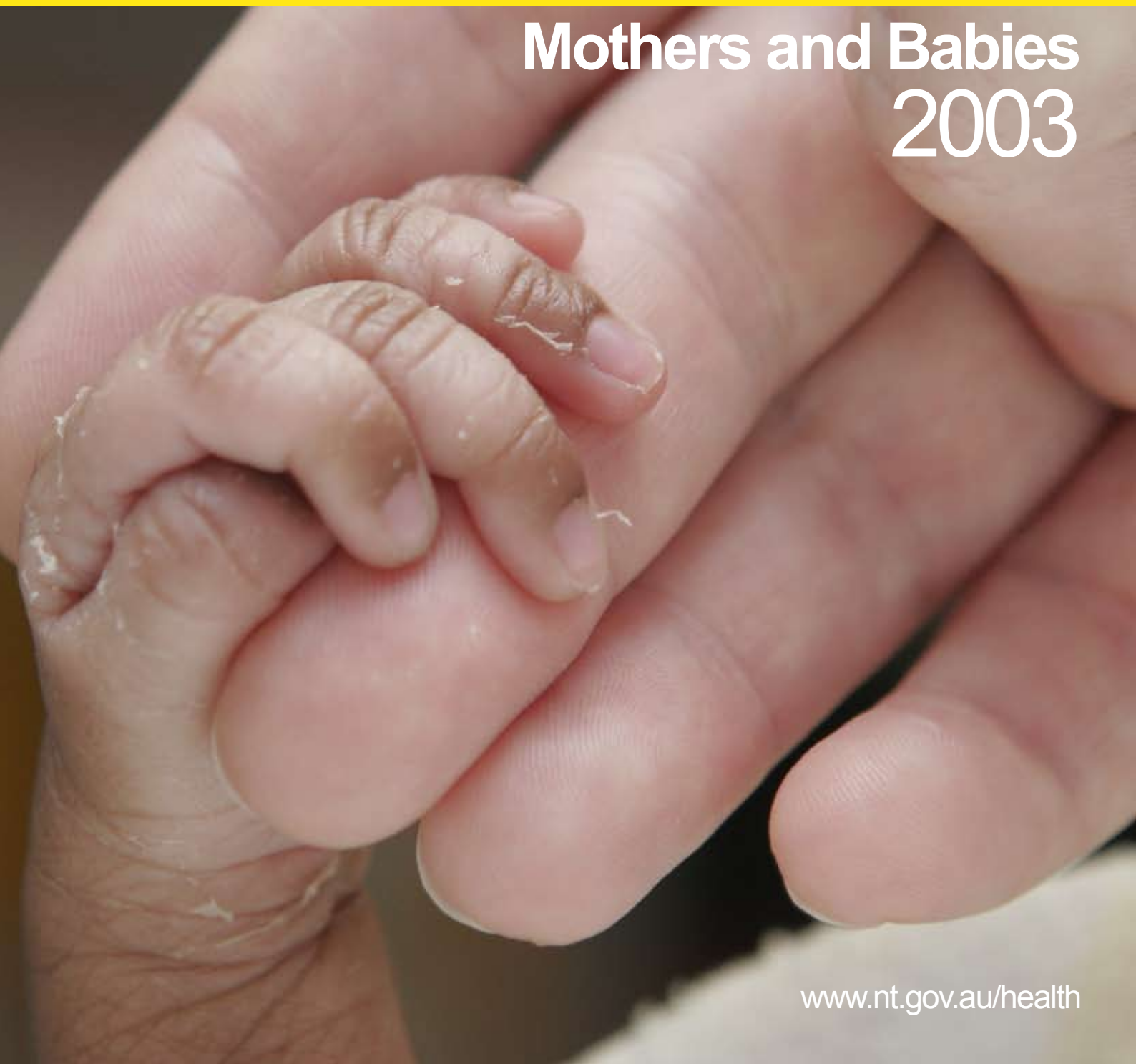


Northern Territory Midwives' Collection

Mothers and Babies 2003





Northern
Territory
Government

DEPARTMENT OF HEALTH AND FAMILIES

Northern Territory Midwives' Collection

Mothers and Babies 2003

Xiaohua Zhang
Karen Dempsey
Sonya McNellee

Acknowledgements

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

- Perinatal Data Manager in the Acute Care Information Branch
- Hospital and community midwives, Indigenous Health Workers, obstetricians and paediatricians
- Members of the Perinatal Information Management Group
- Medical records staff of all public hospitals in the Northern Territory
- Staff of Darwin Private Hospital
- Staff of Alukura in Alice Springs
- Darwin and Alice Springs Home Birth Groups
- Northern Territory Registrar General
- Staff from the Data Warehouse and Acute Care Information Services Branches, Department of Health and Families
- Kim Johnstone for final editing and proof reading.

Health Gains Planning Branch

© Department of Health and Families, Northern Territory 2009.

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 Officer of the Department of Health and Families, Northern Territory.

Suggested citation

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

ISBN 0 9775134 9 1

Printed by the Government Printer of the Northern Territory, 2009.

An electronic version is available at: <http://www.health.nt.gov.au/health/publications.shtml>

General enquiries about this publication should be directed to:

Director, Health Gains Planning Branch
Department of Health and Families
PO Box 40596, Casuarina, NT 0811

Phone: (08) 8985 8074

Facsimile: (08) 8985 8075

Table of contents

Summary	i
Key findings	i
Introduction	1
Data sources	1
Northern Territory Midwives' Collection	1
NT Perinatal Death Register	1
Data quality	2
Information presented in this report	3
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	5
Birth facility	6
Onset of labour and induction of labour	6
Presentation and method of birth	6
Analgesia for labour and anaesthesia for childbirth	7
Labour complications and perineal status	7
Postnatal hospital stay	7
Babies	8
Birth status	8
Plurality	8
Preterm and low birthweight livebirths	8
Apgar scores	8
Resuscitation of livebirths	8
Neonatal and perinatal mortality	9
Statistical tables	10
Mothers	10
Babies	24
References	31
Glossary	32
Appendices	36
Appendix A. Hospital profiles	36
Appendix B. Trends of perinatal indicators, by Indigenous status, NT, 1990–2003	44
Appendix C. Northern Territory Estimated Resident Population	51
Selected Health Gains Planning publications	52
Mothers and babies reports	52
Information on children and young people	52
Other publications	52

List of tables

Table 1. Total births in the NT, by Indigenous status and district of usual residence, 2003.....	10
Table 2. Summary statistics, by Indigenous status, NT mothers, 2003	10
Table 3. Area of usual residence, by Indigenous status, NT mothers, 2003.....	11
Table 4. District and area of usual residence, by Indigenous status, NT mothers, 2003	11
Table 5. Total fertility rate, by Indigenous status and district of usual residence, NT mothers, 2003	11
Table 6. Total fertility rate, by Indigenous status and area of usual residence, NT mothers, 2003	11
Table 7. Age-specific fertility rates and total fertility rate, by Indigenous status, NT mothers, 2003	12
Table 8. Maternal age, by Indigenous status, NT mothers, 2003.....	12
Table 9. Maternal age, by Indigenous status and district of usual residence, NT mothers, 2003	12
Table 10. Maternal age, by Indigenous status and area of usual residence, NT mothers, 2003	13
Table 11. Maternal parity, by Indigenous status, NT mothers, 2003.....	13
Table 12. Maternal age, by Indigenous status, NT first-time mothers, 2003.....	13
Table 13. Antenatal visits, by Indigenous status, NT mothers, 2003	14
Table 14. Antenatal visits, by district of usual residence, NT Indigenous mothers, 2003	14
Table 15. Antenatal visits, by Indigenous status and area of usual residence, NT mothers, 2003	14
Table 16. Gestation at first antenatal visit, by Indigenous status, NT mothers with at least one visit, 2003	15
Table 17. Gestation at first antenatal visit, by district of usual residence, NT Indigenous mothers with at least one visit, 2003	15
Table 18. Gestation at first antenatal visit, by Indigenous status and area of usual residence, NT mothers with at least one visit, 2003.....	15
Table 19. Self-reported alcohol consumption, by Indigenous status, NT mothers, 2003	16
Table 20. Self-reported smoking status, by Indigenous status, NT mothers, 2003.....	16
Table 21. Self-reported smoking status, by Indigenous status and area of usual residence, NT mothers, 2003.....	17
Table 22. Self-reported smoking status, by district of usual residence, NT Indigenous mothers, 2003.....	18
Table 23. Actual place of giving birth, by Indigenous status, NT mothers, 2003.....	18
Table 24. Actual place of giving birth, by district of usual residence, NT Indigenous mothers, 2003.....	19
Table 25. Type of labour onset, by Indigenous status, NT mothers, 2003.....	19
Table 26. Methods of induction, by Indigenous status, NT mothers with induced onset of labour, 2003	19
Table 27. Birth presentation, by Indigenous status, NT mothers, 2003	19
Table 28. Method of birth, by Indigenous status, NT mothers, 2003.....	20
Table 29. Method of birth, by type of labour onset, NT mothers, 2003	20
Table 30. Method of birth, by gestational age, NT mothers with breech presentation, 2003	20
Table 31. Method of birth, by hospital, NT mothers giving birth in hospital, 2003.....	20
Table 32. Indications for caesarean section, by Indigenous status, NT mothers giving birth via caesarean section, 2003	21

Table 33. Method of analgesia, by Indigenous status, NT mothers with spontaneous or induced onset of labour, 2003.....	21
Table 34. Method of anaesthesia, by Indigenous status, NT mothers having operative birth, 2003	22
Table 35. Labour and childbirth complications, by Indigenous status, NT mothers, 2003	22
Table 36. State of the perineum, by Indigenous status, NT mothers having vaginal birth, 2003	22
Table 37. Length of postnatal hospital stay, by Indigenous status, NT mothers giving birth in hospital, 2003	23
Table 38. Average length of postnatal hospital stay, by Indigenous status and method of birth, NT mothers giving birth in hospital, 2003.....	23
Table 39. Summary statistics, by maternal Indigenous status, all babies born in the NT, 2003	24
Table 40. Area of mother's usual residence, by maternal Indigenous status, NT babies, 2003	25
Table 41. District and area of mother's usual residence, by maternal Indigenous status, NT babies, 2003.....	25
Table 42. Gestational age, by maternal Indigenous status and birth status, NT babies, 2003	26
Table 43. Birthweight, by maternal Indigenous status and birth status, NT babies, 2003	26
Table 44. Gestational age, by maternal Indigenous status and district of mother's usual residence, NT livebirths, 2003.....	27
Table 45. Gestational age, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2003.....	27
Table 46. Birthweight, by maternal Indigenous status and district of mother's usual residence, NT livebirths, 2003.....	28
Table 47. Birthweight, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2003	28
Table 48. Birthweight, by maternal Indigenous status and gestational age, NT singleton livebirths, 2003	29
Table 49. Apgar scores at 5 minutes, by maternal Indigenous status, NT livebirths, 2003.....	29
Table 50. Methods of resuscitation, by maternal Indigenous status, NT livebirths, 2003	29
Table 51. Numbers and rates of stillbirth, neonatal death and perinatal death, by Indigenous status, NT babies, 2003	30

Summary

This report summarises data from the 2003 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 2003. While the NT Midwives' Collection contains information on both NT resident and interstate residents who gave birth in the NT, the focus of this report is NT residents who gave birth in the NT.

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 2003, there were 3573 babies born to 3529 NT mothers, 38% of whom were Indigenous. In addition there were 88 babies born to 88 interstate mothers in the NT. The sum total of births in the NT for this year was 3661 babies born to 3617 mothers.
- Women in the NT, particularly Indigenous women, had a higher total fertility rate than the national average.
- The mean age of Indigenous mothers who gave birth in 2003 was more than five years younger than that of non-Indigenous mothers. Twenty nine per cent of Indigenous mothers were less than 20 years of age.
- Indigenous mothers were more likely to give birth to their third or more baby than non-Indigenous mothers.
- Indigenous mothers were more likely to attend no antenatal visits or attend an inadequate number, and were also less likely to attend the first antenatal session within the first trimester of pregnancy.
- About half of Indigenous mothers reported smoking during pregnancy, which was around 2.5 times the proportion of non-Indigenous mothers.
- For a sizeable proportion (22%) of mothers, onset of labour was induced. The most commonly used induction methods were artificial rupture of membranes among non-Indigenous mothers (59%) and oxytocics among Indigenous mothers (58%). Prostaglandins was a less frequently used method of induction (45%)
- Sixty four per cent of mothers had a spontaneous vaginal birth. Assisted births using forceps or vacuum extraction were only used for 8% of mothers. Among the mothers who gave birth vaginally, 9% had an episiotomy and nearly half had an intact perineum.
- Caesarean sections were performed for 28% of mothers. Proportionally more Indigenous mothers had emergency caesareans than non-Indigenous mothers. Failure to progress was the main indication for emergency caesarean sections.
- Almost half of mothers (48%) stayed in hospital for three days or less.

- Eleven per cent of livebirths to NT mothers were preterm and 10% were low in birthweight. Proportionally there were twice as many preterm babies born to Indigenous mothers than non-Indigenous mothers, and this was also true for low birthweight babies.
- Almost half of the babies born alive received some form of resuscitation.
- There were 58 perinatal deaths in 2003, including 39 stillbirths and 19 neonatal deaths. The perinatal death rate of Indigenous babies was almost twice that of non-Indigenous babies.

Introduction

This report summarises data from the 2003 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 2003. The trend tables show changes over time for key demographic and obstetric indicators and birth outcomes over the period 1990–2003.

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.

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 both 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 received, maternal health, the pregnancy, labour and childbirth, and perinatal health.

In 2003 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 intranet 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 and Families has maintained a collection of deaths that occur in newborn 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 early neonatal deaths and the NT Midwives' Collection for stillbirths. Other sources of data include searches in the hospital morbidity dataset and the Australian Bureau of Statistics' death dataset.

