

Koori Health Counts

Koori births in Victoria 1991-2000

Acknowledgements

This report was prepared by Ms Sandy Campbell as part of her Master of Applied Epidemiology (Indigenous Health) degree, and published as part of the Koori Health Counts series by the Koori Human Services Unit, Department of Human Services.

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Identifying Koori births in Victoria

The information in this report is provided by the Victorian Perinatal Data Collection Unit (VPDCU). Some additional information has been made available from the Koori Hospital Liaison Officer collection (KHLO). The report shows the number and outcomes of births reported to the VPDCU and the trends in births to Koori mothers in the years 1991-2000.

The VPDCU collects information about every birth in Victoria and includes demographic (including Indigenous status of the baby's mother), medical and pregnancy history of mothers, and the characteristics of their babies. Midwives at the baby's hospital of birth provide most of the data, but some data comes directly from hospital medical records that are collected by administrative workers. The data is collected in the Perinatal Morbidity Statistics System (PMSS).

There is considerable underreporting of Aboriginality in the PMSS, as in other datasets (please refer to earlier Koori Health Counts reports entitled ***How many Koori babies were born in 1996?*** and ***Counting Koori Births in 1998***). It is estimated that in 1996, the PMSS correctly identified only 54% of the Indigenous births that occurred in Victoria (452/845). In 1998, the estimate is 52% (445/860)

When looking at the graphs made up from information about Koori mothers (and their babies) who were identified by the VPDCU in 1999 and 2000, readers are reminded that a significant number (almost half) may not be included. Some of the births that are included may be non-Indigenous births, but most are likely to be correctly identified. Babies with Koori fathers and non-Koori mothers are not included.

Koori births recorded in 1998 in the PMSS and KHLO collections were matched to ascertain the number of Koori births correctly identified by PMSS in the 16 maternity hospitals where a Koori Hospital Liaison Officer is employed. The Liaison Officers collect data on all births in their hospitals where the mother and/ or father is Aboriginal. The matching process only included births where the mother was Aboriginal. It was found that the PMSS collection correctly identified 75% of Aboriginal births.

This process was repeated in 2002 using data from 2000. This data showed that 85% of births to Koori mothers in the 16 hospitals with a Liaison Officer were identified by both the KHLO and PMSS collections.

These processes show that identification of Koori births is reliable in these 16 hospitals, which account for the majority of births to Koori mothers.

Number of Koori women giving birth

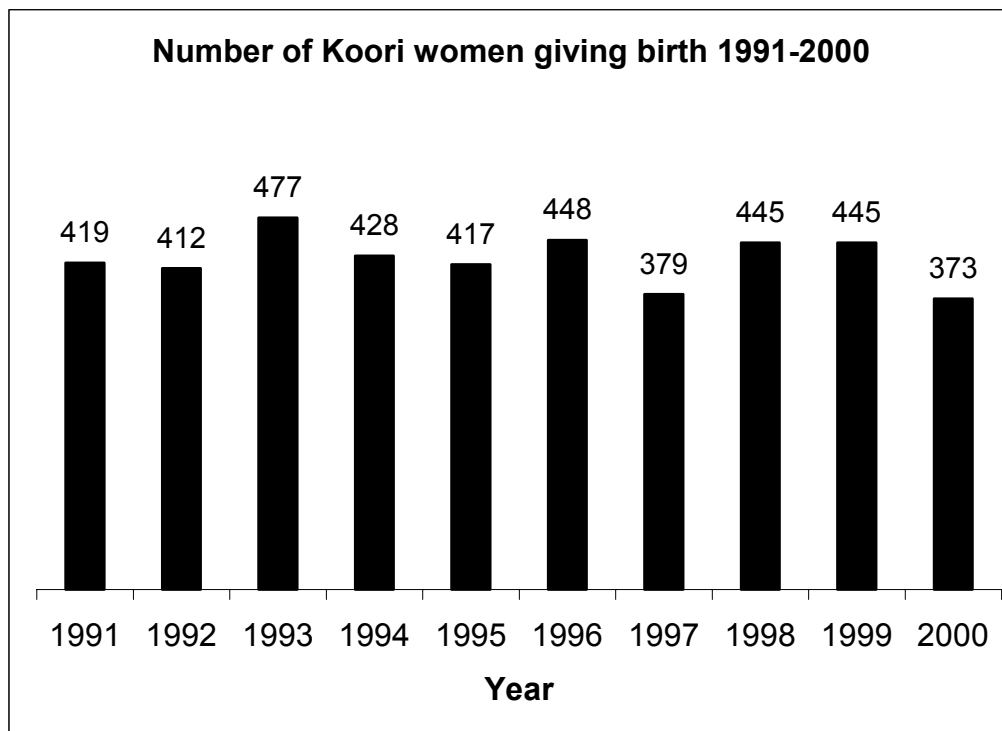
In 1999, there were 445 women who gave birth in Victoria who were identified as being Aboriginal or Torres Strait Islander in the VPDCU.

