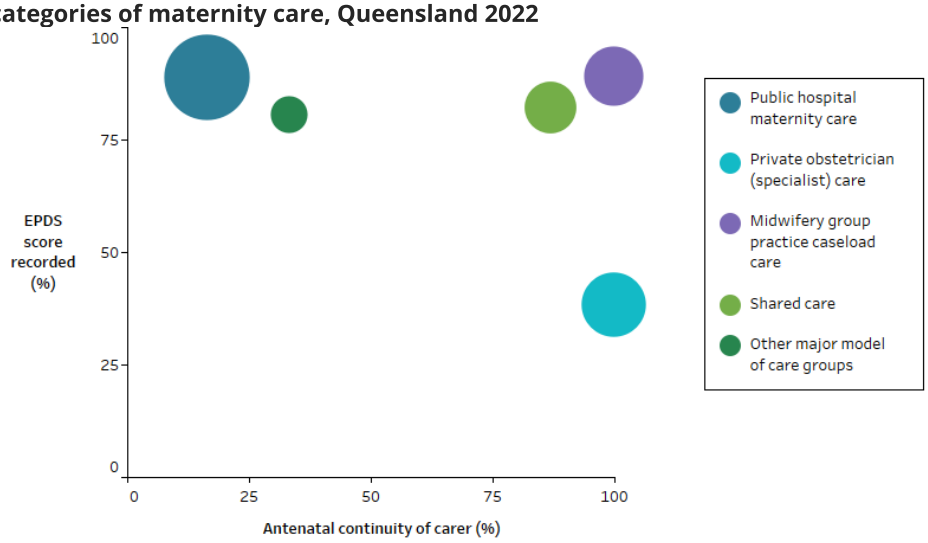
Mothers are described as having received continuity of carer if their maternity care is provided or coordinated by a single care provider. Continuity of carer is closely tied to the model of care a mother receives. For example, in *midwifery group practice caseload care*, care is coordinated by a primary midwife so all mothers receiving this type of care have continuity of carer.

Mothers with continuity of carer may receive care from providers other than their primary care coordinator. For example, private specialist obstetricians may be assisted by midwives and other health practitioners providing antenatal care.

Where there is continuity of carer, screening for mental health and psychosocial risk factors may be conducted by someone other than the primary or coordinating care provider.

Figure 5 shows the common major models of care used, by the percentage of mothers with an Edinburgh Postnatal Depression Scale (EPDS) score, and the percentage of mothers receiving continuity of carer in the antenatal period who gave birth in Queensland in 2022.

Figure 5: Percentage of mothers with a recorded EPDS score and antenatal continuity of carer, by major model categories of maternity care, Queensland 2022



Source: AIHW analysis of NPDC data.

This figure groups mothers by major categories of model of maternity care they received and shows:

1. The percentage of mothers receiving that model of care who had continuity of carer in the antenatal period (X-axis)
2. The percentage of mothers receiving that model of care who had an EPDS score recorded (Y-axis)
3. The percentage of mothers receiving that model of care (size of the bubble, *see also Table 1*).

Mothers most likely to have an EPDS score recorded were those receiving *midwifery group practice caseload care* (89%) or *public hospital maternity care* (89%). In comparison, fewer than 2 in 5 mothers whose care was coordinated by a *private specialist obstetrician* (38%) had an EPDS score recorded during their antenatal period.

In Queensland in 2022, *private obstetrician (specialist) care* made up the majority of privately provided care and is the model of care provided to 1 in 5 (21%) mothers regardless of sector. As with *midwifery group practice caseload care*, all mothers whose care was coordinated by a private specialist obstetrician in Queensland in 2022 had continuity of carer in the antenatal period. While there are overall differences in the proportion of mothers with an EPDS score between mothers who had or did not have antenatal continuity of carer, these differences appear to be associated with the underlying model of care rather than the continuity of carer (Figure 5).

Differences in screening rates between models of care may explain some of the differences in the maternal characteristics of women who are or are not receiving antenatal mental health screening. For example, in 2021:

- Young mothers, and mothers from the most disadvantaged areas were more likely to receive *public hospital maternity care*.
- First Nations mothers were more likely to receive *midwifery group practice caseload care*.
- Older mothers, non-Indigenous mothers, and mothers from the least disadvantaged areas were more likely to receive *private obstetrician (specialist) care*.

These findings provide an explanation for why the maternal and pregnancy characteristics associated with increased mental or psychosocial risks are also associated with an increased likelihood of receiving antenatal mental health screening.

Mothers with characteristics associated with increased mental health or psychosocial risks are also those more likely to receive care under widely used publicly funded models where mental health screening is routinely conducted. Conversely, characteristics associated with lower mental health and psychosocial risks, such as living in higher socioeconomic areas, are associated with increased access to private models of maternity care, of which *private obstetrician (specialist) care* was the largest in Queensland in 2022.

Access to different models of maternity care can be influenced by the same demographic and socioeconomic characteristics that influence mental health and psychosocial risk. It may be that screening practices are more robust in some antenatal care settings because of the risk profile of mothers receiving care there. However, screening for mental health and psychosocial risk factors during the antenatal period is recommended for all mothers. Mothers accessing *private obstetrician (specialist) care*, more commonly mothers who are older, non-Indigenous, or living in the highest socioeconomic areas, appear more likely to miss out on screening.

For more information about models of care in Queensland, see Maternity models of care.

Availability of perinatal data

To date, there is no national data about perinatal mental health screening, service use or outcomes. Data about the mental health of parents in the perinatal period are collected by a range of health services, Australian Government and state and territory government agencies, and non-government organisations, mostly as a by-product of delivering maternity services. The range of settings has implications for the ease with which comparable data can be extracted and collated into a national data collection.

A number of existing data collections currently offer some insight into perinatal mental health, including the:

- National Perinatal Data Collection (NPDC)
- National Maternal Mortality Data Collection (NMMDC)
- Medicare Benefits Schedule (MBS).

In addition, large-scale longitudinal studies also provide insight, including the Australian Longitudinal Study on Women's Health survey - external site opens in new window.

Data relating to the mental health of mothers are also routinely collected in national hospital, hospital emergency department, and pharmaceutical data collections, however, data linkage would be required to identify women in the antenatal and postnatal period.

National Perinatal Data Collection

The National Perinatal Data Collection (NPDC) is Australia's authoritative source of data about pregnancy and childbirth. Each state and territory health authority maintains its own perinatal data collection about births in its jurisdiction and provides an annual standard extract of the data to the Australian Institute of Health and Welfare (AIHW) for national collation. Work to include antenatal mental health data in the NPDC commenced in 2010, and in July 2020, 3 antenatal mental health data items and one family violence screening data item were introduced as part of the voluntary Perinatal National Best Endeavours Data Set (NBEDS):

- Antenatal mental health risk screening status (Yes, Not offered, Declined)
- Indication of possible symptoms of depression at an antenatal care visit (total EPDS score)
- Presence or history of mental health condition indicator (Yes, No)
- Family violence screening status (Yes, Not offered, Declined).

The Perinatal NBEDS is not mandated for national collection but there is a commitment to provide data nationally on a best endeavours basis. State and territory health authorities are at different stages in implementing the data items for a variety of reasons. Five state and territory health authorities supplied at least one of the 4 data items for both the 2022 birth cohort (Table 3). For further information, see Data opportunities.

National Maternal Mortality Data Collection

The National Maternal Mortality Data Collection (NMMDC) is a national data collection of maternal deaths (up to and including 42 days postpartum, irrespective of the duration or outcome of the pregnancy). The NMMDC includes data on if the death was caused by suicide, if mental health screening was offered, complications in the pregnancy and up to 42 days postpartum (including mental health illness*)* and pre-existing conditions (including mental health illness*)*.