Data quality

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 indicators 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 this report we have chosen to adhere to the AIHW default position because 'not stated' data in the NT Midwives Collection are more likely due to random and accidental data entry errors ie MCAR rather than deliberate omission on the part of the mothers. This approach differs from previous NT Mothers and Babies reports in which 'not stated' data were included in the proportional distribution for 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, and comparative analyses involving this report and former reports will need to take this methodological change into account.

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. For this reason maternal medical conditions and pregnancy related complications are not reported in this report, and procedures and complications related to labour and childbirth are reported with caution.

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 they have left the birth suite.

The denominator population used to calculate fertility rates is the 2003 NT Estimated Resident Population based on the 2001 Census of Population and Housing. Because of undercounts in the 2006 Census of Population and Housing that were revealed as a result of Australia's first ever post-enumeration survey in remote parts of Australia,¹ estimates for earlier censuses are being developed based on the 2006 Census. Once these estimates are completed they will be used for time series' analysis, which may produce different results from those presented here.

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. A further issue with data disaggregated by region for the Indigenous population is difficulties individuals have identifying one

usual place of residence.² 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.³ 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 88% congruence between hospital records of patients' usual place of residence and the place people identified as their usual place of residence when asked in an interview.⁴

Information presented in this report

The NT Midwives' Collection contains information on both NT resident 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 resident interstate and births to them were omitted from the statistical tables.

Information on Territory women who gave birth interstate are not collected in the NT Midwives' Collection and are beyond the scope of this report.

For information on labour and childbirth in the Mothers' section, 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 following section followed by a comprehensive presentation of the data in a series of tables. Most tables present 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, or 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 rest of the NT.⁵

Mothers and babies of the Northern Territory

Mothers

Place of residence

In 2003, 3617 mothers gave birth to 3661 babies in the NT. Among these babies, most were born to mothers who were resident in the NT. Only 88 mothers from interstate were recorded as giving birth in the NT. Indigenous mothers comprised 38% of all NT mothers in 2003. This is higher than the 28% share of the NT female population of child-bearing age made up of Indigenous women (Appendix C).

Most NT non-Indigenous mothers were living in urban areas (93%), which include Darwin Urban and Alice Springs Urban districts and the towns of Katherine, Tennant Creek and Nhulunbuy. In contrast, the majority of Indigenous mothers were from rural and remote areas (68%).

Fertility rate

The total fertility rate (TFR) for the NT was 2.2 livebirths per woman in 2003, which was slightly above the replacement rate of 2.1 births per woman and higher than the 1.8 births per woman for the whole of Australia in the same period.⁶ Non-Indigenous women had a lower TFR than Indigenous women (1.9 and 2.6 births per woman respectively). This pattern of higher TFRs for Indigenous women compared to non-Indigenous women was seen in both urban and rural-remote areas and in most districts, except for Darwin Rural where the TFRs of the two populations were the same. East Arnhem was the district with the highest TFR, whilst Alice Spring Rural had the lowest rate.

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 markedly higher for Indigenous women. Conversely, the fertility rate of the 35 and older age group was slightly higher for non-Indigenous mothers, despite a lower overall fertility rate.

Maternal age

The mean age of Indigenous mothers was 23.8 years, which was over five years younger than the 29.1 years' mean age of 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 most non-Indigenous mothers were 25 years or older. A high proportion (29%) of Indigenous mothers were less than 20 years of age at the time of giving birth, nearly five times higher than the 6% of non-Indigenous mothers. A more marked difference was seen among mothers aged less than 18 years with 15% of all Indigenous mothers being in this age group, compared to only 2% of non-Indigenous mothers. In contrast, non-Indigenous mothers were three times more likely to be in the oldest age group (35 years and over) than Indigenous mothers (18% and 6% respectively). This pattern of marked younger childbearing for Indigenous mothers was seen in all health districts, and did not differ for urban and rural-remote areas.

Parity

Among those women for whom parity was recorded, the majority had given birth at least once before. Nearly half (46%) had one or two previous births and 15% had three or more previous births. There were 39% of women who gave birth to their first child. First-time mothers were proportionally higher among non-Indigenous mothers (43%) than among Indigenous mothers (31%). In contrast, more Indigenous women (27%) than non-Indigenous women (9%) had three or more previous births.

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 at first birth (19.4 and 27.5 years respectively). The majority of non-Indigenous first-time mothers were aged 25 years or older (68%) whereas Indigenous first-time mothers were mostly less than 20 years of age (63%) and largely aged below 18 years of age (41%).

Antenatal care

In total, there was only a small proportion of mothers for whom information on antenatal visits was missing. Specifically, only 1% of records showed an unknown frequency of visits and 7% of records showed an unknown time of the first visit.

The World Health Organisation classifies less than four antenatal visits during a pregnancy to be insufficient. Among mothers for whom information was collected, Indigenous mothers in the NT were more likely to have no antenatal visits or less than four compared to non-Indigenous mothers (19% and 4% respectively). Among non-Indigenous mothers, those living in urban areas were less likely (4%) to have inadequate antenatal visits, than those living in rural-remote areas (11%). However, for Indigenous mothers the situation was reversed. Mothers in urban areas were slightly more likely (22%) to have inadequate antenatal visits than those in rural-remote areas (18%).

It is also regarded as important for maternal and fetal health to have the first antenatal visit within the first trimester period of pregnancy (i.e. less than thirteen weeks from conception). Compared to non-Indigenous mothers, NT 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, half (54%) of non-Indigenous mothers attended the first visit in the first trimester of pregnancy. This proportion was much less for Indigenous mothers (35%) and, among them; there was little difference between urban and rural-remote areas.

Smoking status and alcohol consumption during pregnancy

Self-reported smoking status and alcohol consumption during pregnancy are collected at the first antenatal visit and around 36 weeks' gestation. The quality of data for these data items has improved from previous years. In 2003 there was 13% of data missing at the first visit and 18% at 36 weeks for alcohol consumption, and 10% and 15% respectively for smoking status. The problem of missing data was more severe for Indigenous mothers than for non-Indigenous mothers. The prevalence of alcohol drinking and smoking reported below were calculated after removing missing data, therefore these prevalences are higher than the figures published in *Australia's Mothers and Babies 2003*,⁷ where missing data were included in the denominator. Both methods contain bias due to missing data and caution should be used when referring to them. Despite data quality issues, this information does provide an indication of levels of these harmful behaviours during pregnancy at broad population levels.

Alcohol drinking during pregnancy was much less prevalent than smoking. Alcohol drinking was slightly more prevalent among Indigenous mothers (12% at the first visit and 8% at 36 weeks) than non-Indigenous mothers (9% and 4%, respectively).

Indigenous mothers were more than twice as likely as non-Indigenous mothers to report smoking during pregnancy. At the first antenatal visit, the smoking rate was 52% for Indigenous mothers and 21% for non-Indigenous mothers. Around 36 weeks' gestation the rates dropped slightly for both Indigenous and non-Indigenous mothers (47% and 18% respectively). Among non-Indigenous mothers, those living in rural-remote areas had a higher smoking prevalence than those living in urban areas. For Indigenous mothers, there were little differences between urban and rural-remote areas but some variation among districts. Alice Spring Rural district presented notably lower smoking rates for Indigenous mothers than other districts (although smoking was still high with more than 20% of pregnant women smoking).

Birth facility

Nearly all NT births occurred in hospitals (97%), and most of these births were in public hospitals (79%). The majority of mothers who gave birth in Darwin Private Hospital, the only private hospital in the NT, were non-Indigenous (98%). A small proportion (less than 1%) of mothers, who were all non-Indigenous, had a planned homebirth. Unplanned non-hospital births, including those that happened in health centres, in transit and other places, occurred for 5% of Indigenous mothers but less than 1% of non-Indigenous mothers. Health centres were the most common place for out-of-hospital births, in particular for Indigenous mothers living in rural-remote areas.

Onset of labour and induction of labour

Spontaneous onset of labour occurred for 64% of all mothers. Labours were begun by induction for 22% of mothers, and the rest had no labour. Non-Indigenous mothers were less likely to have spontaneous onset of labour compared to Indigenous mothers (59% and 71% respectively), and therefore were more likely to have needed induction to initiate the labour or have no labour.

Artificial rupture of membranes (ARM), oxytocics and prostaglandins were among the most commonly used induction methods. There was little difference by Indigenous status in the use of ARM and oxytocics, however, prostaglandins were used more for non-Indigenous mothers than Indigenous mothers.

Presentation and method of birth

Of all NT mothers giving birth in 2003, 64% gave birth via spontaneous vaginal deliveries (SVD). Spontaneous vaginal deliveries were slightly more common among Indigenous mothers (69% and 61% respectively). Caesarean sections were performed for over a quarter of all mothers, with 12% being elective and 16% emergency. While Indigenous and non-Indigenous mothers had similar caesarean rates, over half (51%) of caesareans performed on non-Indigenous mothers were elective compared to only 30% of Indigenous mothers. The use of forceps or ventouse (vacuum suction) in childbirth was 8%, which was higher for non-Indigenous than Indigenous mothers (9% and 5% respectively). Vaginal breech accounted for less than 1% of all births.

Vertex presentation was seen in the overwhelming majority of mothers (95%) and breech presentation among 4% of mothers. All other presentations accounted for less than 1% of mothers. Caesarean section was the most common birth method for breech presentations, except for very preterm births, which were mostly delivered vaginally.

Among all hospitals in the NT, Darwin Private Hospital had the highest caesarean rate (39%) and the lowest proportion of spontaneous vaginal births (47%).

The main reason for elective caesarean sections was previous caesarean (58%) and for emergency caesareans; failure to progress during labour (45%) and fetal distress (40%). Non-Indigenous mothers were more likely than Indigenous mothers to undergo an emergency caesarean due to failure to progress (53% and 35% respectively).

Analgesia for labour and anaesthesia for childbirth

The majority of mothers who had spontaneous or induced onset of labour used analgesia (76%), and analgesia use was higher among non-Indigenous mothers than Indigenous mothers (79% and 70% respectively). Anaesthesia was applied in the majority of operative births involving forceps, ventouse or caesarean section. There was a notably lower usage of epidural or caudal as anaesthesia in Indigenous women compared to non-Indigenous women. Instead, a higher usage of spinal anaesthesia was seen among Indigenous women who had operative births.

Labour complications and perineal status

A complication of labour and birth occurred for 39% of all mothers. Complications were higher for Indigenous mothers than non-Indigenous mothers (43% and 37% respectively). Fetal distress during labour and meconium stained liquor were among the most common complications, and for Indigenous mothers, post-partum haemorrhage affected one in ten births.

Just under half (48%) of the women who gave birth vaginally had an intact perineum after childbirth. Forty one per cent had some degree of perineal laceration, with less than 2% of women having a third or fourth degree tear. Episiotomy was performed on 9% of women. There was little difference between Indigenous and non-Indigenous mothers in terms of perineal status.

Postnatal hospital stay

The majority of mothers who gave birth in hospitals also stayed in hospital following the birth. Most stays were for less than one week and only 7% of women stayed for eight or more days. The average length of stay was 3.9 days. Not surprisingly, mothers who had a caesarean had longer stays than mothers who had vaginal births.

Indigenous mothers were more likely than non-Indigenous mothers to have a hospital stay and more likely to stay for eight or more days. The average length of stay for emergency caesarean was one day longer for Indigenous than non-Indigenous mothers. The overall average length of stay for all birth methods was only slightly longer among Indigenous mothers compared to non-Indigenous mothers.

Babies

Birth status

In 2003, 3661 babies were born in the NT. Of these, 88 were born to mothers who were not NT residents. Of the 3573 babies born to NT mothers during 2003, 39 were stillbirths and 3534 were livebirths. Equal numbers of stillbirths were born to Indigenous and non-Indigenous mothers, but the stillbirth rate was higher for Indigenous births. The majority of stillbirths had extremely low birthweight of less than 1000 grams (55%) and were very preterm, being born before 28 weeks gestation (56%).

Plurality

There were 44 sets of twin births in 2003. Multiple births were less common among Indigenous mothers than non-Indigenous mothers (0.6% and 1.6% respectively).

Preterm and low birthweight livebirths

Altogether there were 374 (11%) livebirths born preterm (gestational age less than 37 weeks). Proportionally, there were twice as many preterm babies born to Indigenous mothers (16%) than to non-Indigenous mothers (8%). Nineteen of the 23 babies in the very preterm category (less than 28 weeks gestation) were born to Indigenous mothers.

Of livebirths, the proportion of low birthweight babies less than 2500 grams was 10% for the NT. Babies of Indigenous mothers (14%) were twice as likely to have a low birthweight as babies of non-Indigenous mothers (7%). The difference was also seen in very low birthweight babies (less than 1500 grams), 2.3% of babies born to Indigenous mothers were in this category compared to 0.7% of babies born to non-Indigenous mothers. Indigenous mothers who resided in the Darwin Rural and Barkly districts had the highest percentage of low birthweight babies, with nearly one fifth of babies (18%) under the normal weight. In each district, babies born to Indigenous mothers were more likely to be born with a low birthweight than babies born to non-Indigenous mothers. Katherine district had the highest proportion of low birthweight babies born to non-Indigenous mothers (11%). While this result could be due to small numbers, it is higher than the Indigenous rates for the Darwin Urban and Alice Springs Rural districts.

Among singleton livebirths, the prevalence of low birthweight in full term babies was 5% of those born to Indigenous mothers, which was over twice that of babies born to non-Indigenous mothers (2%). For those born preterm (28-36 weeks' gestation) there were proportionally more babies of at least 2500 grams born to non-Indigenous mothers than Indigenous mothers (49% and 38% respectively).

Apgar scores

An Apgar score is a clinical indicator of the condition of a baby at the time of birth. Five physical signs are assigned a score between 0 and 2, and the highest score is 10. A score of 7-10 indicates a healthy baby. By five minutes after birth there was only 2% of babies with Apgar scores below seven and there were only slight differences between Indigenous and non-Indigenous babies.

Resuscitation of livebirths

Almost half of the babies born alive received some form of resuscitation (47%), excluding tactile stimulation. Babies of Indigenous mothers (50%) were slightly more likely to receive resuscitation than those of non-Indigenous mothers (45%). Methods

such as intubation and intermittent positive pressure ventilation (IPPV) (1%) or cardiac massage and ventilation (0.3%), were not commonly used or applied on their own. The most common methods of resuscitation were suction (18%) or facial oxygen (18%).

