

Alberta Reproductive Health: Pregnancies and Births



ISSN 1480-1876
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Communications
Alberta Health and Wellness
(780) 427-7164

Alberta Reproductive Health: Pregnancies and Births 2002

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Executive Summary

Alberta Reproductive Health: Pregnancies and Births 2002

EXECUTIVE SUMMARY

This report follows the April 2001 Alberta Reproductive Health: Pregnancy Outcomes report. The report has been renamed *Alberta Reproductive Health: Pregnancies and Births*, to reflect the evolution of the report into areas other than those strictly defined as outcomes of pregnancy. The current report is based on data for the fifteen-year period from 1986 to 2000. New to the report are maternal pre- and postnatal morbidity data, infant morbidity data, and data on number of live singleton births to mothers. Also included for the first time is a resource list, including references (primarily in the form of Internet addresses) for relevant reproductive health-related Web sites and reports.

Contents

Data are provided on the following topics: Estimated pregnancies, spontaneous abortions, induced abortions, procedures related to delivery, maternal age, maternal prenatal morbidity, maternal prenatal behaviours, fertility rates, live births, birth weight, pre-term births, multiple births, infant morbidity, stillbirths, mortality (perinatal, neonatal, infant, and maternal), number of live births to mothers, maternal postnatal morbidity, and maternal postnatal behaviours.

Wherever possible and appropriate, data are broken down by regional health authorities (RHAs), age groups, time periods, and risk factors. "Residence RHA" refers to the regional health authority in which the mother resided at the time of the relevant event, and "Facility RHA" refers to the regional health authority where the relevant event occurred. RHA boundaries changed slightly in April 2001; all analyses reflect these new boundaries.

Data Sources

Data sources include Vital Statistics, Alberta Health and Wellness Administrative databases, hospital statistics reported to the Alberta Medical Association (AMA) Committee on Reproductive Care, case information from the hospital medical records departments and offices of the medical examiners, the Northern and Central Alberta Perinatal Outreach Program, the Southern Alberta Perinatal Outreach Program, Statistics Canada publications, and Health Canada publications. In this year's report, *two years of data appear for the statistics reported to the AMA Committee on Reproductive Care*, so that all Alberta data are now reported to the end of 2000.

Overview

We are witnessing profound changes in reproductive health in Alberta. While the number of estimated pregnancies is relatively stable, induced abortion rates have been steadily increasing. Alberta's population is also growing, resulting in a continuing pattern of decreasing fertility rates. Average maternal age continues to increase. Fertility rates continue to rise for mothers over 30, and to decline for younger mothers. Pre-term birth, high birth weight and multiple birth rates for the year 2000 were all at maximum rates for the fifteen-year period from 1986 to 2000. Infant and maternal death rates remain low.

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Pregnancies

Estimated Pregnancies

- The estimated pregnancy rate reached a new low point in 2000, at 64.6 estimated pregnancies per 1,000 women aged 15-49. Pregnancy rates decreased 19.1% between 1986 and 2000.

Spontaneous Abortions

- Spontaneous abortion rates per 1,000 women aged 15-49 have decreased along with decreasing fertility rates.
- The proportion of estimated pregnancies that ended in spontaneous abortion did not show a significant linear trend from 1986 to 2000.

Reproductive Care Services

- The proportion of estimated pregnancies that ended in induced abortion increased linearly from 1986 to 2000. In 2000, 20.1% of estimated pregnancies ended in induced abortion.
- The induced abortion rate per 1,000 women aged 15-49 increased 42% from 1986 to 2000.
- Induction of labour occurred in 25.9% of live births in 2000; this rate represents the highest rate in the fifteen-year period from 1986 to 2000.
- Epidural analgesia rates also continued to rise, with an epidural analgesia rate of 33.1 (per 100 hospital deliveries) in 2000.
- Cesarean section rates have increased since 1995, and the 2000 rate of 20.2 (per 100 hospital deliveries) represents the fifteen-year high.
- Forceps delivery rates have declined, while vacuum extraction rates have increased from 1986 to 2000. In 2000, 6.1% of deliveries involved forceps, and 10.6% were by vacuum extraction.
- The vaginal breech delivery rate was 0.6 (per 100 hospital deliveries) in 2000.

Maternal Factors

Maternal Age

- Mean maternal age continued its increasing trend; the average age at childbirth was 28.3 years in Alberta in 2000, which was the fifteen-year high.
 - Older mothers are at risk relative to younger mothers for both pregnancy complications and negative birth outcomes, including congenital anomalies, pre-term births, and low birth weight births. Multiple births, which have increased risk of negative outcome, are more common in older mothers as well.

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Executive Summary

Maternal Prenatal Morbidity

- Maternal prenatal morbidity data for 1999 and 2000 combined appear in this year's report for the first time.
- High maternal pre-pregnancy weight was quite common; 7.4% of women had a pre-pregnancy weight of more than 91 kilograms.
- Other pre-pregnancy conditions (including pre-existing diabetes, heart disease, pre-existing hypertension, and chronic renal disease) were rare, each affecting less than 1 percent of delivering women.
- Pregnancy complications were reported with a higher frequency than pre-pregnancy conditions.
 - Bleeding in pregnancy prior to 20 weeks gestation occurred in 5.2% of women giving birth; rates were lower for bleeding later in pregnancy and for bleeding both prior to and after 20 weeks gestation.
 - Pregnancy-induced hypertension was reported in 4.8% of delivering women.
 - Gestational diabetes was a factor for 3.2% of women, with rates increasing considerably with maternal age.

Maternal Prenatal Behaviours

- For 1998 to 2000 combined, 25.7% of Alberta women who gave birth to live infants smoked at some point during pregnancy, 4.2% reported consuming alcohol during pregnancy, and street drugs were used in 1.7% of pregnancies.
- Smoking, drinking alcohol, and using street drugs were all associated with increased incidence of low birth weight and pre-term birth.
- Mothers who engaged in these risky behaviours were younger on average than mothers who did not.
- Prenatal classes were attended by 63.5% of women having a first live birth, and prenatal class attendance was associated with decreased incidence of low birth weight and pre-term birth.

Births

Fertility Rates

- Fertility rates are clearly declining in Alberta (and across Canada).
- The general fertility rate (number of live births per 1,000 women aged 15-49 in a given year) was 45.6 in 2000, while the total fertility rate (number of live births per 1,000 women aged 15-49 over a lifetime) was 1,660.
 - Both of these rates reached fifteen-year lows in 2000.

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- Fertility is declining in women under 30 years of age, and increasing for women aged 30 to 44 years (see age specific fertility rates).

Live Births

- Live births continue to decline in Alberta in spite of population increases, resulting in a further decrease in the crude birth rate in 2000. The crude birth rate in 2000 was 12.3 (live births per 1,000 population).

Birth Weight

- The Alberta low birth weight rate has been stable for several years, and was 6.1 (per 100 live births) in 2000.
- Low birth weight rates are elevated for pre-term births, multiple births and births to teenagers and older mothers.
- Small for gestation age rates showed a decreasing trend from 1986 to 2000, and the 2000 rate of 7.9 (per 100 live singleton births) was the fifteen-year low.
- In 2000, 12.9 out of every 100 liveborn infants weighed more than 4,000 grams.
 - High birth weight babies were most likely to be born to mothers over 25 years of age.
- The large for gestational age rate was 12.3 (per 100 live singleton births) in 2000; this rate increased over the fifteen-year study period.

Pre-term Births

- The pre-term birth rate (per 100 live births) reached a new high of 8.5 in 2000.
 - Prematurity is strongly associated with negative birth outcomes, and this rate is of concern.
 - Pre-term births are often also low birth weight births and/or multiple births.
 - Teenage mothers and mothers aged 35 and over are at greater risk for pre-term birth.

Multiple Births

- Multiple births are increasingly common, with a 2000 rate of 3.0.
 - Multiple birth frequency increases linearly with increasing maternal age.
 - The majority of multiple births are low birth weight and/or pre-term.

Infant Morbidity

- Infant morbidity rates are generally low in Alberta.
 - The rate of respiratory distress syndrome was 1.2 (per 100 hospital deliveries) in 1999 and 2000 combined.

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- Congenital anomalies occurred in 34.3 out of every 1,000 total births in Alberta in 2000; the rate of congenital anomalies decreased during the fifteen years from 1986 to 2000.
 - Mothers aged 35 and older are at greater risk of having an infant with a congenital anomaly.

Mortality

Stillbirths

- The rate of stillbirth was 6.5 (per 1,000 total births) in 2000; this rate did not vary systematically over the fifteen-year study period.
- Stillbirths are more common for teenage mothers and mothers aged 35 and older.
- Most stillbirths are low birth weight and/or pre-term.
- Multiple pregnancies are much more likely to end in one or more stillbirths than singleton pregnancies.

Perinatal and Neonatal Mortality

- The perinatal mortality rate for 2000 was 9.7 (per 1,000 total births).
- The neonatal mortality rate (per 1,000 live births) was 4.1 in 2000.
 - Perinatal and neonatal deaths decrease markedly with increasing birth weight and gestational age.
 - Overall perinatal and neonatal mortality rates, corrected for congenital anomalies, increase with increasing maternal age.
 - Low birth weight, prematurity, and congenital anomalies are strong predictors of perinatal and neonatal deaths.

Post-Neonatal Mortality

- The post-neonatal mortality rate for 2000 was 2.4 (per 1,000 live births).
 - This rate was at its highest point since 1994 in 2000.

Infant Mortality

- Infant mortality declined over the fifteen-year study period, although the 2000 rate of 6.5 (per 1,000 live births) was the highest in several years. This statistic will be carefully monitored to determine whether the 2000 rate was anomalous, or a trend is developing.
 - Infant mortalities are more common in male infants than in female infants (the rates were 7.5 and 5.5, respectively, in 2000).

Maternal Mortality

- The maternal mortality rate is low in Alberta, and has decreased significantly over time.

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- There was one maternal death in 1999 and there were no maternal deaths in 2000 reported to medical records departments in Alberta. The 1999 maternal death was classified as unrelated. This means that the death was not related to pregnancy, childbirth, or puerperium, but occurred within the 90-day post-delivery time frame.

Maternal Factors

Number of Live Births to Mothers

- Data on number of live births to a mother appear in this report for the first time.
- In 2000, 42.2% of live births were first live births, 34.1% were second live births, 14.8% were third live births, and the remaining 8.8% were fourth or later live births.
- Over the time period 1986 to 2000, there was a small significant decrease in the proportion of second and third live births, accompanied by a small significant increase in proportion of first births, indicating a downward shift in number of live births per mother.
- First live births are more likely to result in small and/or pre-term infants than are second live births.

Maternal Postnatal Morbidity

- Maternal postnatal morbidity data are new to this report this year.
 - The incidence of shoulder dystocia for 1999 and 2000 combined was 3.3 (per 100 hospital deliveries).
 - Postpartum hemorrhage occurred in 16.5 out of every 100 hospital deliveries in 1999 and 2000 combined data.
 - Depression was a common occurrence in postpartum women in 1999 and 2000 combined, with incidence of 12.8% in the first year after giving birth and 16.7% in the first twenty-four months postpartum.
 - The depression rate for mothers prior to pregnancy was 2.5%.

Maternal Postnatal Behaviours

- Breastfeeding initiation rates are quite high in Alberta, with 86.6% of women giving birth in hospitals breastfeeding at the point of discharge in 2000.
 - This rate showed a small increase from 1996 to 2000.

For further information on any aspect of the report, please contact the Health Surveillance Branch of Alberta Health and Wellness, or the Alberta Medical Association Committee on Reproductive Care.

Introduction

Alberta Reproductive Health: Pregnancies and Births 2002

INTRODUCTION

This document signifies continued successful collaboration between Alberta Health and Wellness and the Alberta Medical Association in reporting on the reproductive health of Albertans. This year, the Northern and Central Alberta Perinatal Outreach Program and the Southern Alberta Perinatal Outreach Program also participated in this collaborative effort by providing data on maternal morbidity for the report.

Contents

Data consist of pregnancy and birth data for the calendar years 1986 to 2000, including:

- spontaneous abortions
- induced abortions
- operative deliveries and induction of labour
- epidurals in labour (1998 to 2000 only)
- maternal age
- maternal prenatal morbidity (1999 and 2000 only)
- maternal prenatal behaviours (1998 to 2000 only)
- live births
- birth weight
- pre-term births
- multiple pregnancies and births
- infant morbidity (1999 and 2000 only)
- stillbirths
- perinatal, neonatal, and infant mortality
- maternal mortality
- number of live births to mothers
- maternal postnatal morbidity (1999 and 2000 only)
- maternal postnatal behaviours (i.e., breastfeeding initiation)

Data Sources

- Vital Statistics Birth Registration files, Department of Government Services
- Vital Statistics Death Registration files, Department of Government Services
- Clinic Files, Alberta Health and Wellness
- Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness
- Fee-for-Service Claims Files, Alberta Health and Wellness
- Ambulatory Care Classification System, Alberta Health and Wellness
- Alberta Congenital Anomalies Surveillance System

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- Alberta Health Care Insurance Plan Stakeholder Registration File, Alberta Health and Wellness
- Alberta Medical Association Committee on Reproductive Care
- Reports from follow-up clinics for neonates and infants
- Northern and Central Alberta Perinatal Outreach Program
- Southern Alberta Perinatal Outreach Program
- Statistics Canada and Health Canada publications

Methodology and Limitations

- Only Alberta residents are included in analyses unless otherwise stated.
- Regional data (by regional health authorities) are provided where appropriate. Some data are broken down by relevant factors such as maternal age or birth weight groupings.
- National comparisons are made where possible. At the time of preparation of this document, national data were available to the end of 1999.
 - National data are extracted from Statistics Canada and Health Canada publications on births, therapeutic abortions, deaths, and population.
- Statistical analyses are mainly descriptive, including frequencies, rates, percentages, means and medians. Regional differences are interpreted in terms of standard errors and confidence intervals.
- With rare events (e.g., stillbirths) or detailed break-downs (e.g., live births by age group of mother, RHA, and year), rates may be based on small numbers, which reduces their statistical reliability. Caution should always be exercised in interpreting these rates.
- Data are often combined across three-year periods (e.g., 1998 to 2000) in order to increase reliability of rates.
- In some cases, linear, quadratic, and cubic effects are described. Linear effects refer to a straight-line relationship between two variables (either an increasing or a decreasing trend). Quadratic and cubic effects are non-linear: The relationship between two variables in this case is captured by a second-order (quadratic) or third-order (cubic) polynomial. A quadratic function results in a curve with one change of direction, for example a decrease followed by an increase (a U-shaped curve). A cubic function results in a curve with two changes of direction, for example an increase, followed by a decrease, followed by an increase.
- Birth statistics are derived from Vital Statistics Birth Registration Files. Registration of births in Alberta is a legal requirement, and the files are believed to be virtually complete. Births to non-Alberta residents occurring in Alberta have been excluded.
- Extracting maternal and infant morbidity data from health records is a challenging task, and the analyses reported here are exploratory in nature. To maximize capture of cases, we extracted diagnostic information from

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three data sources: Fee-For-Service Claims, Ambulatory Care Classification System, and Inpatient Hospital Morbidity files. The first three diagnoses for each case were checked, and each case was counted only once in a year for a given diagnosis.

- Many more maternal and infant conditions than those reported on here were studied in preliminary analyses. The final variable selections were based on a number of considerations, primarily data reliability and expert consultation.
- Information on post-neonatal and infant deaths is derived from Vital Statistics Death Registration Files. Registration of deaths in Alberta is a legal requirement, and the files are believed to be virtually complete. Deaths to non-Alberta residents occurring in Alberta have been excluded.
- Populations used for the calculations of rates are derived from the Alberta Health Care Insurance Plan Registration Files. They are estimated at June 30, as viewed at December 31 of each year. Provincial rate calculations include those with an “unknown” RHA code.
 - Population figures used in calculations in this report are in Tables A102 and A103.
- Because of differences in definitions and dates of extracting data for analyses, the statistics in this report may not be exactly the same as those previously published by Alberta Health and Wellness.

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**Time Trends for Major Indicators of
 Reproductive Health**

- The table below summarizes time trends for selected major indicators of reproductive health for the fifteen-year period from 1986 to 2000.
- Included are 2000 rates, the lowest rate for the fifteen-year period (with the year in which the lowest rate occurred in parentheses), the highest rate (year in parentheses), and the linear trend that applies from 1986 to 2000.

| Indicator | 2000 Rate | Lowest Rate (Year) | Highest Rate (Year) | Linear Trend ¹ |
|--|-----------|--------------------|---------------------|---------------------------|
| Induced Abortion Rate (per 1,000 women aged 15-49) | 13.0 | 8.0 (87) | 13.6 (97) | Increasing |
| Total Induction Rate (per 100 hospital deliveries) | 25.9 | 12.0 (88) | 25.9 (00) | Increasing |
| Cesarean Section Rate (per 100 hospital deliveries) | 20.2 | 15.7 (94) | 20.2 (00) | No trend |
| Mean Maternal Age at Delivery | 28.3 | 26.7 (86) | 28.3 (00) | Increasing |
| General Fertility Rate (per 1,000 women aged 15-49) | 45.6 | 45.6 (00) | 63.6 (86) | Decreasing |
| Total Fertility Rate (per 1,000 women) | 1,660 | 1,660 (00) | 1,876 (89) | Decreasing |
| Crude Birth Rate (per 1,000 population) | 12.3 | 12.3 (00) | 17.7 (86) | Decreasing |
| Low Birth Weight Rate (per 100 live births) | 6.1 | 5.5 (86, 87) | 6.2 (97,98) | Increasing |
| High Birth Weight Rate (per 100 live births) | 12.9 | 10.7 (88) | 12.9 (00) | Increasing |
| Pre-Term Birth Rate (per 100 live births) | 8.5 | 6.3 (86) | 8.5 (00) | Increasing |
| Multiple Birth Rate (per 100 live births) | 3.0 | 1.9 (86) | 3.0 (00) | Increasing |
| Congenital Anomalies Rate | 34.3 | 31.1 (99) | 48.5(90) | Decreasing |
| Stillbirth Rate (per 1,000 total births) | 6.5 | 5.0 (98) | 7.3 (91) | No trend |
| Perinatal Mortality rate (per 1,000 total births) | 9.7 | 7.7 (98) | 10.8 (90,95) | No trend |
| Neonatal Mortality Rate (per 1,000 live births) | 4.1 | 3.4 (91,98) | 5.0 (90) | No trend |
| Post-Neonatal Mortality Rate (per 1,000 live births) | 2.4 | 1.4 (97) | 4.0 (86) | Decreasing |
| Infant Mortality Rate (per 1,000 live births) | 6.5 | 4.9 (97) | 8.9 (86) | Decreasing |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Death File, Department of Government Services, May 2001 release.

Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Clinics Files, Alberta Health and Wellness.

Fee-for-Services Claims Files, Alberta Health and Wellness.

Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

Alberta Congenital Anomalies Surveillance System, 1980-99, November 2000 release.

Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Note:

1. Trend refers to whether a statistically significant linear trend is present in the data.

Populations are estimated at June 30, as viewed at December 31 of each year.

2. Note that mortality rates reported here are derived from Vital Statistics databases. The figures may differ somewhat from those reported by the AMA Committee on Reproductive Care due to differences in data sources.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

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National Comparisons

- Shown in the table below are national and provincial comparisons of selected major indicators for 1999 (the most recent year for which comprehensive national data are available).

| Indicator | Canada | Alberta |
|--|-------------------|---------|
| Induced Abortion Rate (per 1,000 women aged 15-44) | 16.1 | 14.8 |
| Cesarean Section Rate (per 100 hospital deliveries) | 19.2 ¹ | 19.1 |
| Mean Maternal Age at Delivery (years) | 28.7 | 28.2 |
| General Fertility Rate (per 1,000 women aged 15-49) | 42.3 | 47.7 |
| Total Fertility Rate (per 1,000 women) | 1,527 | 1,717 |
| Crude Birth Rate (per 1,000 population) | 11.1 | 12.9 |
| Low Birth Weight Rate (per 100 live births) | 5.6 | 5.9 |
| High Birth Weight Rate (per 100 live births) | 13.3 | 12.6 |
| Pre-Term Birth Rate (per 100 live births) | 7.3 | 7.8 |
| Multiple Birth Rate (per 100 live births) | 2.7 | 2.7 |
| Stillbirth Rate (per 1,000 total births) | 6.1 | 6.8 |
| Perinatal Mortality rate (per 1,000 total births) | 9.1 | 9.9 |
| Neonatal Mortality Rate (per 1,000 live births) | 3.6 | 3.7 |
| Post-Neonatal Mortality Rate (per 1,000 live births) | 1.6 | 2.0 |
| Infant Mortality Rate (per 1,000 live births) | 5.3 | 5.8 |

Sources:

Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Death File, Department of Government Services, May 2001 release.

Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Clinics Files, Alberta Health and Wellness.

Fee-for-Services Claims Files, Alberta Health and Wellness.

Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness

Births and Deaths (Shelf Tables), 1999, Statistics Canada

<http://www.statcan.ca/english/Pgdb/People/Health/health41a.htm> (Canadian induced abortions)

http://secure.cihi.ca/cihweb/dispage.jsp?cw_page=statistics_results_topic_pregnancy_e&cw_topic=Health%20Conditions&cw_subtopic=Pregnancy%20and%20Childbirth (Canadian cesarean sections)

Notes:

1. Canadian cesarean section rate is for 1998/99 fiscal year.

Populations are estimated at June 30, as viewed at December 31 of each year.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Pregnancies

Alberta Reproductive Health: Pregnancies and Births 2002

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Estimated pregnancies

Definitions

- An *estimate of total pregnancies* in the province in a given time period can be obtained by summing live births, stillbirths, spontaneous abortions, and induced abortions in that period.
- *Estimated pregnancy rate*: Number of estimated pregnancies per 1,000 women between 15 and 49 years of age.

Background

- Accurate pregnancy estimates, while providing valuable information, are difficult to obtain. Live births, stillbirths, and induced abortions are virtually completely reported in Alberta. Spontaneous abortions that are not recognized or have not been reported to physicians cannot be accounted for, however.
 - Pregnancy estimates in this report include only spontaneous abortions for which a physician claim has been made. Pregnancies are therefore underestimated.
- Total number of spontaneous abortions can be estimated from numerous sources, including survey data, fetal life tables, or clinical studies in which human chorionic gonadotropin levels are sampled. By these methods, up to 30% of clinically recognized pregnancies are estimated to end in spontaneous abortion (Hammerslough, 1992; The Alan Guttmacher Institute, 2000; Ventura, Curtin, & Mathews, 2000; Zinaman, Clegg, Brown, O'Connor, & Selevan, 1996).
 - Approximately 9% of the estimated pregnancies reported below for Alberta from 1986 to 2000 ended in spontaneous abortion. Based on the studies cited above, up to 20% more of the estimated pregnancies may have ended prior to being clinically recognized or without treatment by a physician.

Data Sources

- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.
- Stillbirths: Vital Statistics Stillbirth Registration files, Department of Government Services, January 2002 Release.
- Spontaneous abortions: Fee-for-Service Claims Files, Alberta Health and Wellness.
- Other induced abortions: Clinic Files, Alberta Health and Wellness.
- Hospital induced abortions: Fee-for-Service Claims Files, Alberta Health and Wellness.
- Population estimates: Alberta Health Care Insurance Plan Stakeholder Registration File, Alberta Health and Wellness.

Alberta Reproductive Health: Pregnancies and Births 2002

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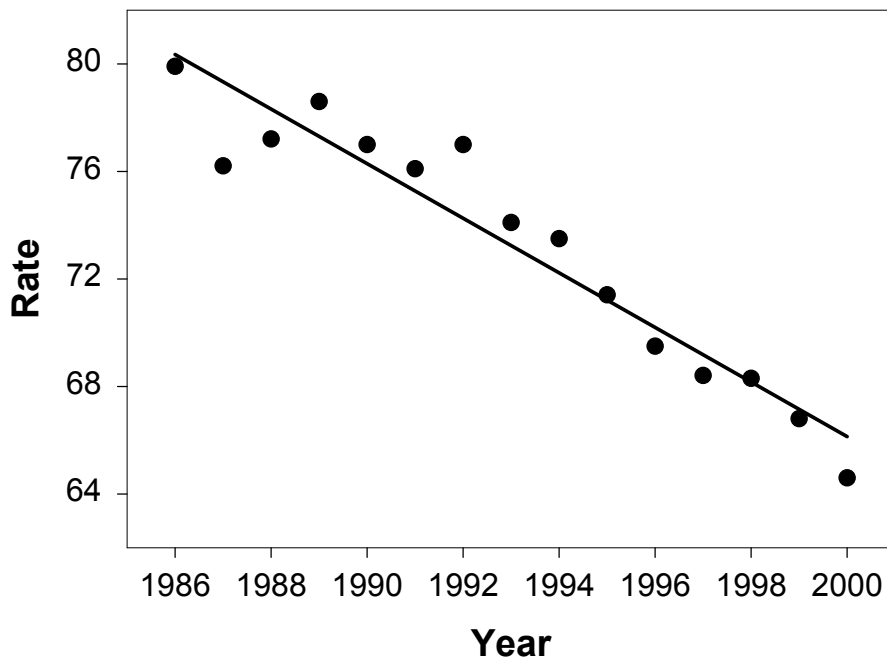
Estimated Pregnancies

Estimated Pregnancies Trends and Effects

- There were 51,851 **estimated pregnancies** in Alberta in 2000.
- The **estimated pregnancy rate** (per 1,000 women aged 15-49) was 64.6 in 2000, which is the lowest rate in the fifteen-year period covered by this report (see Table A1 and Figure 1).
- Table A2 contains data on estimated pregnancy rates broken down by **maternal age** group. The estimated pregnancy rate for women aged 15 to 17 showed a significant linear decrease between 1986 and 2000. For all age groups of women between 18 and 30, significant quadratic trends (in the shape of an inverted U) occurred for estimated pregnancy rates. That is, estimated pregnancy rates for women under thirty were relatively lower in the late 1980's, peaked in the early to mid 1990's, and have declined since. For women between 30 and 44 years, however, estimated pregnancy rates have shown significant *increasing* linear trends over the fifteen-year study period.
 - Women aged 25-29 years continue to have the highest pregnancy rates of all age groups. Women aged 20-24 and 30-34 now have virtually equal pregnancy rates; historically, women aged 20-24 had higher pregnancy rates than women aged 30-34. Women aged 20 to 34 years had 75.4% of the estimated pregnancies in Alberta in 2000.
- For 1998 to 2000 combined, 71.0% of estimated pregnancies ended in live birth.
 - This percentage varied dramatically with maternal age. As shown in Figure 2, there is a significant quadratic effect of maternal age group on **percentage of estimated pregnancies ending in live birth**, with the youngest and oldest age groups having the lowest percentages.
 - For women under 15, only 28.8% of estimated pregnancies ended in live birth between 1998 and 2000; this is the lowest percentage of all age groups.
 - Women aged 30 to 34 were most likely to have a pregnancy end in a live birth, with 80.4% of estimated pregnancies in this age group ending in live births.
- Estimated pregnancy rates by **residence RHA** appear in Table A3. Estimated pregnancy rates for 1998 to 2000 combined were significantly higher than the provincial average in RHAs 1, 6, 9, 12, 13, 14, 15, and 17, and significantly lower than the provincial average in RHAs 3, 5, 7, 8 and 10 (see Map 1).
 - Estimated pregnancy rates by residence RHA and maternal age group are documented in Table A4. Rates for women over 44 years of age *must be interpreted with caution* due to the low number of cases in this age group (indeed, many RHAs had no estimated pregnancies in this age group).

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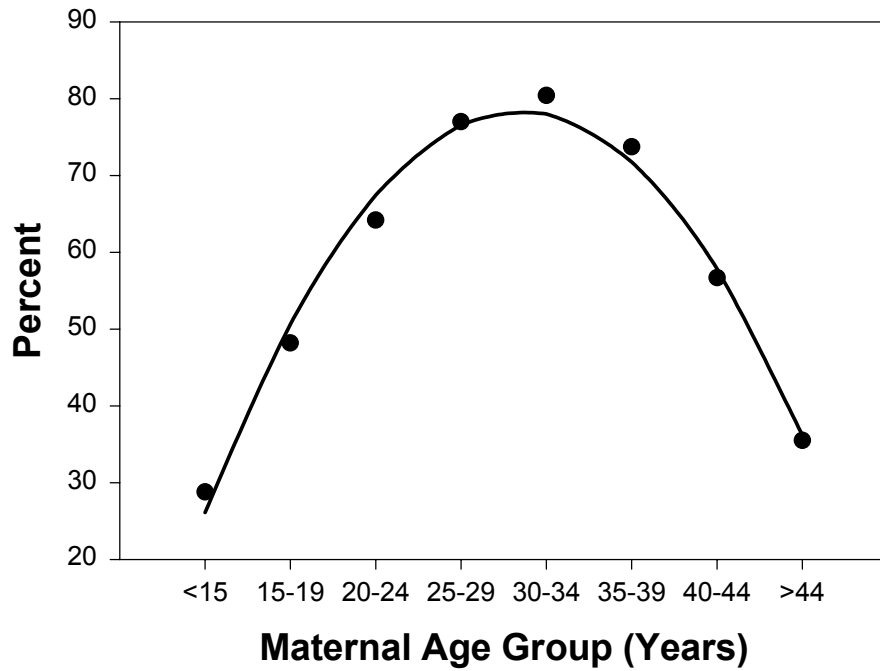
Figure 1.
Estimated Pregnancy Rate
(per 1,000 women aged 15-49),
Alberta, 1986 - 2000



Estimated Pregnancies

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Figure 2.
Percent of Estimated Pregnancies
Ending in Live Birth,
Alberta, 1998 - 2000 Combined



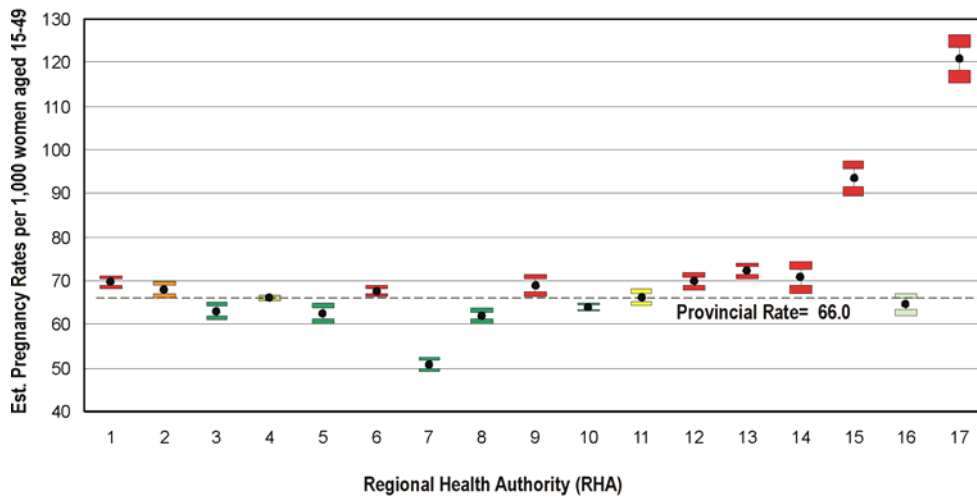
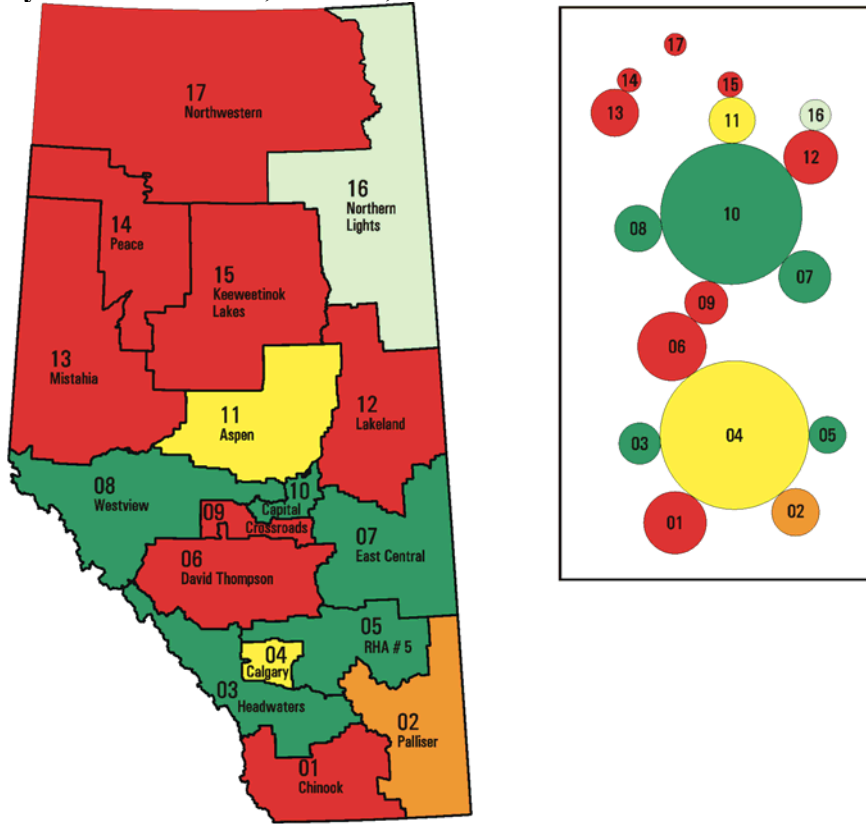
Estimated Pregnancies

Alberta Reproductive Health: Pregnancies and Births 2002

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Map 1. Estimated Pregnancy Rates (per 1,000 women aged 15-49) by Residence RHA, Alberta, 1998 – 2000 Combined.

Estimated Pregnancies



Spontaneous Abortions

Definitions

- **Spontaneous abortion:** Naturally occurring premature expulsion from the uterus of the products of conception – of the embryo, or of a nonviable fetus (Dorland, 2000). Also commonly referred to as miscarriage. In Alberta, the legal definition of spontaneous abortions refers to those occurring prior to 20 weeks gestation.
 - Included in this category are clinical spontaneous abortions treated by physicians, excluding unreported or undetected spontaneous abortions. Although the true number of spontaneous abortions is underestimated (see Estimated Pregnancies section), the data nevertheless allow approximation of time trends and maternal age effects.
 - For repeat spontaneous abortions, a two-month time lag between physician visits was used as the cutoff point for separate pregnancy events.
- **Spontaneous abortion rate:** Number of spontaneous abortions treated by physicians per 1,000 women aged 15-49, or per 100 estimated pregnancies.

Background

- The incidence of spontaneous abortion increases substantially with maternal age.
 - Spontaneous abortion rates in clinically recognized pregnancies for mothers under 30 years of age have been estimated to be in the 10% range, while rates for mothers over 35 have been estimated in the 26% to 28% range (Goldhaber, Fireman, Saraiya, & Berg, 2000; Saraiya, Berg, Shulman, Green, & Atrash, 1999). Note that these estimates do not incorporate adjustment for spontaneous abortions that may have occurred in pregnancies that ended in induced abortions.
- More than half of spontaneous abortions result from chromosomal abnormalities (Reindollar, 2000).
- Recurrent spontaneous abortion is rare; it has been associated with parental chromosomal abnormalities, antiphospholipid syndrome (an autoimmune disease), polycystic ovarian disease, and maternal age over 40 years (Reindollar, 2000).

Data Sources

- Spontaneous abortions: Fee-for-Service Claims Files, Alberta Health and Wellness.
- Population estimates: Alberta Health Care Insurance Plan Stakeholder Registration File, Alberta Health and Wellness.

Alberta Reproductive Health: Pregnancies and Births 2002

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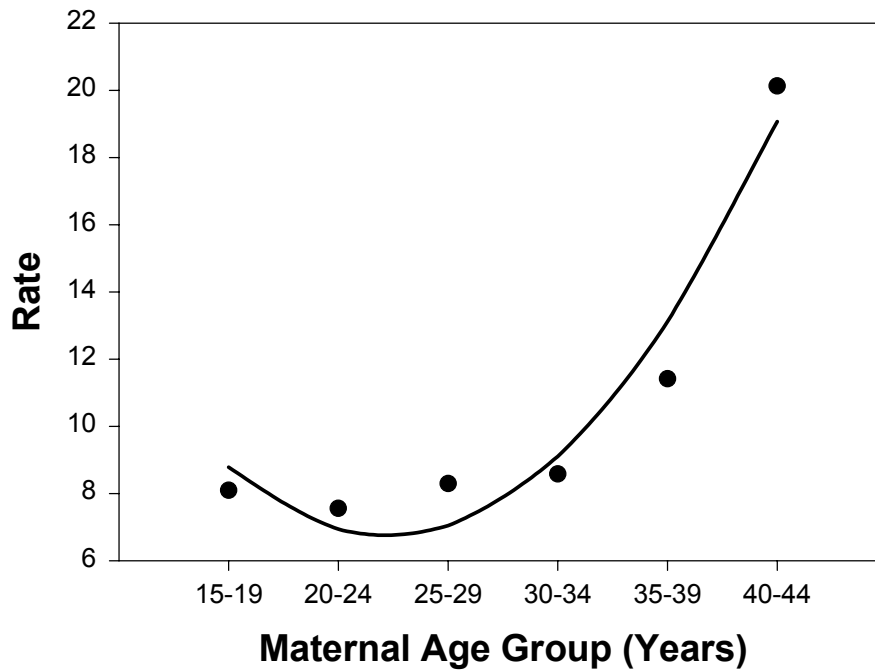
Spontaneous Abortions

Spontaneous Abortions Trends and Effects

- The **spontaneous abortion rate (per 1,000 women aged 15-49)** has declined in concert with declining fertility rates over the last several years (see Table A1). The 2000 rate was 5.7.
- The **spontaneous abortion rate (per 100 estimated pregnancies)** follows no linear time trend (see Table A1). The 2000 rate was 8.8.
- Spontaneous abortion rates vary with **maternal age** group (see Table A5). Note that rates for women under 15 and over 44 years are not reliable due to low numbers of spontaneous abortions in these age groups; *these rates must be interpreted with caution.*
 - Not surprisingly, the rate (per 1,000 women aged 15-49) is highest for women aged 20 to 34, who have the highest number of pregnancies.
 - The rate (per 100 estimated pregnancies) is stable across maternal age for women under 35, increases somewhat for women aged 35-39, and then increases considerably for women over 39. For the 40-44 age group, 18.7% of estimated pregnancies ended in clinically-recognized spontaneous abortion in 2000 (see Figure 3 for these data for 1998 to 2000 combined).
- Spontaneous abortion rates by **residence RHA** are shown in Table A6.

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Figure 3.
Spontaneous Abortion Rate
(per 100 estimated pregnancies)
by Maternal Age Group,
Alberta, 1998 - 2000 Combined



Reproductive Care Services

Induced Abortions

Definitions

- **Induced abortion:** Intentional premature expulsion from the uterus of the products of conception – of the embryo, or of a nonviable fetus (Dorland, 2000). Also commonly referred to as therapeutic abortion.
- **Induced abortion rate:** Number of induced abortions per 1,000 women aged 15-49, or per 100 estimated pregnancies.
- **Age-specific induced abortion rate:** Number of induced abortions per 1,000 women in a given age group.

Background

- Induced abortions came under the control of the Criminal Code in a in 1969. Private clinics became legal in 1988 after a Supreme Court decision struck down the 1969 law (Wadhwa & Millar, 1996).
- Private abortion clinics opened in Alberta in 1991. In 1996, private abortion clinics became fully funded by RHAs.
- In **Canada** in 1999, there were 15.5 abortions for every 1,000 women aged 15 to 44 (Statistics Canada, 2002a); the Alberta rate for women aged 15 to 44 in 1999 was 14.8.
 - One-third of induced abortions in **Canada** in 1999 occurred in clinics (Statistics Canada, 2002a); 41.9% of induced abortions in Alberta occurred in clinics in 1999.

Data Sources

- Hospital induced abortions: Fee-for-Service Claims Files, Alberta Health and Wellness
- Clinic induced abortions: Clinic Files, Alberta Health and Wellness
- Regional comparisons are provided from both facility and residence perspectives. However, because region of residence information is not available in the Clinic Files, it is extracted from Fee-for-Service Claims files and data may not correspond exactly due to data source differences.
- Population estimates: Alberta Health Care Insurance Plan Stakeholder Registration File, Alberta Health and Wellness

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Induced Abortions Trends and Effects

- The **induced abortion rate** (per 1,000 women between 15 and 49 years of age) was 13.0 for 2000 (see Table A1). While there was a significant linear increase in the induced abortion rate over the fifteen-year study period, the rate peaked in 1996 and has declined slightly since then.
- The **induced abortion rate** (per 100 estimated pregnancies) was 20.1 in 2000 (see Table A1). This rate increased between 1986 and 2000 (see Figure 4).
- Women between 18 and 24 years of age continue to have the highest induced abortion rates of all age groups. See Table A7 for **age-specific induced abortion rates**. Note that the age-specific rates for women over 44 are *too unreliable to interpret*, due to low numbers of induced abortions in this age group.
 - The **age-specific induced abortion rate (per 1,000 women in each age group)** for women younger than 15 follows a quadratic trend over the 15-year study period, with rates peaking between 1992 and 1995 and declining since.
 - The rate for women aged 15 to 19 was 20.5 in 2000, which is the lowest rate for this age group since private clinics opened in 1991.
 - The induced abortion rate for 20 to 29 year olds has been relatively stable over the last several years, while still showing an overall increasing trend from 1986 to 2000.
 - The rate for 30 to 44 year old women is increasing, in tandem with increasing pregnancy rates for women in this age group.
 - The **age-specific induced abortion rate (per 100 estimated pregnancies)** has increased over time for all age groups of women under 40; for women aged 40 to 44, there is no reliable trend. Women under the age of 25 have the highest proportion (out of all of the age groups) of pregnancies that end with induced abortion.
- In 2000, **private clinics** performed 43.4% of induced abortions, with the remainder occurring in hospitals (see Table A8).
- Only 2.9% of induced abortions were performed outside of Edmonton or Calgary in 2000 (see Table A9).
 - 43.0% of induced abortions were performed in Edmonton and 54.1% in Calgary (see Table A9).
- A large majority of induced abortions occur within the first 12 weeks of pregnancy. In 2000, 88.1% of induced abortions occurred prior to 13 weeks **gestation**, and 11.8% occurred between 13 and 20 weeks gestation.
 - Women aged 15 to 24 are most likely to have induced abortions between 9 and 12 weeks gestation, while women aged 25 to 44 are most likely to have induced abortions at less than 9 weeks gestation (see Table A10).
 - In hospitals, the most common gestational age for induced abortions was 9 to 12 weeks, with 49.8% of induced abortions in hospitals

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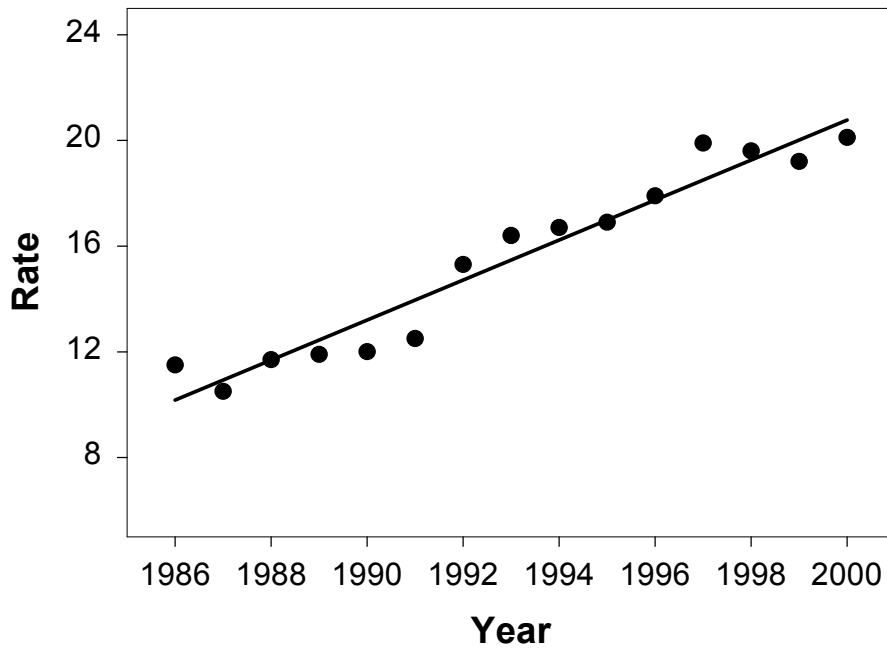
Reproductive Care Services

occurring in this gestational age group. In clinics, the highest frequency of induced abortions was 46.3%, occurring in the “less than 9 weeks” gestational age category (see Table A11).

- Induced abortions and induced abortion rates by **residence RHA** appear in Table A12.
 - For 1998 to 2000 combined, induced abortion rates were higher than the provincial average in RHAs 4 and 10, and lower than the provincial average in all other RHAs, with the exception of RHA 3, where rates did not differ from the provincial average.

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Figure 4.
Induced Abortion Rate
(per 100 estimated pregnancies),
Alberta, 1986 - 2000



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Maternal Factors

Deliveries

Definitions

- **Induced labour:** Labour brought on by mechanical or other extraneous means (Dorland, 2000).
 - **Medical induction:** Induction with oxytocin or prostaglandins.
 - **Surgical induction:** Induction of labour by artificial rupture of membranes or other surgical methods.
- **Epidural analgesia:** A method of pain relief consisting of continuous bathing of lumbar or thoracic nerve roots within the epidural space with an injected anesthetic solution (Dorland, 2000).
- **Vaginal delivery:** Delivery of an infant through the normal openings of the uterus and vagina (Dorland, 2000).
- **Cesarean section:** Incision through the abdominal and uterine walls for delivery of a fetus (Dorland, 2000). Also known as an abdominal delivery.
- **Breech delivery:** Extraction of the infant from the uterus in breech presentation; i.e., when the buttocks of the fetus are presented in labour (Dorland, 2000).
- **Forceps delivery:** Extraction of a fetus from the maternal passages by application of forceps to the child's head (Dorland, 2000).
- **Vacuum extraction:** Use of a device, consisting of a suction cup connected to a vacuum bottle, to facilitate delivery. The suction cup is placed on the fetus' head and vacuum pressure is applied to pull the baby out of the birth canal (Morgan, 1990).
- **Rates** for the above procedures are per 100 hospital deliveries.

Background

- High cesarean section rates in recent decades have been a topic of concern (Millar, Nair, & Wadhera, 1996). Risk factors for both primary and secondary cesarean sections have been extensively studied in an effort to safely reduce the rate of primary cesarean sections and increase vaginal births after cesarean deliveries (e.g., Janssen, Klein, & Soolsma, 2001; Mastrobattista, 1999).
- There is ongoing debate over the use of forceps versus vacuum extraction in assisted deliveries. It appears that maternal trauma is reduced with the use of vacuum extraction relative to forceps delivery, but that certain types of neonatal injury may be more common with vacuum extraction (Putta & Spencer, 2000; Wen, Liu, Kramer, Marcouz, Ohlsson, Sauve, & Liston, 2001; see also Buekens, 2001).

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Data Sources

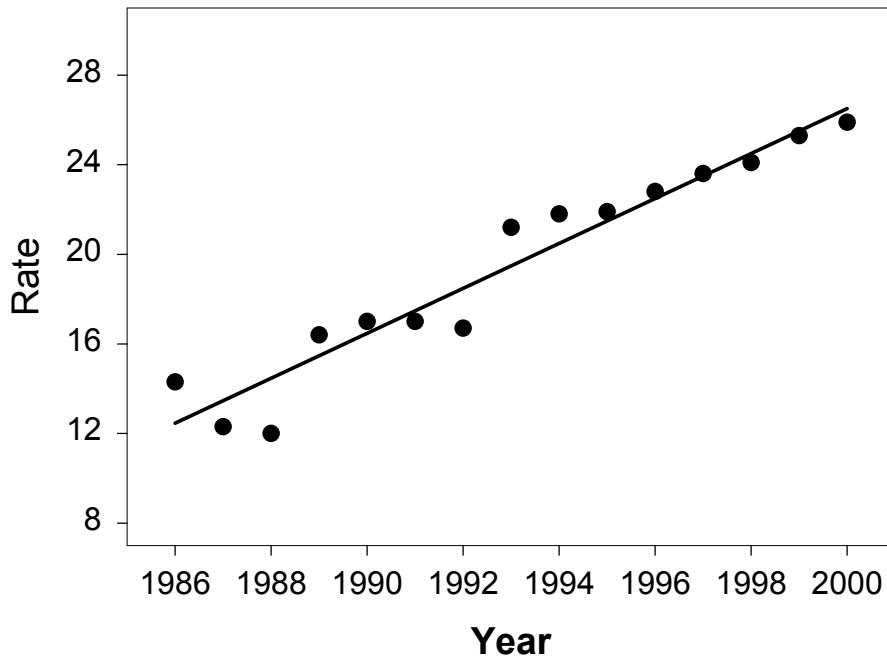
- Inductions, cesarean sections, forceps deliveries, and vacuum extractions: Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.
- Rates are calculated based on hospital deliveries only; home deliveries are not included in total deliveries in this section. Because only primary, secondary, and tertiary ICD9-CM diagnostic and procedure codes were available from 1985 to 1992, the diagnostic and procedure criteria for all years were based on the first three codes only. Thus, the number of procedures (especially minor procedures) may be undercounted. Detailed criteria for data extraction are provided under relevant tables and in Appendix 2.
- Epidural analgesia, cesarean section, and breech delivery data: Alberta Medical Association Committee on Reproductive Care.

Deliveries Trends and Effects: Type of Labour

- In 2000, 74.1% of hospital deliveries occurred after spontaneous labours.
- The **total induction** rate (per 100 hospital deliveries) was 25.9 in 2000. Induction rates have climbed steadily since 1988 (see Table A13 and Figure 5).
 - Most induced labours were **medical inductions**. The medical induction rate was 20.0 in 2000, which is the highest rate since 1986.
 - **Surgical induction** rates peaked in 1993 and 1994, and reached their lowest rate since 1986 in 2000; the 2000 surgical induction rate was 1.5.
 - **Combined inductions** occurred in 4.5% of hospital deliveries in 2000
- Induction rates by **residence RHA** for 1998 to 2000 are in Table A14. Rates varied considerably between regions.
 - Combined data for 1998 to 2000 show that RHAs 10, 11, and 16 had higher total induction rates than the provincial average, while RHAs 1, 2, 3, 5, 14, and 17 had lower than average rates (see Map 2).

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Figure 5.
Total Induction Rate
(per 100 hospital deliveries),
Alberta, 1986 - 2000



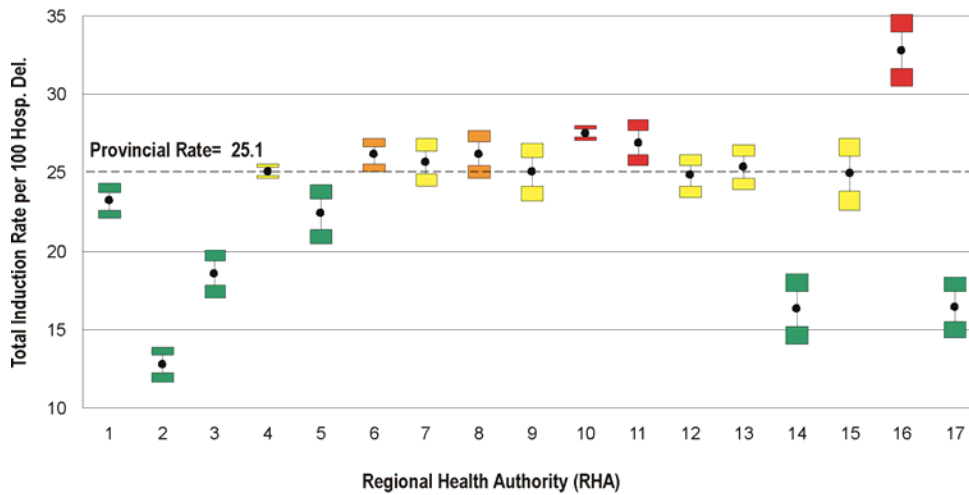
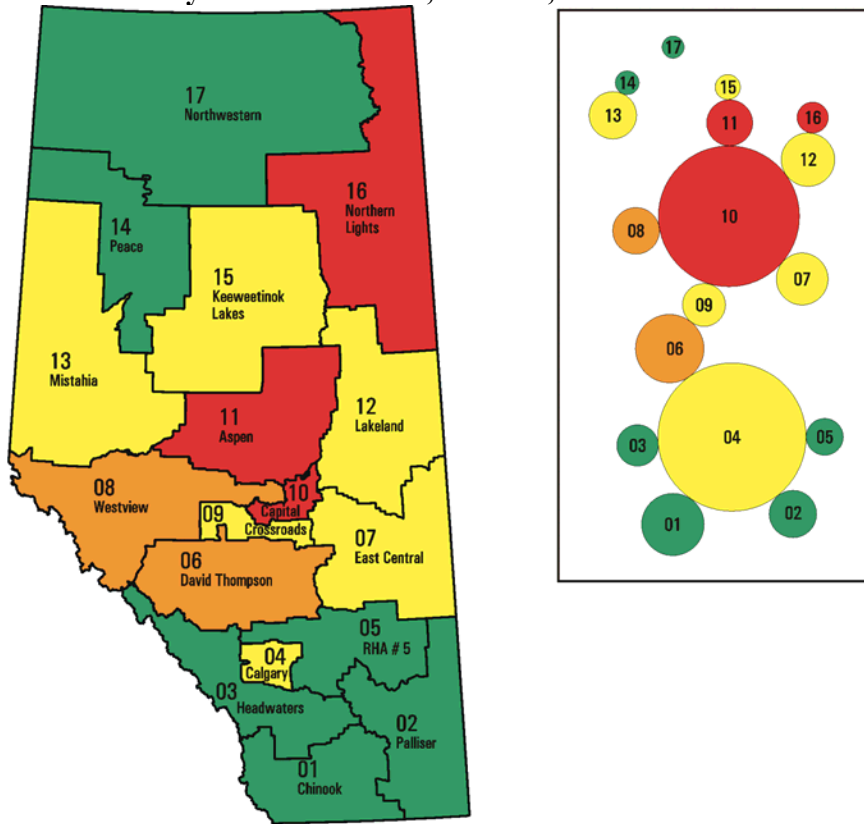
Maternal Factors

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Map 2. Total Induction Rate (per 100 hospital deliveries) by Residence RHA, Alberta, 1998 – 2000 Combined.

Maternal Factors



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Deliveries Trends and Effects: Epidural Analgesia

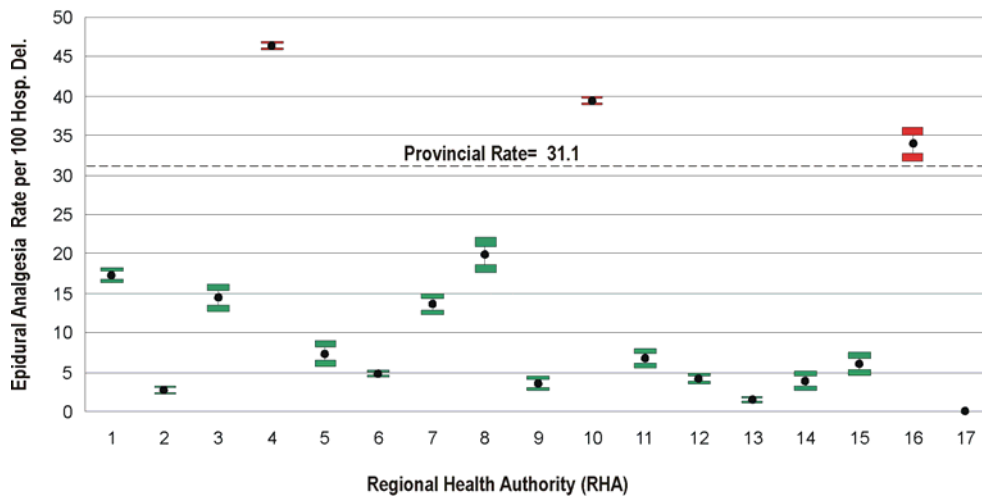
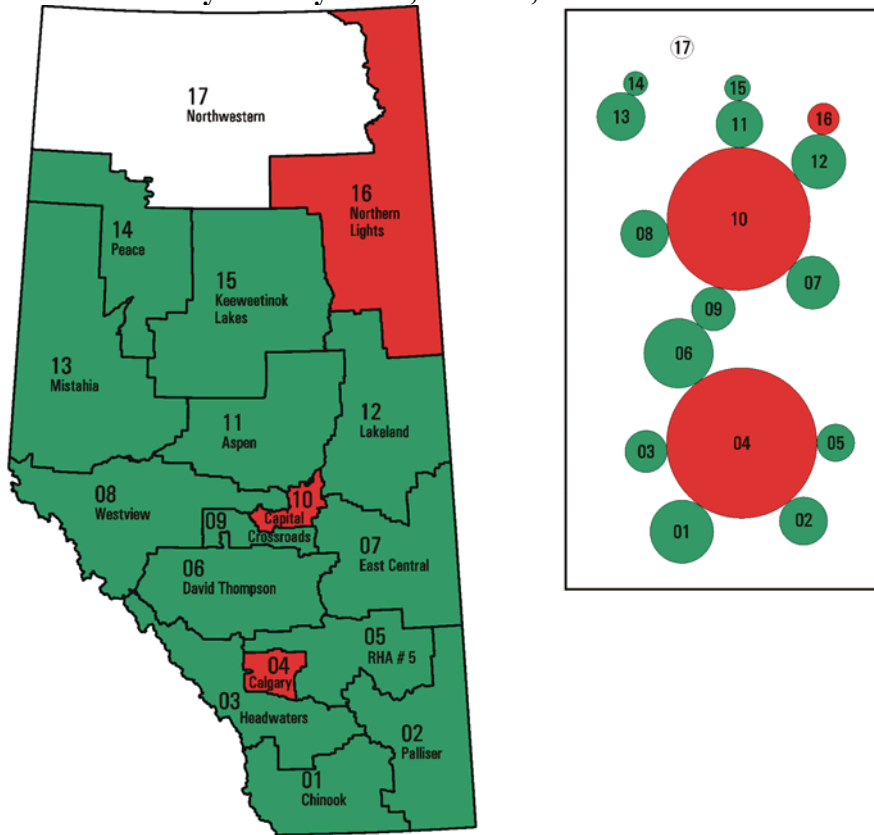
- The provincial **epidural analgesia** rate was 33.1 (per 100 hospital deliveries) in 2000.
- Table A15 shows the rates for regional health authority facilities for 1998 to 2000. The rates are quite variable; a number of regions show large differences between 1998 and 2000 rates.
 - Map 3 shows the epidural rates (per 100 pregnancies) for 2000 by **facility RHA**. The rates were higher than the provincial average in RHAs 4, 10, and 16, and lower in all other RHA's for which rates were calculated. There were no cases of epidural analgesia for labour and delivery reported in RHA 17, so no rate could be calculated.
- Table A16 shows epidural analgesia use in labour and delivery by **level of hospital** for 1998 to 2000 (see Health Canada 2000b for definition on levels of hospital care).
 - While the rate of epidural analgesia increases overall with level of hospital, there is variation within levels.

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Map 3. Epidural Analgesia Rate (per 100 hospital deliveries) by Facility RHA, Alberta, 1998 – 2000 Combined.

Maternal Factors



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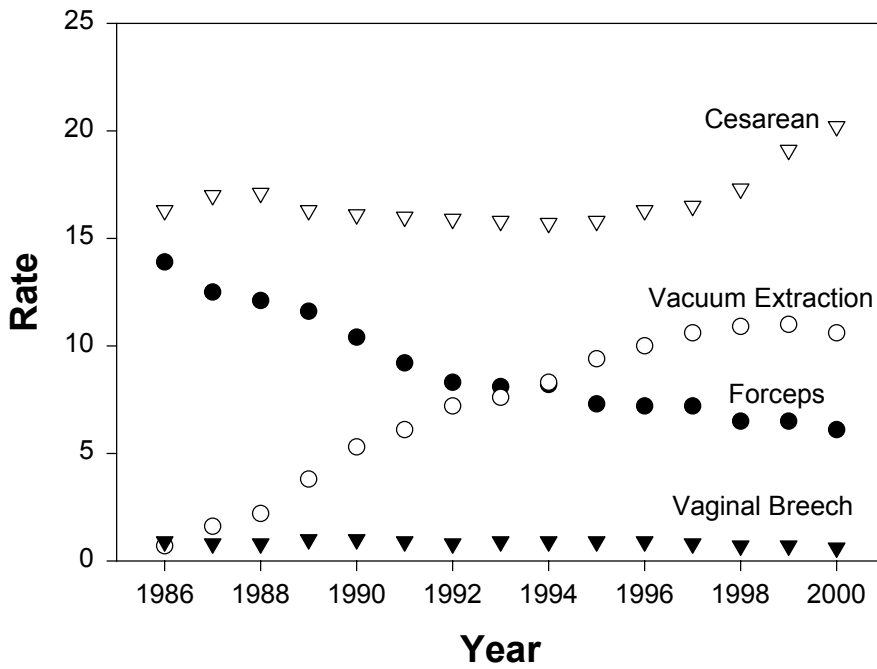
Maternal Factors

Deliveries Trends and Effects: Method of Delivery

- Rates for cesarean section, forceps, vacuum extraction, and vaginal breech deliveries are shown in Figure 6.
- The **cesarean section** rate (per 100 hospital deliveries) has increased since 1995, after a period of decrease, resulting in a significant quadratic trend over the fifteen-year study period. The rate was 20.2 in 2000, the fifteen-year high (see Table A17).
 - When data for 1998 to 2000 are combined for **residence RHAs**, cesarean rates are higher than the provincial average in RHAs 4, 6, 7, 12, 14, and 16, and lower than the provincial average in RHAs 1, 2, 8, 9, 13, and 17 (see Map 4 and Table A18).
 - Tables A19 and A20 provide detailed data for cesarean sections for each of the regional health authorities in 1999 and 2000.
 - Most cesarean sections were primary cesarean sections (67.1% in 2000).
 - Labour was attempted for 45.7% of deliveries in 2000 for mothers who had previous cesarean sections. In 2000, 75.2% of these attempted vaginal births after cesarean sections (VBAC's) were successful.
 - The perinatal and neonatal combined death rate for cesarean sections was 7.1 in 2000 (per 1,000 total births).
 - Table A21 shows the cesarean section and VBAC rates for 1992 to 2000. There has been an upturn in the repeat cesarean rate, accompanied by a decrease in trials of labour and VBAC's, over the last two years. A significant quadratic trends is present for repeat cesarean sections (rates decreased from 1992 to the mid-1990's, then increased). Trials of labour and VBACs also followed significant quadratic trends, with an opposite pattern (increasing to the mid-1990's, and decreasing since). There are no significant trends in the VBAC success rate.
- As shown in Table A17, **forceps and vacuum extraction** rates follow opposing trends. Forceps rates decreased over the fifteen-year study period, while vacuum extraction rates increased.
 - In 2000, 6.1% of deliveries were by forceps and 10.6% by vacuum extraction.
 - As shown in Table A18, forceps rates varied with **residence RHA**. Forceps rates were higher than the provincial average in RHAs 4, 10, and 16 and lower than average in RHAs 1, 2, 6, 9, 11, 12, 13, 14, 15, and 17 when data were combined for 1998 to 2000.
 - Vacuum extraction rates were higher than the provincial average in **residence RHAs** 4, 8, 10, 11, 12 and 17, and lower in RHAs 1, 2, 6, 9, 13, 15, and 16 for 1998 to 2000.

