



Northern
Territory
Government

Northern Territory Midwives' Collection
Mothers and Babies 2009



Mothers and Babies 2009

Northern Territory Midwives' Collection

Fintan Thompson
Xiaohua Zhang

Acknowledgements

The authors are grateful to the many people, who have assisted in the production of this report, including:

- Public hospital and Darwin Private Hospital midwives
- Remote community midwives
- Homebirth services midwives
- Midwifery Group Practices, Darwin and Alice Springs
- Community Midwives Group Practice
- Indigenous Health Workers
- Public hospital and Darwin Private Hospital obstetricians
- Public hospital and Darwin Private Hospital paediatricians
- Public hospital medical records staff
- Alukura staff
- Northern Territory Registrar of Births, Deaths and Marriages
- Perinatal Data Manager, Acute Care Information Services
- Data Warehouse staff, Department of Health
- Members of the Perinatal Information Management Group

© Department of Health, Northern Territory 2013

This publication is copyright. The information in this report may be freely copied and distributed for non-profit purposes such as study, research, health service management and public information subject to the inclusion of an acknowledgement of the source. Reproduction for other purposes requires the written permission of the Chief Executive of the Department of Health, Northern Territory.

Suggested citation

Thompson F, Zhang X. Northern Territory Midwives' Collection. Mothers and Babies 2009. Department of Health, Darwin, 2013

ISBN 978 0 9804235 8 7

Printed by the Government Printer of the Northern Territory, 2013

An electronic version is available at:

http://www.health.nt.gov.au/Health_Gains/Publications/index.aspx

General enquiries about this publication should be directed to:

Director, Health Gains Planning Branch

Department of Health

PO Box 40596, Casuarina, NT 0811

Phone: (08) 8985 8074

Email: ntghealth.gains@nt.gov.au

Table of contents

Summary	v
Key findings	v
Introduction	1
Information presented in this report	1
Data sources	1
Northern Territory Midwives' Collection	1
NT Perinatal Death Register	2
Data limitations	2
Mothers and babies of the Northern Territory	4
Mothers	4
Place of residence	4
Fertility rate	4
Maternal age	4
Parity	5
Antenatal care	5
Smoking status and alcohol consumption during pregnancy	6
Birth facility	7
Onset of labour and induction of labour	7
Presentation and method of birth	7
Analgesia for labour and anaesthesia for childbirth	8
Labour complications and perineal status	8
Postnatal hospital stay	8
Babies	8
Birth status	8
Plurality	9
Preterm and low birthweight liveborn babies	9
Apgar scores	9
Resuscitation of liveborn babies	9
Perinatal mortality	9
Statistical tables	11
Mothers	11
Babies	27
Appendices	35
Appendix 1. Hospital profiles	35
Appendix 2. Trends of perinatal indicators, by Indigenous status, NT, 1995–2009	43
Appendix 3. Northern Territory Estimated Resident Population	50
Glossary	51
References	54
List of tables	55
Selected Health Gains Planning publications	57

Summary

This report summarises data from the 2009 Northern Territory (NT) Midwives' Collection. It includes population characteristics of mothers, maternal health status, antenatal information, conditions and procedures used in labour and childbirth as well as birth outcomes of all births that occurred in 2009. While the NT Midwives' Collection contains information on both NT residents and interstate residents who gave birth in the NT, the focus of this report is NT residents who gave birth in the NT. Unless otherwise stated, the following key findings are for NT residents.

The primary purpose of the report is to inform and encourage professional discussion regarding the health of women and their babies. This report will assist policy makers and health planners to provide better services to the community. In addition, this report aims to provide feedback to midwives, Aboriginal Health Workers, community health nurses and medical practitioners involved with maternal and child health.

Key findings

- During 2009, there were 3,824 babies born to 3,771 NT mothers, 38% of whom were Indigenous. In addition there were 88 interstate mothers who gave birth to 90 babies in the NT. The total of births in the NT for this year was 3,914 babies born to 3,859 mothers.
- Indigenous women had a higher total fertility rate (TFR) than that reported for all Australian women during the same period (2.28 and 1.90 births per woman respectively). The TFR of non-Indigenous women (1.87) was comparable with the national rate.
- The mean age of Indigenous mothers (24.8 years) was nearly five years younger than that of non-Indigenous mothers (29.7 years). Almost a quarter of Indigenous mothers (22%) were less than 20 years of age.
- Non-Indigenous mothers were more than twice as likely to be in the oldest age group (35 years and over) than Indigenous mothers (21% and 8% respectively).
- A greater proportion of Indigenous mothers (26%) had three or more previous births compared with non-Indigenous mothers (9%). Similarly, a smaller proportion of Indigenous than non-Indigenous mothers (30% and 43% respectively) gave birth to their first baby.
- Indigenous mothers were six times more likely to have insufficient antenatal care (no antenatal visit or attended less than four visits) compared with non-Indigenous mothers (18% and 3% respectively).
- Three quarters (77%) of non-Indigenous mothers attended their first antenatal visit during their first trimester of pregnancy. This proportion was much less for Indigenous mothers (45%).
- At first antenatal visit, Indigenous mothers were three times more likely to report smoking compared with non-Indigenous mothers (54% and 16% respectively).
- Onset of labour was induced for 21% of all NT mothers. Artificial rupture of membranes and oxytocics were the most common methods of induction used in induced labours (70% and 69% respectively).

- Sixty three per cent of all NT mothers had a spontaneous vaginal delivery and 8% had assisted vaginal birth mainly using forceps or vacuum extraction. Among those who gave birth vaginally, 44% had an intact perineum, while 44% had some degree of perineal laceration. The remainder had an episiotomy (11%) or a combination of episiotomy and tear (1.1%).
- Over a quarter (29%) of all NT mothers had a caesarean section. Indigenous mothers were more likely to undergo a caesarean section for emergency reasons (68%) than non-Indigenous mothers (48%).
- The main reason for elective caesarean section births was a previous caesarean section (65%). The main reasons for emergency caesarean section births were failure to progress during labour (49%) and fetal distress (31%). Indigenous mothers were much more likely to have an emergency caesarean section because of fetal distress than non-Indigenous mothers (37% and 26% respectively).
- Over half of all NT mothers (57%) stayed in hospital for three days or less following birth.
- Nine per cent of all NT livebirths were preterm (less than 37 weeks). The proportion of preterm babies born to Indigenous mothers was more than double that of preterm babies born to non-Indigenous mothers (14% and 6% respectively).
- Nine per cent of all NT livebirths were low in birthweight (less than 2500 grams). The proportion of low birthweight babies born to Indigenous mothers was more than double that of low birthweight babies born to non-Indigenous mothers (14% and 5% respectively).
- A small percentage of all NT full term (37 weeks and over) singleton livebirths were of low birthweight; 5% of those born to Indigenous mothers and 2% to non-Indigenous mothers.
- Twenty seven per cent of all NT livebirths received some form of resuscitation, excluding tactile stimulation. Resuscitation rates were higher among Indigenous compared to non-Indigenous liveborn babies (31% and 24% respectively).
- There were 60 perinatal deaths comprising 42 stillbirths and 18 neonatal deaths. The overall Indigenous perinatal death rate was over three times that of the non-Indigenous rate (28 and 8 deaths per 1000 births respectively).

Introduction

This report summarises data from the 2009 Northern Territory (NT) Midwives' Collection. It includes population characteristics of mothers, maternal health status, antenatal information, conditions and procedures used in labour and childbirth as well as birth outcomes for all births that occurred in 2009. The trend tables show changes over time for key demographic and obstetric indicators and birth outcomes over the period 1995–2009.

The primary purpose of the report is to inform and encourage professional discussion regarding the health of women and their babies. Annual reporting is primarily to the Perinatal Information Management Group (PIMG), which makes the data available for health service planning and delivery. This report will assist policy makers and health planners to provide better services to the community. In addition, this report aims to provide feedback to midwives, Aboriginal Health Workers, community health nurses and medical practitioners involved with maternal and child health.

Information presented in this report

The NT Midwives' Collection contains information on both NT residents and interstate residents who gave birth in the NT. However, the focus of this report is NT residents who gave birth in the NT. Unless specified, mothers usually residing interstate and births to them were omitted from the statistical tables.

Information on Territory women who gave birth interstate is not collected in the NT Midwives' Collection and is beyond the scope of this report. Australia's Mothers and Babies 2009 report published estimated numbers of NT women who gave birth interstate. It was estimated that up to 69 NT women gave birth interstate, predominantly in Queensland (32 births), South Australia (22 births) and Western Australia (7 births) with the rest in New South Wales and the Australian Capital Territory.¹ Indigenous status was not available for interstate births to NT women.

In this report the maternal Indigenous status was used during analysis of both mother and baby information. For information on labour and childbirth in the Mothers' section of this report, the data of the first birth were used for mothers with multiple births in one pregnancy.

A brief description of the results is presented in the next chapter followed by a comprehensive presentation of the data in a series of tables. Most tables are presented with information for all women as well as separately by Indigenous status and, in some, place of mother's usual residence (for NT mothers). Place of mother's usual residence is classified into health service districts, and into urban/rural-remote areas. The urban area includes Darwin Urban and Alice Springs Urban districts and the towns of Katherine, Tennant Creek and Nhulunbuy; the rural-remote area covers the balance of the NT.²

Data sources

Northern Territory Midwives' Collection

The NT Midwives' Collection is a population-based census of all births that occurred in the NT, including births in public and private hospitals, planned home births, births in

community health centres, and other non-hospital births. All livebirths and stillbirths of at least 20 weeks gestation or with a birthweight of at least 400 grams are included.

The NT Midwives' Collection contains information about population characteristics of the mother, antenatal care, maternal health, the pregnancy, labour and childbirth, and perinatal health.

In 2009 the majority of information about the births was captured directly in electronic format. In the public sector, midwives enter data shortly after the birth of a baby via the Birthing Suite Module of CareSys, the Hospital Information System. This normally covers births that occurred in public hospitals and births before arrival (BBAs). Births in Darwin Private Hospital (DPH) and planned home births are entered via the internet site of the NT Midwives' Collection. Births that occurred in health centres, which did not involve being admitted to hospital, are submitted in paper form and then entered by the perinatal data manager to the intranet site.

In producing this report, data from the Midwives' Collection were downloaded in unit record form from Business Objects and transferred into a statistical program. The data went through further validation and corrections were transferred back to the Midwives' Collection systems.

NT Perinatal Death Register

The Health Gains Planning Branch of the Department of Health has maintained information on deaths of babies up to one year of age since 1986. The primary sources for the register are the monthly death list from the NT Births, Deaths and Marriage Registry for neonatal deaths and the NT Midwives' Collection for stillbirths. The hospital morbidity dataset is also used as another source of data.

Data limitations

Several data items in the Midwives' Collection, notably antenatal information including parity, previous caesareans, smoking and alcohol use during pregnancy, maternal medical conditions and pregnancy complications as well as indications for caesarean section are incomplete or low in accuracy. This is primarily due to the indirect data collection method and the lack of a validating process.

The treatment of 'not stated' data requires careful consideration depending upon the cause of the missing data. For example data may be missing due to refusal of clients to answer a question or may simply be missing completely at random (MCAR). While there are no hard and fast rules as to how 'not stated' data are reported, as a default position the Australian Institute of Health and Welfare (AIHW) recommends that 'not stated' are shown in tables as numbers and excluded from the calculation of percentage distributions. This methodology assumes that the 'stated' and the 'not stated' share the same distribution (unpublished guidelines, AIHW, 2008).

In the *Mothers and Babies* 2003 report,³ the Health Gains Planning Branch commenced using the AIHW default position and 'not stated' data were excluded from calculation of percentage distributions. This approach differs from reports compiled prior to the 2003 report. In these reports, 'not stated' data were included as a percentage of the total in each table.

The effect of our change in approach is that the proportional distribution for certain data items, particularly smoking and/or alcohol consumption during pregnancy, is now markedly higher than previously reported. Comparative analyses involving reports

published from 2003 and those published prior to 2003 will need to take this methodological change into account.

The data used in this report are limited to the health information available at the time of data entry. In instances where an antenatal record is incomplete or missing, the midwife entering information in the Birthing Suite Module of CareSys or the internet site of the NT Midwives' Collection is limited to the details at hand. Key antenatal indicators such as visit dates and health behaviours are most likely to be affected as this information is only recorded on antenatal records.

For some medical conditions, procedures and complications related to labour and childbirth, the data in the Midwives' Collection are sometimes different from the information recorded in the main hospital data system. This is due to the different data coding and entry methods with midwives responsible for data in the Midwives' Collection and medical coders responsible for data entry to the main hospital data system.

Information such as mother's post-partum complications and baby's further health outcomes are not collected in the NT Midwives' Collection because they are recorded only after mothers and babies have left the birthing suite.

The denominator population used to calculate fertility rates is the 2009 NT Estimated Resident Population based on the 2006 ABS Census of Population and Housing.

Because the NT population is small, when data are disaggregated by Indigenous status or regions the numbers being reported can be very small. When small numbers are used, seemingly large differences can be seen when percentage rates are calculated, even if the difference is only one or two births. When there is a risk of attributes about an individual being disclosed due to a small number of cases, relevant cells or tables are suppressed. In 2009 there were a total of five births at Tennant Creek Hospital and as a result a hospital profile has not been presented in Appendix 1.

A further issue with data disaggregated by region for the Indigenous population is difficulties individuals have identifying one usual place of residence.⁴ This is particularly true for pregnant women who have to travel to and stay in town from 36 weeks gestation to be close to a hospital when they give birth.⁵ The place they are staying in town could thus be recorded as their usual place of residence and not the community they have travelled from. A recent audit of NT hospital demographic data found 91% congruence between hospital records of patients' usual health district of residence and the health district people identified as their usual place of residence when asked in an interview.⁶

Mothers and babies of the Northern Territory

Mothers

Place of residence

In 2009, a total of 3,859 mothers gave birth to 3,914 babies in the NT, of which 3,871 were livebirths. Among all babies born in the NT, most were born to mothers who were resident in the NT. There were 88 mothers from interstate who gave birth to 90 babies (2% of all babies born in the NT).

Indigenous mothers comprised 38% of all NT mothers in 2009. This is higher than the share of the NT female population of child-bearing age (i.e. 15-49 years) made up of Indigenous women. In 2009, Indigenous women comprised 31% of all NT women of child-bearing age (Appendix 3).

Most NT non-Indigenous mothers were living in urban areas (95%), which include Darwin Urban and Alice Springs Urban districts and the towns of Katherine, Tennant Creek and Nhulunbuy. In contrast, Indigenous mothers were predominantly from rural and remote areas (65%).

Fertility rate

The total fertility rate (TFR) for the NT was 2.07 livebirths per woman in 2009, which is slightly below the replacement rate of 2.1 births per woman and was higher than the 1.90 births per woman for the whole of Australia in the same period.⁷ Non-Indigenous women had a lower TFR than Indigenous women (1.87 and 2.28 births per woman respectively).

This pattern of higher TFRs for Indigenous women compared with non-Indigenous women was seen in both urban and rural-remote areas and in all districts. Katherine district had the highest TFR for all NT women, whilst Alice Springs Rural had the lowest.

The age-specific fertility rates show differences in the age of child-bearing between the Indigenous and non-Indigenous populations. The fertility rate in the youngest age group (less than 20 years of age) was almost five times higher for Indigenous women compared with non-Indigenous women of the same age (88.9 and 18.0 births per 1,000 women respectively). Conversely, the fertility rate of the 35 and older age group was higher for non-Indigenous mothers (26.6 and 18.6 respectively), despite a lower overall fertility rate.