Neonatal and perinatal mortality

Neonatal mortality refers to the death of livebirth within the first twenty-eight days of life. Perinatal mortality includes neonatal deaths and stillbirths.

In 2003 there were 58 perinatal deaths in the NT, including 39 stillbirths and 19 neonatal deaths. The stillbirth rate for Indigenous babies was over 1.5 times that of non-Indigenous babies. The Indigenous neonatal death rate was nearly three times the non-Indigenous rate. The overall Indigenous perinatal death rate was twice that of the non-Indigenous rate (23 and 12 deaths per 1000 births respectively).

Statistical tables

Mothers

Table 1. Total births in the NT, by Indigenous status and district of usual residence, 2003

District	Indigenous		non-Indigenous		All NT	
	mothers	babies	mothers	babies	mothers	babies
Darwin Urban	215	216	1496	1524	1711	1740
Darwin Rural	242	242	63	63	305	305
Katherine	222	223	167	168	389	391
East Arnhem	255	259	79	81	334	340
Barkly	87	87	37	37	124	124
Alice Springs Urban	107	109	328	333	435	442
Alice Springs Rural	205	205	23	23	228	228
Not stated	1	1	2	2	3	3
NT total	1334	1342	2195	2231	3529	3573
Interstate	60	60	28	28	88	88
Total	1394	1402	2223	2259	3617	3661

Table 2. Summary statistics, by Indigenous status, NT mothers, 2003

		Indigenous		non-Indigenous		All NT	
		Number	%	Number	%	Number	%
ALL	Total	1334		2195		3529	
MOTHERS	Maternal age						
	<20	382	28.6	125	5.7	507	14.4
	20-34	873	65.4	1680	76.5	2553	72.3
	35+	79	5.9	390	17.8	469	13.3
	Place of birth						
	Hospital	1264	94.8	2165	98.6	3429	97.2
	Non-hospital	70	5.2	30	1.4	100	2.8
	Type of labour onset						
	Spontaneous	940	70.5	1302	59.3	2242	63.5
	Induced	243	18.2	544	24.8	787	22.3
	No labour	151	11.3	349	15.9	500	14.2
	Method of birth						
	Spontaneous vaginal	918	68.8	1335	60.8	2253	63.8
	Vaginal breech	16	1.2	10	0.5	26	0.7
	Forceps	23	1.7	48	2.2	71	2.0
	Ventouse	42	3.1	158	7.2	200	5.7
	Caesarean section	335	25.1	644	29.3	979	27.7
FIRST-TIME	Total	416		943		1359	
MOTHERS	Maternal age						
	<20	260	62.5	104	11.0	364	26.8
	20-34	152	36.5	725	76.9	877	64.5
	35+	4	1.0	114	12.1	118	8.7
TOTAL FERTILITY RATE		2.6		1.9		2.2	

Table 3. Area of usual residence, by Indigenous status, NT mothers, 2003

Area	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Urban area	421	31.6	2044	93.1	2465	69.8
Rural/remote area	912	68.4	149	6.8	1061	30.1
Total stated	1333	100.0	2193	100.0	3526	100.0
Not stated	1		2		3	
Total	1334		2195		3529	

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 4. District and area of usual residence, by Indigenous status, NT mothers, 2003

District	Area	Indigenous		non-Indigenous		All NT	
		Number	%	Number	%	Number	%
Darwin Urban		215	16.1	1496	68.2	1711	48.5
Darwin Rural		242	18.2	63	2.9	305	8.7
Katherine	Urban	51	3.8	130	5.9	181	5.1
	Rural/remote	171	12.8	37	1.7	208	5.9
East Arnhem	Urban	12	0.9	58	2.6	70	2.0
	Rural/remote	243	18.2	21	1.0	264	7.5
Barkly	Urban	36	2.7	32	1.5	68	1.9
	Rural/remote	51	3.8	5	0.2	56	1.6
Alice Springs Urban		107	8.0	328	15.0	435	12.3
Alice Springs Rural		205	15.4	23	1.0	228	6.5
Total stated		1333	100.0	2193	100.0	3526	100.0
Not stated		1		2		3	
Total		1334		2195		3529	

Table 5. Total fertility rate, by Indigenous status and district of usual residence, NT mothers, 2003

District	Indigenous	non-Indigenous	All NT
Darwin Urban	2.5	1.9	2.0
Darwin Rural	2.5	2.5	2.6
Katherine	2.8	2.4	2.7
East Arnhem	3.1	2.1	3.0
Barkly	3.2	2.1	2.8
Alice Springs Urban	2.6	2.0	2.1
Alice Springs Rural	2.1	0.6	1.8
Total	2.6	1.9	2.2

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 2003.

Table 6. Total fertility rate, by Indigenous status and area of usual residence, NT mothers, 2003

Area	Indigenous	non-Indigenous	All NT
Urban area	2.6	1.9	2.1
Rural/remote area	2.6	1.8	2.4
Total	2.6	1.9	2.2

Notes:

Total fertility rate is the average number of births per woman over her life time if she experienced the age-specific rates seen in 2003.

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, 2003

Indigenous status	Age specific fertility rate (births per 1000)			TFR
	<20 years	20-34 years	35+ years	
Indigenous	134.6	115.6	15.9	2.6
non-Indigenous	29.2	98.4	23.1	1.9
All NT	71.3	103.7	21.5	2.2

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 year; 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, 2003

Maternal age (years)	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
<16	56	4.2	3	0.1	59	1.7
16-17	142	10.6	42	1.9	184	5.2
18-19	184	13.8	80	3.6	264	7.5
20-24	428	32.1	358	16.3	786	22.3
25-29	273	20.5	638	29.1	911	25.8
30-34	172	12.9	684	31.2	856	24.3
35-44	79	5.9	385	17.5	464	13.1
45+	0	0.0	5	0.2	5	0.1
Total	1334	100.0	2195	100.0	3529	100.0
Mean age (years)	23.8		29.1		27.1	

Table 9. Maternal age, by Indigenous status and district of usual residence, NT mothers, 2003

District	Maternal age			Total
	<20 years	20-34 years	35+ years	
	%	%	%	Number
Indigenous				
Darwin Urban	18.1	74.9	7.0	215
Darwin Rural	30.2	62.8	7.0	242
Katherine	27.5	66.2	6.3	222
East Arnhem	29.8	63.9	6.3	255
Barkly	34.5	57.5	8.0	87
Alice Springs Urban	18.7	76.6	4.7	107
Alice Springs Rural	40.5	57.1	2.4	205
Not stated	0.0	100.0	0.0	1
Total	28.6	65.4	5.9	1334
Non-Indigenous				
Darwin Urban	4.3	77.1	18.6	1496
Darwin Rural	12.7	73.0	14.3	63
Katherine	11.4	79.0	9.6	167
East Arnhem	5.1	72.2	22.8	79
Barkly	16.2	75.7	8.1	37
Alice Springs Urban	7.3	72.6	20.1	328
Alice Springs Rural	0.0	100.0	0.0	23
Not stated	0.0	100.0	0.0	2
Total	5.7	76.5	17.8	2195
All NT	14.4	72.3	13.3	3529

Table 10. Maternal age, by Indigenous status and area of usual residence, NT mothers, 2003

Area	Maternal age			Total
	<20 years	20-34 years	35+ years	
	%	%	%	Number
Indigenous				
Urban area	21.1	72.2	6.7	421
Rural/remote area	32.1	62.3	5.6	912
Not stated	0.0	100.0	0.0	1
Total	28.6	65.4	5.9	1334
Non-Indigenous				
Urban area	5.2	76.4	18.4	2044
Rural/remote area	12.8	77.9	9.4	149
Not stated	0.0	100.0	0.0	2
Total	5.7	76.5	17.8	2195

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, 2003

Parity	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0	416	31.2	943	43.1	1359	38.6
1-2	562	42.2	1061	48.4	1623	46.1
3+	355	26.6	186	8.5	541	15.4
Total stated	1333	100.0	2190	100.0	3523	100.0
Not stated	1		5		6	
Total	1334		2195		3529	

Note: Parity is the number of previous births a woman has had of at least 20 weeks duration.

Table 12. Maternal age, by Indigenous status, NT first-time mothers, 2003

Maternal age (years)	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
<16	55	13.2	3	0.3	58	4.3
16-17	116	27.9	38	4.0	154	11.3
18-19	89	21.4	63	6.7	152	11.2
20-24	110	26.4	195	20.7	305	22.4
25-29	28	6.7	271	28.7	299	22.0
30-34	14	3.4	259	27.5	273	20.1
35-44	4	1.0	114	12.1	118	8.7
45+	0	0.0	0	0.0	0	0.0
Total	416	100.0	943	100.0	1359	100.0
Mean age (years)	19.4		27.5		25.0	

Table 13. Antenatal visits, by Indigenous status, NT mothers, 2003

Antenatal visits	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0	22	1.7	4	0.2	26	0.7
1 - 3	228	17.4	84	3.9	312	9.0
4 - 7	327	25.0	299	13.7	626	18.0
8 & more	731	55.9	1791	82.2	2522	72.3
Total stated	1308	100.0	2178	100.0	3486	100.0
Not stated	26		17		43	
Total	1334		2195		3529	

Table 14. Antenatal visits, by district of usual residence, NT Indigenous mothers, 2003

District	Number of antenatal visits				Total Stated	Not stated	Total
	0	1 - 3	4 - 7	8+			
	%	%	%	%	Number	Number	Number
Darwin Urban	2.4	25.7	24.3	47.6	210	5	215
Darwin Rural	1.3	8.0	21.4	69.3	238	4	242
Katherine	1.8	11.0	26.0	61.2	219	3	222
East Arnhem	1.6	17.3	22.5	58.6	249	6	255
Barkly	4.6	28.7	31.0	35.6	87	0	87
Alice Springs Urban	0.0	12.3	23.6	64.2	106	1	107
Alice Springs Rural	1.0	24.7	30.3	43.9	198	7	205
Not stated	0.0	100.0	0.0	0.0	1	0	1
Total	1.7	17.4	25.0	55.9	1308	26	1334

Table 15. Antenatal visits, by Indigenous status and area of usual residence, NT mothers, 2003

Area	Number of antenatal visits				Total stated	Not stated	Total
	0	1 - 3	4 - 7	8+			
	%	%	%	%	Number	Number	Number
Indigenous							
Urban area	2.4	19.8	24.2	53.6	414	7	421
Rural/remote area	1.3	16.2	25.4	57.0	893	19	912
Not stated	0.0	100.0	0.0	0.0	1	0	1
Total	1.7	17.4	25.0	55.9	1308	26	1334
Non-Indigenous							
Urban area	0.1	3.4	13.2	83.3	2031	13	2044
Rural/remote area	0.7	10.3	21.4	67.6	145	4	149
Not stated	0.0	0.0	0.0	100.0	2	0	2
Total	0.2	3.9	13.7	82.2	2178	17	2195

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, 2003

Gestation at first antenatal visit	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
First trimester	413	35.4	1088	53.5	1501	46.9
Second trimester	525	45.0	810	39.8	1335	41.7
Third trimester	229	19.6	136	6.7	365	11.4
Total stated	1167	100.0	2034	100.0	3201	100.0
Not stated	119		140		259	
Total	1286		2174		3460	

Note: First trimester is less than 13 weeks gestation; second trimester is 13-26 weeks gestation; third trimester is 27 weeks or more gestation.

Table 17. Gestation at first antenatal visit, by district of usual residence, NT Indigenous mothers with at least one visit, 2003

District	Gestation at first antenatal visit			Total stated	Not stated	Total
	First trimester	Second trimester	Third trimester			
	%	%	%	Number	Number	Number
Darwin Urban	29.5	44.8	25.7	183	22	205
Darwin Rural	38.6	49.8	11.7	223	12	235
Katherine	36.2	46.2	17.6	199	16	215
East Arnhem	35.3	45.9	18.8	218	27	245
Barkly	35.2	38.0	26.8	71	12	83
Alice Springs Urban	45.8	40.6	13.5	96	10	106
Alice Springs Rural	31.3	42.0	26.7	176	20	196
Not stated	0.0	0.0	100.0	1	0	1
Total	35.4	45.0	19.6	1167	119	1286

Note: First trimester is less than 13 weeks gestation; second trimester is 13-26 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, 2003

Area	Gestation at first antenatal visit			Total stated	Not stated	Total
	First trimester	Second trimester	Third trimester			
	%	%	%	Number	Number	Number
Indigenous						
Urban area	35.7	44.3	19.9	361	43	404
Rural/remote area	35.3	45.3	19.4	805	76	881
Not stated	0.0	0.0	100.0	1	0	1
Total	35.4	45.0	19.6	1167	119	1286
Non-Indigenous						
Urban area	53.9	39.6	6.5	1903	125	2028
Rural/remote area	47.3	43.4	9.3	129	15	144
Not stated	50.0	50.0	0.0	2	0	2
Total	53.5	39.8	6.7	2034	140	2174

Notes:

First trimester is less than 13 weeks gestation; second trimester is 13-26 weeks gestation; third trimester is 27 weeks or more gestation.
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 19. Self-reported alcohol consumption, by Indigenous status, NT mothers, 2003

	Alcohol consumption	Indigenous		non-Indigenous		All NT	
		Number	%	Number	%	Number	%
At 1st visit	Alcohol	127	11.9	183	9.1	310	10.1
	Nil	937	88.1	1824	90.9	2761	89.9
	Total stated	1064	100.0	2007	100.0	3071	100.0
	Not stated	270		188		458	
	Total	1334		2195		3529	
At 36 weeks	Alcohol	80	8.0	79	4.2	159	5.5
	Nil	916	92.0	1814	95.8	2730	94.5
	Total stated	996	100.0	1893	100.0	2889	100.0
	Not stated	338		302		640	
	Total	1334		2195		3529	

