

**Perinatal National Minimum Data Set
compliance evaluation
2001 to 2005**

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Please note that as with all statistical reports there is the potential for minor revisions of data.

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**Perinatal National Minimum Data Set
compliance evaluation
2001 to 2005**

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Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
ASCCSS	Australian Standard Classification of Countries for Social Statistics
g	gram
METeOR	Metadata online registry
NHDD	National Health Data Dictionary
NHIG	National Health Information Group
NHISSC	National Health Information Standards and Statistics Committee
NMDS	National Minimum Data Set
NPDC	National Perinatal Data Collection
NPDDC	National Perinatal Data Development Committee
NPSU	AIHW National Perinatal Statistics Unit
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
SA	South Australia
SACC	Standard Australian Classification of Countries
SIMC	Statistical Information Management Committee
Tas	Tasmania
UNSW	University of New South Wales
Vic	Victoria
WA	Western Australia
..	Not applicable

1 Introduction

This report presents a comprehensive review of the extent to which data for 2001, 2002, 2003, 2004 and 2005 for the Perinatal National Minimum Data Set (NMDS) were collected and/or provided by states and territories to the Australian Institute of Health and Welfare (AIHW) National Perinatal Statistics Unit (NPSU) in accordance with the NMDS specifications as published in the *National health data dictionary* (NHDD) (AIHW 2000; AIHW 2001; AIHW 2002; NHDC 2003). This report provides information that can be used to improve data reporting and to develop and refine the NMDS specifications.

Background

An evaluation of the Perinatal NMDS was undertaken in 2003 by the NPSU, in consultation with the National Perinatal Data Development Committee (NPDDC). The evaluation was funded by the Australian Health Ministers' Advisory Council (AHMAC), through the then National Health Information Group (NHIG). The *Report on the evaluation of the Perinatal National Minimum Data Set* was published in 2004 and included a compliance evaluation of 2000 data, a review of utility based on consultations with data providers and users, and recommendations for future data development (Laws & Sullivan 2004).

Since publication of the evaluation report, a program of perinatal data development has been implemented. In 2005, AHMAC, through a cost-shared budget with the Statistical Information Management Committee (SIMC), provided the NPSU with funding to assist with undertaking data development work to further develop the NMDS. The program of data development involves revision of existing Perinatal NMDS items, data development work on existing perinatal NHDD items, and the development of new perinatal items. The work program has included data development based on the recommendations of the evaluation.

The methodology for this compliance evaluation is based on an enhanced methodology for NMDS reviews used for the compliance section of the previous evaluation report (Laws & Sullivan 2004) and for the more recent report evaluating the NMDS for Admitted Patient Care (AIHW 2006).

Purpose of this report

The purpose of this evaluation is to assess the quality and consistency of the Perinatal NMDS data, that is, the extent to which data were collected and/or provided by states and territories in accordance with NMDS specifications as published in the NHDD. The NMDS is contingent upon a national agreement to collect uniform data and to supply it as part of the national collection. This means that data elements should be collected or at least reported using standard definitions and domain values and reported for all births within scope. However, there tends to be some variation in the way in which data are reported among the states and territories.

Through assessing the ability of states and territories to comply with the NMDS specifications (data definitions, domain values and scope), actions can be taken to improve the data quality and consistency.

The data evaluated were for 2001 to 2005 and were based on the specifications in the version of the NHDD current in each year of data collection, that is, Version 9 for 2001 data (AIHW 2000), Version 10 for 2002 data (AIHW 2001), Version 11 for 2003 data (AIHW 2002) and Version 12 for 2004 and 2005 data (NHDC 2003). As the compliance evaluation is based on data provided by states and territories, assessments of compliance have been made according to the specifications in these NHDD versions, not against the most recent version, Version 13 (HDSC 2006).

This compliance evaluation was based on the data provided by the states and territories to the NPSU for each year; the documentation provided with the data; and communications between the NPSU and the jurisdictions during compilation of the National Perinatal Data Collection for 2001 to 2005, and during the preparation of this report.

The compliance evaluation involved assessing for each data element in the 2001 to 2005 data:

1. whether states and territories had provided it
2. whether it was provided in accordance with the NMDS specifications as published in the NHDD (i.e. whether the NHDD definition and domain values were used)
3. whether it was reported for every birth or woman who gave birth (scope).

The overall scope of data provided by states and territories was also assessed, that is, whether data were provided for all births.

Structure of this report

This chapter provides background information on the Perinatal NMDS.

Chapter 2 provides summaries at both the national and state and territory levels of the extent to which the data provided for the Perinatal NMDS comply with the NHDD definitions and domain values.

Chapter 3 describes the results of the compliance evaluation for each data element, including information on the scope of the data provided, the extent to which the data provided comply with the NHDD definitions and domain values and a commentary on the trend in data quality over the five-year period.

The Perinatal National Minimum Data Set

An NMDS is a core set of data elements endorsed by the National Health Information Standards and Statistics Committee (NHISSC) for mandatory collection and reporting at a national level. An NMDS depends on a national agreement to collect uniform data and to supply it as part of a national collection. The standards make data collection activities more efficient by reducing duplication of effort by standardising core data items; more effective by ensuring that information to be collected is relevant and appropriate to its purpose; and more comparable and consistent for reporting purposes.

An NMDS includes agreement on specified data elements (discrete items of information or variables) and supporting data element concepts as well as the scope of the application of those data elements and the statistical units for collection. Definitions of all data elements that are included in NMDSs are included in the AIHW's online metadata registry, 'METeOR'.

The Perinatal NMDS is a specification for data collected on all births in Australia. Data are collected from perinatal administrative and clinical record systems and forwarded regularly to the relevant state or territory health authority. Data for the year ending 31 December are then provided annually to the NPSU for national collation.

The Perinatal NMDS was first specified in 1997. It includes data items relating to the mother, including demographic characteristics and factors relating to the pregnancy, labour and birth, and data items relating to the baby, including birth status, sex and birthweight.

Current definitions are available in the *National health data dictionary* (NHDD) Version 13 (HDSC 2006) and on METeOR online at <www.meteor.aihw.gov.au>. Version 12 of the NHDD was current at the time of collection of the 2004 and 2005 data (NHDC 2003).

The National Perinatal Data Development Committee

The primary role of the NPDDC is to provide expert advice to the NPSU regarding perinatal health data. The NPSU in consultation with the NPDDC review existing data items and develop new items to ensure that the NPDC is nationally consistent and current. New data items and changes to existing items that are endorsed by the Committee are submitted to NHISSC for endorsement for inclusion in METeOR and the Perinatal NMDS. The Committee is comprised of representatives from each state and territory health authority, the Australian Bureau of Statistics (ABS) and the NPSU, with temporary members invited on a transitory basis as their expertise is required. The NPDDC seeks expert clinical advice from professional bodies such as the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, the Australian and New Zealand College of Anaesthetists and the Australian College of Midwives as required. Since completion of the Perinatal NMDS evaluation report (Laws & Sullivan 2004), a program of perinatal data development has been implemented.

2 Summary

National summary

Scope

The Perinatal NMDS is a specification for data that are collected on all births in Australia in hospitals, birth centres and the community. It includes both live and stillbirths, of at least 20 weeks gestation or at least 400 grams birthweight. Some data elements in the NMDS are collected for all women who gave birth (e.g. Onset of labour), rather than all births (e.g. Sex), or apply only to women who gave birth in a hospital or birth centre (e.g. Separation date).

Data are collected by midwives or other birth attendants using patient administrative and clinical records and are forwarded to the relevant state or territory health authority on a regular basis. Data for each year ending 31 December are then provided to the AIHW National Perinatal Statistics Unit (NPSU) for national collation, on an annual basis.

This evaluation examines the 2001, 2002, 2003, 2004 and 2005 data provided by the states and territories for inclusion in the Perinatal NMDS, as it compares to the NHDD version current at the beginning of each data collection period.

Use of national standard definition, domain values and NMDS scope

This is a national summary of the information to be presented in more detail on the following pages. Table 2.1 presents a summary of the compliance with the NHDD definitions, domain values and scope. The data elements are presented in alphabetical order of their METeOR short name.

In Table 2.1, '✓' indicates that all states and territories complied with the NHDD definition, domain values or scope for the data element for that collection year and '✗' indicates that at least one state or territory did not comply with the NHDD definition, domain values or scope for the data element. For the purposes of this evaluation, compliance is established for a state or territory if the NHDD definition was used and if the NHDD domain values were reported for at least 99.5% of separations within scope for the data element for the collection year.

The measure of whether the data element was provided for all reported births has been reported as '✓' in the tables summarising this information in this section of the report and in the sections on each data element, if the data were missing or not reported for no more than 0.5% of separations. The text presented in the sections on the data elements details situations in which the data were missing for more than 0.5% of records.