Medicare Benefits Schedule

The Medicare Benefits Schedule (MBS) data collection contains information on services that qualify for a benefit or subsidy and for which a claim has been processed. It includes 2 antenatal and 3 postnatal obstetric items that require the claiming general practitioner (GP) or obstetrician to offer a 'mental health assessment' to the patient. Between 2018 and 2023, the number of these antenatal services claimed per year decreased, from around 121,000 services in 2018 to around 90,000 services in 2023. Use of the postnatal items has increased steadily per year, from around 37,900 services claimed in 2018 to around 58,200 services in 2024 (Figure 12).

Medicare subsidises antenatal and postnatal services delivered in the community and to admitted private hospital patients by GPs, midwives, specialists and some allied health workers. This does not include services provided to public hospital patients, including antenatal clinics run by public hospitals. It is currently unknown what proportion of antenatal and postnatal services this represents.

The MBS also includes items for non-directive Pregnancy Support Counselling provided by GPs, other eligible medical practitioners (not including specialists or consultant physicians), psychologists, social workers and mental health nurses to patients who are pregnant or one year postpartum. Pregnancy support counselling does not need to relate to a patient's mental health and can be used to discuss any pregnancy related concerns such as parenting, health, relationship and financial concerns. Use of these services has steadily increased, from around 22,500 services claimed in 2018 to 41,700 services in 2023 (Figure 12). These services were provided to patients out of hospital, and the bulk were provided by GPs (96% of services in 2023).

Figure 12: Number of Medicare-subsidised perinatal mental health-related services, by service type, 2018 to 2023

In 2018 there were 121,078 MBS funded services for antenatal assessment (at least 29 weeks gestation).

In 2019 there were 117,385 MBS funded services for antenatal assessment (at least 29 weeks gestation).

In 2020 there were 110,502 MBS funded services for antenatal assessment (at least 29 weeks gestation).

In 2021 there were 114,467 MBS funded services for antenatal assessment (at least 29 weeks gestation).

In 2022 there were 101,136 MBS funded services for antenatal assessment (at least 29 weeks gestation).

In 2023 there were 90,013 MBS funded services for antenatal assessment (at least 29 weeks gestation).

In 2018 there were 37,882 MBS funded services for postnatal assessment (4-8 weeks after birth).

In 2019 there were 46,451 MBS funded services for postnatal assessment (4-8 weeks after birth).

In 2020 there were 49,829 MBS funded services for postnatal assessment (4-8 weeks after birth).

In 2021 there were 58,712 MBS funded services for postnatal assessment (4-8 weeks after birth).

In 2022 there were 59,917 MBS funded services for postnatal assessment (4-8 weeks after birth).

In 2023 there were 58,187 MBS funded services for postnatal assessment (4-8 weeks after birth).

In 2018 there were 22,429 MBS funded services for pregnancy support counselling (antenatal or postnatal).

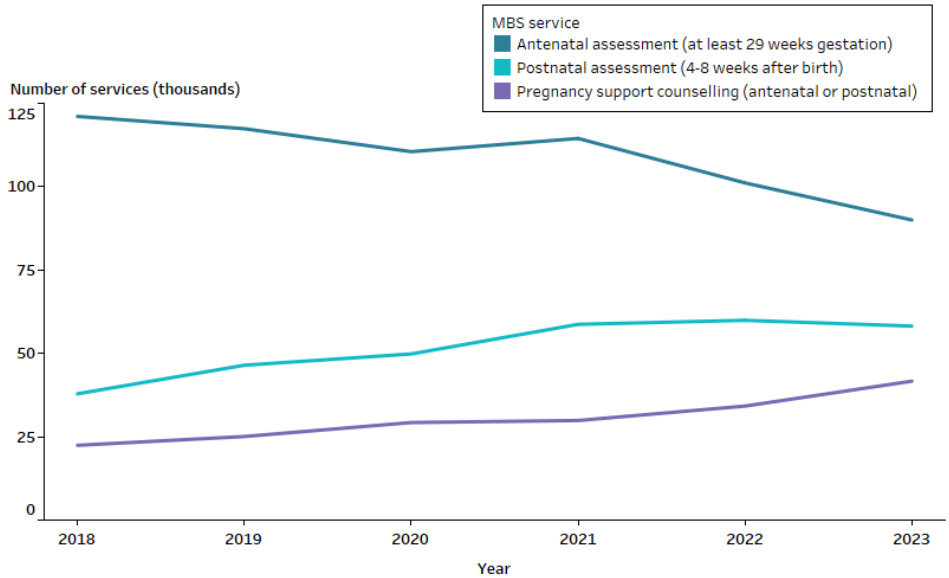
In 2019 there were 25,069 MBS funded services for pregnancy support counselling (antenatal or postnatal).

In 2020 there were 29,256 MBS funded services for pregnancy support counselling (antenatal or postnatal).

In 2021 there were 29,866 MBS funded services for pregnancy support counselling (antenatal or postnatal).

In 2022 there were 34,197 MBS funded services for pregnancy support counselling (antenatal or postnatal).

In 2023 there were 41,664 MBS funded services for pregnancy support counselling (antenatal or postnatal).



Source: AIHW analysis of Medicare Benefits Schedule item reports - external site opens in new window. Sourced on 24 September 2024.

Notes:

1. Results are by date of processing.
2. Antenatal items include items 16590 and 16591.
   Postnatal items include items 16407, 91851 and 91856.
   Pregnancy support counselling items include 4001, 792, 81000, 81005, 81010, 93026, 93029, 92136, 92137, 92138 and 92139.
3. Although the antenatal items have existed since 2004, these items were updated in November 2017 to require the medical practitioner to offer a mental health assessment (previously it was at the discretion of the medical practitioner). The postnatal items requiring an assessment to be offered were introduced from November 2017.

It should be noted that the MBS claims data does not include information about if or how the woman was screened (that is, the tools used) or the outcome of the mental health screening – the selected antenatal and postnatal items only tell us that the woman has been 'offered' a mental health assessment. In addition, this is likely to be underestimated, as GPs and obstetricians might provide similar services under different 'general' MBS items (for example, item 23), or a mental health-specific item that is not specific to women in the antenatal or postnatal period.

As such, while the MBS claims data can give an indication of the number of women being offered perinatal mental health screening in out of hospital settings, or to private admitted patients of public and private hospitals, its use for monitoring perinatal mental health is limited without linkage to another data source that identifies women in the antenatal and postnatal period.

Surveys and longitudinal studies

There are several large scale and ongoing surveys and longitudinal studies in Australia that provide insight into perinatal mental health screening and outcomes (Table 2), including:

Table 2: Overview of Australian surveys and longitudinal studies related to perinatal mental health

		Mothers	
Study	**Perinatal mental health scope**	**In scope cohort**	**Representativeness**
Australian Longitudinal Study on Women's Health (Loxton et al. 2021)	Mothers were asked: 'For your most recent pregnancy, were you asked any questions by a midwife, GP, child health nurse or other professional about your emotional wellbeing? (e.g., given a questionnaire to complete)'.	*1973–78 cohort:*Across the 2009 to 2018 surveys (aged 31 to 42), 1,180 women reported giving birth in the three years before the survey. *1989–95 cohort:* Across the 2017 and 2019 surveys (aged 22 to 29), 1,083 women reported giving birth in the three years before the survey. *Perinatal mental health related questions were not included in the 2020 survey but may be included in future years.*	*1973–78 cohort:* Randomly sampled from the Medicare database in 1996. Women from rural and remote areas were oversampled to support analysis of this group. *1989–95 cohort:* Recruited by traditional methods (referral, print and commercial media) and social media/marketing campaigns in 2013. Women with tertiary education were overrepresented, and women from non-English speaking backgrounds were underrepresented.
Australian Genetics of Depression study (Kiewa et al. 2022)	Women with self-reported perinatal depression were asked about symptom onset and prior depression history.	2,261 women with perinatal depression with a prior depression history. 878 women with perinatal depression with no prior depression history.	Women with major depression were recruited during 2016-2018. The Australian Genetics of Depression Study cohort is mostly young and well-educated and may not generalise to the entire population.