Table 20. Self-reported smoking status, by Indigenous status, NT mothers, 2003

	Smoking status	Indigenous		non-Indigenous		All NT	
		Number	%	Number	%	Number	%
At 1st visit	Smoking	578	51.7	444	21.4	1,022	32.0
	Non-smoking	541	48.3	1628	78.6	2,169	68.0
	Total stated	1119	100.0	2072	100.0	3191	100.0
	Not stated	215		123		338	
	Total	1334		2195		3529	
At 36 weeks	Smoking	488	45.6	350	18.0	838	28.0
	Non-smoking	562	53.5	1,591	82.0	2,153	72.0
	Total stated	1050	100.0	1941	100.0	2991	100.0
	Not stated	284		254		538	
	Total	1334		2195		3529	

Table 21. Self-reported smoking status, by Indigenous status and area of usual residence, NT mothers, 2003

Area	Smoker	Non-smoker	Total stated	Not stated	Total
	%	%	Number	Number	Number
Smoking status at first visit					
Indigenous					
Urban area	53.7	46.3	380	41	421
Rural/remote area	50.7	49.3	738	174	912
Not stated	0.0	100.0	1	0	1
Total	51.7	48.3	1119	215	1334
Non-Indigenous					
Urban area	20.7	79.3	1931	113	2044
Rural/remote area	32.1	67.9	140	9	149
Not stated	0.0	100.0	1	1	2
Total	21.4	78.6	2072	123	2195
Smoking status at 36 weeks					
Indigenous					
Urban area	47.7	52.3	348	73	421
Rural/remote area	45.9	54.1	701	211	912
Not stated	0.0	100.0	1	0	1
Total	46.5	53.5	1050	284	1334
Non-Indigenous					
Urban area	17.2	82.8	1813	231	2044
Rural/remote area	29.9	70.1	127	22	149
Not stated	0.0	100.0	1	1	2
Total	18.0	82.0	1941	254	2195

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, 2003

District	Smoker	Non-smoker	Total stated	Not stated	Total
	%	%	Number	Number	Number
Smoking status at first visit					
Darwin Urban	54.8	45.2	199	16	215
Darwin Rural	58.4	41.6	202	40	242
Katherine	53.8	46.2	197	25	222
East Arnhem	57.9	42.1	209	46	255
Barkly	53.2	46.8	62	25	87
Alice Springs Urban	48.0	52.0	100	7	107
Alice Springs Rural	28.9	71.1	149	56	205
Not stated	0.0	100.0	1	0	1
Total	51.7	48.3	1119	215	1334
Smoking status at 36 weeks					
Darwin Urban	49.2	50.8	177	38	215
Darwin Rural	52.7	47.3	184	58	242
Katherine	49.5	50.5	186	36	222
East Arnhem	57.6	42.4	203	52	255
Barkly	39.3	60.7	56	31	87
Alice Springs Urban	43.9	56.1	98	9	107
Alice Springs Rural	20.7	79.3	145	60	205
Not stated	0.0	100.0	1	0	1
Total	46.5	53.5	1050	284	1334

Table 23. Actual place of giving birth, by Indigenous status, NT mothers, 2003

Actual place of giving birth	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
RDH	561	42.1	879	40.0	1440	40.8
DPH	13	1.0	695	31.7	708	20.1
GDH	124	9.3	58	2.6	182	5.2
KH	183	13.7	158	7.2	341	9.7
TCH	23	1.7	12	0.5	35	1.0
ASH	360	27.0	363	16.5	723	20.5
Health centres	51	3.8	2	0.1	53	1.5
Planned homes	0	0.0	11	0.5	11	0.3
In transit	3	0.2	3	0.1	6	0.2
Other	16	1.2	14	0.6	30	0.9
Total	1334	100.0	2195	100.0	3529	100.0

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 24. Actual place of giving birth, by district of usual residence, NT Indigenous mothers, 2003

District	Actual place of giving birth			Total
	Hospital	Health centres	Others*	
	%	%	%	Number
Darwin Urban	99.5	0.0	0.5	215
Darwin Rural	93.4	5.4	1.2	242
Katherine	93.7	5.4	0.9	222
East Arnhem	92.2	4.7	3.1	255
Barkly	92.0	5.7	2.3	87
Alice Springs Urban	98.1	1.9	0.0	107
Alice Springs Rural	95.1	3.4	1.5	205
Not stated	100.0	0.0	0.0	1
Total	94.8	3.8	1.4	1334

Note: *Others include other and in transit births. No Indigenous woman had a planned homebirth.

Table 25. Type of labour onset, by Indigenous status, NT mothers, 2003

Type of labour onset	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Spontaneous	940	70.5	1302	59.3	2242	63.5
Induced	243	18.2	544	24.8	787	22.3
No labour	151	11.3	349	15.9	500	14.2
Total	1334	100.0	2195	100.0	3529	100.0

Table 26. Methods of induction, by Indigenous status, NT mothers with induced onset of labour, 2003

Method of induction	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
ARM	127	52.3	322	59.4	449	57.2
Oxytocics	140	57.6	303	55.9	443	56.4
Prostaglandins	95	39.1	261	48.2	356	45.4
Other methods	6	2.5	5	0.9	11	1.4
Total stated	243		542		785	
Not stated	0		2		2	
Total	243		544		787	

Note: Multiple methods may be applied to one mother. ARM stands for artificial rupture of membranes.

Table 27. Birth presentation, by Indigenous status, NT mothers, 2003

Presentation at birth	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Vertex	1260	94.5	2085	95.0	3345	94.8
Breech	62	4.6	90	4.1	152	4.3
Face	0	0.0	0	0.0	0	0.0
Brow	1	0.1	3	0.1	4	0.1
Other	11	0.8	16	0.7	27	0.8
Total stated	1334	100.0	2194	100.0	3528	100.0
Not stated	0		1		1	
Total	1334		2195		3529	

Table 28. Method of birth, by Indigenous status, NT mothers, 2003

Method of birth	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Spontaneous vaginal	918	68.8	1335	60.8	2253	63.8
Vaginal breech	16	1.2	10	0.5	26	0.7
Forceps	23	1.7	48	2.2	71	2.0
Ventouse	42	3.1	158	7.2	200	5.7
Elective caesarean	101	7.6	331	15.1	432	12.2
Emergency caesarean	234	17.5	313	14.3	547	15.5
Total	1334	100.0	2195	100.0	3529	100.0

Table 29. Method of birth, by type of labour onset, NT mothers, 2003

Type of labour onset	Method of birth				Total
	Spontaneous vaginal	Assisted vaginal	Elective caesarean	Emergency caesarean	Number
	%	%	%	%	
Spontaneous	77.4	9.1	0.4	13.1	2242
Induced	65.8	11.7	0.0	22.5	787
No labour	0.0	0.0	84.6	15.4	500
Total	63.8	8.4	12.2	15.5	3529

Note: Assisted vaginal births include vaginal breech, forceps and ventouse.

Table 30. Method of birth, by gestational age, NT mothers with breech presentation, 2003

Method of birth	Gestational age (weeks)						Total	
	< 28		28 - 36		37 +		Number	%
	Number	%	Number	%	Number	%		
Spontaneous vaginal	1	5.6	1	2.9	1	1.0	3	2.0
Vaginal breech	16	88.9	5	14.3	5	5.1	26	17.1
Elective caesarean	0	0.0	6	17.1	72	72.7	78	51.3
Emergency caesarean	1	5.6	23	65.7	21	21.2	45	29.6
Total	18	100.0	35	100.0	99	100.0	152	100.0

Table 31. Method of birth, by hospital, NT mothers giving birth in hospital, 2003

Hospital	Method of birth						Total
	Spontaneous vaginal	Vaginal breech	Forceps	Ventouse	Elective caesarean	Emergency caesarean	Number
	%	%	%	%	%	%	
RDH	61.0	0.9	1.4	6.5	10.2	20.0	1440
DPH	46.9	0.3	3.8	10.3	24.4	14.3	708
GDH	78.0	0.0	0.0	2.2	9.3	10.4	182
KH	72.4	0.3	1.5	2.3	7.9	15.5	341
TCH	91.4	5.7	2.9	0.0	0.0	0.0	35
ASH	72.8	0.4	2.5	3.0	9.4	11.9	723
All hospitals	62.9	0.6	2.1	5.8	12.6	16.0	3429

Notes:

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, 2003

Type of indication	Indigenous		Non-Indigenous		All NT	
	Number	%	Number	%	Number	%
<i>Elective caesarean</i>						
Previous caesarean [†]	72	72.0	169	53.1	241	57.7
Malpresentation [†]	18	18.0	66	20.8	84	20.1
Other [*]	12	12.0	89	28.0	101	24.2
Total stated	100		318		418	
Not stated	1		13		14	
Total	101		331		432	
<i>Emergency caesarean</i>						
Failure to progress [†]	76	34.7	159	53.2	235	45.4
Fetal distress [†]	97	44.3	108	36.1	205	39.6
Malpresentation [†]	29	13.2	25	8.4	54	10.4
Ante-partum haemorrhage [†]	9	4.1	13	4.3	22	4.2
Cord prolapse [†]	4	1.8	1	0.3	5	1.0
Other ^{**}	35	16.0	28	9.4	63	12.2
Total stated	219		299		518	
Not stated	15		14		29	
Total	234		313		547	

Notes:

[†] Mothers may have more than one indication for caesarean section.^{*} Other indications for elective caesarean sections exclude previous caesarean and malpresentation.^{**} Other indications for emergency caesarean sections exclude failure to progress, fetal distress, malpresentation, ante-partum haemorrhage and cord prolapse.**Table 33. Method of analgesia, by Indigenous status, NT mothers with spontaneous or induced onset of labour, 2003**

Analgesia: highest rank of method used	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
None	344	29.5	385	21.0	729	24.3
Nitrous oxide	377	32.3	527	28.8	904	30.1
Narcotics	282	24.2	419	22.9	701	23.4
Epidural/Caudal	88	7.5	378	20.6	466	15.5
Spinal	2	0.2	6	0.3	8	0.3
Other	74	6.3	117	6.4	191	6.4
Total stated	1167	100.0	1832	100.0	2999	100.0
Not stated	16		14		30	
Total	1183		1846		3029	

Table 34. Method of anaesthesia, by Indigenous status, NT mothers having operative birth, 2003

Anaesthesia: highest rank of method used	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
None	9	2.3	29	3.5	38	3.1
Local	31	7.8	31	3.7	62	5.0
Pudendal	3	0.8	13	1.6	16	1.3
Epidural/Caudal	51	12.8	273	32.7	324	26.3
Spinal	254	63.7	286	34.3	540	43.8
General	46	11.5	93	11.2	139	11.3
Other	5	1.3	109	13.1	114	9.2
Total stated	399	100.0	834	100.0	1233	100.0
Not stated	1		16		17	
Total	400		850		1250	

Note: Operative birth methods include forceps, ventouse and caesarean section.

Table 35. Complications due to pregnancy and/or childbirth, by Indigenous status, NT mothers, 2003

Type of complication	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Pregnancy						
Pre-eclampsia*	66	4.9	87	4.0	153	4.3
Childbirth						
Cord prolapse†	4	0.3	2	0.1	6	0.2
Fetal distress	169	12.7	254	11.6	423	12.0
Manual removal of placenta†	29	2.2	33	1.5	62	1.8
Meconium stained liquor	157	11.8	215	9.8	372	10.5
Obstructed labour	64	4.8	141	6.4	205	5.8
Post-partum haemorrhage†	137	10.3	116	5.3	253	7.2
Other**	166	12.4	224	10.2	390	11.1
Any complication	577	43.3	814	37.1	1391	39.4
Total births	1334	100.0	2195	100.0	3529	100.0

Notes:

(1) Mothers may have more than one complication.

† Validated data items.

* Pre-eclampsia includes hypertension in pregnancy.

** Other complications include ante-partum haemorrhage as well as other unclassified complications.

Table 36. State of the perineum, by Indigenous status, NT mothers having vaginal birth, 2003

State of the perineum	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Intact	484	49.9	713	46.7	1197	48.0
1st degree tear	194	20.0	333	21.8	527	21.1
2nd degree tear	177	18.3	289	18.9	466	18.7
3rd-4th degree tear	19	2.0	23	1.5	42	1.7
Episiotomy	80	8.3	155	10.2	235	9.4
Combined episiotomy & tear	15	1.5	13	0.9	28	1.1
Total stated	969	100.0	1526	100.0	2495	100.0
Not stated	30		25		55	
Total	999		1551		2550	

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

Table 37. Length of postnatal hospital stay, by Indigenous status, NT mothers giving birth in hospital, 2003

Length of postnatal stay (days)	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0	26	2.1	83	3.8	109	3.2
1 - 3	571	45.2	971	44.8	1542	45.0
4 - 7	553	43.8	990	45.7	1543	45.0
8 & more	114	9.0	121	5.6	235	6.9
Total	1264	100.0	2165	100.0	3429	100.0

Table 38. Average length of postnatal hospital stay, by Indigenous status and method of birth, NT mothers giving birth in hospital, 2003

Method of birth	Indigenous	non-Indigenous	All NT
	Average length (days) of postnatal stay		
Spontaneous vaginal	3.4	3.1	3.2
Assisted vaginal	4.1	4.4	4.3
Elective caesarean	5.2	5.0	5.0
Emergency caesarean	6.4	5.4	5.8
Total	4.1	3.8	3.9

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, 2003

	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
BIRTHS TO NT RESIDENTS						
Birth status						
Livebirths	1323	98.6	2211	99.1	3534	98.9
Stillbirths	19	1.4	20	0.9	39	1.1
Baby's sex						
Males	711	53.0	1160	52.0	1871	52.4
Females	631	47.0	1070	48.0	1701	47.6
Indeterminate	0	0.0	1	0.0	1	0.0
Plurality						
Singletons	1326	98.8	2159	96.8	3485	97.5
Twins	16	1.2	72	3.2	88	2.5
Total	1342		2231		3573	
BIRTHS TO NON-NT RESIDENTS						
Birth status						
Livebirths	59	98.3	27	96.4	86	97.7
Stillbirths	1	1.7	1	3.6	2	2.3
Baby's sex						
Males	27	45.0	9	32.1	36	40.9
Females	33	55.0	19	67.9	52	59.1
Indeterminate	0	0.0	0	0.0	0	0.0
Plurality						
Singletons	60	100.0	28	100.0	88	100.0
Twins	0	0.0	0	0.0	0	0.0
Total	60		28		88	
ALL BIRTHS						
Birth status						
Livebirths	1382	98.6	2238	99.1	3620	98.9
Stillbirths	20	1.4	21	0.9	41	1.1
Baby's sex						
Males	738	52.6	1169	51.7	1907	52.1
Females	664	47.4	1089	48.2	1753	47.9
Indeterminate	0	0.0	1	0.0	1	0.0
Plurality						
Singletons	1386	98.9	2187	96.8	3573	97.6
Twins	16	1.1	72	3.2	88	2.4
Total	1402		2259		3661	