In 2000, there were 373 births to Koori women identified by the VPDCU.

The drop in the number of births to Koori women identified by the VPDCU in 2000 (compared with the previous two years) was also apparent in other datasets that collect information about Indigenous births. Koori Hospital Liaison Officers identified 303 births (at 16 hospitals) in 2000 (compared with 353 in 1999). The Victorian Admitted Episodes Dataset (collected by hospitals and provides information about Victorian hospital admissions) identified 333 births in 2000 (compared with 363 in 1999).

The lower number of births identified in 2000 appears to reflect a real fall in the number of Koori births, rather than poorer than usual identification.

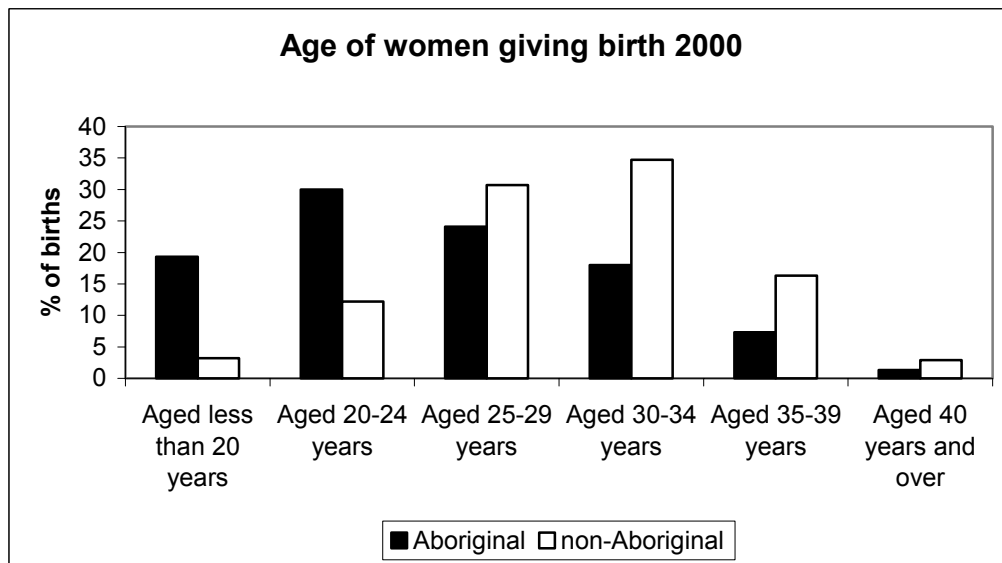
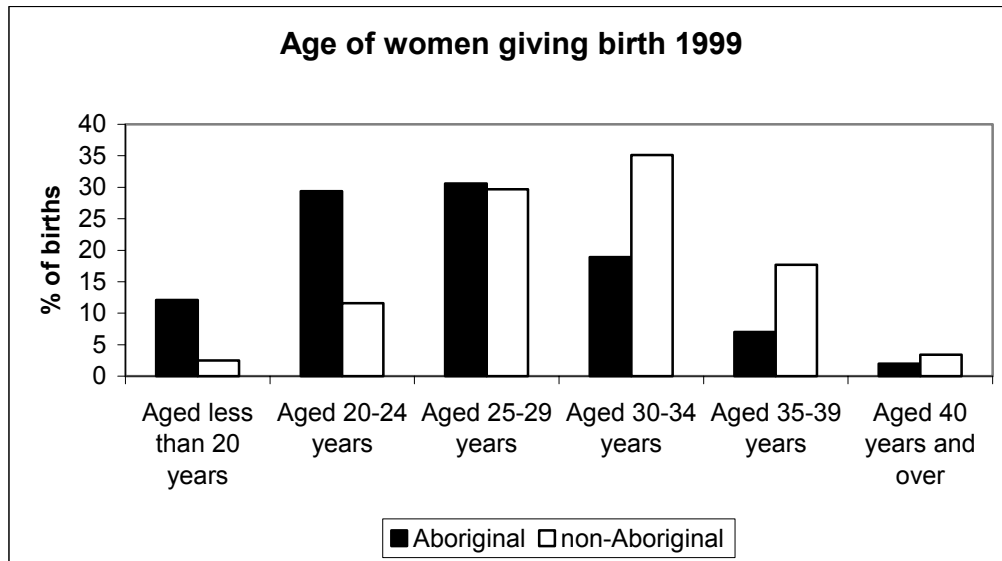
The number of women identified by the VPDCU as Aboriginal or Torres Strait Islander origin giving birth in Victoria over the past ten years is shown below.