Maternal age

The mean age of Indigenous mothers was 24.8 years, which was almost five years less than the mean age of 29.7 years for non-Indigenous mothers. This difference was due to the age profile of mothers. The majority of Indigenous mothers were aged less than 25 years whereas over half of non-Indigenous mothers were 30 years or older. Almost a quarter (22%) of Indigenous mothers were less than 20 years of age at the time of giving birth, seven times higher than the 3% of non-Indigenous mothers. A more marked difference was seen among mothers aged less than 18 years with 10% of all

Indigenous mothers being in this age group, compared with only 0.9% of non-Indigenous mothers. In contrast, non-Indigenous mothers were two and a half times more likely to be in the oldest age group (35 years and over) than Indigenous mothers (21% and 8% respectively). This pattern of markedly earlier childbearing among Indigenous mothers was seen in all health districts including urban areas.

Indigenous mothers in the Darwin Urban district were less likely to have their children below age 20 than Indigenous mothers in other districts (16% compared with between 20% and 26% elsewhere). Across the NT the proportion of young Indigenous mothers (less than 20 years) was only slightly lower in urban areas (21%) than in rural-remote areas (23%).

Parity

Among those women with parity recorded, the majority had given birth at least once before. Nearly half (47%) had one or two previous births and 15% had three or more previous births. Thirty eight per cent of women gave birth to their first child. First-time mothers were proportionally higher among non-Indigenous mothers (43%) than Indigenous mothers (30%). Similarly, proportionally more Indigenous women than non-Indigenous had three or more previous births (26% and 9% respectively).

The difference in maternal age between Indigenous and non-Indigenous women was more pronounced among first-time mothers for whom there was an eight year difference in the mean age of birth (20 and 28 years respectively). The majority of non-Indigenous first-time mothers were aged 25 years or older (71%), whereas first-time Indigenous mothers were mostly less than 20 years of age (53%), and many were aged below 18 years of age (30%).

Antenatal care

The vast majority of mothers had information on antenatal visits recorded. In less than 1% of records the date of first visit or frequency of visits were not recorded. The World Health Organisation classifies less than four antenatal visits during the whole pregnancy to be insufficient.⁸ Among mothers for whom information was collected, Indigenous mothers in the NT were six times more likely to have insufficient antenatal care documented (no antenatal visit or attended less than four visits) compared with non-Indigenous mothers (18% and 3% respectively). Among Indigenous mothers, insufficient antenatal care was more likely in urban areas compared to rural and remote areas (22% and 16% respectively). For non-Indigenous, insufficient antenatal care was comparable among those living in urban areas as in rural-remote areas (3% and 5% respectively).

It is regarded as important for maternal and fetal health to have the first antenatal visit within the first trimester period of pregnancy.⁹ In this report, first trimester is defined as gestational age less than fourteen weeks from conception. This definition is consistent with the National Indigenous Reform Agreement definition endorsed onto Australia's online repository for metadata standards (METeOR) in June 2013¹⁰ and differs from NT perinatal reports published prior to 2013, which defined trimester as less than thirteen weeks.

In this report gestational age at the first antenatal visit was derived from three sources of information: the date of the first antenatal visit, the date of the first ultrasound or the recorded gestational age at the time of the first ultrasound to determine the lowest valid gestational age.

Compared with non-Indigenous mothers, Indigenous mothers were more likely to attend their first antenatal visits later in the pregnancy. Among those mothers who

attended at least one antenatal visit and had a record of the time of their first visit, three quarters (77%) of non-Indigenous mothers attended their first visit in the first trimester of pregnancy. This proportion was much less for Indigenous mothers (45%). An antenatal visit in the first trimester was higher in urban areas than in rural-remote areas for both Indigenous (50% and 42% respectively) and non-Indigenous (78% and 73% respectively) mothers.

Smoking status and alcohol consumption during pregnancy

Self-reported smoking status and alcohol consumption during pregnancy are collected at the first antenatal visit and again at around 36 weeks gestation. Although the collection of these two key indicators has improved in recent years the proportion of missing data remains sizeable. In this report 11% of alcohol consumption data were missing at the first visit and 19% at 36 weeks. For smoking status the missing data were 26% and 32% respectively. The proportion of missing smoking status data in 2009 was substantially higher compared to 2008, which was in turn higher compared to 2007. Commencing in 2008, midwives were required to prepare electronic discharge letters in addition to their standard clinical documentation. This increase in workload may have contributed to smoking information not being recorded. Missing data for smoking status and alcohol consumption was more prevalent among the antenatal records of Indigenous mothers than non-Indigenous.

The prevalence of alcohol drinking and smoking reported below were calculated after removing missing data, therefore these prevalence rates are higher than the figures published in the AIHW report Australia's Mothers and Babies 2009,¹ where missing data is included in the denominator. Both methods contain bias due to missing data and caution should be used when interpreting the information. Despite differences in data analysis methodology both reports provide an indication of the levels of these harmful behaviours during pregnancy at broad population levels.

In the NT, alcohol drinking during pregnancy was much less prevalent than smoking. At first antenatal visit, 8% of all NT mothers reported alcohol drinking during pregnancy and 29% reported smoking. The prevalence of alcohol drinking was higher in Indigenous mothers (14% at the first visit and 11% at 36 weeks gestation) than non-Indigenous mothers (4% and 2%, respectively).

Indigenous mothers were three times more likely than non-Indigenous mothers to report smoking during pregnancy at first antenatal visit. At this stage of pregnancy the smoking rate was 54% for Indigenous mothers and 16% for non-Indigenous mothers. By 36 weeks gestation the smoking prevalence dropped for all mothers, although Indigenous mothers were still four times more likely to report smoking compared to non-Indigenous mothers (47% and 12% respectively). Smoking prevalence was higher in rural-remote areas compared to urban areas for Indigenous mothers at both first antenatal visit and at 36 weeks. Among non-Indigenous mothers, the smoking prevalence for urban and rural-remote mothers was comparable at first antenatal visit (16% and 15% respectively) and slightly lower in urban areas at 36 weeks (12% and 15% respectively).

Among Indigenous mothers, Alice Springs Rural district presented notably lower smoking rates than other districts (although smoking levels were still high with one third of mothers smoking at their first antenatal visit). This pattern of lower smoking in Alice Springs Rural is consistent with data from previous years.

Birth facility

Nearly all NT births occurred in a hospital (97%). The majority of hospital births took place at one of the five public hospitals (80%) and the rest were in DPH, the only private hospital in the NT. Almost all mothers who gave birth in DPH were non-Indigenous (99%).

A small proportion of mothers (1%) had a planned homebirth and all except one were non-Indigenous. Around 4% of Indigenous mothers and less than 1% of non-Indigenous mothers had an unplanned non-hospital birth. Unplanned non-hospital births include births that occurred in either health centres, in transit to hospitals or in unintended locations, including unplanned births in the home. Health centres were the most common place for non-hospital births for Indigenous mothers. East Arnhem health district had the largest proportion of non-hospital births, most of which occurred in health centres.

Onset of labour and induction of labour

Spontaneous onset of labour occurred for 64% of all mothers; one in five mothers (21%) had induced labour and 15% had no labour. Non-Indigenous mothers were less likely to have spontaneous onset of labour compared with Indigenous mothers (60% and 71% respectively) and therefore were more likely to have induction to initiate the labour or have no labour.

Artificial rupture of membranes (ARM), oxytocics and prostaglandins were the more common induction methods. The most common induction method among non-Indigenous mothers was ARM (75%), whereas oxytocics was the most common method (71%) for Indigenous mothers.

Presentation and method of birth

Of all NT mothers giving birth in 2009, 63% had a spontaneous vaginal delivery (SVD). Indigenous mothers were more likely to have a SVD than non-Indigenous mothers (68% and 59% respectively). Over a quarter (29%) of births were performed by caesarean section. Non-Indigenous mothers were more likely to have a caesarean section than Indigenous mothers (31% and 25% respectively). Among all hospitals in the NT, DPH had the highest proportion of caesarean section births (41%) and the lowest proportion of spontaneous vaginal births (43%).

Instrumental deliveries using forceps or ventouse (vacuum suction) in childbirth accounted for 8% of births and were more common among non-Indigenous mothers (10%) than Indigenous mothers (5%). Vaginal breech accounted for less than 1% of all births.

The majority of presentations were vertex (95%) while breech accounted for 4% and other presentations 1%. Caesarean section was the most common birth method for breech presentations, except for very preterm births (less than 28 weeks) which were mostly delivered vaginally.

Among mothers who had a caesarean section, Indigenous mothers were much more likely to undergo the procedure for emergency reasons (68%) compared to non-Indigenous mothers (48%). The primary reason for elective caesarean section births was previous caesarean section (65%). The main reasons for emergency caesarean section included: failure to progress during labour (49%), fetal distress (31%) and malpresentation (14%). Indigenous mothers were much more likely to have an emergency caesarean section because of fetal distress than non-Indigenous mothers (37% and 26% respectively).

Analgesia for labour and anaesthesia for childbirth

The majority of mothers who had spontaneous or induced onset of labour used some form of analgesia (79%). Analgesia use was slightly higher among non-Indigenous mothers than Indigenous mothers (80% and 77% respectively).

Anaesthesia was applied in the vast majority of operative births, including births using forceps or ventouse or via caesarean section. Non-Indigenous women were twice as likely as Indigenous women to have an epidural or caudal anaesthesia (22% and 13% respectively). By contrast, there was higher use of spinal anaesthesia among Indigenous women than non-Indigenous women (68% and 55% respectively).

Labour complications and perineal status

This report presents information on a selection of pregnancy and/or childbirth complications. Almost half of all NT mothers (46%) experienced one of these complications. Indigenous mothers were more likely to have a complication than non-Indigenous mothers (54% and 41% respectively). Post-partum haemorrhage was the most common complication for both Indigenous and non-Indigenous mothers (19% and 11% respectively).

Less than half (44%) of all mothers who gave birth vaginally had an intact perineum after childbirth, while 44% had some degree of perineal laceration. A small proportion (2%) had a third or fourth degree tear. Episiotomy was performed on 11% of women. Indigenous mothers were more likely than non-Indigenous mothers to have an intact perineum (51% and 39% respectively).

Postnatal hospital stay

The majority of mothers who gave birth in hospital also stayed in hospital following the birth for one day or more (93%). Most stays were for less than one week and only 5% of women stayed for eight or more days. The average length of stay was 3.5 days. Not surprisingly, mothers who had a caesarean section had longer stays than mothers who had vaginal births.

Indigenous mothers were slightly more likely than non-Indigenous mothers to have a hospital stay and more likely to stay for eight or more days. The mean length of stay for emergency caesarean section was 1.5 days longer for Indigenous mothers compared with non-Indigenous mothers. The overall average length of stay for all birth methods was only slightly longer among Indigenous mothers compared with non-Indigenous mothers (3.8 days and 3.2 days respectively).

Babies

Birth status

In 2009, a total of 3,914 babies were born in the NT. Of these, 90 were born to mothers who were not NT residents. Of the 3,824 babies born to NT mothers, 42 were stillbirths and 3,782 were livebirths. The proportion of stillbirths born to Indigenous mothers (1.94%) was three times that of non-Indigenous mothers (0.59%). Over half of stillbirths had extremely low birthweight of less than 1000 grams (63%). Similarly half were very preterm (50%), being born before 28 weeks gestation.

Plurality

There were 51 twin births and one triplet birth in 2009. Multiple births were comparable between Indigenous and non-Indigenous mothers (1.3% and 1.5% respectively).

Preterm and low birthweight liveborn babies

Altogether there were 341 (9%) preterm livebirths (gestational age less than 37 weeks). Proportionally there were over twice as many preterm babies born to Indigenous mothers (14%) than to non-Indigenous mothers (6%). Twelve of the 19 babies in the very preterm category (less than 28 weeks gestation) were born to Indigenous mothers.

Of all liveborn babies, 9% were low birthweight (less than 2500 grams). Babies of Indigenous mothers (14%) were over twice as likely to have a low birthweight as babies of non-Indigenous mothers (6%). The difference was also seen in very low birthweight babies (less than 1500 grams), with 3% of babies born to Indigenous mothers in this category compared with less than 1% of babies born to non-Indigenous mothers. Indigenous mothers who resided in Katherine and Darwin Rural districts had the highest percentage of low birthweight babies (between 16% and 17% respectively). In each district, Indigenous mothers were more likely to have low birthweight babies than non-Indigenous mothers.

Among full term (37 weeks and over) singleton liveborn babies, 5% of those born to Indigenous mothers were of low birthweight compared with 2% born to non-Indigenous mothers. For those born preterm (28-36 weeks gestation) there were proportionally more babies of at least 2500 grams among non-Indigenous mothers compared with Indigenous mothers (42% and 32% respectively).

Apgar scores

An Apgar score is a clinical indicator of the condition of the baby at birth. Five physical signs are each assigned a score of 0, 1 or 2, and the highest total Apgar score is 10. A score of 7-10 indicates a healthy baby.¹ By five minutes after birth there was only 2% of all NT liveborn babies with an Apgar score below seven, and for Indigenous and non-Indigenous babies the proportions were 3.6% and 1.5% respectively.

Resuscitation of liveborn babies

Twenty seven per cent of babies born alive received some form of resuscitation, excluding tactile stimulation. Resuscitation rates were higher among Indigenous compared to non-Indigenous liveborn babies (31% and 24% respectively). The most common methods of resuscitation were suction (9%), facial oxygen (9%) and intermittent positive pressure ventilation (IPPV) (8%). Methods such as intubation or external cardiac massage and ventilation (1%) were uncommon.

Perinatal mortality

Perinatal mortality includes stillbirths and neonatal deaths. Neonatal mortality refers to a death of a liveborn baby within 28 days of birth. In 2009 there were 60 perinatal deaths in the NT comprising 42 stillbirths and 18 neonatal deaths. There were a higher number of stillbirths to Indigenous mothers compared with non-Indigenous mothers (28 and 14 respectively). For the 18 neonatal deaths, 13 were Indigenous and 5 non-Indigenous. The overall Indigenous perinatal death rate was over three times that of the non-Indigenous rate (28 and 8 deaths per 1000 births respectively).

Statistical tables

Mothers

Table 1. Total births in the NT, by Indigenous status and district of usual residence, 2009

District	Indigenous		Non-Indigenous		All	
	Mothers	Babies	Mothers	Babies	Mothers	Babies
Darwin Urban	226	230	1686	1708	1916	1942
Darwin Rural	291	293	52	54	343	347
Katherine	275	279	149	152	424	431
East Arnhem	208	211	88	89	296	300
Barkly	79	79	27	27	106	106
Alice Springs Urban	147	149	320	326	467	475
Alice Springs Rural	199	202	20	21	219	223
NT total	1425	1443	2342	2377	3771	3824
Non NT	59	60	29	30	88	90
Total	1484	1503	2371	2407	3859	3914

Note: The Indigenous status of four mothers was unknown. These mothers and their babies were only included in the count of All.

Table 2. Summary statistics, by Indigenous status, NT mothers, 2009

		Indigenous		Non-Indigenous		All NT	
		Number	%	Number	%	Number	%
ALL	Total	1425		2342		3771	
MOTHERS	Maternal age						
	<20	316	22.2	81	3.5	397	10.5
	20-34	990	69.5	1766	75.4	2759	73.2
	35+	119	8.4	495	21.1	615	16.3
	Place of birth						
	Hospital	1370	96.1	2290	97.8	3664	97.2
	Non-hospital	55	3.9	52	2.2	107	2.8
	Type of labour onset						
	Spontaneous	1008	70.7	1396	59.6	2404	63.7
	Induced	251	17.6	550	23.5	803	21.3
	No labour	166	11.6	396	16.9	564	15.0
	Method of birth						
	Spontaneous vaginal	970	68.1	1393	59.5	2364	62.7
	Vaginal breech	16	1.1	8	0.3	24	0.6
	Forceps	28	2.0	81	3.5	109	2.9
	Ventouse	49	3.4	143	6.1	193	5.1
	Caesarean section	362	25.4	717	30.6	1081	28.7
FIRST-TIME	Total	432		1008		1442	
MOTHERS	Maternal age						
	<20	230	53.2	67	6.6	297	20.6
	20-34	194	44.9	822	81.5	1018	70.6
	35+	8	1.9	119	11.8	127	8.8
TOTAL FERTILITY RATE		2.28		1.87		2.07	

Notes:

(1) The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

(2) Total fertility rate is the average number of births per woman over her life time if she experienced the age-specific rates seen in 2009.

