Perinatal Data Collection

Background

The NSW Perinatal Data Collection (formerly known as the Midwives Data Collection) is a population-based surveillance system covering all births in NSW public and private hospitals, as well as homebirths. The data collection has operated since 1987 but only continuously since 1990. The Perinatal Data Collection (PDC) is a statutory data collection under the NSW Public Health Act 2010.

The PDC encompasses all live births, and stillbirths of at least 20 weeks gestation or at least 400 grams birth weight. For every birth in NSW the attending midwife or medical practitioner completes a form (or its electronic equivalent) giving demographic, medical and obstetric information on the mother, and information on the labour, delivery and condition of the infant. Completed forms are sent to the Data Integrity and Governance Unit, Information Management and Quality, in the System Information and Analytics Branch of the NSW Ministry of Health, where they are compiled into the PDC database. Historically, around two-thirds of PDC notifications are received electronically from hospital maternity information systems. From 2016, the collection went 100% electronic. There are several electronic systems that generate the PDC data including ObstetriX (to 2016), eMaternity and Cerner.

The information sent to the NSW Ministry of Health is checked and compiled into one statewide dataset. One record is reported for each baby, even in the case of a multiple birth. The PDC was revised in 1998, 2006, 2001 and 2016. The PDC includes notifications of births which occur in NSW which includes women whose usual place of residence is outside NSW and who give birth in NSW; it does not receive notifications of interstate births where the mother is resident in NSW. The collection is based on the date of birth of the baby.

Access to information on Aboriginal and Torres Strait Islander peoples

An application to the Aboriginal Health and Medical Research Council (AH&MRC) Ethics Committee should be made for research projects for which one or more of the following apply:

- The experience of Aboriginal people is an explicit focus of all or part of the research
- Data collection is explicitly directed at Aboriginal peoples
- Aboriginal peoples, as a group, are to be examined in the results
- The information has an impact on one or more Aboriginal communities
- Aboriginal health funds are a source of funding

Research that is not specifically directed at Aboriginal people or communities, such as for the total population or a sub-population (e.g. rural NSW, people over 50 years old) can still potentially impact on Aboriginal people.

However, an application for such research need only be made to the Committee if _any_ one of the following applies:

- Any of the five factors listed above are present; or
- Aboriginal people are known, or are likely, to be significantly over-represented in the group being studied (e.g. compared to the 2.1% of the total NSW population as shown in the 2006 Census); or
- The Aboriginal experience of the medical condition being studied is known, or is likely, to be different from the overall population; or
- There are Aboriginal people who use the services being studied in distinctive ways, or who have distinctive barriers that limit their access to the services; or
- It is proposed to separately identify data relating to Aboriginal people in the results.

The AH&MRC Ethics Committee have some specific requirements, including evidence of community engagement in the research. Relevant documents can be found on the AH&MRC website at: http://www.ahmrc.org.au. If you are unsure whether an application to the AH&MRC Ethics Committee is required, please seek the advice of the Ethics Committee secretariat (T: 02 9212 4777 or email: ethics@ahmrc.org.au).

Tips for using the PDC in linkage studies

- While the PDC has operated continuously since 1990, personal identifiers were only included in the data collection after 1992, when it became a statutory data collection under the NSW Public Health Act 1991. There was also a revision to the PDC form in 1993, which was implemented gradually. Consequently, personal identifiers and a number of other fields are available for approximately half of the 1993 records. For these reasons it is recommended that record linkage studies be carried out using data collected from 1994.
- The PDC record contains information on mothers and babies. As the CHeReL links records for the same person (rather than across generations), two sets of personal identifiers from the PDC records are provided to the CHeReL—one for mothers and one for babies. These are known as the PDC mother and PDC baby datasets. When using the PDC in linkage studies, please consider whether mothers or babies or both are of interest. If both mothers and babies are of interest, the CHeReL will create a PDC mother linkage key and a PDC baby linkage key. The data custodian will add both mother and baby project person numbers (PPNs) to the PDC dataset for provision to the project investigators.

New items added in 2016

A small number of new data collection items were added in 2016, and have been included in the data dictionary. Where an item has been referenced as 'Collected from' but not 'Available from', this means that data collection commenced for this item in a particular year, but is not considered high enough quality to support research uses of the data.

Data custodian

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Perinatal Data Collection – Variable information

Variable	Description/Notes	Codes
Year of birth **[year]**	Available from 1994. Year of birth, based on baby's date of birth.	
Mother's date of birth **[mdob]**	Available from 1994 onwards. Full date of birth will only be supplied if sufficient justification is supplied that age is insufficient. Date of birth may otherwise be supplied as MMYYYY.	
Mother's age **[age]**	Available from 1994 onwards. Age in completed years.	
Mother's age group **[agegrp]**	Available from 1994 onwards. Age in five year grouping.	3 = 10-14 years 4 = 15-19 years 5 = 20-24 years 6 = 25-29 years 7 = 30-34 years 8 = 35-39 years 9 = 40-44 years 10 = 45-49 years 11 = 50-54 years 12 = 55-59 years 19 = Not stated
Mother's country of birth **[cob]**	Available from 1994 to 2015. Mother's country of birth.	Codes are the Australian Bureau of Statistics 4 digit country of birth names