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Figure 6.
Specified Types of Delivery Rates
(per 100 hospital deliveries),
Alberta, 1986 - 2000



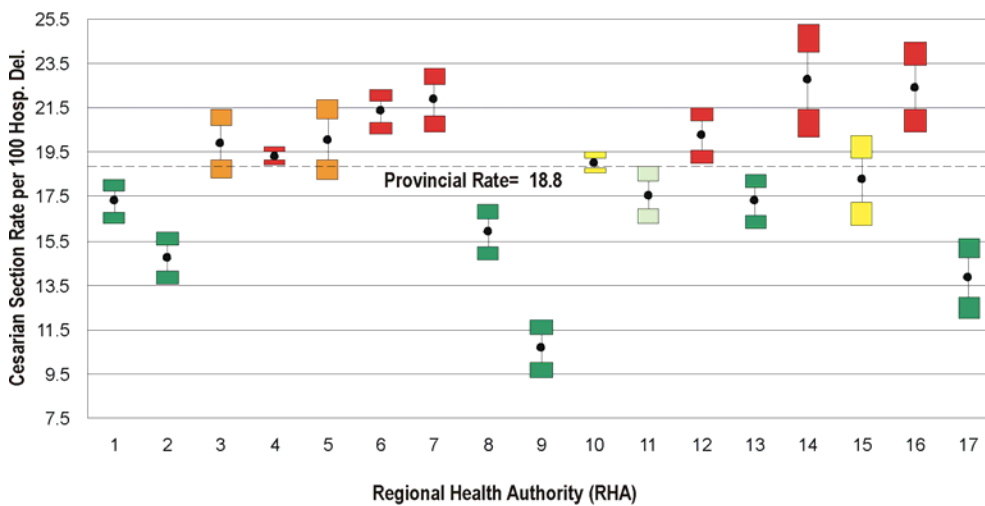
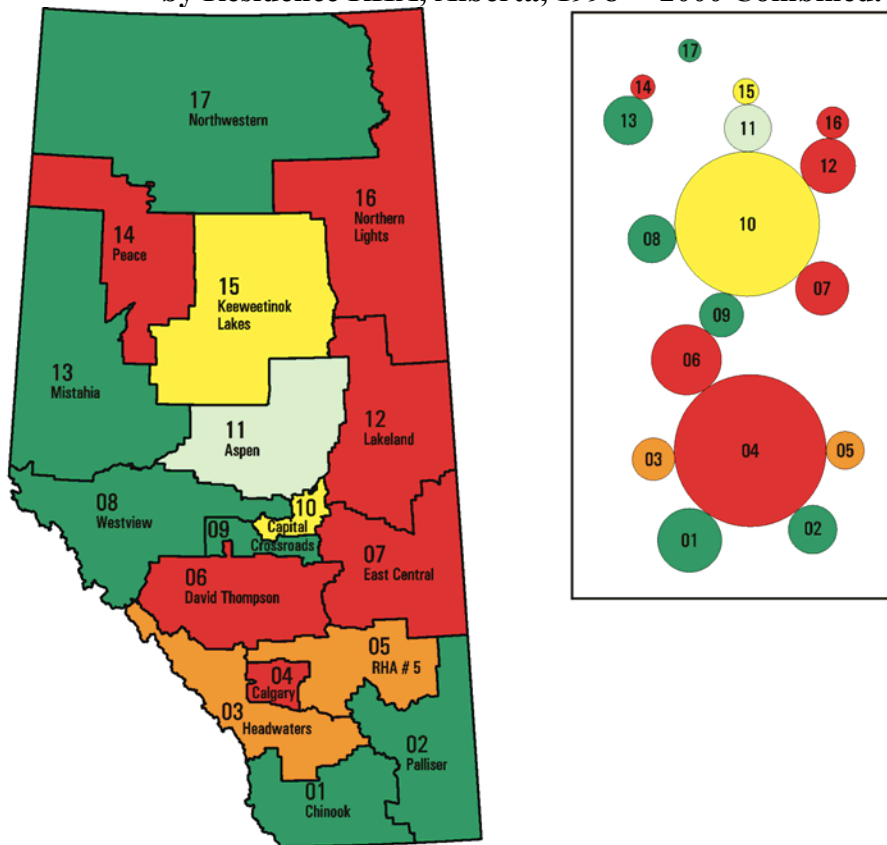
Maternal Factors

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Map 4. Cesarean Section Rate (per 100 hospital deliveries) by Residence RHA, Alberta, 1998 – 2000 Combined.

Maternal Factors



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Deliveries Trends and Effects: Breech Deliveries

- As shown in Table A17, **vaginal breech deliveries** constituted just 0.6% of all deliveries in Alberta in 2000.
 - Table 18 provides data by **residence RHA** for vaginal breech deliveries. Vaginal breech deliveries were more common than the provincial average for 1998 to 2000 in RHA 4, and were less common than the provincial average in RHAs 11, 12, 13, 14, 15, 16 and 17.
- Table A22 contains information about breech deliveries in 1999 and 2000 by **level of hospital**.
 - Breech births were more likely to be delivered vaginally in Level III hospitals than Level I and II hospitals. In Level III hospitals in 2000, 23.7% of breech deliveries were vaginal, while in Levels I and II the rates of vaginal breech delivery were 13.5 and 13.4, respectively (see Health Canada 2000b for definition on levels of hospital care).
- Table A23 describes **perinatal and neonatal mortality** by level of hospital for breech deliveries in 1999 and 2000.
 - The perinatal mortality rate for breech presentation in 2000 was 77.5 (per 1,000 total breech births); when corrected for congenital anomalies, the rate was 53.2. The neonatal mortality rate for breech presentation was 32.9 (per 1,000 live breech births); when corrected for congenital anomalies, the rate was 22.7. *These rates must be interpreted with caution* due to the low number of cases involved.
 - For 87.2% of perinatal mortality cases that were breech presentations in 2000, delivery was vaginal. Perinatal and neonatal mortality rates were considerably higher for vaginal breech deliveries than for cesarean breech deliveries. *These rates must be interpreted with caution* due to the low number of cases involved.
 - Mortality rates in all cases were higher in Level III hospitals than in Level I and II hospitals. Obviously, this is due in part to the fact that high-risk cases tend to be referred to Level III hospitals.
 - Table A24 presents details for 1994 to 2000 on perinatal and neonatal mortality for breech deliveries. *These rates must be interpreted with caution* due to the low number of cases involved.

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Maternal Factors

Maternal Age

Definitions

- *Maternal age* refers to the age of the mother in years at the time of the event in question.

Background

- Mothers 30 years and over are more likely than mothers aged 20-29 years to have cesarean sections, low birth weight births, pre-term births, maternal complications, and infants with chromosomal anomalies (MacNab, Macdonald, & Tuk, 1997).
- Teenaged mothers are more likely than mothers aged 20-29 to have low birth weight or pre-term infants (Tough, Svenson, & Schopflocher, 1999).
- In 1999, the mean maternal age was 28.7 years in **Canada** (Statistics Canada, 2002b), and 28.2 years in Alberta.

Data Sources

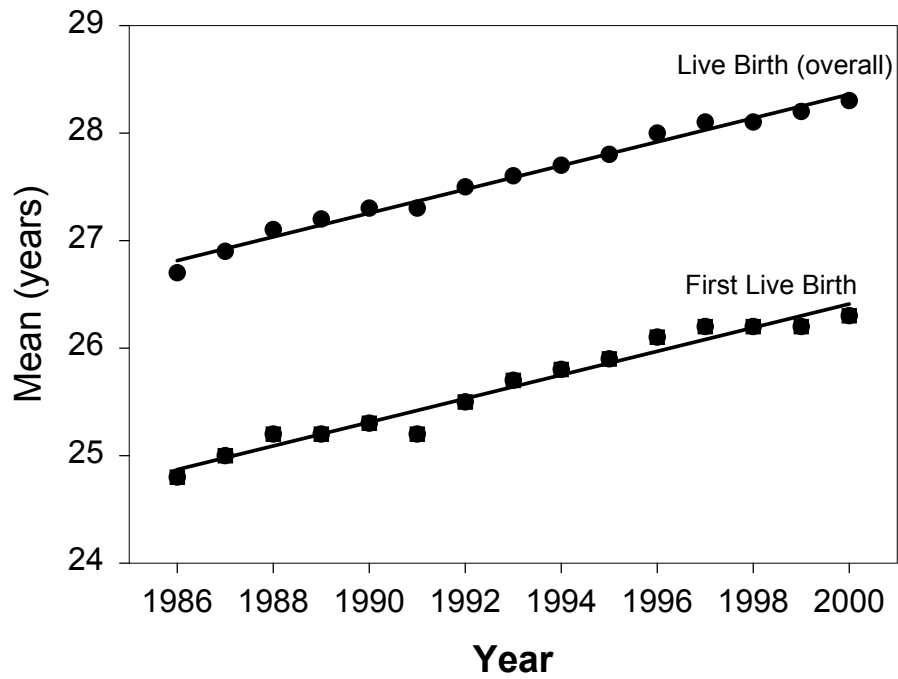
- Maternal age data: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.

Maternal Age Trends and Effects

- Most pregnancy outcomes vary with maternal age. A summary table for 1998 to 2000 combined appears in Table A25.
 - Teenaged mothers are more likely than other mothers to have small infants, and are at increased risk of preterm birth and stillbirth, while having the lowest rate of multiple births. Teenaged mothers are least likely to have a midwife as primary birth attendant.
 - Mothers 40 years and older have elevated low and high birth weight rates, preterm birth rates, and stillbirth rates. They are most likely to have multiple births, and to have a midwife as primary birth attendant, although midwife attendant rates are very low for all age groups.
- In 2000, the mean maternal age at delivery reached a new high for Alberta at 28.3 years. There is a clear linear increase in mean maternal age since 1986 (see Table A26 and Figure 7).
 - Maternal age at first live birth was 24.8 years in 1986 and 26.3 years in 2000.
- Mean maternal age by residence RHA for live births for 1998 to 2000 combined is shown in Figure 8.

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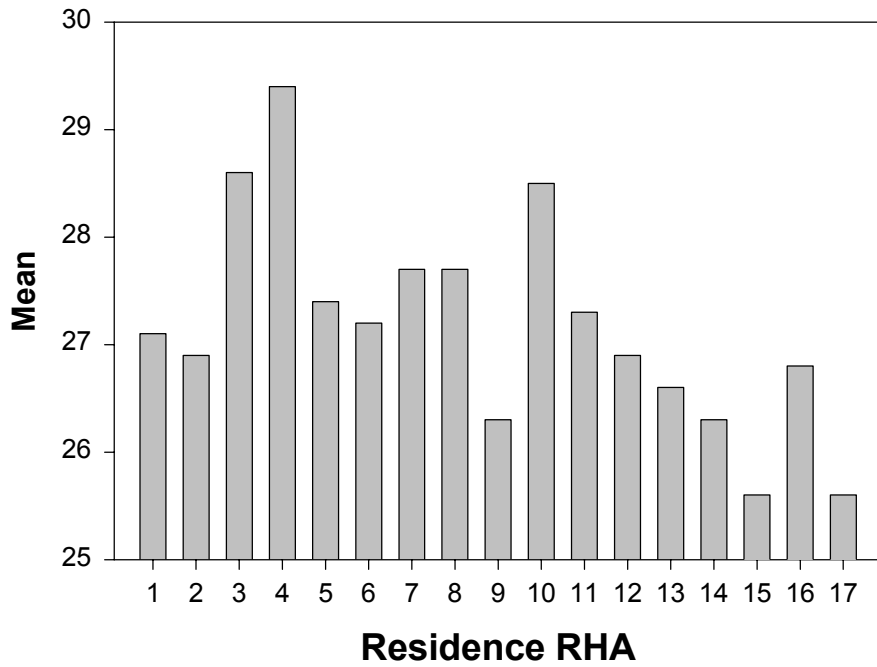
Figure 7.
Mean Maternal Age,
Alberta, 1986 - 2000



Maternal Factors

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Figure 8.
Mean Maternal Age (years)
by Residence RHA,
Alberta, 1998 - 2000 Combined



Maternal Factors

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Maternal Factors

Maternal Prenatal Morbidity

Definitions

- **Diabetes (*diabetes mellitus*):** A chronic syndrome of impaired carbohydrate, protein, and fat metabolism owing to insufficient secretion of insulin or to target tissue insulin resistance. It occurs in two major forms: Type 1 diabetes mellitus and Type 2 diabetes mellitus (Dorland, 2000).
- **Heart disease:** Any organic, mechanical, or functional abnormality of the heart, its structures, or the coronary arteries (Dorland, 2000). This category includes women with asymptomatic or symptomatic heart disease.
- **Hypertension:** High arterial blood pressure, diagnosed prior to pregnancy. In this case, this includes women who had blood pressure of 140/90 or higher, or women who were using antihypertensive drugs.
- **Chronic renal disease:** Any disease of the kidney persisting over a long period of time.
- **Pre-natal bleeding:** Vaginal bleeding prior to birth. In this case, bleeding is classified as occurring prior to 20 weeks gestation, at 20 weeks gestation or later, or at both before and after 20 weeks gestation.
- **Pregnancy-induced hypertension:** High arterial blood pressure with onset during pregnancy.
- **Gestational diabetes:** Diabetes mellitus with onset or first recognition during pregnancy; this category does not include diabetics who become pregnant (Dorland, 2000).
- Rates for the above measures are expressed in terms of percent of women delivering.

Background

- Although maternal obesity is associated with a reduced risk of delivery of a small for gestational age infant, high maternal weight is linked to increased perinatal mortality and neural tube defects, as well as increased rates of hypertension, preeclampsia, gestational diabetes, and cesarean delivery (de Groot, 1999).
- Pregnancy increases the incidence of maternal mortality for women with cardiac disease, due to increased risk for pulmonary edema, hypertension, infective endocarditis, thromboembolism, and fulminating peripartum cardiomyopathy (Gei & Hankins, 2001).
- Hypertension in pregnancy increases in frequency with maternal age. Chronic hypertension can result in maternal complications, such as placental abruption, stroke, and preeclampsia, and fetal complications, such as preterm birth, low birth weight, and perinatal death (Livingston & Sibai, 2001).
- Renal insufficiency (kidney disease) can result in maternal hypertension, preeclampsia, preterm labour, stillbirth, and small for gestational age birth (Sanders & Lucas, 2001).

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- Gestational diabetes is associated with increased risk of stillbirth and congenital anomalies if it is diagnosed before midpregnancy. Macrosomic infants are more common in the case of gestational diabetes, as well as pre-existing diabetes (Lucas, 2001).

Data Sources

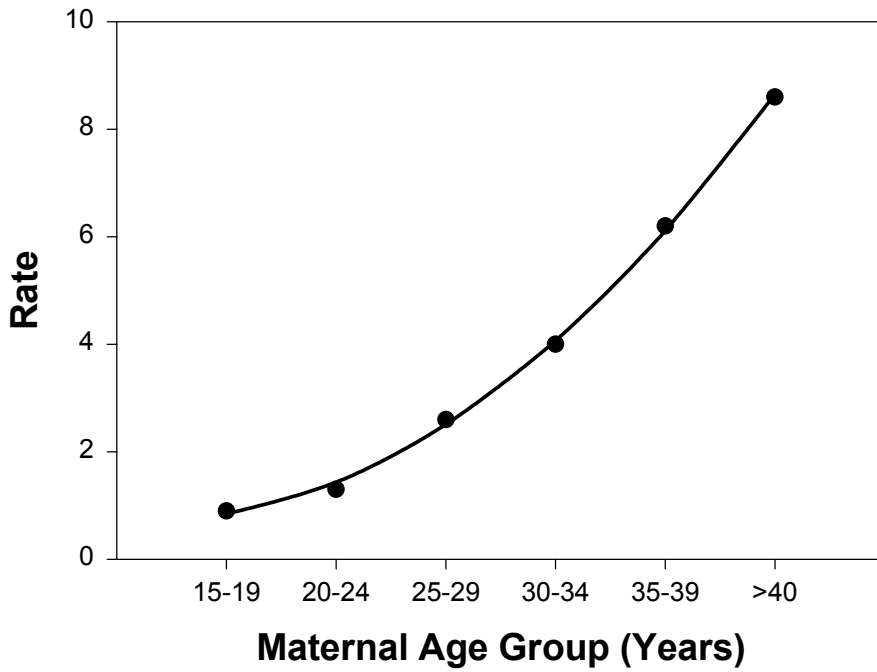
- Maternal prenatal morbidity data: Northern and Central Alberta Perinatal Outreach Program, Southern Alberta Perinatal Outreach Program.

Maternal Prenatal Morbidity Trends and Effects

- Data on the following prenatal maternal conditions appear in Tables A27, A28, and A29.
- Maternal pre-pregnancy weight of 91 kilograms or more was the most common condition among **pre-pregnancy conditions** reported here (all data reported below are for 1999 and 2000 combined).
 - Of Alberta women giving birth, 7.4% had a **pre-pregnancy weight of 91 kilograms or more**. Thus high maternal weight is a health concern for a considerable number of Alberta births.
- In comparison with rates of high maternal weight, the incidence of other pre-pregnancy conditions was low (each occurred in less than one percent of delivering women).
 - The rate of **pre-existing diabetes** was 0.7%.
 - **Heart disease** was present in 0.8% of women giving birth in Alberta.
 - **Pre-existing hypertension** occurred in 0.8% of Alberta women delivering infants.
 - **Chronic renal disease** amongst women giving birth was very rare, with a rate of just 0.1%.
- **Problems during pregnancy** were reported at higher rates, in general, than pre-pregnancy problems (all data reported below are for 1999 and 2000 combined).
 - **Pre-natal bleeding** was a relatively common occurrence, occurring in 5.2% of delivering women prior to 20 weeks gestation only, and in 2.8% of women at or after 20 weeks gestation only. Only 0.6% of women experienced pre-natal bleeding both before and after 20 weeks gestation.
 - **Pregnancy-induced hypertension** was diagnosed in 4.8% of Alberta women delivering infants.
 - **Gestational diabetes** occurred at a rate of 3.2% provincially.
 - This rate varied with **maternal age** (see Table A29 and Figure 9). Gestational diabetes was markedly more common in older mothers. The rate for mothers 15-19 years old was less than one percent, but the rate for mothers over 40 years old was more than eight percent.

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Figure 9.
Gestational Diabetes Rate
(per 100 women with
completed risk assessment),
Alberta, 1999 - 2000 Combined



Maternal Factors

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Maternal Prenatal Behaviours

Definitions

- **Smokers** are women who smoked cigarettes throughout pregnancy, or who quit smoking at some point during pregnancy.
 - **Non-smokers** did not smoke at all during pregnancy.
- **Alcohol consumption** refers to the consumption of alcoholic beverages at any time during pregnancy.
- **Street drug** use refers to the use of any street drug during pregnancy.
 - Marijuana and cocaine are the drugs used most commonly by Alberta women who use street drugs during pregnancy.
- **Prenatal class attendance** refers to a positive response from the mother when asked if she attended prenatal classes during pregnancy. No definition of prenatal classes is provided to delivering mothers. Prenatal class attendance data are provided below for first births only.
- **Rates** for the above measures are expressed as percent of live births.

Background

- The negative effects of smoking on the fetus and neonate are well-documented, and include decreased birth weight, decreased postnatal growth, and increased risk of ectopic pregnancy, spontaneous abortion, preterm birth, perinatal death and sudden infant death syndrome (Campbell, 1992; Chen, Fair, Wilkins, Cyr, and the Fetal and Infant Mortality Study Group of the Canadian Perinatal Surveillance System, 1998; Lee, 1998; Pivarnik, 1998; Pollack, Lantz, & Frohna, 2000; Tough et al., 1999).
- Learning disabilities, hyperactivity, and deficits in attention, memory, and cognitive processing can result from alcohol consumption during pregnancy, and there is growing evidence that binge drinking (consumption of large amounts of alcohol in short periods of time) is particularly harmful (Maier & West, 2001). Alcohol abuse during pregnancy can cause fetal alcohol syndrome, which consists of poor prenatal and postnatal growth, central nervous system abnormalities, and craniofacial anomalies (Wagner, Katikaneni, Cox, & Ryan, 1998).
- Street drug use during pregnancy can have wide-ranging negative effects. Marijuana use has been implicated in intrauterine growth retardation; as well, infants born to marijuana users may be lethargic, with impaired visual responses, and decreased startle reflexes (Wagner et al., 1998). Cocaine use is associated with preterm birth and fetal growth retardation (Plessinger & Woods, 1998).
- In a large sample of **Canadian** mothers in fiscal year 1996/97, 21.3% reported smoking cigarettes during pregnancy, with 7% reporting smoking more than 10 cigarettes per day. The smoking rate was highest for younger mothers and lowest for mothers over 30 years of age (Health Canada, 2000a).

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- The same survey showed that 16.6% of mothers consumed alcohol at some point during pregnancy in **Canada** in 1996/97, with older mothers being more likely to drink alcohol during pregnancy than younger mothers. Binge drinking is more common among younger mothers, however (Maier & West, 2001).

Data Sources

- Cigarette smoking, alcohol consumption, street drug use, prenatal class attendance and live birth data : Vital Statistics Birth Registration files, Department of Government Services, April 2002 Release.
- Data on maternal smoking, alcohol consumption, street drug use, and prenatal class attendance for live births are derived from the Vital Statistics Notice of Live Birth and Stillbirth. This information is not complete for all births; analyses include only those births for which the relevant information is available.
 - Note that these data are self-reported, and thus are subject to the biases inherent in such data (e.g., inaccurate reporting due to social desirability issues).
- O new Notice of Live Birth forms distributed in 2000, the “Quit” option for the question “During this pregnancy did mother smoke?” was not available, leaving “Yes” and “No” as the only options. In order to allow combination of data for 1998 through 2000, all “Yes” and “Quit” responses were grouped into a single category (representing Smokers), and “No” responses into another (representing Nonsmokers).

Maternal Prenatal Behaviours Trends and Effects: Cigarette smoking

- Table A30 contains data on smoking among women who gave birth to a live infant in Alberta between 1998 and 2000.
 - 25.7% of Alberta women who gave birth to a live infant between 1998 and 2000 reported smoking at some point during their pregnancy; 74.3% reported not smoking during pregnancy.
- Table A31 provides rates for several indicators for women who did not smoke during pregnancy and for women who either smoked or quit smoking during pregnancy.
 - Non-smoking women giving birth were older, on average, than smoking women who gave birth between 1998 and 2000. Average **maternal age** for smokers was 25.8 years; average maternal age for non-smokers was 29.1 years.
 - Babies born to non-smokers were larger than those born to smokers.
 - Babies born to non-smokers weighed more (**mean birth weight** 3,429 grams) than babies born to smokers (mean birth weight 3,266 grams).
 - The **low birth weight** rate for non-smokers was 5.2 (per 100 live births); the rate for smokers was 8.3.

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- Non-smokers were more likely to carry their babies to term. The **pre-term birth** rate for non-smokers was 7.3 (per 100 live births); the rate was 9.1 for smokers.
- Rates for smoking during pregnancy by **residence RHA** for 1998 to 2000 combined appear in Table A32. Smoking rates during pregnancy were lower than the provincial average in RHAs 3, 4, and 10, and higher than the provincial average in all other RHAs, with the exception of RHAs 1 and 7, where rates did not differ significantly from the provincial average (see Map 5).

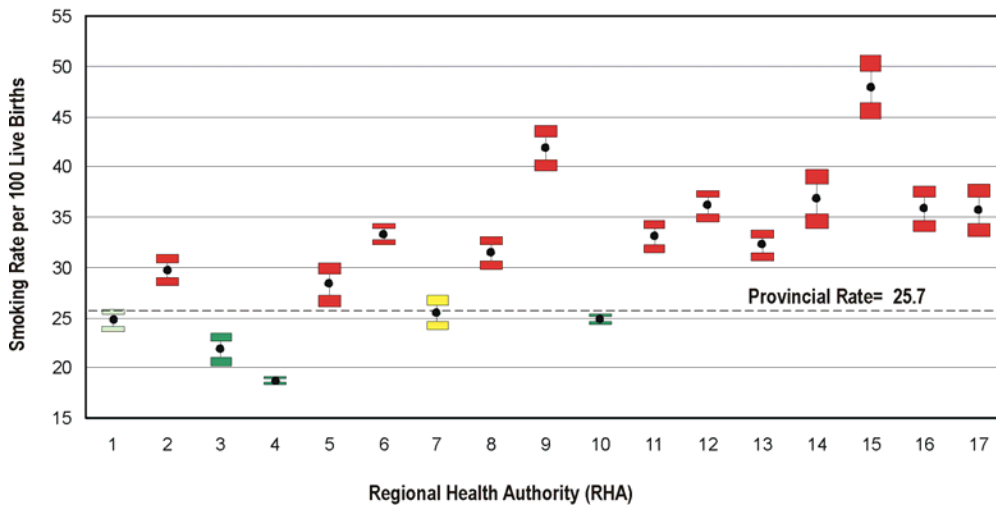
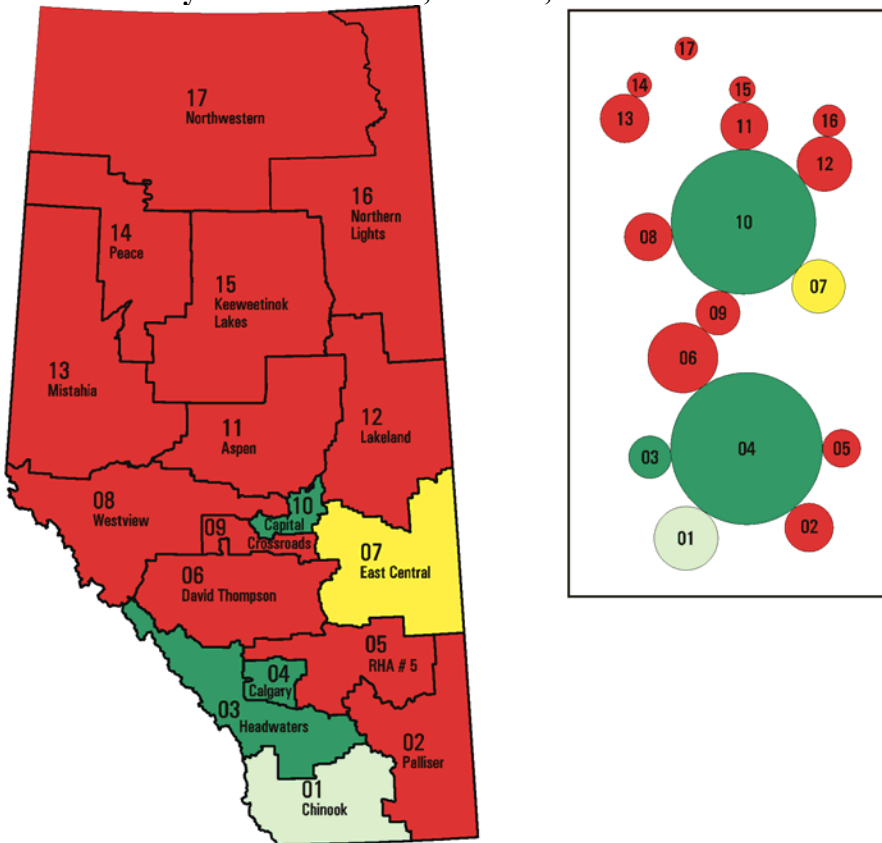
Maternal Factors

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Map 5. Smoking Rate (per 100 live births) by Residence RHA, Alberta, 1998 – 2000 Combined.

Maternal Factors



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Maternal Factors

Maternal Prenatal Behaviours Trends and Effects: Alcohol consumption

- Table A30 describes incidence of alcohol consumption among women who gave birth to a live infant in Alberta between 1998 and 2000.
 - 4.2% of women consumed alcohol during pregnancy for 1998 to 2000 combined.
- Table A31 provides rates for several indicators for women who did and women who did not report consumption of alcohol during pregnancy.
 - Mothers who consumed alcohol during pregnancy tended to be younger than mothers who did not consume alcohol. Mean **maternal age** for mothers who did not consume alcohol during pregnancy was 28.3 years, compared with 26.6 years for those who did consume alcohol.
 - Babies born to mothers who did not consume alcohol during pregnancy were larger than babies born to mothers who reported alcohol consumption during pregnancy.
 - Mean **birth weight** was 3,391 grams for babies born to mothers who did not consume alcohol during pregnancy, compared with 3,317 for babies born to mothers who did consume alcohol.
 - The **low birth weight** rate was 5.8 (per 100 live births) for babies with mothers who did not consume alcohol during pregnancy, and 8.3 for those babies whose mothers did consume alcohol.
 - Amongst babies of women who did not consume alcohol during pregnancy, **pre-term births** occurred at a rate of 7.7 (per 100 live births). The pre-term birth rate was 10.0 for babies of women who did consume alcohol during pregnancy.
- Alcohol consumption rates during pregnancy by **residence RHA** for 1998 to 2000 combined are in Table A32. Alcohol consumption was lower than the provincial average in RHAs 2, 4, 5, 8, and 10, and higher than the provincial average in RHAs 1, 6, 9, 13, 14, 15, 16, and 17.

Maternal Prenatal Behaviours Trends and Effects: Use of street drugs

- Table A30 contains data on incidence of street drug use among women who gave birth to a live infant in Alberta between 1998 and 2000.
 - 1.7% of Alberta women who had a live birth between 1998 and 2000 reported using street drugs during pregnancy.
- Table A31 provides rates for several indicators for street drug users and non-users for 1998 to 2000 combined.
 - Mothers not using street drugs tended to be considerably older than those using street drugs. Mean **maternal age** for non-users of street drugs was 28.3 years, while mean maternal age for users was 23.7 years.
 - Street drug use was associated with smaller babies.
 - **Mean birth weight** was 3,392 grams for babies of women not reporting street drug use, and 3,177 grams for users of street drugs.

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- The **low birth weight rate** was 5.8 (per 100 live births) for babies born to non-users of street drugs, compared with a rate of 12.7 for users.
- Out of every 100 live births to non-users of street drugs, 7.6 were **pre-term**. The pre-term rate for street drug users was 14.9.
- Incidence of street drug use during pregnancy by **residence RHA** for 1998 to 2000 combined is in Table A32. Street drug use was lower than the provincial average in RHAs 1, 3, 4, 7, and 17. Street drug use was higher than the provincial average in RHAs 6, 9, 10, 12, 15, and 16.

Maternal Prenatal Behaviours Trends and Effects: Prenatal Classes

- For 1998 to 2000 combined, 63.5% of first-time mothers having live births reported attending prenatal classes (see Table A30).
- Table A31 contains information on a number of indicators for first-time mothers attending prenatal classes and those not attending.
 - **Mean maternal age** for those attending classes was 27.0 years, compared with a mean maternal age of 24.9 years for those not attending .
 - Babies born to mothers who reported attending prenatal classes were larger than babies born to mothers who reported not attending prenatal classes.
 - **Mean birth weight** for infants whose mothers attended prenatal classes was 3,404 grams, and mean birth weight was 3,235 grams for infants whose mothers did not attend prenatal classes.
 - The **low birth weight rate** was 4.1 (per 100 live births) for infants with mothers who attended prenatal classes and 9.5 for infants whose mothers did not attend.
 - The **pre-term birth rate** (per 100 live births) was 6.0 for infants whose mothers attended prenatal classes. The pre-term birth rate was 11.4 for infants whose mothers did not attend prenatal classes.
- Prenatal class attendance rates by **residence RHA** for 1998 to 2000 combined are provided in Table A32. Prenatal class attendance was lower than the provincial average in RHAs 6, 9, 10, 12, 14, 15, 16, and 17, and higher than the provincial average in RHAs 1, 4, and 8.

Births

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BIRTHS

Fertility rates

Definitions

- **General fertility rate:** Number of live births per 1,000 women aged 15-49 in a given year.
- **Age-specific fertility rate:** Number of live births per 1,000 women in a given age group in a given year.
- **Total fertility rate:** Number of live births per 1,000 women aged 15-49 over a lifetime.
 - This measure provides an estimate of average family size (e.g., a total fertility rate of 2,000 would indicate an average of 2.0 live births per woman over a lifetime). This rate is equal to the sum of the age-specific fertility rates for each year of age between 15 and 49.
- All live births are included in fertility rates, regardless of birth weight or gestational age.

Background

- Total fertility rates in **Canada** underwent dramatic changes in the twentieth century, including the post-war baby boom and a dramatic decline in fertility rates from the mid-1960's to the late 1970's. Canada's total fertility rate is now at an unprecedented low, with Newfoundland having the lowest fertility rate in the country throughout the 1990's and the prairie provinces having the highest (Statistics Canada, 2001).
- Total fertility rate is declining in **Canada** as well as in Alberta, although the rate is higher in Alberta. In 1999, Statistics Canada reported Canada's total fertility rate as 1,527 and Alberta's as 1,708 (Statistics Canada, 2002b).
 - Fertility rates are higher in Alberta than in Canada for women under 35, while national and provincial fertility rates are very similar for women aged 35 and older (Statistics Canada, 2002b).

Data Sources

- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.
- Population estimates: Alberta Health Care Insurance Plan Stakeholder Registration File, Alberta Health and Wellness.

Fertility Rates Trends and Effects

- The **general fertility rate** (number of live births per 1,000 women aged 15-49 in a given year) continues to decline in Alberta. The 2000 rate of 45.6 is the lowest general fertility rate between 1986 and 2000 (see Table A1).
 - For 1998 to 2000 combined, the general fertility rate was lower than the provincial average in residence RHAs 3, 4, 7, and 10, and higher than

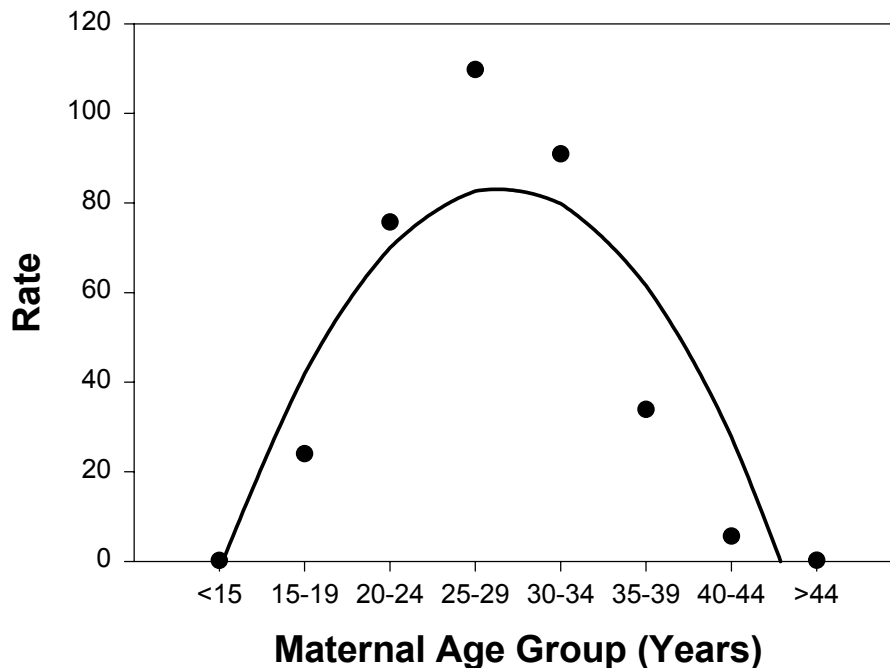
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- the provincial average in RHAs 1, 2, 6, 9, 11, 12, 13, 14, 15, and 17 (see Map 6; see Table A33 for general fertility rates by residence RHA).
- **Total fertility rate** (number of live births per 1,000 women aged 15-49 over a lifetime) also reached a fifteen-year low of 1,660 in 2000 (see Table A1).
 - **Age-specific fertility rates** show declining fertility in women under 30 years of age, and increasing fertility for women aged 30 to 44 years (see Table A34 and Figure 10).
 - In 1996, the age-specific fertility rate for women aged 30 to 34 years surpassed that of 20 to 24 year old women. Also since 1996, the age-specific fertility of women aged 35 to 39 years has surpassed that of women aged 15 to 19 years. Women aged 25-29 continue to have the highest fertility rates, although the fertility rate in this age group has declined sharply in the last fifteen years.
 - Table A35 shows age-specific fertility rates for the RHAs for 1998 to 2000.

Figure 10.
Age-Specific Fertility Rates,
Alberta, 1998 - 2000 Combined

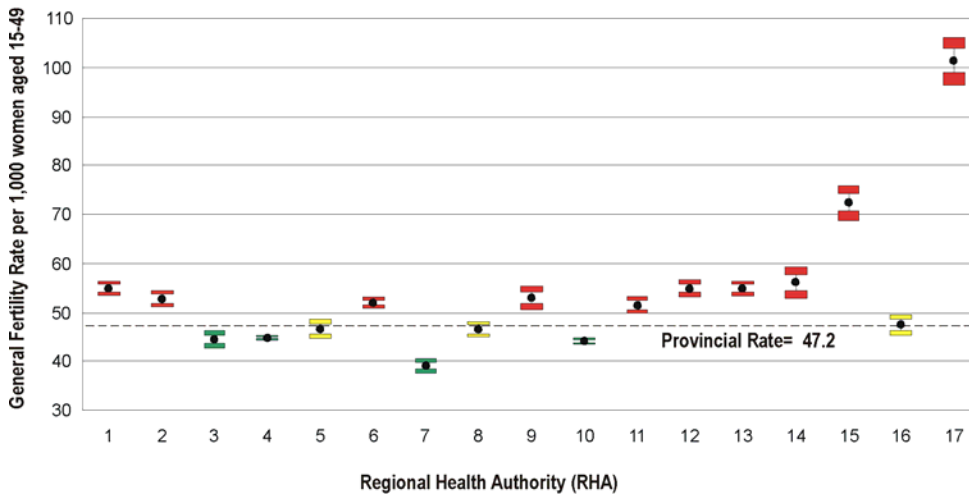
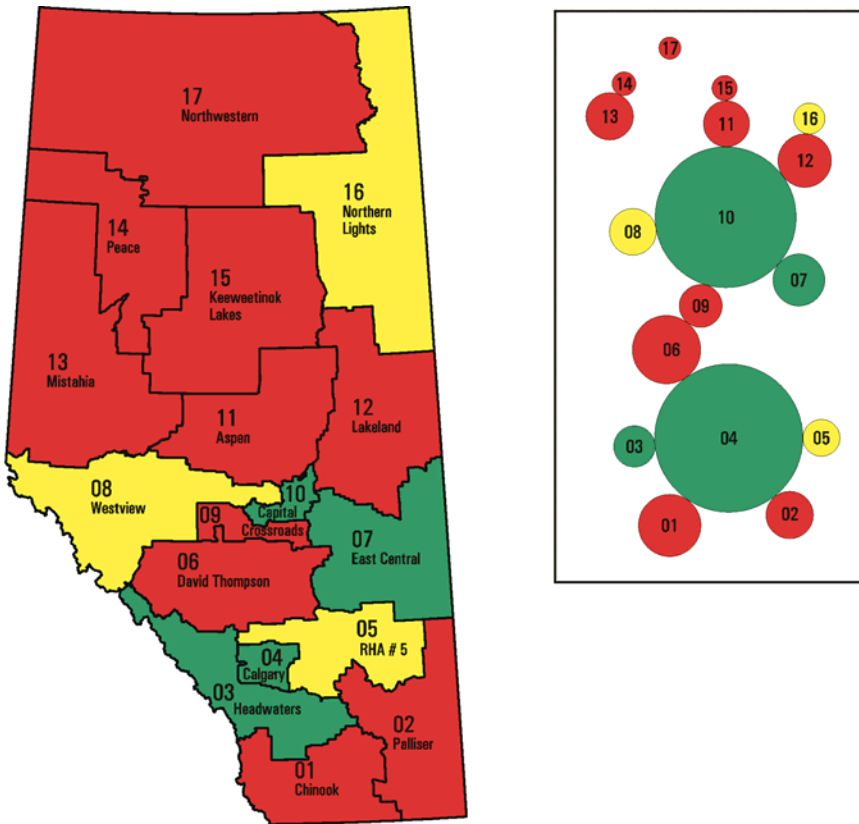


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Map 6. General Fertility Rate (per 1,000 women aged 15-49) by Residence RHA, Alberta, 1998 – 2000 Combined.

Live Births



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Live Births

Definitions

- **Live birth:** The complete expulsion or extraction from the mother, irrespective of the duration of the pregnancy, of a fetus in which, after expulsion or extraction, there is breathing, beating of the heart, pulsation of the umbilical cord or unmistakable movement of voluntary muscle, whether or not the umbilical cord has been cut or the placenta is attached. (Alberta Vital Statistics Act, RSA 1980 cV-4 s1).
- **Total births:** The sum of live births and stillbirths in a given year.
- **Crude birth rate:** Number of live births per 1,000 population in a given year.

Background

- The **Canadian** crude birth rate has decreased over the last several years. In 1999, the Canadian crude birth rate was 11.1, while the Alberta rate was 12.9 (both figures from Statistics Canada, 2002b).

Data Sources

- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.
- Stillbirths: Vital Statistics Stillbirth Registration files, Department of Government Services, January 2002 Release.
- Population estimates: Alberta Health Care Insurance Plan Stakeholder Registration File, Alberta Health and Wellness.

Live Births Trends and Effects

- There were 36,613 **live births** in 2000 (see Table A1).
- **Total births** (including live births and stillbirths) for 1986 to 2000 by **level of hospital care** appear in Table A36.
 - In 2000, 22.7% of births occurred in Level III hospitals, 53.2% in Level II hospitals, 23.2% in Level I hospitals, and 0.9% out of hospital (see Health Canada 2000b for definition of levels of hospital care).
- While the number of live births has declined systematically over the last fifteen years, there has been a concurrent increase in the population of the province. Thus, the **crude birth rate** (number of live births per 1,000 population) has declined, reaching a low of 12.3 in 2000 (see Table A1).

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Birth Weight

Definitions

- **Low birth weight** infants have a birth weight less than 2,500 grams.
 - **Low birth weight rate:** Number of live low birth weight infants per 100 live births.
 - Since 1990, the low birth weight rate has included live newborns weighing less than 500 grams due to changes in registration and reporting (Svenson, Schopflocher, Sauve, and Robertson, 1998) and improvements in and access to perinatal care.
- **Small for gestational age** infants have a birth weight below the 10th percentile of appropriate for gestational age infants (see Robertson, Svenson, & Kyle, 2002).
 - **Small for gestational age rate:** Number of live small for gestational age singleton births per 100 live singleton births.
 - Low birth weight infants may be small for gestational age, or pre-term, or both. These types of low birth weight may have different underlying causes, as well as different effects on later development (Millar & Chen, 1998; Wallace & McCarton, 1997).
- **High birth weight** infants weigh 4,000 grams or more at birth.
 - **High birth weight rate:** Number of live high birth weight infants per 100 live births.
- **Large for gestational age** infants have a birth weight above the 90th percentile of appropriate for gestational age infants (see Robertson, Svenson, & Kyle, 2002).
 - **Large for gestational age rate:** Number of live large for gestational age singleton births per 100 live singleton births.

Background

- Low birth weight is correlated with a number of health concerns, including maternal, fetal, neonatal and long-term complications (Millar & Chen, 1998; Pivarnik, 1998) and fetal and infant mortality (Chen et al., 1998; Nault, 1997).
- Maternal smoking and a low level of maternal education are associated with increased incidence of small for gestational age births, even after adjusting for confounding factors such as maternal age, household income, and receipt of prenatal care (Millar & Chen, 1998).
- Extremely low birthweight children have elevated rates of disability in a number of areas, and a high level of educational support is required for these children (Whitfield, Grunau, & Holsti, 1997).
- Numerous risk factors for low birth weight have been identified, including smoking or alcohol/drug use during pregnancy, low or high maternal age, low socioeconomic status, multiple pregnancy, poor prenatal care, low level of maternal education, pre-term birth, and gender (low birth weight infants

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are more likely to be female) (Chen et al., 1998; Pivarnik, 1998; Pollack, Lantz, & Frohna, 2000; Tough, Svenson, & Schopflocher, 1999). Smoking is the most important modifiable behaviour associated with low birth weight (Wilkins & Houle, 1999).

- A recent study has indicated that the incidence of low birth weight is higher amongst singleton births conceived with the use of assisted reproductive technology than in the general population of singleton births (Schieve, Meikle, Ferre, Peterson, Jeng, & Wilcox, 2002).
- High birth weight has been associated with higher rates of operative delivery, birth trauma, and infant morbidity (Rodrigues, Robinson, Kramer, & Gray-Donald, 2000).
- Babies born to first nations mothers weigh more on average than babies born to non-native mothers. The distribution of birth weights is shifted to the right for first nations infants, resulting in lower rates of low birth weight, and higher rates of high birth weight (Armstrong, Robinson, & Gray-Donald, 1998; Rodrigues et al., 2000).
- Mean birth weight in **Canada** in 1999 was 3,406 grams (Statistics Canada, 2002b); the mean for Alberta in 1999 was 3,388 grams.
- The **Canadian** low birth weight rate was 5.6 in 1999 (Statistics Canada, 2002b), compared with 5.9 in Alberta in 1999.
- The high birth weight rate for **Canada** in 1999 was 13.3 (Statistics Canada, 2002b); the Alberta rate was 12.6.

Data Sources

- Birth weight data, live birth data: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.
- Gestational age birth weight norms: Robertson, Svenson, & Kyle, 2002.

Birth Weight Trends and Effects: Low birth weight

- The **low birth weight** rate stabilized over the several years leading up to 2000, although the 2000 rate is higher than the 1986 rate and there is a significant linear increasing trend (see Table A1 and Figure 11).
 - In 2000, 6.1% of all live births were low birth weight births.
 - Time trend data for several categories of low birth weight appear in Table A37.
- The **low birth weight rate for singleton term births** was 1.6 in 2000 (see Table A38); this rate has declined slightly over the fifteen year study period.
 - Thus low birth weight rate increases from 1986 to 2000 must be a function of increasing pre-term births and/or multiple births rather than singleton term births.
- In Table A39, low birth weight births are classified as **pre-term or term, and singleton or multiple**.

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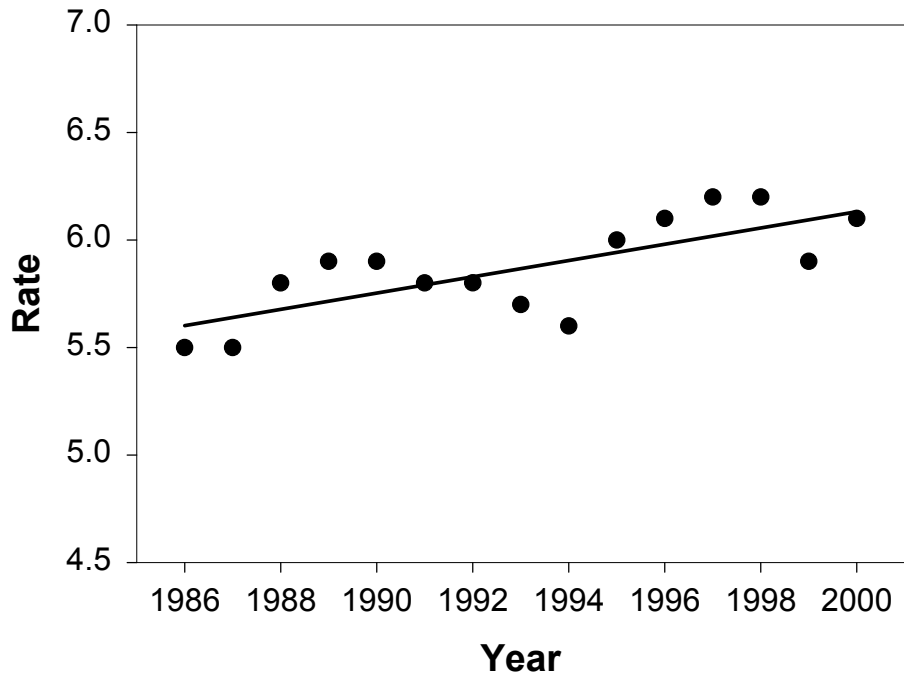
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- In 2000, 72.0% of low birth weight births were pre-term births and 25.1% were multiple births. 20.5% of low birth weight births were both pre-term and multiple births.
- The rate of low birth weight births for multiple pre-term births increased.
- Low birth weight rates vary with **maternal age**, as seen in Table A40 and Figure 12.
 - The low birth weight rate is elevated for teenage mothers and mothers aged 35 and over. The rate is lowest for mothers aged 25 to 29 years.
- Low birth weight births for **residence and facility RHAs** for 1986 to 2000 are in Table A41.
 - Map 7 and Table A42 include data for residence RHAs from 1998 to 2000 combined. RHA 4 had a significantly higher rate of low birth weight births than the provincial average, while RHA 14 had a low birth weight rate that was significantly lower than the provincial average.
- The **small for gestational age** rate for singleton live births has declined steadily since 1986, and reached a low of 7.9 (per 100 live singleton births) in 2000 (see Table A43).
 - Combined data for 1998 to 2000 indicate that SGA rates vary with **region** (see Table A44). The SGA rate was higher than the provincial average in residence RHAs 2 and 4. RHAs 1, 8, 11, 12, and 13 had SGA rates that were lower than the provincial average.

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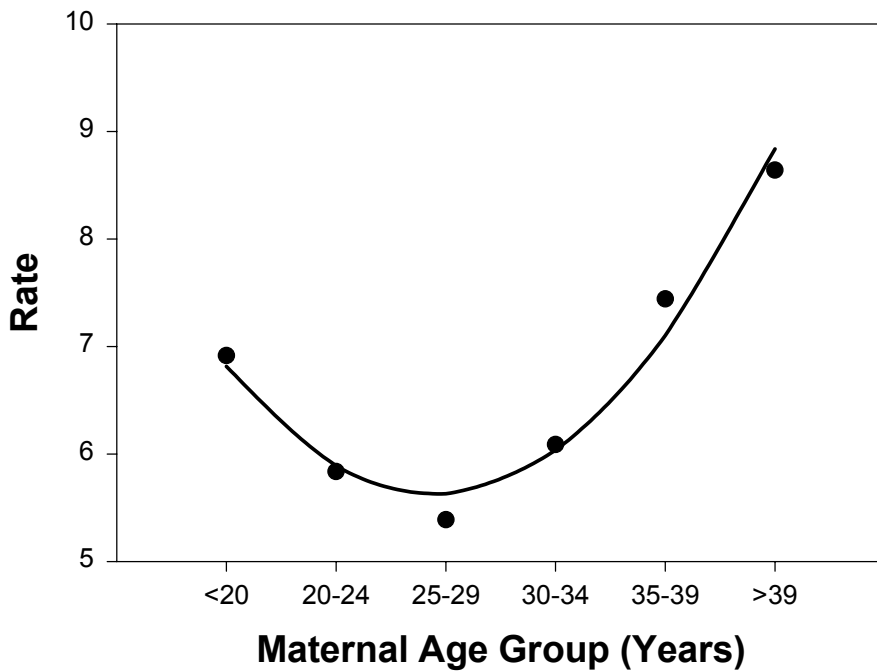
Figure 11.
Low Birth Weight Rate
(per 100 live births),
Alberta, 1986 - 2000



Live Births

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Figure 12.
Low Birth Weight Rate
(per 100 live births)
by Maternal Age Group,
Alberta, 1998 - 2000 Combined



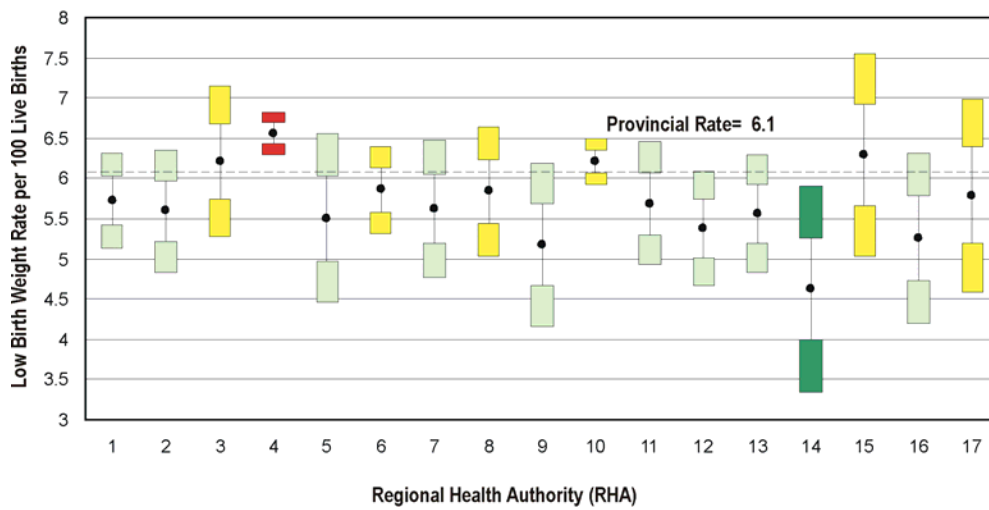
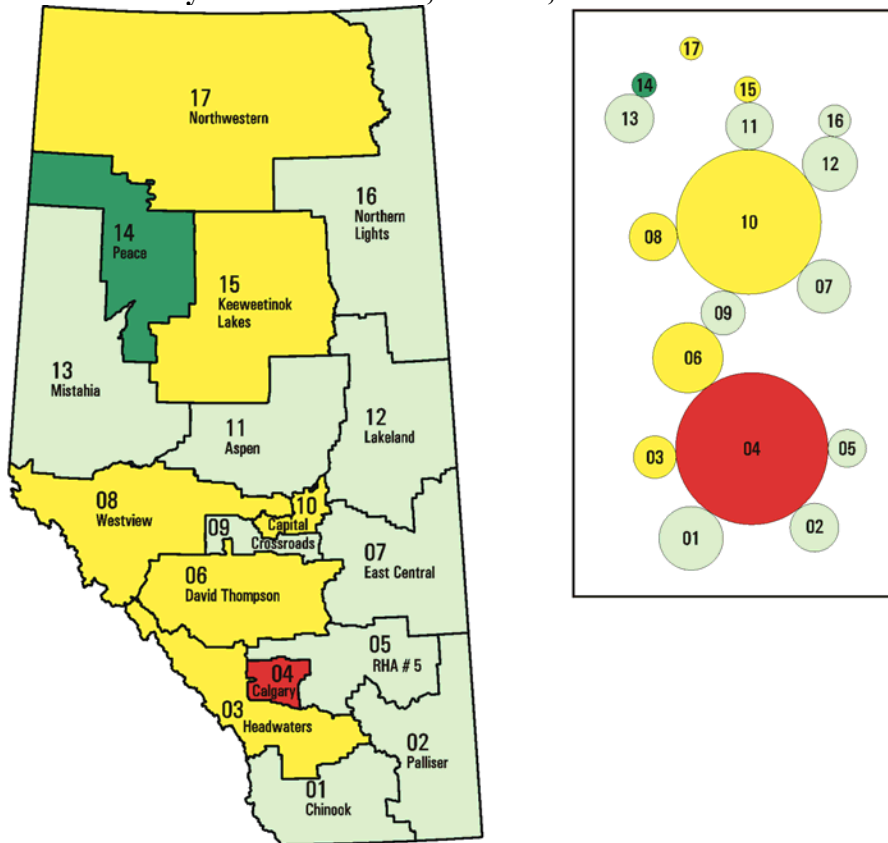
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Map 7. Low Birth Weight Rate (per 100 live births) by Residence RHA, Alberta, 1998 – 2000 Combined.

Live Births



Alberta Reproductive Health: Pregnancies and Births 2002

BIRTHS

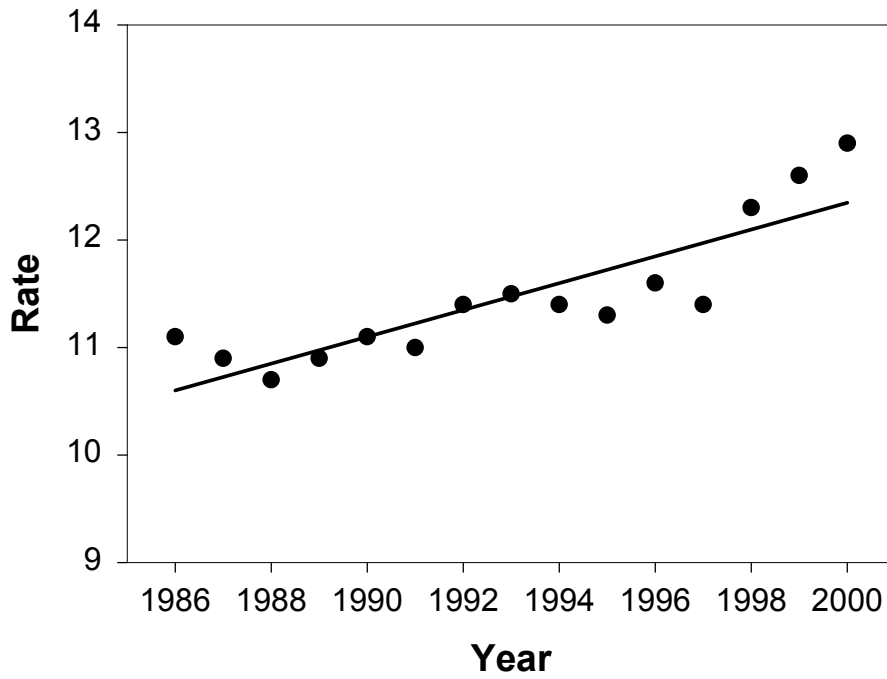
Live Births

Birth Weight Trends and Effects: High birth weight

- There has been a small but discernible and significant increase in **mean birth weight** from 1986 to 2000 (see Table A43). In 2000, the mean birth weight for a live singleton term infant was 3,491 grams.
 - See Appendix 4 for a short report on causes and consequences of increasing birth weight for term births.
- The **high birth weight** rate was stable for several years, but has increased since 1998 (see Table A1). In 2000, 12.9 out of every 100 live births were high birth weight births (see Figure 13).
 - See Table A37 for time trend data on birth weights of 4,000 or more grams and 4,500 or more grams.
- **Maternal age** is related to the high birth weight rate.
 - High birth weight babies are most likely to be born to mothers over 25 years of age, and least likely to be born to teenage mothers (see Table A45).
- High birth weight rates for **residence and facility RHAs** for 1986 to 2000 are in Table A46. Combined data for 1998 to 2000 are in Table A42.
 - Combined data for 1998 to 2000 show that residence RHAs 3, 4, and 10 have lower HBW rates than the provincial average, while the rate is higher than the provincial average in RHAs 1, 6, 8, 9, 11, 12, 13, 14, 16 and 17 (see Map 8 and Table A42).
- Time trend information on **large for gestational age** infants is provided in Table A43 (and Table A1). The large for gestational age rate increased from 9.6 per 100 singleton births in 1986 to 12.3 in 2000.
 - When combined data for 1998 to 2000 are considered, **residence RHAs** 1, 6, 8, 9, 11, 12, 15, 16, and 17 had large for gestational age rates higher than the provincial average, while RHAs 2, 3, and 4 had large for gestational age rates lower than the provincial average (see Table A44).

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Figure 13.
High Birth Weight Rate
(per 100 live births),
Alberta, 1986 - 2000



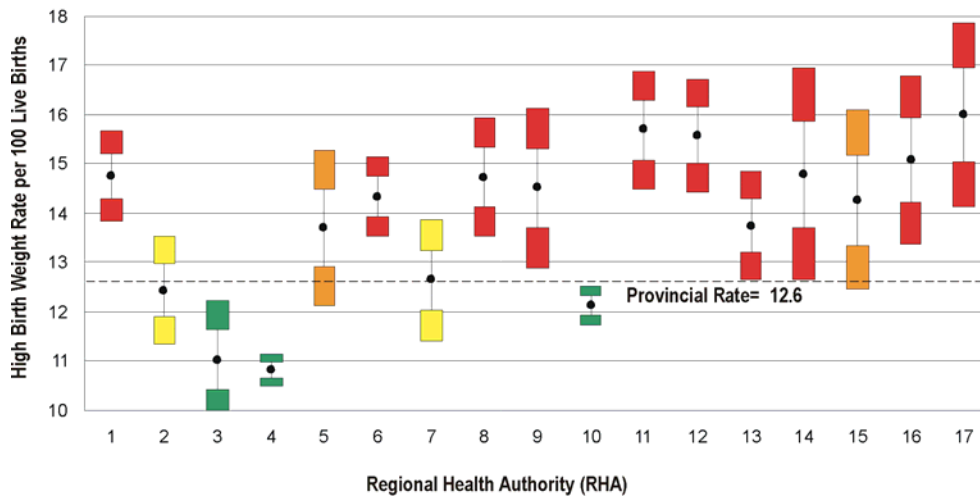
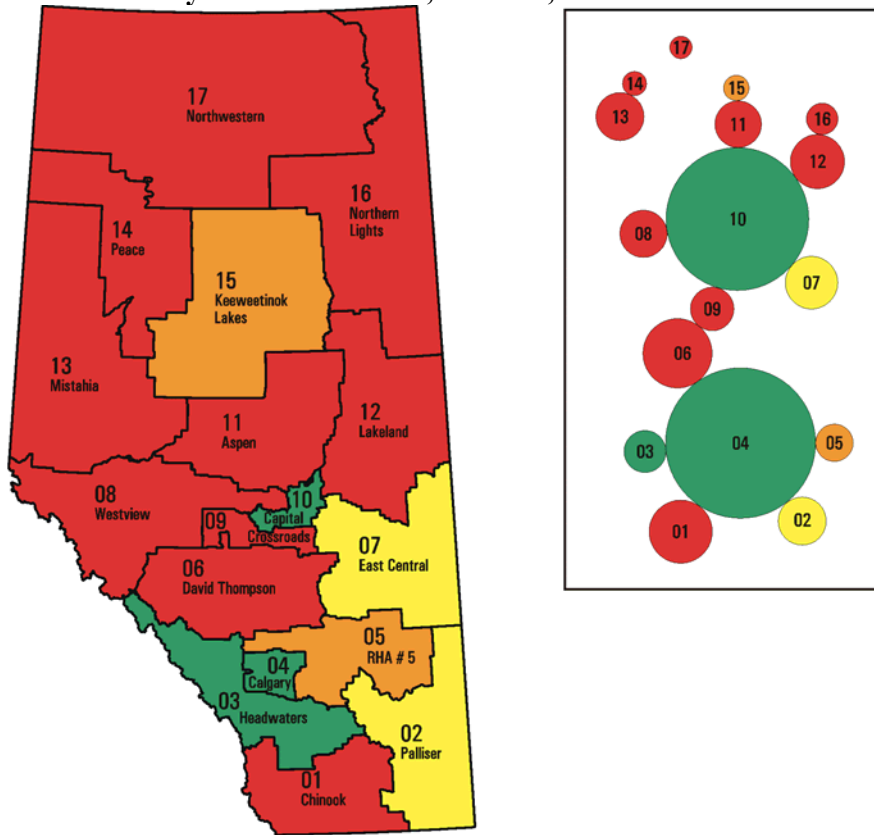
Live Births

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Map 8. High Birth Weight Rate (per 100 live births) by Residence RHA, Alberta, 1998 – 2000 Combined.

Live Births



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Live Births

Pre-Term Births

Definitions

- *Pre-term births* occur prior to 37 completed weeks of gestation (Dorland, 2000). Gestation is measured in weeks from the date of the last menstrual period of the mother.
- *Pre-term birth rate*: Number of pre-term births per 100 live births in a given year.