Age of women giving birth 1999

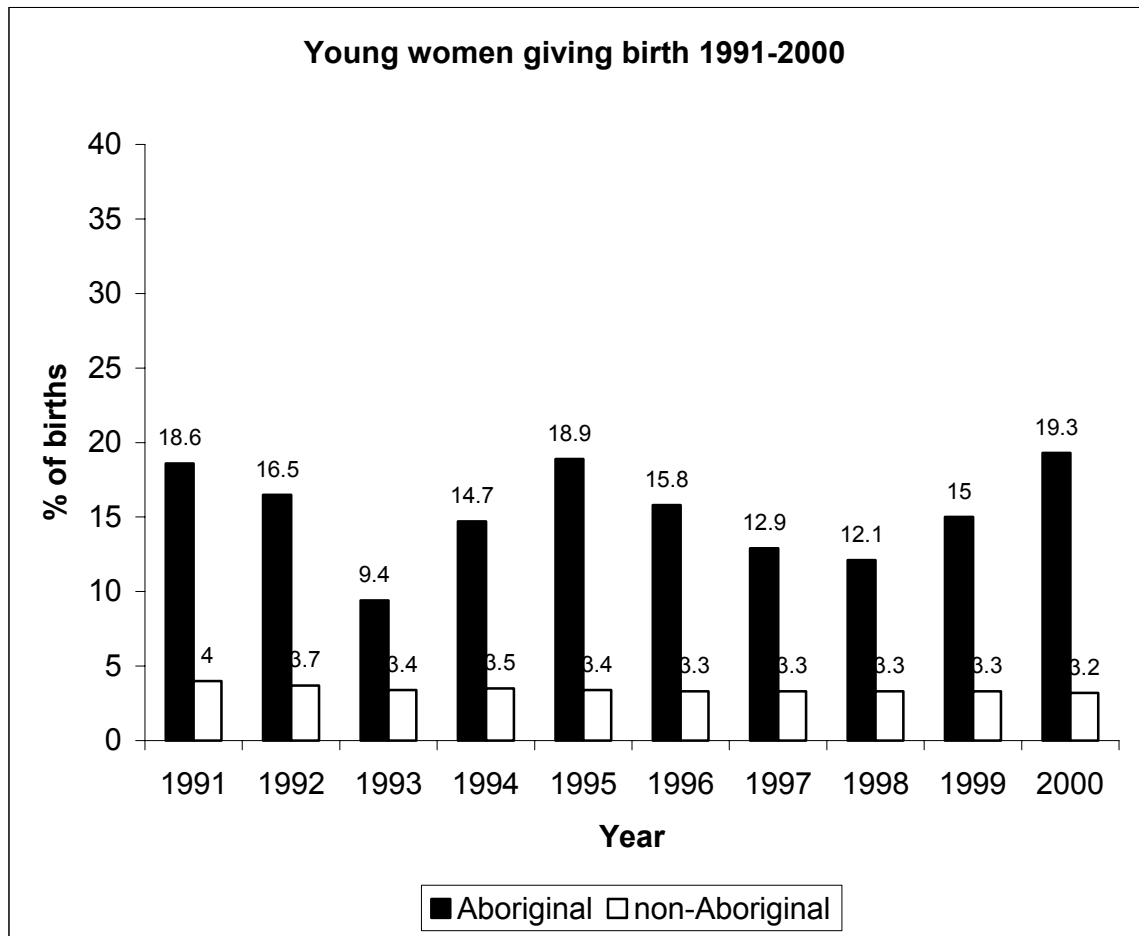
The age of the woman at the time of being pregnant and giving birth can be an important consideration for the health of both mother and baby. In Victoria, more Koori women having babies are in younger age groups when compared to non-Aboriginal women having a baby. This pattern is confirmed by the reports of the Liaison Officers.

The ages of Koori and non-Koori women having a baby in 1999 and 2000 are shown below. Although the percentages may vary slightly from year to year, the pattern of age of women giving birth remains the same.



Births to teenage women 1991 – 2000

The proportion of Koori women and non-Koori women giving birth over the past ten years who were aged less than 20 years is shown below:



Each year since 1991 has shown a much higher proportion of Koori women aged less than 20 years giving birth when compared to the proportion of non-Koori women aged less than 20 years.