Variable	Description/Notes	Codes
Mother's country of birth [cobsacc]	Available from 2002 onwards. Mother's country of birth.	Codes are the Australian Bureau of Statistics 4 digit country of birth names
Mother's country of birth [cobsacc2011]	Available from 2016 onwards. Mother's country of birth, defined using the Australian Bureau of Statistics classification of Countries 2011.	Codes are the Australian Bureau of Statistics 4 digit country of birth names . See ABS Cat. No. 1269.0 – Standard Australian Classification of Countries (SACC), 2011 for further information on the classification schema.
Mother's Aboriginality [aborigin_mum_recode]	Available from 1994. See notes above regarding access to this variable. Information on the quality of reporting is routinely reported via HealthStats NSW (link: http://www.healthstats.nsw.gov.au/Indicator/dqi_era_pdc/dqi_era_pdc). From 2016, variable has been derived from Mother's Indigenous status.	1 = Aboriginal or TSI 2 = Non-Aboriginal 9 = Not stated
Mother's Indigenous status [abtsi_mum]	Available from 1998 onwards. See notes above regarding access to this variable. From 2016, item included response category 'Declined to respond'.	1 = Aboriginal 2 = Torres Strait Islander 3 = Aboriginal and Torres Strait Islander 4 = None of the above 8 = Declined to respond 9 = Not stated
Mother's marital status [maritaly]	Available from 1994 to 1997.	1 = Married (inc. de facto) 2 = Never married 3 = Divorced, separated or married 9 = Not stated **OTHER** = Invalid data
Hospital of birth [hoscode]	Available from 1994. Hospital of birth.	Code lists are updated regularly. If information on specific facilities is required, these should be specified by name.

Variable	Description/Notes	Codes
Health Area of hospital **[ahshos_2005_code]**	Available from 1994 to 2010. Health Area (2005) of hospital. Not available from 2011 onwards	See Attachment 1 – Area Health Services
Local Health District of hospital **[lhdhosp_2010_code]**	Available from 1994 onwards. Local Health District of hospital. Code XPRV refers to private hospitals.	See Attachment 2 – Local Health Districts
Mother's SLA of residence **[sla_2011_code,** **sla_2001_code,** **sla_2006_code,** **sla_1996_code]**	Availability noted below. Mother's Statistical Local Area of residence Sla_1996_code – 2000 to 2015 Sla_2001_code – 2000 to 2015 Sla_2006_code – 1994 onwards Sla_2011_code – 2000 onwards Note: prior to 2016, non-NSW residents were coded to state and territory codes described in attachment 2 – Local Health Districts.	Codes are according to the Australian Standard Geographical Classification (ASGC) issued by the Australian Bureau of Statistics http://www.abs.gov.au/ausstats/abs@.nsf/mf/1216.0 .
Mother's Statistical area 2 of residence **[sa2_2011_code]**	Available from 2000 onwards. Note: from 2000 to 2015, non-NSW residents were coded to state and territory codes described in attachment 2 – Local Health Districts.	Codes are according to ABS Cat. No. 1270.0.55.001 – Australian Statistical Geography Standard (ASGS): volume 1 – Main structure and greater capital city statistical areas, July 2011.
Mother's Statistical area 3 of residence **[sa3_2011_code]**	Available from 2000 onwards. Note: from 2000 to 2015, non-NSW residents were coded to state and territory codes described in attachment 2 – Local Health Districts.	Codes are according to ABS Cat. No. 1270.0.55.001 – Australian Statistical Geography Standard (ASGS): volume 1 – Main structure and greater capital city statistical areas, July 2011.

Variable	Description/Notes	Codes
Mother's Statistical area 4 of residence [sa4_2011_code]	Available from 2000 onwards. Note: from 2000 to 2015, non-NSW residents were coded to state and territory codes described in attachment 2 – Local Health Districts.	Codes are according to ABS Cat. No. 1270.0.55.001 – Australian Statistical Geography Standard (ASGS): volume 1 – Main structure and greater capital city statistical areas, July 2011.
Mother's area of residence (2005 standard) [ahs_2005_code]	Available from 1994 to 2015.	See Attachment 1 – Area Health Services
Mother's remoteness area of residence [ra_2011_code]	Available from 2000 onwards. Note: Remoteness area codes have only been assigned to records related to NSW residents.	Codes are according to ABS Cat. No. 1270.0.55.005 – Australian Statistical Geography Standard (ASGS): Volume 5 – Remoteness Structure.
Mother's Local Health District of residence [lhd_2010_code]	Available from 1994 onwards.	See Attachment 2 – Local Health Districts
Mother's primary health network of residence [phn_2015_code]	Available from 1994 onwards.	See Attachment 4 – Primary Healthcare Networks
Hospital Insurance status [hospins]	Available from 1994 to 1997.	1 = Yes (Private) 2 = No (Public) 9 = Not stated
Baby's date of birth [bdob]	Available from 1994 onwards. Full date of birth will only be supplied if sufficient justification is supplied that age is insufficient. Date of birth may otherwise be supplied as month and year of birth.	

Variable	Description/Notes	Codes
Date of LMP **[lmpdate]**	Available from 1994 to 2006. Date of last menstrual period. Full date will only be supplied if sufficient justification is supplied that gestational age is insufficient.	
Expected date of confinement **[edcdate]**	Available from 2006 onwards. Full date will only be supplied if sufficient justification is supplied that gestational age is insufficient.	
Previous pregnancy >20 weeks gestation? **[prevpreg]**	Available from 1994 onwards. Previous pregnancy greater than 20 weeks gestation	0 = No 1 = Yes 9 = Not stated
Number of previous pregnancies **[pregnum]**	Available from 1994 onwards. Number of previous pregnancies greater than 20 weeks gestation	
Was last birth by caesarean section? **[csbirth]**	Available from 1998 onwards.	0 = No 1 = Yes 9 = Not stated
Total number of previous caesarean section **[cstotal]**	Available from 1998 onwards.	
Amniocentesis (<20 weeks) **[oamn]**	Available from 1994 to 2006.	0 = No 1 = Yes 9 = Not stated
CVS (<20 weeks) **[ocvsonly]**	Available from 1994 to 2006. Chorionic villus sampling.	0 = No 1 = Yes 9 = Not stated
Cervical suture **[OCS]**	Available from 1994 to 1997. Cervical suture?	0 = No 1 = Yes 9 = Not stated