Table 3. Area of usual residence, by Indigenous status, NT mothers, 2009

Area	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Urban area	498	34.9	2236	95.5	2738	72.6
Rural/remote area	927	65.1	106	4.5	1033	27.4
Total	1425	100.0	2342	100.0	3771	100.0

Notes:

(1) Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

(2) The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 4. District and area of usual residence, by Indigenous status, NT mothers, 2009

District	Area	Indigenous		Non-Indigenous		All NT	
		Number	%	Number	%	Number	%
Darwin Urban		226	15.9	1686	72.0	1916	50.8
Darwin Rural		291	20.4	52	2.2	343	9.1
Katherine	Urban	68	4.8	137	5.8	205	5.4
	Rural/remote	207	14.5	12	0.5	219	5.8
East Arnhem	Urban	7	0.5	68	2.9	75	2.0
	Rural/remote	201	14.1	20	0.9	221	5.9
Barkly	Urban	50	3.5	25	1.1	75	2.0
	Rural/remote	29	2.0	2	0.1	31	0.8
Alice Springs Urban		147	10.3	320	13.7	467	12.4
Alice Springs Rural		199	14.0	20	0.9	219	5.8
Total		1425	100.0	2342	100.0	3771	100.0

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 5. Total fertility rate, by Indigenous status and district of usual residence, NT mothers, 2009

District	Indigenous	Non-Indigenous	All NT
Darwin Urban	2.0	1.9	2.0
Darwin Rural	2.6	1.7	2.5
Katherine	2.9	2.1	2.6
East Arnhem	2.0	1.8	2.1
Barkly	2.1	1.5	1.9
Alice Springs Urban	2.7	1.8	2.0
Alice Springs Rural	1.8	0.7	1.6
Total	2.3	1.9	2.1

Note: Total fertility rate is the average number of births per woman over her life time if she experienced the age-specific rates seen in 2009.

Table 6. Total fertility rate, by Indigenous status and area of usual residence, NT mothers, 2009

Remoteness	Indigenous	Non-Indigenous	All NT
Urban area	2.4	1.9	2.0
Rural/remote area	2.2	1.2	2.1
Total	2.3	1.9	2.1

Notes:

(1) Total fertility rate is the average number of births per woman over her life time if she experienced the age-specific rates seen in 2009.

(2) Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

Table 7. Age-specific fertility rates and total fertility rate, by Indigenous status, NT mothers, 2009

Indigenous status	Age specific fertility rate (births per 1000)			Total fertility rate
	<20 years	20-34 years	35+ years	
Indigenous	89.9	107.7	18.6	2.3
Non-Indigenous	18.0	94.3	26.6	1.9
All NT	49.1	98.8	24.6	2.1

Note: Age-specific fertility rate is the number of births per 1000 women in each age group. The rate for the <20 age group is calculated using the female population aged 15-19 years; the rate for the 35+ group is calculated using the female population aged 35-49 years.

Table 8. Maternal age, by Indigenous status, NT mothers, 2009

Maternal age (years)	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
<16	37	2.6	1	0.0	38	1.0
16-17	104	7.3	19	0.8	123	3.3
18-19	175	12.3	61	2.6	236	6.3
20-24	467	32.8	369	15.8	838	22.2
25-29	316	22.2	652	27.8	968	25.7
30-34	207	14.5	745	31.8	953	25.3
35-44	119	8.4	491	21.0	611	16.2
45+	0	0.0	4	0.2	4	0.1
Total	1425	100.0	2342	100.0	3771	100.0
Mean age (years)	24.8		29.7		27.9	

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 9. Maternal age, by Indigenous status and district of usual residence, NT mothers, 2009

District	Maternal age (years)			Total
	<20 %	20-34 %	35+ %	Number
Indigenous				
Darwin Urban	16.4	72.6	11.1	226
Darwin Rural	19.6	71.5	8.9	291
Katherine	25.8	68.0	6.2	275
East Arnhem	23.6	67.3	9.1	208
Barkly	24.1	69.6	6.3	79
Alice Springs Urban	25.9	63.9	10.2	147
Alice Springs Rural	22.6	71.4	6.0	199
Total	22.2	69.5	8.4	1425
Non-Indigenous				
Darwin Urban	3.6	75.4	21.1	1686
Darwin Rural	1.9	69.2	28.8	52
Katherine	6.0	77.9	16.1	149
East Arnhem	1.1	75.0	23.9	88
Barkly	3.7	74.1	22.2	27
Alice Springs Urban	2.8	75.3	21.9	320
Alice Springs Rural	0.0	80.0	20.0	20
Total	3.5	75.4	21.1	2342
All NT	10.5	73.2	16.3	3771

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 10. Maternal age, by Indigenous status and area of usual residence, NT mothers, 2009

Area	Maternal age (years)			Total
	<20 %	20-34 %	35+ %	Number
Indigenous				
Urban area	21.1	68.9	10.0	498
Rural/remote area	22.8	69.8	7.4	927
Total	22.2	69.5	8.4	1425
Non-Indigenous				
Urban area	3.5	75.4	21.0	2236
Rural/remote area	1.9	74.5	23.6	106
Total	3.5	75.4	21.1	2342

Note: Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

Table 11. Maternal parity, by Indigenous status, NT mothers, 2009

Parity	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0	432	30.3	1008	43.0	1442	38.2
1-2	624	43.8	1134	48.4	1759	46.6
3+	369	25.9	200	8.5	570	15.1
Total	1425	100.0	2342	100.0	3771	100.0

Notes:

(1) Parity is the number of previous births a woman has had of at least 20 weeks duration.

(2) The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 12. Maternal age, by Indigenous status, NT first-time mothers, 2009

Maternal age (years)	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
<16	37	8.6	1	0.1	38	2.6
16-17	93	21.5	18	1.8	111	7.7
18-19	100	23.1	48	4.8	148	10.3
20-24	142	32.9	228	22.6	371	25.7
25-29	39	9.0	314	31.2	353	24.5
30-34	13	3.0	280	27.8	294	20.4
35+	8	1.9	119	11.8	127	8.8
Total	432	100.0	1008	100.0	1442	100.0
Mean age (years)	20.2		27.8		25.5	

Note: The Indigenous status of two mothers was unknown and these mothers were only included in the count of All NT.

Table 13. Antenatal visits, by Indigenous status, NT mothers, 2009

Number of antenatal visits	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0	42	3.0	2	0.1	44	1.2
1 - 3	207	14.8	78	3.3	285	7.6
4 - 7	431	30.8	485	20.8	916	24.5
8 & more	721	51.5	1771	75.8	2496	66.7
Total stated	1401	100.0	2336	100.0	3741	100.0
Not stated	24		6		30	
Total	1425		2342		3771	

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 14. Antenatal visits, by district of usual residence, NT Indigenous mothers, 2009

District	Number of antenatal visits				Total	Not	Total
	0	1 - 3	4 - 7	8+	stated	stated	
	%	%	%	%	Number	Number	Number
Darwin Urban	3.6	22.3	36.4	37.7	220	6	226
Darwin Rural	2.8	8.0	28.5	60.8	288	3	291
Katherine	2.6	16.9	24.1	56.4	266	9	275
East Arnhem	4.9	9.3	26.5	59.3	204	4	208
Barkly	2.5	15.2	39.2	43.0	79	0	79
Alice Springs Urban	3.4	15.6	34.0	46.9	147	0	147
Alice Springs Rural	1.0	18.3	35.5	45.2	197	2	199
Total	3.0	14.8	30.8	51.5	1401	24	1425

Table 15. Antenatal visits, by Indigenous status and area of usual residence, NT mothers, 2009

Area	Number of antenatal visits				Total	Not	Total
	0	1 - 3	4 - 7	8+	stated	stated	
	%	%	%	%	Number	Number	Number
Indigenous							
Urban area	3.1	18.9	34.2	43.9	488	10	498
Rural/remote area	3.0	12.6	28.9	55.5	913	14	927
Total	3.0	14.8	30.8	51.5	1401	24	1425
Non-Indigenous							
Urban area	0.1	3.3	20.7	76.0	2230	6	2236
Rural/remote area	0.0	4.7	22.6	72.6	106	0	106
Total	0.1	3.3	20.8	75.8	2336	6	2342

Note: Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

Table 16. Gestation at first antenatal visit, by Indigenous status, NT mothers with at least one visit, 2009

Gestation at first antenatal visit	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
First trimester	609	44.9	1793	77.4	2404	65.4
Second trimester	571	42.1	489	21.1	1062	28.9
Third trimester	175	12.9	35	1.5	210	5.7
Total stated	1355	100.0	2317	100.0	3676	100.0
Not stated	4		17		21	
Total	1359		2334		3697	

Notes:

(1) First trimester is less than 14 weeks gestation; second trimester is 14-26 weeks gestation; third trimester is 27 weeks or more gestation.

(2) There were 74 mothers with no recorded antenatal visits.

(3) The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 17. Gestation at first antenatal visit, by district of usual residence, NT Indigenous mothers with at least one visit, 2009

District	Gestation at first antenatal visit			Total stated	Not stated	Total
	First trimester	Second trimester	Third trimester			
	%	%	%	Number	Number	Number
Darwin Urban	44.8	48.6	6.7	210	2	212
Darwin Rural	44.4	40.9	14.7	279	1	280
Katherine	48.3	41.3	10.4	259	0	259
East Arnhem	37.1	51.5	11.3	194	0	194
Barkly	36.4	40.3	23.4	77	0	77
Alice Springs Urban	58.2	30.5	11.3	141	1	142
Alice Springs Rural	43.1	37.9	19.0	195	0	195
Total	44.9	42.1	12.9	1355	4	1359

Note: First trimester is less than 14 weeks gestation; second trimester is 14-26 weeks gestation; third trimester is 27 weeks or more gestation.

Table 18. Gestation at first antenatal visit, by Indigenous status and area of usual residence, NT mothers with at least one visit, 2009

Area	Gestation at first antenatal visit			Total stated	Not stated	Total
	First trimester	Second trimester	Third trimester			
	%	%	%	Number	Number	Number
Indigenous						
Urban area	49.8	40.0	10.2	470	3	473
Rural/remote area	42.4	43.3	14.4	885	1	886
Total	44.9	42.1	12.9	1355	4	1359
Non-Indigenous						
Urban area	77.6	21.1	1.4	2212	16	2228
Rural/remote area	73.3	21.9	4.8	105	1	106
Total	77.4	21.1	1.5	2317	17	2334

Notes:

(1) First trimester is less than 14 weeks gestation; second trimester is 14-26 weeks gestation; third trimester is 27 weeks or more gestation.

(2) Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

(3) There were 74 mothers with no recorded antenatal visits.

Table 19. Self-reported alcohol consumption, by Indigenous status, NT mothers, 2009

	Alcohol consumption	Indigenous		Non-Indigenous		All NT	
		Number	%	Number	%	Number	%
At first visit	Alcohol	167	14.3	90	4.1	257	7.6
	No alcohol	999	85.7	2100	95.9	3103	92.4
	Total stated	1166	100.0	2190	100.0	3360	100.0
	Not stated	259		152		411	
	Total	1425		2342		3771	
At 36 Weeks	Alcohol	113	10.8	36	1.8	149	4.9
	No alcohol	929	89.2	1977	98.2	2910	95.1
	Total stated	1042	100.0	2013	100.0	3059	100.0
	Not stated	383		329		712	
	Total	1425		2342		3771	

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 20. Self-reported smoking status, by Indigenous status, NT mothers, 2009

	Smoking status	Indigenous		Non-Indigenous		All NT	
		Number	%	Number	%	Number	%
At first visit	Smoking	534	54.2	287	15.8	821	29.2
	Non-smoking	451	45.8	1534	84.2	1988	70.8
	Total stated	985	100.0	1821	100.0	2809	100.0
	Not stated	440		521		962	
	Total	1425		2342		3771	
At 36 Weeks	Smoking	409	46.6	205	12.3	614	24.1
	Non-smoking	469	53.4	1465	87.7	1937	75.9
	Total stated	878	100.0	1670	100.0	2551	100.0
	Not stated	547		672		1220	
	Total	1425		2342		3771	

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 21. Self-reported smoking status, by Indigenous status and area of usual residence, NT mothers, 2009

Area	Smoking %	Non-smoking %	<i>Total stated</i> <i>Number</i>	<i>Not stated</i> <i>Number</i>	<i>Total</i> <i>Number</i>
Smoking status at first visit					
Indigenous					
Urban area	51.1	48.9	352	146	498
Rural/remote area	55.9	44.1	633	294	927
Total	54.2	45.8	985	440	1425
Non-Indigenous					
Urban area	15.8	84.2	1742	494	2236
Rural/remote area	15.2	84.8	79	27	106
Total	15.8	84.2	1821	521	2342
Smoking status at 36 weeks					
Indigenous					
Urban area	43.0	57.0	305	193	498
Rural/remote area	48.5	51.5	573	354	927
Total	46.6	53.4	878	547	1425
Non-Indigenous					
Urban area	12.2	87.8	1596	640	2236
Rural/remote area	14.9	85.1	74	32	106
Total	12.3	87.7	1670	672	2342

Note: Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

Table 22. Self-reported smoking status, by district of usual residence, NT Indigenous mothers, 2009

District	Smoking	Non-smoking	Total stated	Not stated	Total
	%	%	Number	Number	Number
Smoking status at first visit					
Darwin Urban	54.5	45.5	156	70	226
Darwin Rural	66.2	33.8	201	90	291
Katherine	54.5	45.5	200	75	275
East Arnhem	62.1	37.9	145	63	208
Barkly	47.3	52.7	55	24	79
Alice Springs Urban	48.5	51.5	103	44	147
Alice Springs Rural	32.8	67.2	125	74	199
Total	54.2	45.8	985	440	1425
Smoking status at 36 weeks					
Darwin Urban	46.3	53.7	121	105	226
Darwin Rural	57.2	42.8	173	118	291
Katherine	47.6	52.4	191	84	275
East Arnhem	56.3	43.7	126	82	208
Barkly	47.1	52.9	51	28	79
Alice Springs Urban	37.9	62.1	95	52	147
Alice Springs Rural	26.4	73.6	121	78	199
Total	46.6	53.4	878	547	1425

Table 23. Actual place of giving birth, by Indigenous status, NT mothers, 2009

Actual place of giving birth	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
RDH	643	45.1	921	39.3	1564	41.5
RDH Birth Centre	16	1.1	104	4.4	120	3.2
DPH	2	0.1	737	31.5	743	19.7
GDH	113	7.9	63	2.7	176	4.7
KH	177	12.4	127	5.4	304	8.1
TCH	5	0.4	0	0.0	5	0.1
ASH	414	29.1	338	14.4	752	19.9
Health centres	38	2.7	2	0.1	40	1.1
Planned homes	1	0.1	35	1.5	36	1.0
Others*	16	1.1	15	0.6	31	0.8
Total	1425	100.0	2342	100.0	3771	100.0

Notes:

(1) Hospital names are as follows: Royal Darwin Hospital (RDH), Darwin Private Hospital (DPH), Gove District Hospital (GDH), Katherine Hospital (KH), Tennant Creek Hospital (TCH), Alice Springs Hospital (ASH).

(2) The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

* Others include births that occurred in transit to hospitals and in unintended locations, including unplanned births in the home.

Table 24. Actual place of giving birth, by district of usual residence, NT Indigenous mothers, 2009

District	Actual place of giving birth			Total
	Hospital	Health centres	Others*	Number
	%	%	%	
Darwin Urban	97.3	1.3	1.3	226
Darwin Rural	93.5	4.8	1.7	291
Katherine	97.5	1.5	1.1	275
East Arnhem	92.3	5.8	1.9	208
Barkly	100.0	0.0	0.0	79
Alice Springs Urban	99.3	0.0	0.7	147
Alice Springs Rural	97.0	2.5	0.5	199
Total	96.1	2.7	1.2	1425

* Others include births that occurred in transit to hospitals and in unintended locations, including unplanned births in the home.