The Mothers' and Young People's Study (Brown et al. 2021)	Mothers and offspring are given a range of mental health and behavioural measures.	*2003-2005:* Over 1,500 first-time mothers and their first-born children from pregnancy to age 18.	Women were recruited from six Melbourne metropolitan hospitals between 2003-2005. Younger women (aged 18–24 years) and women born overseas in non-English speaking countries were underrepresented.

Fathers

Study	Perinatal mental health scope	In scope cohort	Representativeness
Ten to men: Australian Longitudinal Study on Male Health (AIFS 2021a, 2021b, 2021c, 2021d, 2023, 2024)	Patient Health Questionnaire 9 (depressive symptoms, no assessment of anxiety or stress). Age of child is not recorded, and no questions specific to mental health during the perinatal period.	*Wave 1 (2013/14):* 7,458 fathers to children under 18. *Wave 2 (2015/16):* 205 new fathers since Wave 1 (5,648 fathers to children under 18). *Wave 3 (2020/21):* 3,403 fathers to children under 18. *Wave 4 (2022):* 2,810 fathers to children under 18. *Wave 5 (2024)*: Results not yet published.	Low response rate (35% of eligible males). Sampling not conducted in remote and very remote areas while inner and outer remote areas were oversampled.
Men and Parenting Pathways (MAPP) Study (Macdonald et al. 2021)	21-item Depression, Anxiety, Stress Scales, as well as measures of anger, irritability, parenting, traits, substance use and social support.	*Wave 1:* 241 fathers to 421 children. *Waves 2 and 3:* 67 new fathers and 156 new births. 44 new fathers identified after wave 3 completion. *Waves 4 and 5:* in progress.	Small sample size (608 men aged 28-32 when recruited between 2015 and 2017), although fairly representative.

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Key information gaps

On this page:

The majority of available data are about antenatal mental health screening of mothers conducted by state and territory-funded services, which only covers a segment of the perinatal mental health screening occurring across the country.

Data about mental health and psychosocial screening are collected in antenatal and postnatal settings such as hospitals and General Practitioner (GP) clinics through the course of providing care to patients. These data are stored within the health setting's clinical information system, and may be electronic or paper-based. The ease of which this information can be extracted varies, due to the way data are collected and stored, legislative remit, and resource constraints.

Key information gaps include:

- postnatal mental health screening, which generally occurs through primary health care or Maternal, Child and Family Health Services
- psychosocial risk factor screening and anxiety screening in the antenatal and postnatal period
- repeat screening
- perinatal mental health screening of private patients and of mothers in non-hospital settings such as by GPs, other primary health care workers, and obstetricians
- data for population groups that may be at higher risk, such as First Nations parents, culturally and linguistically diverse (CALD) parents, parents who identify as lesbian, gay, bisexual, trans and gender diverse, intersex, queer or other (LGBTIQ+), and parents with disabilities
- fathers and other non-birthing parents
- protective factors in the perinatal period
- relationship between physical and psychological birth trauma and perinatal mental health.

First Nations communities

First Nations people are an important priority population as they typically have poorer health outcomes including higher rates of adverse pregnancy and birth outcomes (AIHW 2021b), high prevalence of mental illness and suicide (Martin et al. 2023), and higher experiences of intimate partner violence and child abuse and neglect compared to non-Indigenous Australians (AIHW 2022a).

Current research generally suggests that the standard English version of the EPDS is not culturally appropriate for First Nations mothers, however some health care professionals have expressed mixed perceptions on its suitability (Chan et al. 2021). Alternative screening tools have been or are being developed specifically for First Nations women, such as the Kimberley Mums Mood Scale (KMMS), Baby Coming You Ready? (BCYR) and the Mount Isa Depression Scale (MIDS). Expanding data collections to include these screening tools that have been culturally adapted and validated (such as the KMMS) or specifically developed for First Nations people (such as BCYR), may improve representation of First Nations women in the data and result in higher quality data about the perinatal mental health of First Nations women.

Culturally and linguistically diverse communities

Migrants, refugees and asylum seekers are a diverse population, and as such estimates of the prevalence of perinatal mental health conditions and other psychosocial risk factors vary widely (Eastwood et al. 2021; Stevenson et al. 2023; Sullivan et al. 2020). People from culturally and linguistically diverse (CALD) backgrounds may have different levels of social support in Australia, have different levels of language proficiency, may be recovering from pre-migration trauma, and may have experienced or continue to experience discrimination and other stressors such as employment difficulties and insecure visa status (Sullivan et al. 2020).

How mental health is expressed, understood and stigmatised differs across cultures. Women's responses to screening and help-seeking behaviours may be influenced by mistrust of their health care provider or translator, language and translation issues, perception of stigma, and different cultural norms about emotional expression (Firth et al. 2022; Skoog et al. 2022). This has

implications for how mental health data are collected and interpreted clinically and for research: for instance, lower EPDS cut-off scores are recommended when screening women from CALD backgrounds to account for this (Highet et al. 2023).

Providing screening in a woman's preferred language improves their understanding of questions being asked in the tool (Willey et al. 2020). Research indicates that women feel more able to answer sensitive questions truthfully when they can complete screening by themselves, by using a translated paper or digital screening tool, however the presence of an interpreter is still valuable for clarifying the meaning of questions and providing support when speaking to health professionals (Willey et a. 2020).

Accurately identifying CALD populations is a challenge for many data collections, including the NPDC which currently collects country of birth (AIHW 2022e). Collecting other variables such as language, English proficiency, and year migrated to Australia, will support understanding of the perinatal mental health of CALD populations, including allowing recommended culturally relevant cut-off scores to be accounted for when analysing data.

LGBTIQ+ childbearing parents

Childbearing parents who identify as LGBTIQ+ may face unique mental health risks during pregnancy and following childbirth, including stigma, discrimination, difficulty accessing inclusive services for fertility, antenatal, birthing and postnatal support, and challenges related to gender identity. Emerging research suggests the prevalence of perinatal mental health conditions in LGBTIQ+ childbearing parents may be higher than cisgender heterosexual mothers (Kirubarajan et al. 2022). It is currently not possible to identify LGBTIQ+ parents in national data collections, however this is a potential area for exploration in the Perinatal Mental Health pilot (see Data opportunities).

Fathers and other non-birthing parents

Fathers and other non-birthing parents can also experience poor mental health and social and emotional wellbeing during the perinatal period. Having a partner with a mental illness is a risk factor for paternal perinatal illness (Giallo et al. 2012).

It is estimated depression affects between 5% and 10% of fathers during this period (Cameron et al. 2016; Mazza et al. 2022; Paulson and Bazemore 2010), and anxiety affects around 5% to 15% of fathers (Leach et al. 2016). It is estimated that paternal depression co-occurs in around 1% to 3% of mothers and fathers (Mazza et al. 2022; Smythe et al. 2022). In 2022–2023, Perinatal Anxiety & Depression Australia (PANDA) found that 10% of their callers were male (PANDA 2023). Further, more than 10,000 dads have participated in the SMS4dads service in 2021–2022 (PANDA 2022).

Paternal depression during the perinatal period is associated with an increased risk of long term emotional, behavioural and social difficulties in children, independent of maternal perinatal depression (Gentile and Fusco 2017). There are limited data about the prevalence of perinatal mental health conditions in other non-birthing parents and guardians, including adoptive parents, step-parents, and non-birthing LGBTIQ+ parents. Research available is often based on small studies and one-off analysis. Further, studies specifically investigating fathers' own experiences of mental health and well-being during the perinatal period are rare.