Variable	Description/Notes	Codes
Antenatal care **[anc]**	Available from 2006 onwards. Was antenatal care received?	0 = No 1 = Yes 9 = Not stated
Duration of pregnancy (weeks) **at first antenatal visit** **[ancare]**	Available from 1994 to 2010. Duration of pregnancy at first antenatal visit.	
Duration of pregnancy (weeks) **at first antenatal visit** **[ancare2011]**	Available from 2011 onwards . Duration of pregnancy at first comprehensive booking or assessment by clinician. It should be noted that this change led to a discontinuity in the time series for this indicator. Trends in antenatal care for the period 2010 to 2014 should be interpreted with caution.	
Number of antenatal visits **[ancarenum]**	Available from 2011 onwards.	
Not booked **[notbook]**	Available from 1994 to 2006.	0 = No 1 = Yes 9 = Not stated
Smoking during pregnancy **[smoke]**	Available from 1994 to 2010. Did the mother smoke at all during pregnancy?	0 = No 1 = Yes 9 = Not stated
Smoking during first half of **pregnancy** **[smoke1st]**	Available from 2011 onwards. Did the mother smoke during the first half of pregnancy?	0 = No 1 = Yes 9 = Not stated
Cigarettes per day during the **first half pregnancy** **[smoke1stgp_recode]**	Available from 2011 onwards. How many cigarettes each day on average were smoked in the first half of pregnancy.	0 = Did not smoke 1 = Less than 1 per day 2 = 1-10 per day 3 = More than 10 per day 4 = Unknown 9 = Not-stated

Variable	Description/Notes	Codes
Number of cigarettes smoked on average per day during the first half of pregnancy [smokeqty1st]	Available from 2011 onwards.	
Smoking during the second half of pregnancy [smoke2nd]	Available from 2011 onwards. Did the mother smoke during the second half of pregnancy?	0 = No 1 = Yes 9 = Not stated
Cigarettes per day 2nd half pregnancy [smokeqty]	Available from 1994 to 2010. How many cigarettes each day on average were smoked in the second half of pregnancy.	1 = None 2 = More than 10 per day 3 = 1-10 per day 4 = Unknown 8 = Did not smoke during pregnancy 9 = Not stated
Cigarettes per day during the second half pregnancy [smoke2ndgp_recode]	Available from 2011 onwards. How many cigarettes each day on average were smoked in the second half of pregnancy.	0 = Did not smoke 1 = Less than 1 per day 2 = 1-10 per day 3 = More than 10 per day 4 = Unknown 9 = Not-stated
Number of cigarettes smoked on average per day during the second half of pregnancy [smokeqty2nd]	Available from 2011 onwards.	
Mother's height [mheight]	Collected from 2016 onwards. Mother's height in centimetres (measured).	
Mother's weight [mweight]	Collected from 2016 onwards. Mother's weight in kilograms (measured) as recorded in the first trimester of pregnancy.	

Variable	Description/Notes	Codes
Maternal diabetes mellitus [mdiab]	Maternal diabetes mellitus—pre-existing diabetes	0 = No/not stated 1 = Yes
Gestational diabetes [odiab]	Available from 1994 to 2015. Gestational diabetes	0 = No/not stated 1 = Yes
Type of diabetes [mdiab2016]	Available from 2016. Type of diabetes. It is noted that there was a large increase in gestational diabetes mellitus when comparing 2015 and 2016 rates.	' ' = Not applicable 1 = Type 1 diabetes mellitus 2 = Type 2 diabetes mellitus 3 = Gestational diabetes mellitus 4 = Other types of diabetes 9 = Not stated
Eclampsia [ehyper]	Collected from 2016 onwards. Mother hypertension eclampsia flag	0 = No 1 = Yes 9 = Not stated
Chronic hypertension [mhyper]	Available from 1994 onwards. Chronic maternal hypertension	0 = No/not stated 1 = Yes
Pregnancy-induced hypertension [ohyper]	Available from 1994 to 2006. Pregnancy-induced hypertension or pre-eclampsia.	0 = No/not stated 1 = Yes
Pregnancy-induced hypertension – proteinuric [ohyp_p]	Available from 2006 onwards. From 2011, condition is described as pre-eclampsia.	0 = No/not stated 1 = Yes
Pregnancy-induced hypertension – non-proteinuric [ohyp_np]	Available from 2006 onwards. From 2011, condition is described as gestational hypertension.	0 = No/not stated 1 = Yes
Antepartum haemorrhage (any cause) [aph]	Available from 1994 to 1997. Antepartum haemorrhage of any cause.	0 = No/not stated 1 = Yes

Variable	Description/Notes	Codes
Antepartum Haemorrhage (cause unknown) [oaphcu]	Available from 1994 to 1997. Antepartum haemorrhage (APH) of unknown cause.	0 = No/not stated 1 = Yes
Antepartum Haemorrhage (due to placenta abruptio) [oaphpa]	Available from 1994 to 1997. Antepartum haemorrhage due to placenta abruptio.	0 = No/not stated 1 = Yes
Antepartum Haemorrhage (due to placenta praevia) [oaphpp]	Available from 1994 to 1997. Antepartum haemorrhage due to placenta praevia.	0 = No/not stated 1 = Yes
Any obstetric complication [obsc]	Available from 1994 to 1997. Any obstetric complication.	0 = No/not stated 1 = Yes
Any obstetric complication [obsc98]	Available from 1998 to 2005. Any obstetric complication.	0 = No/not stated 1 = Yes
Blood group iso-immunisation [oiso]	Available from 1994 to 1997. Blood group iso-immunisation.	0 = No/not stated 1 = Yes
Pre-labour rupture of membranes (>24 hours) [oprom]	Available from 1994 to 1997. Pre-labour rupture of membranes (>24 hours).	0 = No/not stated 1 = Yes
Threatened premature labour [otmc]	Available from 1994 to 1997.	0 = No/not stated 1 = Yes
Maternal Hepatitis B [mhepb]	Available from 1994 to 1997. Mothers who are hepatitis B positive.	0 = No/not stated 1 = Yes
Maternal Hepatitis B [hepbsag]	Available from 2011 onwards. Mothers who are hepatitis B surface antigen positive.	0 = No/not stated 1 = Yes
Major puerperal infection [infectn]	Available from 1994 to 1997.	0 = No/not stated 1 = Yes