Background

- Pre-term birth is seen as one of the most important challenges to perinatal health (Health Canada, 2002a).
- Preterm birth is associated with neurocognitive, respiratory, and ophthalmologic problems and is also the leading cause of perinatal mortality (Joseph, Kramer, Marcoux, Ohlsson, Wen, Allen, & Platt, 1998; Kramer, Platt, Yang, Joseph, Wen, Morin, & Usher, 1998).
 - Joseph et al. suggest that a number of factors may be contributing to increasing pre-term birth rates in Canada, including higher rates of multiple births, obstetrical intervention, and use of ultrasound technology to estimate gestational age.
- Few babies born before 23 weeks gestation survive, though the proportion of survivors at the limits of viability has increased in recent years. Babies born very prematurely who do survive have high rates of neurodevelopmental handicap (Hack & Fanaroff, 1999).
- Some pre-term infants are small for gestational age, and others are not. The risk factors for small for gestational age pre-term births are different from those for pre-term births of appropriate for gestational age infants. Small for gestational age pre-term births occur more often with mothers who smoke, who are over 35 years of age, who have body mass indices that are high or low, who have hypertension, and who have hemorrhaging from placental abruption (Zeitlin, Ancel, Saurel-Cubizolles, & Papiernik, 2001).
- Risk factors for preterm birth include genital tract infection, smoking, preeclampsia, incompetent cervix, prior preterm birth, and placental abruption, as well as psychological factors such as stress and depression (Health Canada, 2002a).
- The **Canadian** pre-term rate for 1999 was 7.3 (Statistics Canada, 2002b); the Alberta rate for 1999 was 7.8.
 - In Canada in 1998, the pre-term birth rate was 6.0 for singleton births (Statistics Canada, 2002b), compared with 6.5 in Alberta. For multiple births, the 1998 pre-term rate was 53.0 in Canada (Statistics Canada, 2002b) and 52.8 in Alberta.

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Data Sources

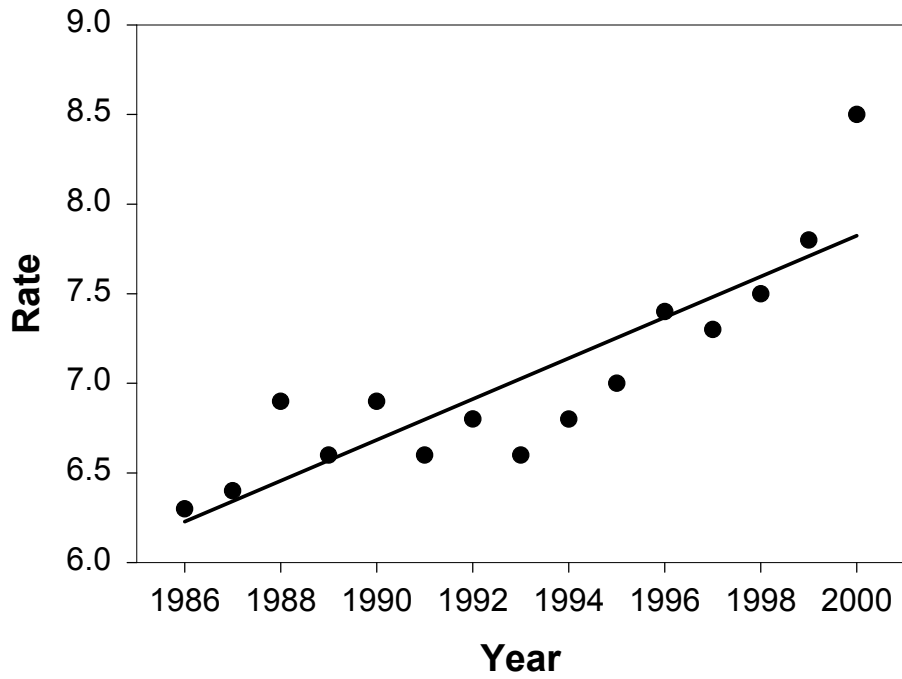
- Gestational age data, live birth data: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.

Pre-Term Births Trends and Effects

- The **pre-term birth rate** (per 100 live births) reached a new high of 8.5 in 2000 (see Table A1 and Figure 14).
- Table A47 categorizes pre-term births according to **birth weight** and **plurality**. In 2000, 52.3% of pre-term weight births were low birth weight births and 19.7% were multiple births.
 - Compared with fifteen years ago, a greater proportion of pre-term births is multiple births.
 - Rising pre-term rates were not solely a function of increasing multiple birth rates. The pre-term birth rate for both singleton and multiple births increased between 1986 and 2000 (see Table A48). In 2000, 7.0% of singleton births and 55.6% of multiple births were pre-term.
- **Maternal age** is clearly related to the pre-term birth rate (see Table A49).
 - As can be seen in Figure 15, pre-term births are least common for mothers who are in their twenties. The rate is elevated for teenage and older mothers, especially mothers over 35 years of age.
- Pre-term births for 1986 to 2000 for **residence and facility RHAs** are provided in Table A50. Pre-term rates for both residence and facility RHAs for 1998 to 2000 combined are presented in Table A42.
 - Map 9 shows the 1998 to 2000 combined data for **residence RHAs**. The pre-term birth rate is higher than the provincial average in RHA 10, and lower than the provincial average in RHAs 1, 2, 6, 9, 13, and 14.

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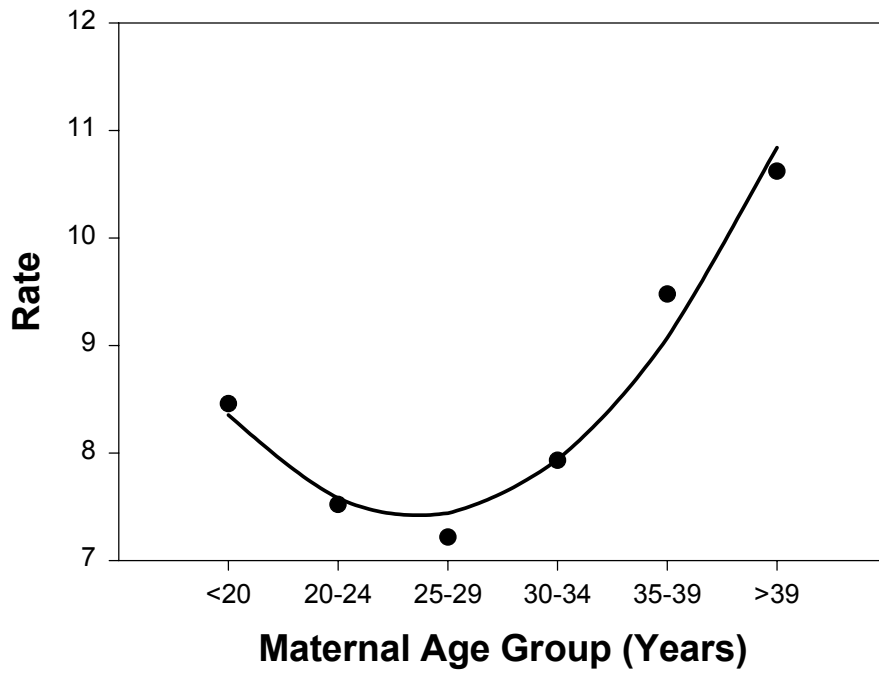
Figure 14.
Pre-Term Birth Rate
(per 100 live births),
Alberta, 1986 - 2000



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Figure 15.
Pre-Term Birth Rate
by Maternal Age Group,
Alberta, 1998 - 2000 Combined



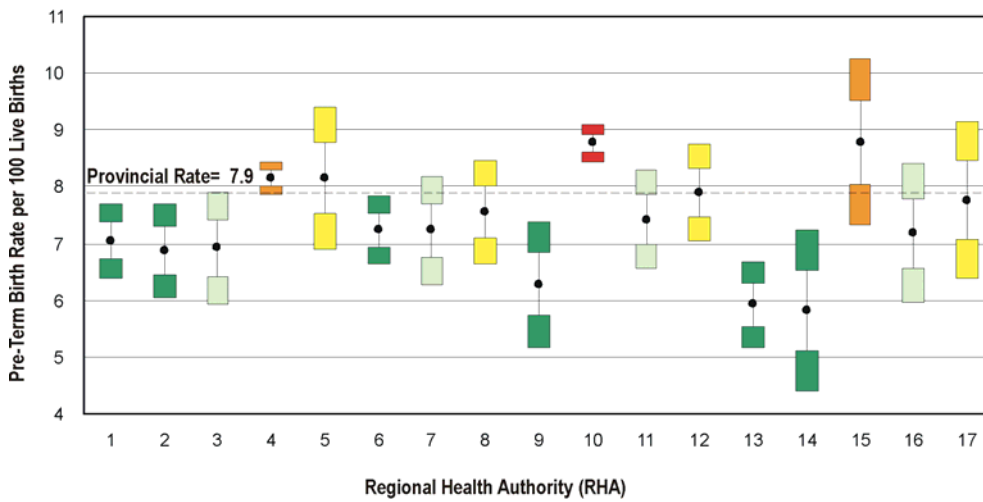
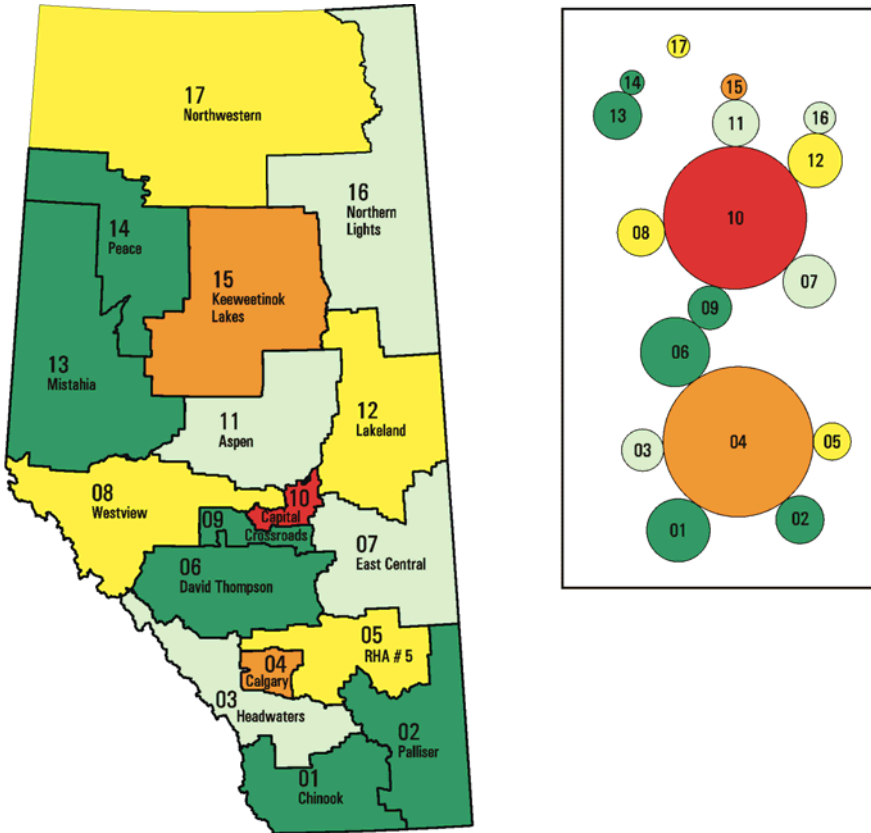
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Map 9. Pre-Term Birth Rate (per 100 live births) by Residence RHA, Alberta, 1998 – 2000 Combined.

Live Births



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Live Births

Multiple Births

Definitions

- **Multiple pregnancy:** Pregnancy in which two or more fetuses exist simultaneously (Dorland, 2000).
- **Multiple birth:** The birth of two or more offspring produced in the same gestation period (Dorland, 2000). This includes both live births and stillbirths.
 - **Multiple birth rate:** Number of live multiple births per 100 live births.

Background

- Multiple pregnancy is associated with a higher incidence of maternal hypertension, post-partum hemorrhage, and cesarean section (Senat, Ancel, Bouvier-Colle, & Breart, 1998) and higher rates of intrauterine growth restriction and fetal death (Alexander, Kogan, Martin, & Papiernik, 1998).
- Multiple births are also more likely to be pre-term and result in low birth weight infants (Tough et al., 1999).
- Perinatal mortality rates reach their lowest level at 38 weeks gestation for twins, compared with 40 weeks for singletons, providing some support for the argument that the definition of pre-term birth should be different for multiple births than for singleton births (Kiely, 1998).
- Pregnancy complications and poor perinatal outcomes are more common in twin pregnancies conceived with assisted reproductive technologies than in twin pregnancies conceived spontaneously or by ovulation induction (Daniel, Ochshorn, Fait, Geva, Bar-Am, & Lessing, 2000).
- The **Canadian** multiple birth rate was 2.7 per 100 live births in 1999 (Statistics Canada, 2002b); the Alberta rate was also 2.7 in 1999.

Data Sources

- Multiple births, live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.

Multiple Births Trends and Effects

- The **multiple birth rate** (per 100 live births) fluctuated between 1.9 and 2.1 from 1986 to 1991, between 2.2 and 2.3 from 1992 to 1995, and increased more dramatically from 2.4 in 1996 to 3.0 in 2000 (see Table A1 and Figure 16).
 - In 2000, 95.9% of multiple live births were twin births; 4.1% were triplet births (see Table A51).
- Multiple birth rates by **maternal age** are provided in Table A52 (rates are not provided for mothers over 39 years prior to 1997, as there were too few multiple births in this age group to provide reliable rate estimates).

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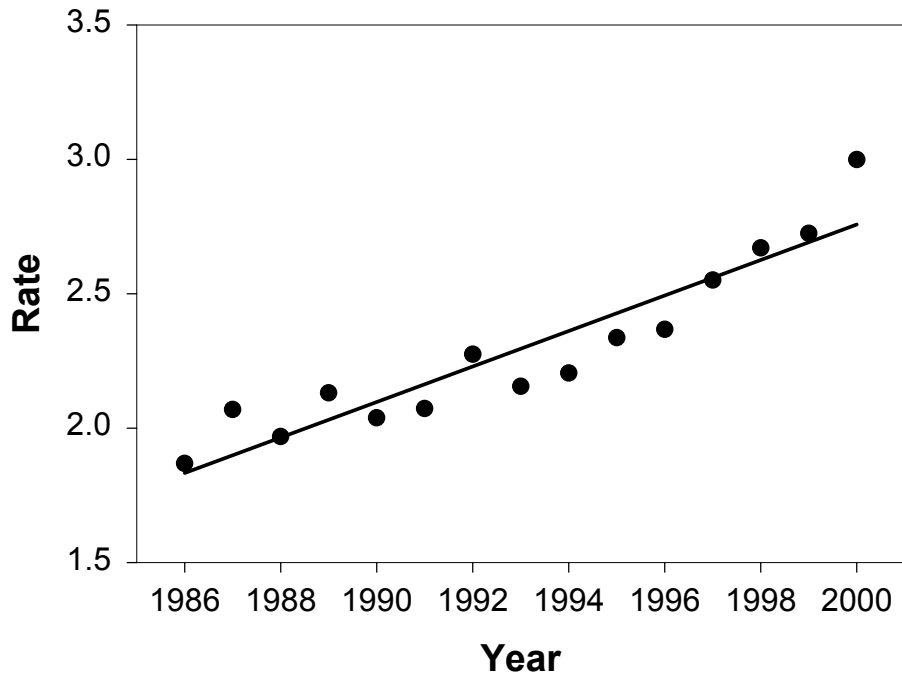
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- In 2000, multiple birth rates varied from 1.4 for teenagers to 4.9 for mothers 40 years of age and older. Figure 17 shows the maternal age effect for 1998 to 2000 combined; the multiple birth rate increases linearly with increasing maternal age.
- Increasing multiple birth rates from 1986 to 2000 are limited to mothers aged 25 years and over: Linear trends are significant only for the 25-29, 30-34 and 35-39 age groups.
- The **low birth weight rate** was 51.5 per 100 live multiple births and 4.7 per 100 live singleton births in 2000 (see Table A53).
- The **pre-term birth rate** was 55.6 per 100 live multiple births and 7.0 per 100 live singleton births in 2000 (see Table A48).
- Multiple births for each of the **residence and facility RHAs** for 1986 to 2000 are detailed in Table A54..
 - Combined data for 1998 to 2000 for **residence RHAs** show that multiple birth rates vary with region (see Table A42). RHA 8 had a higher-than-average multiple birth rate, and RHAs 11 and 14 had lower-than-average multiple birth rates (see Map 10).
 - Rates for **facility RHAs** for 1998 to 2000 combined are also provided in Table A42. Note that *these rates must be interpreted with caution* due to the low number of cases involved
- Multiple pregnancies, multiple births and **perinatal deaths** of multiple births are detailed for 1999 and 2000 for each of the **facility RHAs** in Tables A55 and A56.
 - The perinatal death rate for multiple births was 39.9 (per 1,000 total multiple births) in 2000, and 55.0 in 1999.
- Time trends for 1986 to 2000 for multiple pregnancies, multiple births, and perinatal deaths of multiple births are shown in Table A57.
 - There is no significant linear or quadratic trend in perinatal deaths for multiple births from 1986 to 2000.

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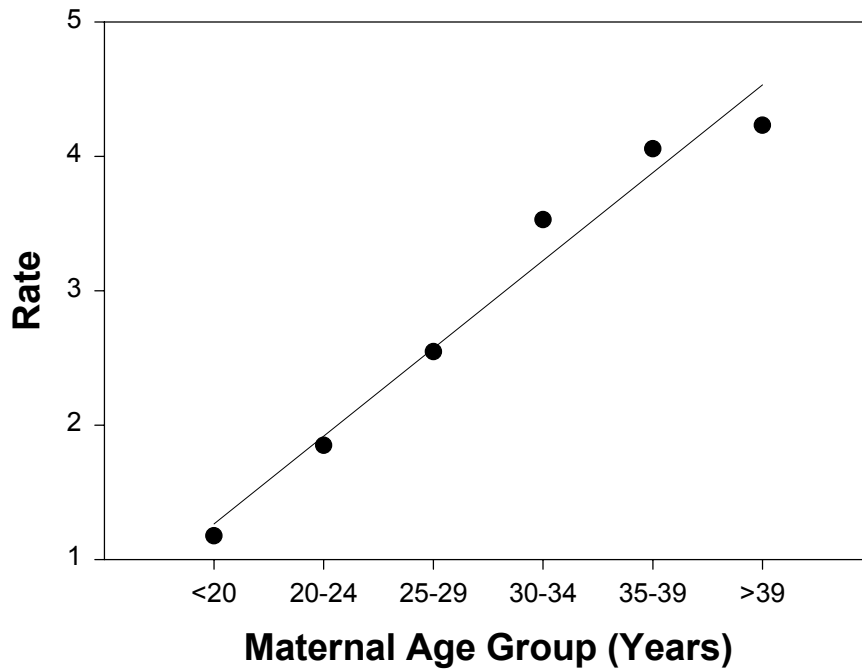
Figure 16.
Multiple Birth Rate
(per 100 live births),
Alberta, 1986 - 2000



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Figure 17.
Multiple Birth Rate
(per 100 live births)
by Maternal Age Group,
Alberta, 1998 - 2000 Combined

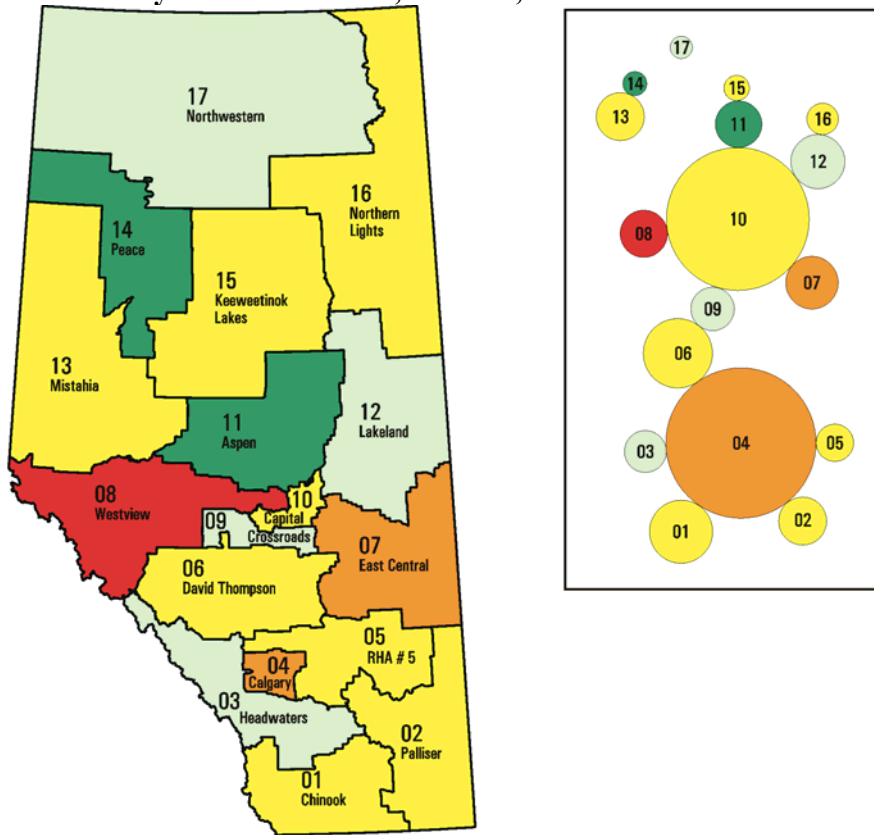


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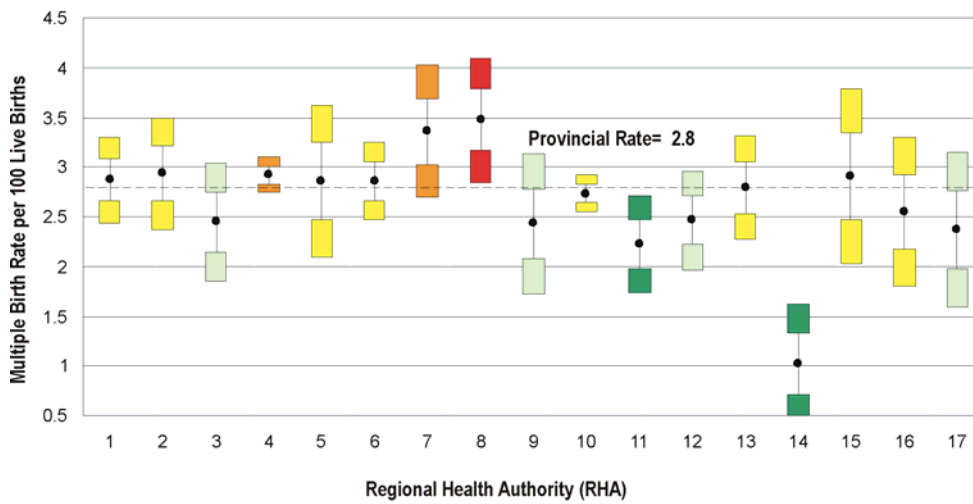
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Map 10. Multiple Birth Rate (per 100 live births) by Residence RHA, Alberta, 1998 – 2000 Combined.



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Infant Morbidity

Definitions

- **Respiratory distress syndrome:** A lung disorder that causes difficulty in breathing; due to lack of surfactant in an infant's lungs. Respiratory distress syndrome results in a life-threatening deficiency of oxygen in the blood (Morgan, 1990).
- **Respiratory distress syndrome rate:** Number of cases of respiratory distress syndrome per 100 hospital deliveries in a given year.
- **Congenital anomaly:** Structural or chemical imperfection present at birth (Dorland, 2000).
- **Neural tube defects** included in the following analyses are spina bifida, anencephaly and encephalocele; these disorders occur when the neural tube fails to close properly during early pregnancy.
 - **Neural tube defect rate:** Number of neural tube defects per 1,000 total births (total births includes live births and stillbirths) in a given year.
- **Heart septal defect:** A disorder of the heart in which the septum fails to develop properly, allowing deoxygenated blood to flow to the lungs (Morgan, 1990).
 - **Heart septal defect rate:** Number of heart septal defects per 1,000 total births (total births includes live births and stillbirths) in a given year.
- **Down syndrome:** A chromosome disorder characterized by a small, anteroposteriorly flattened skull, short, flat-bridged nose, epicanthal fold, short phalanges, widened spaces between the first and second digits of hands and feet, and moderate to severe mental retardation. The chromosomal aberration is trisomy of chromosome 21 (Dorland, 2000).
 - **Down syndrome rate:** Number of cases of down syndrome per 1,000 total births (total births includes live births and stillbirths) in a given year.

Background

- Respiratory distress syndrome of the newborn primarily affects pre-term babies. It can be confused with transient tachypnea of the newborn, meconium aspiration, pneumonia, congenital heart disease, and asthmatic bronchitis. Early diagnosis and treatment of this condition is necessary to avoid serious complications, and thus to reduce infant morbidity and mortality.
- There is evidence that the risk of major congenital anomalies is elevated for infants conceived with assisted reproductive technologies (Hansen, Kurinczuk, Bower, & Webb, 2002).

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- Infant mortalities due to congenital anomalies vary in frequency across Canada, in particular anencephaly and cardiovascular system anomalies (Wen, Liu, Joseph, Trouton, & Allen, 1999).
- Possible effects of neural tube disorders include miscarriage, stillbirth, infant or early childhood death, or lifelong disability (Health Canada, 2002b).
- More detailed information on congenital anomalies will be available from the report of the Alberta Congenital Anomalies Surveillance System, 1980-2000.

Data Sources

- Respiratory distress syndrome data: Fee-for-Service Claims Files, Ambulatory Care Classification System, and Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.
 - ICD-9CM (International Classification of Disease-9th Revision-Clinical Modification) codes used are detailed in Appendix 2.
- Congenital Anomalies: Alberta Congenital Anomalies Surveillance System, 1980-2000, February 2002 release.
 - ICD-9CM (International Classification of Disease-9th Revision-Clinical Modification) codes used are detailed in Appendix 2.
 - Note that maternal age data for congenital anomalies are derived by linkage with Vital Statistics databases. Stillbirths are not available in these databases, so maternal age rates are calculated relative to live births only. Time trends do not require data linkage, and thus are calculated relative to total births (live births + stillbirths).
- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.

Infant Morbidity Trends and Effects

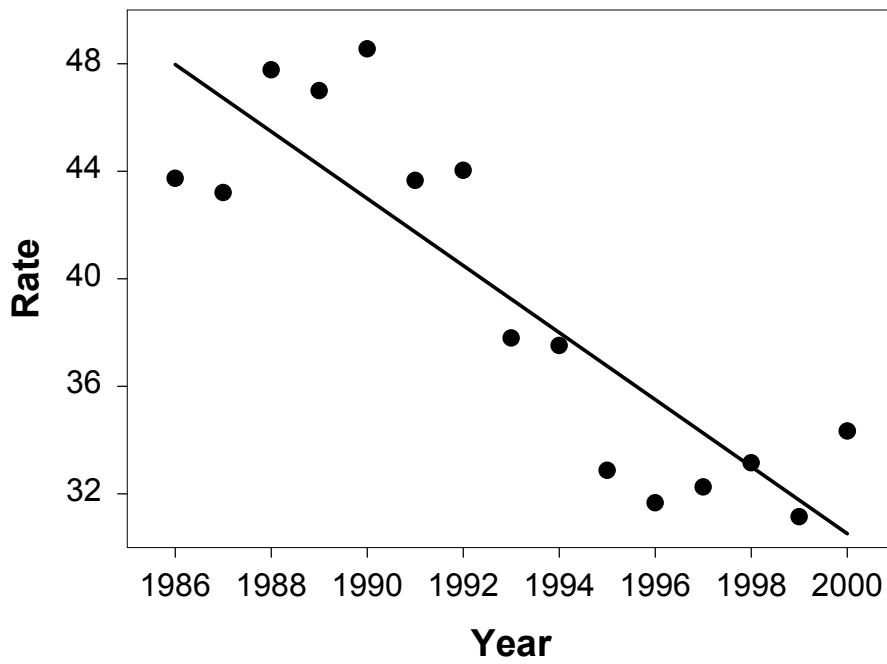
- **Respiratory distress syndrome** resulted in the admission of 1.2% of newborns to hospital in 1999 and 2000 combined (874 cases).
- Table A58 shows the prevalence of selected **congenital anomalies** from 1986 to 2000.
 - When **all congenital anomalies** are combined into a single rate, the rate shows a significant linear decrease over the fifteen-year period (see Figure 18). The 2000 rate was 34.3 (per 1,000 total births).
 - The **neural tube defect rate** (per 1,000 total births) decreased slightly (though not significantly) from 1986 to 2000. The 2000 rate was 0.51.
 - The **heart septal defect rate** (per 1,000 total births) showed a significant linear decrease, with a 2000 rate of 4.25
 - The **Down Syndrome rate** (per 1,000 total births), on the other hand, increased significantly, and was 1.44 in 2000.

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- The incidence of congenital anomalies varies with **maternal age** (see Table A59). Mothers who are 35 or older have a higher risk for congenital anomalies (see Figure 19), most notably for Down Syndrome. The recent trend of increased fertility for mothers aged 35 or older is worth noting in this context.
- Congenital anomalies rates also vary with **birth weight**: Anomalies increase in frequency with decreasing birth weight (see Table A60). More than 180 out of every 1,000 live births of less than 1,500 grams had congenital anomalies for 1985 to 2000 combined.
- Appendix 4 contains a short report on infant morbidity, including mention of shoulder dystocia.

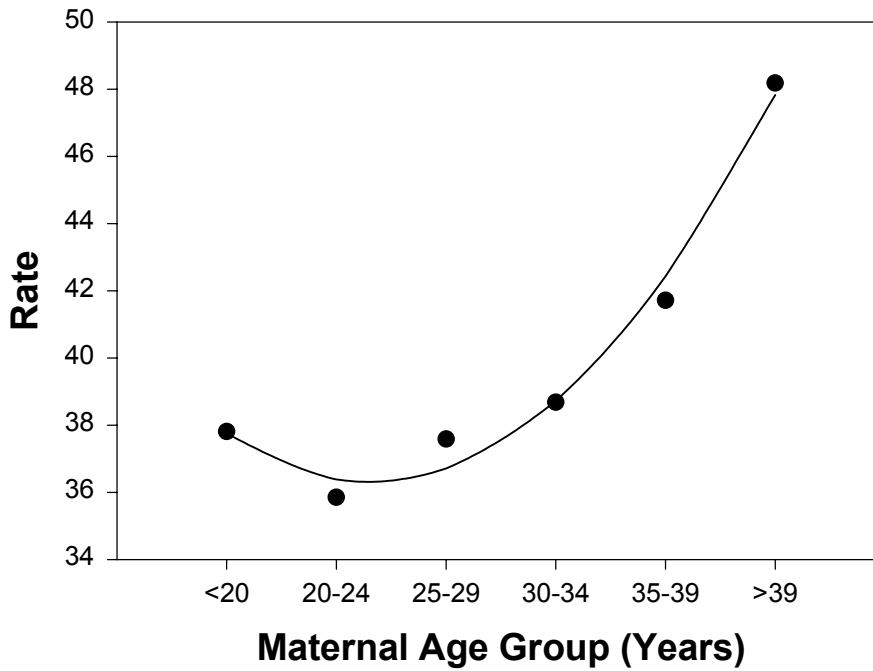
Figure 18.
Congenital Anomalies Rate
(per 1,000 total births),
Alberta, 1986 - 2000



Live Births

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Figure 19.
Congenital Anomalies Rate
(per 1,000 live births)
by Maternal Age Group,
Alberta, 1998 - 2000 Combined



Live Births

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Stillbirths

Definitions

- **Stillbirths** refer to births with the complete expulsion or the extraction from the mother after at least 20 weeks pregnancy, or after attaining a weight of 500 grams or more, of a fetus in which, after the expulsion or the extraction, there is no breathing, beating of the heart, pulsation of the umbilical cord or unmistakable movement of voluntary muscle (Alberta Vital Statistics Act, RHA 1980,cV-4 s1).
- **Stillbirth rate:** Number of stillbirths per 1,000 total births in a given year (total births is equal to the sum of live births and stillbirths).

Background

- Many risk factors for stillbirth have been identified, such as low maternal education, smoking during pregnancy, gender (stillbirths are more often male than female), prematurity, and low birth weight (Chen et al., 1998; Tough et al., 1999).
- There is a risk of recurrence for stillbirth (Oyen, Skjaerven, & Irgens, 1996).
- The **Canadian** stillbirth rate for 1999 was 6.1 (Statistics Canada, 2002b), compared with the Alberta rate of 6.8.

Data Sources

- Stillbirths: Vital Statistics Stillbirth Registration files, Department of Government Services, January 2002 Release, and Alberta Medical Association Committee on Reproductive Care.
- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release, Vital Statistics Annual Reviews, 1999 and 2000.

Stillbirths Trends and Effects

- There were 238 stillbirths in Alberta in 2000, resulting in a **stillbirth rate** of 6.5 (per 1,000 total births; see Table A1). The stillbirth rate did not vary systematically with time from 1986 to 2000.
- Stillbirth rates do vary significantly with **maternal age** (see Table A61). Stillbirths are more common with teenage mothers and with mothers 35 years old and older. The relationship between maternal age group and stillbirth rate is shown in Figure 20.
- Stillbirths and stillbirth rates by **birth weight** category appear in Table A62. Over the period 1986 to 2000, 73.3% of stillbirths were of low birth weight (<2,500 grams) and almost half (47.6%) were of extremely low birth weight (<1,000 grams). 24.6% of stillbirths weighed between 2500

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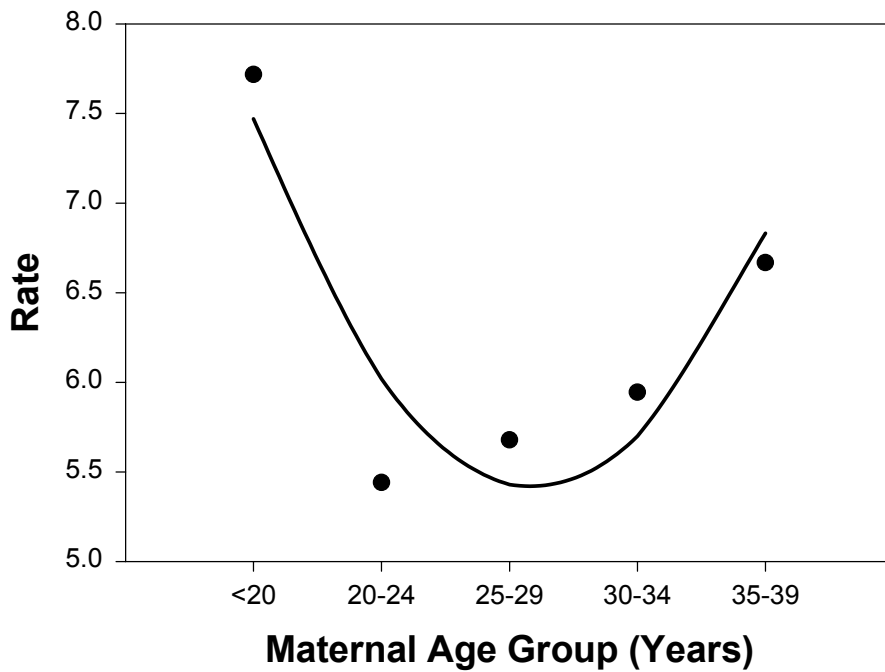
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and 3,999 grams, and just 2.1% of stillbirths were of high birth weight ($\geq 4,000$ grams) in that time period.

- Table A63 provides a breakdown of 1999 and 2000 stillbirths by weight category, time of death (antepartum or intrapartum) and place of death (in hospital or prior to admission). Most stillbirths were antepartum, and occurred prior to hospital admission.
- Of all stillbirths occurring between 1986 and 2000, 72.4% were **pre-term** (see Table A64 for a yearly breakdown of pre-term, term, and post-term stillbirths).
- Stillbirths are far more common in **multiple births** than in singleton births. For 1986 to 2000 combined, the stillbirth rate (per 1,000 total births) was 6.1 for singleton births, and 22.7 for multiple births (see Table A65). Note that *the rates for multiple births must be interpreted with caution* due to the low number of cases involved.

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Figure 20.
Stillbirth Rate
(per 1,000 total births)
by Maternal Age Group,
Alberta, 1998 - 2000 Combined



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Perinatal and Neonatal Mortality

Definitions

- **Perinatal deaths** include stillbirths and early neonatal deaths (deaths before seven days of age). A fetal death is registered as a stillbirth in Alberta if delivery occurs at or after 20 weeks of pregnancy or if the fetal weight is 500 grams or greater and gestational age is not known.
- **Perinatal mortality rate:** Number of perinatal deaths per 1,000 total births in a given year (total births is equal to the sum of live births and stillbirths).
- A **neonatal death** occurs when an infant is born alive but dies before 28 days of age.
- **Neonatal mortality rate:** Number of neonatal deaths per 1,000 live births in a given year.

Background

- The leading causes of neonatal death in Canada in 1995 were conditions originating in the perinatal period (including respiratory distress syndrome, pre-term birth, and low birth weight), and congenital anomalies (Health Canada, 2002c).
- The 1999 perinatal mortality rate was 9.1 in **Canada** (Statistics Canada, 2002b, 2002c), and 9.9 in Alberta.
- 1999 neonatal mortality rates were 3.6 in **Canada** and 3.7 in Alberta (Statistics Canada, 2002c).

Data Sources

- Stillbirths: Vital Statistics Stillbirth Registration files, Department of Government Services, January 2002 Release, Alberta Medical Association Committee on Reproductive Care.
- Mortalities: Vital Statistics Death Registration files, Department of Government Services, May 2001 Release, and Alberta Medical Association Committee on Reproductive Care.
- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release, and Vital Statistics Annual Reviews, 1999 and 2000.
- The Alberta Medical Association, through the Committee on Reproductive Care, reviews cases of perinatal, neonatal and maternal mortality.
 - Case information is received from the medical records departments of Alberta hospitals, hospital perinatal review committees, offices of medical examiners, vital statistics, and physicians. The Committee is designated by Ministerial Order to provide this service. Collaboration and cooperation from medical records staff, hospital perinatal review

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committees and office of medical examiners help to ensure that case information is complete.

- Variables from case reviews are entered into a mortality database and form the basis for the mortality analysis part of this report.
- A validation process with vital statistics, Alberta Health and Wellness and medical records departments ensures that all cases are received for review.
- The mortality data include non-resident mothers who delivered in Alberta, but do not include babies born out-of-province who died in Alberta hospitals.

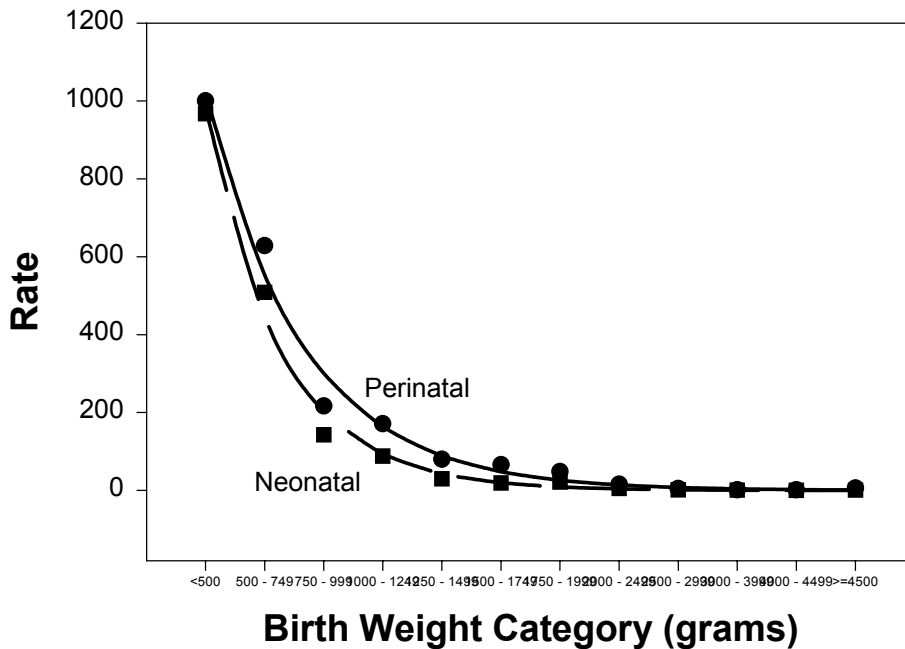
Perinatal and Neonatal Mortality Trends and Effects: Perinatal Mortality

- *Perinatal mortality rates reported below must be interpreted with caution due to the low number of cases in many categories.*
- The **perinatal mortality rate** for 2000 was 9.7 (per 1,000 total births; see Table A1).
- Perinatal mortality rates by **birth weight** are provided for 1999 and 2000 (Tables A66 and A67) and for 1996 to 2000 combined (Table A68, Figure 21). Rates decreased with increasing birth weight under 4,500 grams.
- Perinatal mortality rates by **gestational age** for 1999 and 2000 are in Tables A69 and A70. Rates for 1996 to 2000 combined are in Table A71. Perinatal mortality rates declined with increasing gestational age up to 41 weeks (see Figure 22).
- Perinatal mortality rates by **maternal age** for 1999 and 2000 appear in Table A72. Perinatal mortality rates were highest for mothers aged 35 and over.
- Perinatal mortality rates by **facility RHA** for 1999 and 2000 for infants with birth weights 500 grams and over are provided in Tables A73 and A74.
 - Detailed information on perinatal deaths by facility RHA for 1999 and 2000 appears in Tables A75 and A76. The perinatal mortality rate for 2000 for birth weights 500 grams and over was 6.9; the rate for birth weights 1,000 grams and over was 4.2. These rates were 4.8 and 2.9, respectively, when corrected for congenital anomalies. The number of cases is too small to make inter-regional comparisons.
- Perinatal mortality rates by **level of hospital** for 1999 and 2000 for infants with birth weights 500 grams and over are provided in Tables A77 and A78 (see Health Canada 2000b for definition of levels of hospitals). Rates were highest in Level III hospitals and lowest in Level I hospitals.

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Figure 21.
Perinatal Mortality Rate
(per 1,000 total births) and
Neonatal Mortality Rate
(per 1,000 live births)
by Birth Weight Category,
Alberta, 1996 - 2000 Combined

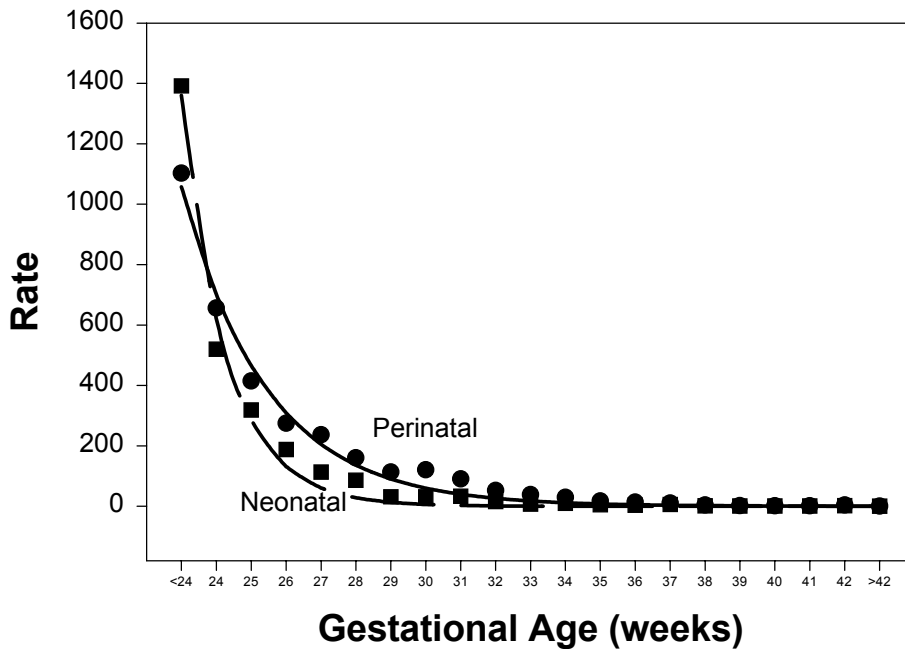
Mortality



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Figure 22.
Perinatal Mortality Rate
(per 1,000 total births) and
Neonatal Mortality Rate
(per 1,000 live births)
by Gestational Age,
Alberta, 1996 - 2000 Combined

Mortality



Alberta Reproductive Health: Pregnancies and Births 2002

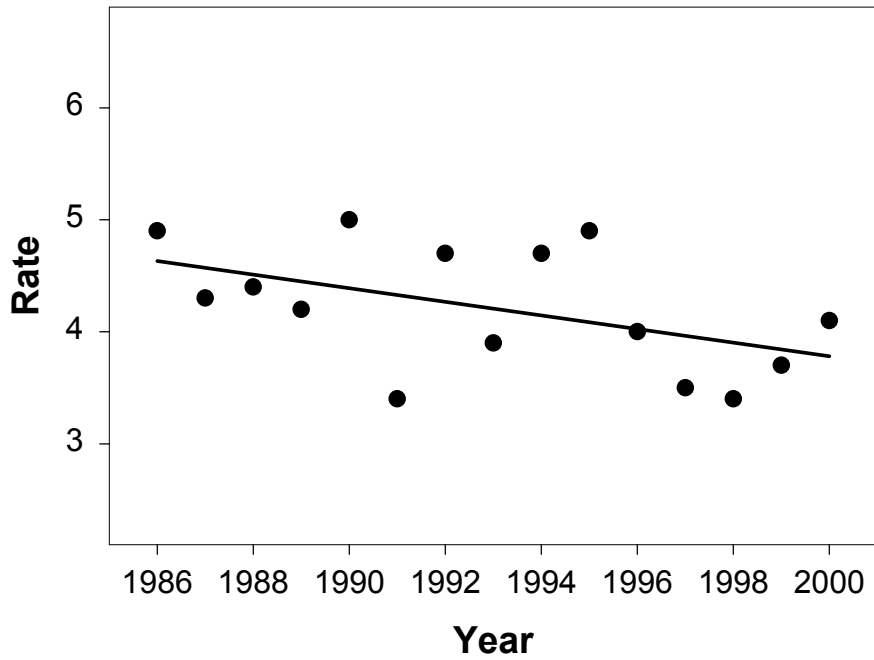
BIRTHS

Mortality

Perinatal and Neonatal Mortality Trends and Effects: Neonatal Mortality

- *Neonatal mortality rates reported below must be interpreted with caution* due to the low number of cases in many categories.
- The **neonatal mortality rate** (per 1,000 live births) was 4.1 in 2000 (see Tables A1 and A79, and Figure 23). There is a pattern of decline from 1986, though the rate increased in both 1999 and 2000. This rate will be watched to determine if the increases of the last two years are part of a trend.
- Neonatal mortality rates decrease with increasing **birth weight**; rates are provided for 1999 and 2000 (Tables A66 and A67) and for 1996 to 2000 combined (Table A68 and Figure 21).
- Neonatal mortality also decreases with increasing **gestational age**. Rates for 1999 and 2000 are in Tables A69 and A70 and rates for 1996 to 2000 combined are in Table A71 and Figure 22.
- Neonatal mortality rates by **maternal age** for 1999 and 2000 are shown in Table A72. Neonatal mortality rates increased with increasing maternal age, in general.
- Neonatal mortality rates for infants with birth weights of 500 grams and over by **facility RHA** for 1999 and 2000 appear in Tables A73 and A74.
 - Tables A80 and A81 provide detailed information on neonatal deaths for facility RHAs for 1999 and 2000.
 - The neonatal mortality rate in 2000 for infants weighing 500 grams or more at birth was 3.0 (per 1,000 live births); the rate for infants with birth weights of at least 1000 grams was 1.6. When corrected for congenital anomalies, the rates were 1.6 and 0.5, respectively. The number of cases is too small to make inter-regional comparisons.
- Neonatal mortality rates for infants with birth weights of 500 grams and over by **level of hospital** for 1999 and 2000 are in Tables A77 and A78. Rates were highest in Level III hospitals (see Health Canada 2000b for definition of levels of hospitals).
- Neonatal mortality rates by **residence and facility RHA** for 1998 to 2000 combined are in Table A82. The number of cases is too small to make inter-regional comparisons.

Figure 23.
Neonatal Mortality Rate
(per 1,000 live births),
Alberta, 1986 - 2000



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Perinatal and Neonatal Mortality Trends and Effects:

Wigglesworth Classifications of Causes of Perinatal and Neonatal Deaths

- A summary of the Wigglesworth classification of causes of death for perinatal and neonatal deaths for 1996 to 2000 appears in Table A83.
- Details for 1999 and 2000 are in Tables A84 and A85.
 - Group 1, Deaths before the start of labour: 23.7% of deaths were assigned to this category in 2000. Abruptio was a factor in 17.5% of these deaths, and 71.1% occurred before 37 weeks gestation. Table A86 contains further detail for 1999 and 2000 on this category.
 - Group 2, Lethal or potentially lethal malformations: This category accounted for 32.0% of deaths in 2000.
 - Group 3, Deaths associated with prematurity: Prematurity was associated with 26.7% of deaths in 2000. Of the deaths associated with prematurity, 95.4% had birth weights of less than 1000 grams, and 36.7% were intrapartum deaths. Table A87 contains further detail on this category for 1999 and 2000.
 - Group 4, Intrapartum Deaths, Neonatal deaths <4 hours old, Neonatal deaths >1000 grams and >4 hours old with evidence of cerebral birth trauma/asphyxia: This category accounted for 4.6% of deaths in 2000. In 26.3% of these cases, massive hemorrhage/abruptio placenta was a factor. Further details for 1999 and 2000 appear in Table A88.
 - Group 5, Defined specific condition: A specific condition was defined in 13.0% of the deaths for 2000. Antepartum deaths accounted for 71.7% of the deaths in 2000, intrapartum deaths 3.8% and neonatal deaths 24.5%. Cord anomalies/accidents were the most common defined condition. Table A89 contains data for 1996 to 2000 for deaths in this category.

Perinatal and Neonatal Mortality Trends and Effects:

Causes of Perinatal deaths

- Low birth weight, prematurity and congenital anomalies were strong predictors of perinatal mortality, as shown in Tables A68 and A71.
 - Of all perinatal deaths from 1996 to 2000, 76.7% were low birth weight, 74.6% were pre-term, and 27.6% had congenital anomalies.
 - Details on congenital anomalies as causes of perinatal deaths for 1999 and 2000 are in Table A90; Table A91 has congenital anomalies data for 1996 to 2000.
- For causes of antepartum deaths of babies weighing 2500 grams or more in 1999 and 2000, refer to Table A92.
 - The most common causes for 2000 were intrauterine asphyxia (40.4%), nuchal cord/true knot or cord occlusion (29.8%), and placenta abruptio/previa (12.3%).

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Perinatal and Neonatal Mortality Trends and Effects:

Causes of Intrapartum/Neonatal deaths

- As with perinatal deaths, the neonatal mortality rate is strongly predicted by low birth weight, prematurity, and congenital anomalies (see Tables A68 and A71).
- Of all neonatal deaths from 1996 to 2000, 76.2% were low birth weight, 71.2% were pre-term, and 38.7% had congenital anomalies.
 - Details on congenital anomalies as causes of neonatal deaths for 1999 and 2000 are in Table A90; Table A91 has congenital anomalies data for 1996 to 2000.
- Causes of death for intrapartum and neonatal deaths of babies who weighed 2500 grams or greater for 1999 and 2000 are found in Table A93.
- In 39.1% of cases in 2000, the cause of death was undetermined; intrapartum hemorrhage was implicated in 26.1% of cases, and cord accidents in 21.7% of cases.
- In each of these cases the fetus was considered to be alive at the start of labour, prior to and during induction of labour and/or cesarean section.

Mortality

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Post-Neonatal Mortality

Definitions

- A *post-neonatal death* occurs when an infant is born alive but dies between 28 days and one year of age.
- *Post-neonatal mortality rate*: Number of post-neonatal deaths per 1,000 live births in a given year.

Background

- The leading causes of post-neonatal mortality in Canada in 1995 were sudden infant death syndrome and congenital anomalies (Health Canada, 2002c).
- Sudden infant death syndrome refers to the sudden and unexpected death of an apparently healthy infant under one year of age which remains unexplained after all known and possible causes have been ruled out through autopsy, death scene investigation and review of the medical history (Health Canada, 2002d).
- For 1999, the post-neonatal mortality rate was 1.6 in **Canada** and 2.0 in Alberta (Statistics Canada, 2002b).

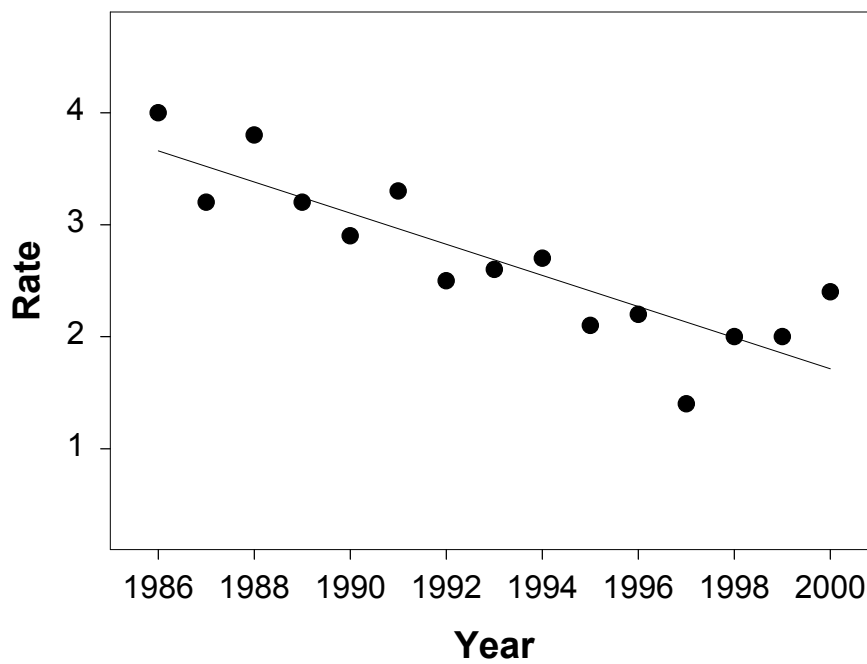
Data Sources

- Mortalities: Vital Statistics Death Registration files, Department of Government Services, May 2001 Release.
- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.

Post-Neonatal Mortality Trends and Effects

- *Post-neonatal mortality rates reported below must be interpreted with caution* due to the low number of cases in many categories.
- The **post-neonatal mortality rate** (per 1,000 live births) was 2.4 in 2000. Although post-neonatal mortality rates declined over the period between 1986 and 2000 (see Figure 24), the 2000 rate was the highest since 1994 (see Tables A1 and A79).
- Post-neonatal mortality rates by **residence and facility RHA** for 1998 to 2000 combined are in Table A82. The number of cases is too small to make inter-regional comparisons.

Figure 24.
Post-Neonatal Mortality Rate
(per 1,000 live births),
Alberta, 1986 - 2000



Mortality

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Mortality

Infant Mortality

Definitions

- An *infant mortality* occurs when an infant dies before reaching 12 months of age. This includes neonatal and post-neonatal deaths.
- *Infant mortality rate*: Number of infant deaths per 1,000 live births.

Background

- Infant mortalities are more likely to occur with low maternal education, low or high maternal age, low birth weight, and pre-term birth; infant mortality is also more common in males (Chen et al., 1998; Nault, 1997).
- Maternal smoking in singleton births has been associated with an infant mortality rate nearly double that of nonsmokers (Pollack, Lantz, and Frohna, 2000).
- Alberta's infant mortality rate was 5.8 in 1999, compared to a **Canadian** rate of 5.3 (both figures from Statistics Canada, 2002b).
 - Infant mortality rates in Canada have declined substantially over the last few decades, with decreases in deaths due to perinatal conditions, congenital anomalies, and external causes. Regional and socioeconomic disparities in infant death rates have also diminished (Wilkins & Houle, 1999; Dzakpasu, Joseph, Kramer, & Allen, 2000).

Data Sources

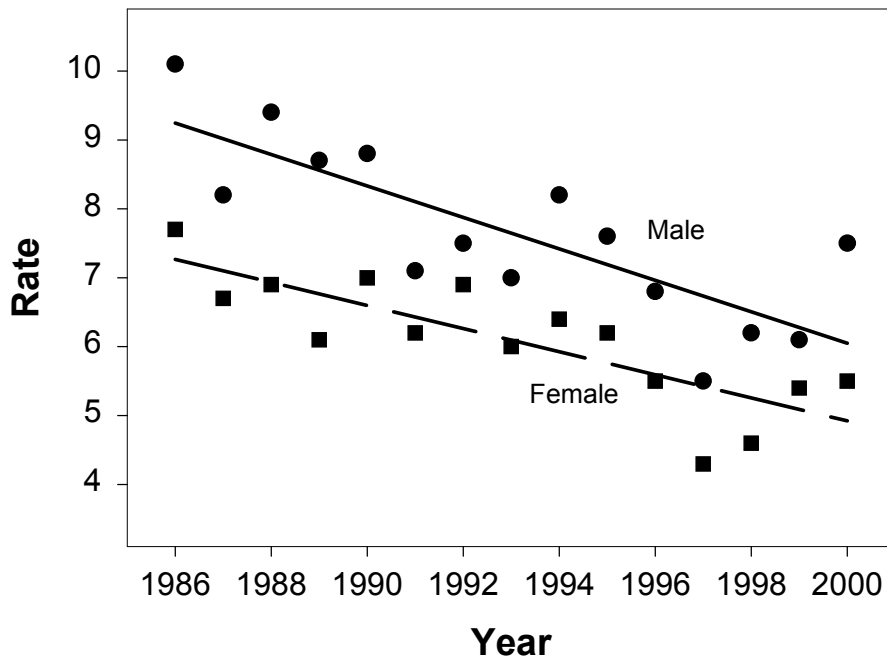
- Mortalities: Vital Statistics Death Registration files, Department of Government Services, May 2001 Release.
- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.

Infant Mortality Trends and Effects

- From 1985 to 1996, the **infant mortality rate** (per 1,000 live births) fluctuated, but the rate decreased overall (see Tables A1 and A79). The rate decreased more dramatically from 1996 to 1999. The 2000 rate was 6.5, however, which is the highest rate since 1993.
- Infant mortality rates by **gender** from 1986 to 2000 are shown in Table A94. The rate for females has been lower than that for males each year during the fifteen-year study period (see Figure 25).
- Infant mortalities for **residence and facility RHAs** appear in Table A95; rates are not provided due to the low number of cases.
 - Combined data for 1998 to 2000 are in Table A82. Map 11 shows the rates for residence RHAs. The infant mortality rate was significantly lower than the provincial average in RHA 4, and higher than the provincial average in RHAs 15 and 17.

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Figure 25.
Infant Mortality Rate
(per 1,000 live births)
by Gender,
Alberta, 1986 - 2000



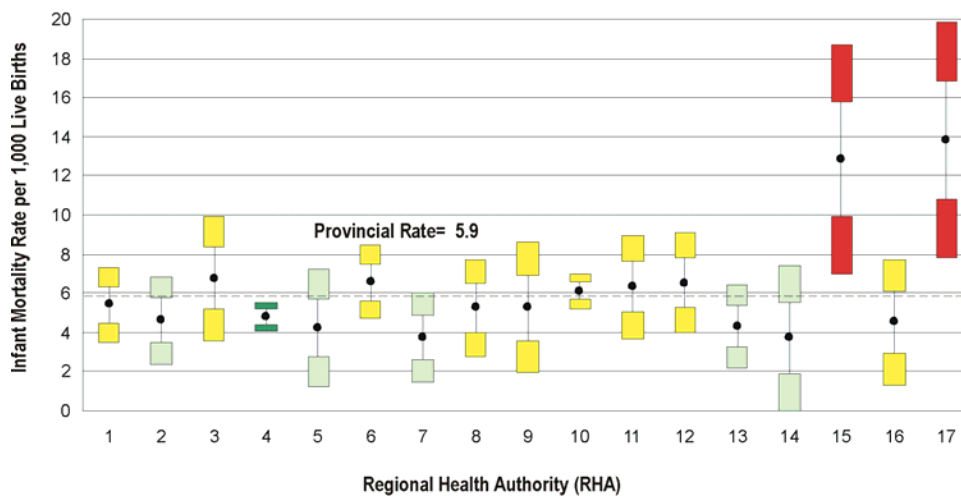
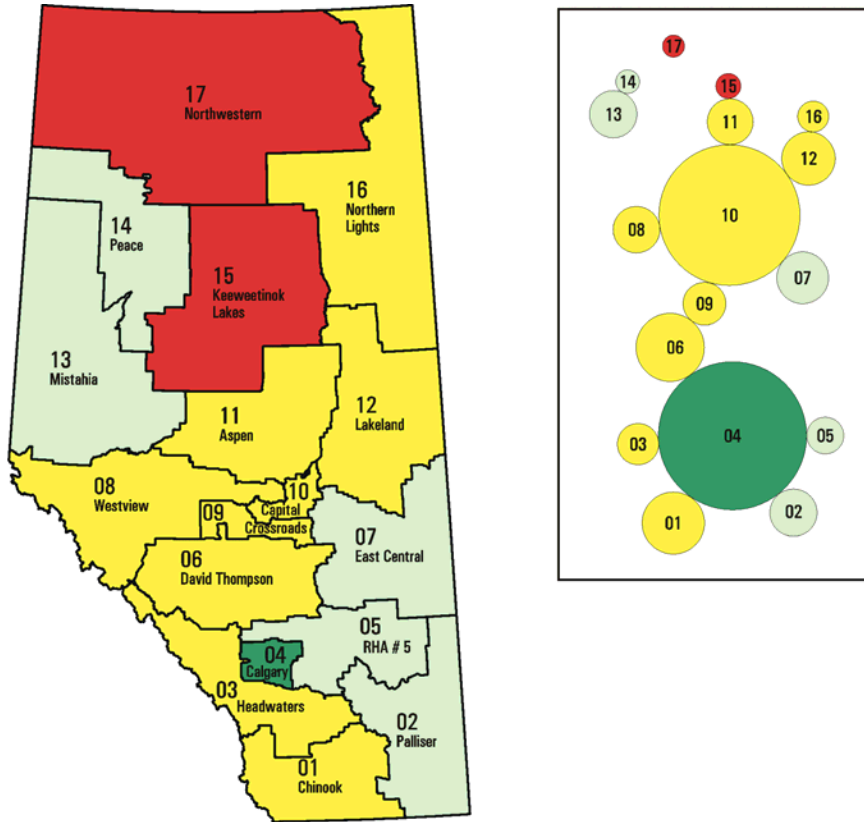
Mortality

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Map 11. Infant Mortality Rate (per 100 live births) by Residence RHA, Alberta, 1998 – 2000 Combined.

Mortality



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Mortality

Maternal Mortality

Definitions

- The AMA Committee on Reproductive Care reviews reported maternal deaths that occur during pregnancy and up to 90 days post-delivery. These deaths are classified according to the Council on Medical Service, American Medical Association, Committee on Maternal And Child Care, A Guide for Maternal Death Studies (1964). This classification includes three categories:
 - **Direct obstetric deaths:** Maternal deaths resulting from complications of pregnancy, childbirth or puerperium including intervention, omission, incorrect treatment, or from chain of events resulting from above.
 - **Indirect obstetric deaths:** Maternal deaths resulting from previous existing diseases or diseases that developed during pregnancy, childbirth or the puerperium which are not due to a direct obstetric cause.
 - **Unrelated deaths:** Maternal deaths not related to pregnancy, childbirth or puerperium, but occurring within the defined time frame.
- **Maternal mortality rate:** Number of maternal deaths per 10,000 live births in a given year.

Background

- The maternal mortality rate is low in **Canada** but has stabilized over the last two or three decades. Rates are somewhat higher in the United States; see Hoyert, Danel, & Tully (2000) for a discussion of maternal mortality in the United States and Canada.