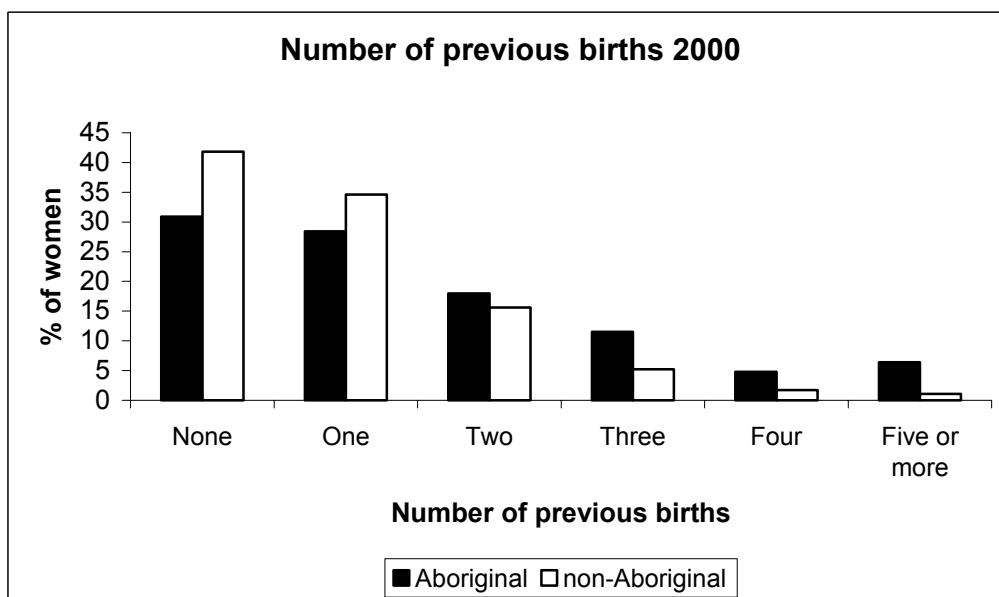
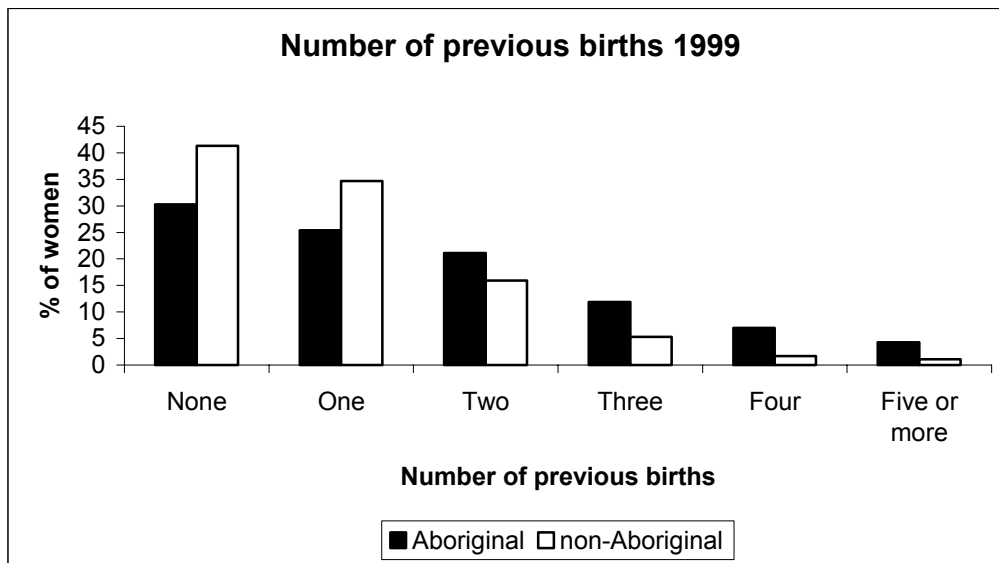
In 2000, the proportion of Koori women aged less than 20 years giving birth was higher than for previous years.

Reports from the Liaison Officers reported that the percentage of teenage mothers was 19.6% in 1999, 24.9% in 2000 and 22% in 2001.

Number of previous births 1999 & 2000

Koori women having a baby in 1999 and 2000 were more likely to already have had two or more births when compared to non-Koori women.

Koori women tend to have larger families.



Stillbirths and deaths of newborn babies

It is acknowledged that every death within the Koori community can impact upon community members in a number of different ways: the impact may be personal, or on family, extended family, it may be work-related, and more broadly as a member of the Koori community.

It is further acknowledged with regret that reporting stillbirths and deaths in this publication may lead to further grief for members of the Koori community in Victoria

Stillbirths in the years 1991-2000

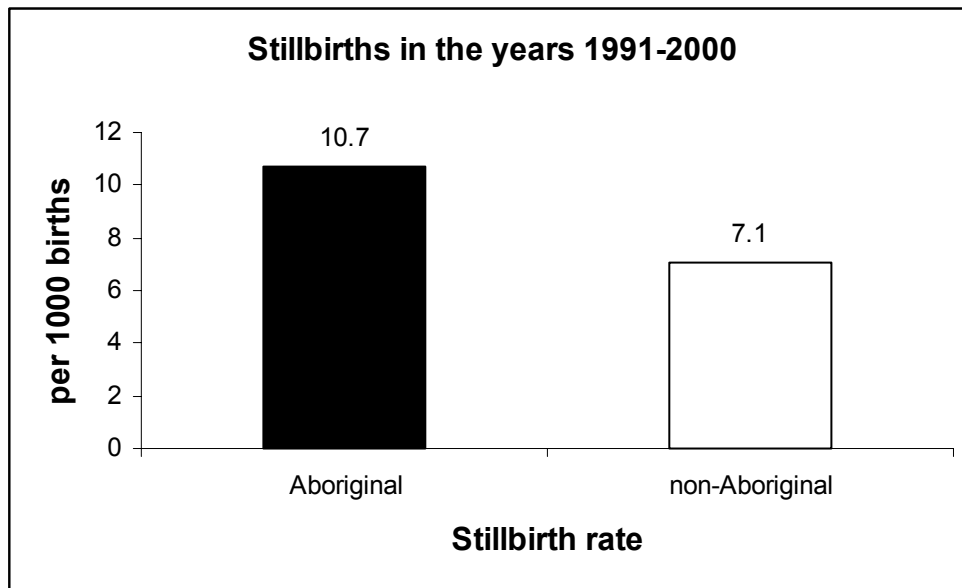
A 'stillbirth' is the term used when the death of a baby occurs before the baby is born.