At present, there are limited data available about perinatal mental health screening and outcomes of fathers in Australia, and even scarcer data available on other non-birthing parents. Addressing and measuring the mental health and wellbeing needs of fathers and other parents requires a tailored approach noting cultural differences in parenting roles, and differences in when and how parents interact with the health system. Signs of mental health conditions can also display differently in men, with symptoms such as irritability, aggression and risk-taking behaviours not captured by the EPDS (Kennedy and Munyan 2021). The Edinburgh Postnatal Depression Scale (EPDS) has been used to screen fathers using a lower cut-off score, however evidence for which cut-off score is mixed (Kennedy and Munyan 2021). The Antenatal Risk Questionnaire (ANRQ) has recently been adapted for men (Highet et al. 2023), and work is underway to adapt other screening tools for fathers, such as BCYR.

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Data opportunities

In 2022, under the National Mental Health and Suicide Prevention Agreement, Bilateral Schedules - external site opens in new window (Bilateral Schedules) between state and territory health authorities and the Australian Government were developed to support the enhanced collection and reporting of perinatal mental health data from public antenatal and postnatal care settings, and the provision of perinatal mental health data to the Australian Institute of Health and Welfare (AIHW) (Commonwealth of Australia 2022). This work builds on efforts that commenced in 2010 with extensive consultation with subject matter and data experts and supports the National Perinatal Depression Initiative which recommended nationally consistent perinatal mental health data to inform analysis, service provision and decision making (Highet and Purtell 2012). The collection of woman-reported data also supports the delivery of woman-centred continuity of care and improved outcomes and experiences for women and their families (COAG Health Council 2019).

Despite challenges, there are a number of developments and opportunities underway to harness these data:

- Perinatal NBEDS items
- Perinatal Mental Health pilot
- Data linkage
- Primary health care data development

Mental health and family violence Perinatal NBEDS items

State and territory health authorities are at different stages of implementing the four mental health and family violence Perinatal National Best Endeavours Data Set (NBEDS) items, for a variety of reasons. Data quality, comparability, and universal coverage are required before the data items can progress to become mandatory as part of the Perinatal National Minimum Data Set (NMDS).

The AIHW is undertaking extensive stakeholder engagement with state and territory health authorities through the Perinatal Mental Health Jurisdictional Data Working Party (Working Party) to understand the challenges experienced in implementing and collecting these data items, and to ensure that these data items are fit-for-purpose and a priority for jurisdictional and national data development. For example, for the Perinatal NBEDS *Presence or history of mental health condition indicator* data item, Working Party members are considering how analysis of Perinatal Mental Health pilot (PMHp) data, which includes the self-reported mental health history from the ANRQ and Safe Start Psychosocial questions, could provide evidence to improve the consistency and comparability of the data collected.

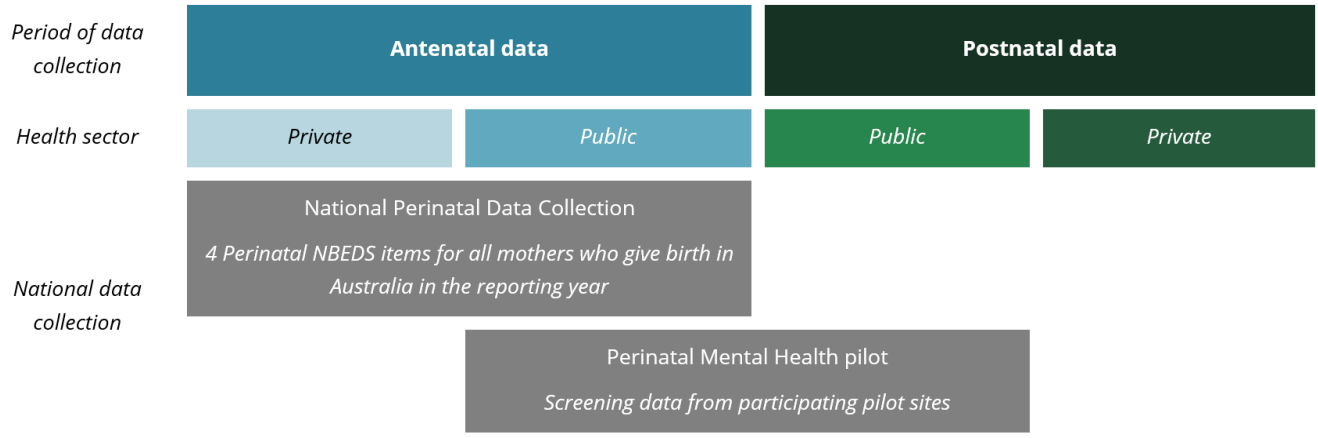
Each state and territory health authority's perinatal data collection, which feeds into the National Perinatal Data Collection (NPDC), is typically sourced from data collected by midwives or other birth attendants shortly after the mother has given birth. Data may also be sourced from information that has been previously electronically captured through the woman's antenatal care. At present there is limited capacity to collect additional mental health-related items in the NPDC. Data about the postnatal period after discharge are out of scope for the NPDC.

Perinatal Mental Health pilot

The Perinatal Mental Health pilot (PMHp) is a novel collection of de-identified screening data sourced from public antenatal and postnatal maternity health services. In mid-2023, the AIHW received the first tranche of PMHp data from South Australia's Northern Adelaide Local Health Network (NALHN). Analysis is underway including sharing service-level data back to NALHN through the AIHW's Perinatal Portal, a secure platform to share perinatal data and insights with perinatal service providers.

The PMHp will grow iteratively in scope and coverage over time, as state and territory health authorities and health services commit to contributing their public antenatal and postnatal maternity service data. The AIHW has received interest from Queensland and New South Wales (NSW) to participate in the PMHp. As such the PMHp is a small but growing sample of the antenatal and postnatal mental health screening occurring across Australia. The PMHp aims to complement the NPDC (Figure 13), by collecting data that is currently out of scope for the NPDC, such as postnatal data and psychosocial risk factor screening data from participating pilot sites.

Figure 13: Scope of the National Perinatal Data Collection and Perinatal Mental Health pilot



The PMHp will trial a new way to collect and report perinatal mental health screening data. Noting that screening practices differ across the country, the PMHp has a flexible scope, with ongoing AIHW ethics approval to collect a broad range of data including:

Symptoms of depression and anxiety
Edinburgh Postnatal Depression Scale (EPDS)

Psychosocial questions
Antenatal/Postnatal Risk Questionnaire (ANRQ/PNRQ)
SAFE START

First Nations screening tools
Kimberley Mum's Mood Scale (KMMS)
Baby Coming You Ready?
Mount Isa Depression Scale

Patient demographics
Age, usual residential area, Indigenous status, if born in Australia or not

Occasion of screening variables
Language of screening, and when screening occurred (incl. if patients are screened multiple times)

Key areas for investigation

The PMHp will provide valuable insights about variation in perinatal mental health screening uptake and the prevalence of psychosocial risk factors by maternal age, socioeconomic level, Indigenous status, geographic region, and language, and changes over time; these insights will inform clinical decision making and benchmarking progress. For example, the PMHp will enable analysis of:

- **All EPDS scores (not just the total score)**: This will provide insights in relation to whether patients report thoughts of self-harm (Question 10), and their anxiety risk (EPDS questions 3, 4 and 5, and ANRQ questions relating to trait anxiety and perfectionism), noting further investigation is needed to assess the validity of the anxiety items (Austin et al. 2022; Smith-Nielsen et al. 2021).
- **When and how screening is conducted:** To inform interpretation of these data, the PMHp is seeking to collect data from all occasions of screening, including how many weeks pregnant or postpartum the woman was at the time of screening. This will allow exploration of the patient journey through contact points with maternity services by considering factors including repeat screening, whether women were screened in both the antenatal and postnatal periods, differences between initial and subsequent screens, and whether at-risk patients (EPDS score 13 or higher) received follow-up screening within the recommended period.
- **Presence or history of mental health condition indicator data item:** Analysis of PMHp data will also support efforts to improve this data item in the Perinatal NBEDS.
- **Psychosocial risk factors** refer to prior mental health history, availability of support systems and feeling safe with their partner, experiences of abuse, alcohol or other drug concerns, and experience of giving birth and parenting. Collecting these data will provide a fuller picture of women's perinatal mental health and build understanding of the different tools used to conduct psychosocial risk factor screening across the country.
- **Protective factors** interact with risk factors and are relative to the individual and their psychological, social, environmental, and cultural needs. Improved understanding about risk factors of mental health conditions through screening in the perinatal period, will help improve understanding about protective factors, such as social support, physical activity, and coping strategies before and after childbirth, as well as positive mother-infant interaction.
- **Priority populations** such as First Nations people and CALD communities, particularly as mainstream approaches may not be the most suitable for these populations. The iCOPE screening platform includes First Nations-specific screening tools and is available in 24 languages other than English. By collecting the language of screening, it will allow recommended lower cut-off scores to be accounted for when analysing the data. The AIHW is also exploring opportunities to include perinatal mental health screening of fathers and other non-birthing parents which the iCOPE screening platform facilitates.