For the figures presented below, certain data items, which were not requested by the NPSU or were requested incorrectly, have been excluded from the totals: Establishment identifier – Australian State/Territory identifier', 'Establishment identifier – Region code', and for 2001 only, 'Method of birth'.

For the 2001 collection year the national standard definition was used for 66.7% of data elements (12 of 18) in the NMDS by all states and territories. This level of compliance remained constant over the following three collection periods (13 of 19 in 2002, 2003 and 2004, or 68.4%). For 2005, 14 of 18 data elements were provided according to the correct definition (77.8%).

The national standard domain values were used for 8 data elements (44.4%) by all jurisdictions for 2001. The following year saw an improvement in the adherence to NHDD domain values with 47.4% of data elements complying. The 2003 collection year saw a decline to 42.1% complying with domain values specified in the NHDD, and 2004 compliance was again at 47.4%. For 2005 data, there was a large improvement in compliance with domain values, with 15 of 18 data elements complying for all jurisdictions (83.3%).

For the 2001 collection year data were provided for more than 99.5% of births or women who gave birth for 9 data elements (50.0%). Compliance increased to 10 data elements in 2002, 2003 and 2004 (52.6%). For 2005, 14 data elements were provided for all relevant records (77.8%). For each of the four years from 2001 to 2004 there were only 7 data elements for which all jurisdictions used the national standard definition and domain values and provided the item for all reported births or women who gave birth (38.9% in 2001 and 36.8% in 2002, 2003 and 2004). For 2005 data, there were 13 data items where complete information was provided (72.2%) (Table 1).

Table 1: National summary of the use of the *National health data dictionary* definition and domain values and NMDS scope, 2001 to 2005

Data element (short name)	NHDD definition used?					NHDD domain values used?					Provided for all* reported births/women who gave birth?				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Actual place of birth	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓
Birth order	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Birth plurality	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Country of birth	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Date of birth (mother)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Date of birth (baby)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✓
Establishment identifier— Australian state/territory identifier
Establishment identifier— sector	✗	✗	✗	✗	✓	✗	✗	✗	✗	✓	✗	✗	✗	✗	✓
Establishment identifier— region code
Establishment identifier— number	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
First day of the last menstrual period	✗	✗	✗	✗	..	✗	✗	✗	✗	..	✗	✗	✗	✗	..
Gestational age	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Indigenous status	✓	✓	✓	✓	✓	✗	✓	✗	✓	✓	✗	✗	✗	✗	✓
Infant weight, neonate, stillborn	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Method of birth	..	✓	✓	✓	✓	..	✗	✗	✗	✓	..	✓	✓	✓	✓
Onset of labour	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓
Person identifier	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Separation date (mother)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Sex	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State/territory of birth	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Status of the baby	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓

* More than 99.5% of relevant births or women who gave birth.

Note: ✓ indicates compliance by all jurisdictions and ✗ indicates that not all jurisdictions were compliant.

.. Not applicable; that is, the data element was not requested by the NPSU or was requested incorrectly.

Compliance with NMDS scope

Table 1 shows that the majority of data elements were provided for all reported births or women who gave birth. Despite this, there are some issues surrounding records which meet the scope but are not provided to the NPSU for inclusion in the Perinatal NMDS, and differences in data collection periods among the states and territories. These are outlined below.

Terminations of pregnancy

Terminations of pregnancy are within the scope of the Perinatal NMDS if they occur at 20 weeks gestation or more or are 400 grams birthweight or more. Inclusion of these records is inconsistent among the states and territories and this affects the counting of fetal deaths. There are inconsistencies among the states and territories in how terminations of pregnancy are identified in their data collections and some jurisdictions cannot separately identify those performed for psychosocial reasons from births.

In South Australia, terminations of pregnancy performed for congenital anomalies at 20 weeks or more gestation or 400 grams or more birthweight are included in their perinatal collection and provided to the NPSU. Terminations for psychosocial reasons are not included in South Australia's perinatal collection. These are not performed in hospitals with obstetric units, and legislation states that a 'stillborn child does not include the product of a procedure for the termination of pregnancy'. As such, these records are not provided to the NPSU for national collation. South Australia has indicated that they could provide summary data for these records (i.e. the number) but not unit record data.

Fetal deaths in utero prior to 20 weeks gestation

Currently the gestational age at delivery should be used to determine inclusion in the Perinatal NMDS. Fetal deaths in utero, including fetus papyraceous/compressus that die before 20 weeks gestation but are delivered at or after 20 weeks, are in scope for the NMDS. These deaths generally occur in multiple pregnancies, for example, where one twin dies early in the pregnancy and the other develops and is born at or after 20 weeks gestation.

At the time of data collection, South Australia's perinatal data collection practices were to exclude fetuses where gestational age at death in utero is known (for example, through serial ultrasound) and the gestational age at death is less than 20 weeks. However, if the gestational age at death is unknown, the fetuses are included. As part of the NPDDC's review of data items, the discrepancy in reporting practices across jurisdictions was highlighted. Other jurisdictions are unable to determine gestational age at death, therefore, using gestational age at delivery of the fetus to determine inclusion in the Perinatal NMDS is a consistent approach. At the NPDDC meeting in May 2007, all states and territories agreed to report fetal deaths in utero in this way. This will ensure national consistency in the future.

This issue affects not only the scope of the Perinatal NMDS and the calculation of perinatal death rates, but the data elements, Birth plurality, Birth order and Gestational age. For example, in a twin pregnancy where one fetal death in utero occurs prior to 20 weeks gestation but is delivered after 20 weeks gestation, this should be considered to be a twin pregnancy and birth order should be assigned to each twin.

Data collection periods

The current Perinatal NMDS specification indicates that the period for which data are to be collected and nationally collated is financial years, ending 30 June each year. However, most jurisdictions collect and report data by calendar year. The discrepancy in the NMDS specification and current practice was identified in the 2004 *Report on the evaluation of the Perinatal National Minimum Data Set*. Following this evaluation, it was recommended to SIMC at their October 2005 meeting, that the collection period for this NMDS be changed to calendar years to reflect current practice. It was noted by SIMC that the collection period for NMDSs is financial years, ending 30 June each year and that any variation on financial year reporting for the Perinatal NMDS needed strong justification. SIMC also noted a general preference for financial year reporting for greater consistency and integration with other data sets.

The above was tabled at the May 2006 NPDDC meeting, where it was noted that there is inconsistency among the states and territories in the data provided to the NPSU for national collation of new and changed data elements. Some states and territories implement changes to their perinatal collections on a calendar year basis (i.e. from 1 January) and others implement changes on a financial year basis (i.e. from 1 July). States and territories that implement changes on a calendar year basis are either six months ahead (if they can change their systems by 31 December in the year the change was endorsed) or six months behind the other states and territories. Therefore, they are not compliant with the NMDS.

At this meeting it was agreed that the NMDS specification should maintain that the collection period is financial years and that national reports (e.g. *Australia's mothers and babies*) would present data by calendar year. The representatives from New South Wales, Victoria and South Australia indicated that there were some barriers to complying with this in their jurisdictions.

The implications of the period for which data are collected and nationally collated being financial years are:

1. Changes to the NMDS would need to be implemented by the states and territories on 1 July of the year following the year of endorsement by NHISSC.
2. The data would continue to be presented in national reports by calendar year, so the presentation of data for data elements that were implemented or changed on 1 July would need to be considered. For example, where a data element was changed, the data for the second half of the calendar year may need to be mapped back to the standard used in the first half of the calendar year, so they can be combined with data for the first half of the year.
3. The timetable for the provision of data to the NPSU may be revised. For example, the data may be provided as two data sets, one for each six-month period.

Additional information

In April 2007, South Australia agreed to make the following changes to the provision of perinatal data in the future:

1. Compliance with gestation at birth (rather than at death) for multiple pregnancies in all cases where a fetal death in utero occurred before 20 weeks gestation and is recognisable as a fetus at birth.
2. Data could be provided by financial year if required and could therefore support financial year collection.

Terminations for psychosocial reasons at 20 weeks gestation or more would continue to not be notified to the South Australian perinatal data collection. They would, therefore, not be included in the Perinatal NMDS.

State and territory summary

The state and territory summary provides information on the number and percentage of data elements for which the *National health data dictionary* definition and domain values were used and the number and percentage of data elements which were reported for all births. Items which were not requested by the NPSU or were requested incorrectly are excluded from Table 2. Therefore, the total number of items assessed is 18 for 2001, 19 for 2002, 2003 and 2004, and 18 for 2005.

Overall, compliance with NHDD definitions improved over the time period from 93.1% for 2001 data to 96.5% for 2005. Compliance with value domains and scope remained fairly stable from 2001 to 2004, but improved substantially for 2005 (97.9% and 96.5% respectively).