There is a higher rate of stillbirths for the babies born to Koori women than for babies born to non-Koori women. The rate and the difference have not changed over time.

As the actual number of stillbirths each year is very small, information for the ten years from 1991-2000 is pooled together in the following graph. The larger number of Koori births over ten years allows us to more confidently compare rates with non-Koori births. Any differences seen are more likely to be true differences (rather than differences that have occurred by chance).

For the ten-year period 1991-2000, the difference in stillbirth rates for babies born to Koori mothers (10.7 per 1000 births) and babies to non-Koori mothers (7.1 per 1000 births) is shown below.

This result is similar to that for the ten year period 1983-1992 (presented in earlier reports), when the stillbirth rate for babies identified as being born to Koori mothers was reported as 11.8 per 1000 births, and for babies born to non-Koori mothers the stillbirth rate was 7.4 per 1000 births.



Perinatal deaths in the years 1991-2000

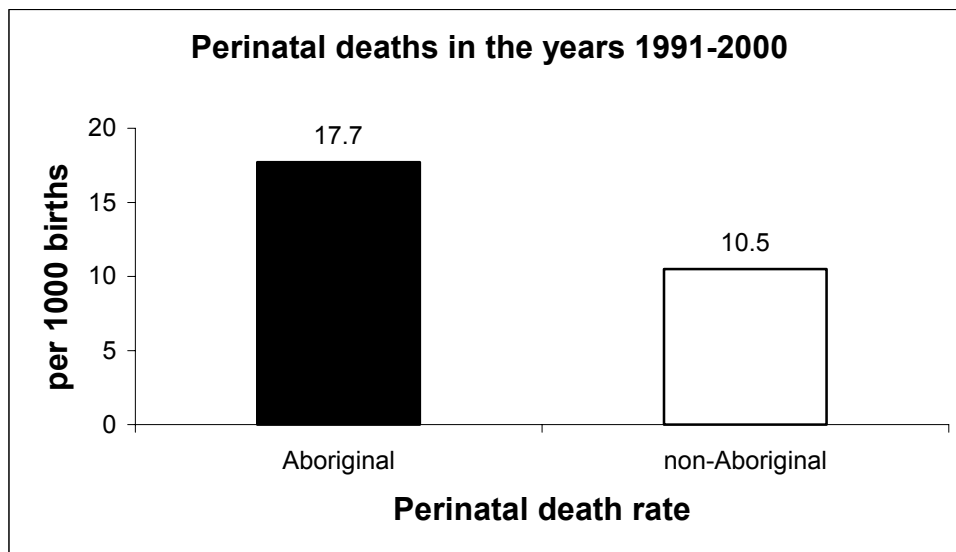
The term 'perinatal death' is the sum of stillbirths (when a baby dies before birth) and neonatal deaths (when a baby is born alive but dies before he or she is 28 days old).

There is a higher rate of perinatal deaths for babies born to Koori women than for babies born to non-Koori women and this has not changed over time.

Again, information for the ten years from 1991 to 2000 is pooled together to allow a comparison of rates between Koori births and non-Koori births.

For the ten-year period 1991-2000, the difference in perinatal death rates for babies born to Koori mothers (17.7 per 1000) and babies to non-Koori mothers (10.5 per 1000) is shown below.

This result is similar to that for the ten year period 1983-1992 (presented in earlier reports), when the perinatal death rate for babies identified as being born to Koori mothers was reported as 15.7 per 1000 births, and for babies born to non-Koori mothers the perinatal death rate was 12.2 per 1000 births.