Variable	Description/Notes	Codes
Third degree tear [tear]	Available from 1994 to 1997.	0 = No/not stated 1 = Yes
Shoulder dystocia [shodys]	Available from 1994 to 1997.	0 = No/not stated 1 = Yes
Retained placenta [retpla]	Available from 1994 to 1997.	0 = No/not stated 1 = Yes
Post-partum haemorrhage [pph]	Available from 2016. Flag indicating whether the mother experienced a post-partum haemorrhage.	0 = No 1 = Yes 9 = Not stated
Blood transfusion flag [bloodtx]	Available from 2016. Flag indicating whether the mother received a blood transfusion. Only asked of mothers who answered 'yes' to post-partum haemorrhage.	' ' = Not applicable 0 = No 1 = Yes 9 = Not stated
Estimated blood loss [bloodvol]	Available from 2016. Estimated blood loss following post-partum haemorrhage.	' ' = Not applicable 1 = 500-999mls 2 = 1,000-1,499mls 3 = 1,500mls or more 9 = Unknown
Post-partum haemorrhage requiring blood transfusion [pphtf]	Available from 2006 to 2015. Note: This variable was originally called 'pph', but was renamed in 2016 to align with changes in underlying data concepts.	0 = No/not stated 1 = Yes
Post-partum haemorrhage requiring blood transfusion [pphtf_recode]	Available from 2006 onwards. The variable pphtf_recode has been derived using information from the variables 'bloodtx' and 'bloodvol' to recreate this measure.	0 = No 1 = Yes 9 = Not stated

Variable	Description/Notes	Codes
Baby length of stay **[blos_recode]**	Available from 1994. Baby's length of stay in hospital.	
Labour onset **[labons]**	Available from 1994. Onset of labour	1 = Spontaneous 2 = Induced 3 = No labour 9 = Not stated
Induction and augmentation of labour **[labind]**	Available from 1994 to 2015. Induction and augmentation of labour	1 = Spontaneous 2 = Spontaneous augmented with ARM 3 = Spontaneous augmented with oxytocics/PGs 4 = No labour 5 = Induced - oxytocics/PGs 6 = Induced - ARM only 7 = Induced - ARM+oxytocics/PGs 8 = Induced - other 9 = Not stated
Induction and augmentation of labour **[labind_recode]**	Available from 1994 onwards. Induction and augmentation of labour	1 = Spontaneous 2 = Spontaneous augmented with ARM 3 = Spontaneous augmented with oxytocics/PGs 4 = No labour 5 = Induced - oxytocics/PGs 6 = Induced - ARM only 7 = Induced - ARM+oxytocics/PGs 8 = Induced - other 9 = Not stated
Induction/augmentation by ARM **[arm]**	Available from 1998 to 2015.	0 = No/not stated 1 = Yes
Induction/augmentation by other method **[indaugot]**	Available from 1998 to 2015.	0 = No/not stated 1 = Yes

Variable	Description/Notes	Codes
Induction/augmentation by oxytocics [oxytocic]	Available from 1998 to 2015.	0 = No/not stated 1 = Yes
Induction/augmentation by prostaglandins [prostagl]	Available from 1998 to 2015.	0 = No 1 = Yes 9 = Not stated
Labour augmented by artificial rupture of membranes [labaugarm]	Available from 2016 onwards.	0 = No 1 = Yes 9 = Not stated
Labour augmented by oxytocins [labaugoxytocic]	Available from 2016 onwards.	0 = No 1 = Yes 9 = Not stated
Labour induced by artificial rupture of membranes [labinarm]	Available from 2016 onwards.	0 = No 1 = Yes 9 = Not stated
Labour induced by other means [labindot]	Available from 2016 onwards.	0 = No 1 = Yes 9 = Not stated
Labour induced by oxytocics [labinoxytocic]	Available from 2016 onwards.	0 = No 1 = Yes 9 = Not stated
Labour induced by prostaglandins [labinprostagl]	Available from 2016 onwards.	0 = No 1 = Yes 9 = Not stated

Variable	Description/Notes	Codes
Main indication for induction/augmentation of labour [inducwhy]	Available from 1998 onwards. In 2016, the category 'Blood group isoimmunisation' was removed from the pick list of indications.	' ' = Not applicable 01 = Diabetes 02 = Hypertensive disease 03 = Fetal distress 04 = Fetal death 05 = Chorioamnionitis 06 = Blood group isoimmunisation 07 = Prelabour rupture of membranes 08 = Prolonged pregnancy (41+ weeks) 09 = Suspected intrauterine growth restriction 10 = Other
Pain relief: None [anal_nil]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: Nitrous oxide [anal_n2o]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: IM narcotics [anal_im]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: Local to perineum [anal_loc]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: Pudendal block [anal_pud]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: Epidural/caudal block [anal_epi]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: Spinal anaesthetic [anal_spi]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: General anaesthetic [anal_ga]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes
Pain relief: Other [anal_oth]	Available from 1998 to 2006.	0 = No/not stated 1 = Yes