Table 40. Area of mother's usual residence, by maternal Indigenous status, NT babies, 2003

Area	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Urban area	424	31.6	2080	93.3	2504	70.1
Rural/remote area	917	68.4	149	6.7	1066	29.9
Total stated	1341	100.0	2229	100.0	3570	100.0
Not stated	1		2		3	
Total	1342		2231		3573	

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 41. District and area of mother's usual residence, by maternal Indigenous status, NT babies, 2003

District	Area	Indigenous		non-Indigenous		All NT	
		Number	%	Number	%	Number	%
Darwin Urban		216	16.1	1524	68.4	1740	48.7
Darwin Rural		242	18.0	63	2.8	305	8.5
Katherine	Urban	51	3.8	131	5.9	182	5.1
	Rural/remote	172	12.8	37	1.7	209	5.9
East Arnhem	Urban	12	0.9	60	2.7	72	2.0
	Rural/remote	247	18.4	21	0.9	268	7.5
Barkly	Urban	36	2.7	32	1.4	68	1.9
	Rural/remote	51	3.8	5	0.2	56	1.6
Alice Springs Urban		109	8.1	333	14.9	442	12.4
Alice Springs Rural		205	15.3	23	1.0	228	6.4
Total stated		1341	100.0	2229	100.0	3570	100.0
Not stated		1		2		3	
Total		1342		2231		3573	

Note: Urban areas include Darwin Urban and Alice Springs Urban districts and towns of Katherine, Tennant Creek and Nhulunbuy; rural and remote areas are the rest of the NT except for urban areas.

Table 42. Gestational age, by maternal Indigenous status and birth status, NT babies, 2003

Gestational age (weeks)	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Stillbirths						
<28	10	52.6	12	60.0	22	56.4
28 - 36	4	21.1	3	15.0	7	17.9
37 - 41	5	26.3	5	25.0	10	25.6
42+	0	0.0	0	0.0	0	0.0
Total	19	100.0	20	100.0	39	100.0
Livebirths						
<28	19	1.4	4	0.2	23	0.7
28 - 36	186	14.1	165	7.5	351	9.9
37 - 41	1104	83.4	2027	91.7	3131	88.6
42+	14	1.1	15	0.7	29	0.8
Total	1323	100.0	2211	100.0	3534	100.0
All births						
<28	29	2.2	16	0.7	45	1.3
28 - 36	190	14.2	168	7.5	358	10.0
37 - 41	1109	82.6	2032	91.1	3141	87.9
42+	14	1.0	15	0.7	29	0.8
Total	1342	100.0	2231	100.0	3573	100.0

Table 43. Birthweight, by maternal Indigenous status and birth status, NT babies, 2003

Birthweight (g)	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
Stillbirths						
<1000	9	50.0	12	60.0	21	55.3
1000 - 1499	2	11.1	1	5.0	3	7.9
1500 - 2499	2	11.1	3	15.0	5	13.2
2500+	5	27.8	4	20.0	9	23.7
Total stated	18	100.0	20	100.0	38	100.0
Not stated	1		0		1	
Total	19		20		39	
Mean birthweight (g)	1618		1282		1446	
Livebirths						
<1000	16	1.2	5	0.2	21	0.6
1000 - 1499	15	1.1	10	0.5	25	0.7
1500 - 2499	160	12.1	137	6.2	297	8.4
2500+	1132	85.6	2059	93.1	3191	90.3
Total	1323	100.0	2211	100.0	3534	100.0
Mean birthweight (g)	3087		3342		3246	
All births						
<1000	25	1.9	17	0.8	42	1.2
1000 - 1499	17	1.3	11	0.5	28	0.8
1500 - 2499	162	12.1	140	6.3	302	8.5
2500+	1137	84.8	2063	92.5	3200	89.6
Total stated	1341	100.0	2231	100.0	3572	100.0
Not stated	1		0		1	
Total	1342		2231		3573	
Mean birthweight (g)	3067		3324		3228	

Table 44. Gestational age, by maternal Indigenous status and district of mother's usual residence, NT livebirths, 2003

District	Gestational age (weeks)			Total
	<37	37-41	42+	
	%	%	%	Number
Indigenous				
Darwin Urban	10.2	88.4	1.4	215
Darwin Rural	17.0	82.6	0.4	241
Katherine	16.4	82.7	0.9	220
East Arnhem	18.8	80.5	0.8	256
Barkly	16.5	82.4	1.2	85
Alice Springs Urban	11.4	88.6	0.0	105
Alice Springs Rural	15.5	82.0	2.5	200
Not stated	100.0	0.0	0.0	1
Total	15.5	83.4	1.1	1323
non-Indigenous				
Darwin Urban	8.3	91.1	0.7	1509
Darwin Rural	3.2	96.8	0.0	63
Katherine	9.5	90.5	0.0	168
East Arnhem	6.3	92.5	1.3	80
Barkly	2.8	97.2	0.0	36
Alice Springs Urban	5.7	93.1	1.2	331
Alice Springs Rural	4.5	95.5	0.0	22
Not stated	0.0	100.0	0.0	2
Total	7.6	91.7	0.7	2211

Table 45. Gestational age, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2003

Area	Gestational age (weeks)			Total
	<37	37-41	42+	
	%	%	%	Number
Indigenous				
Urban area	11.3	88.0	0.7	417
Rural/remote area	17.3	81.4	1.2	905
Not stated	100.0	0.0	0.0	1
Total	15.5	83.4	1.1	1323
non-Indigenous				
Urban area	7.7	91.6	0.7	2062
Rural/remote area	6.8	93.2	0.0	147
Not stated	0.0	100.0	0.0	2
Total	7.6	91.7	0.7	2211

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, 2003

District	Birthweight (g)				Total	Mean
	<1500	1500-2499	2500-3999	4000+		birthweight
	%	%	%	%	Number	(g)
Indigenous						
Darwin Urban	2.3	7.4	83.3	7.0	215	3183
Darwin Rural	5.0	13.3	77.2	4.6	241	2962
Katherine	2.3	14.1	77.7	5.9	220	3067
East Arnhem	2.3	13.3	80.1	4.3	256	2995
Barkly	0.0	17.6	75.3	7.1	85	3076
Alice Springs Urban	1.0	12.4	73.3	13.3	105	3287
Alice Springs Rural	1.0	9.5	82.5	7.0	200	3175
Not stated	0.0	0.0	100.0	0.0	1	2980
Total	2.3	12.1	79.2	6.3	1323	3087
non-Indigenous						
Darwin Urban	0.8	6.8	82.1	10.3	1509	3329
Darwin Rural	0.0	4.8	87.3	7.9	63	3287
Katherine	0.6	10.1	78.0	11.3	168	3252
East Arnhem	1.3	3.8	81.3	13.8	80	3407
Barkly	0.0	0.0	83.3	16.7	36	3521
Alice Springs Urban	0.3	3.6	83.4	12.7	331	3410
Alice Springs Rural	0.0	0.0	86.4	13.6	22	3575
Not stated	0.0	0.0	100.0	0.0	2	3200
Total	0.7	6.2	82.2	10.9	2211	3342

Table 47. Birthweight, by maternal Indigenous status and area of mother's usual residence, NT livebirths, 2003

Indigenous, 2000

Area	Birthweight (g)				Total	Mean
	<1500	1500-2499	2500-3999	4000+		birthweight
	%	%	%	%	Number	(g)
Indigenous						
Urban area	1.7	10.1	78.2	10.1	417	3213
Rural/remote area	2.7	13.0	79.7	4.6	905	3029
Not stated	0.0	0.0	100.0	0.0	1	2980
Total	2.3	12.1	79.2	6.3	1323	3087
non-Indigenous						
Urban area	0.7	6.2	82.0	11.2	2062	3345
Rural/remote area	0.0	6.8	85.0	8.2	147	3310
Not stated	0.0	0.0	100.0	0.0	2	3200
Total	0.7	6.2	82.2	10.9	2211	3342

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, 2003

Gestational age (weeks)	Birthweight (g)				Total	Mean
	<1500	1500-2499	2500-3999	4000+		<i>birthweight</i>
	%	%	%	%	Number	(g)
Indigenous						
<28	94.7	5.3	0.0	0.0	19	852
28 - 36	6.7	54.5	38.2	0.6	178	2360
37 - 41	0.1	4.9	87.6	7.4	1098	3244
42+	0.0	0.0	85.7	14.3	14	3769
Total	2.4	11.6	79.6	6.4	1309	3095
non-Indigenous						
<28	100.0	0.0	0.0	0.0	4	601
28 - 36	6.9	43.1	49.2	0.8	130	2467
37 - 41	0.1	2.2	85.9	11.8	1993	3431
42+	0.0	0.0	73.3	26.7	15	3717
Total	0.7	4.7	83.4	11.3	2142	3369

Table 49. Apgar scores at 5 minutes, by maternal Indigenous status, NT livebirths, 2003

Apgar score at 5 minutes	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
0 - 3	8	0.6	5	0.2	13	0.4
4 - 6	27	2.1	31	1.4	58	1.6
7 - 10	1279	97.3	2174	98.4	3453	98.0
Total stated	1314	100.0	2210	100.0	3524	100.0
Not stated	9		1		10	
Total	1323		2211		3534	

Table 50. Methods of resuscitation, by maternal Indigenous status, NT livebirths, 2003

Resuscitation: highest rank of method used	Indigenous		non-Indigenous		All NT	
	Number	%	Number	%	Number	%
None	649	50.1	1211	55.4	1860	53.4
Suction	202	15.6	428	19.6	630	18.1
Oxygen therapy	278	21.5	334	15.3	612	17.6
IPPR through bag & mask	127	9.8	174	8.0	301	8.6
Endotracheal intubation & IPPV	27	2.1	13	0.6	40	1.1
ECM & ventilation	8	0.6	4	0.2	12	0.3
Other	4	0.3	21	1.0	25	0.7
Total stated	1295	100.0	2185	100.0	3480	100.0
Not stated	28		26		54	
Total	1323		2211		3534	

Note: Resuscitation methods exclude tactile stimulation. IPPR stands for intermittent positive pressure resuscitation; IPPV stands for intermittent positive pressure ventilation; ECM stands for external cardiac massage.

Table 51. Numbers and rates of stillbirth, neonatal death and perinatal death, by Indigenous status, NT babies, 2003

	Indigenous		non-Indigenous		All NT	
	Number	Rate	Number	Rate	Number	Rate
Stillbirths	19	14.2	20	9.0	39	10.9
Neonatal deaths	12	9.1	7	3.2	19	5.4
Perinatal deaths	31	23.1	27	12.1	58	16.2

Notes:

Rate of stillbirth or perinatal death is the number of deaths per 1000 total births; rate of neonatal death is the number of deaths per 1000 livebirths.

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.

References

1. Australian Bureau of Statistics. *Census of Population and Housing – Details of Undercount*. Cat. No. 2940.0. Australian Bureau of Statistics: Canberra, 2007.
2. Morphy F (editor). *Agency, contingency and census process. Observations of the 2006 Indigenous Enumeration Strategy in remote Aboriginal Australia*. CAEPR Research Monograph No. 28. Australian National University E Press: Canberra, 2007.
3. Congress Alukura and Nganampa Health Council Inc. *Minymaku Katju Tjukurpa. Women's Business Manual*. 4th Edition. Central Australian Remote Practitioners' Association (CARPA): Alice Springs, 2008.
4. Tew K, You J, Pircher S. *Validation of hospital patient demographic data: Northern Territory Hospitals, 2008*. Department of Health and Families: Darwin, 2008.
5. Chondur R, Guthridge S. *Population data in the Northern Territory*. Department of Health and Community Services: Darwin, 2006.
6. Australian Bureau of Statistics. *Births, Australia, 2003*. Cat. No. 3301.0. Australian Bureau of Statistics: Canberra, 2004.
7. Laws PJ, Sullivan EA. *Australia's mothers and babies 2003. Perinatal Statistics Series No. 16. AIHW Cat. No. PER 29*. AIHW National Perinatal Statistics Unit: Sydney, 2005.
8. Laws PJ, Abeywardana S, Walker J, Sullivan EA. *Australia's mothers and babies 2005. Perinatal Statistics Series no. 20. AIHW cat. no. PER 40*. AIHW National Perinatal Statistics Unit: Sydney, 2007.

Glossary

Note: for a more comprehensive glossary please see *Australian's Mothers and Babies 2005*.⁸

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. Between 0 and 2 points are 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 live born) 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: injection of anaesthetic agent into the epidural space of the spinal cord.

Episiotomy: an incision of the perineum and vagina to enlarge the vulval orifice. An incision of the perineum and vagina that enlarges the introitus and lessens the curve of the birth canal.

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 to less than 42 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 hospital stay: number of days between admission date (during the admission resulting in a birth) and separation date (from the hospital where birth occurred). The interval is calculated by subtracting the date of admission from the date of separation.

Neonatal death: death of a live born 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 of at least 20 weeks gestation or at least 400 grams birthweight.

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. 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 foetus at birth.

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 foetus 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.

Appendices

Appendix A. Hospital profiles

The profile table of each hospital includes all births that occurred in that hospital in 2003, of mothers who were either NT residents or from interstate.