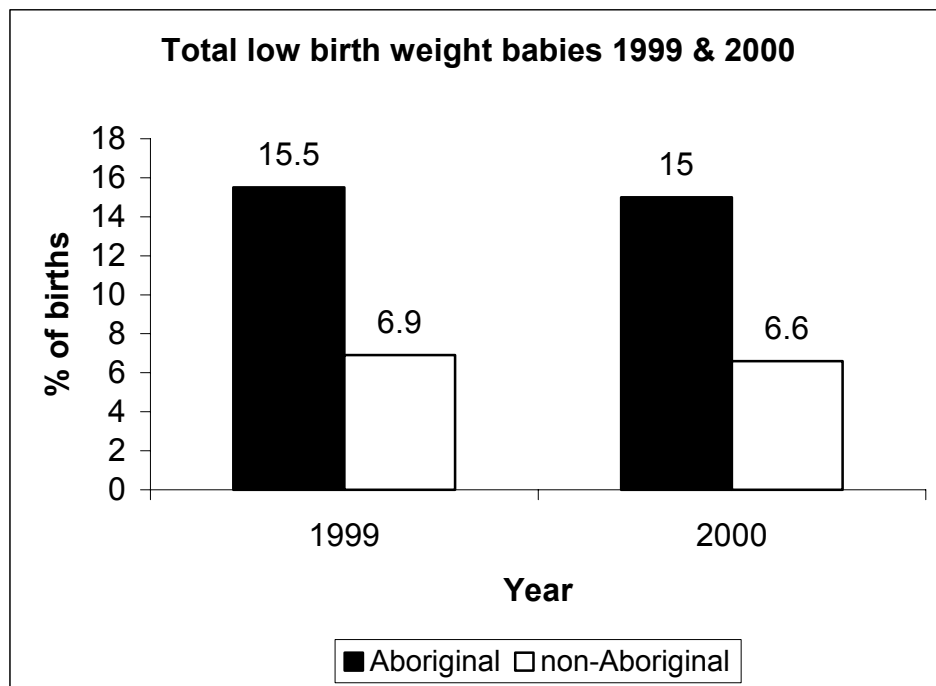
Low birthweight babies in 1999 & 2000

The weight of a baby at the time of birth is an important indicator of the health status of the baby. Babies who weigh less than 2500grams (or 5 ½ pounds) when they are born are known as 'low birthweight' babies. These smaller babies are more likely to have a number of serious and sometimes life threatening health problems in the early weeks of life.

In 1999 and 2000 a higher proportion of babies born to Koori mothers were less than 2500g than babies born to non-Koori mothers.

The following graph shows the proportion of low birthweight Koori babies compared with the proportion of low birthweight non-Koori babies born in 1999 and 2000. This is confirmed by Liaison Officer data from 2002.

This graph includes babies born before their due date (premature births).

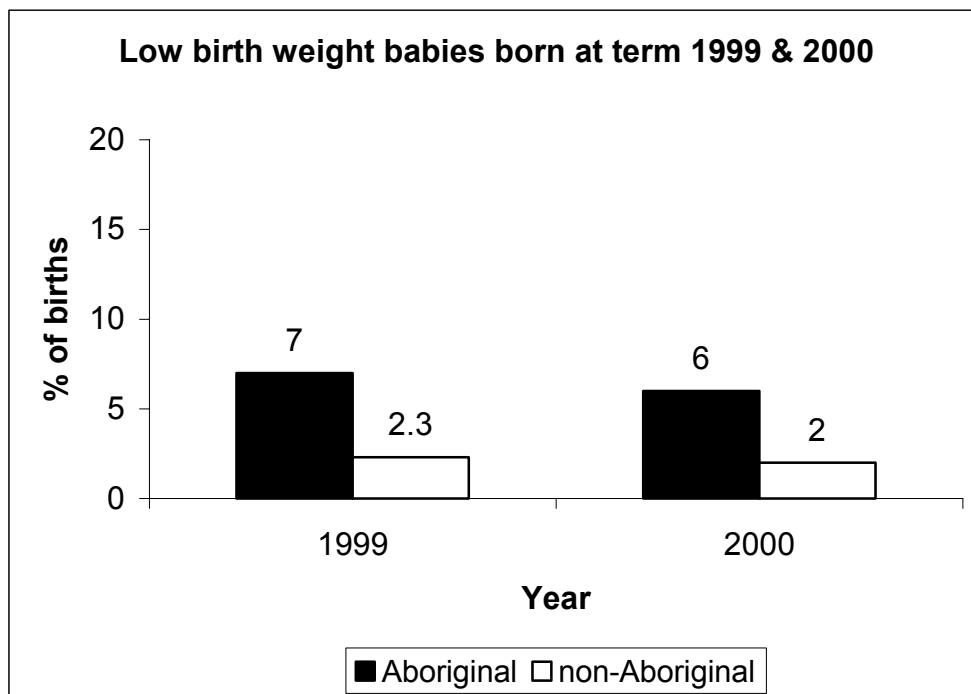


Low birthweight babies born at term (greater than 37 weeks gestation) in 1999 & 2000

Babies that are born premature might well be expected to be smaller and weigh less than full term babies because they have had less time growing. Full term babies that are born smaller and weigh less, do so for a range of other reasons. A baby may be small because it has small parents. There may be serious medical reasons that lead to a full term baby being born at a low birthweight (less than 2500g).

In 1999 and 2000 the proportion of full term low birthweight babies born to Koori mothers was approximately three times the proportion born to non-Koori mothers.

The next graph shows the proportion of full term low birthweight Koori babies compared with the proportion of full term low birthweight non-Koori babies. None of the babies included here were born premature.