Table 25. Type of labour onset, by Indigenous status, NT mothers, 2009

Type of labour onset	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Spontaneous	1008	70.7	1396	59.6	2404	63.7
Induced	251	17.6	550	23.5	803	21.3
No labour	166	11.6	396	16.9	564	15.0
Total	1425	100.0	2342	100.0	3771	100.0

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 26. Method of induction, by Indigenous status, NT mothers with induced onset of labour, 2009

Method of induction	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
ARM	149	59.4	415	75.5	566	70.5
Oxytocics	177	70.5	374	68.0	553	68.9
Prostaglandins	115	45.8	233	42.4	349	43.5
Other methods	3	1.2	3	0.5	6	0.7
Not stated	0	0.0	1	0.2	1	0.1
Total	251		550		803	

Notes:

(1) Multiple methods may be applied to one mother.

(2) ARM stands for artificial rupture of membranes.

(3) The Indigenous status of two mothers was unknown and these mothers were only included in the count of All NT.

Table 27. Birth presentation, by Indigenous status, NT mothers, 2009

Presentation at birth	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Vertex	1344	94.4	2205	94.6	3553	94.6
Breech	67	4.7	100	4.3	167	4.4
Face	3	0.2	7	0.3	10	0.3
Brow	2	0.1	1	0.0	3	0.1
Other	7	0.5	17	0.7	24	0.6
Total stated	1423	100.0	2330	100.0	3757	100.0
Not stated	2		12		14	
Total	1425		2342		3771	

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 28. Method of birth, by Indigenous status, NT mothers, 2009

Method of birth	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Spontaneous vaginal	970	68.1	1393	59.5	2364	62.7
Vaginal breech	16	1.1	8	0.3	24	0.6
Forceps	28	2.0	81	3.5	109	2.9
Ventouse	49	3.4	143	6.1	193	5.1
Caesarean - elective	117	8.2	371	15.8	489	13.0
Caesarean - emergency	245	17.2	346	14.8	592	15.7
Total	1425	100.0	2342	100.0	3771	100.0

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 29. Method of birth, by type of labour onset, NT mothers, 2009

Type of labour onset	Method of birth				Total
	Spontaneous vaginal	Assisted vaginal	Caesarean-elective	Caesarean-emergency	
	%	%	%	%	Number
Spontaneous	76.7	9.2	1.3	12.7	2404
Induced	64.6	13.0	0.0	22.4	803
No labour	0.0	0.0	81.0	19.0	564
Total	62.7	8.6	13.0	15.7	3771

* Assisted vaginal births include vaginal breech, forceps and ventouse.

Table 30. Method of birth, by gestational age, NT mothers with breech presentation, 2009

Gestational age (weeks)	Method of birth					Total
	Spontaneous vaginal	Vaginal breech	Forceps	Caesarean-elective	Caesarean-emergency	
	%	%	%	%	%	Number
<28	21.4	71.4	0.0	0.0	7.1	14
28-36	0.0	20.0	0.0	20.0	60.0	25
37+	0.8	5.5	0.8	68.0	25.0	128
Total	2.4	13.2	0.6	55.1	28.7	167

Table 31. Method of birth, by hospital, NT mothers giving birth in hospital, 2009

Hospital	Method of birth						Total
	Spontaneous vaginal	Vaginal breech	Forceps	Ventouse	Caesarean elective	Caesarean emergency	Number
	%	%	%	%	%	%	
RDH	63.6	0.4	1.3	5.2	10.5	19.0	1684
DPH	43.5	0.3	6.7	8.7	26.1	14.7	743
GDH	75.0	0.0	0.6	4.5	6.3	13.6	176
KH	70.4	1.0	1.0	3.6	9.2	14.8	304
TCH	100.0	0.0	0.0	0.0	0.0	0.0	5
ASH	68.6	1.1	4.4	2.9	10.5	12.5	752
All hospitals	61.7	0.5	3.0	5.3	13.3	16.2	3664

Note: Hospital names are as follows: Royal Darwin Hospital (RDH), Darwin Private Hospital (DPH), Gove District Hospital (GDH), Katherine Hospital (KH), Tennant Creek Hospital (TCH), Alice Springs Hospital (ASH).

Table 32. Indications for caesarean section, by Indigenous status, NT mothers giving birth via caesarean section, 2009

Indications for caesarean section	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
<i>Elective caesarean</i>						
Previous caesarean ¹	93	80.2	221	60.4	315	65.2
Malpresentation ¹	21	18.1	62	16.9	83	17.2
Other ²	11	9.5	86	23.5	97	20.1
Total stated	116	100.0	366	100.0	483	100.0
Not stated	1		5		6	
Total	117		371		489	
<i>Emergency caesarean</i>						
Failure to progress ¹	84	38.9	183	56.1	267	49.2
Fetal distress ¹	79	36.6	86	26.4	166	30.6
Malpresentation ¹	39	18.1	37	11.3	76	14.0
Ante-partum haemorrhage ¹	10	4.6	14	4.3	24	4.4
Cord prolapse ¹	1	0.5	0	0.0	1	0.2
Other ³	39	18.1	42	12.9	81	14.9
Total stated	216	100.0	326	100.0	543	100.0
Not stated	29		20		49	
Total	245		346		592	

Notes:

(1) Multiple indications may be present in one mother.

(2) Previous caesarean and malpresentation are not included in the count of Other Indications for elective caesareans.

(3) Failure to progress, fetal distress, malpresentation, ante-partum haemorrhage and cord prolapse are not included in the count of Other Indications for emergency caesareans.

(4) The Indigenous status of one mother who had an elective caesarean was unknown. This mother was only included in the count of All NT.

(5) The Indigenous status of one mother who had an emergency caesarean was unknown. This mother was only included in the count of All NT.

Table 33. Method of analgesia, by Indigenous status, NT mothers with spontaneous or induced onset of labour, 2009

Analgesia: highest rank of method used	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Nitrous oxide	490	40.2	590	30.8	1080	34.4
Narcotics	233	19.1	347	18.1	581	18.5
Epidural/Caudal	105	8.6	417	21.7	522	16.6
Other	106	8.7	181	9.4	287	9.1
None	286	23.4	383	20.0	669	21.3
Total stated	1220	100.0	1918	100.0	3139	100.0
Not stated	39		28		68	
Total	1259		1946		3207	

Note: The Indigenous status of two mothers was unknown and these mothers were only included in the count of All NT.

Table 34. Method of anaesthesia, by Indigenous status, NT mothers having operative birth, 2009

Anaesthesia: highest rank of method used	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Local	23	5.3	56	6.0	79	5.7
Pudendal	7	1.6	15	1.6	22	1.6
Epidural/Caudal	58	13.3	203	21.7	261	19.0
Spinal	297	68.0	516	55.1	814	59.2
Spinal and Epidural	6	1.4	48	5.1	55	4.0
General	32	7.3	52	5.5	84	6.1
Other	0	0.0	1	0.1	1	0.1
None	14	3.2	46	4.9	60	4.4
Total stated	437	100.0	937	100.0	1376	100.0
Not stated	2		4		7	
Total	439		941		1383	

Notes:

(1) Operative birth methods include forceps, ventouse and caesarean section.

(2) The Indigenous status of three mothers was unknown and these mothers were only included in the count of All NT.

Table 35. Complications due to pregnancy and/or childbirth, by Indigenous status, NT mothers, 2009

Type of complication	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Pregnancy						
Gestational diabetes mellitus*	100	7.0	135	5.8	236	6.3
Pre-eclampsia*	64	4.5	63	2.7	127	3.4
Labour/childbirth						
Cord prolapse*	3	0.2	0	0.0	3	0.1
Fetal distress	149	10.5	223	9.5	373	9.9
Manual removal of placenta*	55	3.9	37	1.6	92	2.4
Meconium stained liquor	218	15.3	227	9.7	445	11.8
Obstructed labour	75	5.3	138	5.9	213	5.6
Post-partum haemorrhage*	270	18.9	258	11.0	528	14.0
Other	197	13.8	215	9.2	412	10.9
Any complication	764	53.6	964	41.2	1730	45.9
Total births	1425		2342		3771	

Notes:

(1) Mothers may have more than one complication.

(2) Pre-eclampsia includes hypertension in pregnancy.

(3) Other complications include ante-partum haemorrhage as well as other unclassified complications.

(4) The Indigenous status of two mothers who had a complication was unknown and these mothers were only included in the count of All NT.

* indicates validated data items

Table 36. State of the perineum, by Indigenous status, NT mothers having vaginal birth, 2009

State of the perineum	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Intact	538	51.3	621	38.6	1160	43.7
1st degree tear	238	22.7	368	22.9	607	22.8
2nd degree tear	170	16.2	342	21.3	512	19.3
3rd-4th degree tear	25	2.4	22	1.4	47	1.8
Episiotomy	70	6.7	232	14.4	302	11.4
Combined episiotomy & tear	7	0.7	22	1.4	29	1.1
Total stated	1048	100.0	1607	100.0	2657	100.0
Not stated	15		18		33	
Total	1063		1625		2690	

Notes:

(1) Vaginal birth methods include spontaneous vaginal, vaginal breech, forceps and ventouse.

(2) The Indigenous status of two mothers was unknown and these mothers were only included in the count of All NT.

Table 37. Length of postnatal hospital stay, by Indigenous status, NT mothers giving birth in hospital, 2009

Length of postnatal stay (days)	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0	62	4.5	211	9.2	273	7.5
1 - 3	727	53.1	1090	47.6	1817	49.6
4 - 7	456	33.3	925	40.4	1385	37.8
8 & more	125	9.1	64	2.8	189	5.2
Total	1370	100.0	2290	100.0	3664	100.0

Note: The Indigenous status of four mothers was unknown and these mothers were only included in the count of All NT.

Table 38. Average length of postnatal hospital stay, by Indigenous status and method of birth, NT mothers giving birth in hospital, 2009

Method of birth	Indigenous	Non-Indigenous	All NT
Average length (days) of postnatal stay			
Spontaneous vaginal	3.1	2.4	2.7
Assisted vaginal	3.9	3.8	3.8
Caesarean - elective	4.6	4.4	4.5
Caesarean - emergency	6.3	4.8	5.4
Total	3.8	3.2	3.5

Note: Assisted vaginal birth methods include vaginal breech, forceps and ventouse.

Babies

Table 39. Summary statistics, by maternal Indigenous status, all babies born in the NT, 2009

	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
BIRTHS TO NT RESIDENTS						
Birth status						
Livebirths	1415	98.1	2363	99.4	3782	98.9
Stillbirths	28	1.9	14	0.6	42	1.1
Baby's sex						
Males	753	52.2	1235	52.0	1992	52.1
Females	689	47.7	1142	48.0	1831	47.9
Unknown	1	0.1	0	0.0	1	0.0
Plurality						
Singletons	1407	97.5	2308	97.1	3719	97.3
Multiples	36	2.5	69	2.9	105	2.7
Total	1443		2377		3824	
BIRTHS TO NON-NT RESIDENTS						
Birth status						
Livebirths	59	98.3	30	100.0	89	98.9
Stillbirths	1	1.7	0	0.0	1	1.1
Baby's sex						
Males	36	60.0	14	46.7	50	55.6
Females	24	40.0	16	53.3	40	44.4
Plurality						
Singletons	58	96.7	28	93.3	86	95.6
Multiples	2	3.3	2	6.7	4	4.4
Total	60		30		90	
ALL BIRTHS						
Birth status						
Livebirths	1474	98.1	2393	99.4	3871	98.9
Stillbirths	29	1.9	14	0.6	43	1.1
Baby's sex						
Males	789	52.5	1249	51.9	2042	52.2
Females	713	47.4	1158	48.1	1871	47.8
Unknown	1	0.1	0	0.0	1	0.0
Plurality						
Singletons	1465	97.5	2336	97.1	3805	97.2
Multiples	38	2.5	71	2.9	109	2.8
Total	1503		2407		3914	

Note: The Indigenous status of the mothers of four babies was unknown. The babies of these mothers were only included in the count of All NT.

Table 40. Area of mother's usual residence, by maternal Indigenous status, NT babies, 2009

Area	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Urban area	505	35.0	2268	95.4	2777	72.6
Rural/remote area	938	65.0	109	4.6	1047	27.4
Total	1443	100.0	2377	100.0	3824	100.0

Notes:

(1) Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

(2) The Indigenous status of the mothers of four babies was unknown. The babies of these mothers were only included in the count of All NT.

Table 41. District and area of mother's usual residence, by maternal Indigenous status, NT babies, 2009

District	Area	Indigenous		Non-Indigenous		All NT	
		Number	%	Number	%	Number	%
Darwin Urban		230	15.9	1708	71.9	1942	50.8
Darwin Rural		293	20.3	54	2.3	347	9.1
Katherine	Urban	69	4.8	140	5.9	209	5.5
	Rural/remote	210	14.6	12	0.5	222	5.8
East Arnhem	Urban	7	0.5	69	2.9	76	2.0
	Rural/remote	204	14.1	20	0.8	224	5.9
Barkly	Urban	50	3.5	25	1.1	75	2.0
	Rural/remote	29	2.0	2	0.1	31	0.8
Alice Springs Urban		149	10.3	326	13.7	475	12.4
Alice Springs Rural		202	14.0	21	0.9	223	5.8
Total		1443	100.0	2377	100.0	3824	100.0

Notes:

(1) Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

(2) The Indigenous status of the mothers of four babies was unknown. The babies of these mothers were only included in the count of All NT.

Table 42. Gestational age, by maternal Indigenous status and birth status, NT babies, 2009

Gestational age (weeks)	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Stillbirths						
<28	14	50.0	7	50.0	21	50.0
28 - 36	7	25.0	5	35.7	12	28.6
37 - 41	7	25.0	2	14.3	9	21.4
Total	28	100.0	14	100.0	42	100.0
Livebirths						
<28	12	0.8	7	0.3	19	0.5
28 - 36	179	12.7	143	6.1	322	8.5
37 - 41	1213	85.8	2191	92.7	3408	90.1
42+	10	0.7	22	0.9	32	0.8
Total stated	1414	100.0	2363	100.0	3781	100.0
Not stated	1		0		1	
Total	1415		2363		3782	
All births						
<28	26	1.8	14	0.6	40	1.0
28 - 36	186	12.9	148	6.2	334	8.7
37 - 41	1220	84.6	2193	92.3	3417	89.4
42+	10	0.7	22	0.9	32	0.8
Total stated	1442	100.0	2377	100.0	3823	100.0
Not stated	1		0		1	
Total	1443	100.0	2377	100.0	3824	100.0

Note: The Indigenous status of the mothers of four babies was unknown. The babies of these mothers were only included in the count of All NT.

Table 43. Birthweight, by maternal Indigenous status and birth status, NT babies, 2009

Birthweight (g)	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Stillbirths						
<1000	17	63.0	8	61.5	25	62.5
1000 - 1499	2	7.4	1	7.7	3	7.5
1500 - 2499	2	7.4	3	23.1	5	12.5
2500+	6	22.2	1	7.7	7	17.5
Total stated	27	100.0	13	100.0	40	100.0
Not stated	1		1		2	
Total	28		14		42	
Mean birthweight (g)	1315		996		1209	
Livebirths						
<1000	12	0.8	6	0.3	18	0.5
1000 - 1499	24	1.7	9	0.4	33	0.9
1500 - 2499	157	11.1	132	5.6	289	7.6
2500+	1222	86.4	2216	93.8	3442	91.0
Total	1415	100.0	2363	100.0	3782	100.0
Mean birthweight (g)	3110		3387		3283	
All births						
<1000	29	2.0	14	0.6	43	1.1
1000 - 1499	26	1.8	10	0.4	36	0.9
1500 - 2499	159	11.0	135	5.7	294	7.7
2500+	1228	85.2	2217	93.3	3449	90.2
Total stated	1442	100.0	2376	100.0	3822	100.0
Not stated	1		1		2	
Total	1443		2377		3824	
Mean birthweight (g)	3076		3373		3261	

Note: The Indigenous status of the mothers of four babies was unknown. The babies of these mothers were only included in the count of All NT.