Out of the states and territories, Victoria, Queensland, Western Australia, Tasmania, the Australian Capital Territory and the Northern Territory all had equally high use of the *National health data dictionary* definitions for reporting data elements (100.0%) for 2005. The jurisdictions with the highest use of the *National health data dictionary* domain values were Queensland, Western Australia, Tasmania, the Australian Capital Territory and the Northern Territory (100.0%). For 2005, Victoria, Queensland, Tasmania, the Australian Capital Territory and the Northern Territory provided all data elements for more than 99.5% of relevant records (100.0%) (Table 2).

Table 2: State and territory summary of the use of the *National health data dictionary* definition and domain values and NMDS scope, 2001 to 2005

State/territory	NHDD definition used?		NHDD domain values used?		Provided for all* reported births/women who gave birth?	
	Number	Per cent	Number	Per cent	Number	Per cent
2001						
NSW	17	94.4	17	94.4	16	88.9
Vic	18	100.0	18	100.0	17	94.4
Qld	15	83.3	17	94.4	17	94.4
WA	18	100.0	18	100.0	15	83.3
SA	13	72.2	13	72.2	13	72.2
Tas	17	94.4	14	77.8	13	72.2
ACT	18	100.0	18	100.0	17	94.4
NT	18	100.0	17	94.4	16	88.9
2002						
NSW	18	94.7	18	94.7	17	89.5
Vic	19	100.0	18	94.7	18	94.7
Qld	15	78.9	17	89.5	18	94.7
WA	18	94.7	19	100.0	16	84.2
SA	14	73.7	14	73.7	14	73.7
Tas	18	94.7	14	73.7	14	73.7
ACT	19	100.0	19	100.0	17	89.5
NT	19	100.0	18	94.7	16	84.2
2003						
NSW	18	94.7	18	94.7	17	89.5
Vic	19	100.0	18	94.7	18	94.7
Qld	15	78.9	17	89.5	18	94.7
WA	19	100.0	18	94.7	16	84.2
SA	14	73.7	14	73.7	14	73.7
Tas	18	94.7	14	73.7	15	78.9
ACT	19	100.0	19	100.0	18	94.7
NT	19	100.0	18	94.7	17	89.5

(continued)

Table 2 (continued): State and territory summary of the use of the National Health Data Dictionary definition and domain values and NMDS scope, 2001 to 2005

State/territory	NHDD definition used?		NHDD domain values used?		Provided for all* reported births/women who gave birth?	
	Number	Per cent	Number	Per cent	Number	Per cent
2004						
NSW	17	89.5	17	89.5	16	84.2
Vic	19	100.0	18	94.7	18	94.7
Qld	19	100.0	19	100.0	18	94.7
WA	19	100.0	19	100.0	16	84.2
SA	14	73.7	14	73.7	14	73.7
Tas	18	94.7	14	73.7	15	78.9
ACT	19	100.0	19	100.0	18	94.7
NT	19	100.0	18	94.7	17	89.5
2005						
NSW	17	94.4	17	94.4	16	88.9
Vic	18	100.0	17	94.4	18	100.0
Qld	18	100.0	18	100.0	18	100.0
WA	18	100.0	18	100.0	16	88.9
SA	14	77.8	17	94.4	17	94.4
Tas	18	100.0	18	100.0	18	100.0
ACT	18	100.0	18	100.0	18	100.0
NT	18	100.0	18	100.0	18	100.0

* More than 99.5% of reported births.

Note: The following data items, which were not requested by the NPSU or were requested incorrectly, have been excluded from the totals: Establishment identifier—Australian state/territory identifier, 'Establishment identifier—region code', and for 2001 only, 'Method of birth'.

3 Assessment of individual data elements

This chapter reports on the assessment of compliance for each data element in the Perinatal NMDS reported by the states and territories for the 2001, 2002, 2003, 2004 and 2005 collection periods.

It presents information on the use of the national standard definitions, domain values and scope by states and territories. The national standard definitions are specified for each collection period according to the relevant version of the NHDD (AIHW 2000; AIHW 2001; AIHW 2002; NHDC 2003). Information is provided on the use of non-standard definitions and domain values and the non-standard use of scope. Information is also provided on any mapping required from the state and territory data provided to the NPSU in order to comply with the national standard domain values. The assessment of each data element includes a commentary on the trend in data quality over the five-year collection period and additional information from states and territories regarding the collection of each data element. The data elements are presented below in alphabetical order of their METeOR short name.

Information on the total number of women who gave birth and births for each of the collection years by state and territory is presented in the Appendix.

Data element short name: Actual place of birth

Evaluation NMDS: Perinatal	Other health DSSs:	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269937
METeOR name: Birth event – setting of birth (actual), code N		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth. For multiple births the actual place of birth of the first born baby is reported.		
Definition: The actual place where the birth occurred, as represented by a code.		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported birth events? ^(a)
		2001	
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✗	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported birth events? ^(a)
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✗	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✗	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✗	✓
2005			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(a) This data element has been requested and provided for all women who gave birth, but not all births, i.e. only the first of a multiple birth.

Details of use of non-standard NHDD definition and domain values

The NHDD definition of 'Actual place of birth' was used by all states and territories.

Most states and territories used the NHDD domain values for 'Actual place of birth' for 2001 to 2004 data. Tasmania provided the data in the format of *1 Hospital, 2 Birth centre, 3 Home, 4 Born before arrival, 8 Other, 9 Not stated*. This is the format in which the NPSU requested this item for data prior to 2000. The Northern Territory provided this item in the format of *1 Hospital, 3 Remote community health centre, 4 Home, 8 Other, 9 Not stated*. There were no birth centre births reported from the Northern Territory during this four-year period.

For 2005 data, all states and territories provided 'Actual place of birth' using the correct data domains.

Details of use of non-standard NMDS scope

'Actual place of birth' was provided for all reported women who gave birth in each state and territory. This data element, however, was not provided for all births. That is, for multiple births, only the place of birth of the first baby has been requested by the NPSU and provided by the states and territories.

Was mapping required from state and territory data sets?

The Tasmanian and Northern Territory data for 2001 to 2004 were mapped to be consistent with the other states and territories. 'Born before arrival' births were recoded to *8 Other*, as were 'Remote community health centre' births from the Northern Territory.

Trend analysis

There was no change in the provision of this data element for 2001 to 2004. It was provided by all jurisdictions for 2005.

Additional information

The NPSU, in consultation with the NPDDC, has begun further data development work on this data element from 2007. Issues being investigated include the reporting of actual place of birth in relation to intended place of birth, particularly with regard to homebirths; whether there should be a distinction between freestanding birth centres and those attached to hospitals; and the reporting of births in remote community health centres.

Data element short name: Birth order

Evaluation NMDS: Perinatal	Other health DSSs: Health care client identification DSS	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269992
METeOR name: Birth – Birth order, code N		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All births.		
Definition: The sequential order of each baby of a multiple birth, as represented by a code.		

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

Not applicable. 'Birth order' was provided for all reported births in each state and territory.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There has been no change in the provision of this data element over the five-year period.

Additional information

Data development is being undertaken on this data element to seek agreement with the NPDDC regarding inclusion of intrauterine fetal deaths and compressed fetuses in the scope, and to reword the Guide for use for clarity.

Data element short name: Birth plurality

Evaluation NMDS: Perinatal	Other health DSSs: Health care client identification DSS	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269994
METeOR name: Birth event – Birth plurality, code N		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth.		
Definition: The number of babies resulting from a single pregnancy, as represented by a code.		

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

Not applicable. 'Birth plurality' was provided for all reported women who gave birth in each state and territory.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There has been no change in the provision of this data element over the five-year period.

Additional information

Although Victoria and South Australia were compliant with the NHDD definition, domain values and scope for 'Birth plurality', these states were not compliant with the Guide for use. The Guide for use specifies that fetuses aborted before 20 completed weeks or fetuses compressed in the placenta at 20 or more weeks are to be excluded.

Victoria includes fetuses compressed in the placenta at 20 or more weeks in the data provided to the NPSU. South Australia complies with the Guide for use regarding fetuses

compressed in the placenta, however, excludes fetuses where a death in utero occurred and was known to be prior to 20 weeks gestation. This would lead to undercounting of multiple pregnancies.

Data development is being undertaken on this data element to seek agreement with the NPDDC regarding inclusion of intrauterine fetal deaths and compressed fetuses in the scope, and to reword the Guide for use for clarity.

