**ACT Maternal Perinatal Data Collection**

ACT Health Directorate

## Background

The ACT Maternal Perinatal Data Collection (formerly known as the Midwives Data Collection) is a population-based surveillance system covering all births in ACT hospitals, as well as homebirths. The data collection has operated since 1991 but only data from 1997 is considered of sufficient quality for analysis. Currently only records from ACT public hospitals are available for linkage.

The ACT MPDC encompasses all live births, and stillbirths of at least 20 weeks gestation or at least 400 grams birth weight. For every birth in ACT 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. The information is sent to the ACT Health Directorate where it is checked and compiled into one state-wide dataset. A record is forwarded for each baby, even in the case of a multiple birth. The ACT MPDC has undergone multiple minor revisions over the years, major changes occurred in 2002 and 2008.

The ACT MPDC includes notifications of births which occur in ACT; it does not receive notifications of interstate births where the mother is resident in ACT. The collection is based on the date of birth of the baby.

## Tips for using the ACT MPDC in linkage studies

* The ACT MPDC 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 ACT MPDC records are provided to the CHeReL—one for mothers and one for babies. These are known as the ACT MPDC mother and ACT MPDC baby datasets. When using the ACT MPDC 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 an ACT MPDC mother linkage key and an ACT MPDC baby linkage key. The data custodian will add both mother and baby project person numbers (PPNs) to the ACT MPDC dataset for provision to the project investigators.

## Data custodian

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## Perinatal Data Collection – Variable information