Data Sources

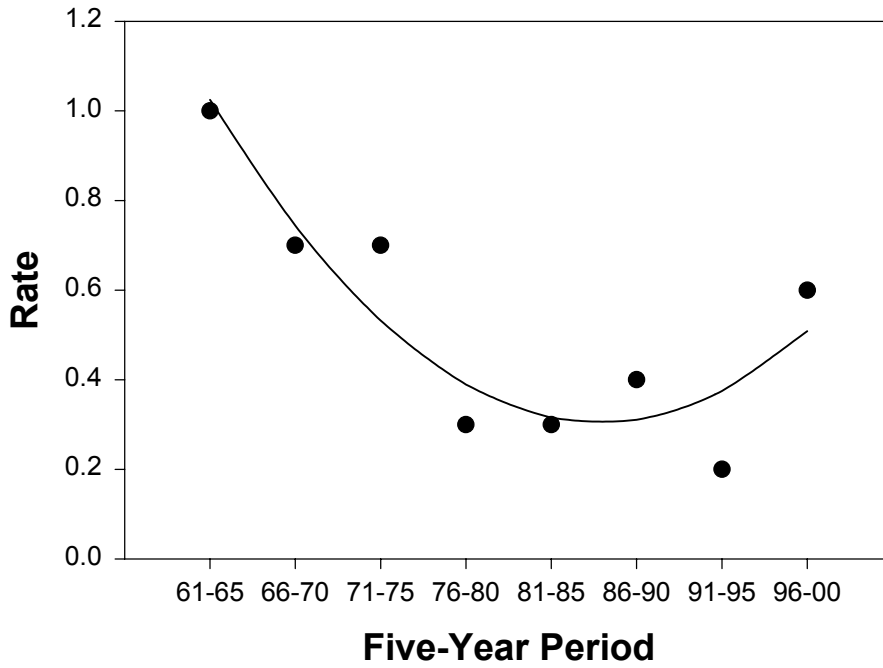
- Maternal mortality data : Alberta Medical Association Committee on Reproductive Care.
- Live births: Vital Statistics Annual Reviews, 1999 and 2000.

Maternal Mortality Trends and Effects

- **Maternal mortality rates** in Alberta are minimal. Both direct and indirect maternal mortality rates have declined significantly over time (see Table A96 and Figure 26).
 - Rates have stabilized since the 1976-80 time period. The 1996 and 1998 maternal mortality rates were anomalously high, however. These rates will be watched to determine whether a trend is developing.
 - In 2000, no maternal deaths were reported in Alberta.

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Figure 26.
Maternal Mortality Five-Year Rate
(per 10,000 live births),
Alberta, 1961-1965 to 1996-2000



Maternal Factors

Maternal Factors

Number of Singleton Live Births to Mothers

Definitions

- *Number of singleton live births to a mother*: Number of live births per mother, excluding multiple births and births to mothers who have had a stillbirth.

Background

- In **Canada** between 1979 and 1998, the rate of first births showed a steep decline for women aged 15 to 24 years, while the first birth rate increased for mothers aged 30 to 39 years.
 - The average age at first birth in Canada rose from 24.9 years in 1979 to 26.8 years in 1998.
 - This postponement of childbearing has not yet resulted in fertility rates for older mothers that offset the decline in fertility for younger mothers; the net result is an overall drop of 8% in fertility rates for primiparous women between 1979 and 1998 (Statistics Canada, 2001).
- Lifetime fertility rates, which represent the average number of children that a single generation of women had, have stabilized at about 1.8 children per woman in Canada (Statistics Canada, 2001).

Data Sources

- Live births: Vital Statistics Birth Registration files, Department of Government Services, January 2002 Release.

Number of Singleton Live Births to a Mother Trends and Effects

- Live births by **number of singleton live births to a mother** (excluding mothers who have had a stillbirth) appear in Table A97. In 2000, 42.2% of live births were first live births, 34.1% were second live births, 14.8% were third live births, and the remaining 8.8% were fourth or later live births.
 - The **percent of live births** that were first births showed a small but significant increasing trend from 1986 to 2000.
 - Percent of live births for second and third births showed small but significant decreases over the fifteen-year study period. The time trends for first and second births are shown in Figure 27.
 - The linear time trend was not significant for fourth births, but there were small, significant increases for fifth and subsequent births.
 - **Fertility rates** (per 1,000 women aged 15-49) do vary with time between 1986 and 2000.

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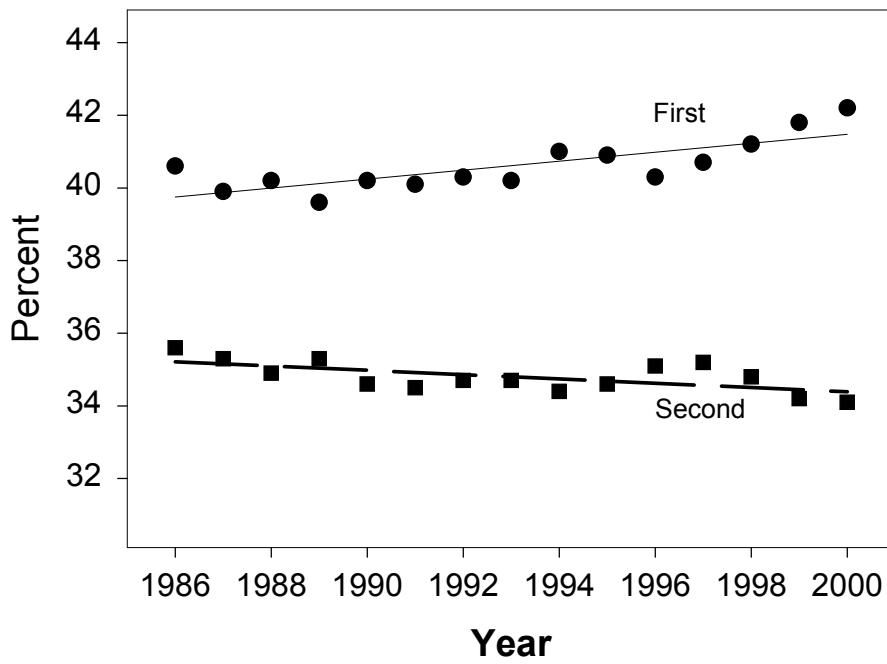
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Maternal Factors

- There is a significant decrease in fertility rate over time for live singleton births of orders 1 to 5. For example, in 1986, 22.5 out of every 1,000 women aged 15 – 49 years had a first live birth. In 2001, this figure had decreased to 16.8.
- Table A98 provides a number of **indicators of reproductive health**, broken down by number of singleton live births to mothers and combined for the years 1998 to 2000. Note that only singleton live births of order 1 through 4 are included in this table.
 - **First babies are smaller** than subsequent babies.
 - Mean birth weight for first live births was 3,426 grams, and 3,518 for second live births.
 - The low birth weight rate is lowest for infants born to mothers with two or three live singleton births.
 - Small for gestational age babies are more likely to be first live births than subsequent births.
 - The high birth weight rate increases with number of live singleton births to a mother.
 - Large for gestational age babies are much less likely to be first births than second or later births.
 - The **pre-term birth rate** is elevated for first and fourth live births.
 - Having a **midwife** as the primary birth attendant increases in frequency with number of live singleton births to a mother.
 - Overall, the indicators are most positive for second-borns.

Alberta Reproductive Health: Pregnancies and Births 2002
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Figure 27.
First and Second Births
(per 100 live births),
Alberta, 1986 - 2000



Maternal Factors

Maternal Postnatal Morbidity

Definitions

- **Shoulder dystocia:** Dystocia is defined as abnormal or difficult labour due to the shape, size or position of the fetus (Dorland, 2000). In the case of shoulder dystocia, there is often an impaction of the anterior shoulder of the fetus against the symphysis pubis after the head has been delivered.
- **Postpartum hemorrhage:** Excessive blood loss after childbirth. May occur immediately after delivery or may be delayed by days or weeks (Morgan, 1990). For the data presented below, postpartum hemorrhage was defined as loss of more than 500 ml of blood during the first 24 hours after vaginal delivery or loss of more than 1000 ml of blood after cesarean section.
- **Depression:** A mental state of depressed mood characterized by feelings of sadness, despair, and discouragement. Depression ranges from normal feelings of “the blues” through dysthymic disorder to major depressive disorder (Dorland, 2000).
 - **Postpartum depression:** The standard diagnostic criterion for postpartum depression is that occurring within four weeks of delivery, however many clinicians use longer timeframes in practice (Miller, 2002). In the analyses below, we looked at diagnoses of depressive disorders occurring within 1 month, 6 months, 1 year and 2 years after birth, in comparison with levels in the 40 weeks prior to delivery.
 - A variety of conditions was classified as depressive disorders: About 70% of depressive disorders were classified as depressive disorders not otherwise specified, followed by dysthymia (22%), depressive reaction (5%), major depression (2%), and the remainder of the diagnostic categories (1%).
- **Rates** for the above conditions are per 100 hospital deliveries.
- Maternal postnatal morbidity that is not recognized or has not resulted in contact with insured medical services cannot be accounted for. Thus, maternal postnatal morbidity rates reported here represent an underestimation of the true rates.

Background

- Shoulder dystocia is a life-threatening emergency, and is often associated with maternal obesity, diabetes, fetal macrosomia, and prolonged labor. It is a major indication for C-section.
- Postpartum hemorrhages account for the majority of serious postpartum complications within the first 24 hours after delivery (Roberts, 1995). Uterine atony, retained placenta, obstetric trauma, and abnormal coagulation are common causes.
- Postpartum depressive disorders are complicated phenomena, with severity ranging from mild “blues” to non-psychotic major depression to psychosis.

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Both physiological and environmental factors can contribute to the development of postpartum depression (Miller, 2002).

Data Sources

- Maternal postnatal morbidity data: Fee-for-Service Claims Files, Alberta Health and Wellness, Ambulatory Care Classification System, Alberta Health and Wellness, Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.
- ICD-9CM (International Classification of Disease-9th Revision-Clinical Modification) codes used are detailed in Appendix 2.
- Population estimates: Alberta Health Care Insurance Plan Stakeholder Registration File, Alberta Health and Wellness.

Maternal Postnatal Morbidity Trends and Effects

- Data described below appear in Table A99.
- The incidence of **shoulder dystocia** in Alberta in 1999 and 2000 combined was 3.3 (per 100 hospital deliveries).
 - Appendix 4 contains a short report on infant morbidity, including mention of shoulder dystocia and increasing birth weights.
- **Postpartum hemorrhage** was documented in 16.5 out of every 100 hospital deliveries in 1999 and 2000 combined.
- **Depression** following childbirth is a relatively common occurrence.
 - Prior to giving birth, 2.5 out of every 100 women delivering had a diagnosis of depressive disorder for 1999 and 2000 combined.
 - Prevalence varied over the two-year period following delivery, as shown in the following data for 1999 and 2000 combined.
 - At one month postpartum, 2.2% of women were diagnosed with a depressive disorder. The rate was 7.4% when the first six months postpartum were considered, and 12.8% for the first twelve months. If the first 24 months postpartum are considered, 16.7% of women delivering had been diagnosed with a depressive disorder.
 - Thus, when prenatal prevalence and postpartum prevalence up to 24 months after birth are considered together, 19.2% of women were diagnosed with some form of depression.

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Maternal Factors

Maternal Postnatal Behaviours

Definitions

- **Breastfeeding** occurs when a child “has received breast milk (direct from the breast or expressed)” (World Health Organization, 1991).
- **Breastfeeding initiation rate:** Number of women per 100 hospital deliveries who were breastfeeding when discharged from hospital after giving birth.

Background

- Breastfeeding benefits are well-documented, including (but not limited to) protection from infection and enhanced cognitive development in infants, and reduced post-partum bleeding and delayed resumption of ovulation in mothers (Health Canada, 2000a).
- The World Health Organization recommends exclusive breastfeeding up to 6 months of age, and continuation of supplemented breastfeeding up to two years of age and beyond (World Health Organization, 2001; World Health Organization/UNICEF, 1990).
 - “Exclusive breastfeeding is defined as no other food or drink, not even water, except breast milk, ...but allows the infant to receive drops and syrups (vitamins, minerals and medicines).” (World Health Organization, 2002).
- Postpartum smoking has been linked to early cessation of breastfeeding (Ratner, Johnson, & Bottorff, 1999), as has exposure to material promoting formula feeding (Howard, Howard, Lawrence, Andresen, DeBlicke, & Weitzman, 2000).
- Early introduction of solid foods has been associated with the development of allergies, iron deficiency, and hypernatremic dehydration (Kwavnick, Reid, Joffres, & Guernsey, 1999).
- In **Canada** in 1997, the breastfeeding initiation rate was 76.7 (per 100 children; Health Canada, 2000a). There is an east-to-west gradient of breastfeeding initiation, with lowest rates in the Maritimes and highest rates in the western provinces.

Data Sources

- Breastfeeding initiation data: Alberta Medical Association Committee on Reproductive Care.

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Maternal Factors

Postnatal Behaviours: Trends and Effects

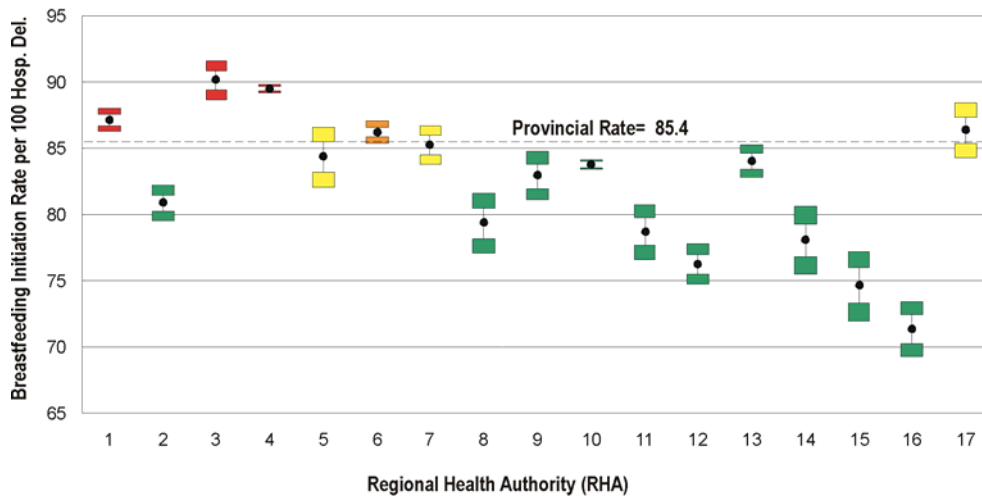
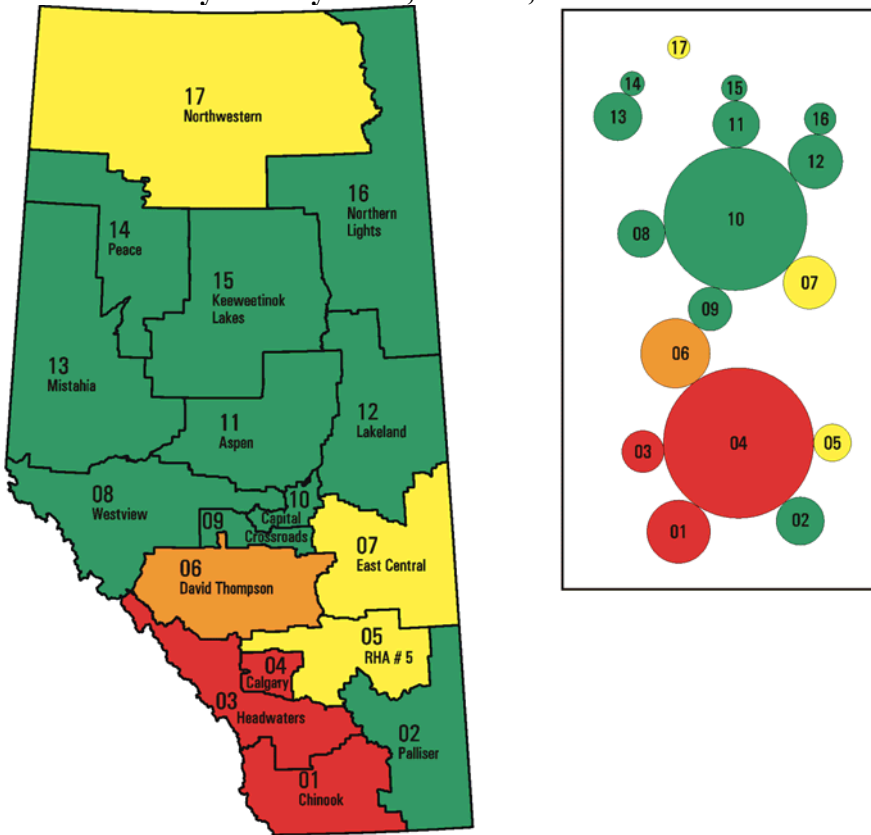
- **Breastfeeding initiation rates** for 1996 to 2000 appear in Table A100. The rate of breastfeeding initiation increased slightly over this five year period.
 - In 2000, 86.6% of women were breastfeeding upon discharge from hospital after giving birth, up from 83.1% in 1996.
- Table A101 shows breastfeeding upon discharge by **facility RHA** from 1998 to 2000.
 - Breastfeeding initiation rates for 1998 to 2000 combined were higher than the provincial average for women delivering in RHAs 1, 3, and 4, and lower than the provincial average in RHAs 2, 8, 9, 10, 11, 12, 13, 14, 15, and 16 (see Map 12).

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Map 12. Breastfeeding Initiation Rate (per 100 hospital deliveries) by Facility RHA, Alberta, 1998 – 2000 Combined.

Maternal Factors



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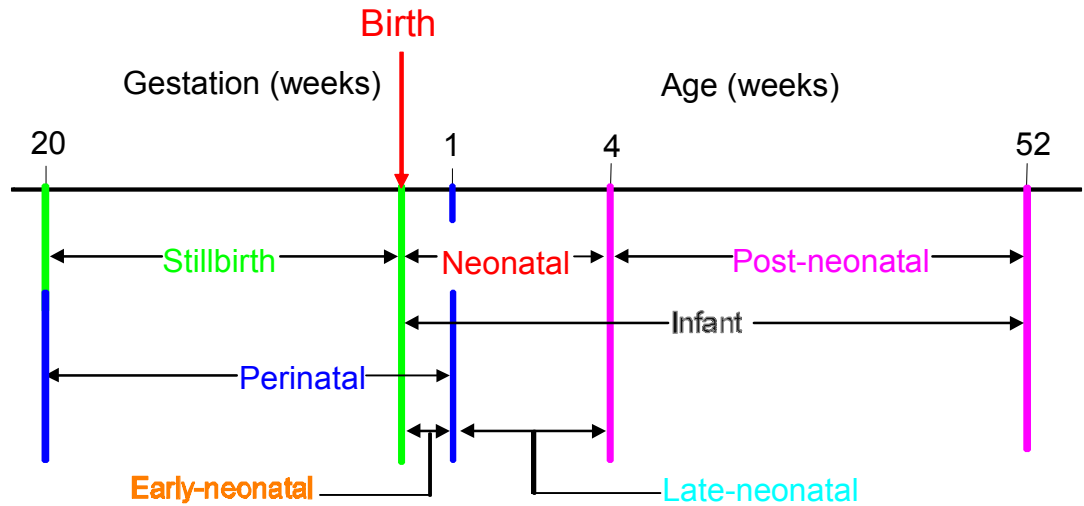
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Appendices

Appendix 1: Definition of Stillbirth and Infant Death



- | | |
|---------------------------------|--|
| Stillbirth | : at least 20 weeks of gestation or after attaining a weight of 500 g. |
| Early-neonatal mortality | : deaths occurring before 7th full day after birth. |
| Perinatal mortality | : stillbirths of at least 20 weeks of gestation and early-neonatal deaths. |
| Late-neonatal mortality | : deaths between 7th full day and 28th full day of life. |
| Neonatal mortality | : deaths occurring within 28 days after birth. |
| Post-neonatal mortality | : deaths between the 4th full week and the 52nd full week. |
| Infant mortality | : deaths occurring within the first year of life. |

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Appendix 2: Codes Used for Data Extraction

Induced Abortion

Induced abortion data were extracted from Fee-For-Service Claims Files using the following health service codes: 86.41, 87.0, 87.0A, 87.1, 87.21.

International Classification of Disease – 9th Revision – Clinical Modification (ICD-9-CM) Codes

Spontaneous abortion

Diagnostic code 634

Hospital Delivery

Diagnostic Codes

| | |
|--------------|--|
| 640-648: | Complications mainly related to pregnancy |
| Fifth digit: | 1 Delivered, with or without mention of antepartum condition |
| | 2 Delivered, with mention of postpartum complication |
| 650: | Delivery in a completely normal case |
| 651-659: | Other indications for care in pregnancy, labour and delivery |
| Fifth digit: | 1 Delivered, with or without mention of antepartum condition |
| | 2 Delivered, with mention of postpartum complication |

V Code

V27: Outcome of delivery

Induction of labour

Procedure Codes

| | |
|--------|--|
| 73.4: | Medical induction of labour |
| 73.01: | Induction of labour by artificial rupture of membranes |
| 73.1: | Other surgical induction of labour |

Operative Delivery

Procedure Codes

| | |
|--------|---|
| 74: | Cesarean section and removal of fetus (7491 (hysterotomy to terminate pregnancy) was excluded). |
| 72.0: | Low forceps operation |
| 72.1: | Low forceps operation with episiotomy |
| 72.2: | Mid forceps operation |
| 72.21: | Mid forceps with episiotomy |
| 72.29: | Other mid forceps operation |
| 72.3: | High forceps operation |

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| | |
|--------|--|
| 72.31: | High forceps operation with episiotomy |
| 72.39: | Other high forceps operation |
| 72.7: | Vacuum extraction |
| 72.71: | Vacuum extraction with episiotomy |

Respiratory distress syndrome

Diagnostic code 769

Congenital Anomalies

Diagnostic Codes

| | |
|-------------|---------------------|
| 740.0-742.0 | Neural Tube Defects |
| 745.0-745.9 | Heart Septal Defect |
| 758.0 | Down Syndrome |

For “All congenital anomalies combined” analyses, the following diagnostic codes were included:

Congenital Anomalies within ICD-9 740.0-759.9:

| | |
|-------------|---------------------------------|
| 740.0-742.9 | Nervous System Anomalies |
| 743.0-743.9 | Eye Anomalies |
| 744.0-744.9 | Ear, Face and Neck |
| 745.0-747.9 | Cardiovascular System Defect |
| 748.0-748.9 | Respiratory System Anomalies |
| 749.0-751.9 | Digestive System Anomalies |
| 752.0-752.9 | Genital Organ Anomalies |
| 753.0-753.9 | Urinary System Anomalies |
| 754.0-756.9 | Musculoskeletal Anomalies |
| 757.0-757.9 | Integument Anomalies |
| 758.0-758.9 | Chromosomal Anomalies |
| 759.0-759.9 | Other and Unspecified Anomalies |

Congenital Anomalies/Disorders Outside ICD-9 740.0-759.9:

| | |
|--------------------------|---|
| 140-239 | Neoplasm |
| 243.9 | Congenital Hypothyroidism |
| 255.2 | Adrenogenital Disorders |
| 270 | Amino Acid and Organic Acid Disorders |
| 271 | Disorders of CHO Transport and Metabolism |
| 275 | Disorders of Mineral Metabolism |
| 277.00 | Cystic Fibrosis |
| 282 | Hereditary Hemolytic Anemias |
| 343 (including 342, 344) | Cerebral Palsy |
| 348.0 | Cerebral Cysts |
| 760.76 | Fetal Alcohol Syndrome |

Shoulder dystocia

Diagnostic Code 640.1

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Postpartum hemorrhage

Diagnostic Code 666

Depression

Diagnostic Codes

| | |
|---------|---------------------------------|
| 296.2-3 | Major depression |
| 298.0 | Depressive-type psychosis |
| 300.4 | Dysthymic disorder |
| 301.1 | Affective personality disorder |
| 309.0-1 | Depressive reaction |
| 311 | Depressive disorder, NOS |
| 313.1 | Misery and unhappiness disorder |

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Appendix 3: Epidemiologic Measures for Maps

Dr. Donald Schopflocher and Erik Ellehoj

All health events reported in this document are mapped according to the method described below. This method was developed to address the issue of how population sizes of health regions can affect rate stability. Specifically, rates will be less stable for RHAs with small populations than those for RHAs with larger populations. The mapping method used in this report is designed to address this issue and allow statistically consistent interpretations. (As an example the numbers shown in the calculations in Steps 1, 2 and 3 below are for low birth weight babies born in the Chinook, Palliser and Northwestern health regions and compared against provincial rates from 1994 to 1996.)

The mapping method consists of the following seven steps:

1. Calculate the rates for each region. For crude rates, an example of this calculation is shown below. *Note: where sex- age standardized rates are used a more detailed calculation would be required.*

| Health Region # | Low Birth Weight (LBW) | Total Births | Proportion LBW |
|-----------------|------------------------|--------------|----------------|
| 1 | 189 | 3,453 | 0.05 |
| 2 | 183 | 3,069 | 0.06 |
| . | . | . | . |
| . | . | . | . |
| . | . | . | . |
| 17 | 65 | 1,557 | 0.04 |

2. Calculate the rate for the province. For crude rates, an example of this calculation is shown below. *Note: where sex- age standardized rates are used a more detailed calculation would be required.*

Number of low birth weight newborns: 6,726
 Total number of live births: 113,252
 Proportion low birth weight: $6,726 / 113,252 = 0.059$

3. Calculate standard error of a probability of a health event for each regional rate. For crude rates the formula which follows can be used. *Note: where sex- age standardized rates are used a more detailed calculation would be required.*

$$\sqrt{\frac{p(1-p)}{n}}$$

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Where: p is the proportion (estimate of probability) for the region
n is the number of births.

| Health Region # | Low Birth Weight | Total Births | Proportion LBW | Calculation | Standard Error |
|-----------------|------------------|--------------|----------------|-------------------------------------|----------------|
| 1 | 189 | 3,453 | 0.05 | $\sqrt{\frac{0.05(1-0.05)}{3,453}}$ | 0.0038 |
| 2 | 183 | 3,069 | 0.06 | $\sqrt{\frac{0.06(1-0.06)}{3,069}}$ | 0.0037 |
| . | . | . | . | . | . |
| . | . | . | . | . | . |
| . | . | . | . | . | . |
| 17 | 65 | 1,557 | 0.04 | $\sqrt{\frac{0.04(1-0.04)}{1,557}}$ | 0.0051 |

4. Calculate the regional-specific standard scores.

Subtract the regional proportion from the provincial proportion and divide these by the standard error derived for each region in step 3. Repeat for each region.

$$\frac{\text{regional proportion} - \text{provincial proportion}}{\text{regional standard error}}$$

5. Graph the regional-specific standard scores calculated in Step 4.

The following colour scheme is used to differentiate the rates that may differ from the provincial average.

| Score | Interpretation | Colour |
|-------------|---|--------|
| ≥ 2 | Higher than provincial average (significant difference in a conventional statistical test (p<0.05)) | Red |
| ≥ 1 and < 2 | probably higher than provincial average (p > 0.5 but < 0.95 that difference is not due to random variation) | Orange |
| < 1 and | Not likely to differ from provincial average (p< 0.5 that difference is not due to random variation) | Yellow |

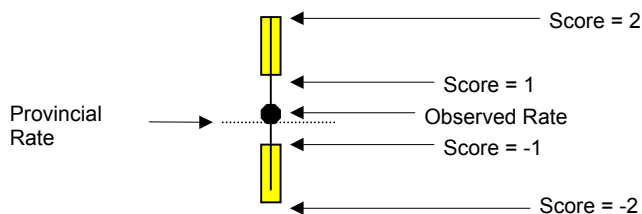
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| | | |
|----------------------------|---|-------------|
| > -1 | | |
| ≤ -1 and > -2 | Probably lower than provincial average ($p > 0.5$ but < 0.95 that difference is not due to random variation) | Light green |
| ≤ -2 | Lower than provincial average (significant difference in a conventional statistical test ($p < 0.05$)) | Dark green |

The figure below illustrates how to interpret the graphic for an individual region. The yellow bars are used to show that the provincial rate crosses between the 1 and -1 score range. The table above lists other colour possibilities by score category.

The black dot represents the value of the rate for each region. The colour of the bars above and below the dot represents the score of the region. The portion of the bar closest to the black dot represents the value for a standard score of 1 or -1, while the part of the bars farthest from the dot represent the value for a score of 2 or -2.



6. Generate maps using the same categories for each region as listed in Step 5.

The graph and map are placed in the same page. The map allows the reader to obtain a quick overview while more detailed information is presented on the graph. The colour assigned to each region is based on the colour of the bars in the graph for the same region. This provides a spatial context to the distribution patterns and consistency among the two graphic elements.

7. Generate a cartogram.

A cartogram is similar to a map. However, each region is represented by a circle that is sized proportionately to the regional population. This graphic is useful for interpreting reported rates by providing an indication of the population size of each region. Each RHA in the cartogram is coloured the same as it is on the provincial map.

Appendix 4: Morbidity Report on Birth Weight and Brachial Plexus Injury in Alberta

Dr. C. Robertson, Dr. J. Watt, Glenrose Rehabilitation Hospital

Birth Weight for Gestational Age: Alberta

Increased birth weight among singleton term newborns in Canada has been reported over the past three decades. Wadhwa et al¹ demonstrated an increase of 3.1% from 1971 to 1989. Arbuckle and Sherman² reported a similar increase between 1972 and 1986. A recent Alberta study of births from 1985 through 1998 shows an increase in birth weight over this period with singleton infants of 38 weeks gestation and beyond having birth weights significantly greater in later than earlier years.³ There was no increase in the birth weight by gestation age for preterm or twin infants during the period.³ While the reason for this increase is unclear, current literature has speculated on the consequences of increased birth weight, including cephalopelvic disproportion,^{4,5} fetal macrosomia syndromes,⁶ adiposity in the first year of life,⁷ and childhood obesity.⁸

We trust that the documentation of increased birth weight for gestational age for term newborns in Alberta³ will result in reviews to consider the causes and consequences of these findings in relation to the health of our children.

Brachial Plexus Injury in Alberta

In Alberta there have been sufficient numbers of newborns with shoulder dystocia and complex Brachial Plexus Palsy to result in the organization of plans for an epidemiological study into this question. Although at this time there is no confirmation of an increased morbidity of Brachial Plexus Injury, numerical extrapolations from those with injury seen at Glenrose Rehabilitation Hospital suggest the incidence may be increasing. In 2001, 17 young children with severe brachial plexus injuries were referred to Glenrose.

The incidence of Brachial Plexus Palsy is considered to be 1-2 per 1000 births. Types of nerve injuries may be neuropraxia where full recovery is expected in 75%; axonotmesis with slow recovery; and neurotmesis, root avulsion, and spinal cord injury where there is no recovery. Upper roots and trunks are more likely injured in a vertex presentation where progression is blocked by the symphysis and causes traction injury with shoulder dystocia doubling the delivery forces.⁹ This is increased by fundal pressure. Injury during breech presentation is to the lower roots. Injury can occur with Cesarean section delivery. Topographical distribution of injury includes C5-C6, upper trunk giving Erb's Palsy; C5-C7, upper and middle trunk; C5-C8, T1, total plexus; all roots and Horner's Syndrome; and C8-T1 giving Klumpke's Palsy which is rare.⁹

Once a Brachial Plexus Injury is recognized after birth an x-ray of the clavicles and diaphragms should be done as well as x-rays of C-spine if the injury is severe. The arm of the sleeper is pinned to the side of the trunk for 10 days. Range of motion exercises at each diaper change is then started. If there is not full recovery within three

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weeks a referral should be made immediately for electrodiagnosis. An electromyography tracing at three weeks is very useful in prognosis and planning subsequent therapy. Alberta now has the capacity to offer Primary Brachial Plexus Surgery as early as 3 months of age as well as Secondary Reconstructive Surgery. For 25% of patients Brachial Plexus Injury is not a benign condition.¹⁰

References:

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8. Tremblay MS, Willms JD. Secular trends in the body mass index of Canadian children. Can Med Assoc J 2000; 163:1429-33.
9. Navakas AO. Obstetrical brachial plexus injuries. In: Lamb DW, editor. The Paralyzed Hand, Edinburgh: Churchill Livingstone, p 116-35.
10. Stömbeck C, Krumlinde-Sundholm L, Forssberg H, Lindgren A. Functional outcome at 5 years in children with obstetrical brachial plexus palsy with and without microsurgical reconstruction. Dev Med Child Neurol 2000; 42:148-157.

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Appendix 5: Resource List

Below are references to reproductive health-related reports and informational Web sites. This list is not intended to be comprehensive.

Alberta Health and Wellness Reports

(available from Health Surveillance, Alberta Health and Wellness).

Maternal Risk Factors in Relationship to Birth Outcome

Alberta Congenital Anomalies Surveillance System, 1980-2000

Reports From Other Provinces

Provincial Health Officer's Annual Report 1995: Women's Health, The Office of the Provincial Health Officer, Ministry of Health Planning, Government of British Columbia. Order at: <http://www.healthplanning.gov.bc.ca/cgi-bin/forms/pho/request-reports.cgi>

Selected Vital Statistics and Health Status Indicators, One Hundred and Twenty-Ninth Annual Report 2000, Division of Vital Statistics, Ministry of Health Planning, Government of British Columbia:
<http://www.vs.gov.bc.ca/stats/annual/2000/index.html>

The Epidemiology of Infant Mortality in Saskatchewan 1982 – 1996. The Infant Mortality Research Team, Saskatchewan Health.
http://www.health.gov.sk.ca/info_center_pub_imrreport.pdf

Manitoba Perinatal Health Surveillance Report 1989-1998. Manitoba Health, Public Health Branch, Epidemiology Unit, Perinatal Project Team.
<http://www.gov.mb.ca/health/publichealth/epiunit/docs/perinatal.pdf>

Accouchements et naissances, Quebec:

<http://www.msss.gouv.qc.ca/f/statistiques/index.htm>

La situation démographique au Québec, bilan 2001 Les naissances : les jumeaux, le poids des nouveau-nés et la mortalité infantile:

http://www.stat.gouv.qc.ca/publications/demograp/sit_demo_an.htm

Institut de la statistique du Quebec: http://www.stat.gouv.qc.ca/default_an.htm

Annual Statistical Report, Vital Statistics, Health and Community Services, Government of New Brunswick: <http://www.gov.nb.ca/0379/pdf/99vsecrep.pdf>

Annual Report 2000-2001, Health and Social Services, Government of Prince Edward Island: <http://www.gov.pe.ca/publications/getpublication.php3?number=616>

Vital Statistics Annual Report, Government of Nova Scotia:

<http://www.gov.ns.ca/snsmr/vstat/annualreports/pdf/2000AnnualReport.pdf>

Live birth trends, Community and Integrated Health Boards, Newfoundland and Labrador, 1996-2000: http://www.nlchi.nf.ca/pdf/LiveBirth_Rpt.pdf

Northwest Territories Vital Statistics:

http://www.stats.gov.nt.ca/Stainfo/Demographics/Vital_Revised/revised_vital.html

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International Reports

United States data on 1998 births:

http://www.cdc.gov/nccdphp/drh/pdf/nvs/nvs48_3.pdf

England Maternity Statistics to 2000/01: <http://www.doh.gov.uk/public/sb0211.htm>

Informational Web Sites

Provincial

Alberta Health and Wellness: <http://www.health.gov.ab.ca/>

Alberta Medical Association: <http://www.albertadoctors.org/home/>

Alberta Wellnet: <http://www.albertawellnet.org/>

Northern and Central Alberta Perinatal Outreach program: <http://www.ncapop.ca/>

Regional Health Authorities: <http://www.health.gov.ab.ca/rhas/rhamap.htm>

British Columbia Ministry of Health Planning: <http://www.gov.bc.ca/healthplanning/>

British Columbia Reproductive Care Program: <http://www.rcp.gov.bc.ca/>

Saskatchewan Health: <http://www.health.gov.sk.ca/>

Manitoba Health: <http://www.gov.mb.ca/health/>

Ontario Ministry of Health and Long Term Care:

<http://www.gov.on.ca/health/index.html>

Sante et services sociaux, Quebec: <http://www.msss.gouv.qc.ca/>

New Brunswick Health and Wellness: <http://www.gov.nb.ca/HW-SM/hw/index.htm>

Prince Edward Island Health and Social Services: <http://www.gov.pe.ca/hss/index.php3>

Nova Scotia Department of Health: <http://www.gov.ns.ca/health/>

Reproductive Care Program of Nova Scotia:

<http://admwww1.ucis.dal.ca/transfer/rcp/index.htm>

Department of Health and Community Services, Government of Newfoundland and

Labrador: <http://www.gov.nf.ca/health/Default.htm>

Newfoundland and Labrador Centre for Health Information:

<http://www.nlchi.nf.ca/index.php>

Federal

Health Canada: <http://www.hc-sc.gc.ca/>

Canadian Institute for Health Information: <http://www.cihi.ca/>

Statistics Canada:

Canadian Women's Health Network: <http://www.cwhn.ca/>

Canadian Health Network: <http://www.canadian-health-network.ca/>

Canadian Medical Association: <http://www.cma.ca/cma/common/start.do?lang=2>

Canadian Pediatric Society: <http://www.cps.ca/>

International

World Health Organization: <http://www.who.int/home-page/>

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Appendix 6: Tables

Table A1 Selected Indicators for Pregnancies and Births, Alberta, 1986 - 2000

| Indicator | Year | | | | | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Live Births | 43,304 | 41,707 | 41,669 | 42,979 | 42,633 | 42,369 | 41,673 | 39,905 | 39,459 | 38,528 | 37,471 | 36,546 | 37,527 | 37,771 | 36,613 |
| Estimated Pregnancies ¹ | 54,443 | 51,984 | 53,069 | 54,615 | 54,443 | 54,591 | 55,864 | 54,166 | 53,927 | 52,714 | 51,721 | 51,746 | 52,835 | 52,902 | 51,851 |
| Estimated Pregnancy Rate (per 1,000 Women Aged 15-49) | 79.9 | 76.2 | 77.2 | 78.6 | 77.0 | 76.1 | 77.0 | 74.1 | 73.5 | 71.4 | 69.5 | 68.4 | 68.3 | 66.8 | 64.6 |
| Spontaneous Abortions | 4,635 | 4,559 | 4,900 | 4,880 | 4,955 | 5,109 | 5,360 | 5,089 | 5,219 | 5,018 | 4,774 | 4,638 | 4,773 | 4,708 | 4,583 |
| Spontaneous Abortion Rate (per 1,000 Women Aged 15-49) | 6.8 | 6.7 | 7.1 | 7.0 | 7.0 | 7.1 | 7.4 | 7.0 | 7.1 | 6.8 | 6.4 | 6.1 | 6.2 | 5.9 | 5.7 |
| Spontaneous Abortion Rate (per 100 Estimated Pregnancies) | 8.5 | 8.8 | 9.2 | 8.9 | 9.1 | 9.4 | 9.6 | 9.4 | 9.7 | 9.5 | 9.2 | 9.0 | 9.0 | 8.9 | 8.8 |
| Induced Abortions | 6,237 | 5,465 | 6,203 | 6,502 | 6,559 | 6,803 | 8,552 | 8,905 | 8,983 | 8,906 | 9,240 | 10,313 | 10,346 | 10,164 | 10,417 |
| Induced Abortion Rate (per 1,000 Women Aged 15-49) | 9.2 | 8.0 | 9.0 | 9.4 | 9.3 | 9.5 | 11.8 | 12.2 | 12.2 | 12.1 | 12.4 | 13.6 | 13.4 | 12.8 | 13.0 |
| Induced Abortion Rate (per 100 estimated pregnancies) | 11.5 | 10.5 | 11.7 | 11.9 | 12.0 | 12.5 | 15.3 | 16.4 | 16.7 | 16.9 | 17.9 | 19.9 | 19.6 | 19.2 | 20.1 |
| Total Induction Rate (per 100 Hospital Deliveries) | 14.3 | 12.3 | 12.0 | 16.4 | 17.0 | 17.0 | 16.7 | 21.2 | 21.8 | 21.9 | 22.8 | 23.6 | 24.1 | 25.3 | 25.9 |
| Cesarean Section Rate (per 100 Hospital Deliveries) | 16.3 | 17.0 | 17.1 | 16.3 | 16.1 | 16.0 | 15.9 | 15.8 | 15.7 | 15.8 | 16.3 | 16.5 | 17.3 | 19.1 | 20.2 |
| Mean Maternal Age at Delivery | 26.7 | 26.9 | 27.1 | 27.2 | 27.3 | 27.3 | 27.5 | 27.6 | 27.7 | 27.8 | 28.0 | 28.1 | 28.1 | 28.2 | 28.3 |
| General Fertility Rate (per 1,000 Women Aged 15-49) | 63.5 | 61.2 | 60.6 | 61.9 | 60.3 | 59.1 | 57.5 | 54.6 | 53.7 | 52.2 | 50.3 | 48.3 | 48.5 | 47.7 | 45.6 |
| Total Fertility Rate (per 1,000 women) | 1,830 | 1,792 | 1,806 | 1,875 | 1,861 | 1,861 | 1,843 | 1,790 | 1,805 | 1,793 | 1,757 | 1,708 | 1,728 | 1,717 | 1,660 |
| Crude Birth Rate (per 1,000 Population) | 17.7 | 16.9 | 16.7 | 17.0 | 16.5 | 16.2 | 15.7 | 14.9 | 14.6 | 14.2 | 13.7 | 13.1 | 13.1 | 12.9 | 12.3 |
| Low Birth Weight Rate (per 100 Live Births) | 5.5 | 5.5 | 5.8 | 5.9 | 5.9 | 5.8 | 5.8 | 5.7 | 5.6 | 6.0 | 6.1 | 6.2 | 6.2 | 5.9 | 6.1 |
| Small for Gestational Age Rate (per 100 Live Singleton Births) | 10.9 | 10.7 | 10.5 | 10.6 | 10.4 | 10.3 | 9.7 | 9.8 | 9.5 | 9.9 | 9.2 | 9.4 | 9.0 | 8.2 | 7.9 |
| High Birth Weight Rate (per 100 Live Births) | 11.1 | 10.9 | 10.7 | 10.9 | 11.1 | 11.0 | 11.4 | 11.5 | 11.4 | 11.3 | 11.6 | 11.4 | 12.3 | 12.6 | 12.9 |
| Large for Gestational Age Rate (per 100 Live Singleton Births) | 9.6 | 9.6 | 9.7 | 9.5 | 9.9 | 9.7 | 10.7 | 10.2 | 10.2 | 10.3 | 11.0 | 10.5 | 11.4 | 11.6 | 12.3 |
| Pre-Term Birth Rate (per 100 Live Births) | 6.3 | 6.4 | 6.9 | 6.6 | 6.9 | 6.6 | 6.8 | 6.6 | 6.8 | 7.0 | 7.4 | 7.3 | 7.5 | 7.8 | 8.5 |
| Multiple Birth Rate (per 100 Live Births) | 1.9 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.3 | 2.2 | 2.2 | 2.3 | 2.4 | 2.6 | 2.7 | 2.7 | 3.0 |
| Congenital Anomalies Rate (per 1,000 Total Births) | 43.7 | 43.2 | 47.8 | 47.0 | 48.5 | 43.7 | 44.0 | 37.8 | 37.5 | 32.9 | 31.7 | 32.3 | 33.1 | 31.1 | 34.3 |
| Stillbirths | 267 | 253 | 297 | 254 | 296 | 310 | 279 | 267 | 266 | 262 | 236 | 249 | 189 | 259 | 238 |
| Stillbirth Rate (per 1,000 Total Births) | 6.1 | 6.0 | 7.1 | 5.9 | 6.9 | 7.3 | 6.7 | 6.6 | 6.7 | 6.8 | 6.3 | 6.8 | 5.0 | 6.8 | 6.5 |
| Perinatal Mortality rate (per 1,000 Total Births) | 10.0 | 9.5 | 10.7 | 9.2 | 10.8 | 9.9 | 10.5 | 9.9 | 10.3 | 10.8 | 9.6 | 9.8 | 7.7 | 9.9 | 9.7 |
| Neonatal Mortality Rate (per 1,000 Live Births) | 4.9 | 4.3 | 4.4 | 4.2 | 5.0 | 3.4 | 4.7 | 3.9 | 4.7 | 4.9 | 4.0 | 3.5 | 3.4 | 3.7 | 4.1 |
| Post-Neonatal Mortality Rate (per 1,000 Live Births) | 4.0 | 3.2 | 3.8 | 3.2 | 2.9 | 3.3 | 2.5 | 2.6 | 2.7 | 2.1 | 2.2 | 1.4 | 2.0 | 2.0 | 2.4 |
| Infant Mortality Rate (per 1,000 Live Births) | 8.9 | 7.5 | 8.2 | 7.4 | 7.9 | 6.7 | 7.2 | 6.6 | 7.3 | 6.9 | 6.2 | 4.9 | 5.4 | 5.8 | 6.5 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
 Vital Statistics, Death File, Department of Government Services, May 2001 release.
 Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.
 Clinics Files, Alberta Health and Wellness.
 Fee-for-Services Claims Files, Alberta Health and Wellness.
 Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.
 Alberta Congenital Anomalies Surveillance System, 1980-99, May 2001 release.
 Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Notes: 1. Estimated pregnancies include livebirths, stillbirths, spontaneous abortions, and induced abortions.
 Populations are estimated at June 30, as viewed at December 31 of each year.
 Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A2 Estimated Pregnancy Rates (including Live Births, Stillbirths, Spontaneous Abortions, and Induced Abortions) by Maternal Age Group, Alberta, 1986 - 2000

| Year | Total | Maternal Age Group (Years) | | | | | | | | | | |
|---|--------|----------------------------|-------|-------|-------|--------|--------|--------|-------|-------|-----|---------|
| | | <15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | >44 | Unknown |
| Estimated pregnancies¹ | | | | | | | | | | | | |
| 86 | 54,443 | 78 | 1,834 | 3,189 | 5,023 | 14,856 | 19,782 | 11,223 | 3,034 | 382 | 25 | 40 |
| 87 | 51,984 | 85 | 1,690 | 3,119 | 4,809 | 13,231 | 18,875 | 11,324 | 3,138 | 455 | 37 | 30 |
| 88 | 53,069 | 90 | 1,695 | 3,335 | 5,030 | 12,917 | 19,066 | 11,886 | 3,464 | 560 | 21 | 35 |
| 89 | 54,615 | 102 | 1,736 | 3,381 | 5,117 | 12,791 | 19,220 | 12,925 | 3,843 | 534 | 46 | 37 |
| 90 | 54,443 | 97 | 1,753 | 3,410 | 5,163 | 12,629 | 18,519 | 13,119 | 4,233 | 633 | 28 | 22 |
| 91 | 54,591 | 116 | 1,928 | 3,466 | 5,394 | 12,618 | 17,807 | 13,353 | 4,574 | 665 | 39 | 25 |
| 92 | 55,864 | 143 | 2,180 | 3,490 | 5,670 | 12,857 | 17,520 | 13,982 | 4,864 | 747 | 43 | 38 |
| 93 | 54,166 | 119 | 2,224 | 3,462 | 5,686 | 12,535 | 16,392 | 13,600 | 4,986 | 789 | 35 | 24 |
| 94 | 53,927 | 115 | 2,043 | 3,608 | 5,651 | 12,179 | 16,131 | 13,650 | 5,250 | 880 | 34 | 37 |
| 95 | 52,714 | 114 | 2,022 | 3,498 | 5,520 | 11,919 | 15,464 | 13,348 | 5,376 | 892 | 42 | 39 |
| 96 | 51,721 | 85 | 1,948 | 3,306 | 5,254 | 11,434 | 15,131 | 13,018 | 5,682 | 1,020 | 54 | 43 |
| 97 | 51,746 | 88 | 1,903 | 3,368 | 5,271 | 11,585 | 15,078 | 12,642 | 5,828 | 1,170 | 53 | 31 |
| 98 | 52,835 | 90 | 1,978 | 3,487 | 5,465 | 11,935 | 15,145 | 12,949 | 5,943 | 1,186 | 81 | 41 |
| 99 | 52,902 | 73 | 1,894 | 3,332 | 5,226 | 12,072 | 15,110 | 12,792 | 6,221 | 1,300 | 74 | 34 |
| 00 | 51,851 | 59 | 1,671 | 3,392 | 5,063 | 11,859 | 14,746 | 12,506 | 6,234 | 1,305 | 45 | 34 |
| Estimated pregnancy rate (per 1,000 women in each age group)^{2,3,4} | | | | | | | | | | | | |
| 86 | 79.9 | 0.9 | 33.3 | 83.6 | 53.8 | 125.8 | 149.8 | 96.9 | 31.7 | 5.4 | 0.4 | |
| 87 | 76.2 | 1.0 | 31.2 | 82.6 | 52.3 | 118.5 | 145.1 | 95.5 | 32.7 | 6.0 | 0.6 | |
| 88 | 77.2 | 1.0 | 32.0 | 86.8 | 55.0 | 121.0 | 148.3 | 97.9 | 35.2 | 7.0 | 0.3 | |
| 89 | 78.6 | 1.1 | 33.3 | 88.0 | 56.5 | 124.8 | 151.4 | 104.2 | 37.5 | 6.3 | 0.7 | |
| 90 | 77.0 | 1.1 | 33.3 | 91.0 | 57.3 | 124.7 | 148.2 | 103.1 | 39.2 | 7.1 | 0.4 | |
| 91 | 76.1 | 1.2 | 36.3 | 94.9 | 60.2 | 125.5 | 147.1 | 103.3 | 40.3 | 7.1 | 0.6 | |
| 92 | 77.0 | 1.5 | 40.1 | 96.7 | 62.7 | 129.9 | 150.4 | 107.0 | 41.2 | 7.8 | 0.6 | |
| 93 | 74.1 | 1.2 | 40.6 | 95.7 | 62.5 | 128.3 | 147.4 | 103.8 | 40.9 | 8.0 | 0.4 | |
| 94 | 73.5 | 1.1 | 36.8 | 98.9 | 61.4 | 127.9 | 152.1 | 105.5 | 42.1 | 8.6 | 0.4 | |
| 95 | 71.4 | 1.1 | 36.0 | 94.3 | 59.1 | 127.2 | 150.8 | 106.0 | 42.4 | 8.3 | 0.5 | |
| 96 | 69.5 | 0.8 | 33.5 | 88.4 | 55.0 | 123.1 | 149.4 | 107.3 | 44.2 | 9.1 | 0.6 | |
| 97 | 68.4 | 0.8 | 31.7 | 88.3 | 53.7 | 121.8 | 148.2 | 107.6 | 44.5 | 9.9 | 0.6 | |
| 98 | 68.3 | 0.8 | 31.7 | 88.0 | 53.5 | 121.3 | 145.4 | 113.0 | 44.7 | 9.6 | 0.8 | |
| 99 | 66.8 | 0.7 | 29.4 | 81.3 | 49.5 | 118.2 | 142.9 | 113.5 | 46.4 | 10.2 | 0.7 | |
| 00 | 64.6 | 0.5 | 25.5 | 79.4 | 46.8 | 114.5 | 139.1 | 112.7 | 47.0 | 9.9 | 0.4 | |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.
Clinics Files, Alberta Health and Wellness.
Fee-for-Services Claims Files, Alberta Health and Wellness.
Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Notes: 1. Estimated pregnancies include live births, stillbirths, spontaneous abortions, and induced abortions.
2. Age-specific rate refers to number of estimated pregnancies per 1,000 women in a specific age group.
3. The age-specific rates for age groups <15 and >44 are calculated based on female populations in 10-14 and 44-49 age groups respectively.
4. Total rate = total estimated pregnancies / number of women aged 15-49 x 1,000.
Populations are estimated at June 30, as viewed at December 31 of each year.
Data include Alberta residents only, with the exception of spontaneous abortion data, which may contain 'out of province' case
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A3 Estimated Pregnancy Rates (including Live Births, Stillbirths, Spontaneous Abortions, and Induced Abortions) by Residence RHA, Alberta, 1986 - 2000

| Residence RHA | Year | | | | | | | | | | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Estimated pregnancies^{1,2} | | | | | | | | | | | | | | | |
| 1 | 2,971 | 2,915 | 2,802 | 3,002 | 3,036 | 2,962 | 2,988 | 2,895 | 2,907 | 2,910 | 2,791 | 2,885 | 2,632 | 2,637 | 2,468 |
| 2 | 1,551 | 1,421 | 1,487 | 1,559 | 1,502 | 1,411 | 1,429 | 1,406 | 1,405 | 1,525 | 1,471 | 1,523 | 1,564 | 1,544 | 1,626 |
| 3 | 1,123 | 1,070 | 1,097 | 1,150 | 1,133 | 1,130 | 1,232 | 1,184 | 1,234 | 1,180 | 1,204 | 1,253 | 1,254 | 1,262 | 1,247 |
| 4 | 16,088 | 15,813 | 16,010 | 16,736 | 16,848 | 16,652 | 17,150 | 16,391 | 16,668 | 16,209 | 16,266 | 16,426 | 17,099 | 17,252 | 17,278 |
| 5 | 875 | 841 | 853 | 822 | 859 | 823 | 838 | 843 | 866 | 844 | 839 | 831 | 839 | 860 | 834 |
| 6 | 3,602 | 3,340 | 3,378 | 3,429 | 3,321 | 3,413 | 3,424 | 3,406 | 3,235 | 3,271 | 3,212 | 3,156 | 3,213 | 3,290 | 3,208 |
| 7 | 1,628 | 1,530 | 1,524 | 1,527 | 1,474 | 1,400 | 1,396 | 1,448 | 1,455 | 1,366 | 1,294 | 1,284 | 1,329 | 1,248 | 1,218 |
| 8 | 1,475 | 1,376 | 1,382 | 1,464 | 1,452 | 1,435 | 1,571 | 1,445 | 1,467 | 1,536 | 1,482 | 1,509 | 1,533 | 1,531 | 1,503 |
| 9 | 934 | 888 | 868 | 928 | 1,029 | 954 | 1,024 | 894 | 940 | 896 | 834 | 812 | 820 | 828 | 817 |
| 10 | 15,896 | 14,785 | 15,666 | 15,866 | 15,948 | 16,356 | 16,535 | 16,277 | 15,515 | 14,803 | 14,296 | 14,036 | 14,346 | 14,306 | 13,990 |
| 11 | 1,664 | 1,577 | 1,670 | 1,774 | 1,646 | 1,779 | 1,779 | 1,739 | 1,756 | 1,635 | 1,549 | 1,538 | 1,563 | 1,674 | 1,449 |
| 12 | 1,947 | 1,929 | 1,860 | 1,952 | 1,803 | 1,847 | 1,916 | 1,856 | 1,849 | 1,751 | 1,700 | 1,742 | 1,737 | 1,727 | 1,598 |
| 13 | 1,744 | 1,671 | 1,686 | 1,612 | 1,562 | 1,661 | 1,630 | 1,560 | 1,637 | 1,672 | 1,702 | 1,675 | 1,728 | 1,782 | 1,683 |
| 14 | 563 | 558 | 495 | 530 | 515 | 516 | 520 | 507 | 530 | 514 | 528 | 475 | 502 | 464 | 399 |
| 15 | 628 | 625 | 583 | 647 | 631 | 648 | 695 | 675 | 743 | 683 | 676 | 639 | 674 | 606 | 632 |
| 16 | 955 | 854 | 939 | 866 | 942 | 849 | 868 | 838 | 758 | 741 | 801 | 763 | 771 | 817 | 819 |
| 17 | 516 | 506 | 507 | 528 | 534 | 567 | 575 | 579 | 602 | 653 | 626 | 649 | 620 | 575 | 617 |
| Unknown | 108 | 104 | 84 | 61 | 66 | 49 | 49 | 48 | 130 | 312 | 326 | 202 | 107 | 122 | 110 |
| Alberta | 54,268 | 51,803 | 52,891 | 54,453 | 54,301 | 54,452 | 55,619 | 53,991 | 53,697 | 52,501 | 51,597 | 51,398 | 52,331 | 52,525 | 51,496 |
| Rate per 1,000 women aged 15-49 | | | | | | | | | | | | | | | |
| 1 | 86.8 | 84.7 | 81.3 | 87.1 | 87.0 | 84.1 | 84.1 | 81.2 | 81.0 | 80.5 | 76.8 | 79.0 | 71.8 | 71.0 | 66.0 |
| 2 | 75.8 | 69.9 | 73.1 | 76.6 | 73.1 | 68.2 | 69.2 | 67.7 | 66.3 | 70.9 | 67.1 | 68.5 | 68.7 | 66.1 | 68.7 |
| 3 | 82.2 | 76.9 | 76.9 | 79.0 | 75.2 | 72.8 | 77.1 | 71.6 | 72.2 | 67.0 | 66.2 | 66.8 | 65.0 | 63.1 | 60.9 |
| 4 | 77.5 | 76.0 | 75.7 | 77.7 | 76.4 | 74.2 | 75.5 | 71.8 | 72.4 | 69.4 | 68.4 | 67.2 | 67.4 | 65.9 | 64.8 |
| 5 | 78.0 | 75.4 | 76.4 | 73.5 | 75.5 | 71.2 | 70.8 | 69.7 | 70.6 | 67.2 | 65.9 | 64.8 | 63.6 | 63.1 | 60.7 |
| 6 | 90.0 | 83.5 | 84.0 | 84.4 | 80.1 | 81.1 | 80.0 | 78.8 | 74.1 | 74.2 | 72.1 | 69.9 | 68.8 | 68.5 | 65.6 |
| 7 | 68.4 | 65.2 | 65.5 | 66.0 | 63.8 | 60.1 | 59.1 | 60.9 | 60.4 | 56.5 | 53.0 | 52.3 | 53.4 | 50.1 | 48.7 |
| 8 | 75.4 | 70.6 | 70.2 | 72.8 | 70.9 | 68.0 | 72.5 | 66.1 | 66.0 | 66.6 | 63.2 | 63.3 | 63.4 | 61.9 | 60.6 |
| 9 | 93.2 | 87.6 | 84.9 | 89.3 | 97.3 | 87.6 | 92.4 | 80.1 | 84.0 | 79.5 | 73.3 | 70.4 | 69.6 | 69.4 | 67.7 |
| 10 | 76.4 | 70.7 | 74.6 | 75.0 | 74.1 | 75.1 | 75.3 | 73.4 | 70.5 | 68.1 | 66.1 | 64.6 | 65.3 | 63.9 | 61.9 |
| 11 | 80.3 | 76.4 | 80.0 | 84.0 | 76.3 | 81.1 | 79.2 | 76.1 | 75.5 | 70.6 | 66.9 | 66.5 | 67.2 | 70.6 | 60.9 |
| 12 | 81.9 | 82.1 | 78.8 | 82.6 | 76.6 | 78.5 | 80.9 | 78.2 | 78.0 | 74.1 | 72.3 | 73.4 | 71.9 | 71.5 | 66.3 |
| 13 ³ | - | - | - | - | 75.7 | 79.9 | 77.9 | 75.3 | 78.5 | 77.7 | 76.6 | 73.8 | 73.7 | 74.0 | 69.2 |
| 14 ³ | - | - | - | - | 77.7 | 78.1 | 79.5 | 78.5 | 81.4 | 79.1 | 81.6 | 74.0 | 78.3 | 71.8 | 62.2 |
| 15 | 113.9 | 111.8 | 101.6 | 112.8 | 107.8 | 108.8 | 115.1 | 110.0 | 118.1 | 105.5 | 103.2 | 95.8 | 100.1 | 89.0 | 91.6 |
| 16 | 78.3 | 74.7 | 83.1 | 75.7 | 81.8 | 72.7 | 73.8 | 72.1 | 66.5 | 66.2 | 71.5 | 65.1 | 63.3 | 66.0 | 64.2 |
| 17 | 138.4 | 134.8 | 132.6 | 136.0 | 139.0 | 143.8 | 144.3 | 141.9 | 144.0 | 152.1 | 141.2 | 137.6 | 126.2 | 114.0 | 122.5 |
| Alberta | 79.6 | 76.0 | 76.9 | 78.4 | 76.8 | 75.9 | 76.7 | 73.9 | 73.1 | 71.1 | 69.3 | 68.0 | 67.6 | 66.3 | 64.2 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Clinics Files, Alberta Health and Wellness.

Fee-for-Services Claims Files, Alberta Health and Wellness.

Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Notes:

1. Estimated pregnancies include live births, stillbirths, spontaneous abortions, and induced abortions.

2. Regional pregnancy estimates differ slightly from non-regional pregnancy estimates (reported in other tables) because regional induced abortion data differ from non-regional induced abortion data (due to differences in source).

3. Population estimations for regions 13 and 14 are not available for years 1986 through 1989.

Populations are estimated at June 30, as viewed at December 31 of each year.