Variable	Description/Notes	Codes
Analgesia for labour: Nil [an_l_nil]	Available from 2006 onwards.	' ' = Not applicable 0 = No/not stated 1 = Yes
Analgesia for labour: Nitrous oxide [an_l_no2]	Available from 2006 onwards.	' ' = Not applicable 0 = No/not stated 1 = Yes
Analgesia for labour: Systemic opioids [an_l_im]	Available from 2006 onwards.	' ' = Not applicable 0 = No/not stated 1 = Yes
Analgesia for labour: Spinal [an_l_spi]	Available from 2006 onwards.	' ' = Not applicable 0 = No/not stated 1 = Yes
Analgesia for labour: Epidural/caudal [an_l_epi]	Available from 2006 onwards.	' ' = Not applicable 0 = No/not stated 1 = Yes
Analgesia for labour: Combined spinal-epidural [an_l_com]	Available from 2006 onwards.	' ' = Not applicable 0 = No/not stated 1 = Yes
Analgesia for labour: Other [an_l_oth]	Available from 2006 onwards.	' ' = Not applicable 0 = No/not stated 1 = Yes
Anaesthesia for delivery: Nil [an_d_nil]	Available from 2006 onwards.	0 = No/not stated 1 = Yes
Anaesthesia for delivery: Local to perineum [an_d_loc]	Available from 2006 onwards.	0 = No/not stated 1 = Yes
Anaesthesia for delivery: Pudendal [an_d_pud]	Available from 2006 onwards.	0 = No/not stated 1 = Yes

Variable	Description/Notes	Codes
Anaesthesia for delivery: Spinal [an_d_spi]	Available from 2006 onwards.	0 = No/not stated 1 = Yes
Anaesthesia for delivery: Epidural/caudal [an_d_epi]	Available from 2006 onwards.	0 = No/not stated 1 = Yes
Anaesthesia for delivery: Combined spinal-epidural [an_d_com]	Available from 2006 onwards.	0 = No/not stated 1 = Yes
Anaesthesia for delivery: General anaesthetic [an_d_ga]	Available from 2006 onwards.	0 = No/not stated 1 = Yes
Anaesthesia for delivery: Other [an_d_oth]	Available from 2006 onwards.	0 = No/not stated 1 = Yes
Epidural anaesthetic [epidural]	Available from 1994 to 1997.	0 = No 1 = Yes 9 = Not stated
Presentation [present]	Available from 1994 to 1997.	1 = Vertex 2 = Other 3 = Breech 4 = Unknown 9 = Not stated
Presentation [presen98]	Available from 1998 to 2006.	1 = Vertex 2 = Breech 3 = Face 4 = Brow 5 = Other 9 = Not stated

Variable	Description/Notes	Codes
Presentation [presen06]	Available from 2006 onwards.	1 = Vertex 2 = Breech 3 = Face 4 = Brow 5 = Shoulder/transverse 6 = Other 9 = Unknown presentation of fetus at birth
Type of delivery [delivery]	Available from 1994 to 1997.	1 = Normal vaginal 2 = Forceps 3 = Forceps rotation 4 = Vacuum extraction 5 = Vaginal breech 6 = Elective caesarean 7 = Emergency caesarean 9 = Not stated
Type of delivery [deliv98]	Available from 1998 to 2010.	1 = Normal vaginal 2 = Forceps 3 = Vacuum extraction 4 = Vaginal breech 5 = Caesarean section 9 = Not stated
Type of delivery [deliv2011, deliv2011_code]	Available from 2011 onwards.	1 = Normal vaginal 2 = Forceps 3 = Vacuum extraction 4 = Vaginal breech – forceps 5 = Vaginal breech – no forceps 6 = Caesarean section 9 = Not stated

Variable	Description/Notes	Codes
Type of delivery [delivery_recode]	Available for 1994 onwards Represents a lowest common denominator version of the mode of delivery variable collected since 1994.	1 = Normal vaginal 2 = Forceps 3 = Vacuum extraction 4 = Vaginal breech 5 = Caesarean section 9 = Not stated
Main indication for caesarean section [cswhy]	Available from 1998 to 2006.	0 = Not applicable 1 = Failure to progress: cervical dilatation not stated 2 = Failure to progress: cervix 3cm dilated or less 3 = Failure to progress: cervix more than 3cm dilated 4 = Fetal distress 5 = Other 9 = Not stated
Main indication for caesarean section [cswhy06]	Available from 2006 to 2015.	' ' = Not applicable 1 = Failure to progress: cervical dilatation not stated 2 = Failure to progress: cervix 3 cm dilated or less 3 = Failure to progress: cervix more than 3 cm dilated 4 = Fetal distress 5 = Elective Repeat Caesarean Section 6 = Other Clinical Indication 7 = Non-clinical indication 9 = Not stated

Variable	Description/Notes	Codes
Main indication for caesarean section **[cswhy2016]**	Available from 2016 onwards.	' ' = Not applicable 01 = Fetal compromise 02 = Suspected fetal macrosomia 03 = Malpresentation 04 = Lack of progress; less than or equal to 3cm cervical dilatation 05 = Lack of progress in the first stage; 4cm to less than 10cm cervical dilatation 06 = Lack of progress in the second stage 07 = Placenta praevia 08 = Placental abruption 09 = Vasa praevia 10 = Antepartum/intrapartum haemorrhage 11 = Multiple pregnancy 12 = Unsuccessful attempt at assisted delivery 13 = Unsuccessful induction 14 = Cord prolapse 15 = Previous caesarean section 16 = Previous shoulder dystocia 17 = Previous severe perineal trauma 18 = Previous adverse fetal/neonatal outcome 19 = Other obstetric, medical surgical, psychological indications 20 = Maternal choice in the absence of any obstetric, medical, surgical, psychological indications 99 = Not stated
Main indication for caesarean section – recode **[cswhy_recode]**	Available from 1998 onwards. Derived variable that combines 'cswhy' and 'cswhy06' into a single lowest common denominator field.	0 = Not applicable 1 = Failure to progress 2 = Fetal distress 3 = Other 9 = Not stated