Data element short name: Country of birth

<p>Evaluation NMDS: Perinatal</p>	<p>Other health DSSs: Acute coronary syndrome (clinical) DSS Admitted patient care NMDS Admitted patient mental health care NMDS Admitted patient palliative care NMDS Alcohol and other drug treatment services NMDS Cardiovascular disease (clinical) DSS Community mental health care NMDS Computer Assisted Telephone Interview demographic module DSS Health care client identification DSS Non-admitted patient emergency department care NMDS Residential mental health care NMDS</p>	<p>Collection year/s: 2001, 2002, 2003, 2004, 2005</p> <p>METeOR ID: 270277</p>
<p>METeOR name: Person – country of birth, code (SACC 1998) NNNN</p>		
<p>NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.</p>		
<p>Data element scope: All women who gave birth.</p>		
<p>Definition: The country in which the person was born, as represented by a code.</p>		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2001^(a)			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✗	✓
WA	✓	✓	✗
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✗
2002			
NSW	✓	✓	✓
Vic	✓	✗	✓
Qld	✓	✗	✓
WA	✓	✓	✗
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✗
2003			
NSW	✓	✓	✓
Vic	✓	✗	✓
Qld	✓	✗	✓
WA	✓	✓	✗
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✗
2004			
NSW	✓	✓	✓
Vic	✓	✗	✓
Qld	✓	✓	✓
WA	✓	✓	✗
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✗

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2005	
NSW	✓	✓	✓
Vic	✓	✗	✓
Qld	✓	✓	✓
WA	✓	✓	✗
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(a) States/territories have been considered compliant if ASCCSS or SACC was provided for 2001, as both classifications were current in that year.

Details of use of non-standard NHDD definition and domain values

The NHDD definition of 'Country of birth' was used by all states and territories.

As of 1 July 2001, the Country of birth classification changed from the *Australian Standard Classification of Countries for Social Statistics* (ASCCSS) to the *Standard Australian Classification of Countries* (SACC) (from NHDD Version 10). As Perinatal NMDS data are requested and provided in calendar years, states and territories have been considered compliant if they provided either of these classifications for 2001.

For 2001 to 2003, Queensland collected 'Country of birth' using the ABS ASCCSS or SACC classifications. However, in order to confidentialise data for reporting purposes this item was provided to the NPSU in previously agreed groupings. The codes provided were 2-digit codes, representing 18 countries or groups of countries, as well as other and unknown categories. Mappings for these groupings were provided with the extract. From 2004 data, legislative changes in Queensland allowed SACC codes to be provided to the NPSU.

Victoria provided 'Country of birth' to the NPSU using the ASCCSS for 2001 to 2005 data. Tasmania provided ASCCSS for 2001 to 2004 data.

A data domain value of 9999 was reported by some jurisdictions each year. This code is not valid in ASCCSS or SACC. However, it is a value the NPSU requests for where 'Country of birth' is unknown. In addition, for a small number of records, 1-digit supplementary codes for inadequate data, including 0, 1, 2, 3 and 4, were recorded in some jurisdictions during the five-year period.

Details of use of non-standard NMDS scope

Western Australia reported greater than 0.5% not stated or inadequate data for 'Country of birth' for women who gave birth in each year, and the Northern Territory for 2001 to 2004, as shown in Table 3.

Table 3: Women who gave birth in Western Australia and the Northern Territory, number and percentage of not stated or inadequate data for Country of birth, 2001 to 2005

	2001	2002	2003	2004	2005
WA					
Number	1,481	1,235	1,235	1,634	644
Per cent	6.0	5.1	5.1	6.5	2.4
NT					
Number	29	29	22	58	..
Per cent	0.8	0.8	0.6	1.7	..

.. Not applicable as less than 0.5% of records had a Not stated Country of birth.

Western Australia reported that missing data are the result of incomplete linkage between their Midwives' Notification System and Hospital Morbidity Database. Improvements in data quality assurance procedures in this state led to a reduction in the proportion of missing data for 2005.

Was mapping required from state and territory data sets?

Queensland provided mappings for the agreed 'Country of birth' groupings for 2001 to 2003 data to allow for consistent reporting. ASCCSS data from Victoria and Tasmania were mapped from SACC using the ABS concordance (ABS 1998).

Trend analysis

The five-year period has seen some improvement in the consistency of country of birth data provided as part of the Perinatal NMDS, with seven out of eight jurisdictions providing data according to SACC for the most recent year. The percentage of missing or inadequate data for Western Australia and the Northern Territory improved for 2005.

Additional information

Queensland legislation restricted the release of identifiable data for 2001 to 2003, therefore, the 'Country of birth' field was confidentialised. Once legislation changed, Queensland supplied actual SACC codes from 2004 data.

Data element short name: Date of birth (mother)

<p>Evaluation NMDS: Perinatal</p>	<p>Other health DSSs: Acute coronary syndrome (clinical) DSS Admitted patient care NMDS Admitted patient mental health care NMDS Admitted patient palliative care NMDS Alcohol and other drug treatment services NMDS Cancer (clinical) DSS Cardiovascular disease (clinical) DSS Community mental health care NMDS Computer Assisted Telephone Interview demographic module DSS Diabetes (clinical) DSS Health care client identification DSS Health care provider identification DSS Health labour force NMDS Non-admitted patient emergency department care NMDS Residential mental health care NMDS</p>	<p>Collection year/s: 2001, 2002, 2003, 2004, 2005</p>
		<p>METeOR ID: 287007</p>
<p>METeOR name: Person – date of birth, DDMMYYYY</p>		
<p>NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.</p>		
<p>Data element scope: All women who gave birth.</p>		
<p>Definition: The date of birth of the person.</p>		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2001			
NSW	✓	✓	✓
Vic	✓	✓*	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓*	✓
NT	✓	✓*	✓
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓*	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✗	✗	✗
Vic	✓	✓*	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2005	
NSW	✘	✘	✘
Vic	✓	✓*	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA ^(a)	✘	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(a) Confidentialised dates were provided.

* Full date provided, however, mapping to NHDD date format was required.

Details of use of non-standard NHDD definition and domain values

All jurisdictions except for South Australia and Queensland provided full dates of birth for mothers for 2001 to 2003. For 2004 and 2005 all jurisdictions except for New South Wales and South Australia provided full dates. South Australia provided the year of birth only (i.e. 99/99/YYYY) for 2001, blank dates (i.e. 99999999) for 2002, 2003 and 2004, and full adjusted dates for 2005. Queensland adjusted mother's date of birth in 2001 to 2003 based on the baby's date of birth, in order to confidentialise the dates. In Queensland for these years baby's date of birth was provided as the first of every month. New South Wales provided maternal year of birth only for 2004 and 2005.

All states and territories which provided maternal date of birth used the NHDD date format or a format which could easily be transformed into the correct format.

Details of use of non-standard NMDS scope

Although South Australia provided the 'Date of birth' of mother for all reported women who gave birth for 2001, the dates were incomplete. For 2002 to 2004, no maternal date of birth information was provided for any women who gave birth in South Australia.

Dates from Queensland were confidentialised for 2001 to 2003 data. All women who gave birth in New South Wales in 2004 and 2005 had an incomplete date of birth.

Was mapping required from state and territory data sets?

All dates not in DDMMYYYY format were changed to NHDD date format.

Trend analysis

For most states and territories there has been no change in the provision of this data element over the five-year period. New South Wales did not provide maternal date of birth for the most recent two data collection years, 2004 and 2005. Queensland adjusted mother's date of birth based on the baby's date of birth for 2001 to 2003 data. South Australia provided year of birth for 2001, missing data for 2002 to 2004, and adjusted mother's date of birth for 2005.

Additional information

Queensland legislation restricted the release of identifiable data for 2001 to 2003, therefore, the 'Date of birth (mother)' field was confidentialised. Once legislation changed, Queensland supplied actual dates from 2004 data.

South Australia did not provide the full date of birth for some years for reasons of confidentiality. However, mother's age was provided. South Australian legislation prevents the release of potentially identifiable data from its perinatal collection. For 2005, South Australia provided data in a confidentialised format as Queensland had done prior to their legislative changes.

New South Wales did not provide full maternal dates of birth for 2004 or 2005. Maternal age was provided. New South Wales reported that this data element was not provided as it would be used by the NPSU to calculate maternal ages in conjunction with the baby's date of birth. This results in some different figures compared to those in the New South Wales data collection and state reports. The NPSU calculates maternal ages to ensure a consistent method is used across jurisdictions.