| Variable | Description/Notes | Codes |
| --- | --- | --- |
| Mother’s date of birth[moth\_dob] | 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[moth\_age] | Age in years |  |
| Mother’s country of birth[sacc] | The country in which the mother was born | Codes are the Australian Bureau of Statistics 4 digit country of birth names [http://www.abs.gov.au/ausstats/abs@.nsf/mf/1269.0](http://www.abs.gov.au/ausstats/abs%40.nsf/mf/1269.0) |
| Mother’s Indigenous status[ind\_moth] | Mother’s Indigenous status. Used from 1999 onwards. | 1 = Aboriginal but not Torres Strait Islander origin2 = Torres Strait Islander but not Aboriginal origin3 = Both Aboriginal and Torres Strait Islander origin4 = Neither Aboriginal nor Torres Strait Islander origin9 = Unknown or not stated |
| Mother’s marital status[mar\_stat] | Mother’s marital status. | 1 = Never married 2 = Widowed 3 = Divorced 4 = Separated 5 = Married (registered and de facto)9 = Not stated/inadequately described |
| Hospital of birth[est\_no] | Hospital of birth registration for live births and stillbirths. Babies born before arrival at hospital will be listed against the hospital at which their birth was registered.  | 82 = Canberra Hospital83 = Calvary Public Hospital – Bruce 85 = Calvary John James Hospital86 = Calvary Private Hospital – Bruce8888 = Not applicable (home birth)9999 = Not stated/unknown  |
| Mother’s postcode[pcode] | Mother’s postcode of residence | ACT – 2600-2620; 2900-2915. Postcodes 2600, 2611, 2618, 2619, 2620 are shared with NSW. NSW – 2000-2599; 2618-2899VIC – 3000-3999QLD – 4000-4999SA – 5000-5999WA – 6000-6999TAS – 7000-7999NT – 0800-0899O/S – null or 9999 |
| Mother’s SLA of residence[ssla] | Statistical Local Area of residence | Codes are according to the Australian Standard Geographical Classification (ASGC) issued by the Australian Bureau of Statistics [https://www.abs.gov.au/websitedbs/D3310114.nsf/home/Australian+Standard+Geographical+Classification+(ASGC)](https://www.abs.gov.au/websitedbs/D3310114.nsf/home/Australian%2BStandard%2BGeographical%2BClassification%2B%28ASGC%29)  |
| Mother’s SA2 of residence[sa2\_2011][sa2\_2016] | Statistical Area level 2 of residence, available from 2016. 2011 and 2016 versions of the ASGS SA2 codes are stored in separate variables. | Codes are according to the Australian Statistical Geography Standard (ASGS) issued by the Australian Bureau of Statistics [https://www.abs.gov.au/websitedbs/D3310114.nsf/home/Australian+Statistical+Geography+Standard+(ASGS)](https://www.abs.gov.au/websitedbs/D3310114.nsf/home/Australian%2BStatistical%2BGeography%2BStandard%2B%28ASGS%29)  |
| Accommodation status[pat\_clss] | Patient accommodation status | 1 = Public2 = Private8 = Other9 = Not stated |
| Baby’s date of birth[baby\_dob] | Full date of birth will only be supplied if sufficient justification is supplied. Date of birth may otherwise be supplied as MMYYYY. |  |
| Date of LMP[lmp\_date] | Date of last menstrual period. Full date will only be supplied if sufficient justification is supplied that gestational age is insufficient.  |  |
| Previous pregnancy?[prv\_preg] | Primigravida or Multigravida | 0 = Primigravida1 = Multigravida9 = Not stated |
| Number of previous pregnancies[prv\_prgs] | Number of previous pregnancies  | 99 = Not stated |
| Was last birth by caesarean section?[cs\_last] | Available from 2006 onwards | 1 = Yes2 = No7 or missing = Not applicable (no previous births)9 = Not stated |
| Total number of previous caesarean section[cs\_pnum] | Available from 2006 onwards | 99 = Not stated |
| Amniocentesis (<20 weeks)[amnio20b] | From 2012, amniocentesis is collected without timing. Both amniocentesis variables contain the same information. | 0 = No1 = Yes9 = Not stated |
| Amniocentesis (≥20 weeks)[amnio20a] | From 2012, amniocentesis is collected without timing. Both amniocentesis variables contain the same information. | 0 = No1 = Yes9 = Not stated |
| CVS[cvs] | Chorionic villus sampling.  | 0 = No1 = Yes9 = Not stated |
| Cervical suture[cer\_sut] |  | 0 = No1 = Yes9 = Not stated |
|  Antenatal care providers[ACProvider] | Who provided antenatal care? Main antenatal care provider from 1997–2007, all antenatal care providers from 2008. Responses are separated by ‘^’ | 0 = No antenatal care10 = Obstetrician (including Fetal Medicine Unit)11 = General Practitioner12 = Midwife led Clinic13 = Independent Midwife14 = Hospital Antenatal Clinic15 = Primary Midwife model16 = Aboriginal Health Service17 = Shared care (GP & Hospital ANC as per guidelines)98 = Other99 = Not stated  |
| Duration of pregnancy (weeks) at first antenatal visit[dpafv] | Duration of pregnancy at first antenatal visit. Quality improves over time; however the later years are still close to 20% not stated and most often this represents the duration of pregnancy at first hospital antenatal clinic appointment. | 98 = No antenatal care99 = Not stated |