RHA boundaries are current as of April, 2001

Data include Alberta residents only, with the exception of spontaneous abortion data, which may contain 'out of province' cases.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A4 Estimated Pregnancy Rate (per 1,000 women in each age group)
by Residence RHA and Maternal Age Group, Alberta, 1998 - 2000

| Residence RHA | Total ¹ | Maternal Age Group (Years) | | | | | | | | | |
|------------------|--------------------|----------------------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|-------------|------------|
| | | <15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | >44 |
| 1998 | | | | | | | | | | | |
| 1 | 71.8 | 0.9 | 27.0 | 81.4 | 48.1 | 132.8 | 176.7 | 115.3 | 40.6 | 7.0 | 1.0 |
| 2 | 68.7 | 0.6 | 27.1 | 77.6 | 46.7 | 139.0 | 165.6 | 109.8 | 30.3 | 8.6 | 0.4 |
| 3 | 65.0 | - | 24.3 | 82.2 | 46.5 | 105.3 | 135.9 | 115.9 | 50.1 | 10.3 | 0.4 |
| 4 | 67.4 | 1.2 | 29.2 | 87.8 | 51.8 | 103.1 | 130.2 | 123.3 | 53.3 | 12.0 | 1.1 |
| 5 | 63.6 | 0.5 | 23.1 | 74.8 | 42.7 | 136.2 | 174.1 | 97.3 | 29.8 | 8.8 | 0.6 |
| 6 | 68.8 | 0.3 | 32.0 | 88.8 | 54.0 | 137.5 | 171.7 | 104.3 | 35.1 | 5.1 | 0.7 |
| 7 | 53.4 | 0.7 | 17.2 | 63.6 | 35.3 | 101.8 | 133.9 | 92.1 | 30.3 | 4.9 | 0.6 |
| 8 | 63.4 | 1.0 | 32.2 | 84.2 | 51.8 | 127.8 | 160.6 | 99.9 | 35.6 | 7.7 | 0.6 |
| 9 | 69.6 | 0.5 | 37.1 | 88.5 | 55.8 | 140.8 | 168.9 | 100.8 | 28.8 | 5.8 | 0.7 |
| 10 | 65.3 | 0.6 | 34.7 | 81.6 | 53.2 | 109.2 | 135.7 | 109.5 | 46.4 | 9.5 | 1.1 |
| 11 | 67.2 | 0.3 | 33.0 | 85.9 | 53.3 | 139.5 | 176.5 | 101.5 | 32.7 | 6.2 | 0.3 |
| 12 | 71.9 | 1.0 | 29.9 | 107.4 | 60.2 | 145.3 | 171.6 | 102.4 | 32.9 | 5.4 | 0.7 |
| 13 | 73.7 | 1.1 | 36.8 | 108.9 | 64.7 | 155.4 | 160.9 | 93.6 | 29.8 | 7.9 | 0.4 |
| 14 | 78.3 | 0.9 | 41.3 | 107.5 | 66.4 | 149.7 | 206.1 | 107.3 | 26.7 | 11.0 | - |
| 15 | 100.1 | 3.2 | 69.3 | 122.1 | 90.5 | 206.5 | 161.3 | 134.9 | 39.8 | 3.6 | - |
| 16 | 63.3 | 1.7 | 23.0 | 87.1 | 48.2 | 137.3 | 129.0 | 95.9 | 28.9 | 7.9 | - |
| 17 | 126.2 | 1.9 | 59.4 | 163.0 | 100.2 | 246.1 | 195.9 | 124.3 | 69.4 | 25.9 | - |
| Alberta | 67.6 | 0.8 | 31.4 | 87.1 | 53.0 | 119.1 | 144.3 | 112.4 | 44.4 | 9.4 | 0.9 |
| 1999 | | | | | | | | | | | |
| 1 | 71.0 | 0.3 | 26.1 | 78.4 | 46.8 | 137.3 | 173.1 | 118.7 | 39.2 | 6.4 | 0.6 |
| 2 | 66.1 | 0.3 | 27.9 | 77.6 | 46.8 | 134.7 | 159.9 | 107.2 | 31.3 | 4.5 | 0.7 |
| 3 | 63.1 | 0.7 | 25.6 | 88.9 | 51.0 | 92.8 | 139.8 | 114.0 | 48.6 | 9.8 | - |
| 4 | 65.9 | 0.7 | 28.0 | 72.5 | 45.2 | 100.6 | 126.9 | 122.2 | 56.9 | 12.9 | 0.9 |
| 5 | 63.1 | 1.3 | 22.4 | 94.8 | 50.2 | 121.3 | 175.3 | 95.4 | 34.9 | 6.7 | - |
| 6 | 68.5 | 0.7 | 26.7 | 94.9 | 52.9 | 142.5 | 160.5 | 113.4 | 34.5 | 6.4 | 0.6 |
| 7 | 50.1 | 0.3 | 16.0 | 47.6 | 28.3 | 98.2 | 143.7 | 88.9 | 25.0 | 3.7 | 0.6 |
| 8 | 61.9 | 0.5 | 28.3 | 85.0 | 49.9 | 116.9 | 157.2 | 111.9 | 33.3 | 7.3 | 0.6 |
| 9 | 69.4 | 0.5 | 44.5 | 101.3 | 65.9 | 156.1 | 156.8 | 89.2 | 31.6 | 5.1 | 0.7 |
| 10 | 63.9 | 0.8 | 30.2 | 75.0 | 47.9 | 105.4 | 131.7 | 111.1 | 48.5 | 11.4 | 0.7 |
| 11 | 70.6 | - | 28.4 | 91.5 | 52.3 | 146.8 | 191.8 | 109.8 | 36.2 | 6.3 | 1.0 |
| 12 | 71.5 | 0.7 | 33.6 | 87.6 | 53.9 | 150.2 | 178.9 | 102.8 | 33.2 | 7.7 | 0.7 |
| 13 | 74.0 | 0.3 | 28.0 | 92.6 | 52.9 | 147.7 | 176.2 | 103.5 | 35.4 | 6.1 | 0.7 |
| 14 | 71.8 | - | 49.6 | 93.4 | 66.5 | 164.1 | 153.8 | 78.3 | 41.7 | 10.6 | 1.3 |
| 15 | 89.0 | 2.3 | 44.1 | 160.4 | 87.1 | 201.7 | 155.9 | 98.7 | 24.9 | 10.3 | - |
| 16 | 66.0 | - | 37.6 | 98.3 | 61.5 | 134.3 | 151.0 | 89.4 | 30.5 | 6.6 | - |
| 17 | 114.0 | 0.9 | 50.8 | 164.8 | 93.4 | 231.1 | 186.3 | 113.2 | 45.0 | 20.3 | 2.7 |
| Alberta | 66.3 | 0.7 | 29.2 | 80.4 | 49.1 | 116.7 | 142.0 | 113.1 | 46.2 | 10.2 | 0.7 |
| 2000 | | | | | | | | | | | |
| 1 | 66.0 | - | 23.2 | 72.0 | 43.0 | 116.5 | 160.8 | 114.7 | 43.8 | 8.1 | 0.2 |
| 2 | 68.7 | 0.3 | 20.6 | 89.1 | 48.0 | 142.1 | 168.8 | 110.6 | 31.0 | 5.9 | 0.9 |
| 3 | 60.9 | - | 15.1 | 69.7 | 37.1 | 101.8 | 122.8 | 124.8 | 49.2 | 10.7 | 0.4 |
| 4 | 64.8 | 0.6 | 26.1 | 75.7 | 45.7 | 100.9 | 124.8 | 121.7 | 56.6 | 13.0 | 0.4 |
| 5 | 60.7 | 0.4 | 24.0 | 76.7 | 43.3 | 119.3 | 155.8 | 105.0 | 39.7 | 5.8 | - |
| 6 | 65.6 | 0.3 | 28.4 | 77.5 | 47.8 | 136.4 | 159.5 | 105.8 | 36.3 | 6.6 | 0.6 |
| 7 | 48.7 | 0.5 | 16.3 | 45.0 | 27.5 | 90.6 | 145.5 | 83.5 | 26.6 | 7.9 | - |
| 8 | 60.6 | 0.5 | 20.2 | 83.2 | 44.6 | 120.0 | 164.6 | 105.6 | 35.9 | 6.1 | - |
| 9 | 67.7 | 1.3 | 29.6 | 89.0 | 53.2 | 150.7 | 167.3 | 97.9 | 28.4 | 5.9 | 1.3 |
| 10 | 61.9 | 0.8 | 24.8 | 75.8 | 45.3 | 101.2 | 129.2 | 112.3 | 47.8 | 9.9 | 0.4 |
| 11 | 60.9 | 0.5 | 19.0 | 77.3 | 41.1 | 136.2 | 162.2 | 93.7 | 36.2 | 6.2 | 0.3 |
| 12 | 66.3 | 0.5 | 26.4 | 81.4 | 47.6 | 137.6 | 169.6 | 100.0 | 37.1 | 7.5 | - |
| 13 | 69.2 | 0.3 | 27.5 | 89.1 | 51.4 | 135.2 | 167.0 | 98.5 | 34.3 | 5.4 | 1.0 |
| 14 | 62.2 | 0.9 | 30.9 | 100.5 | 56.2 | 146.1 | 151.2 | 69.6 | 27.8 | 5.9 | - |
| 15 | 91.6 | 0.7 | 64.4 | 134.3 | 90.9 | 216.7 | 158.1 | 88.1 | 47.1 | 6.6 | - |
| 16 | 64.2 | - | 49.5 | 93.7 | 66.8 | 118.1 | 146.3 | 92.3 | 33.7 | 5.3 | 0.6 |
| 17 | 122.5 | - | 45.9 | 152.8 | 87.4 | 243.6 | 196.1 | 121.4 | 83.9 | 21.2 | 5.1 |
| Alberta | 64.2 | 0.6 | 25.5 | 78.1 | 46.3 | 113.0 | 138.5 | 112.3 | 46.8 | 9.9 | 0.4 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Notes:
1. Total rate = total pregnancies / number of women aged 15-49 x 1,000.
2. Regional pregnancy estimates differ slightly from non-regional pregnancy estimates (reported in other tables) because regional induced abortion data differ from non-regional induced abortion data (due to differences in source).
Populations are estimated at June 30, as viewed at December 31 of each year.
RHA boundaries are current as of April, 2001
Data include Alberta residents only, with the exception of spontaneous abortion data, which may contain 'out of province' cases.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A5 Spontaneous Abortions, Rate per 1,000 Women and Rate per 100 Estimated Pregnancies, by Maternal Age Group, Alberta, 1986 - 2000

| Year | Maternal Age Group (Years) | | | | | | | | | | | |
|---|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------|
| | Total | <15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | >44 | Unknown |
| Spontaneous Abortions | | | | | | | | | | | | |
| 86 | 4,635 | 13 | 151 | 252 | 403 | 1,172 | 1,606 | 920 | 394 | 76 | 11 | 40 |
| 87 | 4,559 | 7 | 148 | 242 | 390 | 1,081 | 1,527 | 990 | 409 | 104 | 21 | 30 |
| 88 | 4,900 | 22 | 161 | 286 | 447 | 1,105 | 1,614 | 1,093 | 465 | 111 | 8 | 35 |
| 89 | 4,880 | 14 | 201 | 289 | 490 | 1,009 | 1,566 | 1,163 | 479 | 102 | 20 | 37 |
| 90 | 4,955 | 17 | 177 | 283 | 460 | 1,071 | 1,481 | 1,220 | 527 | 145 | 12 | 22 |
| 91 | 5,109 | 21 | 196 | 299 | 495 | 1,095 | 1,464 | 1,284 | 568 | 143 | 14 | 25 |
| 92 | 5,360 | 14 | 203 | 293 | 496 | 1,144 | 1,501 | 1,320 | 636 | 183 | 29 | 37 |
| 93 | 5,089 | 20 | 242 | 342 | 584 | 1,023 | 1,342 | 1,285 | 599 | 203 | 10 | 23 |
| 94 | 5,219 | 18 | 179 | 343 | 522 | 1,108 | 1,355 | 1,257 | 693 | 213 | 17 | 36 |
| 95 | 5,018 | 17 | 194 | 291 | 485 | 1,032 | 1,371 | 1,173 | 668 | 213 | 20 | 39 |
| 96 | 4,774 | 16 | 181 | 267 | 448 | 935 | 1,273 | 1,140 | 670 | 227 | 23 | 42 |
| 97 | 4,638 | 14 | 156 | 274 | 430 | 912 | 1,231 | 1,121 | 643 | 228 | 30 | 29 |
| 98 | 4,773 | 8 | 156 | 299 | 455 | 932 | 1,266 | 1,111 | 682 | 254 | 36 | 29 |
| 99 | 4,708 | 7 | 155 | 257 | 412 | 884 | 1,251 | 1,118 | 710 | 265 | 29 | 32 |
| 00 | 4,583 | 10 | 133 | 275 | 408 | 895 | 1,216 | 1,053 | 708 | 244 | 17 | 32 |
| Rate per 1,000 Women in Each Age Group^{1,2} | | | | | | | | | | | | |
| 86 | 6.8 | 0.1 | 2.7 | 6.6 | 4.3 | 9.9 | 12.2 | 7.9 | 4.1 | 1.1 | 0.2 | |
| 87 | 6.7 | 0.1 | 2.7 | 6.4 | 4.2 | 9.7 | 11.7 | 8.4 | 4.3 | 1.4 | 0.4 | |
| 88 | 7.1 | 0.3 | 3.0 | 7.4 | 4.9 | 10.3 | 12.6 | 9.0 | 4.7 | 1.4 | 0.1 | |
| 89 | 7.0 | 0.2 | 3.9 | 7.5 | 5.4 | 9.8 | 12.3 | 9.4 | 4.7 | 1.2 | 0.3 | |
| 90 | 7.0 | 0.2 | 3.4 | 7.6 | 5.1 | 10.6 | 11.9 | 9.6 | 4.9 | 1.6 | 0.2 | |
| 91 | 7.1 | 0.2 | 3.7 | 8.2 | 5.5 | 10.9 | 12.1 | 9.9 | 5.0 | 1.5 | 0.2 | |
| 92 | 7.4 | 0.1 | 3.7 | 8.1 | 5.5 | 11.6 | 12.9 | 10.1 | 5.4 | 1.9 | 0.4 | |
| 93 | 7.0 | 0.2 | 4.4 | 9.5 | 6.4 | 10.5 | 12.1 | 9.8 | 4.9 | 2.1 | 0.1 | |
| 94 | 7.1 | 0.2 | 3.2 | 9.4 | 5.7 | 11.6 | 12.8 | 9.7 | 5.6 | 2.1 | 0.2 | |
| 95 | 6.8 | 0.2 | 3.4 | 7.8 | 5.2 | 11.0 | 13.4 | 9.3 | 5.3 | 2.0 | 0.2 | |
| 96 | 6.4 | 0.2 | 3.1 | 7.1 | 4.7 | 10.1 | 12.6 | 9.4 | 5.2 | 2.0 | 0.2 | |
| 97 | 6.1 | 0.1 | 2.6 | 7.2 | 4.4 | 9.6 | 12.1 | 9.5 | 4.9 | 1.9 | 0.3 | |
| 98 | 6.2 | 0.1 | 2.5 | 7.5 | 4.5 | 9.5 | 12.2 | 9.7 | 5.1 | 2.1 | 0.4 | |
| 99 | 5.9 | 0.1 | 2.4 | 6.3 | 3.9 | 8.7 | 11.8 | 9.9 | 5.3 | 2.1 | 0.3 | |
| 00 | 5.7 | 0.1 | 2.0 | 6.4 | 3.8 | 8.6 | 11.5 | 9.5 | 5.3 | 1.9 | 0.2 | |
| Rate per 100 Estimated Pregnancies in Each Age Group^{3,4} | | | | | | | | | | | | |
| 86 | 8.5 | 16.7 | 8.2 | 7.9 | 8.0 | 7.9 | 8.1 | 8.2 | 13.0 | 19.9 | 44.0 | |
| 87 | 8.8 | 8.2 | 8.8 | 7.8 | 8.1 | 8.2 | 8.1 | 8.7 | 13.0 | 22.9 | 56.8 | |
| 88 | 9.3 | 24.4 | 9.5 | 8.6 | 8.9 | 8.6 | 8.5 | 9.2 | 13.4 | 19.8 | 38.1 | |
| 89 | 9.0 | 13.7 | 11.6 | 8.5 | 9.6 | 7.9 | 8.1 | 9.0 | 12.5 | 19.1 | 43.5 | |
| 90 | 9.1 | 17.5 | 10.1 | 8.3 | 8.9 | 8.5 | 8.0 | 9.3 | 12.4 | 22.9 | 42.9 | |
| 91 | 9.4 | 18.1 | 10.2 | 8.6 | 9.2 | 8.7 | 8.2 | 9.6 | 12.4 | 21.5 | 35.9 | |
| 92 | 9.6 | 9.8 | 9.3 | 8.4 | 8.7 | 8.9 | 8.6 | 9.4 | 13.1 | 24.5 | 67.4 | |
| 93 | 9.4 | 16.8 | 10.9 | 9.9 | 10.3 | 8.2 | 8.2 | 9.4 | 12.0 | 25.7 | 28.6 | |
| 94 | 9.7 | 15.7 | 8.8 | 9.5 | 9.2 | 9.1 | 8.4 | 9.2 | 13.2 | 24.2 | 50.0 | |
| 95 | 9.5 | 14.9 | 9.6 | 8.3 | 8.8 | 8.7 | 8.9 | 8.8 | 12.4 | 23.9 | 47.6 | |
| 96 | 9.3 | 18.8 | 9.3 | 8.1 | 8.5 | 8.2 | 8.4 | 8.8 | 11.8 | 22.3 | 42.6 | |
| 97 | 9.0 | 15.9 | 8.2 | 8.1 | 8.2 | 7.9 | 8.2 | 8.9 | 11.0 | 19.5 | 56.6 | |
| 98 | 9.1 | 8.9 | 7.9 | 8.6 | 8.3 | 7.8 | 8.4 | 8.6 | 11.5 | 21.4 | 44.4 | |
| 99 | 8.9 | 9.6 | 8.2 | 7.7 | 7.9 | 7.3 | 8.3 | 8.7 | 11.4 | 20.4 | 39.2 | |
| 00 | 8.9 | 16.9 | 8.0 | 8.1 | 8.1 | 7.5 | 8.2 | 8.4 | 11.4 | 18.7 | 37.8 | |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.
Clinics Files, Alberta Health and Wellness.
Fee-for-Services Claims Files, Alberta Health and Wellness.
Alberta Health Care Spontaneous Abortion Registration File, Alberta Health and Wellness.

Notes:
1. Total rate = total spontaneous abortions / number of women aged 15-49 x 1,000.
2. The age-specific rates for age groups <15 and >44 are calculated based on female populations in the 10-14 and 44-49 age groups, respectively.
3. Estimated pregnancies include live births, stillbirths, spontaneous abortions, and induced abortions.
4. Total rate = total spontaneous abortions / number of estimated pregnancies for women aged 15-49 x 1,000. Populations are estimated at June 30, as viewed at December 31 of each year.
Data include Alberta residents only, with the exception of spontaneous abortion data, which may contain 'out of province' cases.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A6 Spontaneous Abortion Rates (per 100 Estimated Pregnancies, and per 1,000 Women aged 15-49) by Residence RHA, Alberta, 1986 - 2000

| Residence RHA | Year | | | | | | | | | | | | | | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | |
| Spontaneous Abortions | | | | | | | | | | | | | | | | |
| 1 | 268 | 242 | 254 | 291 | 372 | 370 | 300 | 272 | 298 | 307 | 336 | 311 | 310 | 250 | 222 | |
| 2 | 81 | 94 | 114 | 154 | 112 | 109 | 83 | 99 | 132 | 112 | 125 | 132 | 136 | 143 | 162 | |
| 3 | 91 | 92 | 116 | 109 | 84 | 100 | 109 | 93 | 103 | 111 | 113 | 96 | 116 | 111 | 107 | |
| 4 | 1,340 | 1,272 | 1,477 | 1,409 | 1,528 | 1,640 | 1,598 | 1,420 | 1,574 | 1,440 | 1,490 | 1,423 | 1,504 | 1,540 | 1,405 | |
| 5 | 74 | 64 | 82 | 91 | 92 | 77 | 67 | 85 | 108 | 77 | 73 | 87 | 83 | 83 | 78 | |
| 6 | 268 | 267 | 316 | 298 | 319 | 299 | 280 | 245 | 281 | 325 | 263 | 281 | 260 | 270 | 279 | |
| 7 | 188 | 131 | 157 | 160 | 151 | 145 | 146 | 149 | 129 | 134 | 106 | 110 | 138 | 123 | 127 | |
| 8 | 134 | 140 | 105 | 132 | 119 | 102 | 140 | 132 | 154 | 120 | 104 | 107 | 125 | 127 | 127 | |
| 9 | 87 | 69 | 83 | 70 | 106 | 82 | 87 | 81 | 82 | 81 | 73 | 39 | 78 | 77 | 74 | |
| 10 | 1,397 | 1,466 | 1,451 | 1,439 | 1,450 | 1,482 | 1,779 | 1,754 | 1,536 | 1,432 | 1,247 | 1,203 | 1,232 | 1,153 | 1,216 | |
| 11 | 126 | 123 | 147 | 183 | 138 | 124 | 159 | 143 | 158 | 149 | 90 | 135 | 106 | 159 | 149 | |
| 12 | 153 | 166 | 182 | 191 | 131 | 170 | 167 | 162 | 168 | 142 | 145 | 155 | 152 | 156 | 143 | |
| 13 | 134 | 131 | 138 | 111 | 127 | 163 | 138 | 143 | 163 | 143 | 168 | 177 | 185 | 178 | 180 | |
| 14 | 47 | 47 | 50 | 44 | 31 | 44 | 60 | 57 | 54 | 46 | 59 | 52 | 59 | 51 | 27 | |
| 15 | 55 | 45 | 38 | 34 | 48 | 62 | 81 | 72 | 66 | 69 | 74 | 57 | 79 | 52 | 68 | |
| 16 | 84 | 99 | 103 | 88 | 90 | 77 | 93 | 92 | 58 | 61 | 62 | 53 | 57 | 81 | 70 | |
| 17 | 40 | 48 | 57 | 50 | 36 | 49 | 54 | 61 | 49 | 68 | 59 | 79 | 65 | 54 | 60 | |
| Unknown | 68 | 63 | 30 | 26 | 21 | 14 | 19 | 29 | 106 | 201 | 187 | 141 | 88 | 100 | 89 | |
| Alberta | 4,635 | 4,559 | 4,900 | 4,880 | 4,955 | 5,109 | 5,360 | 5,089 | 5,219 | 5,018 | 4,774 | 4,638 | 4,773 | 4,708 | 4,583 | |
| Rate per 1,000 Women Aged 15-49¹ | | | | | | | | | | | | | | | | |
| 1 | 7.8 | 7.0 | 7.4 | 8.4 | 10.7 | 10.5 | 8.4 | 7.6 | 8.3 | 8.5 | 9.2 | 8.5 | 8.5 | 6.7 | 5.9 | |
| 2 | 4.0 | 4.6 | 5.6 | 7.6 | 5.4 | 5.3 | 4.0 | 4.8 | 6.2 | 5.2 | 5.7 | 5.9 | 6.0 | 6.1 | 6.8 | |
| 3 | 6.7 | 6.6 | 8.1 | 7.5 | 5.6 | 6.4 | 6.8 | 5.6 | 6.0 | 6.3 | 6.2 | 5.1 | 6.0 | 5.6 | 5.2 | |
| 4 | 6.5 | 6.1 | 7.0 | 6.5 | 6.9 | 7.3 | 7.0 | 6.2 | 6.8 | 6.2 | 6.3 | 5.8 | 5.9 | 5.9 | 5.3 | |
| 5 | 6.6 | 5.7 | 7.3 | 8.1 | 8.1 | 6.7 | 5.7 | 7.0 | 8.8 | 6.1 | 5.7 | 6.8 | 6.3 | 6.1 | 5.7 | |
| 6 | 6.7 | 6.7 | 7.9 | 7.3 | 7.7 | 7.1 | 6.5 | 5.7 | 6.4 | 7.4 | 5.9 | 6.2 | 5.6 | 5.6 | 5.7 | |
| 7 | 7.9 | 5.6 | 6.8 | 6.9 | 6.5 | 6.2 | 6.2 | 6.3 | 5.4 | 5.5 | 4.3 | 4.5 | 5.5 | 4.9 | 5.1 | |
| 8 | 6.8 | 7.2 | 5.3 | 6.6 | 5.8 | 4.8 | 6.5 | 6.0 | 6.9 | 5.2 | 4.4 | 4.5 | 5.2 | 5.1 | 5.1 | |
| 9 | 8.7 | 6.8 | 8.1 | 6.7 | 10.0 | 7.5 | 7.9 | 7.3 | 7.3 | 7.2 | 6.4 | 3.4 | 6.6 | 6.5 | 6.1 | |
| 10 | 6.7 | 7.0 | 6.9 | 6.8 | 6.7 | 6.8 | 8.1 | 7.9 | 7.0 | 6.6 | 5.8 | 5.5 | 5.6 | 5.2 | 5.4 | |
| 11 | 6.1 | 6.0 | 7.0 | 8.7 | 6.4 | 5.7 | 7.1 | 6.3 | 6.8 | 6.4 | 3.9 | 5.8 | 4.6 | 6.7 | 6.3 | |
| 12 | 6.4 | 7.1 | 7.7 | 8.1 | 5.6 | 7.2 | 7.1 | 6.8 | 7.1 | 6.0 | 6.2 | 6.5 | 6.3 | 6.5 | 5.9 | |
| 13 ² | | | | | 6.2 | 7.8 | 6.6 | 6.9 | 7.8 | 6.6 | 7.6 | 7.8 | 7.9 | 7.4 | 7.4 | |
| 14 ² | | | | | 4.7 | 6.7 | 9.2 | 8.8 | 8.3 | 7.1 | 9.1 | 8.1 | 9.2 | 7.9 | 4.2 | |
| 15 | 10.0 | 8.1 | 6.6 | 5.9 | 8.2 | 10.4 | 13.4 | 11.7 | 10.5 | 10.7 | 11.3 | 8.5 | 11.7 | 7.6 | 9.9 | |
| 16 | 6.9 | 8.7 | 9.1 | 7.7 | 7.8 | 6.6 | 7.9 | 7.9 | 5.1 | 5.5 | 5.5 | 4.5 | 4.7 | 6.5 | 5.5 | |
| 17 | 10.7 | 12.8 | 14.9 | 12.9 | 9.4 | 12.4 | 13.6 | 15.0 | 11.7 | 15.8 | 13.3 | 16.8 | 13.2 | 10.7 | 11.9 | |
| Alberta | 6.8 | 6.7 | 7.1 | 7.0 | 7.0 | 7.1 | 7.4 | 7.0 | 7.1 | 6.8 | 6.4 | 6.1 | 6.2 | 5.9 | 5.7 | |
| Rate per 100 Estimated Pregnancies^{2,3} | | | | | | | | | | | | | | | | |
| 1 | 9.0 | 8.3 | 9.1 | 9.7 | 12.3 | 12.5 | 10.0 | 9.4 | 10.3 | 10.5 | 12.0 | 10.8 | 11.8 | 9.5 | 9.0 | |
| 2 | 5.2 | 6.6 | 7.7 | 9.9 | 7.5 | 7.7 | 5.8 | 7.0 | 9.4 | 7.3 | 8.5 | 8.7 | 8.7 | 9.3 | 10.0 | |
| 3 | 8.1 | 8.6 | 10.6 | 9.5 | 7.4 | 8.8 | 8.8 | 7.9 | 8.3 | 9.4 | 9.4 | 7.7 | 9.3 | 8.8 | 8.6 | |
| 4 | 8.3 | 8.0 | 9.2 | 8.4 | 9.1 | 9.8 | 9.3 | 8.7 | 9.4 | 8.9 | 9.2 | 8.7 | 8.8 | 8.9 | 8.1 | |
| 5 | 8.5 | 7.6 | 9.6 | 11.1 | 10.7 | 9.4 | 8.0 | 10.1 | 12.5 | 9.1 | 8.7 | 10.5 | 9.9 | 9.7 | 9.4 | |
| 6 | 7.4 | 8.0 | 9.4 | 8.7 | 9.6 | 8.8 | 8.2 | 7.2 | 8.7 | 9.9 | 8.2 | 8.9 | 8.1 | 8.2 | 8.7 | |
| 7 | 11.5 | 8.6 | 10.3 | 10.5 | 10.2 | 10.4 | 10.5 | 10.3 | 8.9 | 9.8 | 8.2 | 8.6 | 10.4 | 9.9 | 10.4 | |
| 8 | 9.1 | 10.2 | 7.6 | 9.0 | 8.2 | 7.1 | 8.9 | 9.1 | 10.5 | 7.8 | 7.0 | 7.1 | 8.2 | 8.3 | 8.4 | |
| 9 | 9.3 | 7.8 | 9.6 | 7.5 | 10.3 | 8.6 | 8.5 | 9.1 | 8.7 | 9.0 | 8.8 | 4.8 | 9.5 | 9.3 | 9.1 | |
| 10 | 8.8 | 9.9 | 9.3 | 9.1 | 9.1 | 9.1 | 10.8 | 10.8 | 9.9 | 9.7 | 8.7 | 8.6 | 8.6 | 8.1 | 8.7 | |
| 11 | 7.6 | 7.8 | 8.8 | 10.3 | 8.4 | 7.0 | 8.9 | 8.2 | 9.0 | 9.1 | 5.8 | 8.8 | 6.8 | 9.5 | 10.3 | |
| 12 | 7.9 | 8.6 | 9.8 | 9.8 | 7.3 | 9.2 | 8.7 | 8.7 | 9.1 | 8.1 | 8.5 | 8.9 | 8.8 | 9.0 | 8.9 | |
| 13 | 7.7 | 7.8 | 8.2 | 6.9 | 8.1 | 9.8 | 8.5 | 9.2 | 10.0 | 8.6 | 9.9 | 10.6 | 10.7 | 10.0 | 10.7 | |
| 14 | 8.3 | 8.4 | 10.1 | 8.3 | 6.0 | 8.5 | 11.5 | 11.2 | 10.2 | 8.9 | 11.2 | 10.9 | 11.8 | 11.0 | 6.8 | |
| 15 | 8.8 | 7.2 | 6.5 | 5.3 | 7.6 | 9.6 | 11.7 | 10.7 | 8.9 | 10.1 | 10.9 | 8.9 | 11.7 | 8.6 | 10.8 | |
| 16 | 8.8 | 11.6 | 11.0 | 10.2 | 9.6 | 9.1 | 10.7 | 11.0 | 7.7 | 8.2 | 7.7 | 6.9 | 7.4 | 9.9 | 8.5 | |
| 17 | 7.8 | 9.5 | 11.2 | 9.5 | 6.7 | 8.6 | 9.4 | 10.5 | 8.1 | 10.4 | 9.4 | 12.2 | 10.5 | 9.4 | 9.7 | |
| Alberta | 8.5 | 8.8 | 9.3 | 9.0 | 9.1 | 9.4 | 9.6 | 9.4 | 9.7 | 9.6 | 9.3 | 9.0 | 9.1 | 9.0 | 8.9 | |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Clinics Files, Alberta Health and Wellness.

Fee-for-Services Claims Files, Alberta Health and Wellness.

Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Notes:

1. Population estimations for regions 13 and 14 are not available for years 1986 through 1989.
2. Estimated pregnancies include live births, stillbirths, spontaneous abortions, and induced abortions.
3. Regional pregnancy estimates differ slightly from non-regional pregnancy estimates (reported in other tables) because regional induced abortion data differ from non-regional induced abortion data (due to differences in source).

Populations are estimated at June 30, as viewed at December 31 of each year.

RHA boundaries are current as of April, 2001

Data include Alberta residents only, with the exception of spontaneous abortion data, which may contain 'out of province' cases.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A7 Induced Abortions by Age, and Age-Specific Induced Abortion Rates, Alberta, 1986 - 2000

| Year | Maternal Age Group (Years) | | | | | | | | | | | Unknown |
|--|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------|
| | Total | < 15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | > 44 | |
| Number of Induced Abortions | | | | | | | | | | | | |
| 86 | 6,237 | 38 | 607 | 857 | 1,464 | 2,199 | 1,321 | 759 | 358 | 93 | 5 | 0 |
| 87 | 5,465 | 44 | 538 | 815 | 1,353 | 1,788 | 1,227 | 663 | 289 | 93 | 8 | 0 |
| 88 | 6,203 | 33 | 563 | 985 | 1,548 | 2,015 | 1,372 | 760 | 362 | 108 | 5 | 0 |
| 89 | 6,502 | 54 | 513 | 965 | 1,478 | 2,077 | 1,498 | 855 | 412 | 117 | 11 | 0 |
| 90 | 6,559 | 44 | 515 | 907 | 1,422 | 2,131 | 1,426 | 952 | 447 | 131 | 6 | 0 |
| 91 | 6,803 | 47 | 578 | 911 | 1,489 | 2,155 | 1,466 | 1,003 | 508 | 128 | 7 | 0 |
| 92 | 8,552 | 76 | 816 | 1097 | 1,913 | 2,692 | 1,849 | 1,227 | 645 | 141 | 9 | 0 |
| 93 | 8,905 | 63 | 885 | 1,212 | 2,097 | 2,817 | 1,737 | 1,290 | 739 | 154 | 8 | 0 |
| 94 | 8,983 | 59 | 832 | 1,276 | 2,108 | 2,813 | 1,794 | 1,318 | 708 | 179 | 4 | 0 |
| 95 | 8,906 | 69 | 817 | 1,203 | 2,020 | 2,773 | 1,795 | 1,277 | 758 | 207 | 7 | 0 |
| 96 | 9,240 | 38 | 851 | 1,250 | 2,101 | 2,907 | 1,937 | 1,220 | 800 | 221 | 15 | 1 |
| 97 | 10,313 | 47 | 911 | 1,390 | 2,301 | 3,272 | 2,081 | 1,423 | 903 | 275 | 11 | 0 |
| 98 | 10,346 | 57 | 955 | 1,442 | 2,397 | 3,263 | 2,109 | 1,321 | 898 | 280 | 21 | 0 |
| 99 | 10,164 | 43 | 892 | 1,327 | 2,219 | 3,284 | 2,115 | 1,336 | 870 | 286 | 11 | 0 |
| 00 | 10,417 | 33 | 795 | 1,423 | 2,218 | 3,452 | 2,178 | 1,357 | 881 | 284 | 14 | 0 |
| Age-Specific Rate (per 1,000 Women in each age group)^{1,2} | | | | | | | | | | | | |
| | 15-49 | < 15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | > 44 | |
| 86 | 9.2 | 0.4 | 11.0 | 22.5 | 15.7 | 18.6 | 10.0 | 6.6 | 3.7 | 1.3 | 0.1 | |
| 87 | 8.0 | 0.5 | 9.9 | 21.6 | 14.7 | 16.0 | 9.4 | 5.6 | 3.0 | 1.2 | 0.1 | |
| 88 | 9.0 | 0.4 | 10.6 | 25.6 | 16.9 | 18.9 | 10.7 | 6.3 | 3.7 | 1.3 | 0.1 | |
| 89 | 9.4 | 0.6 | 9.8 | 25.1 | 16.3 | 20.3 | 11.8 | 6.9 | 4.0 | 1.4 | 0.2 | |
| 90 | 9.3 | 0.5 | 9.8 | 24.2 | 15.8 | 21.0 | 11.4 | 7.5 | 4.1 | 1.5 | 0.1 | |
| 91 | 9.5 | 0.5 | 10.9 | 24.9 | 16.6 | 21.4 | 12.1 | 7.8 | 4.5 | 1.4 | 0.1 | |
| 92 | 11.8 | 0.8 | 15.0 | 30.4 | 21.2 | 27.2 | 15.9 | 9.4 | 5.5 | 1.5 | 0.1 | |
| 93 | 12.2 | 0.6 | 16.2 | 33.5 | 23.1 | 28.8 | 15.6 | 9.8 | 6.1 | 1.6 | 0.1 | |
| 94 | 12.2 | 0.6 | 15.0 | 35.0 | 22.9 | 29.5 | 16.9 | 10.2 | 5.7 | 1.7 | 0.0 | |
| 95 | 12.1 | 0.7 | 14.5 | 32.4 | 21.6 | 29.6 | 17.5 | 10.1 | 6.0 | 1.9 | 0.1 | |
| 96 | 12.4 | 0.4 | 14.6 | 33.4 | 22.0 | 31.3 | 19.1 | 10.1 | 6.2 | 2.0 | 0.2 | |
| 97 | 13.6 | 0.4 | 15.2 | 36.4 | 23.4 | 34.4 | 20.5 | 12.1 | 6.9 | 2.3 | 0.1 | |
| 98 | 13.4 | 0.5 | 15.3 | 36.4 | 23.5 | 33.2 | 20.3 | 11.5 | 6.8 | 2.3 | 0.2 | |
| 99 | 12.8 | 0.4 | 13.8 | 32.4 | 21.0 | 32.2 | 20.0 | 11.9 | 6.5 | 2.2 | 0.1 | |
| 00 | 13.0 | 0.3 | 12.1 | 33.3 | 20.5 | 33.3 | 20.6 | 12.2 | 6.6 | 2.2 | 0.1 | |
| Age-Specific Rate (per 100 estimated pregnancies in each age group)^{1,2} | | | | | | | | | | | | |
| | 15-49 | < 15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | > 44 | |
| 86 | 11.5 | 48.7 | 33.1 | 26.9 | 29.1 | 14.8 | 6.7 | 6.8 | 11.8 | 24.3 | 20.0 | |
| 87 | 10.5 | 51.8 | 31.8 | 26.1 | 28.1 | 13.5 | 6.5 | 5.9 | 9.2 | 20.4 | 21.6 | |
| 88 | 11.7 | 36.7 | 33.2 | 29.5 | 30.8 | 15.6 | 7.2 | 6.4 | 10.5 | 19.3 | 23.8 | |
| 89 | 11.9 | 52.9 | 29.6 | 28.5 | 28.9 | 16.2 | 7.8 | 6.6 | 10.7 | 21.9 | 23.9 | |
| 90 | 12.1 | 45.4 | 29.4 | 26.6 | 27.5 | 16.9 | 7.7 | 7.3 | 10.6 | 20.7 | 21.4 | |
| 91 | 12.5 | 40.5 | 30.0 | 26.3 | 27.6 | 17.1 | 8.2 | 7.5 | 11.1 | 19.2 | 17.9 | |
| 92 | 15.4 | 53.1 | 37.4 | 31.4 | 33.7 | 20.9 | 10.6 | 8.8 | 13.3 | 18.9 | 20.9 | |
| 93 | 16.5 | 52.9 | 39.8 | 35.0 | 36.9 | 22.5 | 10.6 | 9.5 | 14.8 | 19.5 | 22.9 | |
| 94 | 16.7 | 51.3 | 40.7 | 35.4 | 37.3 | 23.1 | 11.1 | 9.7 | 13.5 | 20.3 | 11.8 | |
| 95 | 16.9 | 60.5 | 40.4 | 34.4 | 36.6 | 23.3 | 11.6 | 9.6 | 14.1 | 23.2 | 16.7 | |
| 96 | 17.9 | 44.7 | 43.7 | 37.8 | 40.0 | 25.4 | 12.8 | 9.4 | 14.1 | 21.7 | 27.8 | |
| 97 | 20.0 | 53.4 | 47.9 | 41.3 | 43.7 | 28.2 | 13.8 | 11.3 | 15.5 | 23.5 | 20.8 | |
| 98 | 19.6 | 63.3 | 48.3 | 41.4 | 43.9 | 27.3 | 13.9 | 10.2 | 15.1 | 23.6 | 25.9 | |
| 99 | 19.3 | 58.9 | 47.1 | 39.8 | 42.5 | 27.2 | 14.0 | 10.4 | 14.0 | 22.0 | 14.9 | |
| 00 | 20.1 | 55.9 | 47.6 | 42.0 | 43.8 | 29.1 | 14.8 | 10.9 | 14.1 | 21.8 | 31.1 | |

Sources: Clinics Files, Alberta Health and Wellness.

Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

- Notes:
1. Age-specific rate refers to number of induced abortions per 1,000 women in a specific age group.
 2. The age-specific rates for age groups <15 and >44 are calculated based on female populations in 10-14 and 45-49 age groups respectively.
- Populations are estimated at June 30, as viewed at December 31 of each year.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A8 Induced Abortions by Facility Type, Alberta, 1986 - 2000

| Year | Total | Acute Care Hospital | | Private Clinic | |
|------|--------|---------------------|-------|----------------|------|
| | | Cases | % | Cases | % |
| 86 | 6,237 | 6,237 | 100.0 | 0 | 0.0 |
| 87 | 5,465 | 5,465 | 100.0 | 0 | 0.0 |
| 88 | 6,203 | 6,203 | 100.0 | 0 | 0.0 |
| 89 | 6,502 | 6,502 | 100.0 | 0 | 0.0 |
| 90 | 6,559 | 6,559 | 100.0 | 0 | 0.0 |
| 91 | 6,803 | 6,292 | 92.5 | 511 | 7.5 |
| 92 | 8,552 | 6,131 | 71.7 | 2,421 | 28.3 |
| 93 | 8,905 | 6,368 | 71.5 | 2,537 | 28.5 |
| 94 | 8,983 | 6,696 | 74.5 | 2,287 | 25.5 |
| 95 | 8,906 | 6,607 | 74.2 | 2,299 | 25.8 |
| 96 | 9,240 | 5,955 | 64.4 | 3,285 | 35.6 |
| 97 | 10,313 | 6,353 | 61.6 | 3,960 | 38.4 |
| 98 | 10,346 | 6,053 | 58.5 | 4,293 | 41.5 |
| 99 | 10,164 | 5,904 | 58.1 | 4,260 | 41.9 |
| 00 | 10,417 | 5,895 | 56.6 | 4,522 | 43.4 |

Source: Clinics Files, Alberta Health and Wellness.

Notes: The clinics opened in the Fall of 1991.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A9 Induced Abortions by Facility Regions, Alberta, 1986 - 2000

| Year | Total | Calgary (Hospitals and Clinics) | | Edmonton (Hospitals and Clinics) | | Rural Areas (Hospitals) | |
|------|--------|---------------------------------|------|----------------------------------|------|-------------------------|------|
| | | Cases | % | Cases | % | Cases | % |
| 86 | 6,237 | 3,166 | 50.8 | 2,040 | 32.7 | 1,031 | 16.5 |
| 87 | 5,465 | 3,072 | 56.2 | 1,288 | 23.6 | 1,105 | 20.2 |
| 88 | 6,203 | 3,199 | 51.6 | 1,919 | 30.9 | 1,085 | 17.5 |
| 89 | 6,502 | 3,132 | 48.2 | 2,385 | 36.7 | 985 | 15.1 |
| 90 | 6,559 | 3,490 | 53.2 | 2,387 | 36.4 | 682 | 10.4 |
| 91 | 6,803 | 3,234 | 47.5 | 2,831 | 41.6 | 738 | 10.8 |
| 92 | 8,552 | 4,549 | 53.2 | 3,527 | 41.2 | 476 | 5.6 |
| 93 | 8,905 | 4,722 | 53.0 | 3,659 | 41.1 | 524 | 5.9 |
| 94 | 8,983 | 4,840 | 53.9 | 3,595 | 40.0 | 548 | 6.1 |
| 95 | 8,906 | 4,755 | 53.4 | 3,624 | 40.7 | 527 | 5.9 |
| 96 | 9,240 | 4,917 | 53.2 | 3,855 | 41.7 | 468 | 5.1 |
| 97 | 10,313 | 5,398 | 52.3 | 4,462 | 43.3 | 453 | 4.4 |
| 98 | 10,346 | 5,668 | 54.8 | 4,297 | 41.5 | 381 | 3.7 |
| 99 | 10,164 | 5,483 | 53.9 | 4,326 | 42.6 | 355 | 3.5 |
| 00 | 10,417 | 5,636 | 54.1 | 4,477 | 43.0 | 304 | 2.9 |

Source: Clinics Files, Alberta Health and Wellness.

Notes: The clinics opened in the Fall of 1991.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A10 Induced Abortions by Week of Gestation and Maternal Age Group,
Alberta, 1998 - 2000

| Age Group (Years) | Total | Week of Gestation | | | | | | | | | | | |
|-------------------|---------------|-------------------|-------------|--------------|-------------|------------|------------|------------|------------|-----------|------------|----------|------------|
| | | < 9 | | 9 -12 | | 13 -16 | | 17-20 | | >20 | | Unknown | |
| | | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % |
| 1998 | | | | | | | | | | | | | |
| <15 | 57 | 16 | 28.1 | 31 | 54.4 | 6 | 10.5 | 4 | 7.0 | 0 | 0.0 | 0 | 0.0 |
| 15-17 | 955 | 315 | 33.0 | 485 | 50.8 | 98 | 10.3 | 55 | 5.8 | 2 | 0.2 | 0 | 0.0 |
| 18-19 | 1,442 | 493 | 34.2 | 724 | 50.2 | 159 | 11.0 | 63 | 4.4 | 3 | 0.2 | 0 | 0.0 |
| 15-19 | 2,397 | 808 | 33.7 | 1,209 | 50.4 | 257 | 10.7 | 118 | 4.9 | 5 | 0.2 | 0 | 0.0 |
| 20-24 | 3,263 | 1407 | 43.1 | 1,491 | 45.7 | 259 | 7.9 | 101 | 3.1 | 3 | 0.1 | 2 | 0.1 |
| 25-29 | 2,109 | 995 | 47.2 | 892 | 42.3 | 143 | 6.8 | 74 | 3.5 | 5 | 0.2 | 0 | 0.0 |
| 30-34 | 1,321 | 702 | 53.1 | 511 | 38.7 | 73 | 5.5 | 29 | 2.2 | 4 | 0.3 | 2 | 0.2 |
| 35-39 | 898 | 489 | 54.5 | 329 | 36.6 | 39 | 4.3 | 34 | 3.8 | 5 | 0.6 | 2 | 0.2 |
| 40-44 | 280 | 156 | 55.7 | 101 | 36.1 | 9 | 3.2 | 12 | 4.3 | 2 | 0.7 | 0 | 0.0 |
| >44 | 21 | 12 | 57.1 | 6 | 28.6 | 0 | 0.0 | 3 | 14.3 | 0 | 0.0 | 0 | 0.0 |
| Total | 10,346 | 4,585 | 44.3 | 4,570 | 44.2 | 786 | 7.6 | 375 | 3.6 | 24 | 0.2 | 6 | 0.1 |
| 1999 | | | | | | | | | | | | | |
| <15 | 43 | 17 | 39.5 | 17 | 39.5 | 6 | 14.0 | 3 | 7.0 | 0 | 0.0 | | |
| 15-17 | 892 | 269 | 30.2 | 468 | 52.5 | 103 | 11.5 | 50 | 5.6 | 2 | 0.2 | | |
| 18-19 | 1,327 | 420 | 31.7 | 665 | 50.1 | 170 | 12.8 | 71 | 5.4 | 1 | 0.1 | | |
| 15-19 | 2,219 | 689 | 31.1 | 1,133 | 51.1 | 273 | 12.3 | 121 | 5.5 | 3 | 0.1 | | |
| 20-24 | 3,284 | 1293 | 39.4 | 1,577 | 48.0 | 299 | 9.1 | 111 | 3.4 | 4 | 0.1 | | |
| 25-29 | 2,115 | 929 | 43.9 | 948 | 44.8 | 159 | 7.5 | 72 | 3.4 | 7 | 0.3 | | |
| 30-34 | 1,336 | 646 | 48.4 | 528 | 39.5 | 108 | 8.1 | 46 | 3.4 | 8 | 0.6 | | |
| 35-39 | 870 | 429 | 49.3 | 353 | 40.6 | 51 | 5.9 | 35 | 4.0 | 2 | 0.2 | | |
| 40-44 | 286 | 129 | 45.1 | 129 | 45.1 | 14 | 4.9 | 13 | 4.5 | 1 | 0.3 | | |
| >44 | 11 | 5 | 45.5 | 5 | 45.5 | 0 | 0.0 | 1 | 9.1 | 0 | 0.0 | | |
| Total | 10,164 | 4,137 | 40.7 | 4,690 | 46.1 | 910 | 9.0 | 402 | 4.0 | 25 | 0.2 | | |
| 2000 | | | | | | | | | | | | | |
| <15 | 33 | 13 | 39.4 | 14 | 42.4 | 4 | 12.1 | 2 | 6.1 | 0 | 0.0 | | |
| 15-17 | 795 | 238 | 29.9 | 419 | 52.7 | 87 | 10.9 | 49 | 6.2 | 2 | 0.3 | | |
| 18-19 | 1,423 | 510 | 35.8 | 688 | 48.3 | 135 | 9.5 | 87 | 6.1 | 3 | 0.2 | | |
| 15-19 | 2,218 | 748 | 33.7 | 1,107 | 49.9 | 222 | 10.0 | 136 | 6.1 | 5 | 0.2 | | |
| 20-24 | 3,452 | 1,416 | 41.0 | 1,618 | 46.9 | 270 | 7.8 | 145 | 4.2 | 3 | 0.1 | | |
| 25-29 | 2,178 | 1,029 | 47.2 | 920 | 42.2 | 158 | 7.3 | 68 | 3.1 | 3 | 0.1 | | |
| 30-34 | 1,357 | 701 | 51.7 | 533 | 39.3 | 83 | 6.1 | 40 | 2.9 | 0 | 0.0 | | |
| 35-39 | 881 | 460 | 52.2 | 349 | 39.6 | 43 | 4.9 | 28 | 3.2 | 1 | 0.1 | | |
| 40-44 | 284 | 145 | 51.1 | 108 | 38.0 | 19 | 6.7 | 12 | 4.2 | 0 | 0.0 | | |
| >44 | 14 | 6 | 42.9 | 7 | 50.0 | 1 | 7.1 | 0 | 0.0 | 0 | 0.0 | | |
| Total | 10,417 | 4,518 | 43.4 | 4,656 | 44.7 | 800 | 7.7 | 431 | 4.1 | 12 | 0.1 | | |

Source: Clinics Files, Alberta Health and Wellness.

Note: Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A11 Induced Abortions by Week of Gestation and Facility Type, Alberta, 1986 - 2000

| Year | Total | Week of Gestation | | | | | | | | | | Unknown | |
|-----------------------------|--------|-------------------|------|-------|------|-------|------|-------|-----|-------|-----|---------|-----|
| | | <9 | | 9-12 | | 13-16 | | 17-20 | | >20 | | Cases | % |
| | | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | | |
| All Facilities | | | | | | | | | | | | | |
| 86 | 6,237 | 1,576 | 25.3 | 4,047 | 64.9 | 451 | 7.2 | 159 | 2.5 | 4 | 0.1 | 0 | 0.0 |
| 87 | 5,465 | 1,521 | 27.8 | 3,408 | 62.4 | 341 | 6.2 | 186 | 3.4 | 9 | 0.2 | 0 | 0.0 |
| 88 | 6,203 | 1,692 | 27.3 | 3,838 | 61.9 | 477 | 7.7 | 188 | 3.0 | 8 | 0.1 | 0 | 0.0 |
| 89 | 6,502 | 1,785 | 27.5 | 4,388 | 67.5 | 265 | 4.1 | 54 | 0.8 | 9 | 0.1 | 1 | 0.0 |
| 90 | 6,559 | 2,055 | 31.3 | 4,256 | 64.9 | 200 | 3.0 | 44 | 0.7 | 4 | 0.1 | 0 | 0.0 |
| 91 | 6,803 | 1,324 | 19.5 | 5,089 | 74.8 | 338 | 5.0 | 49 | 0.7 | 3 | 0.0 | 0 | 0.0 |
| 92 | 8,552 | 2,585 | 30.2 | 5,179 | 60.6 | 637 | 7.4 | 144 | 1.7 | 7 | 0.1 | 0 | 0.0 |
| 93 | 8,905 | 2,460 | 27.6 | 5,606 | 63.0 | 651 | 7.3 | 180 | 2.0 | 8 | 0.1 | 0 | 0.0 |
| 94 | 8,983 | 2,643 | 29.4 | 5,584 | 62.2 | 549 | 6.1 | 198 | 2.2 | 9 | 0.1 | 0 | 0.0 |
| 95 | 8,906 | 2,500 | 28.1 | 5,691 | 63.9 | 502 | 5.6 | 195 | 2.2 | 18 | 0.2 | 0 | 0.0 |
| 96 | 9,240 | 3,510 | 38.0 | 5,016 | 54.3 | 490 | 5.3 | 217 | 2.3 | 7 | 0.1 | 0 | 0.0 |
| 97 | 10,313 | 5,073 | 49.2 | 4,356 | 42.2 | 626 | 6.1 | 253 | 2.5 | 5 | 0.0 | 0 | 0.0 |
| 98 | 10,346 | 4,585 | 44.3 | 4,570 | 44.2 | 786 | 7.6 | 375 | 3.6 | 24 | 0.2 | 6 | 0.1 |
| 99 | 10,164 | 4,137 | 40.7 | 4,690 | 46.1 | 910 | 9.0 | 402 | 4.0 | 25 | 0.2 | 0 | 0.0 |
| 00 | 10,417 | 4,518 | 43.4 | 4,656 | 44.7 | 800 | 7.7 | 431 | 4.1 | 12 | 0.1 | 0 | 0.0 |
| Acute Care Hospitals | | | | | | | | | | | | | |
| 86 | 6,237 | 1,576 | 25.3 | 4,047 | 64.9 | 451 | 7.2 | 159 | 2.5 | 4 | 0.1 | 0 | 0.0 |
| 87 | 5,465 | 1,521 | 27.8 | 3,408 | 62.4 | 341 | 6.2 | 186 | 3.4 | 9 | 0.2 | 0 | 0.0 |
| 88 | 6,203 | 1,692 | 27.3 | 3,838 | 61.9 | 477 | 7.7 | 188 | 3.0 | 8 | 0.1 | 0 | 0.0 |
| 89 | 6,502 | 1,785 | 27.5 | 4,388 | 67.5 | 265 | 4.1 | 54 | 0.8 | 9 | 0.1 | 1 | 0.0 |
| 90 | 6,559 | 2,055 | 31.3 | 4,256 | 64.9 | 200 | 3.0 | 44 | 0.7 | 4 | 0.1 | 0 | 0.0 |
| 91 | 6,292 | 1,284 | 20.4 | 4,747 | 75.4 | 219 | 3.5 | 39 | 0.6 | 3 | 0.0 | 0 | 0.0 |
| 92 | 6,131 | 2,098 | 34.2 | 3,869 | 63.1 | 117 | 1.9 | 43 | 0.7 | 4 | 0.1 | 0 | 0.0 |
| 93 | 6,368 | 1,889 | 29.7 | 4,295 | 67.4 | 140 | 2.2 | 38 | 0.6 | 6 | 0.1 | 0 | 0.0 |
| 94 | 6,696 | 2,030 | 30.3 | 4,485 | 67.0 | 132 | 2.0 | 44 | 0.7 | 5 | 0.1 | 0 | 0.0 |
| 95 | 6,607 | 1,550 | 23.5 | 4,853 | 73.5 | 139 | 2.1 | 53 | 0.8 | 12 | 0.2 | 0 | 0.0 |
| 96 | 5,955 | 1,938 | 32.5 | 3,790 | 63.6 | 151 | 2.5 | 74 | 1.2 | 2 | 0.0 | 0 | 0.0 |
| 97 | 6,353 | 2,907 | 45.8 | 2,983 | 47.0 | 352 | 5.5 | 108 | 1.7 | 3 | 0.0 | 0 | 0.0 |
| 98 | 6,053 | 2,338 | 38.6 | 3,115 | 51.5 | 380 | 6.3 | 203 | 3.4 | 17 | 0.3 | 0 | 0.0 |
| 99 | 5,904 | 2,053 | 34.8 | 3,212 | 54.4 | 421 | 7.1 | 197 | 3.3 | 21 | 0.4 | 0 | 0.0 |
| 00 | 5,895 | 2,424 | 41.1 | 2,933 | 49.8 | 342 | 5.8 | 191 | 3.2 | 5 | 0.1 | 0 | 0.0 |
| Private Clinics | | | | | | | | | | | | | |
| 91 | 511 | 40 | 7.8 | 342 | 66.9 | 119 | 23.3 | 10 | 2.0 | 0 | 0.0 | 0 | 0.0 |
| 92 | 2,421 | 487 | 20.1 | 1,310 | 54.1 | 520 | 21.5 | 101 | 4.2 | 3 | 0.1 | 0 | 0.0 |
| 93 | 2,537 | 571 | 22.5 | 1,311 | 51.7 | 511 | 20.1 | 142 | 5.6 | 2 | 0.1 | 0 | 0.0 |
| 94 | 2,287 | 613 | 26.8 | 1,099 | 48.1 | 417 | 18.2 | 154 | 6.7 | 4 | 0.2 | 0 | 0.0 |
| 95 | 2,299 | 950 | 41.3 | 838 | 36.5 | 363 | 15.8 | 142 | 6.2 | 6 | 0.3 | 0 | 0.0 |
| 96 | 3,285 | 1,572 | 47.9 | 1,226 | 37.3 | 339 | 10.3 | 143 | 4.4 | 5 | 0.2 | 0 | 0.0 |
| 97 | 3,960 | 2,166 | 54.7 | 1,373 | 34.7 | 274 | 6.9 | 145 | 3.7 | 2 | 0.1 | 0 | 0.0 |
| 98 | 4,293 | 2,247 | 52.3 | 1,455 | 33.9 | 406 | 9.5 | 172 | 4.0 | 7 | 0.2 | 6 | 0.1 |
| 99 | 4,260 | 2,084 | 48.9 | 1,478 | 34.7 | 489 | 11.5 | 205 | 4.8 | 4 | 0.1 | 0 | 0.0 |
| 00 | 4,522 | 2,094 | 46.3 | 1,723 | 38.1 | 458 | 10.1 | 240 | 5.3 | 7 | 0.2 | 0 | 0.0 |

Source: Clinics Files, Alberta Health and Wellness.

Notes: The clinics opened in the Fall of 1991.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A12 Induced Abortions and Induced Abortion Rate by Residence RHA,
Alberta, 1986 - 2000

| RHA | Year | | | | | | | | | | | | | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Induced Abortions | | | | | | | | | | | | | | | |
| 1 | 246 | 234 | 217 | 237 | 209 | 216 | 264 | 260 | 270 | 291 | 289 | 321 | 259 | 290 | 276 |
| 2 | 141 | 134 | 138 | 129 | 102 | 99 | 138 | 154 | 132 | 132 | 177 | 198 | 182 | 162 | 238 |
| 3 | 149 | 137 | 153 | 161 | 165 | 154 | 220 | 231 | 233 | 229 | 234 | 246 | 240 | 278 | 227 |
| 4 | 2,609 | 2,504 | 2,486 | 2,613 | 2,754 | 2,665 | 3,323 | 3,448 | 3,495 | 3,434 | 3,556 | 3,876 | 3,955 | 3,942 | 4,052 |
| 5 | 78 | 68 | 85 | 62 | 72 | 69 | 87 | 114 | 113 | 96 | 116 | 118 | 127 | 127 | 126 |
| 6 | 321 | 301 | 345 | 323 | 245 | 278 | 393 | 374 | 401 | 393 | 414 | 428 | 448 | 453 | 498 |
| 7 | 93 | 65 | 79 | 83 | 72 | 88 | 114 | 143 | 153 | 168 | 147 | 173 | 176 | 137 | 153 |
| 8 | 95 | 72 | 115 | 118 | 144 | 158 | 189 | 190 | 180 | 183 | 220 | 240 | 265 | 240 | 233 |
| 9 | 55 | 41 | 40 | 68 | 65 | 62 | 71 | 77 | 97 | 86 | 104 | 116 | 116 | 102 | 116 |
| 10 | 1,663 | 1,181 | 1,742 | 1,972 | 1,990 | 2,224 | 2,749 | 2,925 | 2,847 | 2,784 | 2,854 | 3,254 | 3,144 | 3,097 | 3,183 |
| 11 | 89 | 57 | 103 | 100 | 88 | 122 | 163 | 183 | 161 | 161 | 165 | 197 | 203 | 213 | 193 |
| 12 | 92 | 87 | 103 | 103 | 92 | 125 | 156 | 158 | 179 | 172 | 160 | 200 | 195 | 211 | 208 |
| 13 | 193 | 181 | 185 | 147 | 172 | 174 | 194 | 191 | 202 | 204 | 227 | 242 | 248 | 211 | 237 |
| 14 | 38 | 32 | 29 | 42 | 33 | 39 | 39 | 58 | 47 | 56 | 63 | 55 | 46 | 48 | 47 |
| 15 | 50 | 63 | 56 | 58 | 67 | 41 | 60 | 55 | 79 | 67 | 70 | 75 | 66 | 77 | 76 |
| 16 | 93 | 70 | 84 | 73 | 83 | 97 | 102 | 108 | 119 | 102 | 137 | 137 | 122 | 153 | 147 |
| 17 | 17 | 16 | 11 | 16 | 19 | 18 | 15 | 42 | 21 | 24 | 44 | 28 | 34 | 31 | 35 |
| Unknown | 40 | 41 | 54 | 35 | 45 | 35 | 30 | 19 | 24 | 111 | 139 | 61 | 16 | 15 | 17 |
| Alberta | 6,062 | 5,284 | 6,025 | 6,340 | 6,417 | 6,664 | 8,307 | 8,730 | 8,753 | 8,693 | 9,116 | 9,965 | 9,842 | 9,787 | 10,062 |
| Induced Abortion Rate (per 1,000 Women Aged 15-49) | | | | | | | | | | | | | | | |
| 1 | 7.2 | 6.8 | 6.3 | 6.9 | 6.0 | 6.1 | 7.4 | 7.3 | 7.5 | 8.0 | 8.0 | 8.8 | 7.1 | 7.8 | 7.4 |
| 2 | 6.9 | 6.6 | 6.8 | 6.3 | 5.0 | 4.8 | 6.7 | 7.4 | 6.2 | 6.1 | 8.1 | 8.9 | 8.0 | 6.9 | 10.1 |
| 3 | 10.9 | 9.8 | 10.7 | 11.1 | 11.0 | 9.9 | 13.8 | 14.0 | 13.6 | 13.0 | 12.9 | 13.1 | 12.4 | 13.9 | 11.1 |
| 4 | 12.6 | 12.0 | 11.7 | 12.1 | 12.5 | 11.9 | 14.6 | 15.1 | 15.2 | 14.7 | 15.0 | 15.9 | 15.6 | 15.1 | 15.2 |
| 5 | 7.0 | 6.1 | 7.6 | 5.5 | 6.3 | 6.0 | 7.4 | 9.4 | 9.2 | 7.6 | 9.1 | 9.2 | 9.6 | 9.3 | 9.2 |
| 6 | 8.0 | 7.5 | 8.6 | 7.9 | 5.9 | 6.6 | 9.2 | 8.6 | 9.2 | 8.9 | 9.3 | 9.5 | 9.6 | 9.4 | 10.2 |
| 7 | 3.9 | 2.8 | 3.4 | 3.6 | 3.1 | 3.8 | 4.8 | 6.0 | 6.3 | 6.9 | 6.0 | 7.0 | 7.1 | 5.5 | 6.1 |
| 8 | 4.9 | 3.7 | 5.8 | 5.9 | 7.0 | 7.5 | 8.7 | 8.7 | 8.1 | 7.9 | 9.4 | 10.1 | 11.0 | 9.7 | 9.4 |
| 9 | 5.5 | 4.0 | 3.9 | 6.5 | 6.1 | 5.7 | 6.4 | 6.9 | 8.7 | 7.6 | 9.1 | 10.1 | 9.9 | 8.5 | 9.6 |
| 10 | 8.0 | 5.6 | 8.3 | 9.3 | 9.2 | 10.2 | 12.5 | 13.2 | 12.9 | 12.8 | 13.2 | 15.0 | 14.3 | 13.8 | 14.1 |
| 11 | 4.3 | 2.8 | 4.9 | 4.7 | 4.1 | 5.6 | 7.3 | 8.0 | 6.9 | 7.0 | 7.1 | 8.5 | 8.7 | 9.0 | 8.1 |
| 12 | 3.9 | 3.7 | 4.4 | 4.4 | 3.9 | 5.3 | 6.6 | 6.7 | 7.6 | 7.3 | 6.8 | 8.4 | 8.1 | 8.7 | 8.6 |
| 13 | 9.5 | 8.9 | 9.1 | 7.2 | 8.3 | 8.4 | 9.3 | 9.2 | 9.7 | 9.5 | 10.2 | 10.7 | 10.6 | 8.8 | 9.7 |
| 14 | 5.8 | 4.9 | 4.5 | 6.5 | 5.0 | 5.9 | 6.0 | 9.0 | 7.2 | 8.6 | 9.7 | 8.6 | 7.2 | 7.4 | 7.3 |
| 15 | 9.1 | 11.3 | 9.8 | 10.1 | 11.5 | 6.9 | 9.9 | 9.0 | 12.6 | 10.3 | 10.7 | 11.2 | 9.8 | 11.3 | 11.0 |
| 16 | 7.6 | 6.1 | 7.4 | 6.4 | 7.2 | 8.3 | 8.7 | 9.3 | 10.4 | 9.1 | 12.2 | 11.7 | 10.0 | 12.4 | 11.5 |
| 17 | 4.6 | 4.3 | 2.9 | 4.1 | 4.9 | 4.6 | 3.8 | 10.3 | 5.0 | 5.6 | 9.9 | 5.9 | 6.9 | 6.1 | 6.9 |
| Alberta | 8.9 | 7.7 | 8.8 | 9.1 | 9.1 | 9.3 | 11.5 | 11.9 | 11.9 | 11.8 | 12.2 | 13.2 | 12.7 | 12.4 | 12.5 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
Fee-for-Service Claims Files, Alberta Health and Wellness.

Note: RHA boundaries are current as of April, 2001.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A13 Induction Rates, Alberta, 1986 - 2000

| Year | Total hospital deliveries ¹ | Total Induction | | Medical Induction ² | | Surgical Induction ³ | | Combined Induction ⁴ | |
|------|--|-----------------|-------------------|--------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|
| | | Cases | Rate ⁵ | Cases | Rate ⁵ | Cases | Rate ⁵ | Cases | Rate ⁵ |
| 86 | 43,675 | 6,258 | 14.3 | 4,149 | 9.5 | 1,387 | 3.2 | 722 | 1.7 |
| 87 | 41,910 | 5,165 | 12.3 | 3,645 | 8.7 | 1,051 | 2.5 | 469 | 1.1 |
| 88 | 41,983 | 5,040 | 12.0 | 3,450 | 8.2 | 1,057 | 2.5 | 533 | 1.3 |
| 89 | 43,272 | 7,085 | 16.4 | 4,259 | 9.8 | 1,462 | 3.4 | 1,364 | 3.2 |
| 90 | 43,024 | 7,306 | 17.0 | 4,487 | 10.4 | 1,314 | 3.1 | 1,505 | 3.5 |
| 91 | 42,676 | 7,269 | 17.0 | 4,556 | 10.7 | 1,354 | 3.2 | 1,359 | 3.2 |
| 92 | 41,727 | 6,964 | 16.7 | 4,232 | 10.1 | 1,275 | 3.1 | 1,457 | 3.5 |
| 93 | 40,043 | 8,484 | 21.2 | 4,356 | 10.9 | 2,390 | 6.0 | 1,738 | 4.3 |
| 94 | 39,554 | 8,642 | 21.8 | 4,698 | 11.9 | 2,256 | 5.7 | 1,688 | 4.3 |
| 95 | 38,462 | 8,414 | 21.9 | 5,179 | 13.5 | 1,596 | 4.1 | 1,639 | 4.3 |
| 96 | 37,312 | 8,495 | 22.8 | 5,757 | 15.4 | 1,095 | 2.9 | 1,643 | 4.4 |
| 97 | 36,387 | 8,578 | 23.6 | 6,428 | 17.7 | 647 | 1.8 | 1,503 | 4.1 |
| 98 | 37,432 | 9,004 | 24.1 | 6,932 | 18.5 | 559 | 1.5 | 1,513 | 4.0 |
| 99 | 37,898 | 9,599 | 25.3 | 7,320 | 19.3 | 605 | 1.6 | 1,674 | 4.4 |
| 00 | 36,711 | 9,505 | 25.9 | 7,324 | 20.0 | 547 | 1.5 | 1,634 | 4.5 |

Source: Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

ICD-9 code All ICD-9 codes are based on the first three diagnostic codes and the first three procedure codes in the Hospital Morbidity Files.