Data element short name: Date of birth (baby)

<p>Evaluation NMDS: Perinatal</p>	<p>Other health DSSs: Acute coronary syndrome (clinical) DSS Admitted patient care NMDS Admitted patient mental health care NMDS Admitted patient palliative care NMDS Alcohol and other drug treatment services NMDS Cancer (clinical) DSS Cardiovascular disease (clinical) DSS Community mental health care NMDS Computer Assisted Telephone Interview demographic module DSS Diabetes (clinical) DSS Health care client identification DSS Health care provider identification DSS Health labour force NMDS Non-admitted patient emergency department care NMDS Residential mental health care NMDS</p>	<p>Collection year/s: 2001, 2002, 2003, 2004, 2005</p> <p>METeOR ID: 287007</p>
<p>METeOR name: Person – date of birth, DDMMYYYY</p>		
<p>NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.</p>		
<p>Data element scope: All births.</p>		
<p>Definition: The date of birth of the person.</p>		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported births?
2001			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓*	✓
NT	✓	✓	✓
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓*	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported births?
		2005	
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA ^(a)	✘	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(a) Confidentialised dates were provided.

* Full date provided, however, mapping to NHDD date format was required.

Details of use of non-standard NHDD definition and domain values

All states and territories were recorded as using the NHDD definition for 'Date of birth' of the baby except where confidentialised dates or no dates were provided. Most states and territories used the NHDD date format or a format which could easily be transformed into the correct format.

For Queensland data for 2001 to 2003, almost all of the dates of birth were provided as the first of the month, hence the month and year were provided. South Australia provided the month and year of birth only (i.e. 99/MM/YYYY) for 2001, missing dates of birth for 2002 to 2004 data, and as the first of the month for 2005.

Details of use of non-standard NMDS scope

Although South Australia provided the 'Date of birth' for all reported births for 2001, the dates were incomplete, therefore were recorded as non-compliant. For 2002 to 2004, no date of birth information was provided for any baby born in South Australia.

Dates from Queensland were provided for all births, although were confidentialised for 2001 to 2003 data. Dates from South Australia for 2005 were also confidentialised.

Was mapping required from state and territory data sets?

All dates not in DDMMYYYY format were changed to NHDD date format.

Trend analysis

For most states and territories there has been no change in the provision of this data element over the five-year period. Queensland provided confidentialised dates for 2001 to 2003, and full dates for 2004 and 2005. South Australia provided month and year of birth for 2001, missing data for 2002 to 2004, and confidentialised dates for 2005.

Additional information

Queensland legislation prevented the release of identifiable data from its perinatal data collection for data up until 2003. A confidentialised date of birth indicating the first day of the month and year of the actual birth date was calculated for all perinatal records. Date fields supplied to the NPSU were altered (confidentialised) in line with the revised birth date so as to retain the original relativity, that is, the number of days between any two related dates remained the same. For 2004 and 2005 data, full, unconfidentialised dates were provided.

South Australia did not provide the full date of birth for some years for reasons of confidentiality. South Australian legislation prevents the release of potentially identifiable data from its perinatal collection. For 2005, South Australia provided data in a confidentialised format as Queensland had done prior to their legislative changes.

Data element short name: Establishment identifier—Australian State/Territory identifier (establishment)

Evaluation NMDS: Perinatal	Other health DSSs: Admitted patient care NMDS Community mental health care NMDS Mental health establishments NMDS Residential mental health care NMDS	Collection year/s: none
		METeOR ID: 269941
METeOR name: Establishment – Australian state/territory identifier, code N		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth in hospitals or birth centres.		
Definition: An identifier of the Australian state or territory in which an establishment is located, as represented by a code.		

Use of national standard definition, domain values and NMDS scope

The NPSU did not request ‘Australian State/Territory identifier (establishment)’ for any of the years 2001 to 2005, therefore, none of the states or territories provided data for this item.

Additional information

‘Australian State/Territory identifier (establishment)’ was not requested or provided, however, ‘State/Territory of birth’ was provided. These two items should be the same for all women who gave birth in a hospital or birth centre. This data element is not relevant for births occurring at home or in other locations. ‘Australian State/Territory identifier (establishment)’ was not provided separately.

Data element short name: Establishment identifier—Establishment number

Evaluation NMDS: Perinatal	Other health DSSs: Admitted patient care NMDS Community mental health care NMDS Mental health establishments NMDS Residential mental health care NMDS	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269975
METeOR name: Establishment – organisation identifier (state/territory), NNNNN		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth in hospitals or birth centres.		
Definition: An identifier for an establishment, unique within the state or territory.		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2001	
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA ^(a)	✓	✓	✓
SA	✗	✗	✗
Tas ^(a)	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA ^(a)	✓	✓	✓
SA	✗	✗	✗
Tas ^(a)	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA ^(a)	✓	✓	✓
SA	✗	✗	✗
Tas ^(a)	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA ^(a)	✓	✓	✓
SA	✗	✗	✗
Tas ^(a)	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2005			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA ^(a)	✓	✓	✓
SA	✗	✗	✗
Tas ^(a)	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(a) Private hospitals were confidentialised, i.e. one code was provided for all private hospitals.

Details of use of non-standard NHDD definition and domain values

All states and territories, excluding South Australia, provided hospital codes for 'Establishment number' for 2001 to 2005 data. Tasmania and Western Australia both coded all private hospitals to one numerical code for confidentiality reasons. Therefore, individual private hospitals cannot be identified separately for these states.

Details of use of non-standard NMDS scope

Apart from South Australia, all jurisdictions provided an 'Establishment number' (or private hospital code) for all women who gave birth in hospital or a birth centre.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There was no change in the provision of this data element for 2001 to 2005.

Additional information

South Australia does not provide data for 'Establishment number' for reasons of confidentiality, however, data on hospital size according to the number of births per annum are provided.

Data element short name: Establishment identifier—Establishment sector

Evaluation NMDS: Perinatal	Other health DSSs: Admitted patient care NMDS Community mental health care NMDS Mental health establishments NMDS Residential mental health care NMDS	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269977
METeOR name: Establishment – sector, code N		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth in hospitals or birth centres.		
Definition: A section of the health care industry with which a health care establishment can identify, as represented by a code.		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2001			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✗	✗	✗
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✗	✗	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✗	✗	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✗	✗	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2005			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

Details of use of non-standard NHDD definition and domain values

Tasmania was the only state and territory which did not provide the establishment sector data element to the NPSU for 2001 to 2004. The item was able to be created by the NPSU using the hospital codes provided and advice regarding which hospital codes represented public hospitals and which represented private hospitals. The NHDD definition and domain values were used by all other states and territories and, for 2005, all jurisdictions including Tasmania. Following creation of this data element by the NPSU for Tasmania for 2001 to 2004, this item exists in the Perinatal NMDS for all states and territories.

Details of use of non-standard NMDS scope

'Establishment sector' was provided, or able to be created, for all reported women who gave birth in hospital in each state and territory. This data element is not relevant for women who gave birth at home or in other locations.

Was mapping required from state and territory data sets?

Hospital code data were used to create this data element for Tasmania for 2001 to 2004.

Trend analysis

There was no change in the provision of this data element for 2001 to 2004. It was provided by all jurisdictions for 2005.

Additional information

Not applicable.

Data element short name: Establishment identifier—Region code

Evaluation NMDS: Perinatal	Other health DSSs: Admitted patient care NMDS Community mental health care NMDS Mental health establishments NMDS Residential mental health care NMDS	Collection year/s: none
		METeOR ID: 269940
METeOR name: Establishment – region identifier, X[X]		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth in hospitals or birth centres.		
Definition: An alphanumeric identifier for the location of health services in a defined geographic or administrative area.		

Use of national standard definition, domain values and NMDS scope

The NPSU did not request ‘Region code’ for any of the years 2001 to 2005, therefore, none of the states or territories provided data for this item. According to the NHDD, domain values for this data element are as specified by the individual states and territories and there are no standard categories that have to be reported.

Additional information

‘Region code’ of the establishment was not requested or provided. The only information known about the location of establishments in the Perinatal NMDS is the state or territory of the birth. This data element is not relevant for births occurring at home or in other locations.

Data element short name: First day of the last menstrual period

Evaluation NMDS: Perinatal	Other health DSSs:	Collection year/s: 2001, 2002, 2003, 2004
		METeOR ID: 270038
METeOR name: Pregnancy – first day of the last menstrual period, date DDMMYYYY		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth.		
Definition: Date of the first day of the mother’s last menstrual period (LMP).		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2001	
NSW	x	x	x
Vic	✓	✓*	x
Qld	x	x	x
WA	✓	✓	x
SA	x	x	x
Tas	✓	✓*	x
ACT	✓	✓	x
NT	✓	✓	x

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2002			
NSW	x	x	x
Vic	✓	✓	x
Qld	x	x	x
WA	✓	✓	x
SA	x	x	x
Tas	✓	✓*	x
ACT	✓	✓	x
NT	✓	✓	x
2003			
NSW	x	x	x
Vic	✓	✓*	x
Qld	x	x	x
WA	✓	✓	x
SA	x	x	x
Tas	✓	✓*	x
ACT	✓	✓	x
NT	✓	✓	x
2004			
NSW	x	x	x
Vic	✓	✓*	x
Qld	✓	✓	x
WA	✓	✓	x
SA	x	x	x
Tas	✓	✓*	x
ACT	✓	✓	x
NT	✓	✓	x

* Full date provided however mapping to NHDD date format was required.