| Smoking during pregnancy[smoke] | Did the mother smoke at all during pregnancy? | 1 = Yes2 = No9 = Not stated |
| Smoking before 20 weeks pregnancy[smkeb20] | Did the mother smoke during the first 20 weeks of pregnancy pregnancy? | 1 = Yes2 = No9 = Not stated |
| Maternal smoking <20 weeks – average smoked per day [smkeb20no] | How many cigarettes each day on average were smoked in the first half of pregnancy | 98 = less than 199 = Not stated |
| Smoking at or after 20 weeks pregnancy[smkea20] | Did the mother smoke after 20 weeks of pregnancy? | 1 = Yes2 = No9 = Not stated |
| Maternal smoking ≥ 20 weeks – average smoked per day [smokea20no] | How many cigarettes each day on average were smoked in the second half of pregnancy | 98 = less than 199 = Not stated |
| Alcohol use during pregnancy[alcohol] | Did the mother drink alcohol at all during pregnancy? | 1 = Yes2 = No9 = Not stated |
| Standard drinks per week during pregnancy[alcoholno] | How many standard drinks each week on average were drunk during pregnancy | 98 = less than 199 = Not stated |
| Maternal diabetes mellitus[diabetes] | Maternal diabetes mellitus—pre-existing diabetes | 0 = No1 = Yes9 = Not stated |
| Gestational diabetes[g\_diabet] | Gestational diabetes | 0 = No1 = Yes9 = Not stated |
| Chronic hypertension[ess\_hypt] | Chronic maternal hypertension (pre-existing hypertension) | 0 = No1 = Yes9 = Not stated |
| Pregnancy-induced hypertension[pih] | Pregnancy-induced hypertension. Available from 1999, excluding 2009 to 2012. | 0 = No1 = Yes9 = Not stated |
| Pre-eclampsia[pe] | Pre-eclampsia. Available from 1999 | 0 = No1 = Yes9 = Not stated |
| APH[aph] | Antepartum haemorraghe, available from 1997. | 0 = None1 = Placenta praevia2 = Abrupto placenta3 = Other APH4 = Placenta praevia and Abrupto placenta9 = Not stated |
| Prelabour rupture of membranes (>24 hours)[prom] |  | 0 = No1 = Yes9 = Not stated |
| Threatened premature labour[t\_preml] | Available from 1999 | 0 = No1 = Yes9 = Not stated |
| Major puerperal infection[p\_infect] |  | 0 = No1 = Yes9 = Not stated |
| Third or fourth degree tear[deg\_tear] |  | 0 = No1 = Yes9 = Not stated |
| Retained placenta[ret\_plac] |  | 0 = No1 = Yes9 = Not stated |
| Post-partum haemorrhage (>600mls)[pph] | Available up until 2013. Tick box on paper form provided by hospitals. | 0 = No1 = Yes9 = Not stated |
| Primary post-partum haemorrhage (>500mls)[pphstat] | Available from 2014. Calculated from primary blood loss. | 1 = Yes2 = No9 = Not stated |
| Labour onset[onsetlab] | Onset of labour | 1 = Spontaneous2 = Induced3 = No labour9 = Not stated |
| Type of Induction[InductionMethod] | Birth event—labour induction type, more than one method is collected. Responses are separated by ‘^’Available from 1999 | 0 = None 1 = Oxytocin2 = Prostaglandins 3 = Artificial rupture of membranes (ARM) 4 = Combined ARM and Oxytocin6 = Mechanical cervical dilatation7 = Anti-progesterone8, 88 = Other9, 99 = Not stated |
| Type of Augmentation[AugmAgent] | Birth event—labour augmentation type, more than one method is collected. Responses are separated by ‘^’Available from 1999 | 0 = None1 = Oxytocin2 = Prostaglandins3 = Artificial rupture of membranes (ARM)8 = Other9 = Not stated |
| Analgesia for labour[Analgesia] | Analgesia administered to the woman to relieve pain for labour and unassisted birth, more than one method is collected.Responses are separated by ‘^’. | 1 = None2 = Nitrous oxide3 = intra-muscular injection4 = Epidural or caudal5 = Spinal6 = Systemic opioids7 = Combined spinal-epidural88 = Other99 = Not stated/inadequately described |
| Anaesthesia for delivery[Anaesthesia] | Anaesthesia administered for operative/assisted delivery of the baby, more than one method is collected.Responses are separated by ‘^’. | 1 = None2 = Local anaesthetic to perineum3 = Pudendal block4 = Epidural or caudal5 = Spinal6 = General anaesthetic7 = Combined spinal-epidural88 = Other99 = Not stated/inadequately described |
| Presentation[present6] | The presenting part of the foetus at birth. | 1 = Vertex2 = Breech3 = Face4 = Brow8 = Other9 = Not stated |
| Type of Delivery[birth\_vb] | Available for 1997–2005 | 1 = Spontaneous vaginal2 = Forceps (assisted vaginal birth)3 = Vaginal Breech4 = Caesarean Section5 = Vacuum extraction8 = Other9 = Not Stated |
| Method of Birth[birth] | Available from 2006 onwards | 1 = Vaginal - non-instrumental2 = Vaginal - forceps4 = Caesarean section5 = Vaginal - vacuum extraction9 = Not stated |
| Perineal status[peristat] | Source data from 1998 to 2008. Recoded from source from 2009. | 1 = Intact2 = 1st degree tear/graze3 = 2nd degree tear4 = 3rd degree tear5 = Episiotomy6 = Combined tear and episiotomy7 = 4th degree tear8 = Other9 = Not stated |