1. Hospital delivery: Diagnostic codes 640-648 if 5th digit=1 or 2 or 650 or 651-676 if 5th digit=1 or 2 or V27 or procedure codes 72.0 to 74.99
2. Medical induction: Procedure codes 73.4 without 73.01 or 73.1
3. Surgical induction: procedure codes 73.01 and/or 73.1 without 73.4
4. Combined induction: procedure codes: 73.4 with 73.01 and/or 73.1
5. Rate = Cases / Total hospital deliveries * 100

Data include 'out of province' cases.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A14 Induction Rates by Residence RHA,
Alberta, 1998 - 2000

| Residence RHA ⁶ | Total hospital deliveries ¹ | Total Induction | | Medical Induction ² | | Surgical Induction ³ | | Combined Induction ⁴ | |
|-------------------------------|--|-----------------|-------------------|-----------------------------------|-------------------|------------------------------------|-------------------|------------------------------------|-------------------|
| | | Cases | Rate ⁵ | Cases | Rate ⁵ | Cases | Rate ⁵ | Cases | Rate ⁵ |
| | | | | | | | | | |
| 1998 | | | | | | | | | |
| 1 | 2,001 | 463 | 23.1 | 428 | 21.4 | 20 | 1.0 | 15 | 0.7 |
| 2 | 1,217 | 115 | 9.4 | 104 | 8.5 | 5 | 0.4 | 6 | 0.5 |
| 3 | 869 | 169 | 19.4 | 120 | 13.8 | 17 | 2.0 | 32 | 3.7 |
| 4 | 11,309 | 2,552 | 22.6 | 1,798 | 15.9 | 187 | 1.7 | 567 | 5.0 |
| 5 | 638 | 131 | 20.5 | 113 | 17.7 | 4 | 0.6 | 14 | 2.2 |
| 6 | 2,199 | 602 | 27.4 | 413 | 18.8 | 32 | 1.5 | 157 | 7.1 |
| 7 | 1,168 | 297 | 25.4 | 258 | 22.1 | 17 | 1.5 | 22 | 1.9 |
| 8 | 1,112 | 284 | 25.5 | 223 | 20.1 | 20 | 1.8 | 41 | 3.7 |
| 9 | 735 | 179 | 24.4 | 149 | 20.3 | 6 | 0.8 | 24 | 3.3 |
| 10 | 9,699 | 2,590 | 26.7 | 1,997 | 20.6 | 127 | 1.3 | 466 | 4.8 |
| 11 | 1,201 | 306 | 25.5 | 254 | 21.1 | 11 | 0.9 | 41 | 3.4 |
| 12 | 1,365 | 332 | 24.3 | 275 | 20.1 | 30 | 2.2 | 27 | 2.0 |
| 13 | 1,254 | 332 | 26.5 | 295 | 23.5 | 33 | 2.6 | 4 | 0.3 |
| 14 | 397 | 70 | 17.6 | 65 | 16.4 | 4 | 1.0 | 1 | 0.3 |
| 15 | 508 | 141 | 27.8 | 108 | 21.3 | 13 | 2.6 | 20 | 3.9 |
| 16 | 583 | 192 | 32.9 | 144 | 24.7 | 7 | 1.2 | 41 | 7.0 |
| 17 | 490 | 103 | 21.0 | 82 | 16.7 | 13 | 2.7 | 8 | 1.6 |
| Unknown | 687 | 146 | 21.3 | 106 | 15.4 | 13 | 1.9 | 27 | 3.9 |
| Alberta | 37,432 | 9,004 | 24.1 | 6,932 | 18.5 | 559 | 1.5 | 1,513 | 4.0 |
| 1999 | | | | | | | | | |
| 1 | 2,043 | 497 | 24.3 | 468 | 22.9 | 20 | 1.0 | 9 | 0.4 |
| 2 | 1,201 | 154 | 12.8 | 140 | 11.7 | 7 | 0.6 | 7 | 0.6 |
| 3 | 853 | 151 | 17.7 | 97 | 11.4 | 21 | 2.5 | 33 | 3.9 |
| 4 | 11,403 | 2,958 | 25.9 | 1,992 | 17.5 | 256 | 2.2 | 710 | 6.2 |
| 5 | 673 | 149 | 22.1 | 128 | 19.0 | 6 | 0.9 | 15 | 2.2 |
| 6 | 2,345 | 627 | 26.7 | 436 | 18.6 | 32 | 1.4 | 159 | 6.8 |
| 7 | 1,147 | 286 | 24.9 | 244 | 21.3 | 15 | 1.3 | 27 | 2.4 |
| 8 | 1,147 | 273 | 23.8 | 205 | 17.9 | 15 | 1.3 | 53 | 4.6 |
| 9 | 730 | 187 | 25.6 | 167 | 22.9 | 4 | 0.5 | 16 | 2.2 |
| 10 | 9,817 | 2,742 | 27.9 | 2,114 | 21.5 | 126 | 1.3 | 502 | 5.1 |
| 11 | 1,247 | 339 | 27.2 | 268 | 21.5 | 23 | 1.8 | 48 | 3.8 |
| 12 | 1,332 | 353 | 26.5 | 290 | 21.8 | 29 | 2.2 | 34 | 2.6 |
| 13 | 1,346 | 296 | 22.0 | 285 | 21.2 | 6 | 0.4 | 5 | 0.4 |
| 14 | 360 | 52 | 14.4 | 46 | 12.8 | 3 | 0.8 | 3 | 0.8 |
| 15 | 457 | 109 | 23.9 | 96 | 21.0 | 7 | 1.5 | 6 | 1.3 |
| 16 | 566 | 184 | 32.5 | 158 | 27.9 | 7 | 1.2 | 19 | 3.4 |
| 17 | 472 | 56 | 11.9 | 44 | 9.3 | 10 | 2.1 | 2 | 0.4 |
| Unknown | 759 | 186 | 24.5 | 142 | 18.7 | 18 | 2.4 | 26 | 3.4 |
| Alberta | 37,898 | 9,599 | 25.3 | 7,320 | 19.3 | 605 | 1.6 | 1,674 | 4.4 |
| 2000 | | | | | | | | | |
| 1 | 1,896 | 418 | 22.0 | 385 | 20.3 | 24 | 1.3 | 9 | 0.5 |
| 2 | 1,193 | 192 | 16.1 | 176 | 14.8 | 5 | 0.4 | 11 | 0.9 |
| 3 | 890 | 165 | 18.5 | 112 | 12.6 | 17 | 1.9 | 36 | 4.0 |
| 4 | 11,361 | 3,047 | 26.8 | 2,179 | 19.2 | 221 | 1.9 | 647 | 5.7 |
| 5 | 647 | 158 | 24.4 | 120 | 18.5 | 9 | 1.4 | 29 | 4.5 |
| 6 | 2,219 | 538 | 24.2 | 362 | 16.3 | 47 | 2.1 | 129 | 5.8 |
| 7 | 1,113 | 296 | 26.6 | 259 | 23.3 | 13 | 1.2 | 24 | 2.2 |
| 8 | 1,107 | 324 | 29.3 | 248 | 22.4 | 14 | 1.3 | 62 | 5.6 |
| 9 | 734 | 184 | 25.1 | 161 | 21.9 | 6 | 0.8 | 17 | 2.3 |
| 10 | 9,376 | 2,633 | 28.1 | 1,976 | 21.1 | 123 | 1.3 | 534 | 5.7 |
| 11 | 1,064 | 300 | 28.2 | 244 | 22.9 | 12 | 1.1 | 44 | 4.1 |
| 12 | 1,207 | 283 | 23.4 | 229 | 19.0 | 23 | 1.9 | 31 | 2.6 |
| 13 | 1,240 | 346 | 27.9 | 343 | 27.7 | 2 | 0.2 | 1 | 0.1 |
| 14 | 325 | 54 | 16.6 | 53 | 16.3 | 0 | 0.0 | 1 | 0.3 |
| 15 | 471 | 108 | 22.9 | 90 | 19.1 | 8 | 1.7 | 10 | 2.1 |
| 16 | 585 | 193 | 33.0 | 168 | 28.7 | 6 | 1.0 | 19 | 3.2 |
| 17 | 506 | 82 | 16.2 | 72 | 14.2 | 5 | 1.0 | 5 | 1.0 |
| Unknown | 777 | 184 | 23.7 | 147 | 18.9 | 12 | 1.5 | 25 | 3.2 |
| Alberta | 36,711 | 9,505 | 25.9 | 7,324 | 20.0 | 547 | 1.5 | 1,634 | 4.5 |

Source: Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

ICD-9 codes: All ICD-9 codes are based on the first three diagnostic codes and the first three procedure codes in the Hospital Morbidity Files.

1. Hospital delivery: Diagnostic codes 640-648 if 5th digit=1 or 2 or 650 or 651-676 if 5th digit=1 or 2 or V27 or procedure codes 72.0 to 74.99

2. Medical induction: Procedure codes 73.4 without 73.01 or 73.1

3. Surgical induction: procedure codes 73.01 and/or 73.1 without 73.4

4. Combined induction: procedure codes: 73.4 with 73.01 and/or 73.1

5. Rate = Cases / Total hospital deliveries x 100

6. RHA boundaries are current as of April, 2001.

Notes:

Data include 'out of province' cases.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A15 Epidural Rate by Facility RHA, Alberta, 1998 - 2000

| Facility RHA | 1998 | | | 1999 | | | 2000 | | |
|----------------|-------------------|------------------------------|----------------------------|-------------------|------------------------------|----------------------------|-------------------|------------------------------|----------------------------|
| | Total Pregnancies | Epidural Analgesia in Labour | Epidural Rate ¹ | Total Pregnancies | Epidural Analgesia in Labour | Epidural Rate ¹ | Total Pregnancies | Epidural Analgesia in Labour | Epidural Rate ¹ |
| 1 | 2,079 | 211 | 10.1 | 2,104 | 403 | 19.2 | 1,975 | 448 | 22.7 |
| 2 | 1,242 | 16 | 1.3 | 1,234 | 28 | 2.3 | 1,194 | 51 | 4.3 |
| 3 | 562 | 76 | 13.5 | 530 | 103 | 19.4 | 590 | 64 | 10.8 |
| 4 | 12,078 | 5,241 | 43.4 | 12,299 | 5,610 | 45.6 | 12,305 | 6,167 | 50.1 |
| 5 | 366 | 36 | 9.8 | 360 | 43 | 11.9 | 340 | 0 | 0.0 |
| 6 | 2,300 | 118 | 5.1 | 2,406 | 84 | 3.5 | 2,262 | 123 | 5.4 |
| 7 | 837 | 71 | 8.5 | 821 | 121 | 14.7 | 756 | 137 | 18.1 |
| 8 | 433 | 158 | 36.5 | 437 | 51 | 11.7 | 394 | 42 | 10.7 |
| 9 | 575 | 23 | 4.0 | 605 | 24 | 4.0 | 535 | 11 | 2.1 |
| 10 | 12,028 | 3,979 | 33.1 | 12,183 | 4,924 | 40.4 | 11,637 | 5,223 | 44.9 |
| 11 | 535 | 42 | 7.9 | 554 | 36 | 6.5 | 500 | 30 | 6.0 |
| 12 | 1,124 | 58 | 5.2 | 1,085 | 42 | 3.9 | 949 | 31 | 3.3 |
| 13 | 1,226 | 7 | 0.6 | 1,285 | 2 | 0.2 | 1,220 | 48 | 3.9 |
| 14 | 401 | 9 | 2.2 | 358 | 19 | 5.3 | 325 | 15 | 4.6 |
| 15 | 393 | 13 | 3.3 | 360 | 21 | 5.8 | 354 | 34 | 9.6 |
| 16 | 639 | 187 | 29.3 | 619 | 260 | 42.0 | 626 | 192 | 30.7 |
| 17 | 411 | 0 | 0.0 | 418 | 0 | 0.0 | 430 | 0 | 0.0 |
| Alberta | 37,229 | 10,245 | 27.5 | 37,658 | 11,771 | 31.3 | 36,392 | 12,616 | 34.7 |

Source: Statistics reported to the Reproductive Care Committee from Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness; validated with hospitals and Perinatal Outreach Programs.

Notes: 1. Rate is per 100 pregnancies.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A16 Epidural Rate by Level of Facility, Alberta, 1998 - 2000

| Hospitals | 1998 | | | 1999 | | | 2000 | | |
|---|-------------------|------------------------------|---------------|-------------------|------------------------------|---------------|-------------------|------------------------------|---------------|
| | Total Pregnancies | Epidural Analgesia in Labour | Epidural Rate | Total Pregnancies | Epidural Analgesia in Labour | Epidural Rate | Total Pregnancies | Epidural Analgesia in Labour | Epidural Rate |
| Level III | | | | | | | | | |
| Foothills | 4,253 | 2,254 | 53.0 | 4,344 | 2,378 | 54.7 | 4,157 | 2,330 | 56.1 |
| Royal Alexandra/University of Alberta Hos | 4,498 | 1,564 | 34.8 | 4,408 | 1,580 | 35.8 | 4,017 | 1,730 | 43.1 |
| Level III Total | 8,751 | 3,818 | 43.6 | 8,752 | 3,958 | 45.2 | 8,174 | 4,060 | 49.7 |
| Level II | | | | | | | | | |
| Rockyview General Hospital | 4,011 | 1,678 | 41.8 | 4,185 | 1,948 | 46.5 | 4,115 | 2,190 | 53.2 |
| Misericordia Hospital | 2,549 | 739 | 29.0 | 2,620 | 750 | 28.6 | 2,657 | 787 | 29.6 |
| Grey Nuns Hospital | 3,479 | 1,676 | 48.2 | 3,553 | 2,037 | 57.3 | 3,560 | 2,218 | 62.3 |
| Grande Prairie | 1,061 | 7 | 0.7 | 1,104 | 2 | 0.2 | 1,055 | 48 | 4.5 |
| Lethbridge Regional Hospital | 1,589 | 184 | 11.6 | 1,601 | 365 | 22.8 | 1,572 | 431 | 27.4 |
| Medicine Hat Regional Hospital | 936 | 16 | 1.7 | 897 | 28 | 3.1 | 899 | 51 | 5.7 |
| Red Deer General Hospital | 1,702 | 102 | 6.0 | 1,750 | 67 | 3.8 | 1,699 | 113 | 6.7 |
| Peter Lougheed Centre | 3,814 | 1,309 | 34.3 | 3,770 | 1,284 | 34.1 | 4,033 | 1,647 | 40.8 |
| Level II Total | 19,141 | 5,711 | 29.8 | 19,480 | 6,481 | 33.3 | 19,590 | 7,485 | 38.2 |
| Level I | | | | | | | | | |
| North | 7,404 | 573 | 7.7 | 7,453 | 1,145 | 15.4 | 6,817 | 987 | 14.5 |
| South | 1,933 | 143 | 7.4 | 1,973 | 187 | 9.5 | 1,811 | 84 | 4.6 |
| Level I Total | 9,337 | 716 | 7.7 | 9,426 | 1,332 | 14.1 | 8,628 | 1,071 | 12.4 |
| Alberta | 37,229 | 10,245 | 27.5 | 37,658 | 11,771 | 31.3 | 36,392 | 12,616 | 34.7 |

Source: Statistics reported to the Reproductive Care Committee from Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness; validated with hospitals and Perinatal Audit Programs.

Note: 1. Number of women with epidural analgesia in labour / Total pregnancies x 100.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A17 Operative and Vaginal Breech Deliveries, Alberta, 1986 - 2000

| Year | Total Hospital Deliveries ¹ | Cesarean Section ² | | Forceps ³ | | Vacuum Extraction ⁴ | | Forceps and/or Vacuum | | Vaginal Breech Delivery ⁵ | |
|------|--|-------------------------------|-------------------|----------------------|-------------------|--------------------------------|-------------------|-----------------------|-------------------|--------------------------------------|-------------------|
| | | Cases | Rate ⁶ | Cases | Rate ⁶ | Cases | Rate ⁶ | Cases | Rate ⁶ | Cases | Rate ⁶ |
| 86 | 43,675 | 7,130 | 16.3 | 6,068 | 13.9 | 324 | 0.7 | 6,392 | 14.6 | 389 | 0.9 |
| 87 | 41,910 | 7,142 | 17.0 | 5,229 | 12.5 | 653 | 1.6 | 5,882 | 14.0 | 343 | 0.8 |
| 88 | 41,983 | 7,190 | 17.1 | 5,083 | 12.1 | 910 | 2.2 | 5,993 | 14.3 | 350 | 0.8 |
| 89 | 43,272 | 7,057 | 16.3 | 5,034 | 11.6 | 1,662 | 3.8 | 6,696 | 15.5 | 426 | 1.0 |
| 90 | 43,024 | 6,911 | 16.1 | 4,463 | 10.4 | 2,270 | 5.3 | 6,733 | 15.6 | 419 | 1.0 |
| 91 | 42,676 | 6,846 | 16.0 | 3,909 | 9.2 | 2,608 | 6.1 | 6,517 | 15.3 | 393 | 0.9 |
| 92 | 41,727 | 6,646 | 15.9 | 3,445 | 8.3 | 3,008 | 7.2 | 6,453 | 15.5 | 337 | 0.8 |
| 93 | 40,043 | 6,314 | 15.8 | 3,241 | 8.1 | 3,051 | 7.6 | 6,292 | 15.7 | 378 | 0.9 |
| 94 | 39,554 | 6,214 | 15.7 | 3,241 | 8.2 | 3,266 | 8.3 | 6,507 | 16.5 | 342 | 0.9 |
| 95 | 38,462 | 6,061 | 15.8 | 2,793 | 7.3 | 3,619 | 9.4 | 6,412 | 16.7 | 339 | 0.9 |
| 96 | 37,312 | 6,069 | 16.3 | 2,669 | 7.2 | 3,737 | 10.0 | 6,406 | 17.2 | 346 | 0.9 |
| 97 | 36,387 | 6,005 | 16.5 | 2,617 | 7.2 | 3,873 | 10.6 | 6,490 | 17.8 | 280 | 0.8 |
| 98 | 37,432 | 6,461 | 17.3 | 2,421 | 6.5 | 4,087 | 10.9 | 6,508 | 17.4 | 261 | 0.7 |
| 99 | 37,898 | 7,234 | 19.1 | 2,464 | 6.5 | 4,152 | 11.0 | 6,616 | 17.5 | 264 | 0.7 |
| 00 | 36,711 | 7,405 | 20.2 | 2,226 | 6.1 | 3,906 | 10.6 | 6,132 | 16.7 | 216 | 0.6 |

Source: Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

ICD-9 codes: All ICD-9 codes are based on the first three diagnostic codes and the first three procedure codes in the Hospital Morbidity Files.

1. Hospital delivery: Diagnostic codes 640-648 if 5th digit=1 or 2 or 650 or 651-676 if 5th digit=1 or 2 or V27 or procedure codes 72.0 to 74.99
2. Cesarean section: Procedure code 74.0, 74.1, 74.2, 74.4, 74.99.
3. Forceps: Procedure 72.0 or 72.1 or 72.2 or 72.21 or 72.29 or 72.3 or 72.31 or 72.39.
4. Vacuum Extraction: Procedure 72.7.
5. Vaginal breech: Diagnostic code 652.2 or procedure codes 72.5 or 72.6.
6. Rate = Cases / Total hospital deliveries x 100.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A18 Methods of Delivery by Residence RHA, Alberta, 1998 - 2000

| Residence RHA ^{8,9} | Total hospital deliveries ¹ | Cesarean Section ² | | Forceps ³ | | Vacuum Extraction ⁴ | | Vaginal Breech Delivery ⁵ | |
|------------------------------|--|-------------------------------|-------------------|----------------------|-------------------|--------------------------------|-------------------|--------------------------------------|-------------------|
| | | Cases | Rate ⁷ | Cases | Rate ⁷ | Cases | Rate ⁷ | Cases | Rate ⁷ |
| 1998 | | | | | | | | | |
| 1 | 2,001 | 294 | 14.7 | 104 | 5.2 | 199 | 9.9 | 24 | 1.2 |
| 2 | 1,217 | 147 | 12.1 | 27 | 2.2 | 103 | 8.5 | 10 | 0.8 |
| 3 | 869 | 157 | 18.1 | 66 | 7.6 | 89 | 10.2 | 9 | 1.0 |
| 4 | 11,309 | 1,983 | 17.5 | 927 | 8.2 | 1,438 | 12.7 | 84 | 0.7 |
| 5 | 638 | 111 | 17.4 | 41 | 6.4 | 67 | 10.5 | 3 | 0.5 |
| 6 | 2,199 | 423 | 19.2 | 109 | 5.0 | 37 | 1.7 | 16 | 0.7 |
| 7 | 1,168 | 238 | 20.4 | 72 | 6.2 | 126 | 10.8 | 6 | 0.5 |
| 8 | 1,112 | 169 | 15.2 | 72 | 6.5 | 157 | 14.1 | 6 | 0.5 |
| 9 | 735 | 77 | 10.5 | 28 | 3.8 | 65 | 8.8 | 3 | 0.4 |
| 10 | 9,699 | 1,728 | 17.8 | 711 | 7.3 | 1,168 | 12.0 | 78 | 0.8 |
| 11 | 1,201 | 189 | 15.7 | 65 | 5.4 | 159 | 13.2 | 2 | 0.2 |
| 12 | 1,365 | 253 | 18.5 | 54 | 4.0 | 192 | 14.1 | 4 | 0.3 |
| 13 | 1,254 | 200 | 15.9 | 14 | 1.1 | 96 | 7.7 | 5 | 0.4 |
| 14 | 397 | 86 | 21.7 | 5 | 1.3 | 28 | 7.1 | 1 | 0.3 |
| 15 | 508 | 89 | 17.5 | 20 | 3.9 | 23 | 4.5 | 3 | 0.6 |
| 16 | 583 | 125 | 21.4 | 67 | 11.5 | 28 | 4.8 | 3 | 0.5 |
| 17 | 490 | 59 | 12.0 | 9 | 1.8 | 52 | 10.6 | 0 | 0.0 |
| Unknown Alberta | 687 | 133 | 19.4 | 30 | 4.4 | 60 | 8.7 | 4 | 0.6 |
| 1999 | 37,432 | 6,461 | 17.3 | 2,421 | 6.5 | 4,087 | 10.9 | 261 | 0.7 |
| 1 | 2,043 | 367 | 18.0 | 62 | 3.0 | 201 | 9.8 | 12 | 0.6 |
| 2 | 1,201 | 182 | 15.2 | 34 | 2.8 | 109 | 9.1 | 8 | 0.7 |
| 3 | 853 | 176 | 20.6 | 51 | 6.0 | 78 | 9.1 | 8 | 0.9 |
| 4 | 11,403 | 2,283 | 20.0 | 931 | 8.2 | 1,470 | 12.9 | 108 | 0.9 |
| 5 | 673 | 145 | 21.5 | 38 | 5.6 | 73 | 10.8 | 4 | 0.6 |
| 6 | 2,345 | 490 | 20.9 | 115 | 4.9 | 46 | 2.0 | 15 | 0.6 |
| 7 | 1,147 | 264 | 23.0 | 76 | 6.6 | 127 | 11.1 | 9 | 0.8 |
| 8 | 1,147 | 186 | 16.2 | 58 | 5.1 | 147 | 12.8 | 3 | 0.3 |
| 9 | 730 | 76 | 10.4 | 21 | 2.9 | 64 | 8.8 | 6 | 0.8 |
| 10 | 9,817 | 1,850 | 18.8 | 810 | 8.3 | 1,194 | 12.2 | 64 | 0.7 |
| 11 | 1,247 | 217 | 17.4 | 55 | 4.4 | 153 | 12.3 | 5 | 0.4 |
| 12 | 1,332 | 272 | 20.4 | 64 | 4.8 | 160 | 12.0 | 4 | 0.3 |
| 13 | 1,346 | 236 | 17.5 | 17 | 1.3 | 96 | 7.1 | 5 | 0.4 |
| 14 | 360 | 82 | 22.8 | 3 | 0.8 | 42 | 11.7 | 1 | 0.3 |
| 15 | 457 | 88 | 19.3 | 13 | 2.8 | 23 | 5.0 | 2 | 0.4 |
| 16 | 566 | 129 | 22.8 | 53 | 9.4 | 41 | 7.2 | 1 | 0.2 |
| 17 | 472 | 67 | 14.2 | 7 | 1.5 | 63 | 13.3 | 1 | 0.2 |
| Unknown Alberta | 759 | 124 | 16.3 | 56 | 7.4 | 65 | 8.6 | 8 | 1.1 |
| 2000 | 37,898 | 7,234 | 19.1 | 2,464 | 6.5 | 4,152 | 11.0 | 264 | 0.7 |
| 1 | 1,896 | 366 | 19.3 | 66 | 3.5 | 155 | 8.2 | 15 | 0.8 |
| 2 | 1,193 | 202 | 16.9 | 24 | 2.0 | 103 | 8.6 | 10 | 0.8 |
| 3 | 890 | 187 | 21.0 | 30 | 3.4 | 99 | 11.1 | 4 | 0.4 |
| 4 | 11,361 | 2,322 | 20.4 | 823 | 7.2 | 1,460 | 12.9 | 86 | 0.8 |
| 5 | 647 | 137 | 21.2 | 35 | 5.4 | 86 | 13.3 | 6 | 0.9 |
| 6 | 2,219 | 530 | 23.9 | 101 | 4.6 | 40 | 1.8 | 20 | 0.9 |
| 7 | 1,113 | 247 | 22.2 | 64 | 5.8 | 125 | 11.2 | 6 | 0.5 |
| 8 | 1,107 | 180 | 16.3 | 65 | 5.9 | 150 | 13.6 | 6 | 0.5 |
| 9 | 734 | 81 | 11.0 | 20 | 2.7 | 50 | 6.8 | 4 | 0.5 |
| 10 | 9,376 | 1,920 | 20.5 | 750 | 8.0 | 977 | 10.4 | 46 | 0.5 |
| 11 | 1,064 | 211 | 19.8 | 66 | 6.2 | 131 | 12.3 | 2 | 0.2 |
| 12 | 1,207 | 266 | 22.0 | 48 | 4.0 | 157 | 13.0 | 3 | 0.2 |
| 13 | 1,240 | 228 | 18.4 | 7 | 0.6 | 122 | 9.8 | 0 | 0.0 |
| 14 | 325 | 78 | 24.0 | 3 | 0.9 | 32 | 9.8 | 0 | 0.0 |
| 15 | 471 | 85 | 18.0 | 19 | 4.0 | 21 | 4.5 | 0 | 0.0 |
| 16 | 585 | 135 | 23.1 | 49 | 8.4 | 51 | 8.7 | 2 | 0.3 |
| 17 | 506 | 77 | 15.2 | 11 | 2.2 | 75 | 14.8 | 4 | 0.8 |
| Unknown Alberta | 777 | 153 | 19.7 | 45 | 5.8 | 72 | 9.3 | 2 | 0.3 |
| 2000 | 36,711 | 7,405 | 20.2 | 2,226 | 6.1 | 3,906 | 10.6 | 216 | 0.6 |

Source: Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

ICD-9 codes: All ICD-9 codes are based on the first three diagnostic codes and the first three procedure codes in the Hospital Morbidity Files.

1. Hospital delivery: Diagnostic codes 640-648 if 5th digit=1 or 2 or 650 or 651-676 if 5th digit=1 or 2 or V27 or procedure codes 72.0 to 74.99.

2. Cesarean section: Procedure code 74.0, 74.1, 74.2, 74.4, 74.99.

3. Forceps: Procedure 72.0 or 72.1 or 72.2 or 72.21 or 72.29 or 72.3 or 72.31 or 72.39

4. Vacuum Extraction: Procedure 72.7.

5. Vaginal breech: Diagnostic code 652.2 or procedure codes 72.5 or 72.6.

6. Other: Procedure 72.8 or 72.9 or 73.2 or 73.5 or 73.8 or 73.9.

7. Rate = Cases / Total hospital deliveries x 100.

8. RHA boundaries are current as of April, 2001.

9. RHAs are by residence of mothers.

Data include 'out of province' cases.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Notes:

Table A19 Cesarean Sections (All Weights), Primary and Repeat Rates by Facility RHA, Alberta, 1999

| Facility RHA | Total Mothers Delivered | Pregnancies Delivered by Cesarean Section | | Primary Cesarean Section | | | Repeat Cesarean Section | | Cesarean Section Perinatal & Neonatal Deaths | | Trial of Labour | | VBAC ¹ | | |
|----------------|-------------------------|---|-------------------|--------------------------|--------------------|-------------------------|-------------------------|-------------------|--|-------------------|------------------------|-----------------------------|-------------------|-------------------|----------------------------|
| | | Total | Rate ² | Cases | Rate ^{3*} | % of total ⁴ | Cases | Rate ⁵ | Cases | Rate ⁶ | Attempted ⁷ | Attempted Rate ⁸ | Successful | Rate ⁹ | Success Rate ¹⁰ |
| 1 | 2,104 | 391 | 18.6 | 233 | 11.1 | 59.6 | 158 | 7.5 | 2 | 5.1 | 94 | 39.8 | 78 | 33.1 | 83.0 |
| 2 | 1,234 | 161 | 13.0 | 113 | 9.2 | 70.2 | 48 | 3.9 | 3 | 18.6 | 44 | 54.3 | 33 | 40.7 | 75.0 |
| 3 | 530 | 90 | 17.0 | 55 | 10.4 | 61.1 | 35 | 6.6 | 0 | 0.0 | 7 | 16.7 | 7 | 16.7 | 100.0 |
| 4 | 12,299 | 2,515 | 20.4 | 1,765 | 14.4 | 70.2 | 750 | 6.1 | 20 | 8.0 | 668 | 54.4 | 478 | 38.9 | 71.6 |
| 5 | 360 | 65 | 18.1 | 37 | 10.3 | 56.9 | 28 | 7.8 | 0 | 0.0 | 11 | 30.6 | 8 | 22.2 | 72.7 |
| 6 | 2,406 | 492 | 20.4 | 326 | 13.5 | 66.3 | 166 | 6.9 | 4 | 8.1 | 82 | 33.2 | 81 | 32.8 | 98.8 |
| 7 | 821 | 172 | 21.0 | 124 | 15.1 | 72.1 | 48 | 5.8 | 4 | 23.3 | 27 | 38.0 | 23 | 32.4 | 85.2 |
| 8 | 437 | 56 | 12.8 | 42 | 9.6 | 75.0 | 14 | 3.2 | 0 | 0.0 | 16 | 59.3 | 13 | 48.1 | 81.3 |
| 9 | 605 | 43 | 7.1 | 18 | 3.0 | 41.9 | 25 | 4.1 | 0 | 0.0 | 36 | 60.0 | 35 | 58.3 | 97.2 |
| 10 | 12,183 | 2,387 | 19.6 | 1,563 | 12.8 | 65.5 | 824 | 6.8 | 29 | 12.1 | 611 | 46.3 | 496 | 37.6 | 81.2 |
| 11 | 554 | 77 | 13.9 | 55 | 9.9 | 71.4 | 22 | 4.0 | 0 | 0.0 | 16 | 43.2 | 15 | 40.5 | 93.8 |
| 12 | 1,085 | 194 | 17.9 | 125 | 11.5 | 64.4 | 69 | 6.4 | 1 | 5.2 | 41 | 39.8 | 34 | 33.0 | 82.9 |
| 13 | 1,285 | 241 | 18.8 | 148 | 11.5 | 61.4 | 93 | 7.2 | 4 | 16.6 | 37 | 28.9 | 35 | 27.3 | 94.6 |
| 14 | 358 | 76 | 21.2 | 50 | 14.0 | 65.8 | 26 | 7.3 | 0 | 0.0 | 10 | 28.6 | 9 | 25.7 | 90.0 |
| 15 | 360 | 49 | 13.6 | 33 | 9.2 | 67.3 | 16 | 4.4 | 0 | 0.0 | 6 | 27.3 | 6 | 27.3 | 100.0 |
| 16 | 619 | 127 | 20.5 | 75 | 12.1 | 59.1 | 52 | 8.4 | 0 | 0.0 | 38 | 46.3 | 30 | 36.6 | 78.9 |
| 17 | 418 | 45 | 10.8 | 33 | 7.9 | 73.3 | 12 | 2.9 | 0 | 0.0 | 22 | 71.0 | 19 | 61.3 | 86.4 |
| Alberta | 37,658 | 7,181 | 19.1 | 4,795 | 12.7 | 66.8 | 2,386 | 6.3 | 67 | 9.3 | 1,766 | 46.6 | 1,400 | 37.0 | 79.3 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

- Notes:**
1. VBAC = Vaginal Birth After Cesarean.
 2. (Total Cesarean Sections / Total Mothers Delivered) x 100.
 3. (Primary Cesarean Sections / Total Mothers Delivered) x 100.
 4. (Primary Cesarean Sections / Total Pregnancies Delivered by Cesarean Section) x 100.
 5. (Repeat Cesarean Sections / Total Mothers Delivered) x 100.
 6. (Cesarean Section Deaths (Stillbirths + Early Neonatal Deaths + Late Neonatal Deaths)/Total Pregnancies Delivered by Cesarean Section) x 1000.
 7. Failed VBAC's + Successful VBAC's.
 8. (Attempted VBAC's / (Repeat Cesarean Sections + Successful VBAC's)) x 100.
 9. (Successful VBAC's / (Repeat Cesarean Sections + Successful VBAC's)) x 100.
 10. Successful VBAC's / Attempted VBAC's x 100.
- Excludes out-of-hospital births.
RHA boundaries are current as of 2001.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A20 Cesarean Sections (All Weights), Primary and Repeat Rates by Facility RHA, Alberta, 2000

| Facility RHA | Total Mothers Delivered | Pregnancies Delivered by Cesarean Section | | Primary Cesarean Section | | | Repeat Cesarean Section | | Cesarean Section Perinatal & Neonatal Deaths | | Trial of Labour | | VBAC ¹ | | |
|----------------|-------------------------|---|-------------------|--------------------------|--------------------|-------------------------|-------------------------|-------------------|--|-------------------|------------------------|-----------------------------|-------------------|-------------------|----------------------------|
| | | Total | Rate ² | Cases | Rate ^{3*} | % of total ⁴ | Cases | Rate ⁵ | Cases | Rate ⁶ | Attempted ⁷ | Attempted Rate ⁸ | Successful | Rate ⁹ | Success Rate ¹⁰ |
| 1 | 1,975 | 382 | 19.3 | 258 | 13.1 | 67.5 | 124 | 6.3 | 1 | 2.6 | 81 | 43.1 | 64 | 34.0 | 79.0 |
| 2 | 1,194 | 191 | 16.0 | 144 | 12.1 | 75.4 | 47 | 3.9 | 1 | 5.2 | 41 | 53.2 | 30 | 39.0 | 73.2 |
| 3 | 590 | 108 | 18.3 | 83 | 14.1 | 76.9 | 25 | 4.2 | 0 | 0.0 | 13 | 35.1 | 12 | 32.4 | 92.3 |
| 4 | 12,305 | 2,551 | 20.7 | 1,739 | 14.1 | 68.2 | 812 | 6.6 | 14 | 5.5 | 683 | 52.8 | 481 | 37.2 | 70.4 |
| 5 | 340 | 61 | 17.9 | 38 | 11.2 | 62.3 | 23 | 6.8 | 1 | 16.4 | 9 | 32.1 | 5 | 17.9 | 55.6 |
| 6 | 2,262 | 555 | 24.5 | 349 | 15.4 | 62.9 | 206 | 9.1 | 3 | 5.4 | 98 | 34.6 | 77 | 27.2 | 78.6 |
| 7 | 756 | 164 | 21.7 | 98 | 13.0 | 59.8 | 66 | 8.7 | 0 | 0.0 | 31 | 33.3 | 27 | 29.0 | 87.1 |
| 8 | 394 | 61 | 15.5 | 44 | 11.2 | 72.1 | 17 | 4.3 | 1 | 16.4 | 22 | 61.1 | 19 | 52.8 | 86.4 |
| 9 | 535 | 30 | 5.6 | 14 | 2.6 | 46.7 | 16 | 3.0 | 0 | 0.0 | 29 | 64.4 | 29 | 64.4 | 100.0 |
| 10 | 11,637 | 2,441 | 21.0 | 1,636 | 14.1 | 67.0 | 805 | 6.9 | 23 | 9.4 | 535 | 44.5 | 398 | 33.1 | 74.4 |
| 11 | 500 | 71 | 14.2 | 52 | 10.4 | 73.2 | 19 | 3.8 | 1 | 14.1 | 11 | 40.7 | 8 | 29.6 | 72.7 |
| 12 | 949 | 201 | 21.2 | 147 | 15.5 | 73.1 | 54 | 5.7 | 1 | 5.0 | 23 | 30.3 | 22 | 28.9 | 95.7 |
| 13 | 1,220 | 234 | 19.2 | 138 | 11.3 | 59.0 | 96 | 7.9 | 2 | 8.5 | 43 | 32.8 | 35 | 26.7 | 81.4 |
| 14 | 325 | 70 | 21.5 | 41 | 12.6 | 58.6 | 29 | 8.9 | 1 | 14.3 | 6 | 17.1 | 6 | 17.1 | 100.0 |
| 15 | 354 | 47 | 13.3 | 30 | 8.5 | 63.8 | 17 | 4.8 | 0 | 0.0 | 7 | 29.2 | 7 | 29.2 | 100.0 |
| 16 | 626 | 138 | 22.0 | 94 | 15.0 | 68.1 | 44 | 7.0 | 3 | 21.7 | 35 | 47.3 | 30 | 40.5 | 85.7 |
| 17 | 430 | 52 | 12.1 | 34 | 7.9 | 65.4 | 18 | 4.2 | 0 | 0.0 | 17 | 50.0 | 16 | 47.1 | 94.1 |
| Alberta | 36,392 | 7,357 | 20.2 | 4,939 | 13.6 | 67.1 | 2,418 | 6.6 | 52 | 7.1 | 1,684 | 45.7 | 1,266 | 34.4 | 75.2 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

Notes:

1. VBAC = Vaginal Birth After Cesarean.
 2. (Total Cesarean Sections / Total Mothers Delivered) x 100.
 3. (Primary Cesarean Sections / Total Mothers Delivered) x 100.
 4. (Primary Cesarean Sections / Total Pregnancies Delivered by Cesarean Section) x 100.
 5. (Repeat Cesarean Sections / Total Mothers Delivered) x 100.
 6. (Cesarean Section Deaths (Stillbirths + Early Neonatal Deaths + Late Neonatal Deaths)/Total Pregnancies Delivered by Cesarean Section) x 1000.
 7. Failed VBAC's + Successful VBAC's.
 8. (Attempted VBAC's / (Repeat Cesarean Sections + Successful VBAC's)) x 100.
 9. (Successful VBAC's / (Repeat Cesarean Sections + Successful VBAC's)) x 100.
 10. Successful VBAC's / Attempted VBAC's x 100.
- Excludes out-of-hospital births.
RHA boundaries are current as of 2001.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A21 Cesarean Section and Vaginal Birth After
Cesarean (VBAC) Rates,
Alberta, 1992 - 2000

| Year | Cesarean Section Rate ¹ | Repeat Cesarean Section Rate ² | Trial of Labour Rate ³ | VBAC Rate ⁴ | VBAC Success Rate ⁵ |
|------|------------------------------------|---|-----------------------------------|------------------------|--------------------------------|
| 92 | 15.9 | 5.9 | 51.0 | 40.0 | 77.0 |
| 93 | 15.7 | 5.9 | 52.0 | 39.0 | 74.0 |
| 94 | 15.8 | 5.7 | 60.5 | 43.0 | 71.0 |
| 95 | 15.8 | 5.5 | 58.3 | 42.9 | 73.6 |
| 96 | 16.2 | 5.5 | 58.3 | 44.0 | 75.5 |
| 97 | 16.5 | 6.0 | 56.5 | 38.8 | 68.7 |
| 98 | 17.0 | 5.8 | 54.4 | 41.5 | 76.4 |
| 99 | 19.1 | 6.3 | 46.6 | 37.0 | 79.3 |
| 00 | 20.2 | 6.6 | 45.7 | 34.4 | 75.2 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals & Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

Notes:

1. Cesarean Sections / Total Mothers Delivered X 100.
2. (Repeat Cesarean Sections / Total Mothers Delivered) x 100.
3. Attempted Vaginal Births After Cesarean (VBAC's) / (Repeat Cesarean Sections + Successful VBAC's) X 100.
4. Successful VBAC's / (Repeat Cesarean Sections + Successful VBAC's) X 100.
5. Successful VBAC's / Attempted VBAC's X 100.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A22 Breech Deliveries by Level of Hospital, Alberta, 1999 & 2000

| Level of hospital | 1999 | | | | | 2000 | | | | |
|-------------------|---------------------|------------------|------------------------------|------------------|-------------------------------|---------------------|------------------|------------------------------|------------------|-------------------------------|
| | Total Breech Births | Vaginal Delivery | % of Breech Vaginal delivery | Cesarean Section | % of Breech Cesarean delivery | Total Breech Births | Vaginal Delivery | % of Breech Vaginal delivery | Cesarean Section | % of Breech Cesarean delivery |
| Level III | 464 | 128 | 27.6 | 336 | 72.4 | 507 | 120 | 23.7 | 387 | 76.3 |
| Level II | 747 | 135 | 18.1 | 612 | 81.9 | 692 | 93 | 13.4 | 599 | 86.6 |
| Level I | 213 | 49 | 23.0 | 164 | 77.0 | 208 | 28 | 13.5 | 180 | 86.5 |
| Total | 1,424 | 312 | 21.9 | 1,112 | 78.1 | 1,407 | 241 | 17.1 | 1,166 | 82.9 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals & Canadian Institute of Health and Wellness Inpatient Files, Alberta Health and Wellness.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A23a Breech Presentation Mortality Rates by Level of Hospital, Alberta, 1999

| Perinatal Mortality | | | | | | | | | |
|---------------------|-------------|-----------------------|---------------------------------|---|----------------------------|----------------------------------|---------------------------------------|----------------------------------|---------------------------------------|
| Level of hospital | Stillbirths | Early Neonatal Deaths | Perinatal Deaths With Anomalies | Perinatal Mortality Rate (PMR) ¹ | Corrected PMR ² | Perinatal Death Vaginal Delivery | PMR for Vaginal Delivery ¹ | Perinatal Death Cesarean Section | PMR for Cesarean Section ¹ |
| Level III | 40 | 24 | 25 | 137.9 | 88.8 | 55 | 429.7 | 9 | 26.8 |
| Level II | 25 | 11 | 5 | 48.2 | 41.8 | 33 | 244.4 | 3 | 4.9 |
| Level I | 7 | 2 | 0 | 42.3 | 42.3 | 9 | 183.7 | 0 | 0.0 |
| Total | 72 | 37 | 30 | 76.5 | 56.7 | 97 | 310.9 | 12 | 10.8 |

| Neonatal Mortality | | | | | | | | | |
|--------------------|-----------------------|----------------------|--------------------------------|--|----------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|
| Level of hospital | Early Neonatal Deaths | Late Neonatal Deaths | Neonatal Deaths With Anomalies | Neonatal Mortality Rate (NMR) ³ | Corrected NMR ² | Neonatal Death Vaginal Delivery | NMR for Vaginal Delivery ³ | Neonatal Death Cesarean Section | NMR for Cesarean Section ³ |
| Level III | 24 | 3 | 11 | 63.7 | 38.7 | 18 | 202.2 | 9 | 26.9 |
| Level II | 11 | 0 | 3 | 15.2 | 11.1 | 9 | 81.1 | 2 | 3.3 |
| Level I | 2 | 1 | 0 | 14.6 | 14.6 | 2 | 47.6 | 1 | 6.1 |
| Total | 37 | 4 | 14 | 30.3 | 20.2 | 29 | 119.8 | 12 | 10.8 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

- Notes:**
1. Rate per 1,000 total breech presentation births.
 2. Corrected rates exclude deaths due to major anomalies.
 3. Rate per 1,000 live breech presentation births.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A23b Breech Presentation Mortality Rates by Level of Hospital, Alberta, 2000

| Perinatal Mortality | | | | | | | | | |
|---------------------|-------------|-----------------------|---------------------------------|---|----------------------------|----------------------------------|---------------------------------------|----------------------------------|---------------------------------------|
| Level of hospital | Stillbirths | Early Neonatal Deaths | Perinatal Deaths With Anomalies | Perinatal Mortality Rate (PMR) ¹ | Corrected PMR ² | Perinatal Death Vaginal Delivery | PMR for Vaginal Delivery ¹ | Perinatal Death Cesarean Section | PMR for Cesarean Section ¹ |
| Level III | 38 | 32 | 31 | 138.1 | 81.9 | 61 | 508.3 | 9 | 23.3 |
| Level II | 26 | 7 | 5 | 47.7 | 40.8 | 30 | 322.6 | 3 | 5.0 |
| Level I | 6 | 0 | 0 | 28.8 | 28.8 | 4 | 142.9 | 2 | 11.1 |
| Total | 70 | 39 | 36 | 77.5 | 53.2 | 95 | 394.2 | 14 | 12.0 |

| Neonatal Mortality | | | | | | | | | |
|--------------------|-----------------------|----------------------|--------------------------------|--|----------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|
| Level of hospital | Early Neonatal Deaths | Late Neonatal Deaths | Neonatal Deaths With Anomalies | Neonatal Mortality Rate (NMR) ³ | Corrected NMR ² | Neonatal Death Vaginal Delivery | NMR for Vaginal Delivery ³ | Neonatal Death Cesarean Section | NMR for Cesarean Section ³ |
| Level III | 32 | 4 | 12 | 76.8 | 52.5 | 24 | 289.2 | 12 | 31.1 |
| Level II | 7 | 0 | 1 | 10.5 | 9.0 | 5 | 73.5 | 2 | 3.3 |
| Level I | 0 | 1 | 1 | 5.0 | 0.0 | 0 | 0.0 | 1 | 5.6 |
| Total | 39 | 5 | 14 | 32.9 | 22.7 | 29 | 165.7 | 15 | 12.9 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

- Notes:**
1. Rate per 1,000 total breech presentation births.
 2. Corrected rates exclude deaths due to major anomalies.
 3. Rate per 1,000 live breech presentation births.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A24 Breech Presentation Mortality Rates, Alberta, 1994 - 2000

| Perinatal Mortality | | | | | | | | | |
|---------------------|-------------|-----------------------|---------------------------------|---|----------------------------|----------------------------------|---------------------------------------|----------------------------------|---------------------------------------|
| Year | Stillbirths | Early Neonatal Deaths | Perinatal Deaths With Anomalies | Perinatal Mortality Rate (PMR) ¹ | Corrected PMR ² | Perinatal Death Vaginal Delivery | PMR for Vaginal Delivery ¹ | Perinatal Death Cesarean Section | PMR for Cesarean Section ¹ |
| 94 | 68 | 47 | 25 | 69.5 | 55.2 | 92 | 164.9 | 23 | 21.0 |
| 95 | 62 | 54 | 27 | 71.2 | 55.5 | 97 | 193.2 | 19 | 16.8 |
| 96 | 79 | 44 | 31 | 79.2 | 60.4 | 104 | 214.4 | 19 | 17.8 |
| 97 | 74 | 44 | 31 | 83.2 | 62.7 | 102 | 286.5 | 16 | 15.1 |
| 98 | 51 | 27 | 27 | 42.5 | 28.2 | 68 | 97.7 | 10 | 8.8 |
| 99 | 72 | 37 | 30 | 76.5 | 56.7 | 97 | 310.9 | 12 | 10.8 |
| 00 | 70 | 39 | 36 | 77.5 | 53.2 | 95 | 394.2 | 14 | 12.0 |

| Neonatal Mortality | | | | | | | | | |
|--------------------|-----------------------|----------------------|--------------------------------|--|----------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|
| Year | Early Neonatal Deaths | Late Neonatal Deaths | Neonatal Deaths With Anomalies | Neonatal Mortality Rate (NMR) ³ | Corrected NMR ² | Neonatal Death Vaginal Delivery | NMR for Vaginal Delivery ³ | Neonatal Death Cesarean Section | NMR for Cesarean Section ³ |
| 94 | 47 | 4 | 12 | 32.2 | 24.8 | 31 | 62.4 | 19 | 17.4 |
| 95 | 54 | 6 | 14 | 38.3 | 29.6 | 42 | 94.2 | 18 | 16.0 |
| 96 | 44 | 1 | 14 | 30.5 | 21.2 | 28 | 68.5 | 17 | 16.0 |
| 97 | 44 | 4 | 13 | 35.7 | 26.3 | 31 | 109.2 | 17 | 16.0 |
| 98 | 27 | 7 | 13 | 19.0 | 11.9 | 24 | 37.0 | 10 | 8.8 |
| 99 | 37 | 4 | 14 | 30.3 | 20.2 | 29 | 119.8 | 12 | 10.8 |
| 00 | 39 | 5 | 14 | 32.9 | 22.7 | 29 | 165.7 | 15 | 12.9 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Notes:

1. Rate per 1,000 total breech presentation births.
 2. Corrected rates exclude deaths due to major anomalies.
 3. Rate per 1,000 live breech presentation births.
- Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A25 Selected Indicators by Maternal Age Group, Alberta, 1998 - 2000 Combined

| Indicator | Maternal Age Group (years) | | | | | | |
|--|----------------------------|-------|-------|-------|-------|-------|-------|
| | Total ¹ | <20 | 20-24 | 25-29 | 30-34 | 35-39 | >39 |
| Small for gestational age singleton rate per 100 live singleton births | 8.4 | 10.1 | 9.0 | 8.1 | 7.6 | 8.6 | 9.3 |
| Large for gestational age rate per 100 live births | 11.8 | 9.3 | 10.1 | 12.1 | 12.8 | 12.8 | 14.5 |
| Average birth weight for singleton term births | 3,483 | 3,425 | 3,461 | 3,491 | 3,502 | 3,483 | 3,491 |
| Low birth weight rate per 100 live births | 6.1 | 6.9 | 5.8 | 5.4 | 6.1 | 7.4 | 8.6 |
| High birth weight rate per 100 live births | 12.6 | 9.9 | 11.5 | 13.0 | 13.5 | 12.9 | 13.6 |
| Preterm rate per 100 live births | 7.9 | 8.5 | 7.5 | 7.2 | 7.9 | 9.5 | 10.6 |
| Multiple birth rate per 100 live births | 2.8 | 1.2 | 1.8 | 2.5 | 3.5 | 4.1 | 4.2 |
| Midwife attendant rate per 1,000 live births | 5.3 | 0.8 | 2.6 | 4.4 | 6.4 | 10.8 | 15.8 |
| Stillbirths (per 1,000 total births) | 6.1 | 7.7 | 5.4 | 5.7 | 5.9 | 6.7 | 12.4 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Note: 1. Total includes all births for which maternal age is known.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A26 Mean Maternal Age at Stillbirth, First Live Birth, and Live Birth, Alberta, and Live Birth, Canada, 1986 - 2000

| Year | Stillbirth Alberta | First Live Birth Alberta | Live Birth Alberta | Live Birth Canada ¹ |
|------|--------------------|--------------------------|--------------------|--------------------------------|
| 86 | 26.6 | 24.8 | 26.7 | 27.5 |
| 87 | 26.7 | 25.0 | 26.9 | 27.7 |
| 88 | 26.4 | 25.2 | 27.1 | 27.9 |
| 89 | 27.8 | 25.2 | 27.2 | 28.0 |
| 90 | 27.4 | 25.3 | 27.3 | 28.1 |
| 91 | 27.0 | 25.2 | 27.3 | 28.2 |
| 92 | 27.2 | 25.5 | 27.5 | 28.4 |
| 93 | 27.7 | 25.7 | 27.6 | 28.5 |
| 94 | 28.3 | 25.8 | 27.7 | 28.7 |
| 95 | 28.3 | 25.9 | 27.8 | 28.8 |
| 96 | 28.5 | 26.1 | 28.0 | 28.4 |
| 97 | 28.4 | 26.2 | 28.1 | 28.5 |
| 98 | 28.3 | 26.2 | 28.1 | 28.7 |
| 99 | 28.6 | 26.2 | 28.2 | 28.7 |
| 00 | 28.5 | 26.3 | 28.3 | - |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Births and Deaths, 1995, Statistics Canada.

Births and Deaths, 1996, Statistics Canada (shelf tables).

Births 1997, Statistics Canada (shelf tables).

Deaths 1997, Statistics Canada (shelf tables).

Births 1998, Statistics Canada (shelf tables).

Deaths 1998, Statistics Canada (shelf tables).

Note: 1. Canadian data for 1999 and 2000 are not available.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A27 Selected Maternal Pre-Pregnancy Conditions,
Alberta, 1999 and 2000 Combined

| Condition | Cases ¹ | Rate ² |
|---|--------------------|-------------------|
| Maternal weight of 91 kilograms or more | 5,379 | 7.4 |
| Pre-existing diabetes | 471 | 0.7 |
| Heart disease | 578 | 0.8 |
| Pre-existing hypertension | 411 | 0.6 |
| Chronic renal disease | 73 | 0.1 |

Sources: Northern and Central Alberta Perinatal Outreach Program
Southern Alberta Perinatal Outreach Program

Notes: 1. Cases = Number of women with the specified condition on the antenatal risk assessment portion of the Alberta Prenatal Record.
2. Rate is per 100 women with completed antenatal risk assessments on the Alberta Prenatal Record. There were 70,761 women with completed antenatal risk assessments for 1999 and 2000 combined.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A28 Selected Problems in Pregnancy,
Alberta, 1999 and 2000 Combined

| Condition | Cases ¹ | Rate ² |
|--|--------------------|-------------------|
| Prenatal bleeding | | |
| At less than 20 weeks gestation only | 3,690 | 5.2 |
| At 20 weeks gestation or later only | 1,949 | 2.8 |
| Both before and after 20 weeks gestation | 458 | 0.6 |
| Pregnancy-induced hypertension | 3,409 | 4.8 |
| Gestational diabetes | 2,240 | 3.2 |

Sources: Northern and Central Alberta Perinatal Outreach Program
Southern Alberta Perinatal Outreach Program

Notes: 1. Cases = Number of women with the specified condition on the antenatal risk assessment portion of the Alberta Prenatal Record.
2. Rate is per 100 women with completed antenatal risk assessments on the Alberta Prenatal Record. There were 70,761 women with completed antenatal risk assessments for 1999 and 2000 combined.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A29 Gestational Diabetes Rate by Maternal Age Group, Alberta,
1999 and 2000 Combined

| Maternal Age Group (Years) | Cases ¹ | N ² | Rate ³ |
|----------------------------|--------------------|----------------|-------------------|
| <15 | 2 | 39 | - |
| 15-19 | 45 | 4,783 | 0.9 |
| 20-24 | 191 | 14,548 | 1.3 |
| 25-29 | 557 | 21,684 | 2.6 |
| 30-34 | 762 | 19,066 | 4.0 |
| 35-39 | 546 | 8,759 | 6.2 |
| ≥40 | 130 | 1,504 | 8.6 |
| Unknown | 7 | 378 | |
| Alberta | 2,240 | 70,761 | 3.2 |

Sources: Northern and Central Alberta Perinatal Outreach Program
Southern Alberta Perinatal Outreach Program

- Notes:**
1. Cases = Number of women with the specified condition on the antenatal risk assessment portion of the Alberta Prenatal Record.
 2. N = Number of women with completed antenatal risk assessment on the Alberta Prenatal Record.
 3. Rate is per 100 women in each age group with completed antenatal risk assessments on the Alberta Prenatal Record. A rate is not provided for the <15 age group due to the low number of cases in this group.
- Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A30 Maternal Prenatal Behaviours, Alberta, 1998 - 2000

| Year | Smoking During Pregnancy | | | | Alcohol Consumption During Pregnancy | | | | Street Drug Use During Pregnancy | | | | Prenatal Class Attendance ¹ | | | |
|--------------|--------------------------|-------------|-----------------|-------------|--------------------------------------|-------------|--------------|------------|----------------------------------|-------------|--------------|------------|--|-------------|---------------|-------------|
| | No | | Yes and/or Quit | | No | | Yes | | No | | Yes | | No | | Yes | |
| | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % | Cases | % |
| 98 | 26,337 | 73.2 | 9,628 | 26.8 | 33,952 | 95.6 | 1,556 | 4.4 | 34,753 | 98.4 | 577 | 1.6 | 4,827 | 36.1 | 8,555 | 63.9 |
| 99 | 27,036 | 74.3 | 9,357 | 25.7 | 34,414 | 95.7 | 1,529 | 4.3 | 35,085 | 98.5 | 538 | 1.5 | 4,839 | 35.8 | 8,689 | 64.2 |
| 00 | 26,808 | 75.4 | 8,723 | 24.6 | 33,639 | 96.0 | 1,401 | 4.0 | 33,576 | 98.1 | 666 | 1.9 | 4,925 | 37.7 | 8,134 | 62.3 |
| Total | 80,181 | 74.3 | 27,708 | 25.7 | 102,005 | 95.8 | 4,486 | 4.2 | 103,414 | 98.3 | 1,781 | 1.7 | 14,591 | 36.5 | 25,378 | 63.5 |

Source: Vital Statistics, Birth File, Department of Government Services, April 2002 release.

Notes: 1. Prenatal class attendance data are for first births only.

Only live births with available information on the relevant maternal behaviour are included.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A31 Selected Indicators for Live Births, by Maternal Prenatal Behaviours,
Alberta, 1998 - 2000 Combined

| Indicator | Smoking During Pregnancy | | Alcohol Consumption During Pregnancy | | Street Drug Use During Pregnancy | | Prenatal Class Attendance ¹ | |
|---|--------------------------|-----------------|--------------------------------------|-------|----------------------------------|-------|--|-------|
| | No | Yes and/or Quit | No | Yes | No | Yes | No | Yes |
| Mean Maternal Age (Years) | 29.1 | 25.8 | 28.3 | 26.6 | 28.3 | 23.7 | 24.9 | 27.0 |
| Mean Birth Weight (Grams) | 3,429 | 3,266 | 3,391 | 3,317 | 3,392 | 3,177 | 3,235 | 3,404 |
| Low Birth Weight Rate (per 100 Live Births) | 5.2 | 8.3 | 5.8 | 8.3 | 5.8 | 12.7 | 9.5 | 4.1 |
| Pre-term Birth Rate (per 100 Live Births) | 7.3 | 9.1 | 7.7 | 10.0 | 7.6 | 14.9 | 11.4 | 6.0 |

Source: Vital Statistics, Birth File, Department of Government Services, April 2002 release.

Notes: 1. Prenatal class attendance data are for first births only.

Only live births with available information on the relevant maternal behaviour are included.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

**Table A32 Maternal Prenatal Behaviours by Residence RHA,
Alberta, 1998 - 2000 Combined**

| RHA | Smoking During Pregnancy | | | Alcohol Consumption During Pregnancy | | | Street Drug Use During Pregnancy | | | Prenatal Class Attendance ² | | |
|----------------|--------------------------|---------------|-------------|--------------------------------------|--------------|------------|----------------------------------|--------------|------------|--|---------------|-------------|
| | Live Births ¹ | Cases | % | Live Births ¹ | Cases | % | Live Births ¹ | Cases | % | Live Births ¹ | Cases | % |
| 1 | 5,969 | 1,474 | 24.7 | 5,899 | 388 | 6.6 | 5,855 | 54 | 0.9 | 2,011 | 1,454 | 72.3 |
| 2 | 3,553 | 1,055 | 29.7 | 2,791 | 91 | 3.3 | 2,740 | 36 | 1.3 | 1,355 | 886 | 65.4 |
| 3 | 2,577 | 561 | 21.8 | 2,560 | 111 | 4.3 | 2,533 | 27 | 1.1 | 893 | 584 | 65.4 |
| 4 | 34,180 | 6,413 | 18.8 | 34,015 | 799 | 2.3 | 33,730 | 407 | 1.2 | 13,571 | 9,032 | 66.6 |
| 5 | 1,757 | 497 | 28.3 | 1,731 | 56 | 3.2 | 1,722 | 24 | 1.4 | 488 | 310 | 63.5 |
| 6 | 7,039 | 2,343 | 33.3 | 6,990 | 795 | 11.4 | 6,892 | 151 | 2.2 | 2,525 | 1,434 | 56.8 |
| 7 | 2,826 | 720 | 25.5 | 2,820 | 113 | 4.0 | 2,778 | 23 | 0.8 | 950 | 622 | 65.5 |
| 8 | 3,209 | 1,009 | 31.4 | 3,166 | 98 | 3.1 | 3,122 | 41 | 1.3 | 1,146 | 823 | 71.8 |
| 9 | 1,832 | 766 | 41.8 | 1,839 | 185 | 10.1 | 1,784 | 53 | 3.0 | 564 | 319 | 56.6 |
| 10 | 28,684 | 7,143 | 24.9 | 28,496 | 918 | 3.2 | 28,143 | 643 | 2.3 | 11,008 | 6,774 | 61.5 |
| 11 | 3,495 | 1,154 | 33.0 | 3,465 | 130 | 3.8 | 3,418 | 51 | 1.5 | 1,149 | 743 | 64.7 |
| 12 | 3,828 | 1,383 | 36.1 | 3,806 | 170 | 4.5 | 3,754 | 99 | 2.6 | 1,187 | 694 | 58.5 |
| 13 | 3,786 | 1,218 | 32.2 | 3,791 | 238 | 6.3 | 3,713 | 52 | 1.4 | 1,446 | 884 | 61.1 |
| 14 | 1,063 | 391 | 36.8 | 1,051 | 88 | 8.4 | 1,029 | 13 | 1.3 | 369 | 199 | 53.9 |
| 15 | 996 | 477 | 47.9 | 987 | 80 | 8.1 | 953 | 40 | 4.2 | 287 | 113 | 39.4 |
| 16 | 1,747 | 625 | 35.8 | 1,748 | 121 | 6.9 | 1,732 | 54 | 3.1 | 779 | 413 | 53.0 |
| 17 | 1,335 | 476 | 35.7 | 1,323 | 103 | 7.8 | 1,285 | 13 | 1.0 | 238 | 92 | 38.7 |
| Unknown | 13 | 3 | | 13 | 2 | | 12 | 0 | | 3 | 2 | |
| Alberta | 107,889 | 27,708 | 25.7 | 106,491 | 4,486 | 4.2 | 105,195 | 1,781 | 1.7 | 39,969 | 25,378 | 63.5 |

Source: Vital Statistics, Birth File, Department of Government Services, April 2002 release.

Notes: 1. Only live births with available information on the relevant maternal behaviour are included.

2. Prenatal class attendance data are for first births only.

Data include Alberta residents only.