Data linkage

Data linkage is a process that combines information from multiple data collections to tell a richer story than would be possible from a single data source. This maximises the utility of existing data sources and minimises the burden and cost of collecting additional data.

A pilot study is underway to assess the feasibility of linking the NPDC to other health and welfare related data collections. This will build an understanding about patterns of mental health care use by women before, during and after pregnancy, and health outcomes for mothers and babies. For example, linking the NPDC to:

- **Medicare Benefits Scheme (MBS) data** will provide insight into use of mental health-related Medicare subsidised services, including from GPs, psychiatrists, psychologists and other allied health workers
- **Pharmaceutical Benefits Scheme (PBS) data** will provide insight into use of mental health-related prescription medications
- **Hospital admitted patient data** will provide insight into hospital admissions for mental health and intentional self-harm
- **Hospital emergency department (ED) data** will provide insight into mental health-related ED presentations
- **Community mental health data** will provide data about women treated in specialist community and hospital-based outpatient care services provided by state and territory governments. These are collectively referred to as community mental health care (CMHC) services and contribute data to the Community Mental Health Care National Minimum Data Set (CMHC NMDS). The CMHC NMDS does not include data from non-government funded community services such as not-for-profit organisations.
- **Mortality data** will provide data about women who die by suicide in the postnatal period, beyond 42 days after birth. Linkage with the above data sources, will also provide insight into mental health service use and medication use by these women, compared with women who have not died by suicide.

These insights will inform service planning and policy, to help ensure women and families get the care they need, when they need it.

Development of primary health care data

GPs and other primary health care providers play a key role in the delivery of antenatal and postnatal mental health screening, referral and care. As noted earlier, MBS data offers limited insight into the delivery of these services and patient outcomes.

There are information gaps in primary health care data that make it difficult to understand a patient's journey through the health care system. A variety of clinical information systems are used in primary health care settings, alongside different tools for extracting data from these systems, which can make it difficult to collate data into a national collection.

Whilst there are difficulties in collating data into a national collection, there are a number of large-scale projects underway to improve the availability of primary health care data, and it may be possible to leverage these projects to give insight into the screening and management of perinatal mental health conditions in general practice, particularly for women in the postnatal period:

- The AIHW is developing a National Primary Health Care Data Collection (NPHCDC), with an initial focus on general practice activity data. The AIHW has consulted across the primary health care sector and is now working collaboratively with PHNs to conduct small-scale data demonstration projects. The goal of these projects is to generate a comprehensive overview of the current state of general practice data in Australia. The first data demonstration project commenced in 2023 and was focused on general practice data on dementia. Planning for the second project is underway.
- NSW's Lumos is a state-wide program linking GP data with public and private hospital admitted patient, non-admitted patient, ambulance, cancer and cause of death data. Data linkages are performed twice per year, and after each linkage participating GPs and PHNs receive a customised report about their patients. As of October 2024, all NSW PHNs and more than 800 general practices were participating in Lumos. The program has been funded through the Commonwealth Health Innovation Fund (NSW Health 2022).
- The University of Melbourne, in partnership with general practices, has developed Data for Decisions - external site opens in new window, a collection of de-identified general practice data. In 2020, there were approximately 3.5 million de-identified patients in the dataset and around 80 million patient visits.
- The *National Primary and Acute Care Data Linkage Project (Design Phase)* is co-led by NSW Health, Commonwealth Department of Health and Aged Care and AIHW, in partnership with all state and territory health departments. The project is engaging key stakeholders, such as those from the PHN, general practice and Aboriginal community controlled health sectors, during the consultation process to inform a blueprint for a hub-and-spoke data linkage system. It is envisaged that de-identified data from general practices would be linked with other health data by leveraging existing infrastructure and successes across jurisdictions, such as the Lumos project in NSW, to provide better insights into patient journeys across the health system.

Next steps for perinatal mental health screening data

Evidence about perinatal mental health is essential to inform the development and evaluation of policies and to help plan, deliver and coordinate targeted services and initiatives. Perinatal mental health data are currently disparate and fragmented, and this report highlights there is currently no single solution. To produce a meaningful national picture, a multipronged, iterative approach is needed

that builds on existing systems and works in tandem with the delivery of quality health care.

The various data development initiatives described in this report will improve evidence about perinatal mental health in Australia. Amplified by Australian stories of perinatal mental health experiences, future reporting of state and territory efforts, including data gained from the PMHp and data linkage, will improve our picture of the needs of mothers and families, so they receive the mental health support they need.

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Technical notes

Terminology

Sex and gender terminology

This report uses the terms 'woman', 'women', 'mother' and 'mothers' to mean females who were pregnant or gave birth. 'Woman' and 'women' typically refers to groups of people aged 18 years and over; however, in this report, people who were pregnant or gave birth aged less than 18 are included.

It is acknowledged that this report includes people who do not identify as women or mothers, and that individual parents and families may use different words to those used in this report. This may include transgender men, intersex people, non-binary and gender diverse people.

First Nations terminology

The AIHW uses 'First Nations people' to refer to Aboriginal and/or Torres Strait Islander people in this report.

Data sources

National Perinatal Data Collection

Analysis in this report uses data from the National Perinatal Data Collection (NPDC) for 2020 to 2022, including voluntary mental health screening items contributed by states and territories under the 2020–21, 2021–22 and 2022–23 National Best Endeavours Data Set (NBEDS).

See Availability of perinatal data for more information about what perinatal data are available in the NPDC and NBEDS.

See Australia's mothers and babies for more information on how data are collected for the NPDC and its structure.

Table 3: Overview of state and territory health authorities that supplied the mental health and family violence data items, 2020 and 2022

Antenatal mental health risk screening status

Year	Vic	Qld	WA	Tas	ACT	Per cent of mothers from supplying state and territory health authorities with a stated result[(a)(b)] (%)	Per cent of all mothers nationally with a stated result[(a)] (%)
2020		✓	✓	✓	✓	96.5	33.8
2021		✓	✓	✓	✓	96.8	33.9
2022	✓[(b)]	✓	✓	✓	✓[(c)]	93.9[(c)]	45.3[(c)]

Indication of possible symptoms of depression at an antenatal care visit, total EPDS score

Year	Vic	Qld	WA	Tas	ACT	Per cent of mothers from supplying state and territory health authorities with a stated result[(a)(b)] (%)	Per cent of all mothers nationally with a stated result[(a)] (%)
2020		✓		✓	✓	75.7 (*99% of 'Yes' Antenatal mental health risk screening status)*	18.3
2021		✓		✓	✓	75.3 (*99% of 'Yes' Antenatal mental health risk screening status)*	18.1

2022	✓[(b)]	✓		✓	✓[(c)]	61.2 (*99% of 'Yes' Antenatal mental health risk screening status)*[(c)]	22.9

Presence or history of mental health condition

Year	Vic	Qld	WA	Tas	ACT	**Per cent of mothers from supplying state and territory health authorities with a stated result[(a)(b)] (%)**	**Per cent of all mothers nationally with a stated result[(a)] (%)**
2020		✓		✓	✓	100	24.1
2021		✓		✓	✓	100	24.0
2022	✓[(b)]	✓		✓	✓[(c)]	98.8[(c)]	36.9

Family violence screening status

Year	Vic	Qld	WA	Tas	ACT	**Per cent of mothers from supplying state and territory health authorities with a stated result[(a)(b)] (%)**	**Per cent of all mothers nationally with a stated result[(a)] (%)**
2020		✓		✓		99.6	12.9
2021		✓		✓		99.6	21.9
2022	✓[(b)]	✓	✓	✓		91.1[(c)]	42.0[(c)]

Source: AIHW analysis of the NPDC, 2020 to 2022.