Variable	Description/Notes	Codes
Perineal status [perineal]	Available from 1998 to 2006.	1 = Intact 2 = 1st degree tear/graze 3 = 2nd degree tear 4 = 3rd degree tear 5 = 4th degree tear 6 = Episiotomy 7 = Combined tear and episiotomy 8 = Other 9 = Not stated
Perineal status [perineal06]	Available from 2006 onwards.	1 = Intact 2 = 1st degree tear/graze 3 = 2nd degree tear 4 = 3rd degree tear 5 = 4th degree tear 6 = Other 9 = Not stated
Episiotomy [episiot]	Available from 1994 onwards. Episiotomy	0 = No 1 = Yes 9 = Not stated
Surgical repair of vagina or perineum [repair]	Available from 1998 onwards.	0 = No 1 = Yes 9 = Not stated
Third stage [stage3]	Available from 2006 onwards. Management of the third stage of labour.	1 = Active 2 = Physiological 9 = Not stated
Model of care-antenatal: Private obstetrician [mod_an_ob]	Available from 2006 to 2015. Model of care-antenatal: Private obstetrician	0 = No 1 = Yes

Variable	Description/Notes	Codes
Model of care-antenatal: Hospital-based medical [mod_an_h]	Available from 2006 to 2015. Model of care-antenatal: Hospital-based medical	0 = No 1 = Yes
Model of care-antenatal: General practitioner [mod_an_gp]	Available from 2006 to 2015. Model of care-antenatal: General practitioner	0 = No 1 = Yes
Model of care-antenatal: Hospital-based midwife/midwives [mod_an_m]	Available from 2006 to 2015. Model of care-antenatal: Hospital-based midwife/midwives	0 = No 1 = Yes
Model of care-antenatal: Independent midwife [mod_an_im]	Available from 2006 to 2015. Model of care-antenatal: Independent midwife	0 = No 1 = Yes
Model of care-antenatal: Not applicable [mod_an_na]	Available from 2006 to 2015. Model of care-antenatal: Not applicable	0 = No 1 = Yes
Model of care-birth: Private obstetrician [mod_b_ob]	Available from 2006 to 2015. Model of care-birth: Private obstetrician	0 = No 1 = Yes
Model of care-antenatal: Hospital-based medical [mod_b_h]	Available from 2006 to 2015. Model of care-antenatal: Hospital-based medical	0 = No 1 = Yes
Model of care-birth: General practitioner [mod_b_gp]	Available from 2006 to 2015. Model of care-birth: General practitioner	0 = No 1 = Yes
Model of care-birth: Hospital-based midwife/midwives [mod_b_m]	Available from 2006 to 2015. Model of care-birth: Hospital-based midwife/midwives	0 = No 1 = Yes

Variable	Description/Notes	Codes
Model of care-birth: Independent midwife [mod_b_im]	Available from 2006 to 2015. Model of care-birth: Independent midwife	0 = No 1 = Yes
Model of care-birth: Not applicable [mod_b_na]	Available from 2006 to 2015. Model of care-birth: Not applicable	0 = No 1 = Yes
Main model of care – birth [mod_birth_main]	Available from 2016 onwards. The main model of care used during the birth period.	01 = Private obstetrician 02 = Private midwife 03 = GP obstetrician 04 = Shared care 05 = Combined care 06 = Public hospital care 07 = Public hospital high-risk 08 = Team midwifery 09 = Midwifery caseload 10 = Remote area 11 = No formal care 99 = Not stated
Main model of care – antenatal [mod_an_main]	Available from 2016 onwards. The main model of care used during the antenatal period.	01 = Private obstetrician 02 = Private midwife 03 = GP obstetrician 04 = Shared care 05 = Combined care 06 = Public hospital care 07 = Public hospital high-risk 08 = Team midwifery 09 = Midwifery caseload 10 = Remote area 11 = No formal care 99 = Not stated

Variable	Description/Notes	Codes
Midwifery continuity of carer program **[contcarer]**	Available from 2011 to 2015. Whether the Mother was in a midwifery continuity of carer program for antenatal, birth and postnatal care.	0 = No 1 = Yes 9 = Not stated
Mother referred **[ref_mum]**	Available from 2006 to 2015. Mother referred from another hospital	0 = No 1 = Yes 9 = Not stated
Mother referral hospital **[ref_hos]**	Available from 2006 to 2015. If mother referred from another hospital, hospital code.	Code lists are updated regularly. If information on specific facilities is required, these should be specified by name.
Referral prior **[ref_pre]**	Available from 2006 to 2015. Referral prior to the onset of labour.	0 = No 1 = Yes
Referral post **[ref_post]**	Available from 2006 to 2015. Referral post onset of labour.	0 = No 1 = Yes
Baby's sex **[bsex]**	Available from 1994 onwards. Baby's sex	1 = Male 2 = Female 3 = Indeterminate 9 = Unknown
Baby's Aboriginality **[aborigin_bub_recode]**	Available from 2011 onwards. See notes above regarding access to this variable. Information on the quality of reporting is routinely reported via HealthStats NSW (link: http://www.healthstats.nsw.gov.au/Indicator/dqi_era_pdc/dqi_era_pdc_baby). From 2016, field was derived from Baby's Indigenous status.	1 = Aboriginal or TSI 2 = Non-Aboriginal 9 = Not stated

Variable	Description/Notes	Codes
Baby's Indigenous status [abtsi_bub]	Available from 2011 onwards. See notes above regarding access to this variable. From 2016, item included response category 'Declined to respond'.	1 = Aboriginal 2 = Torres Strait Islander 3 = Aboriginal and Torres Strait Islander 4 = None of the above 8 = Declined to respond 9 = Not stated
Plurality of birth [plural]	Available from 1994 onwards. The number of fetuses or babies from the pregnancy. On this basis pregnancy may be classified as single or multiple	1 = Singleton 2 = Twins 3 = Triplets etc 9 = Not stated
Birth order [plurnum]	Available from 1994 onwards. The order of birth,	1 = First 2 = Second 3 = Third etc 9 = Not stated
Gestational age [gestage]	Available from 1994 onwards. Gestational age measured in completed weeks, based on the best clinical estimate.	
Birthweight [bweight]	Available from 1994 onwards. The newborn infant's first weight in grams, usually taken within the first hour of life.	
APGAR score (1 min) [apgar1]	Available from 1994 onwards. A numerical scoring system routinely administered one minute after birth to evaluate the condition of the baby. The score ranges from 0 to 10.	