Royal Darwin Hospital

	Indigenous		non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	570		894		1464	
Maternal age						
<20 years	150	26.3	67	7.5	217	14.8
20-34 years	378	66.3	704	78.7	1082	73.9
35+ years	42	7.4	123	13.8	165	11.3
Onset of labour						
Spontaneous onset	382	67.0	590	66.0	972	66.4
Induced labour	108	18.9	196	21.9	304	20.8
No labour	80	14.0	108	12.1	188	12.8
Method of birth						
Spontaneous vaginal birth	345	60.5	549	61.4	894	61.1
Vaginal breech birth	6	1.1	7	0.8	13	0.9
Forceps birth	9	1.6	11	1.2	20	1.4
Ventouse birth	27	4.7	68	7.6	95	6.5
Elective caesarean	52	9.1	96	10.7	148	10.1
Emergency caesarean	131	23.0	163	18.2	294	20.1
Labour and childbirth complications						
Cord prolapse	2	0.4	1	0.1	3	0.2
Fetal distress	107	18.8	162	18.1	269	18.4
Manual removal of placenta	7	1.2	10	1.1	17	1.2
Meconium stained liquor	79	13.9	137	15.3	216	14.8
Obstructed labour	37	6.5	70	7.8	107	7.3
Post-partum haemorrhage	58	10.2	56	6.3	114	7.8
Pre-eclampsia	32	5.6	38	4.3	70	4.8
Others	82	14.4	106	11.9	188	12.8
Any complication	300	52.6	420	47.0	720	49.2
MOTHERS HAVING VAGINAL BIRTH	387		635		1022	
Perineum status						
Intact	191	49.9	312	49.8	503	49.9
1st degree tear	48	12.5	90	14.4	138	13.7
2nd degree tear	67	17.5	129	20.6	196	19.4
3rd-4th degree tear	9	2.3	12	1.9	21	2.1
Episiotomy	58	15.1	73	11.7	131	13.0
Combined episiotomy & tear	10	2.6	10	1.6	20	2.0
BABIES	574		911		1485	
Gestational age						
<28 weeks	15	2.6	9	1.0	24	1.6
28-36 weeks	98	17.1	71	7.8	169	11.4
37+ weeks	461	80.3	831	91.2	1292	87.0
Birthweight						
<1500g	26	4.5	18	2.0	44	3.0
1500-2499g	79	13.8	74	8.1	153	10.3
2500+g	469	81.7	819	89.9	1288	86.7
Birth status						
Livebirths	569	99.1	900	98.8	1469	98.9
Stillbirths	5	0.9	11	1.2	16	1.1

Notes:

This table includes all births that occurred in RDH in 2003. An additional 31 births occurred before arrival at hospital.

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

Darwin Private Hospital

	Indigenous		non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	13		707		720	
Maternal age						
<20 years	1	7.7	10	1.4	11	1.5
20-34 years	7	53.8	531	75.1	538	74.7
35+ years	5	38.5	166	23.5	171	23.8
Onset of labour						
Spontaneous onset	5	38.5	303	42.9	308	42.8
Induced labour	3	23.1	231	32.7	234	32.5
No labour	5	38.5	173	24.5	178	24.7
Method of birth						
Spontaneous vaginal birth	8	61.5	329	46.5	337	46.8
Vaginal breech birth	0	0.0	2	0.3	2	0.3
Forceps birth	0	0.0	29	4.1	29	4.0
Ventouse birth	0	0.0	73	10.3	73	10.1
Elective caesarean	5	38.5	171	24.2	176	24.4
Emergency caesarean	0	0.0	103	14.6	103	14.3
Labour and childbirth complications						
Cord prolapse	0	0.0	1	0.1	1	0.1
Fetal distress	0	0.0	71	10.0	71	9.9
Manual removal of placenta	0	0.0	8	1.1	8	1.1
Meconium stained liquor	0	0.0	44	6.2	44	6.1
Obstructed labour	0	0.0	47	6.6	47	6.5
Post-partum haemorrhage	0	0.0	19	2.7	19	2.6
Pre-eclampsia	0	0.0	28	4.0	28	3.9
Others	0	0.0	62	8.8	62	8.6
Any complication	0	0.0	221	31.3	221	30.7
MOTHERS HAVING VAGINAL BIRTH	8		433		441	
Perineum status						
Intact	3	37.5	187	43.2	190	43.1
1st degree tear	3	37.5	127	29.3	130	29.5
2nd degree tear	2	25.0	50	11.5	52	11.8
3rd-4th degree tear	0	0.0	3	0.7	3	0.7
Episiotomy	0	0.0	65	15.0	65	14.7
Combined episiotomy & tear	0	0.0	1	0.2	1	0.2
BABIES	13		720		733	
Gestational age						
<28 weeks	0	0.0	3	0.4	3	0.4
28-36 weeks	0	0.0	61	8.5	61	8.3
37+ weeks	13	100.0	656	91.1	669	91.3
Birthweight						
<1500g	0	0.0	5	0.7	5	0.7
1500-2499g	0	0.0	38	5.3	38	5.2
2500+g	13	100.0	677	94.0	690	94.1
Birth status						
Livebirths	13	100.0	715	99.3	728	99.3
Stillbirths	0	0.0	5	0.7	5	0.7

Notes:

This table includes all births occurred in DPH in 2003. An additional 3 births occurred before arrival at hospital.

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	125		58		183	
Maternal age						
<20 years	36	28.8	2	3.4	38	20.8
20-34 years	85	68.0	42	72.4	127	69.4
35+ years	4	3.2	14	24.1	18	9.8
Onset of labour						
Spontaneous onset	91	72.8	38	65.5	129	70.5
Induced labour	22	17.6	12	20.7	34	18.6
No labour	12	9.6	8	13.8	20	10.9
Method of birth						
Spontaneous vaginal birth	97	77.6	46	79.3	143	78.1
Vaginal breech birth	0	0.0	0	0.0	0	0.0
Forceps birth	0	0.0	0	0.0	0	0.0
Ventouse birth	2	1.6	2	3.4	4	2.2
Elective caesarean	9	7.2	8	13.8	17	9.3
Emergency caesarean	17	13.6	2	3.4	19	10.4
Labour and childbirth complications						
Cord prolapse	0	0.0	0	0.0	0	0.0
Fetal distress	5	4.0	2	3.4	7	3.8
Manual removal of placenta	2	1.6	3	5.2	5	2.7
Meconium stained liquor	15	12.0	4	6.9	19	10.4
Obstructed labour	6	4.8	1	1.7	7	3.8
Post-partum haemorrhage	10	8.0	8	13.8	18	9.8
Pre-eclampsia	7	5.6	1	1.7	8	4.4
Others	8	6.4	10	17.2	18	9.8
Any complication	40	32.0	22	37.9	62	33.9
MOTHERS HAVING VAGINAL BIRTH	99		48		147	
Perineum status						
Intact	43	46.7	17	37.8	60	43.8
1st degree tear	30	32.6	15	33.3	45	32.8
2nd degree tear	15	16.3	10	22.2	25	18.2
3rd-4th degree tear	1	1.1	1	2.2	2	1.5
Episiotomy	2	2.2	2	4.4	4	2.9
Combined episiotomy & tear	1	1.1	0	0.0	1	0.7
BABIES	125		58		183	
Gestational age						
<28 weeks	1	0.8	0	0.0	1	0.5
28-36 weeks	9	7.2	1	1.7	10	5.5
37+ weeks	115	92.0	57	98.3	172	94.0
Birthweight						
<1500g	1	0.8	0	0.0	1	0.5
1500-2499g	8	6.4	0	0.0	8	4.4
2500+g	116	92.8	58	100.0	174	95.1
Birth status						
Livebirths	125	100.0	58	100.0	183	100.0
Stillbirths	0	0.0	0	0.0	0	0.0

Notes:

This table includes all births occurred in GDH in 2003. An additional 16 births occurred before arrival at hospital.

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	184		158		342	
Maternal age						
<20 years	53	28.8	16	10.1	69	20.2
20-34 years	120	65.2	124	78.5	244	71.3
35+ years	11	6.0	18	11.4	29	8.5
Onset of labour						
Spontaneous onset	139	75.5	115	72.8	254	74.3
Induced labour	30	16.3	25	15.8	55	16.1
No labour	15	8.2	18	11.4	33	9.6
Method of birth						
Spontaneous vaginal birth	136	73.9	112	70.9	248	72.5
Vaginal breech birth	0	0.0	1	0.6	1	0.3
Forceps birth	3	1.6	2	1.3	5	1.5
Ventouse birth	3	1.6	5	3.2	8	2.3
Elective caesarean	11	6.0	16	10.1	27	7.9
Emergency caesarean	31	16.8	22	13.9	53	15.5
Labour and childbirth complications						
Cord prolapse	2	1.1	0	0.0	2	0.6
Fetal distress	16	8.7	7	4.4	23	6.7
Manual removal of placenta	5	2.7	2	1.3	7	2.0
Meconium stained liquor	22	12.0	17	10.8	39	11.4
Obstructed labour	10	5.4	9	5.7	19	5.6
Post-partum haemorrhage	23	12.5	8	5.1	31	9.1
Pre-eclampsia	9	4.9	12	7.6	21	6.1
Others	23	12.5	18	11.4	41	12.0
Any complication	77	41.8	58	36.7	135	39.5
MOTHERS HAVING VAGINAL BIRTH	142		120		262	
Perineum status						
Intact	70	50.7	61	52.1	131	51.4
1st degree tear	32	23.2	27	23.1	59	23.1
2nd degree tear	26	18.8	24	20.5	50	19.6
3rd-4th degree tear	0	0.0	3	2.6	3	1.2
Episiotomy	8	5.8	2	1.7	10	3.9
Combined episiotomy & tear	2	1.4	0	0.0	2	0.8
BABIES	185		159		344	
Gestational age						
<28 weeks	0	0.0	0	0.0	0	0.0
28-36 weeks	14	7.6	11	6.9	25	7.3
37+ weeks	171	92.4	148	93.1	319	92.7
Birthweight						
<1500g	0	0.0	0	0.0	0	0.0
1500-2499g	15	8.1	13	8.2	28	8.1
2500+g	170	91.9	146	91.8	316	91.9
Birth status						
Livebirths	183	98.9	159	100.0	342	99.4
Stillbirths	2	1.1	0	0.0	2	0.6

Notes:

This table includes all births occurred in KH in 2003. An additional 15 births occurred before arrival at hospital.

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

Tennant Creek Hospital

	Indigenous		non-Indigenous		All	
	Number	%	Number	%	Number	%
MOTHERS	23		12		35	
Maternal age						
<20 years	7	30.4	2	16.7	9	25.7
20-34 years	15	65.2	9	75.0	24	68.6
35+ years	1	4.3	1	8.3	2	5.7
Onset of labour						
Spontaneous onset	23	100.0	12	100.0	35	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	20	87.0	12	100.0	32	91.4
Vaginal breech birth	2	8.7	0	0.0	2	5.7
Forceps birth	1	4.3	0	0.0	1	2.9
Ventouse birth	0	0.0	0	0.0	0	0.0
Elective caesarean	0	0.0	0	0.0	0	0.0
Emergency caesarean	0	0.0	0	0.0	0	0.0
Labour and childbirth complications						
Cord prolapse	0	0.0	0	0.0	0	0.0
Fetal distress	3	13.0	0	0.0	3	8.6
Manual removal of placenta	1	4.3	0	0.0	1	2.9
Meconium stained liquor	1	4.3	0	0.0	1	2.9
Obstructed labour	0	0.0	0	0.0	0	0.0
Post-partum haemorrhage	0	0.0	1	8.3	1	2.9
Pre-eclampsia	0	0.0	0	0.0	0	0.0
Others	1	4.3	1	8.3	2	5.7
Any complication	6	26.1	2	16.7	8	22.9
MOTHERS HAVING VAGINAL BIRTH	23		12		35	
Perineum status						
Intact	6	30.0	7	63.6	13	41.9
1st degree tear	10	50.0	4	36.4	14	45.2
2nd degree tear	2	10.0	0	0.0	2	6.5
3rd-4th degree tear	0	0.0	0	0.0	0	0.0
Episiotomy	2	10.0	0	0.0	2	6.5
Combined episiotomy & tear	0	0.0	0	0.0	0	0.0
BABIES	23		12		35	
Gestational age						
<28 weeks	0	0.0	0	0.0	0	0.0
28-36 weeks	1	4.3	0	0.0	1	2.9
37+ weeks	22	95.7	12	100.0	34	97.1
Birthweight						
<1500g	0	0.0	0	0.0	0	0.0
1500-2499g	1	4.3	0	0.0	1	2.9
2500+g	22	95.7	12	100.0	34	97.1
Birth status						
Livebirths	23	100.0	12	100.0	35	100.0
Stillbirths	0	0.0	0	0.0	0	0.0

Notes:

This table includes all births occurred in TCH in 2003. An additional 5 births occurred before arrival at hospital.

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	404		364		768	
Maternal age						
<20 years	135	33.4	25	6.9	160	20.8
20-34 years	252	62.4	273	75.0	525	68.4
35+ years	17	4.2	66	18.1	83	10.8
Onset of labour						
Spontaneous onset	265	65.6	234	64.3	499	65.0
Induced labour	91	22.5	85	23.4	176	22.9
No labour	48	11.9	45	12.4	93	12.1
Method of birth						
Spontaneous vaginal birth	279	69.1	273	75.0	552	71.9
Vaginal breech birth	3	0.7	0	0.0	3	0.4
Forceps birth	12	3.0	8	2.2	20	2.6
Ventouse birth	14	3.5	11	3.0	25	3.3
Elective caesarean	31	7.7	43	11.8	74	9.6
Emergency caesarean	65	16.1	29	8.0	94	12.2
Labour and childbirth complications						
Cord prolapse	0	0.0	0	0.0	0	0.0
Fetal distress	42	10.4	17	4.7	59	7.7
Manual removal of placenta	5	1.2	4	1.1	9	1.2
Meconium stained liquor	41	10.1	17	4.7	58	7.6
Obstructed labour	16	4.0	15	4.1	31	4.0
Post-partum haemorrhage	39	9.7	22	6.0	61	7.9
Pre-eclampsia	18	4.5	9	2.5	27	3.5
Others	48	11.9	24	6.6	72	9.4
Any complication	149	36.9	91	25.0	240	31.3
MOTHERS HAVING VAGINAL BIRTH	308		292		600	
Perineum status						
Intact	140	47.3	117	41.3	257	44.4
1st degree tear	65	22.0	75	26.5	140	24.2
2nd degree tear	64	21.6	70	24.7	134	23.1
3rd-4th degree tear	8	2.7	4	1.4	12	2.1
Episiotomy	17	5.7	15	5.3	32	5.5
Combined episiotomy & tear	2	0.7	2	0.7	4	0.7
BABIES	406		369		775	
Gestational age						
<28 weeks	5	1.2	3	0.8	8	1.0
28-36 weeks	49	12.1	21	5.7	70	9.0
37+ weeks	352	86.7	345	93.5	697	89.9
Birthweight						
<1500g	5	1.2	3	0.8	8	1.0
1500-2499g	45	11.1	13	3.5	58	7.5
2500+g	356	87.7	353	95.7	709	91.5
Birth status						
Livebirths	399	98.3	365	98.9	764	98.6
Stillbirths	7	1.7	4	1.1	11	1.4

Notes:

This table includes all births occurred in ASH in 2003. An additional 18 births occurred before arrival at hospital.