Table 44. Gestational age, by maternal Indigenous status and district of mother's usual residence, NT livebirths, 2009

District	Gestational age (weeks)			Total stated Number	Not stated Number	Total Number
	<37	37-41	42+			
	%	%	%			
Indigenous						
Darwin Urban	12.4	86.7	0.9	225	0	225
Darwin Rural	15.9	83.1	1.0	290	0	290
Katherine	15.2	84.4	0.4	276	0	276
East Arnhem	11.5	88.5	0.0	208	1	209
Barkly	11.5	88.5	0.0	78	0	78
Alice Springs Urban	15.2	84.8	0.0	145	0	145
Alice Springs Rural	10.4	87.5	2.1	192	0	192
Total	13.5	85.8	0.7	1414	1	1415
Non-Indigenous						
Darwin Urban	6.1	92.9	0.9	1696	0	1696
Darwin Rural	14.8	83.3	1.9	54	0	54
Katherine	5.3	94.7	0.0	152	0	152
East Arnhem	3.4	95.5	1.1	89	0	89
Barkly	7.7	92.3	0.0	26	0	26
Alice Springs Urban	7.1	91.7	1.2	325	0	325
Alice Springs Rural	9.5	90.5	0.0	21	0	21
Total	6.3	92.7	0.9	2363	0	2363

Table 45. Gestational age, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2009

Area	Gestational age (weeks)			Total stated Number	Not stated Number	Total Number
	<37	37-41	42+			
	%	%	%			
Indigenous						
Urban area	13.3	86.1	0.6	495	0	495
Rural/remote area	13.6	85.6	0.8	919	1	920
Total	13.5	85.8	0.7	1414	1	1415
Non-Indigenous						
Urban area	6.2	92.9	0.9	2254	0	2254
Rural/remote area	9.2	89.9	0.9	109	0	109
Total	6.3	92.7	0.9	2363	0	2363

Note: Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

Table 46. Birthweight, by maternal Indigenous status and district of mother's usual residence, NT livebirths, 2009

District	Birthweight (g)				Total Number	Mean birthweight (g)
	<1500 %	1500-2499 %	2500-3999 %	4000+ %		
Indigenous						
Darwin Urban	0.4	12.0	77.3	10.2	225	3230
Darwin Rural	4.8	12.1	79.7	3.4	290	3008
Katherine	4.0	11.6	77.9	6.5	276	3061
East Arnhem	1.4	11.5	84.2	2.9	209	3078
Barkly	0.0	10.3	84.6	5.1	78	3098
Alice Springs Urban	2.8	11.0	75.2	11.0	145	3132
Alice Springs Rural	1.6	7.8	85.4	5.2	192	3221
Total	2.5	11.1	80.2	6.1	1415	3110
Non-Indigenous						
Darwin Urban	0.8	5.8	81.8	11.7	1696	3382
Darwin Rural	1.9	13.0	74.1	11.1	54	3188
Katherine	0.0	3.9	84.9	11.2	152	3422
East Arnhem	0.0	2.2	75.3	22.5	89	3604
Barkly	0.0	0.0	80.8	19.2	26	3419
Alice Springs Urban	0.3	5.2	82.8	11.7	325	3377
Alice Springs Rural	0.0	9.5	81.0	9.5	21	3256
Total	0.6	5.6	81.7	12.1	2363	3387

Table 47. Birthweight, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2009

Area	Birthweight (g)				Total Number	Mean birthweight (g)
	<1500 %	1500-2499 %	2500-3999 %	4000+ %		
Indigenous						
Urban area	1.0	12.3	77.2	9.5	495	3175
Rural/remote area	3.4	10.4	81.8	4.3	920	3076
Total	2.5	11.1	80.2	6.1	1415	3110
Non-Indigenous						
Urban area	0.6	5.5	81.9	12.1	2254	3390
Rural/remote area	0.9	8.3	78.0	12.8	109	3315
Total	0.6	5.6	81.7	12.1	2363	3387

Note: Urban area covers the two urban districts: Darwin and Alice Springs plus the major townships: Katherine, Tennant Creek and Nhulunbuy; rural/remote area covers the rest of the NT.

Table 48. Birthweight, by maternal Indigenous status and gestational age, NT singleton livebirths, 2009

Gestational age (weeks)	Birthweight (g)				Total Number	Mean birthweight (g)
	<1500 %	1500-2499 %	2500-3999 %	4000+ %		
Indigenous						
<28	100.0	0.0	0.0	0.0	9	860
28 - 36	13.5	54.8	30.3	1.3	155	2236
37 - 41	0.0	4.6	88.6	6.9	1207	3260
42+	0.0	10.0	70.0	20.0	10	3545
Total stated	2.2	10.2	81.3	6.3	1381	3132
Not stated	0.0	0.0	100.0	0.0	1	2802
Total	2.2	10.2	81.3	6.3	1,382	3132
Non-Indigenous						
<28	100.0	0.0	0.0	0.0	5	686
28 - 36	5.3	52.6	42.1	0.0	114	2434
37 - 41	0.0	1.9	85.0	13.0	2155	3471
42+	0.0	0.0	77.3	22.7	22	3803
Total	0.5	4.4	82.6	12.5	2296	3416

Table 49. Apgar scores at 5 minutes, by maternal Indigenous status, NT livebirths, 2009

Apgar score at 5 minutes	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0 - 3	9	0.6	5	0.2	14	0.4
4 - 6	42	3.0	31	1.3	74	2.0
7 - 10	1363	96.4	2327	98.5	3693	97.7
Total stated	1414	100.0	2363	100.0	3781	100.0
Not stated	1		0		1	
Total	1415		2363		3782	

Note: The Indigenous status of the mothers of four babies was unknown. The babies of these mothers were only included in the count of All NT.

Table 50. Methods of resuscitation, by maternal Indigenous status, NT livebirths, 2009

Resuscitation: highest rank of method used	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Suction	105	7.5	235	10.0	340	9.1
Oxygen therapy	173	12.4	168	7.2	341	9.1
IPPV	137	9.8	145	6.2	282	7.5
Endotracheal intubation	13	0.9	10	0.4	24	0.6
ECM & ventilation	8	0.6	9	0.4	17	0.5
Other	2	0.1	4	0.2	6	0.2
None	958	68.6	1775	75.7	2736	73.0
Total stated	1396	100.0	2346	100.0	3746	100.0
Not stated	19		17		36	
Total of livebirths	1415		2363		3782	

Notes:

- (1) Resuscitation methods exclude tactile stimulation.
- (2) IPPV stands for intermittent positive pressure ventilation.
- (3) ECM stands for external cardiac massage.
- (4) Other resuscitation includes stimulation methods such as intramuscular treatment, continuous positive airway pressure (CPAP).
- (5) The Indigenous status of the mothers of four babies was unknown. The babies of these mothers were only included in the count of All NT.

Table 51. Numbers and rates of stillbirths, neonatal deaths and perinatal deaths, by Indigenous status, NT babies, 2009

	Indigenous		Non-Indigenous		All NT	
	Number	Rate	Number	Rate	Number	Rate
Stillbirths	28	19.4	14	5.9	42	11.0
Neonatal deaths	13	9.2	5	n.p.	18	4.8
Perinatal deaths	41	28.4	19	8.0	60	15.7

Notes:

- (1) Rate of stillbirths or perinatal deaths is the number of deaths per 1000 total births; rate of neonatal deaths is the number of deaths per 1000 livebirths.
- (2) Stillbirths are by maternal Indigenous status and neonatal deaths are by Indigenous status of the babies. Perinatal deaths are therefore a mix of maternal and baby's Indigenous status.
- n.p. Rates are not published due to the small number of events (i.e. less than 10).

Appendices

Appendix 1. Hospital profiles

The profile table of each hospital includes all births that occurred in that hospital in 2009, of mothers who were either NT residents or from interstate.

Royal Darwin Hospital

	Indigenous		Non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	673		1041		1714	
Maternal age						
<20 years	129	19.2	63	6.1	192	11.2
20-34 years	475	70.6	799	76.8	1274	74.3
35+ years	69	10.3	179	17.2	248	14.5
Onset of labour						
Spontaneous onset	471	70.0	689	66.2	1160	67.7
Induced labour	105	15.6	203	19.5	308	18.0
No labour	97	14.4	149	14.3	246	14.4
Method of birth						
Spontaneous vaginal birth	406	60.3	682	65.5	1088	63.5
Vaginal breech birth	5	0.7	2	0.2	7	0.4
Forceps birth	10	1.5	12	1.2	22	1.3
Ventouse birth	32	4.8	56	5.4	88	5.1
Elective caesarean	63	9.4	117	11.2	180	10.5
Emergency caesarean	157	23.3	172	16.5	329	19.2
Pregnancy and/or childbirth complications						
Cord prolapse	2	0.3	0	0.0	2	0.1
Fetal distress	90	13.4	136	13.1	226	13.2
Gestational diabetes mellitus	54	8.0	62	6.0	116	6.8
Manual removal of placenta	20	3.0	15	1.4	35	2.0
Meconium stained liquor	91	13.5	145	13.9	236	13.8
Obstructed labour	37	5.5	57	5.5	94	5.5
Post-partum haemorrhage	115	17.1	166	15.9	281	16.4
Pre-eclampsia	32	4.8	46	4.4	78	4.6
Others	114	16.9	118	11.3	232	13.5
Any complication	378	56.2	523	50.2	901	52.6
MOTHERS HAVING VAGINAL BIRTH	453		752		1205	
Perineum status						
Intact	239	54.0	302	40.4	541	45.4
1st degree tear	79	17.8	131	17.5	210	17.6
2nd degree tear	69	15.6	195	26.1	264	22.2
3rd-4th degree tear	6	1.4	13	1.7	19	1.6
Episiotomy	47	10.6	94	12.6	141	11.8
Combined episiotomy & tear	3	0.7	13	1.7	16	1.3
BABIES	686		1055		1741	
Gestational age						
<28 weeks	16	2.3	12	1.1	28	1.6
28-36 weeks	111	16.2	76	7.2	187	10.7
37+ weeks	559	81.5	967	91.7	1526	87.7
Birthweight						
<1500g	34	5.0	18	1.7	52	3.0
1500-2499g	95	13.8	79	7.5	174	10.0
2500+g	557	81.2	957	90.8	1514	87.0
Birth status						
Livebirths	674	98.3	1048	99.3	1722	98.9
Stillbirths	12	1.7	7	0.7	19	1.1

Notes:

(1) This table includes all births that occurred in RDH and the attached Birth Centre in 2009. An additional 35 births occurred before arrival.

(2) Not stated category is not presented and so the total may differ from the sum of the variable components.

Darwin Private Hospital

	All	
	Number	%
MOTHERS	749	
Maternal age		
<20 years	6	0.8
20-34 years	542	72.4
35+ years	201	26.8
Onset of labour		
Spontaneous onset	332	44.3
Induced labour	230	30.7
No labour	187	25.0
Method of birth		
Spontaneous vaginal birth	325	43.4
Vaginal breech birth	2	0.3
Forceps birth	50	6.7
Ventouse birth	65	8.7
Elective caesarean	197	26.3
Emergency caesarean	110	14.7
Pregnancy and/or childbirth complications		
Cord prolapse	0	0.0
Fetal distress	53	7.1
Gestational diabetes mellitus	47	6.3
Manual removal of placenta	2	0.3
Meconium stained liquor	20	2.7
Obstructed labour	47	6.3
Post-partum haemorrhage	22	2.9
Pre-eclampsia	5	0.7
Others	62	8.3
Any complication	220	29.4
MOTHERS HAVING VAGINAL BIRTH	442	
Perineum status		
Intact	148	34.0
1st degree tear	130	29.9
2nd degree tear	42	9.7
3rd-4th degree tear	1	0.2
Episiotomy	104	23.9
Combined episiotomy & tear	10	2.3
BABIES	764	
Gestational age		
<28 weeks	2	0.3
28-36 weeks	45	5.9
37+ weeks	717	93.8
Birthweight		
<1500g	5	0.7
1500-2499g	36	4.7
2500+g	723	94.6
Birth status		
Livebirths	760	99.5
Stillbirths	4	0.5

Notes:

(1) This table includes all births that occurred in DPH in 2009. Separate data by Indigenous status is not presented due to the small number of Indigenous mothers.

(2) There were two Indigenous mothers and the Indigenous status of four mothers was unknown.

(3) Not stated category is not presented and so the total may differ from the sum of the variable components.

Gove District Hospital

	Indigenous		Non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	113		63		176	
Maternal age						
<20 years	28	24.8	1	1.6	29	16.5
20-34 years	78	69.0	48	76.2	126	71.6
35+ years	7	6.2	14	22.2	21	11.9
Onset of labour						
Spontaneous onset	89	78.8	42	66.7	131	74.4
Induced labour	15	13.3	15	23.8	30	17.0
No labour	9	8.0	6	9.5	15	8.5
Method of birth						
Spontaneous vaginal birth	86	76.1	46	73.0	132	75.0
Vaginal breech birth	0	0.0	0	0.0	0	0.0
Forceps birth	0	0.0	1	1.6	1	0.6
Ventouse birth	5	4.4	3	4.8	8	4.5
Elective caesarean	4	3.5	7	11.1	11	6.3
Emergency caesarean	18	15.9	6	9.5	24	13.6
Pregnancy and/or childbirth complications						
Cord prolapse	0	0.0	0	0.0	0	0.0
Fetal distress	7	6.2	2	3.2	9	5.1
Gestational diabetes mellitus	4	3.5	3	4.8	7	4.0
Manual removal of placenta	4	3.5	0	0.0	4	2.3
Meconium stained liquor	25	22.1	11	17.5	36	20.5
Obstructed labour	8	7.1	3	4.8	11	6.3
Post-partum haemorrhage	17	15.0	4	6.3	21	11.9
Pre-eclampsia	4	3.5	0	0.0	4	2.3
Others	10	8.8	2	3.2	12	6.8
Any complication	56	49.6	19	30.2	75	42.6
MOTHERS HAVING VAGINAL BIRTH	91		50		141	
Perineum status						
Intact	44	48.9	23	46.0	67	47.9
1st degree tear	15	16.7	12	24.0	27	19.3
2nd degree tear	23	25.6	11	22.0	34	24.3
3rd-4th degree tear	5	5.6	0	0.0	5	3.6
Episiotomy	3	3.3	4	8.0	7	5.0
Combined episiotomy & tear	0	0.0	0	0.0	0	0.0
BABIES	113		63		176	
Gestational age						
<28 weeks	0	0.0	0	0.0	0	0.0
28-36 weeks	5	4.4	0	0.0	5	2.8
37+ weeks	108	95.6	63	100.0	171	97.2
Birthweight						
<1500g	0	0.0	0	0.0	0	0.0
1500-2499g	5	4.4	1	1.6	6	3.4
2500+g	108	95.6	62	98.4	170	96.6
Birth status						
Livebirths	113	100.0	63	100.0	176	100.0
Stillbirths	0	0.0	0	0.0	0	0.0

Notes:

(1) This table includes all births that occurred in GDH in 2009. An additional 12 births occurred before arrival at hospital.

(2) Not stated category is not presented and so the total may differ from the sum of the variable components.