Details of use of non-standard NHDD definition and domain values

'First day of the last menstrual period' was not well reported nationally for 2001 to 2004. The item was not provided by New South Wales during the 2001 to 2004 period. Due to the interpretation of legislation, South Australia did not supply this data element for any year. Queensland records were also not stated for 'First day of the last menstrual period' in 2001, 2002 and 2003, due to legislative restrictions.

Western Australia and the Northern Territory provided 'First day of the last menstrual period' using the correct domain values for all years.

Details of use of non-standard NMDS scope

All states and territories either did not provide 'First day of the last menstrual period' or provided the data with large proportions of missing values. Missing data were recorded for all jurisdictions and all years, and ranged from 24.3% to 50.5% where the data element was provided. Table 4 shows the number and percentage of missing values for each year and state and territory for 'First day of the last menstrual period'.

Table 4: Women who gave birth, number and percentage of not stated or inadequate data for First day of last menstrual period, by state and territory, 2001 to 2004

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2001								
Number	..	14,879	..	6,760	..	2,574	821	1,673
Per cent	..	24.3	..	27.6	..	45.9	18.6	44.9
2002								
Number	..	15,632	..	7,058	..	2,511	1,963	1,463
Per cent	..	25.2	..	28.9	..	44.6	41.7	39.8
2003								
Number	..	15,385	..	6,762	..	2,326	2,112	1,469
Per cent	..	24.7	..	27.9	..	42.8	44.1	40.6
2004								
Number	..	15,599	12,455	7,804	..	2,404	2,424	1,495
Per cent	..	24.9	24.9	31.1	..	44.4	50.5	43.5

.. Not applicable as the data element was not provided.

Western Australia reported that due to the decreasing importance of this data element, some hospitals no longer collect it at all. The Australian Capital Territory reported that 2001 was the last year where extensive follow-up was conducted to update missing data for this item, explaining the increase in missing data from 2002. Queensland also reported that 'First day of the last menstrual period' is a non-mandatory field and is therefore not followed-up if missing from the database.

Was mapping required from state and territory data sets?

Dates not in the format of DDMMYYYY were put into NHDD date format.

Trend analysis

There does not appear to have been any improvement in the quality of these data, including the proportions of missing values, over the 2001 to 2004 period. 'First day of the last menstrual period' was not part of the Perinatal NMDS in 2005.

Additional information

New South Wales reported that this data element was not provided as it was previously used by the NPSU to calculate gestational ages in conjunction with the baby's date of birth. This resulted in some very different figures compared to those reported in New South Wales state reports. Gestational age is no longer calculated by the NPSU using this item.

It is widely recognised that 'First day of the last menstrual period' data are incomplete. Gestational age was well reported for all states and territories for all years.

This data element was removed from the Perinatal NMDS in 2004 following the recommendation made in the *Report on the evaluation of the Perinatal National Minimum Data Set*. Survey respondents had commented that the item was of poor quality due to often being unknown or not provided. This relates to the changing practice of more frequent use of ultrasound to estimate gestational age. It was recommended that the data element be retained in the NHDD (Laws & Sullivan 2004).

Data element short name: Gestational age

<p>Evaluation NMDS: Perinatal</p>	<p>Other health DSSs:</p>	<p>Collection year/s: 2001, 2002, 2003, 2004, 2005</p>
		<p>METeOR ID: 269965</p>
<p>METeOR name: Female (pregnant) – estimated gestational age, total weeks NN</p>		
<p>NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.</p>		
<p>Data element scope: The item was requested by the NPSU for all births in 2004 and 2005 and all women who gave birth for 2001 to 2003. For multiple births during 2001–2003 the gestational age of the first born baby was reported.</p>		
<p>Definition: The estimated gestational age of the baby in completed weeks as determined by clinical assessment.</p>		

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

‘Gestational age’ was provided for all reported women who gave birth in each state and territory. From 2004, gestational age was requested and provided by all states and territories, for all babies. This provides more detailed information on multiple births where babies may be born at different gestational ages.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There was no change in the provision of this data element for 2001 to 2003. Data was provided for each mother over this period based on the gestational age of their first born baby. For 2004 and 2005, data were provided for each baby.

Additional information

Not applicable.

Data element short name: Indigenous status

<p>Evaluation NMDS: Perinatal</p>	<p>Other health DSSs: Acute coronary syndrome (clinical) DSS Admitted patient care NMDS Admitted patient mental health care NMDS Admitted patient palliative care NMDS Alcohol and other drug treatment services NMDS Cardiovascular disease (clinical) DSS Community mental health care NMDS Computer Assisted Telephone Interview demographic module DSS Diabetes (clinical) DSS Health care client identification DSS Non-admitted patient emergency department care NMDS Residential mental health care NMDS</p>	<p>Collection year/s: 2001, 2002, 2003, 2004, 2005</p> <p>METeOR ID: 291036</p>
<p>METeOR name: Person – Indigenous status, code N</p>		
<p>NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.</p>		
<p>Data element scope: All women who gave birth.</p>		
<p>Definition: Whether a person identifies as being of Aboriginal or Torres Strait Islander origin, as represented by a code. This is in accord with the first two of three components of the Commonwealth definition.</p>		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2001			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✗
ACT	✓	✓	✗
NT	✓	✓	✗
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✗	✓
SA	✓	✓	✓
Tas	✓	✓	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✗
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2005	
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

Details of use of non-standard NHDD definition and domain values

The NHDD definition of 'Indigenous status' was used by all states and territories.

All states and territories, except for Tasmania and Western Australia, provided 2001 to 2004 data for 'Indigenous status' using the following data domains: 1 *Aboriginal but not Torres Strait Islander origin*, 2 *Torres Strait Islander but not Aboriginal origin*, 3 *Both Aboriginal and Torres Strait Islander origin*, 4 *Neither Aboriginal nor Torres Strait Islander origin*, 9 *Not stated/inadequately described*.

Western Australia provided data in this format for all years except 2003, where data domains were: 1 *Both Aboriginal and Torres Strait Islander* and 4 *Neither Aboriginal nor Torres Strait Islander*. These data were collected using the Western Australian Midwives' Notification System which includes the categories: 1 *Caucasian*, 2 *Aboriginal/TSI* and *Other* only. For the years 2001, 2002 and 2004, data were extracted from the Western Australian hospital morbidity system and provided according to NHDD value domains. NHDD value domains were not available for 2003 data when extraction for national submission was conducted.

Tasmania provided the data in the format of 1 *Both Aboriginal and Torres Strait Islander*, 9 *Non-Indigenous/not stated* in 2001. From 2002 to 2004, Tasmania provided data in the format of 1 *Aboriginal but not Torres Strait Islander origin*, 2 *Torres Strait Islander but not Aboriginal origin*, 3 *Both Aboriginal and Torres Strait Islander origin*, 4 *Non-Indigenous*, 9 *Not stated*. For these four years, Indigenous status was missing for nearly all women who gave birth, as most non-Indigenous mothers could not be identified separately from mothers with a not stated Indigenous status. For 2005, Tasmania provided this data element using the correct data domains.

Details of use of non-standard NMDS scope

Table 5 shows the number and percentage of missing values where these were greater than 0.5% of women who gave birth. The percentage of missing or inadequate data for both the Australian Capital Territory and the Northern Territory has improved since 2002 (0.6% and 0.9% respectively) and was less than 0.5% in 2003 and 2004. 'Indigenous status' data was available in all jurisdictions for at least 99.5% of cases for 2005.

Although the proportion of missing data for 'Indigenous status' for Tasmania has improved over the period, these data are not considered reliable for reporting for the years 2001 to 2004. Tasmania had no missing data for this data element for 2005.

Table 5: Women who gave birth in Tasmania, the Australian Capital Territory and the Northern Territory, number and percentage of not stated or inadequate data for Indigenous status, 2001 to 2005

	2001	2002	2003	2004	2005
			Tas		
Number	5,566	5,542	5,275	5,240	..
Per cent	99.2	98.5	97.0	96.8	..
			ACT		
Number	..	26	..	..	..
Per cent	..	0.6	..	..	..
			NT		
Number	..	32	..	..	..
Per cent	..	0.9	..	..	..

.. Not applicable as less than 0.5% of records had a Not stated Indigenous status.