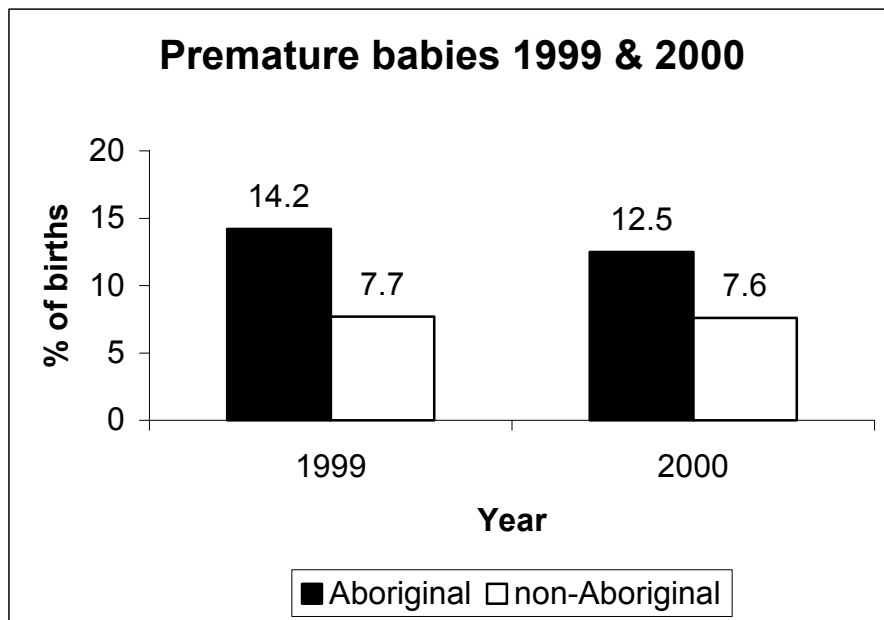


Premature births in 1999 & 2000

Babies born before 37 completed weeks of pregnancy are more likely to have serious health problems in the first weeks after birth. They are also more likely to be of low birth weight (less than 2500grams).

In 1999 and 2000, there were a higher proportion of premature births for Koori women when compared with premature births for non-Koori women.

This graph shows the proportion of premature Koori babies compared with the proportion of premature non-Koori babies.



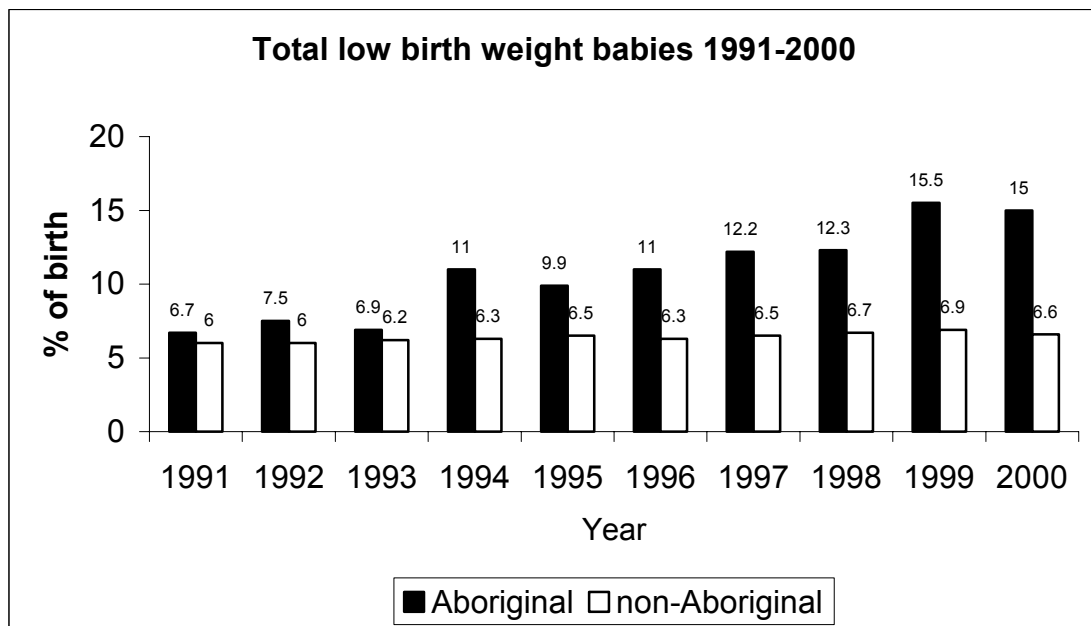
Looking back over 10 years

Data collected over years lets us look back over time to get a picture of whether health status is improving or getting worse. In the following graphs it appears that some indicators of health status for Koori women and their babies are getting worse over time. This may be a true picture, however it may also be misleading. An accurate picture is dependent on **reliable** data. We know that Victoria's Indigenous birth data is not reliable and therefore it should be interpreted with caution.