Katherine Hospital

	Indigenous		Non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	177		127		304	
Maternal age						
<20 years	47	26.6	5	3.9	52	17.1
20-34 years	122	68.9	105	82.7	227	74.7
35+ years	8	4.5	17	13.4	25	8.2
Onset of labour						
Spontaneous onset	146	82.5	74	58.3	220	72.4
Induced labour	21	11.9	32	25.2	53	17.4
No labour	10	5.6	21	16.5	31	10.2
Method of birth						
Spontaneous vaginal birth	138	78.0	76	59.8	214	70.4
Vaginal breech birth	3	1.7	0	0.0	3	1.0
Forceps birth	1	0.6	2	1.6	3	1.0
Ventouse birth	3	1.7	8	6.3	11	3.6
Elective caesarean	9	5.1	19	15.0	28	9.2
Emergency caesarean	23	13.0	22	17.3	45	14.8
Pregnancy and/or childbirth complications						
Cord prolapse	1	0.6	0	0.0	1	0.3
Fetal distress	12	6.8	10	7.9	22	7.2
Gestational diabetes mellitus	6	3.4	6	4.7	12	3.9
Manual removal of placenta	7	4.0	1	0.8	8	2.6
Meconium stained liquor	35	19.8	11	8.7	46	15.1
Obstructed labour	7	4.0	11	8.7	18	5.9
Post-partum haemorrhage	38	21.5	16	12.6	54	17.8
Pre-eclampsia	6	3.4	4	3.1	10	3.3
Others	22	12.4	8	6.3	30	9.9
Any complication	91	51.4	47	37.0	138	45.4
MOTHERS HAVING VAGINAL BIRTH	145		86		231	
Perineum status						
Intact	68	47.2	29	34.1	97	42.4
1st degree tear	50	34.7	22	25.9	72	31.4
2nd degree tear	21	14.6	25	29.4	46	20.1
3rd-4th degree tear	2	1.4	3	3.5	5	2.2
Episiotomy	2	1.4	6	7.1	8	3.5
Combined episiotomy & tear	1	0.7	0	0.0	1	0.4
BABIES	177		128		305	
Gestational age						
<28 weeks	1	0.6	0	0.0	1	0.3
28-36 weeks	6	3.4	2	1.6	8	2.6
37+ weeks	170	96.0	126	98.4	296	97.0
Birthweight						
<1500g	2	1.1	0	0.0	2	0.7
1500-2499g	11	6.2	2	1.6	13	4.3
2500+g	164	92.7	126	98.4	290	95.1
Birth status						
Livebirths	176	99.4	128	100.0	304	99.7
Stillbirths	1	0.6	0	0.0	1	0.3

Notes:

(1) This table includes all births that occurred in KH in 2009. An additional 5 births occurred before arrival at hospital.

(2) Not stated category is not presented and so the total may differ from the sum of the variable components.

Alice Springs Hospital

	Indigenous		Non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	455		344		799	
Maternal age						
<20 years	109	24.0	10	2.9	119	14.9
20-34 years	313	68.8	264	76.7	577	72.2
35+ years	33	7.3	70	20.3	103	12.9
Onset of labour						
Spontaneous onset	282	62.0	221	64.2	503	63.0
Induced labour	120	26.4	79	23.0	199	24.9
No labour	53	11.6	44	12.8	97	12.1
Method of birth						
Spontaneous vaginal birth	317	69.7	231	67.2	548	68.6
Vaginal breech birth	7	1.5	2	0.6	9	1.1
Forceps birth	20	4.4	17	4.9	37	4.6
Ventouse birth	10	2.2	13	3.8	23	2.9
Elective caesarean	41	9.0	39	11.3	80	10.0
Emergency caesarean	60	13.2	42	12.2	102	12.8
Pregnancy and/or childbirth complications						
Cord prolapse	0	0.0	0	0.0	0	0.0
Fetal distress	45	9.9	26	7.6	71	8.9
Gestational diabetes mellitus	36	7.9	20	5.8	56	7.0
Manual removal of placenta	15	3.3	7	2.0	22	2.8
Meconium stained liquor	71	15.6	38	11.0	109	13.6
Obstructed labour	28	6.2	24	7.0	52	6.5
Post-partum haemorrhage	97	21.3	51	14.8	148	18.5
Pre-eclampsia	23	5.1	9	2.6	32	4.0
Others	47	10.3	24	7.0	71	8.9
Any complication	241	53.0	154	44.8	395	49.4
MOTHERS HAVING VAGINAL BIRTH	354		263		617	
Perineum status						
Intact	180	51.6	95	37.0	275	45.4
1st degree tear	82	23.5	63	24.5	145	23.9
2nd degree tear	56	16.0	69	26.8	125	20.6
3rd-4th degree tear	8	2.3	5	1.9	13	2.1
Episiotomy	19	5.4	25	9.7	44	7.3
Combined episiotomy & tear	4	1.1	0	0.0	4	0.7
BABIES	460		350		810	
Gestational age						
<28 weeks	10	2.2	1	0.3	11	1.4
28-36 weeks	59	12.8	26	7.4	85	10.5
37+ weeks	391	85.0	323	92.3	714	88.1
Birthweight						
<1500g	15	3.3	1	0.3	16	2.0
1500-2499g	46	10.0	20	5.7	66	8.1
2500+g	399	86.7	329	94.0	728	89.9
Birth status						
Livebirths	446	97.0	347	99.1	793	97.9
Stillbirths	14	3.0	3	0.9	17	2.1

Notes:

(1) This table includes all births that occurred in ASH in 2009. An additional 13 births occurred before arrival at hospital.

(2) Not stated category is not presented and so the total may differ from the sum of the variable components.

Non-hospital

	Indigenous		Non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	59		53		112	
Maternal age						
<20 years	8	13.6	0	0.0	8	7.1
20-34 years	46	78.0	34	64.2	80	71.4
35+ years	5	8.5	19	35.8	24	21.4
Onset of labour						
Spontaneous onset	59	100.0	53	100.0	112	100.0
Induced labour	0	0.0	0	0.0	0	0.0
No labour	0	0.0	0	0.0	0	0.0
Method of birth						
Spontaneous vaginal birth	57	96.6	51	96.2	108	96.4
Vaginal breech birth	2	3.4	2	3.8	4	3.6
Actual place of giving birth						
Health centres	40	67.8	2	3.8	42	37.5
Planned homes	1	1.7	36	67.9	37	33.0
Other	18	30.5	15	28.3	33	29.5
Pregnancy and/or childbirth complications						
Cord prolapse	0	0.0	0	0.0	0	0.0
Fetal distress	2	3.4	1	1.9	3	2.7
Gestational diabetes mellitus	1	1.7	1	1.9	2	1.8
Manual removal of placenta	1	1.7	1	1.9	2	1.8
Meconium stained liquor	6	10.2	4	7.5	10	8.9
Obstructed labour	0	0.0	0	0.0	0	0.0
Post-partum haemorrhage	11	18.6	5	9.4	16	14.3
Pre-eclampsia	1	1.7	0	0.0	1	0.9
Others	12	20.3	5	9.4	17	15.2
Any complication	26	44.1	13	24.5	39	34.8
MOTHERS HAVING VAGINAL BIRTH	59		53		112	
Perineum status						
Intact	28	47.5	31	58.5	59	52.7
1st degree tear	20	33.9	16	30.2	36	32.1
2nd degree tear	7	11.9	5	9.4	12	10.7
3rd-4th degree tear	3	5.1	0	0.0	3	2.7
Episiotomy	1	1.7	1	1.9	2	1.8
Combined episiotomy & tear	0	0.0	0	0.0	0	0.0
BABIES	60		53		113	
Gestational age						
<28 weeks	2	3.4	0	0.0	2	1.8
28-36 weeks	16	27.1	3	5.7	19	17.0
37+ weeks	41	69.5	50	94.3	91	81.3
Birthweight						
<1500g	7	11.9	1	1.9	8	7.1
1500-2499g	11	18.6	1	1.9	12	10.7
2500+g	41	69.5	51	96.2	92	82.1
Birth status						
Livebirths	58	96.7	53	100.0	111	98.2
Stillbirths	2	3.3	0	0.0	2	1.8

Notes:

(1) This table comprises all births that occurred out of hospital in 2009, including planned home births, births in health centres and other locations such as in transit to hospital or unintended places.

(2) Not stated category is not presented and so the total may differ from the sum of the variable components.

Appendix 2. Trends of perinatal indicators, by Indigenous status, NT, 1995–2009

Table A.1. Trends in numbers for selected measures, NT Indigenous mothers and babies, 1995-2009

		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total fertility rate		2.3	2.3	2.2	2.3	2.4	2.3	2.6	2.4	2.4	2.2	2.3	2.4	2.4	2.2	2.3
		Number														
ALL MOTHERS	Total	1184	1147	1152	1206	1261	1236	1430	1332	1334	1270	1320	1400	1412	1356	1425
	Maternal age															
	<20	345	318	355	362	374	407	430	401	382	360	338	360	335	305	316
	20-34	796	778	745	780	819	772	929	851	875	822	905	950	974	944	990
	35+	43	51	50	62	68	57	71	80	77	88	77	90	103	107	119
	Place of birth															
	Hospital	1127	1100	1071	1131	1188	1195	1365	1279	1264	1209	1249	1330	1350	1299	1370
	Non-hospital	57	47	81	75	73	41	65	53	70	61	71	70	62	57	55
	Type of labour onset															
	Spontaneous	901	899	863	883	919	930	1041	976	940	926	948	972	975	950	1008
	Induced	153	137	149	166	193	202	240	208	243	194	212	275	264	233	251
	No labour	122	109	113	128	127	104	149	148	151	150	160	153	173	173	166
	Method of birth															
	Spontaneous vaginal	832	850	816	839	933	901	1028	951	918	868	905	959	962	939	970
	Vaginal breech	14	14	13	12	8	9	7	5	16	17	12	15	14	14	16
	Forceps	30	39	30	30	22	17	25	22	23	12	19	13	16	20	28
	Ventouse	9	5	17	19	25	40	53	28	42	53	49	56	41	39	49
	Caesarean section	297	237	252	280	252	269	317	326	335	320	335	357	379	344	362
FIRST-TIME MOTHERS	Total	373	338	401	392	425	438	470	412	416	373	406	419	407	402	432
	Maternal age															
	<20	234	226	247	250	267	317	298	262	261	245	245	255	245	229	230
	20-34	137	108	148	135	152	120	165	143	151	128	159	162	157	169	194
	35+	2	4	4	6	6	1	7	7	4	0	2	2	5	4	8
BABIES	Total	1191	1160	1160	1215	1278	1245	1442	1348	1342	1277	1331	1416	1428	1367	1443
	Plurality															
	Singleton	1177	1134	1144	1197	1244	1227	1418	1316	1326	1263	1310	1384	1396	1345	1407
	Multiples	14	26	16	18	34	18	24	32	16	14	21	32	32	22	36
	Birthweight (g)															
	<1500	20	35	38	35	41	32	32	33	42	41	49	57	54	36	55
	1500-2499	139	138	149	120	138	140	154	152	162	141	150	154	143	160	159
	2500+	1030	985	944	1031	1076	1073	1256	1163	1137	1095	1132	1205	1230	1171	1228
	Gestational age (weeks)															
	<28	17	19	24	24	27	21	18	20	29	25	31	19	24	22	26
	28-36	132		152	144	163	156	174	199	190	180	176	207	201	179	186
	37+	1024	977	947	1013	1067	1068	1249	1128	1123	1072	1124	1190	1201	1166	1230
	Birth status															
	Livebirths	1172	1146	1141	1198	1253	1231	1428	1333	1323	1264	1313	1393	1406	1351	1415
	Stillbirths	19	14	19	17	25	14	14	15	19	13	18	23	22	16	28

Table A.2. Trends in proportions for selected measures, NT Indigenous mothers and babies, 1995-2009

		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
		Percent														
ALL MOTHERS	Maternal age															
	<20	29.1	27.7	30.9	30.1	29.7	32.9	30.1	30.1	28.6	28.3	25.6	25.7	23.7	22.5	22.2
	20-34	67.2	67.8	64.8	64.8	64.9	62.5	65.0	63.9	65.6	64.7	68.6	67.9	69.0	69.6	69.5
	35+	3.6	4.4	4.3	5.1	5.4	4.6	5.0	6.0	5.8	6.9	5.8	6.4	7.3	7.9	8.4
	Place of birth															
	Hospital	95.2	95.9	93.0	93.8	94.2	96.7	95.5	96.0	94.8	95.2	94.6	95.0	95.6	95.8	96.1
	Non-hospital	4.8	4.1	7.0	6.2	5.8	3.3	4.5	4.0	5.2	4.8	5.4	5.0	4.4	4.2	3.9
	Type of labour onset															
	Spontaneous	76.6	78.5	76.7	75.0	74.2	75.2	72.8	73.3	70.5	72.9	71.8	69.4	69.1	70.1	70.7
	Induced	13.0	12.0	13.2	14.1	15.6	16.3	16.8	15.6	18.2	15.3	16.1	19.6	18.7	17.2	17.6
	No labour	10.4	9.5	10.0	10.9	10.3	8.4	10.4	11.1	11.3	11.8	12.1	10.9	12.3	12.8	11.6
	Method of birth															
	Spontaneous vaginal	70.4	74.2	72.3	71.1	75.2	72.9	71.9	71.4	68.8	68.3	68.6	68.5	68.1	69.2	68.1
Vaginal breech	1.2	1.2	1.2	1.0	0.6	0.7	0.5	0.4	1.2	1.3	0.9	1.1	1.0	1.0	1.1	
Forceps	2.5	3.4	2.7	2.5	1.8	1.4	1.7	1.7	1.7	0.9	1.4	0.9	1.1	1.5	2.0	
Ventouse	0.8	0.4	1.5	1.6	2.0	3.2	3.7	2.1	3.1	4.2	3.7	4.0	2.9	2.9	3.4	
Caesarean section	25.1	20.7	22.3	23.7	20.3	21.8	22.2	24.5	25.1	25.2	25.4	25.5	26.8	25.4	25.4	
FIRST-TIME MOTHERS	Maternal age															
	<20	62.7	66.9	61.9	63.9	62.8	72.4	63.4	63.6	62.7	65.7	60.3	60.9	60.2	57.0	53.2
	20-34	36.7	32.0	37.1	34.5	35.8	27.4	35.1	34.7	36.3	34.3	39.2	38.7	38.6	42.0	44.9
	35+	0.5	1.2	1.0	1.5	1.4	0.2	1.5	1.7	1.0	0.0	0.5	0.5	1.2	1.0	1.9
BABIES	Plurality															
	Singleton	98.8	97.8	98.6	98.5	97.3	98.6	98.3	97.6	98.8	98.9	98.4	97.7	97.8	98.4	97.5
	Multiples	1.2	2.2	1.4	1.5	2.7	1.4	1.7	2.4	1.2	1.1	1.6	2.3	2.2	1.6	2.5
	Birthweight (g)															
	<1500	1.7	3.0	3.4	3.0	3.3	2.6	2.2	2.4	3.1	3.2	3.7	4.0	3.8	2.6	3.8
	1500-2499	11.7	11.9	13.2	10.1	11.0	11.2	10.7	11.3	12.1	11.0	11.3	10.9	10.0	11.7	11.0
	2500+	86.6	85.1	83.5	86.9	85.7	86.2	87.1	86.3	84.8	85.7	85.0	85.1	86.2	85.7	85.2
	Gestational age (weeks)															
	<28	1.4	1.9	2.1	2.0	2.1	1.7	1.2	1.5	2.2	2.0	2.3	1.3	1.7	1.6	1.8
	28-36	11.3	0.0	13.5	12.2	13.0	12.5	12.1	14.8	14.2	14.1	13.2	14.6	14.1	13.1	12.9
	37+	87.3	98.1	84.3	85.8	84.9	85.8	86.7	83.7	83.7	83.9	84.4	84.0	84.2	85.3	85.3
Birth status																
Livebirths	98.4	98.8	98.4	98.6	98.0	98.9	99.0	98.9	98.6	99.0	98.6	98.4	98.5	98.8	98.1	
Stillbirths	1.6	1.2	1.6	1.4	2.0	1.1	1.0	1.1	1.4	1.0	1.4	1.6	1.5	1.2	1.9	

Note: Not stated category is not shown in each breakdown, therefore the sum of listed categories of each breakdown may not add to the total number.