The Australian Capital Territory reported that not stated 'Indigenous status' data are updated using the linked Admitted Patient Care data. Remaining missing data are sent to the hospital medical records departments to be provided if available.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There was no change in the provision of this data element for 2001 to 2005 for New South Wales, Victoria, Queensland and South Australia.

Although the proportion of missing data for 'Indigenous status' has improved, Tasmanian data are not considered reliable for reporting for the years 2001 to 2004 or for trend analysis.

The change in data domains for Western Australia in 2003 means that only trends in Indigenous and non-Indigenous mothers and their babies can be analysed over the 2001–2005 period. That is, analyses of only Aboriginal or only Torres Strait Islander women who gave birth are not possible for 2003.

Additional information

This data element is not collected for each baby and therefore does not identify all Indigenous babies, for example, babies of an Indigenous father and non-Indigenous mother.

Although hospital morbidity data can be used to determine Indigenous status for women who gave birth, these data would not be available for women who gave birth at home or in other non-hospital locations.

Further information about the collection and quality of Indigenous status data in the state and territory perinatal collections (and the National Perinatal Data Collection) is available in the report *Indigenous mothers and their babies, Australia 2001–2004* (Leeds et al. 2007).

Data element short name: Infant weight, neonate, stillborn

Evaluation NMDS: Perinatal	Other health DSSs:	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269938
METeOR name: Birth – birth weight, total grams NNNN		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All births.		
Definition: The first weight, in grams, of the live-born or stillborn baby obtained after birth, or the weight of the neonate or infant on the date admitted if this is different from the date of birth.		

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

Not applicable. 'Infant weight, neonate, stillborn' was provided for all reported births in each state and territory.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There has been no change in the provision of this data element over the five-year period.

Additional information

Not applicable.

Data element short name: Method of birth

Evaluation NMDS: Perinatal	Other health DSSs:	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 295349
METeOR name: Birth event – birth method, code N		
Scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: The item was requested by the NPSU for all births during 2002–2005 and all women who gave birth in 2001. For multiple births in 2001 the method of birth of the first born baby was reported.		
Definition: The method of complete expulsion or extraction from its mother of a product of conception in a birth event, as represented by a code.		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2001	
NSW	✓	✓*	✓
Vic	✓	✓*	✓
Qld	✓	✓	✓
WA	✓	✓*	✓
SA	✓	✓*	✓
Tas	✓	x*	✓
ACT	✓	✓*	✓
NT	✓	✓*	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2005			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

* All data domains provided, however, an additional two data domains, which were requested by the NPSU, were also provided.

Details of use of non-standard NHDD definition and domain values

The NHDD definition of 'Method of birth' was used by all states and territories.

All states and territories provided all of the NHDD data domains. Apart from Queensland, all jurisdictions also provided an additional two categories to the NHDD data domains in 2001 which were requested by the NPSU. These domains further divide caesarean sections into 6 *Elective caesarean section* and 7 *Emergency caesarean section*, thus making 4 *Caesarean section* into 4 *Caesarean section (unspecified)*.

Tasmania provided all of the correct categories and the additional two categories, but did not use NHDD value domains for 2001–2004: 1 *Spontaneous vaginal*, 2 *Caesarean section (unspecified)*, 3 *Elective caesarean section*, 4 *Emergency caesarean section*, 5 *Forceps*, 6 *Vaginal breech*, 7 *Vacuum extraction*, 8 *Other*, 9 *Not stated*. This is the format in which the NPSU requested this item for data prior to 2000. Tasmania provided the correct data domains for 2005.

Details of use of non-standard NMDS scope

'Method of birth' was provided for all reported women who gave birth in each state and territory. This item was not, however, provided for all births for 2001. For multiple births, only the method of birth of the first born baby was reported.

Was mapping required from state and territory data sets?

The 'Method of birth' categories for Tasmania were mapped to be consistent with the other states and territories. Data from 2002 onwards for the jurisdictions which provided the additional two caesarean section categories were recoded so that each had only one caesarean section data domain.

Trend analysis

Data for 'Method of birth' were requested and supplied differently for 2001 compared with the later collection years. There has been no change in the provision of this data element from 2002 onwards for all jurisdictions except Tasmania. The three categories collected for caesarean section in 2001 need to be combined into one when analysing trends in method of birth over time.

Additional information

Since 2002 data reporting, caesarean sections have been reported according to whether there was labour or no labour. This is collected more consistently than elective and emergency caesarean section categories, as these definitions can vary.

Data element short name: Onset of labour

Evaluation NMDS: Perinatal	Other health DSSs:	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269942
METeOR name: Birth event – labour onset type, code N		
Scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth.		
Definition: The manner in which labour started in a birth event, as represented by a code.		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2001	
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✗
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2005			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

'Onset of labour' was provided for all reported women who gave birth in each state and territory except Tasmania for 2001 to 2004. Tasmania had a missing value for 'Onset of labour' for around 3.0% of mothers for each of these years (Table 6). There were no missing cases reported for Tasmania for 2005.

Table 6: Women who gave birth in Tasmania, number and percentage of not stated or inadequate data for Onset of labour, 2001 to 2005

	2001	2002	2003	2004	2005
Number	169	145	136	159	..
Per cent	3.0	2.6	2.5	2.9	..

.. Not applicable as less than 0.5% of records had a Not stated Onset of labour.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There has been no change in the provision of this data element over the five-year period.

Additional information

Not applicable.

Data element short name: Person identifier

<p>Evaluation NMDS: Perinatal</p>	<p>Other health DSSs: Acute coronary syndrome (clinical) DSS Admitted patient care NMDS Admitted patient mental health care NMDS Admitted patient palliative care NMDS Alcohol and other drug treatment services NMDS Cancer (clinical) DSS Cardiovascular disease (clinical) DSS Community mental health care NMDS Health care client identification DSS Health care provider identification DSS Non-admitted patient emergency department care NMDS Residential mental health care NMDS</p>	<p>Collection year/s: 2001, 2002, 2003, 2004, 2005</p> <p>METeOR ID: 290046</p>
<p>METeOR name: Person – person identifier, XXXXXX[X(14)]</p>		
<p>Scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.</p>		
<p>Data element scope: All births.</p>		
<p>Definition: Person identifier unique within an establishment or agency.</p>		

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

'Person identifier' was provided for all reported women who gave birth in each state and territory. All records reported to the NPSU require an identifier, therefore, it is not possible for data to be reported as 'Not stated' for this data element.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There has been no change in the provision of this data element over the five-year period.

Additional information

Not applicable.

Data element short name: Separation date (mother)

Evaluation NMDS: Perinatal	Other health DSSs: Acute coronary syndrome (clinical) DSS Admitted patient care NMDS Admitted patient mental health care NMDS Admitted patient palliative care NMDS	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 270025
METeOR name: Episode of admitted patient care – separation date, DDMMYYYY		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All women who gave birth in hospitals or birth centres.		
Definition: Date on which an admitted patient completes an episode of care.		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2001	
NSW	✓	✓	✗
Vic	✓	✓	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✗
SA	✗	✗	✗
Tas	✓	✓*	✗
ACT	✓	✓*	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
2002			
NSW	✓	✓	✗
Vic	✓	✓	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✗
SA	✗	✗	✗
Tas	✓	✓*	✗
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✗
Vic	✓	✓	✓
Qld ^(a)	✗	✓	✓
WA	✓	✓	✗
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✗
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✗
SA	✗	✗	✗
Tas	✓	✓*	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported women who gave birth?
		2005	
NSW	✓	✓	✗
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✗
SA ^(a)	✗	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(a) Confidentialised dates were provided.

* Full date provided, however, mapping to NHDD date format was required.

Details of use of non-standard NHDD definition and domain values

All states and territories were recorded as using the NHDD definition for 'Separation date' of the mother except where confidentialised dates or no dates were provided. Most states and territories used the NHDD date format or a format which could easily be transformed into the correct format.

Tasmania provided 'Separation date' in the format DDMMYY for 2001 to 2004. Due to interpretation of legislation, South Australia was unable to provide separation date for all years. Data was supplied as 99/99/9999 for this field for 2001 to 2004. Full confidentialised dates were provided for 2005.

Details of use of non-standard NMDS scope

Victoria, Queensland, the Northern Territory and the Australian Capital Territory provided 'Separation date' for all women who gave birth in hospitals and birth centres over the 2001–2005 period. Dates from Queensland were confidentialised for 2001–2003 data. Dates from South Australia were confidentialised for 2005.

Table 7 shows the number and proportions of missing 'Separation date' of women who gave birth hospitals or birth centres in New South Wales, Western Australia and Tasmania. Tasmania was missing data for 'Separation date' for 0.6% of records in 2001 and 0.7% in 2002, but not more than 0.5% from 2003 onwards.