Notes:

a. Stated results exclude mothers with '*Unknown*', '*Not stated/inadequately described*' or missing results. For instance, for the *Total EPDS score* item, stated results include a score of 0 to 30.
b. Victoria supplied data from 1 July 2022. Denominator of 'Per cent of mothers from supplying jurisdictions with a stated result' excludes births in Victoria prior to 1 July 2022.
c. Data for births occurring during the 2022 calendar year are based on complete data for 7 jurisdictions and a compilation of data for the ACT. The ACT's data consists of their 2022 data for January to October, supplemented by their 2021 data for November and December. Care should be taken if comparing data across time and jurisdictions.

Perinatal Mental Health pilot Collection

Analysis in this report uses detailed antenatal mental health and family violence risk factor screening contributed to the Perinatal Mental Health pilot collection, for mothers screened in New South Wales public maternity services between July 2019 and June 2022.

See Risk factors in *New South Wales antenatal mental health and family violence screening* on this page for details on specific items reported.

Methods

Cohorts

Analysis in this report and supporting data tables presents maternal and pregnancy characteristics of:

- all mothers who gave birth in Australia between 2020 and 2022
- all mothers who gave birth in Queensland, Tasmania and the Australian Capital Territory
- mothers who gave birth in:
  - New South Wales public hospitals
  - New South Wales private hospitals
  - Public hospitals from states and territories other than New South Wales
- mothers who received antenatal mental health and family violence screening in NSW public health services

the maternal and pregnancy characteristics, and EPDS screening results for:

- all mothers who gave birth in Queensland, Tasmania and the Australian Capital Territory and had a recorded antenatal mental health screening result.
- mothers who received antenatal mental health and family violence screening in NSW public health services

and additional psychosocial risk factor results for mothers who received antenatal mental health and family violence screening in NSW public health services

Missing data

In most cases, proportions, percentages and rates for maternal characteristics exclude cases where the variable of interest is missing, recorded as not stated, or is inadequately described.

New South Wales, South Australia, Western Australia, and the Northern Territory did not supply data on the *use of assisted reproductive technologies* to the NPDC for 2020–2022.

New South Wales and Western Australia did not supply data on *previous pregnancies resulting in live birth* and *previous still birth* to the NPDC for 2020–2022.

New South Wales did not supply data on *alcohol consumed during first 20 weeks* and *alcohol consumed after 20 weeks* to the NPDC for 2020–2022.

States and territories that did not supply data for specific data items are excluded from the calculations for all mothers.

Multiple births

Where a pregnancy resulted in multiple births (twins, triplets, and so on), birth setting and gestational age from the first birth are reported. Where any birth resulted in stillbirth, birth outcomes are reported as 'any stillbirth'. Birth outcomes are reported as 'all live births' where all babies were live born, regardless of subsequent survival or death in the perinatal and postnatal periods.

Remoteness

This report uses the Australian Statistical Geography Standard (ASGS) Remoteness Structure which classifies geographical areas based on their relative access to services.

Remoteness Areas are assigned to the smallest statistical geography unit in the ASGS, Statistical Area 1 (SA1), describing an area with a population of between approximately 200 and 800 people.

This report uses ASGS Remoteness Areas mapped to the Statistical Area 2 (SA2) of mother's usual residence. As Remoteness Areas are assigned at the SA1 level, which aggregate to form SA2s, some SA2s include more than one Remoteness Area. For mothers in an SA2 containing more than one Remoteness Area, counts of mothers were proportionally assigned based to Remoteness Areas based on the estimated percentage of persons in each Remoteness Area within the SA2. Remoteness areas were derived by applying ABS ASGS Edition 3 (2021) to SA2 of mother's usual residence for New South Wales, Victoria, Queensland and Tasmania in 2022, and by applying ABS ASGS Edition 2 (2016) to SA2 of mother's usual residence for remaining jurisdictions in 2022 and all jurisdictions in 2020 and 2021.

In this report, remoteness is not reported for mothers not usually resident in Australia or where the mother's SA2 or state of usual residence was not stated, inadequately described, was unable to be mapped to a Remoteness Area, or was in a territory other than Northern Territory or Australian Capital Territory. Table 4 shows the number of mothers for whom remoteness is not reported.

Table 4: Mothers excluded from remoteness reporting by state and territory of baby's birth

State of baby's birth	**N (%)**
New South Wales	2,242 (0.8)
Victoria	221 (0.1)
Queensland	91 (0.1)
South Australia	33 (0.1)
Western Australia	1,751 (1.8)
Tasmania	–
Northern Territory	4 (0.0)

Australian Capital Territory	2 (0.0)

See the Australian Statistical Geography Standard (ASGS): volume 5 - remoteness structure, July 2016 - external site opens in new window (ABS 2018a) and Australian Statistical Geography Standard (ASGS) Edition 3 - external site opens in new window (ABS 2021a) for further information on Remoteness Areas.

Socioeconomic areas

The Socio-Economic Indexes for Areas (SEIFA) summarises a range of variables to rank geographic areas of Australia according to relative socio-economic advantage or disadvantage. This report uses the Index of Relative Socioeconomic Disadvantage (IRSD) developed by the Australian Bureau of Statistics for use at Statistical Area Level 2 (SA2), defined geographic areas generally containing between 3,000 and 25,000 people. SEIFA quintiles were derived by applying the ABS 2021 IRSD to SA2 of mother's usual residence for New South Wales, Victoria, Queensland and Tasmania in 2022, and by applying ABS 2016 SEIFA IRSD to SA2 of mother's usual residence for remaining jurisdictions in 2022 and all jurisdictions in 2020 and 2021.

The IRSD is a summary measure for a geography area and describes the average level of disadvantage in that area. Socio-economic advantage and disadvantage varies at the individual level within each SA2. A SEIFA rank does not apply to an individual but summarises characteristics of the geographic area such as income and opportunities in education and employment.

This report uses SEIFA quintiles, five approximately equal sized groups ranking geographic areas from the least advantaged (Q1) to the most advantaged (Q5). Mothers are classified into SEIFA quintiles based on their SA2 of usual residence.

In this report, SEIFA scores are not reported for mothers not usually resident in Australia or where the mother's SA2 or state of usual residence was not stated, inadequately described, was unable to be mapped to a SEIFA score, or was in a territory other than Northern Territory or Australian Capital Territory. Table 5 shows the number of mothers for whom SEIFA is not reported.

Table 5: Mothers excluded from SEIFA reporting by state and territory of baby's birth

State of baby's birth	**N (%)**
New South Wales	2,477 (0.9)
Victoria	269 (0.1)
Queensland	78 (0.1)
South Australia	395 (0.7)
Western Australia	1,820 (1.9)
Tasmania	–
Northern Territory	34 (0.3)
Australian Capital Territory	392 (2.1)

See Socio-Economic Indexes for Areas (SEIFA), Australia, 2021 - external site opens in new window (ABS 2018c) and Socio-Economic Indexes for Areas - external site opens in new window (ABS 2023) for further information on SEIFA.

Maternal country of birth

Country of birth is recorded using the Standard Australian Classification of Countries (SACC) a four-digit hierarchical structure classifying countries into major and minor groups country. Mothers born in Australia are identified using the minor group and country codes for Australia and its external territories (11, 1101, 1102 & 1199).