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	75		30		105	
Maternal age						
<20 years	20	26.7	4	13.3	24	22.9
20-34 years	53	70.7	19	63.3	72	68.6
35+ years	2	2.7	7	23.3	9	8.6
Onset of labour						
Spontaneous onset	75	100.0	29	96.7	104	99.0
Induced labour	0	0.0	1	3.3	1	1.0
No labour	0	0.0	0	0.0	0	0.0
Method of birth						
Spontaneous vaginal birth	70	93.3	30	100.0	100	95.2
Vaginal breech birth	5	6.7	0	0.0	5	4.8
Actual place of giving birth						
Health centres	55	73.3	0	0.0	55	61.8
Planned homes	0	0.0	0	0.0	0	0.0
In transit	3	4.0	0	0.0	3	3.4
Other	17	22.7	14	100.0	31	34.8
Labour and childbirth complications						
Cord prolapse	0	0.0	0	0.0	0	0.0
Fetal distress	3	4.0	0	0.0	3	2.9
Manual removal of placenta	2	2.7	0	0.0	2	1.9
Meconium stained liquor	3	4.0	0	0.0	3	2.9
Obstructed labour	0	0.0	0	0.0	0	0.0
Post-partum haemorrhage	11	14.7	2	6.7	13	12.4
Pre-eclampsia	2	2.7	0	0.0	2	1.9
Others	11	14.7	4	13.3	15	14.3
Any complication	25	33.3	6	20.0	31	29.5
MOTHERS HAVING VAGINAL BIRTH	75		30		105	
Perineum status						
Intact	49	66.2	20	66.7	69	66.3
1st degree tear	15	20.3	2	6.7	17	16.3
2nd degree tear	8	10.8	7	23.3	15	14.4
3rd-4th degree tear	1	1.4	0	0.0	1	1.0
Episiotomy	1	1.4	1	3.3	2	1.9
Combined episiotomy & tear	0	0.0	0	0.0	0	0.0
BABIES	76		30		106	
Gestational age						
<28 weeks	10	13.2	1	3.3	11	10.4
28-36 weeks	22	28.9	3	10.0	25	23.6
37+ weeks	44	57.9	26	86.7	70	66.0
Birthweight						
<1500g	13	17.3	2	6.7	15	14.3
1500-2499g	19	25.3	3	10.0	22	21.0
2500+g	43	57.3	25	83.3	68	64.8
Birth status						
Livebirths	70	92.1	29	96.7	99	93.4
Stillbirths	6	7.9	1	3.3	7	6.6

Notes:

This table includes all births occurred out of hospital in 2003.

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

Appendix B. Trends of perinatal indicator, by Indigenous status, NT, 1990–2003

Table A. Trend table, NT Indigenous

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total fertility rate		2.5	2.5	2.6	2.5	2.4	2.4	2.3	2.2	2.3	2.4	2.3	2.7	2.6	2.6
		Number													
ALL MOTHERS	Total	1129	1161	1194	1176	1161	1184	1147	1152	1206	1261	1236	1430	1332	1334
	Maternal age														
	<20	374	369	381	339	358	345	318	355	362	374	408	428	395	382
	20-34	710	749	759	782	748	796	778	745	780	819	772	926	857	873
	35+	45	43	54	55	55	43	51	50	62	68	56	71	80	79
	Place of birth														
	Hospital	1025	1078	1123	1101	1101	1127	1100	1071	1131	1188	1195	1365	1279	1264
	Non-hospital	104	83	71	75	60	57	47	81	75	73	41	65	53	70
	Type of labour onset														
	Spontaneous	936	966	939	900	899	901	899	863	883	919	930	1041	976	940
	Induced	115	122	171	158	152	153	137	149	166	193	202	240	208	243
	No labour	77	73	83	112	109	122	109	113	128	127	104	149	148	151
	Method of birth														
	Spontaneous vaginal	833	872	847	836	830	832	850	816	839	933	901	1028	951	918
	Vaginal breech	14	16	19	13	13	14	14	13	12	8	9	7	5	16
	Forceps	53	60	63	45	36	30	39	30	30	22	17	25	22	23
	Ventouse	22	19	23	22	18	9	5	17	19	25	40	53	28	42
	Caesarean section	205	191	242	255	264	297	237	252	280	252	269	317	326	335
FIRST-TIME MOTHERS	Total	343	385	399	367	390	373	338	401	392	425	438	470	412	416
	Maternal age														
	<20	255	248	271	230	237	234	226	247	250	267	317	297	258	260
	20-34	87	136	126	137	149	137	108	148	135	152	120	163	146	152
	35+	1	1	2	0	4	2	4	4	6	6	1	7	8	4
BABIES	Total	1139	1164	1205	1189	1172	1191	1160	1160	1215	1278	1245	1442	1348	1342
	Plurality														
	Singleton	1119	1158	1184	1163	1150	1177	1134	1144	1197	1244	1227	1418	1316	1326
	Multiples	20	6	21	26	22	14	26	16	18	34	18	24	32	16
	Birthweight (g)														
	<1500	44	34	47	43	35	20	35	38	35	41	32	32	33	42
	1500-2499	142	135	147	113	128	139	138	149	120	138	140	154	152	162
	2500+	951	992	1010	1028	1007	1030	985	944	1031	1076	1073	1256	1163	1137
	Gestational age (weeks)														
	<28	25	17	19	19	22	17	19	24	24	27	21	18	20	29
	28-36	147	137	170	128	133	132	156	152	144	163	156	174	199	190
	37+	967	1007	1014	1011	927	1024	977	947	1013	1067	1068	1249	1128	1123
	Birthstatus														
	Livebirths	1115	1143	1182	1162	1151	1172	1146	1141	1198	1253	1231	1428	1333	1323
	Stillbirths	24	21	23	27	21	19	14	19	17	25	14	14	15	19

Table A. (continued)

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
		Percent													
ALL MOTHERS	Maternal age														
	<20	33.1	31.8	31.9	28.8	30.8	29.1	27.7	30.9	30.1	29.7	33.0	30.0	29.7	28.6
	20-34	62.9	64.5	63.6	66.5	64.4	67.2	67.8	64.8	64.8	64.9	62.5	65.0	64.3	65.4
	35+	4.0	3.7	4.5	4.7	4.7	3.6	4.4	4.3	5.1	5.4	4.5	5.0	6.0	5.9
	Place of birth														
	Hospital	90.8	92.9	94.1	93.6	94.8	95.2	95.9	93.0	93.8	94.2	96.7	95.5	96.0	94.8
	Non-hospital	9.2	7.1	5.9	6.4	5.2	4.8	4.1	7.0	6.2	5.8	3.3	4.5	4.0	5.2
	Type of labour onset														
	Spontaneous	83.0	83.2	78.7	76.9	77.5	76.6	78.5	76.7	75.0	74.2	75.2	72.8	73.3	70.5
	Induced	10.2	10.5	14.3	13.5	13.1	13.0	12.0	13.2	14.1	15.6	16.3	16.8	15.6	18.2
	No labour	6.8	6.3	7.0	9.6	9.4	10.4	9.5	10.0	10.9	10.3	8.4	10.4	11.1	11.3
	Method of birth														
	Spontaneous vaginal	73.9	75.3	70.9	71.4	71.5	70.4	74.2	72.3	71.1	75.2	72.9	71.9	71.4	68.8
FIRST-TIME MOTHERS	Vaginal breech	1.2	1.4	1.6	1.1	1.1	1.2	1.2	1.2	1.0	0.6	0.7	0.5	0.4	1.2
	Forceps	4.7	5.2	5.3	3.8	3.1	2.5	3.4	2.7	2.5	1.8	1.4	1.7	1.7	1.7
	Ventouse	2.0	1.6	1.9	1.9	1.6	0.8	0.4	1.5	1.6	2.0	3.2	3.7	2.1	3.1
	Caesarean section	18.2	16.5	20.3	21.8	22.7	25.1	20.7	22.3	23.7	20.3	21.8	22.2	24.5	25.1
	Maternal age														
	<20	74.3	64.4	67.9	62.7	60.8	62.7	66.9	61.9	63.9	62.8	72.4	63.6	62.6	62.5
	20-34	25.4	35.3	31.6	37.3	38.2	36.7	32.0	37.1	34.5	35.8	27.4	34.9	35.4	36.5
	35+	0.3	0.3	0.5	0.0	1.0	0.5	1.2	1.0	1.5	1.4	0.2	1.5	1.9	1.0
	Plurality														
	Singleton	98.2	99.5	98.3	97.8	98.1	98.8	97.8	98.6	98.5	97.3	98.6	98.3	97.6	98.8
	Multiples	1.8	0.5	1.7	2.2	1.9	1.2	2.2	1.4	1.5	2.7	1.4	1.7	2.4	1.2
	Birthweight (g)														
	<1500	3.9	2.9	3.9	3.6	3.0	1.7	3.0	3.4	3.0	3.3	2.6	2.2	2.4	3.1
BABIES	1500-2499	12.5	11.6	12.2	9.5	10.9	11.7	11.9	13.2	10.1	11.0	11.2	10.7	11.3	12.1
	2500+	83.6	85.4	83.9	86.8	86.1	86.6	85.1	83.5	86.9	85.7	86.2	87.1	86.3	84.8
	Gestational age (weeks)														
	<28	2.2	1.5	1.6	1.6	2.0	1.4	1.6	2.1	2.0	2.1	1.7	1.2	1.5	2.2
	28-36	12.9	11.8	14.1	11.1	12.3	11.3	13.5	13.5	12.2	13.0	12.5	12.1	14.8	14.2
	37+	84.9	86.7	84.3	87.3	85.7	87.3	84.8	84.3	85.8	84.9	85.8	86.7	83.7	83.7
	Birthstatus														
	Livebirths	97.9	98.2	98.1	97.7	98.2	98.4	98.8	98.4	98.6	98.0	98.9	99.0	98.9	98.6
	Stillbirths	2.1	1.8	1.9	2.3	1.8	1.6	1.2	1.6	1.4	2.0	1.1	1.0	1.1	1.4

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. Trend table, NT non-Indigenous

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total fertility rate		1.8	1.9	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9
		Number													
ALL MOTHERS	Total	2163	2265	2326	2251	2249	2340	2200	2306	2230	2219	2197	2212	2233	2195
	Maternal age														
	<20	151	117	142	136	130	141	132	146	109	128	118	121	121	125
	20-34	1795	1894	1906	1868	1846	1909	1769	1817	1783	1751	1726	1750	1721	1680
	35+	217	254	278	247	273	290	299	336	338	340	350	334	391	390
	Place of birth														
	Hospital	2142	2243	2314	2239	2241	2303	2173	2258	2195	2186	2187	2180	2206	2165
	Non-hospital	21	22	12	12	8	37	27	48	35	33	10	32	27	30
	Type of labour onset														
	Spontaneous	1585	1590	1569	1495	1536	1563	1506	1556	1441	1483	1445	1383	1379	1302
	Induced	400	508	550	523	470	537	452	483	531	464	496	528	525	544
	No labour	176	166	207	231	239	234	236	251	253	259	256	301	329	349
	Method of birth														
	Spontaneous vaginal	1649	1722	1693	1629	1655	1723	1618	1703	1568	1566	1548	1476	1496	1335
	Vaginal breech	22	19	15	16	12	14	16	11	15	10	6	15	3	10
	Forceps	141	172	175	113	93	127	137	109	133	114	98	98	83	48
	Ventouse	21	24	45	36	42	34	24	30	24	39	78	85	73	158
	Caesarean section	329	326	397	456	446	442	402	450	486	478	465	538	578	644
FIRST-TIME MOTHERS	Total	945	962	1039	949	965	1031	928	948	968	1041	924	999	943	943
	Maternal age														
	<20	125	98	114	119	111	119	102	116	98	104	97	100	106	104
	20-34	777	807	857	768	793	846	755	747	781	829	730	796	733	725
	35+	43	57	68	62	61	66	71	78	89	108	94	102	104	114
BABIES	Total	2187	2298	2356	2274	2283	2381	2225	2333	2261	2249	2228	2241	2261	2231
	Plurality														
	Singleton	2139	2232	2296	2228	2215	2301	2175	2279	2199	2189	2166	2183	2205	2159
	Multiples	48	66	60	46	68	80	50	54	62	60	62	58	56	72
	Birthweight (g)														
	<1500	38	40	34	25	37	32	26	22	29	41	26	32	28	28
	1500-2499	120	132	157	121	112	116	131	135	150	130	127	113	99	140
	2500+	2029	2125	2163	2127	2134	2230	2062	2154	2076	2066	2072	2096	2134	2063
	Gestational age (weeks)														
	<28	26	25	20	11	22	18	14	12	15	23	14	17	17	16
	28-36	126	142	149	123	139	141	152	170	187	174	169	165	151	168
	37+	2033	2129	2180	2124	2045	2195	2058	2136	2053	2041	2045	2059	2092	2047
	Birthstatus														
	Livebirths	2157	2277	2334	2259	2263	2365	2213	2320	2251	2227	2212	2229	2247	2211
	Stillbirths	30	21	22	15	20	16	12	13	10	22	16	12	14	20