| Perineal status[peri\_stat\_int][peri\_stat\_1st][peri\_stat\_2nd][peri\_stat\_3rd][peri\_stat\_4th][peri\_stat\_epi][peri\_stat\_oth] | Multiple response source data for 2009 to 2011. Recoded from source for 1998 to 2008 and from 2012. Seven variables, any values of 9 represents “Not stated”. | Intact (1=Yes or 0=No or 9=variables not stated)1st deg tear (1=Yes or 0=No/not stated)2nd deg tear (1=Yes or 0=No/not stated)3rd deg tear (1=Yes or 0=No/not stated)4th deg tear (1=Yes or 0=No/not stated)Episiotomy (1=Yes or 0=No/not stated) Non-perinum tear/graze (1=Yes or 0=No/not stated) |
| Perineal status[PerinealStatus] | Multiple response source data from 2012. Recoded from source for 1998 to 2011. Responses are separated by ‘^’ | 1 = Intact2 = 1st degree tear/graze3 = 2nd degree tear4 = 3rd degree tear5 = Episiotomy7 = 4th degree tear88 = Other99 = Not stated |
| Surgical repair of vagina or perineum[peri\_sut] | Available from 1999 | 1 = Yes2 = No9 = Not stated |
| Baby’s sex[baby\_sex] | Baby sex | 1 = Male2 = Female3 = Indeterminate9 = Unknown |
| Plurality of birth[plural] | The number of foetuses or babies from the pregnancy. On this basis pregnancy may be classified as single or multiple. | 1 = Singleton2 = Twins3 = Tripletsetc9 = Not stated |
| Birth order[rank] | The order of birth | 1 = First2 = Second3 = Third etc9 = Not stated |
| Gestational age [gest\_age] | Gestational age measured in completed weeks, based on the best clinical estimate | 99 = Not stated |
| Gestational age [gest\_age\_days] | Number of days since completed week. Partially available from 2018 births. | 0 to 6 days |
| Birth weight [birthwt] | The newborn infant’s first weight in grams, usually taken within one hour of birth | 9999 = Not stated |
| Birth length [length] | The newborn infant’s length at birth in centimetres | 99, 999.9 = Not stated |
| Birth head circumference [hcirc] | The newborn infant’s head circumference at birth in centimetres | 99, 999.9 = Not stated |
| APGAR score (1 min)[apgar1] | A numerical scoring system routinely administered one and five minutes after birth to evaluate the condition of the baby. The score ranges from 0 to 10 | 99 = Not stated |
| APGAR score (5 min)[apgar5] | As above | As above |
| Admitted to Special Care Nursery or Neonatal Intensive Care Unit[icu\_scn] | Available from 1999 | 1 = Yes2 = No9 = Not stated |
| Number of days in SCN/NICU[admitscn] | Number of days in SCN/NICU in hospital of birth. Available from 1999 | 0 = Not admitted to SCN/NICU888 = Admitted, number of days unknown999 = Not stated |
| Resuscitation of baby[resus\_a6] | Source data for 1999-2008.Recoded from source from 2009. | 1 = None2 = Suction3 = Oxygen therapy4 = IPPR by bag and mask5 = Intubation and IPPR6 = External cardiac massage and ventilation7 = Other9 = Not stated |
| [ResusActive] | Multiple response source data from 2009.Recoded from source for 1999 to 2008.Responses are separated by ‘^’ | 1, 01 = None2, 02 = Suction3, 03 = Oxygen therapy4, 04 = IPPR(V) by bag and mask5, 05 = Intubation and IPPR(V)6, 06 = External cardiac massage and ventilation07 = Intermittent positive pressure ventilation (IPPV)08 = Continuous positive airway pressure (CPAP) ventilation10 = Intubation and ventilation11 = External cardiac compressions88 = Other9, 99 = Not stated |
| Baby’s date of discharge or transfer[baby\_dis] | Full date will only be supplied if sufficient justification is supplied that age is insufficient. |  |
| Baby’s discharge status[baby\_sep] | Baby’s discharge status | 1 = Discharged home2 = Transferred3 = Transferred and died4 = Stillborn or died8 = Other9 = Not stated |
| Baby’s date of death[baby\_dod] | Full date will only be supplied if sufficient justification is supplied that age is insufficient.  |  |
| Baby Outcome[baby\_out] | Fetal-infant outcome. Note that whilst termination of pregnancy less than 20 weeks is included in the code set there are no records in the ACT data. | 0 = Stillbirth1 = Livebirth, survived2 = Livebirth, neonatal death3 = Livebirth, post-neonatal death4 = Termination of pregnancy <20wks9 = Not stated |
| Baby’s place of birth[placebir] | Place of birth. Note that whilst free-standing Birth Centre is included in the code set there are no free-standing Birth Centres in the ACT. | 1 = Hospital2 = Birth Centre attached to hospital3 = Birth Centre free-standing4 = Planned home birth8 = Other including born before arrival9 = Not stated |
| Mother’s discharge status[moth\_sep] | Mother’s discharge status | 1 = Discharged home2 = Transferred3 = Died8 = Other9 = Not stated |
| Antenatal stay[antestay] | Duration of mother’s antenatal stay in days |  |
| Postnatal stay[poststay] | Duration of mother’s postnatal stay in days |  |
| Baby’s stay[babystay] | Duration of baby’s stay in hospital in days. |  |