Gestational age

Gestational age uses the number of completed weeks of pregnancy at the time of birth. In this report, mothers were classified as *pre-term* if they gave birth at between 20 and 36 completed weeks of pregnancy, as *at term* if they gave birth between 37 and 41 weeks, and *post-term* if they gave birth at 42 or more completed weeks of pregnancy.

Age-standardisation

Age-standardised rates enable comparisons to be made between populations that have different age structures. Data tables for this report include age-standardised rates using direct standardisation, in which the age-specific rates are applied to a constant population.

Age-standardised rates in supporting data tables use the June 2001 Australian female estimated resident population aged 15–44 as the reference population using five-year age groups. Limited 10-year age groups were used for some characteristics due to small numbers (tables 6 and 7).

Age-standardised rates are not reported for post-term births due to small numbers.

Table 6: Age groups used for age standardisation, NPDC data for Queensland, Tasmania and the Australian Capital Territory, by maternal characteristic

Characteristic of mother or pregnancy	Age groups
• Alcohol consumed after 20 weeks • Parity • Previous live births • Previous stillbirth • Use of assisted reproductive technology	15–24, 25–29, 30–34, 35–39 and 40–44
• Birth setting • Remoteness Area	15–19, 20–24, 25–29, 30–34, 35–44
• Alcohol consumed during first 20 weeks • Birth outcomes • Diabetes during pregnancy • Indigenous status • Gestational age • Hypertensive disorder during pregnancy • Mother's country of birth • Multiple births • Pre-pregnancy BMI • Socioeconomic status (SEIFA quintile) • Smoked after 20 weeks • Smoked at any point • Smoked during first 20 weeks	15–19, 20–24, 25–29, 30–34, 35–39 and 40–44

Table 7: Age groups used for age standardisation, New South Wales antenatal mental health and family violence screening data, by risk factor

Risk factors	Age groups
• Adverse childhood experiences (physical, emotional or sexual abuse) • Domestic violence • High risk of depression • History of mental health problems • Major stressors in past year • Possible symptoms of anxiety	15–24, 25–29, 30–34, 35–39 and 40–44
• Lack of emotional support • Thoughts of self-harm	15–24, 25–29, 30–34, 35–44

Risk factors in New South Wales antenatal mental health and family violence screening

Risk factors reported for New South Wales detailed antenatal mental health screening data includes risks derived from the Safe Start and Edinburgh Postnatal Depression Scale (EPDS) screening tools. EPDS screening is provided as a component of Safe Start screening, but analysis also includes EPDS results from screening conducted under the Perinatal Integrated Psychosocial Assessment study (PIPA) at Sydney's Royal Hospital for Women. Other data items from PIPA screening have not been included in the analysis.

Where multiple screens are recorded for a mother, results are reported for each pregnancy. Risk factors are reported if they were recorded in any screen during a pregnancy, and the screening date and maternal age from the first screen for a pregnancy are used.

Table 8 outlines the tools and data items used to derive risk factors.

Table 8: Risk factors from detailed New South Wales antenatal screening data

Risk factor	Tool	Definition
Lack of emotional support	Safe Start	Responded to Safe Start item 2 (Do you have someone you are able to talk to about your feelings or worries?) with "No".
Major stressors in past year	Safe Start	Responded to Safe Start item 3 "Have you had any major stressors, changes or losses recently (i.e. in the last 12 months) such as, financial problems, someone close to you dying, or any other serious worries?)" with "Yes" or any specific stressor.
History of mental health problems	Safe Start	Responded "Yes" to Safe Start item 6a "Have you ever felt anxious, miserable, worried or depressed for more than a couple of weeks?" and responded "Yes" to either Safe Start item 6b "If so, did it seriously interfere with your work and your relationships with friends and family?" or Safe Start item 7 "Are you currently receiving, or have you in the past received, treatment for any emotional problems?"
Adverse childhood experiences (physical, emotional or sexual abuse)	Safe Start	Responded "Yes" to Safe Start item 10, "Now that you are having a child of your own, you may think more about your own childhood and what it was like. As a child were you hurt or abused in any way (physically, emotionally, sexually)?"
Domestic violence	Safe Start	Responded "Yes" to either Safe Start item 11 "Within the last year have you been hit, slapped, or hurt in other ways by your partner or ex-partner?" or Safe Start item 12 "Are you frightened of your partner or ex-partner?" or provided a response indicating being frightened by specifically their partner or ex-partner.
High risk of depression	EPDS	Completed EPDS with total score of 13 or higher.
Possible symptoms of anxiety	EPDS	Completed EPDS items 3, 4 and 5, with total sum for these items of 5 or higher.
Thoughts of self-harm	EPDS	Responded to EPDS item 10 (The thought of harming myself has occurred to me) with "Hardly ever", "Sometimes", or "Yes, quite often".

References

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Glossary

Aboriginal or Torres Strait Islander: See First Nations

Antenatal Risk Questionnaire (ANRQ): The ANRQ is a 12-item questionnaire used to address key domains of psychosocial health that have been shown to be associated with increased risk of perinatal mental health morbidity (for example, depressive or anxiety disorder) and less optimal mother-infant attachment. The ANRQ can be self-completed or administered by the clinician and can be used during pregnancy or postnatally.

antenatal: The period covering conception up to the time of birth. Synonymous with prenatal.

antenatal care: A planned visit between a pregnant woman and a midwife or doctor to assess and improve the wellbeing of the mother and baby throughout pregnancy. It does not include visits where the sole purpose is to confirm the pregnancy. Also known as an antenatal visit.

anxiety disorders: A group of mental disorders marked by excessive feelings of apprehension, worry, nervousness and stress. Includes generalised anxiety disorder, obsessive-compulsive disorder, panic disorder, post-traumatic stress disorder and various phobias.

birth trauma/traumatic birth: Includes births, whether pre-term or full term, which are physically traumatic (for example, instrumental or assisted deliveries or emergency caesarean sections, severe perineal tears, postpartum haemorrhage) and births that are experienced as traumatic, even when the delivery is obstetrically straightforward (NICE 2020), and thus may include psychological birth trauma. The Australian Longitudinal Study on Women's Health defines traumatic birth experiences as emergency caesarean, labour lasting more than 36 hours, emotional distress during labour, or stillbirth (Loxton et al. 2021).

data linkage/linked data/data integration: Bringing together (linking) information from 2 or more data sources believed to relate to the same entity, such as the same individual or the same institution. The resulting data set is called linked data. In this report, data linkage is used to bring together information from datasets that indicates a population of interest (such as people with dementia) with other datasets that include information on other characteristics or service usage.

de-identified: A process that involves the removal or alteration of personal identifiers, followed by the application of additional techniques or controls to remove, obscure, aggregate, alter and/or protect data so that they are no longer about an identifiable (or reasonably identifiable) individual.

depression: A mood disorder with prolonged feelings of being sad, hopeless, low and inadequate, with a loss of interest or pleasure in activities and often with suicidal thoughts or self-blame.

depressive disorders: A group of mood disorders with prolonged feelings of being sad, hopeless, low and inadequate, with a loss of interest or pleasure in activities and often with suicidal thoughts or self-blame.

Edinburgh Postnatal Depression Scale (EPDS): The EPDS is a 10-item questionnaire asking women how often they have felt certain ways in the past 7 days. For example, for the item 'I have been able to laugh and see the funny side of things,' women are asked to choose between responses; 'As much as I always could,' 'Not quite so much now,' 'Definitely not so much now,' and 'Not at all.' Responses to EPDS items are scored between zero and 3, and a total score of 13 is regarded as a flag for possible depressive symptoms requiring follow up.

family violence (or family and domestic violence): Violence between family members as well as current or former intimate partners. Can include acts of violence between a parent and a child. Family violence is the preferred term used to identify experiences of violence for Aboriginal and Torres Strait Islander people as it encompasses the broad range of extended family and kinship relationships in which violence may occur.

fetal death (stillbirth): Death, before the complete expulsion or extraction from its mother, of a product of conception of 20 or more completed weeks of gestation or of 400 grams or more birthweight. Death is indicated by the fact that, after such separation, the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles.