Western Australia reported that this data element is obtained via linkage with their Hospital Morbidity Data System. From 2005, improvements in linkage procedures and frequency have reduced the proportion of missing separation dates.

Table 7: Women who gave birth in hospitals or birth centres in New South Wales, Western Australia and Tasmania, number and percentage of not stated or inadequate data for Separation date, 2001 to 2005

	2001	2002	2003	2004	2005
			NSW		
Number	7,952	2,206	388	2,859	5,000
Per cent	9.5	2.6	0.5	3.4	5.6
			WA		
Number	1,040	851	751	1,166	202
Per cent	4.3	3.5	3.1	4.7	0.8
			Tas		
Number	34	37	..	..	..
Per cent	0.6	0.7	..	..	..

.. Not applicable as less than 0.5% of records had a Not stated Separation date.

Was mapping required from state and territory data sets?

Dates not in the format of DDMMYYYY were put into NHDD date format.

Trend analysis

For most states and territories there has been no change in the provision of this data element over the five-year period. Queensland provided confidentialised dates for 2001 to 2003, and full dates for 2004 and 2005. South Australia provided missing data for 2001 to 2004, and confidentialised dates for 2005.

For states where there has been greater than 0.5% missing data, there appears to have been improvement in data quality up until 2003. In 2004, the proportion of missing values for New South Wales and Western Australia increased. In 2005, missing data for New South Wales increased further, to 5.6%, while Western Australia showed a large decrease, to 0.8%.

Additional information

Queensland legislation restricted release of identifiable data for 2001 to 2003, therefore, the 'Separation date' field was confidentialised. Once legislation changed, Queensland supplied actual dates from 2004 data.

Western Australia reported that 'Separation date' is not collected on the Notification of Case Attended form in the Midwives' Notification System; it is obtained via linkage with the Hospital Morbidity Data System. Since 2005, improvements in linkage procedures and frequency have led to a reduction in the proportion of missing separation dates.

South Australia did not previously provide separation date for reasons of confidentiality. Length of stay was provided. South Australian legislation prevents the release of potentially identifiable data from its perinatal collection. For 2005, South Australia provided data in a confidentialised format as Queensland had done prior to their legislative changes.

Data element short name: Sex

<p>Evaluation NMDS: Perinatal</p>	<p>Other health DSSs: Acute coronary syndrome (clinical) DSS Admitted patient care NMDS Admitted patient mental health care NMDS Admitted patient palliative care NMDS Alcohol and other drug treatment services NMDS Cancer (clinical) DSS Cardiovascular disease (clinical) DSS Community mental health care NMDS Computer Assisted Telephone Interview demographic module DSS Diabetes (clinical) DSS Health care client identification DSS Health care provider identification DSS Non-admitted patient emergency department care NMDS Residential mental health care NMDS</p>	<p>Collection year/s: 2001, 2002, 2003, 2004, 2005</p> <p>METeOR ID: 287316</p>
<p>METeOR name: Person – sex, code N</p>		
<p>NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.</p>		
<p>Data element scope: All births.</p>		
<p>Definition: Sex is the biological distinction between male and female. Where there is an inconsistency between anatomical and chromosomal characteristics, sex is based on anatomical characteristics.</p>		

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

Not applicable. 'Sex' was provided for all reported babies born in each state and territory.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There has been no change in the provision of this data element over the five-year period.

Additional information

Not applicable.

Data element short name: State/territory of birth

Evaluation NMDS: Perinatal	Other health DSSs: Health care client identification DSS	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 270151
METeOR name: Birth event – state/territory of birth, code N		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All births.		
Definition: The state/territory in which the baby was delivered, as represented by a code.		

Details of use of non-standard NHDD definition and domain values

Not applicable. NHDD definition and domain values were used by all states and territories.

Details of use of non-standard NMDS scope

'State/territory of birth' was provided for all reported births in each state and territory. As these data are supplied to the NPSU by the state or territory in which the birth occurred, it is not possible for data to be reported as 'Not stated' for this data element.

Was mapping required from state and territory data sets?

Not applicable.

Trend analysis

There has been no change in the provision of this data element over the five-year period.

Additional information

Not applicable.

Data element short name: Status of the baby

Evaluation NMDS: Perinatal	Other health DSSs:	Collection year/s: 2001, 2002, 2003, 2004, 2005
		METeOR ID: 269949
METeOR name: Birth – birth status, code N		
NMDS scope: All births in Australia in hospitals, birth centres and the community, both live and stillborn, of at least 20 weeks gestation or 400 grams birthweight.		
Data element scope: All births.		
Definition: The status of the baby at birth as represented by a code.		

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported births?
		2001	
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	x	✓
ACT	✓	✓	✓
NT	✓	✓	✓

(continued)

Use of national standard definition, domain values and NMDS scope

State/ territory	NHDD definition used?	NHDD domain values used?	Provided for all reported births?
2002			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2003			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2004			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✗	✓
ACT	✓	✓	✓
NT	✓	✓	✓
2005			
NSW	✓	✓	✓
Vic	✓	✓	✓
Qld	✓	✓	✓
WA	✓	✓	✓
SA	✓	✓	✓
Tas	✓	✓	✓
ACT	✓	✓	✓
NT	✓	✓	✓

Details of use of non-standard NHDD definition and domain values

The NHDD definition of 'Status of the baby' was used by all states and territories.

All states and territories, except for Tasmania, provided 2001 to 2004 data for 'Status of the baby' using the following data domains: *1 Livebirth, 2 Stillbirth, 9 Not stated*. For 2001–2004, Tasmania provided the data in the format of *0 Stillbirth, 1 Livebirth, 9 Not stated*. This is the format in which the NPSU requested this item for data prior to 2001. For 2005, all states and territories provided the correct data domains.

Details of use of non-standard NMDS scope

Not applicable. 'Status of the baby' was provided for all reported births in each state and territory.

Was mapping required from state and territory data sets?

Data from Tasmania were mapped to be consistent with the other jurisdictions for 2001 to 2004.

Trend analysis

There was no change in the provision of this data element for 2001 to 2004. It was provided by all jurisdictions for 2005.

Additional information

It is rare that data would be reported as 'Not stated' for this data element.

Appendix

Table A1: Women who gave birth and births, by state and territory, 2001 to 2005

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
2001									
Women who gave birth	84,379	61,108	48,908	24,494	17,427	5,612	4,414	3,729	250,071
All births	85,858	62,149	49,690	24,939	17,704	5,703	4,513	3,770	254,326
2002									
Women who gave birth	84,587	62,023	48,324	24,396	17,421	5,625	4,708	3,674	250,758
All births	86,005	63,133	49,196	24,784	17,745	5,709	4,804	3,719	255,095
2003									
Women who gave birth	85,033	62,406	49,511	24,279	17,517	5,436	4,784	3,618	252,584
All births	86,414	63,552	50,366	24,681	17,844	5,530	4,876	3,662	256,925
2004									
Women who gave birth	84,289	62,543	50,051	25,111	17,228	5,413	4,799	3,437	252,871
All births	85,626	63,700	50,910	25,528	17,521	5,520	4,926	3,474	257,205
2005									
Women who gave birth	89,139	65,427	54,336	26,529	17,896	5,820	4,995	3,651	267,793
All births	90,608	66,654	55,280	26,983	18,195	5,912	5,088	3,699	272,419

References

ABS (Australian Bureau of Statistics) 1998. Standard Australian Classification of Countries (SACC). Cat. no. 1269.0. Canberra: ABS.

AIHW (Australian Institute of Health and Welfare) 2000. National health data dictionary. Version 9. Cat. no. HWI 24. Canberra: AIHW.

AIHW 2001. National health data dictionary. Version 10. Cat. no. HWI 30. Canberra: AIHW.

AIHW 2002. National health data dictionary. Version 11. Cat. no. HWI 36. Canberra: AIHW.

AIHW 2006. National Minimum Data Set for Admitted Patient Care: compliance evaluation 2001-02 to 2003-04. Health Services Series no. 28. Cat. no. HSE 44. Canberra: AIHW.

HDSC (Health Data Standards Committee) 2006. National health data dictionary, Version 13. Cat. no. HWI 88. Canberra: AIHW.

Laws PJ & Sullivan EA 2004. Report on the evaluation of the Perinatal National Minimum Data Set. Perinatal statistics series no. 14. Cat. no. PER 27. Sydney: AIHW National Perinatal Statistics Unit.

Leeds KL, Gourley M, Laws PJ, Zhang J, Al-Yaman F & Sullivan EA 2007. Indigenous mothers and their babies, Australia 2001-2004. Perinatal statistics series no. 19. Cat. no. PER 38. Canberra: AIHW.

NHDC (National Health Data Committee) 2003. National health data dictionary, Version 12. Cat. no. HWI 43. Canberra: AIHW.

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