Variable	Description/Notes	Codes
APGAR score (5 min) [apgar5]	Available from 1994 onwards. A numerical scoring system routinely administered five minutes after birth to evaluate the condition of the baby. The score ranges from 0 to 10.	
Admission to Special Care Nursery or Neonatal Intensive Care for 4 hours or more [neomorb]	Available from 1994 to 2015. Was baby admitted to special care nursery or NICU for 4+ hours?	0 = No 1 = Yes 9 = Not stated
Admitted to SCN/NICU due to birth defect [admbdef]	Available from 1998 to 2006	0 = No 1 = Yes 9 = Not stated
Admitted to special care nursery [admitscn]	Available from 1998 to 2006.	0 = No 1 = Yes 9 = Not stated
Admitted to neonatal intensive care unit [admitnic]	Available from 1998 to 2006.	0 = No 1 = Yes 9 = Not stated
Admission to Special Care Nursery or Neonatal Intensive Care [scn_nic]	Available from 2006-to 2015.	0 = No 1 = Yes 9 = Not stated
Was a birth defect the main reason for admission to SCN/NICU? [nic_bdef]	Available from 2006 to 2015.	0 = No 1 = Yes 9 = Not stated **OTHER** = Invalid data

Variable	Description/Notes	Codes
Resuscitation of baby [bresusci]	Available for 1998-2006	1 = None 2 = Suction 3 = Oxygen therapy 4 = IPPR by bag and mask 5 = Intubation and IPPR 6 = External cardiac massage and ventilation 7 = Other 9 = Not stated
Resuscitation of baby [bresusci]	Available from 2006 to 2010.	1 = None 2 = Suction 3 = Oxygen therapy 4 = IPPR by bag and mask 5 = Intubation and IPPR 6 = External cardiac massage and ventilation 9 = Not stated
Resuscitation of baby [bresus2011]	Available from 2011 onwards. The category 'CPAP ventilation' was added in 2016.	1 = None 2 = Suction 3 = Oxygen therapy 4 = IPPR: mask 5 = IPPR: with intubation 6 = External cardiac massage and ventilation 7 = Continuous positive airway pressure (CPAP) ventilation 9 = Not stated
Admitted to special care nursery for observation only [scn_obs]	Available from 1998 to 2006.	0 = No 1 = Yes 9 = Not stated
Vitamin K [vitk]	Available for 2006 to 2015. Vitamin K administered to baby.	1 = Oral 2 = IM 3 = None 9 = Not stated

Variable	Description/Notes	Codes
Hepatitis B birth dose **[hepb]**	Available from 2006 onwards. Hepatitis B birth dose administered to baby.	0 = No 1 = Yes 9 = Not stated
Baby's date of discharge or transfer **[bdisdate]**	Available for the period 1994 onwards. Full date will only be supplied if sufficient justification is supplied that age is insufficient.	
Baby's discharge status **[bdisch]**	Available from 1994 to 2006. Baby's discharge status	1 = Discharged 2 = Stillborn 3 = Neonatal death 4 = Transferred 5 = Transferred and died 9 = Not stated
Baby's discharge status **[bdisch06]**	Available from 2006 to 2015. Baby's discharge status	1 = Discharged 2 = Transferred 3 = Stillborn 4 = Died 5 = Transferred and died 9 = Not stated
Baby's discharge status **[bdisch2016]**	Available from 2016 onwards. Baby's discharge status	01 = Discharge by hospital 02 = Discharge own risk 05 = Transfer to other facility 06 = Death with autopsy 07 = Death without autopsy 88 = Discharge from independent midwife care 99 = Not stated
Baby's discharge status **[bdisch_recode]**	Available from 1994 onwards. Derived variable that provides a lowest common denominator of the three versions of discharge status.	1 = Discharged 2 = Stillborn 3 = Neonatal death 4 = Transferred 9 = Not stated

Variable	Description/Notes	Codes
Hospital of baby transfer [btrans]	Available from 1994 onwards. Hospital that the baby is transferred to after birth	Code lists are updated regularly. If information on specific facilities is required, these should be specified by name.
Perinatal death type [dthtype]	Available from 1994 to 2015. Perinatal outcome	1 = Not a perinatal death 2 = Stillborn 3 = Neonatal death 4 = Postneonatal death 5 = Death – age not stated 9 = Not stated
Perinatal death type [dthtype_recode]	Available from 1994 onwards. Perinatal outcome, with variable derived from other fields in 2016.	1 = Not a perinatal death 2 = Stillborn 3 = Neonatal death 4 = Postneonatal death 5 = Death – age not stated 9 = Not stated
Baby's place of birth [placebth]	Available from 1994 onwards. Place of birth	1 = Hospital 2 = Birth Centre 3 = Planned BC/hospital admission 4 = Planned home birth 5 = Planned HB/hospital admission 6 = Born before arrival 9 = Not stated
Mother's discharge status [mdisch]	Available from 1994 to 2015. Mother's discharge status	1 = Discharged 2 = Died 3 = Transferred 9 = Not stated