Table B. (continued)

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
		Percent													
ALL MOTHERS	Maternal age														
	<20	7.0	5.2	6.1	6.0	5.8	6.0	6.0	6.4	4.9	5.8	5.4	5.5	5.4	5.7
	20-34	83.0	83.6	81.9	83.0	82.1	81.6	80.4	79.0	80.0	78.9	78.7	79.4	77.1	76.5
	35+	10.0	11.2	12.0	11.0	12.1	12.4	13.6	14.6	15.2	15.3	16.0	15.1	17.5	17.8
	Place of birth														
	Hospital	99.0	99.0	99.5	99.5	99.6	98.4	98.8	97.9	98.4	98.5	99.5	98.6	98.8	98.6
	Non-hospital	1.0	1.0	0.5	0.5	0.4	1.6	1.2	2.1	1.6	1.5	0.5	1.4	1.2	1.4
	Type of labour onset														
	Spontaneous	73.3	70.2	67.5	66.5	68.4	67.0	68.6	67.9	64.8	67.2	65.8	62.5	61.8	59.3
	Induced	18.5	22.4	23.6	23.3	20.9	23.0	20.6	21.1	23.9	21.0	22.6	23.9	23.5	24.8
	No labour	8.1	7.3	8.9	10.3	10.6	10.0	10.8	11.0	11.4	11.7	11.7	13.6	14.7	15.9
	Method of birth														
	Spontaneous vaginal	76.3	76.1	72.8	72.4	73.6	73.6	73.6	73.9	70.4	71.0	70.5	66.7	67.0	60.8
	Vaginal breech	1.0	0.8	0.6	0.7	0.5	0.6	0.7	0.5	0.7	0.5	0.3	0.7	0.1	0.5
	Forceps	6.5	7.6	7.5	5.0	4.1	5.4	6.2	4.7	6.0	5.2	4.5	4.4	3.7	2.2
	Ventouse	1.0	1.1	1.9	1.6	1.9	1.5	1.1	1.3	1.1	1.8	3.6	3.8	3.3	7.2
	Caesarean section	15.2	14.4	17.1	20.3	19.8	18.9	18.3	19.5	21.8	21.7	21.2	24.3	25.9	29.3
FIRST-TIME MOTHERS	Maternal age														
	<20	13.2	10.2	11.0	12.5	11.5	11.5	11.0	12.3	10.1	10.0	10.5	10.0	11.2	11.0
	20-34	82.2	83.9	82.5	80.9	82.2	82.1	81.4	79.4	80.7	79.6	79.3	79.8	77.7	76.9
	35+	4.6	5.9	6.5	6.5	6.3	6.4	7.7	8.3	9.2	10.4	10.2	10.2	11.0	12.1
BABIES	Plurality														
	Singleton	97.8	97.1	97.5	98.0	97.0	96.6	97.8	97.7	97.3	97.3	97.2	97.4	97.5	96.8
	Multiples	2.2	2.9	2.5	2.0	3.0	3.4	2.2	2.3	2.7	2.7	2.8	2.6	2.5	3.2
	Birthweight (g)														
	<1500	1.7	1.7	1.4	1.1	1.6	1.3	1.2	1.0	1.3	1.8	1.2	1.4	1.2	1.3
	1500-2499	5.5	5.7	6.7	5.3	4.9	4.9	5.9	5.8	6.7	5.8	5.7	5.0	4.4	6.3
	2500+	92.8	92.5	91.9	93.6	93.5	93.8	92.9	93.2	92.1	92.4	93.1	93.5	94.4	92.5
	Gestational age (weeks)														
	<28	1.2	1.1	0.9	0.5	1.0	0.8	0.6	0.5	0.7	1.0	0.6	0.8	0.8	0.7
	28-36	5.8	6.2	6.3	5.4	6.3	6.0	6.8	7.3	8.3	7.8	7.6	7.4	6.7	7.5
	37+	93.0	92.7	92.8	94.1	92.7	93.2	92.5	92.1	91.0	91.2	91.8	91.9	92.6	91.8
	Birthstatus														
	Livebirths	98.6	99.1	99.1	99.3	99.1	99.3	99.5	99.4	99.6	99.0	99.3	99.5	99.4	99.1
	Stillbirths	1.4	0.9	0.9	0.7	0.9	0.7	0.5	0.6	0.4	1.0	0.7	0.5	0.6	0.9

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 C. Trend table, NT all

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total fertility rate		2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
		Number													
ALL MOTHERS	Total	3292	3426	3520	3429	3410	3524	3347	3458	3436	3480	3433	3642	3565	3529
	Maternal age														
	<20	525	486	523	475	488	486	450	501	471	502	526	549	516	507
	20-34	2505	2643	2665	2652	2594	2705	2547	2562	2563	2570	2498	2676	2578	2553
	35+	262	297	332	302	328	333	350	386	400	408	406	405	471	469
	Place of birth														
	Hospital	3167	3321	3437	3342	3342	3430	3273	3329	3326	3374	3382	3545	3485	3429
	Non-hospital	125	105	83	87	68	94	74	129	110	106	51	97	80	100
	Type of labour onset														
	Spontaneous	2521	2556	2508	2397	2435	2464	2405	2419	2324	2402	2375	2424	2355	2242
	Induced	515	630	721	681	622	690	589	632	697	657	698	768	733	787
	No labour	253	239	290	343	348	356	345	364	381	386	360	450	477	500
	Method of birth														
	Spontaneous vaginal	2482	2594	2540	2467	2485	2555	2468	2519	2407	2499	2449	2504	2447	2253
	Vaginal breech	36	35	34	29	25	28	30	24	27	18	15	22	8	26
	Forceps	194	232	238	158	129	157	176	139	163	136	115	123	105	71
	Ventouse	43	43	68	58	60	43	29	47	43	64	118	138	101	200
	Caesarean section	534	517	639	711	710	739	639	702	766	730	734	855	904	979
FIRST-TIME MOTHERS	Total	1288	1347	1438	1318	1355	1404	1266	1349	1360	1466	1362	1469	1355	1359
	Maternal age														
	<20	380	346	385	349	348	353	328	363	348	371	414	397	364	364
	20-34	864	943	983	907	942	983	863	895	916	981	850	959	879	877
	35+	44	58	70	62	65	68	75	82	95	114	95	109	112	118
BABIES	Total	3326	3462	3561	3465	3455	3572	3385	3493	3476	3527	3473	3683	3609	3573
	Plurality														
	Singleton	3258	3390	3480	3393	3365	3478	3309	3423	3396	3433	3393	3601	3521	3485
	Multiples	68	72	81	72	90	94	76	70	80	94	80	82	88	88
	Birthweight (g)														
	<1500	82	74	81	68	72	52	61	60	64	82	58	64	61	70
	1500-2499	262	267	304	234	240	255	269	284	270	268	267	267	251	302
	2500+	2980	3117	3173	3157	3141	3260	3047	3098	3107	3142	3145	3352	3297	3200
	Gestational age (weeks)														
	<28	51	42	39	30	44	35	33	36	39	50	35	35	37	45
	28-36	273	279	319	251	272	273	308	322	331	337	325	339	350	358
	37+	3000	3136	3194	3137	2972	3219	3035	3083	3066	3108	3113	3308	3220	3170
	Birthstatus														
	Livebirths	3272	3420	3516	3423	3414	3537	3359	3461	3449	3480	3443	3657	3580	3534
	Stillbirths	54	42	45	42	41	35	26	32	27	47	30	26	29	39

Table C. (continued)

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
		Percent													
ALL MOTHERS	Maternal age														
	<20	15.9	14.2	14.9	13.9	14.3	13.8	13.4	14.5	13.7	14.4	15.3	15.1	14.5	14.4
	20-34	76.1	77.1	75.7	77.3	76.1	76.8	76.1	74.3	74.6	73.9	72.8	73.7	72.3	72.3
	35+	8.0	8.7	9.4	8.8	9.6	9.4	10.5	11.2	11.6	11.7	11.8	11.2	13.2	13.3
	Place of birth														
	Hospital	96.2	96.9	97.6	97.5	98.0	97.3	97.8	96.3	96.8	97.0	98.5	97.3	97.8	97.2
	Non-hospital	3.8	3.1	2.4	2.5	2.0	2.7	2.2	3.7	3.2	3.0	1.5	2.7	2.2	2.8
	Type of labour onset														
	Spontaneous	76.6	74.6	71.3	70.1	71.5	70.2	72.0	70.8	68.3	69.7	69.2	66.6	66.1	63.5
	Induced	15.7	18.4	20.5	19.9	18.3	19.7	17.6	18.5	20.5	19.1	20.3	21.1	20.6	22.3
	No labour	7.7	7.0	8.2	10.0	10.2	10.1	10.3	10.7	11.2	11.2	10.5	12.4	13.4	14.2
	Method of birth														
	Spontaneous vaginal	75.5	75.8	72.2	72.1	72.9	72.5	73.8	73.4	70.7	72.5	71.4	68.8	68.6	63.8
	Vaginal breech	1.1	1.0	1.0	0.8	0.7	0.8	0.9	0.7	0.8	0.5	0.4	0.6	0.2	0.7
	Forceps	5.9	6.8	6.8	4.6	3.8	4.5	5.3	4.1	4.8	3.9	3.4	3.4	2.9	2.0
	Ventouse	1.3	1.3	1.9	1.7	1.8	1.2	0.9	1.4	1.3	1.9	3.4	3.8	2.8	5.7
	Caesarean section	16.2	15.1	18.2	20.8	20.8	21.0	19.1	20.5	22.5	21.2	21.4	23.5	25.4	27.7
FIRST-TIME MOTHERS	Maternal age														
	<20	29.5	25.7	26.8	26.5	25.7	25.1	25.9	27.1	25.6	25.3	30.5	27.1	26.9	26.8
	20-34	67.1	70.0	68.4	68.8	69.5	70.0	68.2	66.8	67.4	66.9	62.5	65.5	64.9	64.5
	35+	3.4	4.3	4.9	4.7	4.8	4.8	5.9	6.1	7.0	7.8	7.0	7.4	8.3	8.7
BABIES	Plurality														
	Singleton	98.0	97.9	97.7	97.9	97.4	97.4	97.8	98.0	97.7	97.3	97.7	97.8	97.6	97.5
	Multiples	2.0	2.1	2.3	2.1	2.6	2.6	2.2	2.0	2.3	2.7	2.3	2.2	2.4	2.5
	Birthweight (g)														
	<1500	2.5	2.1	2.3	2.0	2.1	1.5	1.8	1.7	1.9	2.3	1.7	1.7	1.7	2.0
	1500-2499	7.9	7.7	8.5	6.8	7.0	7.1	8.0	8.3	7.8	7.7	7.7	7.2	7.0	8.5
	2500+	89.7	90.1	89.2	91.3	91.0	91.4	90.2	90.0	90.3	90.0	90.6	91.0	91.4	89.6
	Gestational age (weeks)														
	<28	1.5	1.2	1.1	0.9	1.3	1.0	1.0	1.0	1.1	1.4	1.0	1.0	1.0	1.3
	28-36	8.2	8.1	9.0	7.3	8.3	7.7	9.1	9.4	9.6	9.6	9.4	9.2	9.7	10.0
	37+	90.3	90.7	89.9	91.8	90.4	91.3	89.9	89.6	89.2	88.9	89.6	89.8	89.3	88.7
	Birthstatus														
	Livebirths	98.4	98.8	98.7	98.8	98.8	99.0	99.2	99.1	99.2	98.7	99.1	99.3	99.2	98.9
	Stillbirths	1.6	1.2	1.3	1.2	1.2	1.0	0.8	0.9	0.8	1.3	0.9	0.7	0.8	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 C. Northern Territory Estimated Resident Population

Table. Northern Territory Estimated Resident Population, by Indigenous status and sex, 2003

Age (years)	Male			Female			Person
	Indigenous	non-Indigenous	Total	Indigenous	non-Indigenous	Total	Total
0 - 4	3512	5464	8976	3348	5139	8487	17463
5 - 9	3513	5272	8785	3166	4899	8065	16850
10 - 14	3382	4974	8356	3051	4694	7745	16101
15 - 19	2857	4685	7542	2815	4244	7059	14601
20 - 24	2901	5651	8552	2638	4633	7271	15823
25 - 29	2506	6452	8958	2430	5847	8277	17235
30 - 34	2320	7082	9402	2423	6697	9120	18522
35 - 39	1877	6936	8813	1945	5895	7840	16653
40 - 44	1600	6923	8523	1647	5906	7553	16076
45 - 49	1183	5917	7100	1303	5329	6632	13732
50 - 54	919	5741	6660	1026	4690	5716	12376
55 - 59	655	4354	5009	723	3208	3931	8940
60 - 64	534	2871	3405	636	1846	2482	5887
65 - 69	311	1566	1877	396	1030	1426	3303
70 - 74	195	1027	1222	274	704	978	2200
75 +	273	1040	1313	382	1087	1469	2782
Total	28538	75955	104493	28203	65848	94051	198544

Source: Northern Territory Resident Population Estimates by sex, age and Indigenous status (1971-2006) (unpublished data) prepared by Health Gains Planning Branch, Department of Health and Families, February 2007 using published Australian Bureau of Statistics Estimated Resident Population data and Indigenous Population Estimates.

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*. Territory Health Services: Darwin, 1998.

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

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

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

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

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

Information on children and young people

d'Espaignet ET, Kennedy K, Paterson BA, Measey ML. *From Infancy to Young Adulthood: Health Status in the Northern Territory*. Territory Health Services: Darwin, 1998.

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

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

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

Other publications

Condon JR, Warman G, Arnold L. *The Health and Welfare of Territorians*. Territory Health Services: Darwin, 2001.

Jones C, Zhang X, Dempsey K, Schwarz N, Guthridge S. *The Health and Wellbeing of Territory Women: From the Desert to the Sea*. Department of Health and Community Services: Darwin, 2005.