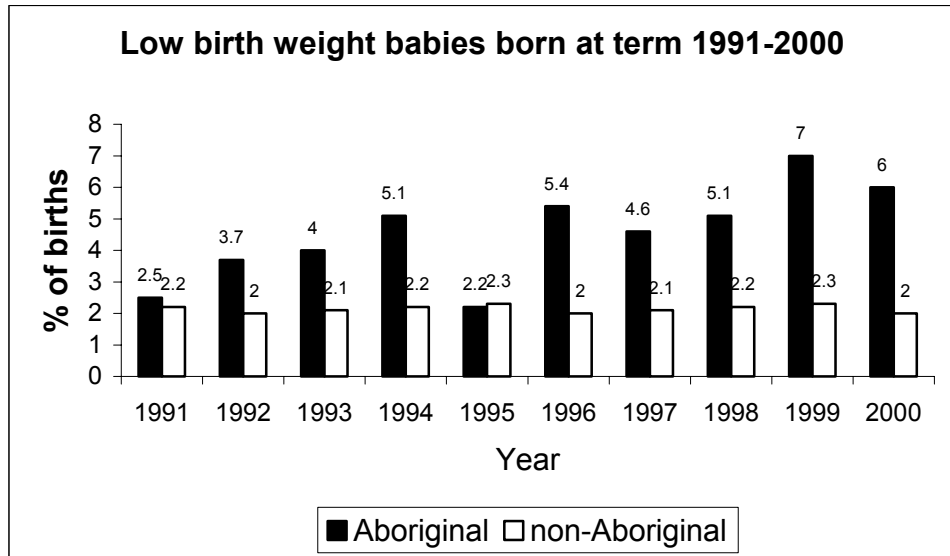
The graphs show data collected by the VPDCU between 1991 and 2000. The data used for these graphs has been shown by studies in 1996 and 1998 to represent approximately half of the Koori women giving birth. We have no idea of how well or how poorly the other women and their babies (on whom we have no data and who are not represented) are faring.

Low birthweight and premature babies tend to remain in hospital for a longer time after birth than babies who are born at a normal weight. A longer hospital stay may result in better identification of Indigenous births by hospitals. The midwives and doctors are likely to get to know the mother and her family better during a longer hospital stay. A pattern of worsening birth outcomes might be partly explained by hospitals being better at identifying Koori babies who have longer hospital stays after birth (low birthweight and premature babies) than Koori babies who go home quickly.

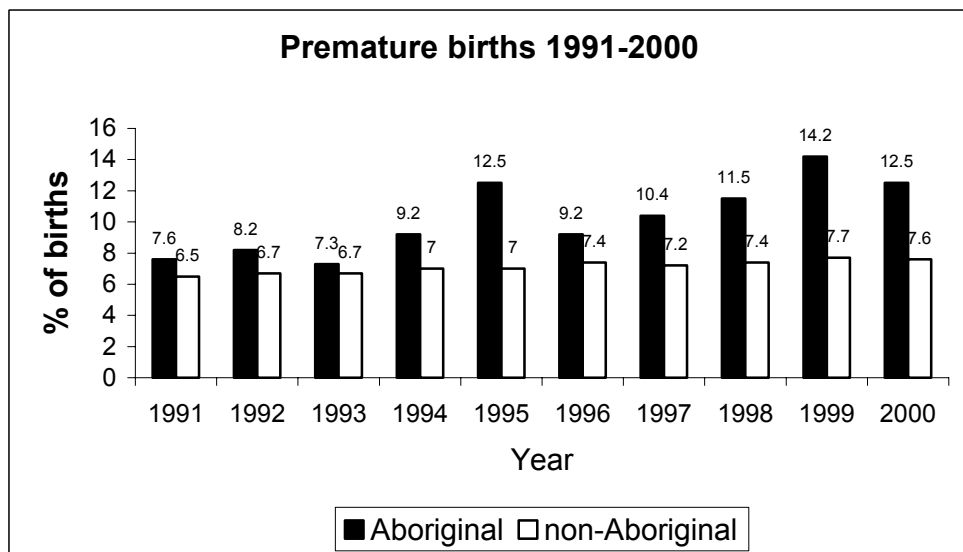
Total low birth weight babies between the years 1991 & 2000



Low birthweight babies born at term (greater than 37 weeks gestation) between the years 1991 & 2000



Premature births between 1991 & 2000



Conclusion

This report has been prepared as part of an evaluation of the Victorian health information systems that collect data on Indigenous births. Clinical detail about mothers and babies is available from two systems: the Perinatal Morbidity Statistics System (PMSS) collected by the Perinatal Data Collection Unit; and the Koori Hospital Liaison Officer (KHLO) dataset, collected by the Koori Human Services Unit. As Aboriginal identification is certain in data collected by the Liaison Officers, this dataset was used to check the accuracy of identification in the PMSS. The PMSS system was found to have identified 75% of births to Koori mothers in the hospitals with Liaison Officers.

Although no single mainstream dataset can be considered to have achieved accurate identification of Koori patients, the birth outcomes of Koori mothers identified in PMSS data are consistent with those identified by Liaison Officers and also with national data.

Koori mothers in Victoria have children at younger ages than the non-Indigenous population, and tend to have larger families. There is a higher rate of stillbirths and neonatal deaths. There is also an apparently increasing rate of low birthweight babies (less than 2500g), which reached 15% of births to Koori mothers in 2000.

As health status later in life is partially determined by infant health status, these results raise issues for future health programs for Koori mothers and babies.