Table B.1. Trends in numbers for selected measures, NT non-Indigenous mothers and babies, 1995-2009

		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total fertility rate		2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9
		Number														
ALL	Total	2340	2200	2306	2230	2219	2197	2212	2233	2195	2065	2229	2187	2243	2373	2342
MOTHERS	Maternal age															
	<20	141	132	146	109	128	118	121	119	123	96	121	109	91	94	81
	20-34	1909	1769	1817	1783	1751	1727	1756	1726	1682	1578	1671	1633	1650	1800	1766
	35+	290	299	336	338	340	352	335	388	390	391	437	444	502	479	495
	Place of birth															
	Hospital	2303	2173	2258	2195	2186	2187	2180	2206	2165	2038	2213	2142	2195	2332	2290
	Non-hospital	37	27	48	35	33	10	32	27	30	27	16	45	48	41	52
	Type of labour onset															
	Spontaneous	1563	1506	1556	1441	1483	1445	1383	1379	1302	1224	1273	1278	1362	1471	1396
	Induced	537	452	483	531	464	496	528	525	544	487	535	513	481	512	550
	No labour	234	236	251	253	259	256	301	329	349	354	421	396	400	390	396
	Method of birth															
	Spontaneous vaginal	1723	1618	1703	1568	1566	1548	1476	1496	1335	1224	1306	1291	1325	1438	1393
	Vaginal breech	14	16	11	15	10	6	15	3	10	9	12	13	14	9	8
	Forceps	127	137	109	133	114	98	98	83	48	48	55	48	55	82	81
	Ventouse	34	24	30	24	39	78	85	73	158	153	153	162	141	157	143
	Caesarean section	442	402	450	486	478	465	538	578	644	631	703	673	708	687	717
FIRST-TIME	Total	1031	928	948	968	1041	924	999	943	943	858	1009	938	986	1076	1008
MOTHERS	Maternal age															
	<20	119	102	116	98	104	97	100	104	103	80	106	98	75	78	67
	20-34	846	755	747	781	829	731	795	736	727	656	764	719	760	852	822
	35+	66	71	78	89	108	96	104	103	113	122	139	120	151	146	119
BABIES	Total	2381	2225	2333	2261	2249	2228	2241	2261	2231	2094	2265	2223	2268	2399	2377
	Plurality															
	Singleton	2301	2175	2279	2199	2189	2166	2183	2205	2159	2036	2193	2151	2219	2347	2308
	Multiples	80	50	54	62	60	62	58	56	72	58	72	72	49	52	69
	Birthweight (g)															
	<1500	32	26	22	29	41	26	32	28	28	30	39	29	23	27	24
	1500-2499	116	131	135	150	130	127	113	99	140	110	131	135	92	93	135
	2500+	2230	2062	2154	2076	2066	2072	2096	2134	2063	1954	2093	2058	2152	2278	2217
	Gestational age (weeks)															
	<28	18	14	12	15	23	14	17	17	16	13	16	16	10	14	14
	28-36	141		170	187	174	169	165	151	168	144	180	175	144	144	148
	37+	2195	2058	2136	2053	2041	2045	2059	2092	2047	1937	2069	2032	2114	2241	2215
	Birth status															
	Livebirths	2365	2213	2320	2251	2227	2212	2229	2247	2211	2085	2242	2206	2259	2389	2363
	Stillbirths	16	12	13	10	22	16	12	14	20	9	23	17	9	10	14

Table B.2. Trends in proportions for selected measures, NT non-Indigenous mothers and babies, 1995-2009

		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
		Percent														
ALL MOTHERS	Maternal age															
	<20	6.0	6.0	6.4	4.9	5.8	5.4	5.5	5.3	5.6	4.6	5.4	5.0	4.1	4.0	3.5
	20-34	81.6	80.4	79.0	80.0	78.9	78.6	79.4	77.3	76.6	76.4	75.0	74.7	73.6	75.9	75.4
	35+	12.4	13.6	14.6	15.2	15.3	16.0	15.1	17.4	17.8	18.9	19.6	20.3	22.4	20.2	21.1
	Place of birth															
	Hospital	98.4	98.8	97.9	98.4	98.5	99.5	98.6	98.8	98.6	98.7	99.3	97.9	97.9	98.3	97.8
	Non-hospital	1.6	1.2	2.1	1.6	1.5	0.5	1.4	1.2	1.4	1.3	0.7	2.1	2.1	1.7	2.2
	Type of labour onset															
	Spontaneous	67.0	68.6	67.9	64.8	67.2	65.8	62.5	61.8	59.3	59.3	57.1	58.4	60.7	62.0	59.6
	Induced	23.0	20.6	21.1	23.9	21.0	22.6	23.9	23.5	24.8	23.6	24.0	23.5	21.4	21.6	23.5
	No labour	10.0	10.8	11.0	11.4	11.7	11.7	13.6	14.7	15.9	17.1	18.9	18.1	17.8	16.4	16.9
	Method of birth															
	Spontaneous vaginal	73.6	73.6	73.9	70.4	71.0	70.5	66.7	67.0	60.8	59.3	58.6	59.0	59.1	60.6	59.5
Vaginal breech	0.6	0.7	0.5	0.7	0.5	0.3	0.7	0.1	0.5	0.4	0.5	0.6	0.6	0.4	0.3	
Forceps	5.4	6.2	4.7	6.0	5.2	4.5	4.4	3.7	2.2	2.3	2.5	2.2	2.5	3.5	3.5	
Ventouse	1.5	1.1	1.3	1.1	1.8	3.6	3.8	3.3	7.2	7.4	6.9	7.4	6.3	6.6	6.1	
Caesarean section	18.9	18.3	19.5	21.8	21.7	21.2	24.3	25.9	29.3	30.6	31.5	30.8	31.6	29.0	30.6	
FIRST-TIME MOTHERS	Maternal age															
	<20	11.5	11.0	12.3	10.1	10.0	10.5	10.0	11.0	10.9	9.3	10.5	10.5	7.6	7.2	6.6
	20-34	82.1	81.4	79.4	80.7	79.6	79.1	79.6	78.0	77.1	76.5	75.7	76.7	77.1	79.2	81.5
	35+	6.4	7.7	8.3	9.2	10.4	10.4	10.4	10.9	12.0	14.2	13.8	12.8	15.3	13.6	11.8
BABIES	Plurality															
	Singleton	96.6	97.8	97.7	97.3	97.3	97.2	97.4	97.5	96.8	97.2	96.8	96.8	97.8	97.8	97.1
	Multiples	3.4	2.2	2.3	2.7	2.7	2.8	2.6	2.5	3.2	2.8	3.2	3.2	2.2	2.2	2.9
	Birthweight (g)															
	<1500	1.3	1.2	1.0	1.3	1.8	1.2	1.4	1.2	1.3	1.4	1.7	1.3	1.0	1.1	1.0
	1500-2499	4.9	5.9	5.8	6.7	5.8	5.7	5.0	4.4	6.3	5.3	5.8	6.1	4.1	3.9	5.7
	2500+	93.8	92.9	93.2	92.1	92.4	93.1	93.5	94.4	92.5	93.3	92.5	92.6	94.9	95.0	93.3
	Gestational age (weeks)															
	<28	0.8	0.7	0.5	0.7	1.0	0.6	0.8	0.8	0.7	0.6	0.7	0.7	0.4	0.6	0.6
	28-36	6.0	0.0	7.3	8.3	7.8	7.6	7.4	6.7	7.5	6.9	7.9	7.9	6.3	6.0	6.2
	37+	93.2	99.3	92.1	91.0	91.2	91.8	91.9	92.6	91.8	92.5	91.3	91.4	93.2	93.4	93.2
Birth status																
Livebirths	99.3	99.5	99.4	99.6	99.0	99.3	99.5	99.4	99.1	99.6	99.0	99.2	99.6	99.6	99.4	
Stillbirths	0.7	0.5	0.6	0.4	1.0	0.7	0.5	0.6	0.9	0.4	1.0	0.8	0.4	0.4	0.6	

Note: Not stated category is not shown in each breakdown, therefore the sum of listed categories of each breakdown may not add to the total number.

Table C.1. Trends in numbers for selected measures, all NT mothers and babies, 1995-2009

		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total fertility rate		2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.0	2.1	2.1	2.1	2.1	2.1
		Number														
ALL MOTHERS	Total	3524	3347	3458	3436	3480	3433	3642	3565	3529	3335	3549	3587	3655	3730	3771
	Maternal age															
	<20	486	450	501	471	502	525	551	520	505	456	459	469	426	399	397
	20-34	2705	2547	2562	2563	2570	2499	2685	2577	2557	2400	2576	2583	2624	2744	2759
	35+	333	350	386	400	408	409	406	468	467	479	514	534	605	587	615
	Place of birth															
	Hospital	3430	3273	3329	3326	3374	3382	3545	3485	3429	3247	3462	3472	3545	3632	3664
	Non-hospital	94	74	129	110	106	51	97	80	100	88	87	115	110	98	107
	Type of labour onset															
	Spontaneous	2464	2405	2419	2324	2402	2375	2424	2355	2242	2150	2221	2250	2337	2421	2404
	Induced	690	589	632	697	657	698	768	733	787	681	747	788	745	745	803
	No labour	356	345	364	381	386	360	450	477	500	504	581	549	573	564	564
	Method of birth															
	Spontaneous vaginal	2555	2468	2519	2407	2499	2449	2504	2447	2253	2092	2211	2250	2287	2377	2364
	Vaginal breech	28	30	24	27	18	15	22	8	26	26	24	28	28	23	24
	Forceps	157	176	139	163	136	115	123	105	71	60	74	61	71	102	109
	Ventouse	43	29	47	43	64	118	138	101	200	206	202	218	182	196	193
	Caesarean section	739	639	702	766	730	734	855	904	979	951	1038	1030	1087	1032	1081
FIRST-TIME MOTHERS	Total	1404	1266	1349	1360	1466	1362	1469	1355	1359	1231	1415	1357	1393	1478	1442
	Maternal age															
	<20	353	328	363	348	371	414	398	366	364	325	351	353	320	307	297
	20-34	983	863	895	916	981	851	960	879	878	784	923	881	917	1021	1018
	35+	68	75	82	95	114	97	111	110	117	122	141	122	156	150	127
BABIES	Total	3572	3385	3493	3476	3527	3473	3683	3609	3573	3371	3596	3639	3696	3767	3824
	Plurality															
	Singleton	3478	3309	3423	3396	3433	3393	3601	3521	3485	3299	3503	3535	3615	3693	3719
	Multiples	94	76	70	80	94	80	82	88	88	72	93	104	81	74	105
	Birthweight (g)															
	<1500	52	61	60	64	82	58	64	61	70	71	88	86	77	63	79
	1500-2499	255	269	284	270	268	267	267	251	302	251	281	289	235	253	294
	2500+	3260	3047	3098	3107	3142	3145	3352	3297	3200	3049	3225	3263	3382	3450	3449
	Gestational age (weeks)															
	<28	35	33	36	39	50	35	35	37	45	38	47	35	34	36	40
	28-36	273		322	331	337	325	339	350	358	324	356	382	345	323	334
	37+	3219	3035	3083	3066	3108	3113	3308	3220	3170	3009	3193	3222	3315	3408	3449
	Birth status															
	Livebirths	3537	3359	3461	3449	3480	3443	3657	3580	3534	3349	3555	3599	3665	3741	3782
	Stillbirths	35	26	32	27	47	30	26	29	39	22	41	40	31	26	42

Table C.2. Trends in proportions for selected measures, all NT mothers and babies, 1995-2009

		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
		Percent														
ALL MOTHERS	Maternal age															
	<20	13.8	13.4	14.5	13.7	14.4	15.3	15.1	14.6	14.3	13.7	12.9	13.1	11.7	10.7	10.5
	20-34	76.8	76.1	74.3	74.6	73.9	72.8	73.7	72.3	72.5	72.0	72.6	72.0	71.8	73.6	73.2
	35+	9.4	10.5	11.2	11.6	11.7	11.9	11.1	13.1	13.2	14.4	14.5	14.9	16.6	15.7	16.3
	Place of birth															
	Hospital	97.3	97.8	96.3	96.8	97.0	98.5	97.3	97.8	97.2	97.4	97.5	96.8	97.0	97.4	97.2
	Non-hospital	2.7	2.2	3.7	3.2	3.0	1.5	2.7	2.2	2.8	2.6	2.5	3.2	3.0	2.6	2.8
	Type of labour onset															
	Spontaneous	70.2	72.0	70.8	68.3	69.7	69.2	66.6	66.1	63.5	64.5	62.6	62.7	63.9	64.9	63.7
	Induced	19.7	17.6	18.5	20.5	19.1	20.3	21.1	20.6	22.3	20.4	21.0	22.0	20.4	20.0	21.3
	No labour	10.1	10.3	10.7	11.2	11.2	10.5	12.4	13.4	14.2	15.1	16.4	15.3	15.7	15.1	15.0
	Method of birth															
	Spontaneous vaginal	72.5	73.8	73.4	70.7	72.5	71.4	68.8	68.6	63.8	62.7	62.3	62.7	62.6	63.7	62.7
Vaginal breech	0.8	0.9	0.7	0.8	0.5	0.4	0.6	0.2	0.7	0.8	0.7	0.8	0.8	0.6	0.6	
Forceps	4.5	5.3	4.1	4.8	3.9	3.4	3.4	2.9	2.0	1.8	2.1	1.7	1.9	2.7	2.9	
Ventouse	1.2	0.9	1.4	1.3	1.9	3.4	3.8	2.8	5.7	6.2	5.7	6.1	5.0	5.3	5.1	
Caesarean section	21.0	19.1	20.5	22.5	21.2	21.4	23.5	25.4	27.7	28.5	29.2	28.7	29.7	27.7	28.7	
FIRST-TIME MOTHERS	Maternal age															
	<20	25.1	25.9	27.1	25.6	25.3	30.4	27.1	27.0	26.8	26.4	24.8	26.0	23.0	20.8	20.6
	20-34	70.0	68.2	66.8	67.4	66.9	62.5	65.4	64.9	64.6	63.7	65.2	65.0	65.8	69.1	70.6
	35+	4.8	5.9	6.1	7.0	7.8	7.1	7.6	8.1	8.6	9.9	10.0	9.0	11.2	10.1	8.8
BABIES	Plurality															
	Singleton	97.4	97.8	98.0	97.7	97.3	97.7	97.8	97.6	97.5	97.9	97.4	97.1	97.8	98.0	97.3
	Multiples	2.6	2.2	2.0	2.3	2.7	2.3	2.2	2.4	2.5	2.1	2.6	2.9	2.2	2.0	2.7
	Birthweight (g)															
	<1500	1.5	1.8	1.7	1.9	2.3	1.7	1.7	1.7	2.0	2.1	2.4	2.4	2.1	1.7	2.1
	1500-2499	7.1	8.0	8.3	7.8	7.7	7.7	7.2	7.0	8.5	7.4	7.8	7.9	6.4	6.7	7.7
	2500+	91.4	90.2	90.0	90.3	90.0	90.6	91.0	91.4	89.6	90.4	89.7	89.7	91.6	91.6	90.2
	Gestational age (weeks)															
	<28	1.0	1.1	1.0	1.1	1.4	1.0	1.0	1.0	1.3	1.1	1.3	1.0	0.9	1.0	1.0
	28-36	7.7	0.0	9.4	9.6	9.6	9.4	9.2	9.7	10.0	9.6	9.9	10.5	9.3	8.6	8.7
	37+	91.3	98.9	89.6	89.2	88.9	89.6	89.8	89.3	88.7	89.3	88.8	88.5	89.7	90.5	90.2
	Birth status															
	Livebirths	99.0	99.2	99.1	99.2	98.7	99.1	99.3	99.2	98.9	99.3	98.9	98.9	99.2	99.3	98.9
Stillbirths	1.0	0.8	0.9	0.8	1.3	0.9	0.7	0.8	1.1	0.7	1.1	1.1	0.8	0.7	1.1	

Note: Not stated category is not shown in each breakdown, therefore the sum of listed categories of each breakdown may not add to the total number.