Variable	Description/Notes	Codes
Mother's discharge status [mdisch2016]	Available from 2016 onwards.	01 = Discharge by hospital 02 = Discharge own risk 05 = Transfer to other facility 06 = Death with autopsy 07 = Death without autopsy 88 = Discharge from independent midwife care 9 = Not stated
Mother's discharge status [mdisch_recode]	Available from 1994 onwards. Variable derived from 'mdisch' and 'mdisch_recode'.	1 = Discharged 2 = Died 3 = Transferred 9 = Not stated
Hospital of mother transfer [mtrans]	Available from 2006 onwards. Hospital that mother is transferred to after birth	Code lists are updated regularly. If information on specific facilities is required, these should be specified by name.
Hospital maternity service level [level]	Available from 1994 onwards. Maternity service level as per the NSW Ministry of Health's *Guide to the Role Delineation of Hospitals*	See Attachment C – Maternity Service Level
Confinement based on first baby [xrank]	Available from 1994 onwards. Refers to a woman having given birth. Note: with a multiple pregnancy, one confinement will result in more than one birth	0 = No 1 = Yes
Baby feeding on discharge – breast feeding [feed_bf]	Available from 2006 onwards. Baby feeding on discharge from the birth hospital.	0 = No/not stated 1 = Yes
Baby feeding on discharge – expressed breast milk [feed_ebm]	Available from 2006 onwards. Baby feeding on discharge from the birth hospital.	0 = No/not stated 1 = Yes

Variable	Description/Notes	Codes
Baby feeding on discharge – infant formula [feed_if]	Available from 2006 onwards. Baby feeding on discharge from the birth hospital.	0 = No/not stated 1 = Yes
Baby feeding on discharge – not applicable [feed_na]	Available from 2016 onwards. Indicates type of feeding due to the baby being transferred from the birth hospital	0 = No 1 = Yes 9 = Not stated
Vaccination in this pregnancy against pertussis [pertussis]	Collected from 2016. Whether the mother was immunised against pertussis in this pregnancy.	0 = No 1 = Yes 9 = Not stated
Vaccination in this pregnancy against influenza [influenza]	Collected from 2016. Whether the mother was immunised against influenza in this pregnancy.	0 = No 1 = Yes 9 = Not stated
Quit smoking in this pregnancy [smokequit]	Collected from 2016. Flag describing whether or not the Mother quit smoking at any time during the current pregnancy. Asked of mothers who smoked in either the first or second half of pregnancy.	' ' = Not applicable 0 = No 1 = Yes 9 = Not stated
Quit smoking at weeks gestation [smokequit_gestage]	Collected from 2016. Gestational age measured in completed weeks. Asked of mothers who smoked in either the first or second half of pregnancy, and had quit smoking during the current pregnancy.	
Mother tested for HIV [HIVtest]	Collected from 2016. Flag describing whether or not the Mother was tested for HIV at some time during the current pregnancy.	0 = No 1 = Yes 9 = Not stated

Attachment 1 - Area Health Services (AHS)

Code	Description
X160	Children's Hospital at Westmead
X170	Justice Health
X500	Sydney South West AHS
X510	South Eastern Sydney & Illawarra AHS
X520	Sydney West AHS
X530	Northern Sydney & Central Coast AHS
X540	Hunter & New England AHS
X550	North Coast AHS
X560	Greater Southern AHS
X570	Greater Western AHS
X900	Ambulance Service of NSW
X910	NSW Not Further Defined
X920	Victoria
X930	Queensland
X940	South Australia
X950	Western Australia
X960	Tasmania
X970	Northern Territory
X980	Australia Capital Territory
X990	Other Australian Territories
X997	Overseas Locality
X998	No Fixed Locality
X999	Not Stated/Other

Attachment 2 – Local Health Districts

Code	Description
X700	Sydney LHD
X710	South Western Sydney LHD
X720	South Eastern Sydney LHD
X730	Illawarra Shoalhaven LHD
X740	Western Sydney LHD
X750	Nepean Blue Mountains LHD
X760	Northern Sydney LHD
X770	Central Coast LHD
X800	Hunter New England LHD
X810	Northern NSW LHD
X820	Mid North Coast LHD
X830	Southern NSW LHD
X840	Murrumbidgee LHD
X850	Western NSW LHD
X860	Far West LHD
X630	Sydney Children's Hospitals Network
X690	St Vincent's Health Network
X180	Forensic Mental Health Network
X170	Justice Health
X910	NSW not further specified
X920	Victoria
X921	Albury (Victoria in-reach)
X930	Queensland
X940	South Australia
X950	Western Australia
X960	Tasmania
X970	Northern Territory
X980	Australian Capital Territory
X990	Other Australian Territories
X997	Overseas Locality
X998	No Fixed Address
9999	Missing
' '	Missing

Attachment 3 – Primary Healthcare Networks

Code	Description
PHN101	Central and Eastern Sydney
PHN102	Northern Sydney
PHN103	Western Sydney
PHN104	Nepean Blue Mountains
PHN105	South Western Sydney
PHN106	South Eastern NSW
PHN107	Western NSW
PHN108	Hunter New England and Central Coast
PHN109	North Coast
PHN110	Murrumbidgee
PHN199	NSW not further specified
PHN921	Network with Vic (Albury LGA)
PHN990	Location in Australia other than NSW
PHN997	Overseas locality
PHN999	Missing

Attachment 4 - Maternity Service Level

Level 1: local maternity service (no births), postnatal only for women with normal outcomes.

Level 2: small maternity services, normal-risk pregnancy and births only. Staffed by general practitioners and midwives.

Level 3: country district and smaller metropolitan services, care for mothers and infants at normal- selected moderate risk pregnancies and births. Full resuscitation and theatre facilities available. Rostered obstetricians, resident medical staff and midwives. Accredited general practitioners-specialist anaesthetist on call. Has Level 2b neonatal care.

Level 4: regional-referral-metropolitan district services. Birth and care for mothers and/or babies with moderate risk factors. Obstetricians and paediatrician available 24 hours a day, 7 days a week. Rostered resident medical staff, specialist anaesthetist on call. Has Level 2b neonatal care.

Level 5: regional referral-metropolitan services, care for mothers and infants known to be at high risk. Able to cope with complications arising from these risk factors. Has Level 2a neonatal care.

Level 6: (tertiary)-specialist obstetric services (supra regional). All functions-normal, moderate and high-risk births. Has Level 3 neonatal intensive care.