First Nations Person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander.

general practice: general practice includes fully qualified general practitioners. Physicians in training are normally excluded.

general practitioner (GP): A medical practitioner who provides primary comprehensive and continuing care to patients and their families in the community.

mental health: A state of wellbeing in which the person realises their own abilities, can cope with normal stresses of life, can work productively and can contribute to the community. Mental health is the capacity of individuals and groups to interact with one another and their environment in ways that promote subjective wellbeing, optimal development and the use of cognitive, affective and relational abilities. Different cultural groups may prefer to use other terms to describe mental health, such as 'social and emotional wellbeing' (Everymind 2020).

mental health condition/mental illness (or **mental health disorder/mental disorder**): A clinically diagnosable disorder that significantly interferes with an individual's cognitive, emotional or social abilities. The term covers a spectrum of disorders that vary in severity and duration, including anxiety disorders, affective disorders (such as depression), psychotic disorders and substance use disorders. The terms mental illness and mental disorder are often used interchangeably.

midwife: A person who is trained to help women in childbirth.

mood (affective) disorders: A set of psychiatric disorders, also called mood disorders. The main types of affective disorders are depression and bipolar disorder. Symptoms vary by individual and can range from mild to severe.

non-Indigenous: People who have indicated that they are not of Aboriginal or Torres Strait Islander descent.

parity: Number of previous pregnancies resulting in live births or stillbirths, excluding the current pregnancy.

perinatal: Pertaining to or occurring in the period covering pregnancy and the first year of birth. Note - this differs from other Australian Institute of Health and Welfare (AIHW) reports where perinatal is used to mean 'pertaining to or occurring in the period shortly before or after birth (usually up to 28 days after)'.

plurality: Number of births resulting from a pregnancy.

postnatal/postpartum: Pertaining to or occurring in the period immediately after birth and the first year after birth. The terms postnatal and postpartum are often used interchangeably however explicitly, *postpartum* refers to the woman and *postnatal* refers to the baby. This differs from other AIHW reports where these terms are used to mean 'pertaining to or occurring in the period immediately after birth lasting 6 weeks.'

postpartum psychosis: Acute cute psychotic episode arising in the early postnatal period.

post-traumatic stress disorder (PTSD): The development of a set of reactions in people who have experienced a traumatic event that might have threatened their life or safety, or others around them. Examples of traumatic events can include war or torture, serious accidents, physical or sexual assault, or disasters. A person who has PTSD can experience feelings of helplessness, horror or intense fear. Childbirth-related PTSD relates to a person's response to their birthing experience.

Pre-term birth: Birth before 37 completed weeks of gestation.

Primary health care: These are services delivered in many community settings, such as general practices, community health centres, Aboriginal health services and allied health practices (for example, physiotherapy, dietetic and chiropractic practices) and come under numerous funding arrangements. Expenditure on primary health care includes recurrent expenditure on health goods and services, such as on medical services, dental services, other health practitioner services, pharmaceuticals and community and public health services.

Primary Health Network (PHN): An administrative not-for-profit organisation set up under the Australian Government Primary Health Networks Program to commission primary care health services:

- to meet the identified and prioritised needs of people in their administrative health region
- to provide practice support to general practitioners
- to integrate health services, including coordinating with local hospitals, to improve operational efficiency and provide a better experience for patients.

Private hospital: A privately owned and operated institution, catering for patients who are treated by a doctor of their own choice. Patients are charged fees for accommodation and other services provided by the hospital and by relevant medical and allied health practitioners. The term includes acute care and psychiatric hospitals as well as private freestanding day hospital facilities.

Private patient: A person admitted to a private hospital, or a person admitted to a public hospital who decides to choose the doctor(s) who will treat them or to have private ward accommodation – this means they will be charged for medical services, food and accommodation.

protective factors: These are actions a person can take to reduce the negative impact of issues like mental health conditions and delayed developmental outcomes in children. They may strengthen a person's ability to cope with difficult circumstances and may include actions before and after childbirth such as physical activity, healthy nutrition, social support, and supporting mother-infant interaction.

psychological birth trauma: May result from a traumatic birth and be experienced by both birthing and non-birthing parents following a birth.

psychosocial: Involving both psychological and social factors that impact on health and wellbeing.

psychotic disorders: 'A diverse group of illnesses that have their origins in abnormal brain function and are characterised by fundamental distortions of thinking, perception and emotional response.' (Slade et al. 2009).

public hospital: A hospital controlled by a state or territory health authority. In Australia, public hospitals offer free diagnostic services, treatment, care and accommodation to all eligible patients.

public patient: Patients who are admitted to hospital at no charge and are mostly funded through public sector health or hospital service budgets.

risk factors: Any factor that represents a greater risk of a health disorder or other unwanted condition or event. Some risk factors are regarded as causes of disease; others are not necessarily so. Along with their opposites (protective factors), risk factors are known as determinants.

stillbirth: See fetal death (stillbirth)

suicide, suicidality, and intentional self-harm: Suicide - An action taken to deliberately end one's own life; Suicidality – a term that encompasses suicide plans, attempts and ideation; Intentional self-harm is deliberately causing physical harm to oneself but not necessarily with the intention of dying.

For additional terms, refer to the Glossary in Mothers & babies.

References

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Notes

Amendment

15 November 2024

- In the New South Wales case study, statistical terminology was updated changing “crude rate” to “crude proportion” for consistency.
- This report is an update and was previously titled *Data opportunities in perinatal mental health screening* and was published 9 November 2023. The report has been renamed to *Perinatal mental health screening in Australia* to better reflect the evolving content of the report.

25 July 2024 – In Data tables: Data opportunities in perinatal mental health screening and web report Figure 2 on the Initial findings page, the label for combined years of data has been corrected from “2021 and 2022” to “2020 and 2021”.

29 April 2024 – In Excel data table 'Table 2: Percentage of mothers who gave birth in Queensland, Tasmania and the Australian Capital Territory with a recorded EPDS score who scored 13 or higher, by maternal and pregnancy characteristics, 2021 and 2022', updated maternal/pregnancy characteristic from ‘Previous pregnancies resulting in live birth’ to ‘Previous pregnancy resulting in stillbirth’ for groups ‘Had Previous stillbirth’ and ‘No previous stillbirth.’

Acknowledgements

This report has been prepared by the Maternal and Perinatal Health Unit at the Australian Institute of Health and Welfare (AIHW) and was made possible by the contribution of many AIHW subject matter experts and external stakeholders. This work has been funded by the Commonwealth Department of Health and Aged Care.

A large number of stakeholders provided valuable advice and input to the National Perinatal Data Collection and to this report, including the National Perinatal Data Development Committee, the National Maternity Data Development Project Advisory Group, the Perinatal Mental Health pilot Governance Committee, and the Perinatal Mental Health Jurisdictional Data Working Party.

For more information see State and territory perinatal collections.

The AIHW also acknowledges the time, effort and expertise of all maternity staff in collecting and providing the data for the National Perinatal Data Collection.

Australian Government
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Data

Data tables: Perinatal mental health screening in Australia 2024

Data

Supplementary tables 1 to 17
XLSX 253kB

Related material

For information about the physical health of mothers and babies see:

- Australia's mothers and babies

For more information on family, domestic and sexual violence see:

- Family, domestic and sexual violence: National data landscape 2022
- Family, domestic and sexual violence data in Australia

Related topics

- Mental health
- Mothers & babies

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Archived content

The data tables below show previous analysis of the National Perinatal Data Collection for previous earlier versions of this report and were correct at the time of publication.

Note: data may have changed since the original publication date.

Data tables: Data opportunities in perinatal mental health screening (July 2024)

Data
XLSX 120kB