Appendix 3. Northern Territory Estimated Resident Population

Table. Northern Territory Estimated Resident Population, by Indigenous status and sex, 2009

Age (years)	Male			Female			Person
	Indigenous	Non-Indigenous	Total	Indigenous	Non-Indigenous	Total	Total
0 - 4	4176	5307	9483	3933	5035	8968	18451
5 - 9	3953	5071	9024	3844	4823	8667	17691
10 - 14	3740	5077	8817	3423	4593	8016	16833
15 - 19	3627	5103	8730	3525	4621	8146	16876
20 - 24	3342	6459	9801	3217	5425	8642	18443
25 - 29	2949	7322	10271	3182	7023	10205	20476
30 - 34	2581	6978	9559	2715	6454	9169	18728
35 - 39	2374	7253	9627	2545	6607	9152	18779
40 - 44	1837	6684	8521	1972	6066	8038	16559
45 - 49	1590	6844	8434	1705	6072	7777	16211
50 - 54	1163	6199	7362	1393	5565	6958	14320
55 - 59	762	5789	6551	989	4683	5672	12223
60 - 64	608	4221	4829	832	3050	3882	8711
65 - 69	383	2684	3067	550	1810	2360	5427
70 - 74	232	1418	1650	432	930	1362	3012
75 +	249	1365	1614	423	1394	1817	3431
Total	33566	83774	117340	34680	74151	108831	226171

Source: Department of Health, 2011, 'Northern Territory Resident Population Estimates by Age, Sex, Indigenous Status and Health Districts (1971-2010)', prepared by Health Gains Planning, file updated 01 Apr 2011, using ABS Estimated Resident Population.

Glossary

Note: for a more comprehensive glossary please see Australia's Mothers and Babies 2009.¹

Age-specific fertility rate: The number of births per individual within a specific age interval during a specified time.

Apgar score: numerical score used to indicate the baby's condition at one minute and five minutes after birth. A score of 0, 1 or 2 is given for each of five characteristics; heart rate, breathing, colour, muscle tone and reflex irritability, and the total score is between 0 and 10.

Augmentation of labour: intervention after the onset of labour to assist the progress of labour.

Birth status: status of the baby immediately after birth.

Birthweight: the first weight of a baby (stillborn or liveborn) obtained after birth, measured to the nearest 5 grams and usually obtained within one hour of birth. Low weight births can be classified at the following levels:

- Low birthweight: less than 2500 grams
- Very low birthweight: less than 1500 grams
- Extremely low birthweight: less than 1000 grams.

Born before arrival: a term used for deliveries which occur before reaching the hospital.

Caesarean section: operative birth by surgical incision through the abdominal wall and uterus. It is often divided into two sub-categories:

- Elective caesarean section: A caesarean section (planned or unplanned) performed before the onset of labour, usually due to health risks to the mother or baby.
- Emergency caesarean section: A caesarean section performed after the onset of labour, whether or not the onset of labour was spontaneous.

Epidural/Caudal: Analgesia or anaesthesia produced by injection of a local anaesthetic into the epidural space of the spinal cord or caudal canal.

Episiotomy: an incision of the perineum and vagina to enlarge the vulval orifice.

Forceps: assisted birth using a metallic obstetric instrument.

First-time mother: also called primiparous mother, refers to a woman who is giving birth for the first time.

Gestational age: the duration of a pregnancy in completed weeks, calculated from the date of the first day of women's last menstrual period to her baby's date of birth. Each birth can be categorized, according to fetal gestational age, into:

- Preterm baby: A baby born before 37 completed weeks of gestation;
- Term baby: A baby born from 37 completed weeks up to 41 completed weeks of gestation; or

- **Post-term baby:** A baby born after 41 completed weeks of gestation.

Induction of labour: intervention to stimulate the onset of labour.

Instrumental birth: includes vaginal birth by forceps or ventouse (vacuum extraction).

Labour: the process by which the products of conception are expelled from the uterus via the birth canal.

Livebirth: the complete expulsion or extraction from its mother of a baby, irrespective of duration of pregnancy, which after separation shows signs of life.

Maternal age: mother's age in completed years at the birth of her baby.

Mother's length of postnatal hospital stay: number of days between date of baby's birth and separation date of the mother (from the hospital where birth occurred). The interval is calculated by subtracting the date of baby's birth from the date of separation.

Neonatal death: death of a liveborn baby within 28 days of birth.

Neonatal death rate: the neonatal deaths in a year per 1000 livebirths in that same year.

Parity: number of previous pregnancies resulting in livebirths or stillbirths, excluding the current pregnancy.

Perinatal death: a fetal or neonatal death.

Perinatal death rate: the sum of fetal deaths (stillbirths) and neonatal deaths in a year per 1000 total births in that same year.

Perineal status: status of the perineum after the birth. It may involve surgical suturing of perineal laceration (tear) or episiotomy incision.

Plurality: the number of babies resulting from a pregnancy. According to plurality a pregnancy can be defined as either

- Singleton birth: with one baby; or
- Multiple birth: with more than one baby.

Presentation at birth: presenting part of the fetus at birth.

Pudendal: local anaesthetic to block the pudendal nerves.

Resuscitation of baby: active measures taken shortly after birth to assist the baby's ventilation and heartbeat, or to treat depressed respiratory effort and to correct metabolic disturbances.

Spontaneous vaginal: birth without intervention in which the baby's head is the presenting part.

Stillbirth (Fetal death): death prior to the complete expulsion or extraction from its mother of a product of conception of 20 or more completed weeks of gestation or of 400 grams or more birthweight. The death is indicated by the fact that after such

separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Stillbirth rate: the number of fetal deaths (stillbirths) in a year per 1000 total births in that same year.

Teenage mother: mother aged less than 20 years at the birth of her baby.

Total fertility rate: a hypothetical measure of the number of livebirths a woman would have if, throughout her reproductive years, she had children at the age-specific rates that were observed in any one year.

Ventouse (Vacuum extraction): assisted birth using a suction cap applied to the baby's head.

Vaginal breech: vaginal birth in which the baby's buttocks or lower limbs are the presenting parts.

References

1. Li Z, McNally L, Hilder L, Sullivan E. Australia's mothers and babies 2009. *Perinatal statistics series no. 25. Cat. no. PER 52*. Canberra: Australian Institute of Health and Welfare National Perinatal Statistics Unit, 2011.
2. Chondur R, Guthridge S. Population data in the Northern Territory. Darwin: Department of Health and Community Services, 2006.
3. Dempsey K, Xiaohua Z, McNellee S. Northern Territory Midwives' Collection: Mothers and Babies 2003. Darwin: Department of Health and Families, 2009.
4. Morphy F. Agency, contingency and census progress. Observation of the 2006 Indigenous Enumeration Strategy in remote Aboriginal Australia. *CAEPR Research Monograph No. 28*. Canberra: Australian National University E Press, 2007.
5. Congress Alukura and Nganampa Health Council Inc. *Minymaku Katju Tjukurpa: Women's Business Manual*. 4th ed. Alice Springs: Central Australian Remote Practitioners' Association (CARPA), 2008.
6. Foley M, Zhao Y, Condon J. Demographic data quality assessment for Northern Territory public hospitals 2011. Darwin: Department of Health, 2012.
7. Australian Bureau of Statistics. Births, Australia, 2009. *Cat. No. 3301.0*. Canberra: ABS, 2010.
8. World Health Organisation. Report of a technical working group. *WHO/FRH/MSM/96.8*. Geneva: WHO, 1996.
9. Department of Making Pregnancy Safer. Standards for maternal and neonatal care: Provision of effective antenatal care. Geneva: World Health Organisation, 2007.
10. Australian Institute of Health and Welfare. Metadata Online Registry (METeOR). National Indigenous Reform Agreement: PI 09-Antenatal care, 2013. Viewed 04 September 2013, <<http://meteor.aihw.gov.au/content/index.phtml/itemId/484317>>.

List of tables

Table 1. Total births in the NT, by Indigenous status and district of usual residence, 2009	11
Table 2. Summary statistics, by Indigenous status, NT mothers, 2009	11
Table 3. Area of usual residence, by Indigenous status, NT mothers, 2009.....	12
Table 4. District and area of usual residence, by Indigenous status, NT mothers, 2009	12
Table 5. Total fertility rate, by Indigenous status and district of usual residence, NT mothers, 2009	12
Table 6. Total fertility rate, by Indigenous status and area of usual residence, NT mothers, 2009	12
Table 7. Age-specific fertility rates and total fertility rate, by Indigenous status, NT mothers, 2009	13
Table 8. Maternal age, by Indigenous status, NT mothers, 2009	13
Table 9. Maternal age, by Indigenous status and district of usual residence, NT mothers, 2009	14
Table 10. Maternal age, by Indigenous status and area of usual residence, NT mothers, 2009	14
Table 11. Maternal parity, by Indigenous status, NT mothers, 2009.....	15
Table 12. Maternal age, by Indigenous status, NT first-time mothers, 2009.....	15
Table 13. Antenatal visits, by Indigenous status, NT mothers, 2009	15
Table 14. Antenatal visits, by district of usual residence, NT Indigenous mothers, 2009	16
Table 15. Antenatal visits, by Indigenous status and area of usual residence, NT mothers, 2009	16
Table 16. Gestation at first antenatal visit, by Indigenous status, NT mothers with at least one visit, 2009	16
Table 17. Gestation at first antenatal visit, by district of usual residence, NT Indigenous mothers with at least one visit, 2009	17
Table 18. Gestation at first antenatal visit, by Indigenous status and area of usual residence, NT mothers with at least one visit, 2009.....	17
Table 19. Self-reported alcohol consumption, by Indigenous status, NT mothers, 2009	18
Table 20. Self-reported smoking status, by Indigenous status, NT mothers, 2009.....	18
Table 21. Self-reported smoking status, by Indigenous status and area of usual residence, NT mothers, 2009.....	19
Table 22. Self-reported smoking status, by district of usual residence, NT Indigenous mothers, 2009	20
Table 23. Actual place of giving birth, by Indigenous status, NT mothers, 2009	20
Table 24. Actual place of giving birth, by district of usual residence, NT Indigenous mothers, 2009	21
Table 25. Type of labour onset, by Indigenous status, NT mothers, 2009.....	21
Table 26. Method of induction, by Indigenous status, NT mothers with induced onset of labour, 2009	21

Table 27. Birth presentation, by Indigenous status, NT mothers, 2009	21
Table 28. Method of birth, by Indigenous status, NT mothers, 2009.....	22
Table 29. Method of birth, by type of labour onset, NT mothers, 2009	22
Table 30. Method of birth, by gestational age, NT mothers with breech presentation, 2009	22
Table 31. Method of birth, by hospital, NT mothers giving birth in hospital, 2009.....	23
Table 32. Indications for caesarean section, by Indigenous status, NT mothers giving birth via caesarean section, 2009.....	23
Table 33. Method of analgesia, by Indigenous status, NT mothers with spontaneous or induced onset of labour, 2009.....	24
Table 34. Method of anaesthesia, by Indigenous status, NT mothers having operative birth, 2009	24
Table 35. Complications due to pregnancy and/or childbirth, by Indigenous status, NT mothers, 2009	25
Table 36. State of the perineum, by Indigenous status, NT mothers having vaginal birth, 2009	25
Table 37. Length of postnatal hospital stay, by Indigenous status, NT mothers giving birth in hospital, 2009	25
Table 38. Average length of postnatal hospital stay, by Indigenous status and method of birth, NT mothers giving birth in hospital, 2009	26
Table 39. Summary statistics, by maternal Indigenous status, all babies born in the NT, 2009	27
Table 40. Area of mother's usual residence, by maternal Indigenous status, NT babies, 2009	28
Table 41. District and area of mother's usual residence, by maternal Indigenous status, NT babies, 2009.....	28
Table 42. Gestational age, by maternal Indigenous status and birth status, NT babies, 2009	29
Table 43. Birthweight, by maternal Indigenous status and birth status, NT babies, 2009	30
Table 44. Gestational age, by maternal Indigenous status and district of mother's usual residence, NT livebirths, 2009.....	31
Table 45. Gestational age, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2009.....	31
Table 46. Birthweight, by maternal Indigenous status and district of mother's usual residence, NT livebirths, 2009.....	32
Table 47. Birthweight, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2009.....	32
Table 48. Birthweight, by maternal Indigenous status and gestational age, NT singleton livebirths, 2009	33
Table 49. Apgar scores at 5 minutes, by maternal Indigenous status, NT livebirths, 2009	33
Table 50. Methods of resuscitation, by maternal Indigenous status, NT livebirths, 2009	34
Table 51. Numbers and rates of stillbirths, neonatal deaths and perinatal deaths, by Indigenous status, NT babies, 2009.....	34

Selected Health Gains Planning publications

Mothers and babies reports

Markey PG, d'Espaignet ET, Condon JR, Woods M. *Trends in the Health of Mothers and Babies Northern Territory 1986–1995*. Darwin: Territory Health Services, 1998.

d'Espaignet ET, Carnegie MA, Measey ML, Gladigau PW. *Northern Territory Midwives' Collection: Mothers and Babies 1996*. Darwin: Territory Health Services, 1999.

Carnegie MA, Gladigau PW, Measey ML, d'Espaignet ET. *Northern Territory Midwives' Collection: Mothers and Babies 1997*. Darwin: Territory Health Services, 1999.

Gladigau PW, Carnegie MA, Measey ML, d'Espaignet ET. *Northern Territory Midwives' Collection: Mothers and Babies 1998*. Darwin: Territory Health Services, 2000.

NT Perinatal Information Management Group. *Northern Territory Midwives' Collection: Mothers and Babies 1999*. Darwin: Department of Health and Community Services, 2002.

Stewart ML, Li SQ. *Northern Territory Midwives' Collection: Mothers and Babies 2000–2002*. Darwin: Department of Health and Community Services, 2005.

Zhang X, Dempsey KE, McNellee S. *Northern Territory Midwives' Collection. Mothers and Babies 2003*. Darwin: Department of Health and Families, 2009.

Zhang X, Dempsey KE, McNellee S. *Northern Territory Midwives' Collection. Mothers and Babies 2004*. Darwin: Department of Health and Families, 2009.

Zhang X, Johnstone K. *Northern Territory Midwives' Collection. Mothers and Babies 2005*. Darwin: Department of Health and Families, 2009.

Zhang X, Dempsey KE, Johnstone K, Guthridge S. *Trends in the Health of Mothers and Babies in the Northern Territory, 1986-2005*. Department of Health and Families, Darwin, 2010

Tew K, Zhang X. *Northern Territory Midwives' Collection. Mothers and Babies 2006*. Darwin: Department of Health and Families, 2010.

Thompson F, Zhang X, Dempsey K. *Northern Territory Midwives' Collection. Mothers and Babies 2007*. Darwin: Department of Health and Families, 2012.

Thompson F, Zhang X, Bhatia B. *Northern Territory Midwives' Collection. Mothers and Babies 2008*. Darwin: Department of Health, 2013.

Information on children and young people

Carson BE, Guthridge SL, Li SQ, Measey ML. *Growing up in the Territory: Parent Survey*. Darwin: Department of Health and Community Services, 2006.

Li SQ, Jacklyn SP, Carson BE, Guthridge SL, Measey ML. *Growing up in the Territory: Social-emotional Wellbeing and Learning Outcomes*. Darwin: Department of Health and Community Services, 2006.

Li SQ, Guthridge SL, Tursan d'Espaignet ET, Paterson BA. *From Infancy to Young Adulthood: Health Status in the Northern Territory 2006*. Darwin: Department of Health and Community Services, 2007.

Northern Territory Midwives' Collection Mothers and Babies 2009

Department of Health

Health Gains Planning

GPO Box 40596

Casuarina NT 0811

Telephone: (08) 8985 8074

Facsimile: (08) 8985 8075

Email: ntghealth.gains@nt.gov.au

Web: www.nt.gov.au/health