RHA boundaries are current as of April, 2001

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A33 Live Births and General Fertility Rates by Residence RHA, Alberta, 1986 - 2000

| Residence RHA | Year | | | | | | | | | | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Live Births | | | | | | | | | | | | | | | |
| 1 | 2,440 | 2,422 | 2,310 | 2,463 | 2,443 | 2,354 | 2,402 | 2,344 | 2,323 | 2,292 | 2,151 | 2,244 | 2,060 | 2,078 | 1,961 |
| 2 | 1,320 | 1,185 | 1,227 | 1,270 | 1,274 | 1,199 | 1,202 | 1,146 | 1,134 | 1,269 | 1,161 | 1,184 | 1,239 | 1,227 | 1,215 |
| 3 | 877 | 835 | 824 | 875 | 881 | 872 | 900 | 857 | 892 | 834 | 847 | 908 | 886 | 863 | 910 |
| 4 | 12,059 | 11,965 | 11,981 | 12,642 | 12,495 | 12,259 | 12,148 | 11,454 | 11,512 | 11,271 | 11,149 | 11,048 | 11,577 | 11,703 | 11,738 |
| 5 | 718 | 702 | 681 | 662 | 689 | 673 | 675 | 639 | 637 | 668 | 650 | 622 | 624 | 639 | 626 |
| 6 | 3,000 | 2,764 | 2,698 | 2,799 | 2,740 | 2,807 | 2,736 | 2,767 | 2,536 | 2,531 | 2,520 | 2,429 | 2,494 | 2,553 | 2,413 |
| 7 | 1,330 | 1,325 | 1,284 | 1,273 | 1,245 | 1,159 | 1,128 | 1,150 | 1,164 | 1,059 | 1,034 | 989 | 1,008 | 978 | 932 |
| 8 | 1,239 | 1,157 | 1,156 | 1,206 | 1,180 | 1,170 | 1,231 | 1,116 | 1,129 | 1,227 | 1,151 | 1,152 | 1,136 | 1,156 | 1,135 |
| 9 | 784 | 772 | 737 | 786 | 849 | 804 | 860 | 730 | 757 | 725 | 655 | 651 | 625 | 645 | 625 |
| 10 | 12,768 | 12,070 | 12,380 | 12,380 | 12,418 | 12,555 | 11,938 | 11,519 | 11,071 | 10,525 | 10,136 | 9,523 | 9,929 | 9,989 | 9,533 |
| 11 | 1,445 | 1,388 | 1,408 | 1,485 | 1,407 | 1,525 | 1,445 | 1,404 | 1,426 | 1,315 | 1,286 | 1,198 | 1,247 | 1,295 | 1,096 |
| 12 | 1,696 | 1,666 | 1,558 | 1,646 | 1,567 | 1,540 | 1,582 | 1,525 | 1,497 | 1,423 | 1,384 | 1,379 | 1,385 | 1,351 | 1,243 |
| 13 | 1,409 | 1,349 | 1,348 | 1,344 | 1,248 | 1,314 | 1,287 | 1,223 | 1,256 | 1,309 | 1,297 | 1,247 | 1,292 | 1,382 | 1,261 |
| 14 | 472 | 475 | 414 | 439 | 447 | 431 | 417 | 389 | 427 | 408 | 404 | 364 | 396 | 364 | 321 |
| 15 | 518 | 513 | 481 | 552 | 511 | 539 | 550 | 542 | 592 | 545 | 529 | 500 | 522 | 472 | 485 |
| 16 | 773 | 683 | 744 | 701 | 764 | 672 | 670 | 633 | 577 | 574 | 599 | 568 | 589 | 581 | 599 |
| 17 | 456 | 436 | 438 | 456 | 475 | 496 | 502 | 467 | 529 | 553 | 518 | 540 | 515 | 488 | 516 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 4 |
| Alberta | 43,304 | 41,707 | 41,669 | 42,979 | 42,633 | 42,369 | 41,673 | 39,905 | 39,459 | 38,528 | 37,471 | 36,546 | 37,527 | 37,771 | 36,613 |
| General Fertility Rate (per 1,000 Women Aged 15-49)¹ | | | | | | | | | | | | | | | |
| 1 | 71.3 | 70.4 | 67.0 | 71.5 | 70.0 | 66.8 | 67.6 | 65.7 | 64.7 | 63.4 | 59.2 | 61.4 | 56.2 | 56.0 | 52.4 |
| 2 | 64.5 | 58.3 | 60.3 | 62.4 | 62.0 | 58.0 | 58.2 | 55.2 | 53.5 | 59.0 | 52.9 | 53.2 | 54.4 | 52.6 | 51.4 |
| 3 | 64.2 | 60.0 | 57.7 | 60.1 | 58.5 | 56.2 | 56.3 | 51.8 | 52.2 | 47.4 | 46.5 | 48.4 | 46.0 | 43.2 | 44.4 |
| 4 | 58.1 | 57.5 | 56.6 | 58.7 | 56.6 | 54.6 | 53.5 | 50.1 | 50.0 | 48.3 | 46.9 | 45.2 | 45.6 | 44.7 | 44.0 |
| 5 | 64.0 | 62.9 | 61.0 | 59.2 | 60.6 | 58.2 | 57.0 | 52.9 | 51.9 | 53.2 | 51.1 | 48.5 | 47.3 | 46.9 | 45.6 |
| 6 | 75.0 | 69.1 | 67.1 | 68.9 | 66.1 | 66.7 | 63.9 | 64.0 | 58.1 | 57.4 | 56.6 | 53.8 | 53.4 | 53.2 | 49.3 |
| 7 | 55.9 | 56.5 | 55.2 | 55.0 | 53.9 | 49.8 | 47.8 | 48.4 | 48.3 | 43.8 | 42.4 | 40.3 | 40.5 | 39.3 | 37.2 |
| 8 | 63.3 | 59.4 | 58.7 | 60.0 | 57.6 | 55.4 | 56.8 | 51.0 | 50.8 | 53.2 | 49.1 | 48.4 | 47.0 | 46.7 | 45.8 |
| 9 | 78.2 | 76.2 | 72.1 | 75.6 | 80.3 | 73.8 | 77.6 | 65.4 | 67.7 | 64.3 | 57.6 | 56.4 | 53.1 | 54.0 | 51.8 |
| 10 | 61.4 | 57.7 | 58.9 | 58.5 | 57.7 | 57.7 | 54.3 | 51.9 | 50.3 | 48.4 | 46.8 | 43.8 | 45.2 | 44.6 | 42.2 |
| 11 | 69.8 | 67.3 | 67.4 | 70.3 | 65.2 | 69.5 | 64.3 | 61.4 | 61.3 | 56.8 | 55.5 | 51.8 | 53.6 | 54.6 | 46.1 |
| 12 | 71.3 | 70.9 | 66.0 | 69.7 | 66.6 | 65.5 | 66.8 | 64.2 | 63.2 | 60.2 | 58.9 | 58.1 | 57.3 | 55.9 | 51.6 |
| 13 ² | - | - | - | - | 60.5 | 63.2 | 61.5 | 59.0 | 60.2 | 60.8 | 58.4 | 55.0 | 55.1 | 57.4 | 51.9 |
| 14 ² | - | - | - | - | 67.4 | 65.3 | 63.8 | 60.3 | 65.6 | 62.8 | 62.4 | 56.7 | 61.7 | 56.4 | 50.0 |
| 15 | 93.9 | 91.8 | 83.8 | 96.2 | 87.3 | 90.5 | 91.1 | 88.3 | 94.1 | 84.2 | 80.8 | 75.0 | 77.5 | 69.3 | 70.3 |
| 16 | 63.4 | 59.8 | 65.9 | 61.3 | 66.4 | 57.5 | 57.0 | 54.4 | 50.6 | 51.3 | 53.5 | 48.5 | 48.4 | 46.9 | 47.0 |
| 17 | 122.3 | 116.2 | 114.5 | 117.4 | 123.6 | 125.8 | 126.0 | 114.5 | 126.6 | 128.8 | 116.9 | 114.5 | 104.9 | 96.7 | 102.4 |
| Alberta | 63.5 | 61.2 | 60.6 | 61.9 | 60.3 | 59.1 | 57.5 | 54.6 | 53.7 | 52.2 | 50.3 | 48.3 | 48.5 | 47.7 | 45.6 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Notes: 1. General fertility rate (GFR) refers to total number of live births per 1,000 women aged 15-49.

2. Population estimations for regions 13 and 14 are not available for years 1986 through 1989.

Populations are estimated at June 30, as viewed at December 31 of each year.

RHA boundaries are current as of 2001.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A34 Live Births and Percentage of Live Births by Age Group of Mother, and Age-Specific Fertility Rates, Alberta, 1986 - 2000

| Year | Total | Maternal Age Group (Years) | | | | | | | | | | |
|--|------------------|----------------------------|-------|-------|-------|--------|--------|--------|-------|-------|-----|---------|
| | | <15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | >44 | Unknown |
| Live Births | | | | | | | | | | | | |
| 86 | 43,304 | 26 | 1,064 | 2,068 | 3,132 | 11,414 | 16,767 | 9,480 | 2,267 | 209 | 9 | 0 |
| 87 | 41,707 | 34 | 995 | 2,035 | 3,030 | 10,303 | 16,046 | 9,610 | 2,418 | 258 | 8 | 0 |
| 88 | 41,669 | 34 | 956 | 2,044 | 3,000 | 9,730 | 15,966 | 9,972 | 2,620 | 339 | 8 | 0 |
| 89 | 42,979 | 34 | 1,017 | 2,112 | 3,129 | 9,659 | 16,060 | 10,843 | 2,927 | 312 | 15 | 0 |
| 90 | 42,633 | 36 | 1,051 | 2,206 | 3,257 | 9,351 | 15,525 | 10,874 | 3,228 | 352 | 10 | 0 |
| 91 | 42,369 | 47 | 1,141 | 2,243 | 3,384 | 9,282 | 14,792 | 10,988 | 3,469 | 389 | 18 | 0 |
| 92 | 41,673 | 52 | 1,151 | 2,082 | 3,233 | 8,951 | 14,090 | 11,372 | 3,549 | 420 | 5 | 1 |
| 93 | 39,905 | 36 | 1,087 | 1,892 | 2,979 | 8,639 | 13,234 | 10,955 | 3,615 | 429 | 17 | 1 |
| 94 | 39,459 | 38 | 1,021 | 1,976 | 2,997 | 8,204 | 12,914 | 10,998 | 3,814 | 480 | 13 | 1 |
| 95 | 38,528 | 28 | 1,003 | 1,985 | 2,988 | 8,068 | 12,221 | 10,826 | 3,916 | 466 | 15 | 0 |
| 96 | 37,471 | 31 | 914 | 1,770 | 2,684 | 7,551 | 11,851 | 10,598 | 4,174 | 566 | 16 | 0 |
| 97 | 36,546 | 27 | 828 | 1,696 | 2,524 | 7,350 | 11,689 | 10,042 | 4,237 | 663 | 12 | 2 |
| 98 | 37,527 | 25 | 862 | 1,731 | 2,593 | 7,708 | 11,717 | 10,464 | 4,338 | 646 | 24 | 12 |
| 99 | 37,771 | 23 | 840 | 1,736 | 2,576 | 7,854 | 11,666 | 10,274 | 4,604 | 738 | 34 | 2 |
| 00 | 36,613 | 16 | 737 | 1,680 | 2,417 | 7,468 | 11,285 | 10,029 | 4,616 | 767 | 13 | 2 |
| Percentage of Live Births | | | | | | | | | | | | |
| 86 | 100 | 0.1 | 2.5 | 4.8 | 7.2 | 26.4 | 38.7 | 21.9 | 5.2 | 0.5 | 0.0 | 0.0 |
| 87 | 100 | 0.1 | 2.4 | 4.9 | 7.3 | 24.7 | 38.5 | 23.0 | 5.8 | 0.6 | 0.0 | 0.0 |
| 88 | 100 | 0.1 | 2.3 | 4.9 | 7.2 | 23.4 | 38.3 | 23.9 | 6.3 | 0.8 | 0.0 | 0.0 |
| 89 | 100 | 0.1 | 2.4 | 4.9 | 7.3 | 22.5 | 37.4 | 25.2 | 6.8 | 0.7 | 0.0 | 0.0 |
| 90 | 100 | 0.1 | 2.5 | 5.2 | 7.6 | 21.9 | 36.4 | 25.5 | 7.6 | 0.8 | 0.0 | 0.0 |
| 91 | 100 | 0.1 | 2.7 | 5.3 | 8.0 | 21.9 | 34.9 | 25.9 | 8.2 | 0.9 | 0.0 | 0.0 |
| 92 | 100 | 0.1 | 2.8 | 5.0 | 7.8 | 21.5 | 33.8 | 27.3 | 8.5 | 1.0 | 0.0 | 0.0 |
| 93 | 100 | 0.1 | 2.7 | 4.7 | 7.5 | 21.6 | 33.2 | 27.5 | 9.1 | 1.1 | 0.0 | 0.0 |
| 94 | 100 | 0.1 | 2.6 | 5.0 | 7.6 | 20.8 | 32.7 | 27.9 | 9.7 | 1.2 | 0.0 | 0.0 |
| 95 | 100 | 0.1 | 2.6 | 5.2 | 7.8 | 20.9 | 31.7 | 28.1 | 10.2 | 1.2 | 0.0 | 0.0 |
| 96 | 100 | 0.1 | 2.4 | 4.7 | 7.2 | 20.2 | 31.6 | 28.3 | 11.1 | 1.5 | 0.0 | 0.0 |
| 97 | 100 | 0.1 | 2.3 | 4.6 | 6.9 | 20.1 | 32.0 | 27.5 | 11.6 | 1.8 | 0.0 | 0.0 |
| 98 | 100 | 0.1 | 2.3 | 4.6 | 6.9 | 20.5 | 31.2 | 27.9 | 11.6 | 1.7 | 0.1 | 0.0 |
| 99 | 100 | 0.1 | 2.2 | 4.6 | 6.8 | 20.8 | 30.9 | 27.2 | 12.2 | 2.0 | 0.1 | 0.0 |
| 00 | 100 | 0.0 | 2.0 | 4.6 | 6.6 | 20.4 | 30.8 | 27.4 | 12.6 | 2.1 | 0.0 | 0.0 |
| Age-Specific Fertility Rate (per 1,000 Women in Each Group)^{1,2} | | | | | | | | | | | | |
| | TFR ³ | | | | | | | | | | | |
| 86 | 1,830 | 0.3 | 19.3 | 54.2 | 33.6 | 96.7 | 127.0 | 81.9 | 23.7 | 3.0 | 0.2 | |
| 87 | 1,792 | 0.4 | 18.6 | 54.5 | 32.9 | 92.3 | 123.4 | 81.1 | 25.2 | 3.4 | 0.1 | |
| 88 | 1,806 | 0.4 | 17.3 | 53.6 | 32.8 | 91.1 | 124.2 | 82.1 | 26.7 | 4.2 | 0.1 | |
| 89 | 1,875 | 0.4 | 18.8 | 55.9 | 34.6 | 94.2 | 126.5 | 87.4 | 28.5 | 3.7 | 0.2 | |
| 90 | 1,861 | 0.4 | 19.8 | 57.4 | 36.2 | 92.4 | 124.2 | 85.4 | 29.9 | 3.9 | 0.2 | |
| 91 | 1,861 | 0.5 | 21.9 | 58.4 | 37.7 | 92.3 | 122.2 | 85.0 | 30.6 | 4.1 | 0.3 | |
| 92 | 1,843 | 0.5 | 21.9 | 55.6 | 35.8 | 90.4 | 120.9 | 87.0 | 30.0 | 4.4 | 0.1 | |
| 93 | 1,790 | 0.4 | 20.5 | 51.8 | 32.8 | 88.4 | 119.0 | 83.6 | 29.6 | 4.4 | 0.2 | |
| 94 | 1,805 | 0.4 | 18.8 | 54.8 | 32.6 | 86.1 | 121.8 | 85.0 | 30.6 | 4.7 | 0.2 | |
| 95 | 1,793 | 0.3 | 18.3 | 54.9 | 32.0 | 86.1 | 119.2 | 86.0 | 30.9 | 4.3 | 0.2 | |
| 96 | 1,757 | 0.3 | 16.4 | 48.5 | 28.1 | 81.3 | 117.0 | 87.3 | 32.5 | 5.0 | 0.2 | |
| 97 | 1,707 | 0.3 | 14.7 | 45.7 | 25.7 | 77.3 | 114.9 | 85.4 | 32.4 | 5.6 | 0.1 | |
| 98 | 1,728 | 0.2 | 14.8 | 46.3 | 25.4 | 78.4 | 112.5 | 91.3 | 32.6 | 5.2 | 0.2 | |
| 99 | 1,717 | 0.2 | 14.0 | 45.5 | 24.4 | 76.9 | 110.3 | 91.2 | 34.4 | 5.8 | 0.3 | |
| 00 | 1,660 | 0.1 | 11.8 | 42.4 | 22.3 | 72.1 | 106.5 | 90.4 | 34.8 | 5.8 | 0.1 | |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
 Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness

- Notes:
- Age-specific fertility rate refers to number of live births per 1,000 women in a specific age group.
 - Age-specific fertility rates for age groups <15 and >44 are calculated based on female populations in the 10-14 and 45-49 age groups, respectively.
 - Total fertility rate (TFR) represents the average number of children a woman can expect to have in her lifetime, based on the fertility rates of a given year. TFR is equal to the sum of the age-specific fertility rates (ages 15 to 49). Populations are estimated at June 30, as viewed at December 31 of each year.
- Data include Alberta residents only.
 Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A35 Age-Specific Fertility Rates^{1,2} and Total Fertility Rate by Residence RHA, Alberta, 1998 - 2000

| Residence RHA | TFR ³ | Age Group (Years) | | | | | | | | | |
|----------------|------------------|-------------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|------------|------------|
| | | <15 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | >44 |
| 1998 | | | | | | | | | | | |
| 1 | 2,055 | 0.3 | 18.5 | 49.5 | 30.5 | 101.4 | 145.9 | 97.0 | 31.3 | 4.3 | 0.4 |
| 2 | 1,990 | 0.3 | 15.6 | 48.3 | 28.3 | 106.8 | 139.8 | 93.4 | 25.0 | 4.8 | 0.0 |
| 3 | 1,639 | 0.0 | 11.1 | 45.3 | 24.3 | 65.3 | 102.4 | 94.5 | 35.9 | 5.3 | 0.0 |
| 4 | 1,576 | 0.2 | 8.6 | 31.8 | 17.5 | 58.8 | 96.2 | 97.4 | 38.6 | 6.4 | 0.3 |
| 5 | 1,848 | 0.0 | 9.7 | 35.6 | 19.5 | 93.2 | 145.3 | 85.3 | 20.8 | 5.6 | 0.0 |
| 6 | 1,980 | 0.0 | 16.0 | 56.2 | 31.5 | 102.6 | 142.8 | 89.0 | 27.0 | 2.7 | 0.3 |
| 7 | 1,527 | 0.0 | 6.1 | 35.6 | 17.7 | 72.6 | 109.6 | 78.7 | 24.0 | 2.3 | 0.6 |
| 8 | 1,804 | 0.5 | 15.7 | 45.3 | 26.9 | 86.1 | 133.3 | 82.7 | 28.3 | 3.4 | 0.3 |
| 9 | 1,927 | 0.0 | 22.6 | 53.4 | 33.8 | 102.7 | 142.6 | 79.2 | 23.1 | 4.0 | 0.0 |
| 10 | 1,596 | 0.2 | 13.3 | 38.2 | 23.1 | 66.7 | 102.2 | 88.4 | 33.0 | 5.4 | 0.2 |
| 11 | 2,050 | 0.0 | 17.6 | 49.0 | 29.6 | 106.8 | 154.1 | 88.3 | 25.9 | 4.9 | 0.3 |
| 12 | 2,076 | 0.2 | 20.5 | 68.3 | 39.2 | 108.6 | 148.7 | 89.0 | 26.5 | 3.1 | 0.0 |
| 13 | 1,922 | 0.3 | 20.5 | 64.2 | 37.4 | 114.9 | 125.7 | 77.0 | 24.3 | 5.0 | 0.0 |
| 14 | 2,254 | 0.9 | 26.0 | 82.5 | 47.4 | 117.2 | 170.7 | 87.6 | 21.0 | 7.0 | 0.0 |
| 15 | 2,461 | 3.2 | 48.8 | 68.1 | 56.6 | 159.9 | 138.0 | 107.0 | 27.2 | 3.6 | 0.0 |
| 16 | 1,713 | 0.6 | 14.4 | 59.1 | 32.0 | 98.9 | 105.1 | 79.7 | 21.5 | 5.3 | 0.0 |
| 17 | 3,145 | 0.9 | 37.8 | 146.4 | 80.6 | 208.1 | 172.7 | 107.3 | 48.2 | 12.0 | 0.0 |
| Alberta | 1,728 | 0.2 | 13.8 | 43.7 | 25.4 | 78.4 | 112.5 | 91.3 | 32.6 | 5.2 | 0.2 |
| 1999 | | | | | | | | | | | |
| 1 | 2,070 | 0.2 | 15.1 | 52.0 | 29.7 | 107.9 | 143.6 | 97.0 | 31.8 | 3.8 | 0.2 |
| 2 | 1,938 | 0.3 | 16.5 | 56.9 | 31.9 | 101.5 | 135.1 | 92.2 | 22.7 | 3.9 | 0.3 |
| 3 | 1,560 | 0.4 | 10.9 | 42.1 | 23.4 | 52.1 | 102.1 | 94.6 | 35.1 | 4.7 | 0.0 |
| 4 | 1,556 | 0.1 | 9.4 | 29.7 | 17.2 | 56.4 | 92.9 | 95.7 | 41.5 | 7.0 | 0.4 |
| 5 | 1,821 | 0.4 | 7.5 | 46.8 | 22.6 | 89.6 | 142.4 | 77.2 | 28.8 | 3.6 | 0.0 |
| 6 | 1,992 | 0.4 | 13.5 | 54.7 | 29.3 | 105.3 | 134.7 | 97.7 | 27.0 | 4.2 | 0.2 |
| 7 | 1,540 | 0.0 | 6.4 | 25.7 | 13.9 | 75.8 | 122.1 | 74.0 | 18.6 | 3.0 | 0.6 |
| 8 | 1,822 | 0.0 | 13.9 | 42.5 | 24.8 | 81.8 | 135.0 | 90.9 | 27.6 | 3.9 | 0.3 |
| 9 | 1,980 | 0.5 | 25.4 | 71.1 | 42.6 | 125.9 | 126.8 | 72.3 | 25.6 | 2.8 | 0.0 |
| 10 | 1,588 | 0.3 | 12.4 | 36.5 | 21.9 | 63.9 | 99.9 | 88.8 | 36.0 | 6.7 | 0.3 |
| 11 | 2,122 | 0.0 | 14.8 | 54.1 | 29.7 | 106.4 | 159.9 | 95.8 | 28.0 | 3.9 | 0.6 |
| 12 | 2,069 | 0.5 | 20.7 | 57.3 | 34.5 | 112.2 | 148.7 | 87.7 | 26.7 | 3.9 | 0.3 |
| 13 | 2,034 | 0.0 | 17.0 | 57.1 | 32.5 | 115.2 | 142.8 | 86.9 | 25.4 | 3.9 | 0.4 |
| 14 | 2,045 | 0.0 | 21.7 | 68.8 | 39.9 | 128.1 | 131.7 | 69.2 | 31.0 | 7.7 | 1.3 |
| 15 | 2,259 | 1.5 | 32.4 | 122.8 | 65.8 | 160.1 | 120.6 | 80.1 | 18.4 | 6.8 | 0.0 |
| 16 | 1,687 | 0.0 | 16.9 | 50.6 | 30.2 | 96.3 | 113.9 | 76.6 | 19.5 | 1.0 | 0.0 |
| 17 | 2,921 | 0.9 | 39.0 | 130.7 | 73.2 | 196.9 | 171.1 | 95.9 | 34.1 | 12.9 | 0.0 |
| Alberta | 1,717 | 0.2 | 13.0 | 42.4 | 24.4 | 76.9 | 110.3 | 91.2 | 34.4 | 5.8 | 0.3 |
| 2000 | | | | | | | | | | | |
| 1 | 1,953 | 0.0 | 14.2 | 46.8 | 27.5 | 86.7 | 138.2 | 98.6 | 33.5 | 6.2 | 0.2 |
| 2 | 1,911 | 0.0 | 8.6 | 50.3 | 25.3 | 103.4 | 134.7 | 93.0 | 22.5 | 2.6 | 0.6 |
| 3 | 1,628 | 0.0 | 6.0 | 28.6 | 15.1 | 64.3 | 100.2 | 99.2 | 38.9 | 7.8 | 0.0 |
| 4 | 1,549 | 0.1 | 8.2 | 29.5 | 16.6 | 55.5 | 91.8 | 96.8 | 41.5 | 7.6 | 0.1 |
| 5 | 1,779 | 0.0 | 14.1 | 48.7 | 26.8 | 82.5 | 130.4 | 83.4 | 30.0 | 2.7 | 0.0 |
| 6 | 1,867 | 0.0 | 12.9 | 45.5 | 25.8 | 96.3 | 129.6 | 89.3 | 28.1 | 3.7 | 0.4 |
| 7 | 1,483 | 0.0 | 6.4 | 22.2 | 12.6 | 66.9 | 121.8 | 69.1 | 21.1 | 5.3 | 0.0 |
| 8 | 1,818 | 0.3 | 10.5 | 44.6 | 23.7 | 82.1 | 136.6 | 90.2 | 27.0 | 4.0 | 0.0 |
| 9 | 1,943 | 1.3 | 21.6 | 56.1 | 35.3 | 112.2 | 135.1 | 82.4 | 19.8 | 3.8 | 0.0 |
| 10 | 1,517 | 0.2 | 9.1 | 35.3 | 19.7 | 59.0 | 95.6 | 88.5 | 35.1 | 5.5 | 0.1 |
| 11 | 1,813 | 0.3 | 12.0 | 44.1 | 24.1 | 99.1 | 131.0 | 76.5 | 27.9 | 3.9 | 0.0 |
| 12 | 1,951 | 0.2 | 19.4 | 49.6 | 31.0 | 101.5 | 141.5 | 82.7 | 30.1 | 3.5 | 0.0 |
| 13 | 1,853 | 0.0 | 14.6 | 57.1 | 31.1 | 99.0 | 131.0 | 77.3 | 27.8 | 4.0 | 0.3 |
| 14 | 1,853 | 0.0 | 17.7 | 69.6 | 36.6 | 115.0 | 125.2 | 66.1 | 24.9 | 3.0 | 0.0 |
| 15 | 2,329 | 0.7 | 51.2 | 100.7 | 70.0 | 163.8 | 117.4 | 72.0 | 37.2 | 5.5 | 0.0 |
| 16 | 1,698 | 0.0 | 24.3 | 51.7 | 35.0 | 86.0 | 113.6 | 77.8 | 23.8 | 3.4 | 0.0 |
| 17 | 3,160 | 0.0 | 31.7 | 125.0 | 68.0 | 207.5 | 165.7 | 113.5 | 61.5 | 15.9 | 0.0 |
| Alberta | 1,660 | 0.2 | 11.3 | 39.3 | 22.3 | 72.1 | 106.5 | 90.4 | 34.8 | 5.8 | 0.1 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release. Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

- Notes:
1. Age-specific fertility rate refers to number of live births per 1,000 women in a specific age group.
 2. Age-specific fertility rates for age groups <15 and >44 are calculated based on female populations in the 10-14 and 45-49 age groups, respectively.
 3. Total fertility rate (TFR) represents the average number of children a woman can expect to have in her lifetime, based on the fertility rates of a given year. TFR is equal to the sum of the age-specific fertility rates (aged 15 to 49).
- Populations are estimated at June 30, as viewed at December 31 of each year.
RHA boundaries are current as of April, 2001
Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A36 Total Births by Level of Hospital, Alberta, 1986 - 2000

| Level of Hospital | Year | | | | | | | | | | | | | | |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Level III | | | | | | | | | | | | | | | |
| Royal Alexandra | 5,833 | 5,220 | 4,816 | 4,740 | 4,717 | 4,592 | 4,477 | 4,623 | 4,620 | 4,885 | 5,089 | 4,709 | 4,624 | 4,528 | 4,165 |
| University of Alberta | 2,262 | 2,578 | 3,026 | 2,803 | 2,999 | 2,909 | 2,906 | 2,798 | 2,521 | 1,223 | 4 | 10 | 6 | 10 | 3 |
| Foothills | 3,935 | 3,914 | 3,773 | 3,727 | 3,448 | 3,286 | 3,437 | 3,264 | 3,264 | 4,368 | 4,404 | 4,425 | 4,381 | 4,471 | 4,301 |
| Total | 12,030 | 11,712 | 11,615 | 11,270 | 11,164 | 10,787 | 10,820 | 10,685 | 10,405 | 10,476 | 9,497 | 9,144 | 9,011 | 9,009 | 8,469 |
| Percent of Total Births | 27.4 | 27.7 | 27.4 | 26.0 | 25.7 | 25.0 | 25.6 | 26.4 | 25.9 | 27.0 | 24.4 | 24.8 | 23.6 | 23.4 | 22.7 |
| Level II | | | | | | | | | | | | | | | |
| Grande Prairie ¹ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,023 | 1,005 | 1,032 | 1,078 | 1,123 | 1,066 |
| Charles Camsell | 1,021 | 913 | 934 | 900 | 858 | 756 | 619 | 189 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misericordia | 3,447 | 3,141 | 3,470 | 3,141 | 3,113 | 3,007 | 2,906 | 2,699 | 2,569 | 2,598 | 2,602 | 2,478 | 2,585 | 2,652 | 2,697 |
| Edmonton General/Grey Nuns | 1,829 | 1,781 | 1,924 | 2,551 | 2,727 | 3,095 | 2,877 | 2,944 | 2,843 | 3,148 | 3,576 | 3,378 | 3,529 | 3,599 | 3,614 |
| Calgary General/Peter Lougheed | 3,030 | 2,797 | 2,584 | 3,087 | 3,339 | 3,405 | 3,593 | 3,619 | 3,641 | 3,734 | 3,769 | 3,739 | 3,857 | 3,817 | 4,081 |
| Holy Cross/Rockyview | 3,980 | 3,842 | 3,965 | 4,384 | 4,665 | 4,648 | 4,439 | 4,092 | 4,056 | 3,950 | 3,796 | 3,763 | 4,051 | 4,233 | 4,164 |
| Grace | 2,003 | 2,236 | 2,503 | 2,118 | 1,975 | 1,991 | 1,652 | 1,480 | 1,478 | 87 | 0 | 0 | 0 | 0 | 0 |
| Lethbridge | 1,178 | 1,143 | 1,113 | 1,442 | 1,454 | 1,460 | 1,634 | 1,643 | 1,695 | 1,670 | 1,587 | 1,696 | 1,608 | 1,630 | 1,613 |
| Medicine Hat | 987 | 885 | 909 | 996 | 969 | 923 | 898 | 853 | 831 | 936 | 844 | 909 | 947 | 912 | 918 |
| Red Deer | 1,949 | 1,785 | 1,743 | 1,862 | 1,799 | 1,892 | 1,917 | 1,890 | 1,769 | 1,725 | 1,688 | 1,649 | 1,731 | 1,777 | 1,735 |
| Total | 19,424 | 18,523 | 19,145 | 20,481 | 20,899 | 21,177 | 20,535 | 19,409 | 18,882 | 18,871 | 18,867 | 18,644 | 19,386 | 19,743 | 19,888 |
| Percent of Total Births | 44.2 | 43.8 | 45.1 | 47.3 | 48.2 | 49.1 | 48.7 | 47.9 | 47.0 | 48.6 | 48.4 | 50.5 | 50.8 | 51.2 | 53.2 |
| Level I | | | | | | | | | | | | | | | |
| North | 9,313 | 9,009 | 8,717 | 8,912 | 8,532 | 8,653 | 8,450 | 8,241 | 8,557 | 7,182 | 8,064 | 6,982 | 7,442 | 7,477 | 6,859 |
| South | 2,967 | 2,919 | 2,805 | 2,514 | 2,640 | 2,337 | 2,282 | 2,086 | 2,111 | 2,106 | 2,282 | 1,858 | 1,934 | 1,974 | 1,815 |
| Total | 12,280 | 11,928 | 11,522 | 11,426 | 11,172 | 10,990 | 10,732 | 10,327 | 10,668 | 9,288 | 10,346 | 8,840 | 9,376 | 9,451 | 8,674 |
| Percent of Total Births | 28.0 | 28.2 | 27.1 | 26.4 | 25.7 | 25.5 | 25.4 | 25.5 | 26.5 | 23.9 | 26.6 | 24.0 | 24.6 | 24.5 | 23.2 |
| Out-of-Hospital Births | 182 | 154 | 177 | 151 | 163 | 139 | 116 | 108 | 235 | 202 | 233 | 257 | 379 | 376 | 353 |
| Percent of Total Births | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.9 |
| Alberta | 43,916 | 42,317 | 42,459 | 43,328 | 43,398 | 43,093 | 42,203 | 40,529 | 40,190 | 38,837 | 38,943 | 36,885 | 38,152 | 38,579 | 37,384 |

Source: Statistics reported to the Reproductive Care Committee by Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness.

Note: 1. Grande Prairie was a Level I hospital until 1995. Births from 1986 to 1994 for Grande Prairie are included in Level I North data.

Table A37 Live Births by Birth Weight Categories,
Alberta, 1986 - 2000

| Year | Birth Weight (Grams) | | | | | |
|----------------------------------|----------------------|-------|-------|-------|-------|-------|
| | <500 | <1000 | <1500 | <2500 | ≥4000 | ≥4500 |
| Live Births | | | | | | |
| 86 | 0 | 157 | 349 | 2,375 | 4,810 | 727 |
| 87 | 0 | 154 | 359 | 2,276 | 4,540 | 683 |
| 88 | 0 | 153 | 383 | 2,413 | 4,440 | 583 |
| 89 | 0 | 192 | 399 | 2,527 | 4,703 | 700 |
| 90 | 42 | 178 | 389 | 2,513 | 4,745 | 712 |
| 91 | 27 | 158 | 365 | 2,440 | 4,656 | 651 |
| 92 | 29 | 176 | 382 | 2,434 | 4,766 | 691 |
| 93 | 32 | 151 | 314 | 2,263 | 4,605 | 719 |
| 94 | 41 | 178 | 364 | 2,227 | 4,493 | 640 |
| 95 | 44 | 189 | 371 | 2,308 | 4,372 | 646 |
| 96 | 35 | 184 | 388 | 2,279 | 4,364 | 697 |
| 97 | 34 | 159 | 368 | 2,251 | 4,174 | 635 |
| 98 | 28 | 164 | 367 | 2,328 | 4,633 | 642 |
| 99 | 31 | 184 | 375 | 2,241 | 4,763 | 765 |
| 00 | 47 | 213 | 423 | 2,249 | 4,713 | 779 |
| Percentage of Live Births | | | | | | |
| 86 | 0.00 | 0.36 | 0.81 | 5.48 | 11.11 | 1.68 |
| 87 | 0.00 | 0.37 | 0.86 | 5.46 | 10.89 | 1.64 |
| 88 | 0.00 | 0.37 | 0.92 | 5.79 | 10.66 | 1.40 |
| 89 | 0.00 | 0.45 | 0.93 | 5.88 | 10.94 | 1.63 |
| 90 | 0.10 | 0.42 | 0.91 | 5.89 | 11.13 | 1.67 |
| 91 | 0.06 | 0.37 | 0.86 | 5.76 | 10.99 | 1.54 |
| 92 | 0.07 | 0.42 | 0.92 | 5.84 | 11.44 | 1.66 |
| 93 | 0.08 | 0.38 | 0.79 | 5.67 | 11.54 | 1.80 |
| 94 | 0.10 | 0.45 | 0.92 | 5.64 | 11.39 | 1.62 |
| 95 | 0.11 | 0.49 | 0.96 | 5.99 | 11.35 | 1.68 |
| 96 | 0.09 | 0.49 | 1.04 | 6.08 | 11.65 | 1.86 |
| 97 | 0.09 | 0.44 | 1.01 | 6.16 | 11.42 | 1.74 |
| 98 | 0.07 | 0.44 | 0.98 | 6.20 | 12.35 | 1.71 |
| 99 | 0.08 | 0.49 | 0.99 | 5.93 | 12.61 | 2.03 |
| 00 | 0.13 | 0.58 | 1.16 | 6.14 | 12.87 | 2.13 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A38 Low Birth Weight Rate for Singleton Term Births,
Alberta, 1986 - 2000

| Year | Total Live Births | Live Singleton Term Births | Percent Live Singleton Term Births | Singleton Term Low Birth Weight Births | Singleton Term Low Birth Weight Rate |
|------|-------------------|----------------------------|------------------------------------|--|--------------------------------------|
| 86 | 43,304 | 40,009 | 92.4 | 792 | 2.0 |
| 87 | 41,707 | 38,463 | 92.2 | 726 | 1.9 |
| 88 | 41,669 | 38,379 | 92.1 | 762 | 2.0 |
| 89 | 42,979 | 39,609 | 92.2 | 792 | 2.0 |
| 90 | 42,633 | 39,221 | 92.0 | 811 | 2.1 |
| 91 | 42,369 | 39,033 | 92.1 | 803 | 2.1 |
| 92 | 41,673 | 38,315 | 91.9 | 764 | 2.0 |
| 93 | 39,905 | 36,737 | 92.1 | 733 | 2.0 |
| 94 | 39,459 | 36,308 | 92.0 | 650 | 1.8 |
| 95 | 38,528 | 35,383 | 91.8 | 667 | 1.9 |
| 96 | 37,471 | 34,317 | 91.6 | 650 | 1.9 |
| 97 | 36,546 | 33,447 | 91.5 | 635 | 1.9 |
| 98 | 37,527 | 34,219 | 91.2 | 651 | 1.9 |
| 99 | 37,771 | 34,324 | 90.9 | 541 | 1.6 |
| 00 | 36,613 | 32,998 | 90.1 | 526 | 1.6 |

Source: Vital Statistics, Birth File, Department of Government Services,
January 2002 release.

Note: Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions
and dates of data extraction.

Table A39 Low Birth Weight (<2500 grams) Births by Term/Pre-term and Singleton/Multiple, Alberta, 1986 - 2000

| Year | Total Low Birth Weight (LBW) Births | Term Low Birth Weight Births ¹ | | | | | | Preterm Low Birth Weight Births ¹ | | | | | |
|------|-------------------------------------|---|-----------------|----------|-----------------|-------|-----------------|--|-----------------|----------|-----------------|-------|-----------------|
| | | Singleton | | Multiple | | Total | | Singleton | | Multiple | | Total | |
| | | Cases | % of LBW Births | Cases | % of LBW Births | Cases | % of LBW Births | Cases | % of LBW Births | Cases | % of LBW Births | Cases | % of LBW Births |
| 86 | 2,375 | 792 | 33.3 | 110 | 4.6 | 902 | 38.0 | 1,174 | 49.4 | 297 | 12.5 | 1,471 | 61.9 |
| 87 | 2,276 | 726 | 31.9 | 102 | 4.5 | 828 | 36.4 | 1,152 | 50.6 | 294 | 12.9 | 1,446 | 63.5 |
| 88 | 2,413 | 762 | 31.6 | 87 | 3.6 | 849 | 35.2 | 1,224 | 50.7 | 340 | 14.1 | 1,564 | 64.8 |
| 89 | 2,527 | 792 | 31.3 | 147 | 5.8 | 939 | 37.2 | 1,258 | 49.8 | 329 | 13.0 | 1,587 | 62.8 |
| 90 | 2,513 | 811 | 32.3 | 86 | 3.4 | 897 | 35.7 | 1,243 | 49.5 | 372 | 14.8 | 1,615 | 64.3 |
| 91 | 2,440 | 803 | 32.9 | 119 | 4.9 | 922 | 37.8 | 1,192 | 48.9 | 326 | 13.4 | 1,518 | 62.2 |
| 92 | 2,434 | 764 | 31.4 | 120 | 4.9 | 884 | 36.3 | 1,179 | 48.4 | 368 | 15.1 | 1,547 | 63.6 |
| 93 | 2,263 | 733 | 32.4 | 102 | 4.5 | 835 | 36.9 | 1,133 | 50.1 | 295 | 13.0 | 1,428 | 63.1 |
| 94 | 2,227 | 650 | 29.2 | 114 | 5.1 | 764 | 34.3 | 1,146 | 51.5 | 317 | 14.2 | 1,463 | 65.7 |
| 95 | 2,308 | 667 | 28.9 | 84 | 3.6 | 751 | 32.5 | 1,162 | 50.3 | 395 | 17.1 | 1,557 | 67.5 |
| 96 | 2,279 | 650 | 28.5 | 93 | 4.1 | 743 | 32.6 | 1,144 | 50.2 | 392 | 17.2 | 1,536 | 67.4 |
| 97 | 2,253 | 635 | 28.2 | 93 | 4.1 | 728 | 32.3 | 1,102 | 48.9 | 421 | 18.7 | 1,523 | 67.6 |
| 98 | 2,328 | 651 | 28.0 | 99 | 4.3 | 750 | 32.2 | 1,142 | 49.1 | 436 | 18.7 | 1,578 | 67.8 |
| 99 | 2,241 | 541 | 24.1 | 95 | 4.2 | 636 | 28.4 | 1,190 | 53.1 | 415 | 18.5 | 1,605 | 71.6 |
| 00 | 2,249 | 526 | 23.4 | 104 | 4.6 | 630 | 28.0 | 1,157 | 51.4 | 461 | 20.5 | 1,618 | 71.9 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes: 1. Low birth weight births with unknown gestation or gestation greater than 42 weeks are excluded from these columns.
Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A40 Low Birth Weight (<2500 grams) Live Births and Low Birth Weight Live Birth Rate by Age Group of Mother, Alberta, 1986 - 2000

| Year | Total | Maternal Age Group (Years) | | | | | | Unknown |
|--|-------|----------------------------|-------|-------|-------|-------|-----|---------|
| | | <20 | 20-24 | 25-29 | 30-34 | 35-39 | >39 | |
| Low Birth Weight Live Births | | | | | | | | |
| 86 | 2,375 | 219 | 627 | 860 | 530 | 124 | 15 | 0 |
| 87 | 2,276 | 184 | 600 | 813 | 507 | 157 | 15 | 0 |
| 88 | 2,413 | 202 | 587 | 858 | 562 | 179 | 25 | 0 |
| 89 | 2,527 | 234 | 552 | 932 | 590 | 190 | 29 | 0 |
| 90 | 2,513 | 216 | 566 | 851 | 655 | 200 | 25 | 0 |
| 91 | 2,440 | 236 | 525 | 789 | 657 | 206 | 27 | 0 |
| 92 | 2,434 | 195 | 543 | 815 | 642 | 212 | 27 | 0 |
| 93 | 2,263 | 214 | 499 | 693 | 597 | 232 | 27 | 1 |
| 94 | 2,227 | 202 | 461 | 668 | 611 | 252 | 32 | 1 |
| 95 | 2,308 | 194 | 499 | 687 | 596 | 296 | 36 | 0 |
| 96 | 2,279 | 198 | 494 | 624 | 630 | 294 | 39 | 0 |
| 97 | 2,251 | 192 | 424 | 673 | 588 | 312 | 62 | 0 |
| 98 | 2,328 | 206 | 449 | 650 | 622 | 340 | 59 | 2 |
| 99 | 2,241 | 152 | 450 | 614 | 651 | 316 | 57 | 1 |
| 00 | 2,249 | 171 | 445 | 604 | 600 | 353 | 76 | 0 |
| Low Birth Weight Rate (per 100 Live Births) | | | | | | | | |
| 86 | 5.5 | 6.9 | 5.5 | 5.1 | 5.6 | 5.5 | 6.9 | |
| 87 | 5.5 | 6.0 | 5.8 | 5.1 | 5.3 | 6.5 | 5.6 | |
| 88 | 5.8 | 6.7 | 6.0 | 5.4 | 5.6 | 6.8 | 7.2 | |
| 89 | 5.9 | 7.4 | 5.7 | 5.8 | 5.4 | 6.5 | 8.9 | |
| 90 | 5.9 | 6.6 | 6.1 | 5.5 | 6.0 | 6.2 | 6.9 | |
| 91 | 5.8 | 6.9 | 5.7 | 5.3 | 6.0 | 5.9 | 6.6 | |
| 92 | 5.8 | 5.9 | 6.1 | 5.8 | 5.6 | 6.0 | 6.4 | |
| 93 | 5.7 | 7.1 | 5.8 | 5.2 | 5.4 | 6.4 | 6.1 | |
| 94 | 5.6 | 6.7 | 5.6 | 5.2 | 5.6 | 6.6 | 6.5 | |
| 95 | 6.0 | 6.4 | 6.2 | 5.6 | 5.5 | 7.6 | 7.5 | |
| 96 | 6.1 | 7.3 | 6.5 | 5.3 | 5.9 | 7.0 | 6.7 | |
| 97 | 6.2 | 7.5 | 5.8 | 5.8 | 5.9 | 7.4 | 9.2 | |
| 98 | 6.2 | 7.9 | 5.8 | 5.5 | 5.9 | 7.8 | 8.8 | |
| 99 | 5.9 | 5.8 | 5.7 | 5.3 | 6.3 | 6.9 | 7.4 | |
| 00 | 6.1 | 7.0 | 6.0 | 5.4 | 6.0 | 7.6 | 9.7 | |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A41 Low Birth Weight (<2500 grams) Births by Residence and Facility RHA,
Alberta, 1986 - 2000

| RHA | Year | | | | | | | | | | | | | | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Residence | | | | | | | | | | | | | | | |
| 1 | 128 | 126 | 120 | 129 | 161 | 127 | 120 | 128 | 133 | 129 | 123 | 121 | 103 | 128 | 118 |
| 2 | 51 | 53 | 60 | 63 | 59 | 62 | 54 | 61 | 45 | 77 | 63 | 61 | 72 | 75 | 59 |
| 3 | 46 | 33 | 54 | 35 | 64 | 58 | 49 | 62 | 55 | 44 | 37 | 68 | 49 | 59 | 57 |
| 4 | 701 | 696 | 748 | 795 | 838 | 760 | 741 | 695 | 675 | 752 | 748 | 752 | 804 | 728 | 767 |
| 5 | 24 | 33 | 42 | 36 | 36 | 35 | 30 | 32 | 32 | 42 | 30 | 31 | 34 | 23 | 47 |
| 6 | 171 | 165 | 144 | 187 | 151 | 151 | 159 | 165 | 143 | 160 | 177 | 142 | 164 | 145 | 128 |
| 7 | 75 | 72 | 66 | 78 | 68 | 67 | 58 | 58 | 53 | 58 | 51 | 65 | 49 | 59 | 56 |
| 8 | 61 | 55 | 66 | 72 | 61 | 72 | 71 | 62 | 68 | 72 | 49 | 59 | 66 | 85 | 49 |
| 9 | 41 | 35 | 32 | 40 | 39 | 42 | 41 | 35 | 47 | 47 | 44 | 41 | 35 | 32 | 31 |
| 10 | 739 | 708 | 720 | 741 | 718 | 739 | 747 | 625 | 642 | 637 | 640 | 600 | 636 | 583 | 611 |
| 11 | 77 | 64 | 94 | 78 | 66 | 87 | 98 | 68 | 81 | 63 | 69 | 61 | 64 | 70 | 73 |
| 12 | 90 | 82 | 82 | 80 | 74 | 72 | 81 | 91 | 76 | 73 | 71 | 82 | 70 | 70 | 74 |
| 13 | 70 | 54 | 70 | 85 | 68 | 65 | 73 | 63 | 64 | 66 | 64 | 52 | 76 | 74 | 69 |
| 14 | 19 | 19 | 26 | 18 | 15 | 24 | 19 | 21 | 19 | 20 | 31 | 25 | 15 | 16 | 19 |
| 15 | 27 | 27 | 25 | 32 | 29 | 30 | 30 | 35 | 37 | 28 | 34 | 27 | 34 | 26 | 33 |
| 16 | 32 | 34 | 40 | 34 | 37 | 28 | 37 | 36 | 28 | 21 | 30 | 34 | 23 | 36 | 34 |
| 17 | 23 | 20 | 24 | 24 | 29 | 21 | 26 | 26 | 29 | 19 | 18 | 30 | 33 | 32 | 23 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Alberta | 2,375 | 2,276 | 2,413 | 2,527 | 2,513 | 2,440 | 2,434 | 2,263 | 2,227 | 2,308 | 2,279 | 2,251 | 2,328 | 2,241 | 2,249 |
| Facility | | | | | | | | | | | | | | | |
| 1 | 126 | 118 | 105 | 122 | 151 | 120 | 105 | 106 | 129 | 118 | 112 | 105 | 101 | 118 | 106 |
| 2 | 43 | 34 | 54 | 44 | 37 | 45 | 41 | 53 | 35 | 66 | 44 | 50 | 52 | 53 | 41 |
| 3 | 16 | 12 | 12 | 11 | 21 | 16 | 10 | 14 | 12 | 11 | 6 | 17 | 10 | 11 | 7 |
| 4 | 774 | 783 | 846 | 877 | 954 | 866 | 844 | 817 | 776 | 864 | 847 | 875 | 917 | 855 | 921 |
| 5 | 9 | 13 | 7 | 14 | 15 | 12 | 7 | 13 | 5 | 7 | 7 | 6 | 5 | 4 | 6 |
| 6 | 132 | 128 | 129 | 152 | 117 | 120 | 126 | 117 | 121 | 119 | 136 | 106 | 121 | 114 | 96 |
| 7 | 29 | 38 | 24 | 28 | 24 | 26 | 27 | 26 | 21 | 19 | 18 | 18 | 13 | 14 | 12 |
| 8 | 15 | 17 | 17 | 23 | 15 | 21 | 19 | 17 | 17 | 9 | 6 | 9 | 11 | 14 | 8 |
| 9 | 16 | 20 | 13 | 17 | 13 | 19 | 13 | 15 | 16 | 18 | 23 | 21 | 14 | 16 | 20 |
| 10 | 1,053 | 966 | 1,032 | 1,072 | 1,014 | 1,015 | 1,075 | 942 | 927 | 920 | 946 | 909 | 954 | 897 | 877 |
| 11 | 27 | 10 | 25 | 26 | 21 | 31 | 21 | 15 | 23 | 17 | 11 | 10 | 7 | 13 | 19 |
| 12 | 35 | 34 | 30 | 29 | 26 | 29 | 35 | 31 | 38 | 33 | 27 | 26 | 26 | 20 | 25 |
| 13 | 41 | 30 | 44 | 40 | 40 | 49 | 46 | 35 | 42 | 62 | 41 | 38 | 48 | 48 | 58 |
| 14 | 13 | 14 | 19 | 14 | 7 | 18 | 11 | 14 | 17 | 13 | 14 | 13 | 4 | 10 | 9 |
| 15 | 10 | 20 | 9 | 17 | 16 | 13 | 11 | 8 | 13 | 5 | 9 | 10 | 7 | 9 | 7 |
| 16 | 25 | 30 | 32 | 28 | 26 | 25 | 27 | 27 | 22 | 17 | 20 | 23 | 18 | 32 | 24 |
| 17 | 11 | 9 | 15 | 13 | 16 | 15 | 16 | 13 | 13 | 10 | 12 | 15 | 20 | 13 | 13 |
| Alberta | 2,375 | 2,276 | 2,413 | 2,527 | 2,513 | 2,440 | 2,434 | 2,263 | 2,227 | 2,308 | 2,279 | 2,251 | 2,328 | 2,241 | 2,249 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes: RHA boundaries are current as of April, 2001.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A42 Low Birth Weight, Pre-term, High Birth Weight, and Multiple Births
by Residence and Facility RHA, Alberta, 1998 - 2000 Combined

| RHA | Total Live Births | Low Birth Weight | | High Birth Weight | | Preterm | | Multiple Birth | |
|------------------|-------------------|------------------|------------|-------------------|-------------|--------------|------------|----------------|------------|
| | | Cases | % | Cases | % | Cases | % | Cases | % |
| Residence | | | | | | | | | |
| 1 | 6,099 | 349 | 5.7 | 900 | 14.8 | 430 | 7.1 | 175 | 2.9 |
| 2 | 3,681 | 206 | 5.6 | 458 | 12.4 | 253 | 6.9 | 108 | 2.9 |
| 3 | 2,659 | 165 | 6.2 | 293 | 11.0 | 184 | 6.9 | 65 | 2.4 |
| 4 | 35,018 | 2,299 | 6.6 | 3,793 | 10.8 | 2,855 | 8.2 | 1,022 | 2.9 |
| 5 | 1,889 | 104 | 5.5 | 259 | 13.7 | 154 | 8.2 | 54 | 2.9 |
| 6 | 7,460 | 437 | 5.9 | 1,070 | 14.3 | 540 | 7.2 | 213 | 2.9 |
| 7 | 2,918 | 164 | 5.6 | 369 | 12.6 | 211 | 7.2 | 98 | 3.4 |
| 8 | 3,427 | 200 | 5.8 | 505 | 14.7 | 259 | 7.6 | 119 | 3.5 |
| 9 | 1,895 | 98 | 5.2 | 275 | 14.5 | 119 | 6.3 | 46 | 2.4 |
| 10 | 29,451 | 1,830 | 6.2 | 3,572 | 12.1 | 2,583 | 8.8 | 805 | 2.7 |
| 11 | 3,638 | 207 | 5.7 | 571 | 15.7 | 270 | 7.4 | 81 | 2.2 |
| 12 | 3,979 | 214 | 5.4 | 620 | 15.6 | 314 | 7.9 | 98 | 2.5 |
| 13 | 3,935 | 219 | 5.6 | 541 | 13.7 | 233 | 5.9 | 110 | 2.8 |
| 14 | 1,081 | 50 | 4.6 | 160 | 14.8 | 63 | 5.8 | 11 | 1.0 |
| 15 | 1,479 | 93 | 6.3 | 211 | 14.3 | 130 | 8.8 | 43 | 2.9 |
| 16 | 1,769 | 93 | 5.3 | 267 | 15.1 | 127 | 7.2 | 45 | 2.5 |
| 17 | 1,519 | 88 | 5.8 | 243 | 16.0 | 118 | 7.8 | 36 | 2.4 |
| Unknown | 14 | 2 | | 2 | | 1 | | | |
| Alberta | 111,911 | 6,818 | 6.1 | 14,109 | 12.6 | 8,844 | 7.9 | 3,129 | 2.8 |
| Facility | | | | | | | | | |
| 1 | 6,188 | 325 | 5.0 | 903 | 14.6 | 401 | 6.3 | 167 | 2.7 |
| 2 | 3,472 | 146 | 6.2 | 457 | 13.2 | 188 | 6.6 | 87 | 2.5 |
| 3 | 1,683 | 28 | 8.5 | 192 | 11.4 | 35 | 3.1 | 2 | 0.1 |
| 4 | 37,258 | 2,693 | 6.5 | 4,043 | 10.9 | 3,328 | 8.4 | 1,212 | 3.3 |
| 5 | 773 | 15 | 12.6 | 102 | 13.2 | 19 | 2.6 | 0 | - |
| 6 | 7,392 | 331 | 6.7 | 1,072 | 14.5 | 423 | 5.3 | 186 | 2.5 |
| 7 | 2,314 | 39 | 6.2 | 324 | 14.0 | 52 | 2.7 | 16 | 0.7 |
| 8 | 1,231 | 33 | 15.6 | 156 | 12.7 | 43 | 4.3 | 22 | 1.8 |
| 9 | 1,719 | 50 | 5.7 | 251 | 14.6 | 63 | 3.3 | 26 | 1.5 |
| 10 | 36,262 | 2,728 | 5.2 | 4,505 | 12.4 | 3,752 | 9.9 | 1,238 | 3.4 |
| 11 | 1,620 | 39 | 10.7 | 256 | 15.8 | 41 | 2.4 | 6 | 0.4 |
| 12 | 3,053 | 71 | 7.1 | 505 | 16.5 | 99 | 2.1 | 15 | 0.5 |
| 13 | 3,742 | 154 | 6.0 | 542 | 14.5 | 176 | 4.1 | 96 | 2.6 |
| 14 | 1,075 | 23 | 3.5 | 166 | 15.4 | 31 | 2.3 | 4 | 0.4 |
| 15 | 1,112 | 23 | 8.7 | 162 | 14.6 | 35 | 1.8 | 4 | 0.4 |
| 16 | 1,731 | 74 | 3.9 | 264 | 15.3 | 99 | 5.5 | 38 | 2.2 |
| 17 | 1,281 | 46 | 7.2 | 208 | 16.2 | 59 | 5.3 | 10 | 0.8 |
| Unknown | 5 | | | 1 | | | | | |
| Alberta | 111,911 | 6,818 | 6.1 | 14,109 | 12.6 | 8,844 | 7.9 | 3,129 | 2.8 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: RHA boundaries are current as of April, 2001.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A43 Singleton Birth Small or Large for Gestational Age, High Birth Weight, and Mean Birth Weight, Alberta, 1986 - 2000

| Year | Total Live Births | Live Singleton Births | Small for Gestational Age Live Singleton Births (SGA) | SGA rate (per 100 Live Singleton Births) | Large for Gestational Age Births (LGA) | LGA rate (per 100 Live Singleton Births) | High Birth Weight Birth (HBW; $\geq 4,000$ grams) | HBW rate (per 100 total live births) | Mean Birth Weight for Live Singleton Term Birth (grams) | Mean Birth Weight for Low Birth Weight Live Birth (grams) |
|------|-------------------|-----------------------|---|--|--|--|---|--------------------------------------|---|---|
| 86 | 43,304 | 42,495 | 4,648 | 10.9 | 4,070 | 9.6 | 4,810 | 11.1 | 3,436 | 2,022 |
| 87 | 41,707 | 40,844 | 4,360 | 10.7 | 3,924 | 9.6 | 4,540 | 10.9 | 3,438 | 1,999 |
| 88 | 41,669 | 40,849 | 4,302 | 10.5 | 3,980 | 9.7 | 4,440 | 10.7 | 3,435 | 2,001 |
| 89 | 42,979 | 42,063 | 4,443 | 10.6 | 4,008 | 9.5 | 4,703 | 10.9 | 3,440 | 2,010 |
| 90 | 42,633 | 41,764 | 4,345 | 10.4 | 4,122 | 9.9 | 4,745 | 11.1 | 3,441 | 1,995 |
| 91 | 42,369 | 41,491 | 4,264 | 10.3 | 4,039 | 9.7 | 4,656 | 11.0 | 3,441 | 2,017 |
| 92 | 41,673 | 40,725 | 3,964 | 9.7 | 4,349 | 10.7 | 4,766 | 11.4 | 3,450 | 2,008 |
| 93 | 39,905 | 39,045 | 3,813 | 9.8 | 3,964 | 10.2 | 4,605 | 11.5 | 3,455 | 2,027 |
| 94 | 39,459 | 38,589 | 3,651 | 9.5 | 3,934 | 10.2 | 4,493 | 11.4 | 3,458 | 1,986 |
| 95 | 38,528 | 37,628 | 3,712 | 9.9 | 3,878 | 10.3 | 4,372 | 11.3 | 3,450 | 1,983 |
| 96 | 37,471 | 36,584 | 3,356 | 9.2 | 4,013 | 11.0 | 4,364 | 11.6 | 3,461 | 1,989 |
| 97 | 36,546 | 35,614 | 3,348 | 9.4 | 3,745 | 10.5 | 4,174 | 11.4 | 3,460 | 1,991 |
| 98 | 37,527 | 36,525 | 3,297 | 9.0 | 4,169 | 11.4 | 4,633 | 12.3 | 3,471 | 1,993 |
| 99 | 37,771 | 36,742 | 3,022 | 8.2 | 4,275 | 11.6 | 4,763 | 12.6 | 3,486 | 1,973 |
| 00 | 36,613 | 35,515 | 2,792 | 7.9 | 4,382 | 12.3 | 4,713 | 12.9 | 3,491 | 1,949 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A44 Small for Gestational Age (SGA) and Large for Gestational Age (LGA) Rates for Singleton Births by Residence RHA, Alberta, 1998 - 2000
Combined

| Residence RHA | Live Singleton Births | SGA | | LGA | |
|------------------|-----------------------------|--------------|------------|---------------|-------------|
| | | Cases | Rate | Cases | Rate |
| Residence | | | | | |
| 1 | 5,924 | 420 | 7.1 | 824 | 13.9 |
| 2 | 3,573 | 340 | 9.5 | 375 | 10.5 |
| 3 | 2,594 | 223 | 8.6 | 268 | 10.3 |
| 4 | 33,996 | 3,164 | 9.3 | 3,364 | 9.9 |
| 5 | 1,835 | 163 | 8.9 | 219 | 11.9 |
| 6 | 7,247 | 563 | 7.8 | 952 | 13.1 |
| 7 | 2,820 | 217 | 7.7 | 333 | 11.8 |
| 8 | 3,308 | 231 | 7.0 | 468 | 14.1 |
| 9 | 1,849 | 158 | 8.5 | 260 | 14.1 |
| 10 | 28,646 | 2,382 | 8.3 | 3,430 | 12.0 |
| 11 | 3,557 | 245 | 6.9 | 533 | 15.0 |
| 12 | 3,881 | 242 | 6.2 | 560 | 14.4 |
| 13 | 3,825 | 287 | 7.5 | 430 | 11.2 |
| 14 | 1,070 | 84 | 7.9 | 147 | 13.7 |
| 15 | 1,436 | 125 | 8.7 | 196 | 13.6 |
| 16 | 1,724 | 126 | 7.3 | 244 | 14.2 |
| 17 | 1,483 | 139 | 9.4 | 221 | 14.9 |
| Unknown | 14 | 2 | | 2 | |
| Alberta | 108,782 | 9,111 | 8.4 | 12,826 | 11.8 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: RHA boundaries are current as of April, 2001.
Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A45 High Birth Weight ($\geq 4,000$ grams) Rate by Maternal Age Group, Alberta, 1986 - 2000

| Year | Total | Maternal Age Group (Years) | | | | | | Unknown |
|---|-------|----------------------------|-------|-------|-------|-------|------|---------|
| | | <20 | 20-24 | 25-29 | 30-34 | 35-39 | >39 | |
| High Birth Weight Live Births | | | | | | | | |
| 86 | 4,810 | 277 | 1,142 | 1,862 | 1,194 | 302 | 33 | 0 |
| 87 | 4,540 | 287 | 1,009 | 1,777 | 1,116 | 311 | 40 | 0 |
| 88 | 4,440 | 257 | 967 | 1,687 | 1,159 | 329 | 41 | 0 |
| 89 | 4,703 | 298 | 917 | 1,771 | 1,315 | 369 | 33 | 0 |
| 90 | 4,745 | 302 | 959 | 1,694 | 1,330 | 401 | 59 | 0 |
| 91 | 4,656 | 347 | 940 | 1,581 | 1,290 | 440 | 58 | 0 |
| 92 | 4,766 | 340 | 945 | 1,612 | 1,353 | 459 | 57 | 0 |
| 93 | 4,605 | 315 | 919 | 1,504 | 1,365 | 439 | 63 | 0 |
| 94 | 4,493 | 310 | 844 | 1,480 | 1,342 | 462 | 55 | 0 |
| 95 | 4,372 | 280 | 807 | 1,448 | 1,305 | 472 | 60 | 0 |
| 96 | 4,364 | 255 | 821 | 1,401 | 1,306 | 503 | 78 | 0 |
| 97 | 4,174 | 249 | 764 | 1,353 | 1,227 | 507 | 74 | 0 |
| 98 | 4,633 | 274 | 819 | 1,518 | 1,373 | 554 | 93 | 2 |
| 99 | 4,763 | 236 | 924 | 1,531 | 1,363 | 599 | 110 | 0 |
| 00 | 4,713 | 247 | 894 | 1,462 | 1,408 | 602 | 100 | 0 |
| High Birth Weight Rate (per 100 Live Births) | | | | | | | | |
| 86 | 11.1 | 8.8 | 10.0 | 11.1 | 12.6 | 13.3 | 15.1 | |
| 87 | 10.9 | 9.4 | 9.8 | 11.1 | 11.6 | 12.9 | 15.0 | |
| 88 | 10.7 | 8.5 | 9.9 | 10.6 | 11.6 | 12.6 | 11.8 | |
| 89 | 10.9 | 9.4 | 9.5 | 11.0 | 12.1 | 12.6 | 10.1 | |
| 90 | 11.1 | 9.2 | 10.3 | 10.9 | 12.2 | 12.4 | 16.3 | |
| 91 | 11.0 | 10.1 | 10.1 | 10.7 | 11.7 | 12.7 | 14.3 | |
| 92 | 11.4 | 10.4 | 10.6 | 11.4 | 11.9 | 12.9 | 13.4 | |
| 93 | 11.5 | 10.4 | 10.6 | 11.4 | 12.5 | 12.1 | 14.1 | |
| 94 | 11.4 | 10.2 | 10.3 | 11.5 | 12.2 | 12.1 | 11.2 | |
| 95 | 11.3 | 9.3 | 10.0 | 11.8 | 12.1 | 12.1 | 12.5 | |
| 96 | 11.6 | 9.4 | 10.9 | 11.8 | 12.3 | 12.1 | 13.4 | |
| 97 | 11.4 | 9.8 | 10.4 | 11.6 | 12.2 | 12.0 | 11.0 | |
| 98 | 12.3 | 10.5 | 10.6 | 13.0 | 13.1 | 12.8 | 13.9 | |
| 99 | 12.6 | 9.1 | 11.8 | 13.1 | 13.3 | 13.0 | 14.2 | |
| 00 | 12.9 | 10.2 | 12.0 | 13.0 | 14.0 | 13.0 | 12.8 | |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A46 High Birth Weight Births ($\geq 4,000$ grams) by Residence and Facility RHA, Alberta, 1986 - 2000

| RHA | Year | | | | | | | | | | | | | | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Residence | | | | | | | | | | | | | | | |
| 1 | 303 | 288 | 217 | 277 | 274 | 257 | 291 | 293 | 285 | 253 | 267 | 240 | 293 | 284 | 323 |
| 2 | 147 | 153 | 150 | 155 | 146 | 129 | 140 | 133 | 124 | 174 | 151 | 155 | 142 | 147 | 169 |
| 3 | 75 | 79 | 83 | 79 | 91 | 74 | 105 | 81 | 97 | 94 | 81 | 79 | 96 | 99 | 98 |
| 4 | 1,122 | 1,149 | 1,132 | 1,200 | 1,215 | 1,207 | 1,172 | 1,097 | 1,143 | 1,144 | 1,107 | 1,103 | 1,229 | 1,293 | 1,271 |
| 5 | 101 | 85 | 84 | 80 | 102 | 83 | 99 | 84 | 88 | 91 | 91 | 79 | 88 | 92 | 79 |
| 6 | 335 | 300 | 316 | 334 | 307 | 340 | 329 | 376 | 313 | 293 | 308 | 324 | 368 | 346 | 356 |
| 7 | 194 | 161 | 183 | 154 | 147 | 146 | 152 | 143 | 142 | 122 | 126 | 123 | 139 | 117 | 113 |
| 8 | 155 | 137 | 126 | 150 | 137 | 141 | 169 | 139 | 128 | 171 | 166 | 150 | 170 | 170 | 165 |
| 9 | 109 | 116 | 93 | 118 | 133 | 102 | 140 | 102 | 111 | 97 | 79 | 68 | 75 | 109 | 91 |
| 10 | 1,390 | 1,200 | 1,268 | 1,363 | 1,334 | 1,339 | 1,271 | 1,272 | 1,184 | 1,146 | 1,103 | 1,080 | 1,178 | 1,217 | 1,177 |
| 11 | 187 | 180 | 180 | 145 | 197 | 187 | 177 | 197 | 196 | 174 | 174 | 150 | 194 | 190 | 187 |
| 12 | 203 | 214 | 209 | 195 | 225 | 195 | 233 | 230 | 204 | 171 | 230 | 191 | 214 | 210 | 196 |
| 13 | 174 | 175 | 158 | 164 | 145 | 161 | 174 | 183 | 177 | 166 | 187 | 153 | 178 | 188 | 175 |
| 14 | 59 | 67 | 43 | 55 | 56 | 63 | 56 | 44 | 61 | 54 | 60 | 56 | 57 | 55 | 48 |
| 15 | 54 | 67 | 62 | 67 | 75 | 79 | 73 | 77 | 77 | 62 | 66 | 63 | 64 | 82 | 65 |
| 16 | 141 | 96 | 91 | 109 | 97 | 91 | 105 | 86 | 90 | 81 | 98 | 75 | 89 | 75 | 103 |
| 17 | 61 | 73 | 45 | 58 | 64 | 62 | 80 | 68 | 73 | 79 | 70 | 85 | 58 | 88 | 97 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Alberta | 4,810 | 4,540 | 4,440 | 4,703 | 4,745 | 4,656 | 4,766 | 4,605 | 4,493 | 4,372 | 4,364 | 4,174 | 4,633 | 4,763 | 4,713 |
| Facility | | | | | | | | | | | | | | | |
| 1 | 291 | 284 | 223 | 276 | 266 | 247 | 288 | 291 | 285 | 259 | 260 | 241 | 297 | 282 | 324 |
| 2 | 150 | 149 | 139 | 150 | 145 | 128 | 133 | 129 | 123 | 168 | 147 | 149 | 140 | 150 | 167 |
| 3 | 50 | 48 | 42 | 35 | 56 | 43 | 58 | 48 | 52 | 59 | 51 | 49 | 65 | 63 | 64 |
| 4 | 1,204 | 1,224 | 1,210 | 1,291 | 1,305 | 1,283 | 1,265 | 1,170 | 1,230 | 1,231 | 1,190 | 1,186 | 1,302 | 1,384 | 1,357 |
| 5 | 47 | 46 | 46 | 35 | 52 | 49 | 46 | 39 | 42 | 46 | 51 | 35 | 37 | 32 | 33 |
| 6 | 336 | 311 | 317 | 337 | 312 | 346 | 355 | 377 | 324 | 293 | 298 | 309 | 368 | 358 | 346 |
| 7 | 188 | 146 | 172 | 142 | 129 | 134 | 130 | 133 | 132 | 115 | 109 | 116 | 118 | 106 | 100 |
| 8 | 82 | 71 | 59 | 72 | 56 | 66 | 64 | 58 | 49 | 50 | 43 | 60 | 49 | 54 | 53 |
| 9 | 101 | 93 | 66 | 82 | 92 | 68 | 94 | 78 | 81 | 85 | 72 | 68 | 76 | 93 | 82 |
| 10 | 1,641 | 1,433 | 1,531 | 1,636 | 1,646 | 1,628 | 1,605 | 1,596 | 1,486 | 1,443 | 1,407 | 1,337 | 1,494 | 1,542 | 1,469 |
| 11 | 98 | 102 | 98 | 82 | 100 | 92 | 73 | 83 | 85 | 61 | 86 | 69 | 87 | 77 | 92 |
| 12 | 156 | 177 | 170 | 150 | 177 | 151 | 189 | 174 | 154 | 139 | 186 | 142 | 177 | 169 | 159 |
| 13 | 164 | 163 | 157 | 156 | 142 | 153 | 176 | 182 | 180 | 175 | 184 | 159 | 182 | 181 | 179 |
| 14 | 58 | 72 | 42 | 59 | 62 | 76 | 56 | 54 | 74 | 55 | 62 | 63 | 61 | 54 | 51 |
| 15 | 50 | 60 | 45 | 40 | 58 | 53 | 65 | 51 | 46 | 50 | 56 | 44 | 48 | 61 | 53 |
| 16 | 141 | 95 | 82 | 105 | 96 | 89 | 105 | 86 | 91 | 77 | 96 | 75 | 87 | 76 | 101 |
| 17 | 53 | 66 | 41 | 55 | 51 | 50 | 64 | 56 | 59 | 66 | 66 | 72 | 45 | 81 | 82 |
| Unknown | | | | | | | | | | | | | | | 1 |
| Alberta | 4,810 | 4,540 | 4,440 | 4,703 | 4,745 | 4,656 | 4,766 | 4,605 | 4,493 | 4,372 | 4,364 | 4,174 | 4,633 | 4,763 | 4,713 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes: RHA boundaries are current as of April, 2001.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A47 Pre-term (<37 Weeks Gestation) Births by LBW/non-LBW
and Singleton/Multiple, Alberta, 1986 - 2000

| Year | Total Preterm Births | Low Birth Weight Preterm Births ¹ | | | | | | Non-Low Birth Weight Preterm Births ¹ | | | | | |
|------|----------------------------|--|---------------------------|----------|---------------------------|-------|---------------------------|--|---------------------------|----------|---------------------------|-------|---------------------------|
| | | Singleton | | Multiple | | Total | | Singleton | | Multiple | | Total | |
| | | Cases | % of Preterm Births | Cases | % of Preterm Births | Cases | % of Preterm Births | Cases | % of Preterm Births | Cases | % of Preterm Births | Cases | % of Preterm Births |
| 86 | 2,741 | 1,174 | 42.8 | 297 | 10.8 | 1,471 | 53.7 | 1,183 | 43.2 | 86 | 3.1 | 1,269 | 46.3 |
| 87 | 2,666 | 1,152 | 43.2 | 294 | 11.0 | 1,446 | 54.2 | 1,136 | 42.6 | 83 | 3.1 | 1,219 | 45.7 |
| 88 | 2,857 | 1,224 | 42.8 | 340 | 11.9 | 1,564 | 54.7 | 1,186 | 41.5 | 107 | 3.7 | 1,293 | 45.3 |
| 89 | 2,830 | 1,258 | 44.5 | 329 | 11.6 | 1,587 | 56.1 | 1,145 | 40.5 | 98 | 3.5 | 1,243 | 43.9 |
| 90 | 2,956 | 1,243 | 42.1 | 372 | 12.6 | 1,615 | 54.6 | 1,250 | 42.3 | 90 | 3.0 | 1,340 | 45.3 |
| 91 | 2,812 | 1,192 | 42.4 | 326 | 11.6 | 1,518 | 54.0 | 1,199 | 42.6 | 94 | 3.3 | 1,293 | 46.0 |
| 92 | 2,819 | 1,179 | 41.8 | 368 | 13.1 | 1,547 | 54.9 | 1,186 | 42.1 | 86 | 3.1 | 1,272 | 45.1 |
| 93 | 2,647 | 1,133 | 42.8 | 295 | 11.1 | 1,428 | 53.9 | 1,132 | 42.8 | 87 | 3.3 | 1,219 | 46.1 |
| 94 | 2,674 | 1,146 | 42.9 | 317 | 11.9 | 1,463 | 54.7 | 1,108 | 41.4 | 103 | 3.9 | 1,211 | 45.3 |
| 95 | 2,707 | 1,162 | 42.9 | 395 | 14.6 | 1,557 | 57.5 | 1,049 | 38.8 | 100 | 3.7 | 1,149 | 42.4 |
| 96 | 2,769 | 1,144 | 41.3 | 392 | 14.2 | 1,536 | 55.5 | 1,113 | 40.2 | 119 | 4.3 | 1,232 | 44.5 |
| 97 | 2,655 | 1,102 | 41.5 | 421 | 15.9 | 1,523 | 57.4 | 1,041 | 39.2 | 91 | 3.4 | 1,132 | 42.6 |
| 98 | 2,812 | 1,142 | 40.6 | 436 | 15.5 | 1,578 | 56.1 | 1,136 | 40.4 | 98 | 3.5 | 1,234 | 43.9 |
| 99 | 2,936 | 1,190 | 40.5 | 415 | 14.1 | 1,605 | 54.7 | 1,203 | 41.0 | 128 | 4.4 | 1,331 | 45.3 |
| 00 | 3,096 | 1,157 | 37.4 | 461 | 14.9 | 1,618 | 52.3 | 1,327 | 42.9 | 150 | 4.8 | 1,477 | 47.7 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes: 1. Preterm births with unknown gestation or unknown birth weight are excluded from these columns.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A48 Singleton and Multiple Pre-term Birth Rates,
Alberta, 1986 - 2000

| Year | Total Live Singleton Births | Live Singleton Pre-term Births | Singleton Pre-term Birth Rate ¹ | Total live multiple births | Live Multiple Pre-term Births | Multiple Pre-term Birth Rate ² |
|------|-----------------------------|--------------------------------|--|----------------------------|-------------------------------|---|
| 86 | 42,495 | 2,358 | 5.5 | 809 | 383 | 47.3 |
| 87 | 40,844 | 2,288 | 5.6 | 863 | 377 | 43.7 |
| 88 | 40,849 | 2,410 | 5.9 | 820 | 447 | 54.5 |
| 89 | 42,063 | 2,403 | 5.7 | 916 | 427 | 46.6 |
| 90 | 41,764 | 2,493 | 6.0 | 869 | 463 | 53.3 |
| 91 | 41,491 | 2,391 | 5.8 | 878 | 420 | 47.8 |
| 92 | 40,725 | 2,365 | 5.8 | 948 | 454 | 47.9 |
| 93 | 39,045 | 2,265 | 5.8 | 860 | 382 | 44.4 |
| 94 | 38,589 | 2,254 | 5.8 | 870 | 420 | 48.3 |
| 95 | 37,628 | 2,211 | 5.9 | 900 | 495 | 55.0 |
| 96 | 36,584 | 2,257 | 6.2 | 887 | 511 | 57.6 |
| 97 | 35,614 | 2,143 | 6.0 | 932 | 512 | 54.9 |
| 98 | 36,525 | 2,278 | 6.2 | 1,002 | 534 | 53.3 |
| 99 | 36,742 | 2,393 | 6.5 | 1,029 | 543 | 52.8 |
| 00 | 35,515 | 2,485 | 7.0 | 1,098 | 611 | 55.6 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002.

Notes: 1. Singleton pre-term birth rate is per 100 live singleton births.

2. Multiple pre-term birth rate is per 100 live multiple births.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A49 Pre-term (<37 weeks gestation) Live Births and Pre-term Live Birth Rate by Maternal Age Group, Alberta, 1986 - 2000

| Year | Total | Maternal Age Group (Years) | | | | | | Unknown |
|--|-------|----------------------------|-------|-------|-------|-------|------|---------|
| | | <20 | 20-24 | 25-29 | 30-34 | 35-39 | >39 | |
| Live Births | | | | | | | | |
| 86 | 2,741 | 262 | 707 | 988 | 592 | 171 | 21 | 0 |
| 87 | 2,665 | 203 | 668 | 955 | 630 | 178 | 31 | 0 |
| 88 | 2,857 | 245 | 684 | 1,036 | 645 | 219 | 28 | 0 |
| 89 | 2,830 | 268 | 632 | 998 | 691 | 204 | 37 | 0 |
| 90 | 2,956 | 253 | 652 | 1,006 | 774 | 245 | 26 | 0 |
| 91 | 2,811 | 280 | 611 | 901 | 723 | 257 | 39 | 0 |
| 92 | 2,819 | 243 | 597 | 905 | 767 | 267 | 39 | 1 |
| 93 | 2,647 | 242 | 573 | 794 | 702 | 298 | 37 | 1 |
| 94 | 2,674 | 236 | 551 | 819 | 721 | 311 | 36 | 0 |
| 95 | 2,706 | 243 | 563 | 802 | 720 | 337 | 41 | 0 |
| 96 | 2,768 | 221 | 543 | 814 | 780 | 359 | 51 | 0 |
| 97 | 2,655 | 217 | 501 | 798 | 705 | 359 | 74 | 1 |
| 98 | 2,812 | 240 | 545 | 799 | 755 | 410 | 62 | 1 |
| 99 | 2,936 | 193 | 614 | 832 | 820 | 399 | 77 | 1 |
| 00 | 3,096 | 214 | 573 | 871 | 865 | 476 | 97 | 0 |
| Pre-term Birth Rate (per 100 Live Births) | | | | | | | | |
| 86 | 6.3 | 8.3 | 6.2 | 5.9 | 6.2 | 7.5 | 9.6 | |
| 87 | 6.4 | 6.6 | 6.5 | 6.0 | 6.6 | 7.4 | 11.7 | |
| 88 | 6.9 | 8.1 | 7.0 | 6.5 | 6.5 | 8.4 | 8.1 | |
| 89 | 6.6 | 8.5 | 6.5 | 6.2 | 6.4 | 7.0 | 11.3 | |
| 90 | 6.9 | 7.7 | 7.0 | 6.5 | 7.1 | 7.6 | 7.2 | |
| 91 | 6.6 | 8.2 | 6.6 | 6.1 | 6.6 | 7.4 | 9.6 | |
| 92 | 6.8 | 7.4 | 6.7 | 6.4 | 6.7 | 7.5 | 9.2 | |
| 93 | 6.6 | 8.0 | 6.6 | 6.0 | 6.4 | 8.2 | 8.3 | |
| 94 | 6.8 | 7.8 | 6.7 | 6.3 | 6.6 | 8.2 | 7.3 | |
| 95 | 7.0 | 8.1 | 7.0 | 6.6 | 6.7 | 8.6 | 8.5 | |
| 96 | 7.4 | 8.1 | 7.2 | 6.9 | 7.4 | 8.6 | 8.8 | |
| 97 | 7.3 | 8.5 | 6.8 | 6.8 | 7.0 | 8.5 | 11.0 | |
| 98 | 7.5 | 9.2 | 7.1 | 6.8 | 7.2 | 9.5 | 9.3 | |
| 99 | 7.8 | 7.4 | 7.8 | 7.1 | 8.0 | 8.7 | 10.0 | |
| 00 | 8.5 | 8.8 | 7.7 | 7.7 | 8.6 | 10.3 | 12.4 | |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes: Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A50 Pre-term (<37 weeks gestation) Live Births by Residence and Facility RHA, Alberta, 1986 - 2000

| RHA | Year | | | | | | | | | | | | | | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Residence | | | | | | | | | | | | | | | |
| 1 | 162 | 170 | 158 | 169 | 208 | 174 | 134 | 178 | 160 | 152 | 150 | 144 | 137 | 144 | 149 |
| 2 | 81 | 82 | 79 | 70 | 91 | 68 | 63 | 59 | 68 | 72 | 65 | 67 | 97 | 77 | 79 |
| 3 | 39 | 47 | 59 | 43 | 61 | 66 | 48 | 57 | 61 | 49 | 47 | 64 | 57 | 61 | 66 |
| 4 | 784 | 744 | 804 | 805 | 913 | 789 | 785 | 759 | 777 | 823 | 829 | 822 | 894 | 948 | 1013 |
| 5 | 23 | 57 | 55 | 31 | 45 | 43 | 40 | 36 | 44 | 44 | 40 | 37 | 44 | 43 | 67 |
| 6 | 171 | 161 | 157 | 192 | 181 | 165 | 179 | 191 | 156 | 177 | 208 | 166 | 167 | 188 | 185 |
| 7 | 73 | 83 | 87 | 101 | 65 | 95 | 65 | 74 | 72 | 88 | 69 | 64 | 68 | 68 | 75 |
| 8 | 76 | 61 | 79 | 84 | 68 | 72 | 92 | 55 | 85 | 82 | 65 | 85 | 81 | 92 | 86 |
| 9 | 51 | 31 | 49 | 52 | 54 | 69 | 52 | 37 | 53 | 59 | 39 | 51 | 43 | 36 | 40 |
| 10 | 894 | 873 | 890 | 867 | 877 | 893 | 947 | 820 | 811 | 770 | 836 | 762 | 832 | 842 | 909 |
| 11 | 87 | 81 | 105 | 106 | 89 | 107 | 104 | 67 | 95 | 68 | 94 | 88 | 84 | 96 | 90 |
| 12 | 101 | 96 | 114 | 100 | 106 | 89 | 95 | 97 | 87 | 100 | 95 | 93 | 79 | 114 | 121 |
| 13 | 73 | 54 | 76 | 77 | 75 | 57 | 79 | 68 | 64 | 82 | 80 | 72 | 75 | 90 | 68 |
| 14 | 23 | 25 | 33 | 24 | 16 | 29 | 27 | 24 | 21 | 27 | 29 | 23 | 23 | 19 | 21 |
| 15 | 27 | 25 | 24 | 36 | 41 | 37 | 44 | 39 | 49 | 46 | 48 | 35 | 48 | 35 | 47 |
| 16 | 43 | 47 | 52 | 39 | 37 | 30 | 35 | 44 | 39 | 37 | 39 | 44 | 39 | 42 | 46 |
| 17 | 33 | 28 | 36 | 34 | 29 | 28 | 30 | 42 | 32 | 30 | 35 | 38 | 43 | 41 | 34 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Alberta | 2,741 | 2,665 | 2,857 | 2,830 | 2,956 | 2,811 | 2,819 | 2,647 | 2,674 | 2,706 | 2,768 | 2,655 | 2,812 | 2,936 | 3,096 |
| Facility | | | | | | | | | | | | | | | |
| 1 | 154 | 160 | 145 | 164 | 205 | 163 | 116 | 156 | 153 | 143 | 139 | 124 | 133 | 130 | 138 |
| 2 | 73 | 62 | 67 | 49 | 64 | 49 | 51 | 47 | 52 | 61 | 51 | 58 | 76 | 56 | 56 |
| 3 | 9 | 13 | 12 | 17 | 15 | 9 | 4 | 16 | 10 | 9 | 7 | 4 | 18 | 8 | 9 |
| 4 | 864 | 862 | 920 | 887 | 1,042 | 921 | 901 | 888 | 890 | 945 | 941 | 963 | 1020 | 1104 | 1204 |
| 5 | 5 | 22 | 12 | 6 | 15 | 13 | 7 | 7 | 12 | 6 | 8 | 7 | 7 | 7 | 5 |
| 6 | 129 | 116 | 140 | 154 | 131 | 139 | 146 | 139 | 134 | 137 | 171 | 126 | 129 | 150 | 144 |
| 7 | 27 | 42 | 36 | 34 | 25 | 46 | 20 | 21 | 34 | 25 | 24 | 13 | 22 | 11 | 19 |
| 8 | 20 | 16 | 20 | 12 | 11 | 12 | 15 | 9 | 20 | 12 | 9 | 11 | 17 | 12 | 14 |
| 9 | 22 | 13 | 17 | 12 | 16 | 35 | 19 | 9 | 15 | 23 | 17 | 21 | 19 | 19 | 25 |
| 10 | 1,267 | 1,181 | 1,285 | 1,326 | 1,253 | 1,235 | 1,345 | 1,190 | 1,173 | 1,122 | 1,202 | 1,166 | 1210 | 1250 | 1292 |
| 11 | 20 | 13 | 24 | 29 | 21 | 31 | 23 | 19 | 20 | 17 | 12 | 12 | 13 | 13 | 15 |
| 12 | 36 | 39 | 43 | 35 | 45 | 39 | 37 | 28 | 37 | 47 | 35 | 27 | 23 | 38 | 38 |
| 13 | 39 | 26 | 43 | 23 | 45 | 39 | 51 | 34 | 38 | 75 | 71 | 54 | 52 | 66 | 58 |
| 14 | 13 | 22 | 27 | 20 | 9 | 16 | 17 | 19 | 14 | 15 | 16 | 11 | 9 | 11 | 11 |
| 15 | 10 | 18 | 5 | 12 | 18 | 24 | 24 | 13 | 23 | 19 | 17 | 10 | 7 | 11 | 17 |
| 16 | 35 | 43 | 43 | 31 | 26 | 26 | 26 | 35 | 33 | 34 | 28 | 31 | 32 | 33 | 34 |
| 17 | 18 | 17 | 18 | 19 | 15 | 14 | 17 | 17 | 16 | 16 | 20 | 17 | 25 | 17 | 17 |
| Alberta | 2,741 | 2,665 | 2,857 | 2,830 | 2,956 | 2,811 | 2,819 | 2,647 | 2,674 | 2,706 | 2,768 | 2,655 | 2,812 | 2,936 | 3,096 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes: RHA boundaries are current as of April, 2001.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A51 Twin, Triplet and Quadruplet Live Births and Percent of Multiple Births,
Alberta, 1986 - 2000

| Year | Total | Twins | Triplets | Quadruplets | %Twins | %Triplets | %Quadruplets |
|------|-------|-------|----------|-------------|--------|-----------|--------------|
| 86 | 809 | 789 | 20 | 0 | 97.5 | 2.5 | 0.0 |
| 87 | 863 | 850 | 13 | 0 | 98.5 | 1.5 | 0.0 |
| 88 | 820 | 794 | 18 | 8 | 96.8 | 2.2 | 1.0 |
| 89 | 916 | 897 | 19 | 0 | 97.9 | 2.1 | 0.0 |
| 90 | 869 | 842 | 27 | 0 | 96.9 | 3.1 | 0.0 |
| 91 | 878 | 867 | 11 | 0 | 98.7 | 1.3 | 0.0 |
| 92 | 948 | 909 | 39 | 0 | 95.9 | 4.1 | 0.0 |
| 93 | 860 | 833 | 23 | 4 | 96.9 | 2.7 | 0.5 |
| 94 | 870 | 849 | 21 | 0 | 97.6 | 2.4 | 0.0 |
| 95 | 900 | 875 | 25 | 0 | 97.2 | 2.8 | 0.0 |
| 96 | 887 | 861 | 26 | 0 | 97.1 | 2.9 | 0.0 |
| 97 | 932 | 875 | 57 | 0 | 93.9 | 6.1 | 0.0 |
| 98 | 1,002 | 965 | 34 | 3 | 96.3 | 3.4 | 0.3 |
| 99 | 1,029 | 997 | 32 | 0 | 96.9 | 3.1 | 0.0 |
| 00 | 1,098 | 1,053 | 45 | 0 | 95.9 | 4.1 | 0.0 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A52 Live Multiple Births and Live Multiple Birth Rate
by Maternal Age Group, Alberta, 1986 - 2000

| Year | Total | Maternal Age Group (Years) | | | | | | Unknown |
|---|-------|----------------------------|-------|-------|-------|-------|-----|---------|
| | | <20 | 20-24 | 25-29 | 30-34 | 35-39 | >39 | |
| Live Multiple Births¹ | | | | | | | | |
| 86 | 809 | 44 | 194 | 314 | 204 | 51 | 2 | 0 |
| 87 | 863 | 39 | 185 | 318 | 252 | 65 | 4 | 0 |
| 88 | 820 | 34 | 154 | 315 | 240 | 69 | 8 | 0 |
| 89 | 916 | 48 | 137 | 349 | 278 | 95 | 9 | 0 |
| 90 | 869 | 29 | 146 | 314 | 300 | 74 | 6 | 0 |
| 91 | 878 | 37 | 148 | 338 | 263 | 84 | 8 | 0 |
| 92 | 948 | 36 | 168 | 343 | 308 | 86 | 7 | 0 |
| 93 | 860 | 29 | 188 | 287 | 248 | 98 | 10 | 0 |
| 94 | 870 | 36 | 137 | 293 | 295 | 106 | 3 | 0 |
| 95 | 900 | 37 | 167 | 282 | 277 | 131 | 6 | 0 |
| 96 | 887 | 44 | 150 | 271 | 289 | 119 | 14 | 0 |
| 97 | 932 | 24 | 133 | 268 | 312 | 171 | 24 | 0 |
| 98 | 1,002 | 28 | 128 | 295 | 358 | 165 | 28 | 0 |
| 99 | 1,029 | 27 | 139 | 277 | 384 | 174 | 28 | 0 |
| 00 | 1,098 | 35 | 159 | 311 | 344 | 211 | 38 | 0 |
| Live Multiple Birth Rate (per 100 Live Births) | | | | | | | | |
| 86 | 1.9 | 1.4 | 1.7 | 1.9 | 2.2 | 2.2 | | |
| 87 | 2.1 | 1.3 | 1.8 | 2.0 | 2.6 | 2.7 | | |
| 88 | 2.0 | 1.1 | 1.6 | 2.0 | 2.4 | 2.6 | | |
| 89 | 2.1 | 1.5 | 1.4 | 2.2 | 2.6 | 3.2 | | |
| 90 | 2.0 | 0.9 | 1.6 | 2.0 | 2.8 | 2.3 | | |
| 91 | 2.1 | 1.1 | 1.6 | 2.3 | 2.4 | 2.4 | | |
| 92 | 2.3 | 1.1 | 1.9 | 2.4 | 2.7 | 2.4 | | |
| 93 | 2.2 | 1.0 | 2.2 | 2.2 | 2.3 | 2.7 | | |
| 94 | 2.2 | 1.2 | 1.7 | 2.3 | 2.7 | 2.8 | | |
| 95 | 2.3 | 1.2 | 2.1 | 2.3 | 2.6 | 3.3 | | |
| 96 | 2.4 | 1.6 | 2.0 | 2.3 | 2.7 | 2.9 | | |
| 97 | 2.6 | 0.9 | 1.8 | 2.3 | 3.1 | 4.0 | 3.6 | |
| 98 | 2.7 | 1.1 | 1.7 | 2.5 | 3.4 | 3.8 | 4.2 | |
| 99 | 2.7 | 1.0 | 1.8 | 2.4 | 3.7 | 3.8 | 3.6 | |
| 00 | 3.0 | 1.4 | 2.1 | 2.8 | 3.4 | 4.6 | 4.9 | |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes: 1. Multiple birth refers to birth in which more than one infant is born.
Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A53 Singleton and Multiple Low Birth Weight Birth Rates, Alberta, 1986 - 2000

| Year | Total Live Singleton Births | Live Singleton Low Birth Weight Births | Singleton Low Birth Weight Birth Rate¹ | Total Live Multiple Births | Live Multiple Low Birth Weight Births | Multiple Low Birth Weight Birth Rate¹ |
|-------------|------------------------------------|---|--|-----------------------------------|--|---|
| 86 | 42,495 | 1,968 | 4.6 | 809 | 407 | 50.3 |
| 87 | 40,844 | 1,880 | 4.6 | 863 | 396 | 45.9 |
| 88 | 40,849 | 1,986 | 4.9 | 820 | 427 | 52.1 |
| 89 | 42,063 | 2,051 | 4.9 | 916 | 476 | 52.0 |
| 90 | 41,764 | 2,055 | 4.9 | 869 | 458 | 52.7 |
| 91 | 41,491 | 1,995 | 4.8 | 878 | 445 | 50.7 |
| 92 | 40,725 | 1,946 | 4.8 | 948 | 488 | 51.5 |
| 93 | 39,045 | 1,866 | 4.8 | 860 | 397 | 46.2 |
| 94 | 38,589 | 1,796 | 4.7 | 870 | 431 | 49.5 |
| 95 | 37,628 | 1,829 | 4.9 | 900 | 479 | 53.2 |
| 96 | 36,584 | 1,794 | 4.9 | 887 | 485 | 54.7 |
| 97 | 35,614 | 1,737 | 4.9 | 932 | 514 | 55.2 |
| 98 | 36,525 | 1,793 | 4.9 | 1,002 | 535 | 53.4 |
| 99 | 36,742 | 1,731 | 4.7 | 1,029 | 510 | 49.6 |
| 00 | 35,515 | 1,684 | 4.7 | 1,098 | 565 | 51.5 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes:

1. Singleton low birth weight rate is per 100 live singleton births.
2. Multiple low birth weight rate is per 100 live multiple births.

Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A54 Multiple Live Births by Residence and Facility RHA, Alberta, 1986 - 2000

| RHA | Year | | | | | | | | | | | | | | |
|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|--------------|--------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Residence | | | | | | | | | | | | | | | |
| 1 | 51 | 44 | 54 | 46 | 69 | 44 | 38 | 52 | 57 | 55 | 50 | 55 | 38 | 63 | 74 |
| 2 | 20 | 17 | 34 | 22 | 18 | 23 | 22 | 25 | 18 | 29 | 23 | 25 | 26 | 36 | 46 |
| 3 | 16 | 16 | 12 | 16 | 10 | 24 | 28 | 20 | 22 | 16 | 16 | 35 | 16 | 23 | 26 |
| 4 | 216 | 266 | 230 | 284 | 287 | 265 | 274 | 258 | 236 | 272 | 304 | 296 | 350 | 340 | 332 |
| 5 | 12 | 20 | 15 | 11 | 16 | 24 | 10 | 6 | 24 | 13 | 12 | 16 | 13 | 10 | 31 |
| 6 | 58 | 68 | 59 | 74 | 67 | 60 | 84 | 63 | 61 | 68 | 80 | 60 | 79 | 66 | 68 |
| 7 | 25 | 27 | 23 | 41 | 22 | 32 | 18 | 30 | 28 | 36 | 14 | 32 | 9 | 52 | 37 |
| 8 | 22 | 21 | 34 | 22 | 20 | 30 | 42 | 30 | 49 | 25 | 19 | 34 | 44 | 39 | 36 |
| 9 | 10 | 26 | 12 | 16 | 20 | 29 | 29 | 18 | 15 | 26 | 12 | 15 | 22 | 13 | 11 |
| 10 | 268 | 254 | 215 | 254 | 225 | 233 | 273 | 240 | 259 | 237 | 235 | 244 | 266 | 248 | 291 |
| 11 | 28 | 28 | 28 | 39 | 14 | 25 | 27 | 30 | 29 | 18 | 36 | 26 | 29 | 30 | 22 |
| 12 | 31 | 25 | 39 | 22 | 29 | 17 | 33 | 33 | 14 | 39 | 28 | 34 | 22 | 31 | 45 |
| 13 | 14 | 12 | 31 | 27 | 28 | 38 | 34 | 16 | 29 | 26 | 12 | 15 | 39 | 45 | 26 |
| 14 | 10 | 10 | 6 | 10 | 6 | 12 | 12 | 8 | 6 | 8 | 15 | 4 | 3 | 0 | 8 |
| 15 | 8 | 18 | 10 | 8 | 4 | 4 | 9 | 12 | 8 | 10 | 13 | 6 | 19 | 14 | 10 |
| 16 | 12 | 8 | 12 | 10 | 25 | 8 | 9 | 15 | 8 | 10 | 10 | 22 | 15 | 11 | 19 |
| 17 | 8 | 3 | 6 | 14 | 9 | 10 | 6 | 4 | 7 | 12 | 8 | 13 | 12 | 8 | 16 |
| Alberta | 809 | 863 | 820 | 916 | 869 | 878 | 948 | 860 | 870 | 900 | 887 | 932 | 1,002 | 1,029 | 1,098 |
| Facility | | | | | | | | | | | | | | | |
| 1 | 53 | 44 | 47 | 50 | 67 | 42 | 38 | 43 | 55 | 50 | 48 | 53 | 38 | 62 | 67 |
| 2 | 12 | 8 | 34 | 18 | 19 | 21 | 20 | 23 | 16 | 28 | 15 | 23 | 21 | 30 | 36 |
| 3 | 0 | 2 | 0 | 2 | 1 | 2 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 |
| 4 | 248 | 305 | 266 | 312 | 321 | 315 | 313 | 304 | 279 | 318 | 348 | 351 | 396 | 396 | 420 |
| 5 | 4 | 10 | 0 | 4 | 4 | 6 | 2 | 2 | 6 | 2 | 6 | 4 | 0 | 0 | 0 |
| 6 | 48 | 54 | 51 | 52 | 45 | 56 | 69 | 49 | 58 | 50 | 64 | 48 | 65 | 56 | 65 |
| 7 | 7 | 18 | 8 | 16 | 8 | 18 | 4 | 12 | 13 | 6 | 2 | 2 | 2 | 8 | 6 |
| 8 | 0 | 8 | 2 | 4 | 6 | 8 | 6 | 12 | 8 | 0 | 0 | 2 | 10 | 6 | 6 |
| 9 | 6 | 8 | 2 | 2 | 5 | 5 | 14 | 4 | 0 | 12 | 2 | 6 | 6 | 12 | 8 |
| 10 | 375 | 351 | 361 | 401 | 336 | 351 | 424 | 362 | 376 | 378 | 368 | 391 | 406 | 398 | 434 |
| 11 | 8 | 6 | 2 | 11 | 0 | 2 | 2 | 4 | 8 | 0 | 2 | 2 | 2 | 4 | 0 |
| 12 | 10 | 10 | 12 | 6 | 9 | 2 | 11 | 6 | 4 | 8 | 2 | 6 | 2 | 6 | 7 |
| 13 | 8 | 6 | 21 | 18 | 24 | 34 | 22 | 14 | 33 | 30 | 16 | 23 | 32 | 36 | 28 |
| 14 | 10 | 10 | 6 | 6 | 4 | 10 | 8 | 8 | 2 | 2 | 2 | 4 | 0 | 0 | 4 |
| 15 | 2 | 14 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 0 |
| 16 | 12 | 8 | 8 | 8 | 18 | 4 | 6 | 13 | 8 | 10 | 6 | 15 | 14 | 11 | 13 |
| 17 | 6 | 1 | 0 | 6 | 2 | 0 | 4 | 2 | 2 | 6 | 4 | 2 | 6 | 0 | 4 |
| Alberta | 809 | 863 | 820 | 916 | 869 | 878 | 948 | 860 | 870 | 900 | 887 | 932 | 1,002 | 1,029 | 1,098 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: RHA boundaries are current as of April, 2001.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A55 Multiple Pregnancies, Multiple Births and Perinatal Deaths of Multiple Births by Facility RHA and Hospitals, Alberta, 1999

| Place of Birth | Total Mothers Delivered | Multiple Pregnancy Rate ¹ | Multiple Pregnancies ² | | | Babies ³ | | | Perinatal Deaths for Multiple Births | |
|-------------------------|-------------------------|--------------------------------------|-----------------------------------|-----------|----------|---------------------|-----------|----------|--------------------------------------|-------------------|
| | | | Twins | Triplets | Other | Twins | Triplets | Other | Cases ⁴ | Rate ⁵ |
| RHA Hospitals | | | | | | | | | | |
| 1 | 2,104 | 1.4 | 28 | 1 | 0 | 56 | 3 | 0 | 0 | 0.0 |
| 2 | 1,234 | 1.2 | 15 | 0 | 0 | 30 | 0 | 0 | 0 | 0.0 |
| 3 | 530 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 4 | 12,299 | 1.7 | 208 | 6 | 1 | 402 | 15 | 0 | 22 | 52.8 |
| 5 | 360 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 6 | 2,406 | 1.1 | 27 | 0 | 0 | 54 | 0 | 0 | 0 | 0.0 |
| 7 | 821 | 0.2 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 0.0 |
| 8 | 437 | 0.2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0.0 |
| 9 | 605 | 0.3 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 0.0 |
| 10 | 12,183 | 1.7 | 206 | 6 | 0 | 412 | 18 | 0 | 27 | 62.8 |
| 11 | 554 | 0.4 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 0.0 |
| 12 | 1,085 | 0.1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0.0 |
| 13 | 1,285 | 1.5 | 19 | 0 | 0 | 38 | 0 | 0 | 6 | 157.9 |
| 14 | 358 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 15 | 360 | 0.3 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 1,000.0 |
| 16 | 619 | 0.6 | 4 | 0 | 0 | 8 | 0 | 0 | 1 | 125.0 |
| 17 | 418 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Out-of-Hospital* | 376 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Alberta | 38,034 | 1.4 | 516 | 13 | 1 | 1,018 | 36 | 0 | 58 | 55.0 |

Sources: Statistics reported to the Reproductive Care Committee by Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness, and validated with the hospitals.

* Out-of-Hospital data from Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes:

1. Multiple Pregnancy Rate = Total Multiple Pregnancies / Total Mothers Delivered x 100.
2. Includes pregnancies with a fetal loss and retention of one or more fetus.
3. Excludes pregnancies with a fetal loss and retention of one or more fetus.
4. Excludes fetal death of one or more multiples prior to 20 weeks gestation.
5. Perinatal Death Rate (Multiple Births) = Number of Perinatal Deaths (Multiple Births) / Total Number of Multiple Births x 1,000.

RHA boundaries are current as of April, 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A56 Multiple Pregnancies, Multiple Births and Perinatal Deaths of Multiple Births by Facility RHA and Hospitals, Alberta, 2000

| Place of Birth | Total Mothers Delivered | Multiple Pregnancy Rate ¹ | Multiple Pregnancies ² | | | Babies ³ | | | Perinatal Deaths for Multiple Births | |
|-------------------------|-------------------------|--------------------------------------|-----------------------------------|-----------|----------|---------------------|-----------|----------|--------------------------------------|-------------------|
| | | | Twins | Triplets | Other | Twins | Triplets | Other | Cases ⁴ | Rate ⁵ |
| RHA Hospitals | | | | | | | | | | |
| 1 | 1,975 | 1.6 | 30 | 1 | 0 | 60 | 0 | 0 | 2 | 33.3 |
| 2 | 1,194 | 1.8 | 21 | 0 | 0 | 42 | 0 | 0 | 0 | 0.0 |
| 3 | 590 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 4 | 12,305 | 1.9 | 219 | 12 | 1 | 412 | 24 | 0 | 17 | 39.0 |
| 5 | 340 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 6 | 2,262 | 1.5 | 34 | 0 | 1 | 66 | 0 | 4 | 2 | 28.6 |
| 7 | 756 | 0.4 | 3 | 0 | 0 | 6 | 0 | 0 | 0 | 0.0 |
| 8 | 394 | 0.3 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0.0 |
| 9 | 535 | 0.7 | 4 | 0 | 0 | 8 | 0 | 0 | 0 | 0.0 |
| 10 | 11,637 | 1.6 | 176 | 8 | 0 | 340 | 24 | 0 | 20 | 54.9 |
| 11 | 500 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 12 | 949 | 0.3 | 3 | 0 | 0 | 6 | 0 | 0 | 0 | 0.0 |
| 13 | 1,220 | 1.2 | 15 | 0 | 0 | 30 | 0 | 0 | 0 | 0.0 |
| 14 | 325 | 0.3 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0.0 |
| 15 | 354 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 16 | 626 | 0.5 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0.0 |
| 17 | 430 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Out-of-Hospital* | 353 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Alberta | 36,745 | 1.5 | 510 | 21 | 2 | 976 | 48 | 4 | 41 | 39.9 |

Sources: Statistics reported to the Reproductive Care Committee by Canadian Institute of Health Information Inpatient Files, Alberta Health and Wellness, and validated with the hospitals.

* Out-of-Hospital data from Health Surveillance, Alberta Health and Wellness.

Notes:

- Multiple Pregnancy Rate = Total Multiple Pregnancies / Total Mothers Delivered x 100.
- Includes pregnancies with a fetal loss and retention of one or more fetus.
- Excludes pregnancies with a fetal loss and retention of one or more fetus.
- Excludes fetal death of one or more multiples prior to 20 weeks gestation.
- Perinatal Death Rate (Multiple Births) = Number of Perinatal Deaths (Multiple Births) / Total Number of Multiple Births x 1,000.

RHA boundaries are current as of April, 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A57 Multiple Pregnancies, Multiple Births and Perinatal Deaths of Multiple Births,
Alberta, 1982 - 2000

| Year | Total Mothers Delivered | Multiple Pregnancies (MP) | | | | Multiple Births (MB) | | | Perinatal Deaths of Multiple Births ¹ | |
|------|-------------------------|---------------------------|----------|-------|---------|----------------------|-----------------------|---------|--|------|
| | | Twins | Triplets | Quads | MP Rate | Total Births | Total MB ² | MB Rate | Cases | Rate |
| 82 | 44,601 | 432 | 11 | 2 | 1.0 | 45,300 | 905 | 2.0 | 52 | 57.5 |
| 83 | 45,023 | 419 | 5 | 0 | 0.9 | 45,770 | 853 | 1.9 | 41 | 48.1 |
| 84 | 43,546 | 416 | 3 | 0 | 1.0 | 44,235 | 841 | 1.9 | 49 | 58.3 |
| 85 | 43,425 | 429 | 5 | 0 | 1.0 | 43,945 | 873 | 2.0 | 40 | 45.8 |
| 86 | 43,495 | 407 | 7 | 0 | 1.0 | 43,853 | 835 | 1.9 | 49 | 58.7 |
| 87 | 41,861 | 448 | 4 | 0 | 1.1 | 42,356 | 908 | 2.1 | 48 | 52.9 |
| 88 | 42,040 | 401 | 6 | 2 | 1.0 | 42,459 | 828 | 2.0 | 53 | 64.0 |
| 89 | 42,819 | 463 | 7 | 0 | 1.1 | 43,293 | 947 | 2.2 | 49 | 51.7 |
| 90 | 42,949 | 446 | 9 | 0 | 1.1 | 43,398 | 919 | 2.1 | 66 | 71.8 |
| 91 | 42,581 | 464 | 6 | 0 | 1.1 | 43,092 | 946 | 2.2 | 46 | 48.6 |
| 92 | 41,693 | 474 | 16 | 0 | 1.2 | 42,203 | 996 | 2.4 | 52 | 52.2 |
| 93 | 40,075 | 442 | 11 | 1 | 1.1 | 40,531 | 921 | 2.3 | 48 | 52.1 |
| 94 | 39,723 | 456 | 8 | 0 | 1.2 | 40,190 | 936 | 2.3 | 44 | 47.0 |
| 95 | 38,359 | 459 | 10 | 0 | 1.2 | 38,837 | 948 | 2.4 | 56 | 59.1 |
| 96 | 37,524 | 456 | 10 | 0 | 1.2 | 37,911 | 942 | 2.5 | 47 | 49.9 |
| 97 | 36,514 | 464 | 28 | 0 | 1.3 | 36,885 | 1,012 | 2.7 | 44 | 43.5 |
| 98 | 37,608 | 495 | 16 | 2 | 1.4 | 37,936 | 1,046 | 2.8 | 30 | 28.7 |
| 99 | 38,034 | 516 | 13 | 1 | 1.4 | 38,579 | 1,054 | 2.7 | 58 | 55.0 |
| 00 | 36,745 | 510 | 21 | 2 | 1.5 | 37,384 | 1,028 | 2.7 | 41 | 39.9 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

Notes: 1. Perinatal Death Rate of Multiple Births = Perinatal Deaths of Multiple Births / Total Number of Multiple Births x 1,000.

2. Total MB includes births in which there was a fetal death of another fetus prior to 20 weeks gestation.

3. This is a correction of the December 2000 Pregnancy Outcomes report, in which 46 perinatal deaths were reported for multiple births in 1997.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A58 Number and Rate (per 1,000 Total Births) of Selected Congenital Anomalies, Alberta, 1986 - 2000

| Year | Total Births ¹ | All Anomalies ² | | Neural Tube Defects ⁴ | | Heart Septal ⁵ | | Down Syndrome ⁶ | |
|------|---------------------------|----------------------------|-------------------|----------------------------------|-------------------|---------------------------|-------------------|----------------------------|-------------------|
| | | Cases | Rate ³ | Cases | Rate ³ | Cases | Rate ³ | Cases | Rate ³ |
| 86 | 43,583 | 1,906 | 43.7 | 49 | 1.12 | 235 | 5.39 | 38 | 0.87 |
| 87 | 41,966 | 1,813 | 43.2 | 33 | 0.79 | 252 | 6.00 | 41 | 0.98 |
| 88 | 41,976 | 2,005 | 47.8 | 41 | 0.98 | 289 | 6.88 | 39 | 0.93 |
| 89 | 43,239 | 2,032 | 47.0 | 37 | 0.86 | 239 | 5.53 | 45 | 1.04 |
| 90 | 42,927 | 2,084 | 48.5 | 31 | 0.72 | 281 | 6.55 | 53 | 1.23 |
| 91 | 42,675 | 1,863 | 43.7 | 35 | 0.82 | 245 | 5.74 | 53 | 1.24 |
| 92 | 41,945 | 1,847 | 44.0 | 36 | 0.86 | 229 | 5.46 | 37 | 0.88 |
| 93 | 40,172 | 1,518 | 37.8 | 30 | 0.75 | 215 | 5.35 | 45 | 1.12 |
| 94 | 39,722 | 1,490 | 37.5 | 30 | 0.76 | 184 | 4.63 | 44 | 1.11 |
| 95 | 38,788 | 1,275 | 32.9 | 42 | 1.08 | 167 | 4.31 | 50 | 1.29 |
| 96 | 37,712 | 1,194 | 31.7 | 23 | 0.61 | 181 | 4.80 | 32 | 0.85 |
| 97 | 36,800 | 1,187 | 32.3 | 39 | 1.06 | 166 | 4.51 | 56 | 1.52 |
| 98 | 37,860 | 1,255 | 33.1 | 30 | 0.79 | 166 | 4.38 | 72 | 1.90 |
| 99 | 38,074 | 1,186 | 31.1 | 25 | 0.66 | 146 | 3.83 | 60 | 1.58 |
| 00 | 37,411 | 1,284 | 34.3 | 19 | 0.51 | 159 | 4.25 | 54 | 1.44 |

Source: Alberta Congenital Anomalies Surveillance System, 1980-2000, February 2002 release.

- Notes:**
1. Total Births = Live Births + Stillbirths
 2. Includes all congenital anomalies in and outside ICD-9 Chapter XIV. The number of patients was counted; one patient could belong to more than one diagnostic category of defects.
 3. Per 1,000 total births in each age group.
 4. ICD-9 diagnostic codes 740.0-742.0.
 5. ICD-9 diagnostic codes 745.0-745.9.
 6. ICD-9 diagnostic code 758.0.
- Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A59 Selected Congenital Anomalies and Rates (per 1,000 Live Births) by Maternal Age Group, Alberta, 1985 - 2000 Combined

| Maternal Age Group (Years) | Live Births | All Anomalies ¹ | | Neural Tube Defects ³ | | Heart Septal ⁴ | | Down Syndrome ⁵ | |
|----------------------------|----------------|----------------------------|-------------------|----------------------------------|-------------------|---------------------------|-------------------|----------------------------|-------------------|
| | | Cases | Rate ² | Cases | Rate ² | Cases | Rate ² | Cases | Rate ² |
| < 20 | 47,607 | 1,800 | 37.8 | 32 | 0.67 | 255 | 5.36 | 25 | 0.53 |
| 20-24 | 143,827 | 5,157 | 35.9 | 94 | 0.65 | 668 | 4.64 | 82 | 0.57 |
| 25-29 | 222,821 | 8,375 | 37.6 | 124 | 0.56 | 1,054 | 4.73 | 158 | 0.71 |
| 30-34 | 166,165 | 6,428 | 38.7 | 99 | 0.60 | 815 | 4.90 | 211 | 1.27 |
| 35-39 | 55,948 | 2,334 | 41.7 | 27 | 0.48 | 348 | 6.22 | 148 | 2.65 |
| ≥40 | 7,534 | 363 | 48.2 | 2 | 0.27 | 57 | 7.57 | 57 | 7.57 |
| Unknown | 21 | 3 | | | | 1 | | | |
| Total | 643,923 | 24,460 | 38.0 | 378 | 0.59 | 3,198 | 4.97 | 681 | 1.06 |

Source: Alberta Congenital Anomalies Surveillance System, 1980-2000, February 2002 release.

Notes: 2. Includes all congenital anomalies in and outside ICD-9 Chapter XIV. The number of patients was counted; one patient could belong to more than one diagnostic category of defects.

2. Per 1,000 live births in each age group.

3. ICD-9 diagnostic codes 740.0-742.0.

4. ICD-9 diagnostic codes 745.0-745.9.

5. ICD-9 diagnostic code 758.0.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A60 Selected Congenital Anomalies and Rates (per 1,000 Live Births) by Birth Weight Group, Alberta, 1985 - 2000 Combined

| Birth Weight (grams) | Live Births | All Anomalies ¹ | | Neural Tube Defects ³ | | Heart Septal ⁴ | | Down Syndrome ⁵ | |
|----------------------|----------------|----------------------------|-------------------|----------------------------------|-------------------|---------------------------|-------------------|----------------------------|-------------------|
| | | Cases | Rate ² | Cases | Rate ² | Cases | Rate ² | Cases | Rate ² |
| < 1000 | 2,775 | 490 | 176.6 | 25 | 9.01 | 55 | 19.82 | 19 | 6.85 |
| 1000-1499 | 3,242 | 610 | 188.2 | 23 | 7.09 | 86 | 26.53 | 13 | 4.01 |
| 1500-2499 | 31,620 | 2,585 | 81.8 | 81 | 2.56 | 489 | 15.46 | 151 | 4.78 |
| 2500-4499 | 595,310 | 20,380 | 34.2 | 244 | 0.41 | 2,508 | 4.21 | 497 | 0.83 |
| ^a 4500 | 10,960 | 391 | 35.7 | 5 | 0.46 | 58 | 5.29 | 1 | 0.09 |
| Unknown | 16 | 4 | | | | 2 | | | |
| Total | 643,923 | 24,460 | 38.0 | 378 | 0.59 | 3,198 | 4.97 | 681 | 1.06 |

Source: Alberta Congenital Anomalies Surveillance System, 1980-2000, February 2002 release.

Notes: 2. Includes all congenital anomalies in and outside ICD-9 Chapter XIV. The number of patients was counted; one patient could belong to more than one diagnostic category of defects.

2. Per 1,000 live births in each age group.

3. ICD-9 diagnostic codes 740.0-742.0.

4. ICD-9 diagnostic codes 745.0-745.9.

5. ICD-9 diagnostic code 758.0.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A61 Stillbirths and Stillbirth Rates by Maternal Age Group, Alberta, 1986 - 2000

| Year | Total | Age Group (Years) | | | | | | Unknown |
|---|-------|-------------------|-------|-------|-------|-------|-----|---------|
| | | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | >39 | |
| Stillbirths | | | | | | | | |
| 86 | 266 | 24 | 71 | 88 | 64 | 15 | 4 | 0 |
| 87 | 253 | 36 | 59 | 75 | 61 | 22 | 0 | 0 |
| 88 | 296 | 35 | 67 | 114 | 61 | 17 | 2 | 0 |
| 89 | 254 | 20 | 46 | 96 | 64 | 25 | 3 | 0 |
| 90 | 296 | 24 | 76 | 87 | 73 | 31 | 5 | 0 |
| 91 | 309 | 26 | 86 | 85 | 78 | 29 | 5 | 0 |
| 92 | 278 | 28 | 70 | 80 | 63 | 34 | 3 | 0 |
| 93 | 267 | 26 | 56 | 79 | 70 | 33 | 3 | 0 |
| 94 | 266 | 24 | 54 | 68 | 77 | 35 | 8 | 0 |
| 95 | 262 | 27 | 46 | 77 | 72 | 34 | 6 | 0 |
| 96 | 236 | 21 | 41 | 70 | 60 | 38 | 6 | 0 |
| 97 | 249 | 16 | 51 | 77 | 56 | 45 | 4 | 0 |
| 98 | 189 | 20 | 32 | 53 | 53 | 25 | 6 | 0 |
| 99 | 259 | 19 | 50 | 78 | 64 | 37 | 11 | 0 |
| 00 | 238 | 20 | 44 | 67 | 67 | 29 | 11 | 0 |
| Stillbirths (per 1,000 Total Births) | | | | | | | | |
| 86 | 6.1 | 7.6 | 6.2 | 5.2 | 6.7 | 6.6 | | |
| 87 | 6.0 | 11.7 | 5.7 | 4.7 | 6.3 | 9.0 | | |
| 88 | 7.1 | 11.5 | 6.8 | 7.1 | 6.1 | 6.4 | | |
| 89 | 5.9 | 6.4 | 4.7 | 5.9 | 5.9 | 8.5 | | |
| 90 | 6.9 | 7.3 | 8.1 | 5.6 | 6.7 | 9.5 | | |
| 91 | 7.2 | 7.6 | 9.2 | 5.7 | 7.0 | 8.3 | | |
| 92 | 6.6 | 8.6 | 7.8 | 5.6 | 5.5 | 9.5 | | |
| 93 | 6.7 | 8.7 | 6.4 | 5.9 | 6.3 | 9.0 | | |
| 94 | 6.7 | 7.9 | 6.5 | 5.2 | 7.0 | 9.1 | | |
| 95 | 6.8 | 9.0 | 5.7 | 6.3 | 6.6 | 8.6 | | |
| 96 | 6.3 | 7.8 | 5.4 | 5.9 | 5.6 | 9.0 | | |
| 97 | 6.8 | 6.3 | 6.9 | 6.5 | 5.5 | 10.5 | | |
| 98 | 5.0 | 7.7 | 4.1 | 4.5 | 5.0 | 5.7 | | |
| 99 | 6.8 | 7.3 | 6.3 | 6.6 | 6.2 | 8.0 | | |
| 00 | 6.5 | 8.2 | 5.9 | 5.9 | 6.6 | 6.2 | | |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release; Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Notes: Data include Alberta residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A62 Stillbirths by Birth Weight Categories, Alberta, 1986 - 2000

| Year | Birth Weight (Grams) | | | | | |
|--|----------------------|-------|-------|-------|-------|-------|
| | <500 | <1000 | <1500 | <2500 | ≈4000 | ≈4500 |
| Stillbirths | | | | | | |
| 86 | 53 | 101 | 127 | 185 | 6 | 2 |
| 87 | 51 | 98 | 122 | 180 | 6 | 2 |
| 88 | 73 | 150 | 177 | 217 | 3 | 1 |
| 89 | 56 | 115 | 137 | 181 | 2 | 1 |
| 90 | 68 | 136 | 166 | 219 | 4 | 0 |
| 91 | 101 | 156 | 188 | 240 | 4 | 0 |
| 92 | 75 | 119 | 150 | 208 | 3 | 1 |
| 93 | 68 | 121 | 145 | 186 | 8 | 1 |
| 94 | 61 | 120 | 140 | 188 | 3 | 1 |
| 95 | 85 | 131 | 151 | 201 | 6 | 4 |
| 96 | 69 | 116 | 134 | 173 | 7 | 3 |
| 97 | 72 | 133 | 153 | 191 | 6 | 3 |
| 98 | 74 | 104 | 115 | 143 | 7 | 2 |
| 99 | 89 | 135 | 156 | 193 | 6 | 3 |
| 00 | 74 | 132 | 145 | 169 | 11 | 5 |
| Percentage of Stillbirths | | | | | | |
| 86 | 19.9 | 37.8 | 47.6 | 69.3 | 2.2 | 0.7 |
| 87 | 20.2 | 38.7 | 48.2 | 71.1 | 2.4 | 0.8 |
| 88 | 24.6 | 50.5 | 59.6 | 73.1 | 1.0 | 0.3 |
| 89 | 22.0 | 45.3 | 53.9 | 71.3 | 0.8 | 0.4 |
| 90 | 23.0 | 45.9 | 56.1 | 74.0 | 1.4 | 0.0 |
| 91 | 32.6 | 50.3 | 60.6 | 77.4 | 1.3 | 0.0 |
| 92 | 26.9 | 42.7 | 53.8 | 74.6 | 1.1 | 0.4 |
| 93 | 25.5 | 45.3 | 54.3 | 69.7 | 3.0 | 0.4 |
| 94 | 22.9 | 45.1 | 52.6 | 70.7 | 1.1 | 0.4 |
| 95 | 32.4 | 50.0 | 57.6 | 76.7 | 2.3 | 1.5 |
| 96 | 29.2 | 49.2 | 56.8 | 73.3 | 3.0 | 1.3 |
| 97 | 28.9 | 53.4 | 61.4 | 76.7 | 2.4 | 1.2 |
| 98 | 39.2 | 55.0 | 60.8 | 75.7 | 3.7 | 1.1 |
| 99 | 34.4 | 52.1 | 60.2 | 74.5 | 2.3 | 1.2 |
| 00 | 31.1 | 55.5 | 60.9 | 71.0 | 4.6 | 2.1 |
| Rate (per 100 Total Births in Each Weight Category) | | | | | | |
| 86 | 100.0 | 39.1 | 26.7 | 7.2 | 0.1 | 0.3 |
| 87 | 100.0 | 38.9 | 25.4 | 7.3 | 0.1 | 0.3 |
| 88 | 100.0 | 49.5 | 31.6 | 8.3 | 0.1 | 0.2 |
| 89 | 100.0 | 37.5 | 25.6 | 6.7 | 0.0 | 0.1 |
| 90 | 61.8 | 43.3 | 29.9 | 8.0 | 0.1 | 0.0 |
| 91 | 78.9 | 49.7 | 34.0 | 9.0 | 0.1 | 0.0 |
| 92 | 72.1 | 40.3 | 28.2 | 7.9 | 0.1 | 0.1 |
| 93 | 68.0 | 44.5 | 31.6 | 7.6 | 0.2 | 0.1 |
| 94 | 59.8 | 40.3 | 27.8 | 7.8 | 0.1 | 0.2 |
| 95 | 65.9 | 40.9 | 28.9 | 8.0 | 0.1 | 0.6 |
| 96 | 66.3 | 38.7 | 25.7 | 7.1 | 0.2 | 0.4 |
| 97 | 67.9 | 45.5 | 29.4 | 7.8 | 0.1 | 0.5 |
| 98 | 72.5 | 38.8 | 23.9 | 5.8 | 0.2 | 0.3 |
| 99 | 74.2 | 42.3 | 29.4 | 7.9 | 0.1 | 0.4 |
| 00 | 61.2 | 38.3 | 25.5 | 7.0 | 0.2 | 0.6 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Note: Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A63a Stillbirths by Birth Weight Distribution and Time of Death, Alberta, 1999

| Birth Weight (grams) | Antepartum Deaths | | | | Intrapartum Deaths | | | | Stillbirths ² | Live Births ³ | Ratio ⁴ |
|----------------------|-----------------------------|-------------|------------|------------------------------|-----------------------------|-------------|-----------|------------------------------|--------------------------|--------------------------|--------------------|
| | Prior to Hospital Admission | In Hospital | Total | Total Corrected ¹ | Prior to Hospital Admission | In Hospital | Total | Total Corrected ¹ | | | |
| <500 | 45 | 1 | 46 | 39 | 2 | 53 | 55 | 26 | 101 | 31 | 3,258 |
| 500 - 749 | 17 | 4 | 21 | 16 | 0 | 11 | 11 | 7 | 32 | 68 | 471 |
| 750 - 999 | 9 | 1 | 10 | 10 | 1 | 1 | 2 | 1 | 12 | 85 | 141 |
| 1000 - 1249 | 16 | 0 | 16 | 13 | 0 | 1 | 1 | 0 | 17 | 85 | 200 |
| 1250 - 1499 | 7 | 1 | 8 | 7 | 0 | 1 | 1 | 0 | 9 | 106 | 85 |
| 1500 - 1749 | 11 | 0 | 11 | 11 | 0 | 1 | 1 | 0 | 12 | 179 | 67 |
| 1750 - 1999 | 6 | 1 | 7 | 6 | 0 | 0 | 0 | 0 | 7 | 259 | 27 |
| 2000 - 2499 | 15 | 2 | 17 | 12 | 1 | 1 | 2 | 2 | 19 | 1,428 | 13 |
| 2500 - 3999 | 56 | 0 | 56 | 54 | 1 | 8 | 9 | 6 | 65 | 30,756 | 2 |
| ≥4000 | 6 | 0 | 6 | 6 | 0 | 1 | 1 | 0 | 7 | 4,762 | 1 |
| Total | 188 | 11 | 198 | 174 | 5 | 78 | 83 | 42 | 281 | 37,759 | 7 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

- Notes:
1. Major anomalies excluded.
 2. Total Antepartum Deaths + Total Intrapartum Deaths (excludes two still births with no specified weight).
 3. Live births for each weight category from Alberta Health (1999) Vital Statistics Annual Review (excludes two live births with no specified weight).
 4. Ratio: Stillbirths/Live births = (Total Antepartum Deaths + Total Intrapartum Deaths)/Live births x 1,000.
- Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A63b Stillbirths by Birth Weight Distribution and Time of Death, Alberta, 2000

| Birth Weight (grams) | Antepartum Deaths | | | | Intrapartum Deaths | | | | Stillbirths ² | Live Births ³ | Ratio ⁴ |
|----------------------|-----------------------------|-------------|------------|------------------------------|-----------------------------|-------------|-----------|------------------------------|--------------------------|--------------------------|--------------------|
| | Prior to Hospital Admission | In Hospital | Total | Total Corrected ¹ | Prior to Hospital Admission | In Hospital | Total | Total Corrected ¹ | | | |
| <500 | 38 | 1 | 39 | 32 | 0 | 37 | 37 | 19 | 76 | 47 | 1,617 |
| 500 - 749 | 16 | 4 | 20 | 15 | 3 | 18 | 21 | 13 | 41 | 74 | 554 |
| 750 - 999 | 9 | 2 | 11 | 9 | 0 | 7 | 7 | 3 | 18 | 92 | 196 |
| 1000 - 1249 | 5 | 0 | 5 | 3 | 0 | 2 | 2 | 0 | 7 | 89 | 79 |
| 1250 - 1499 | 3 | 1 | 4 | 2 | 0 | 2 | 2 | 0 | 6 | 121 | 50 |
| 1500 - 1749 | 6 | 0 | 6 | 5 | 0 | 0 | 0 | 0 | 6 | 160 | 38 |
| 1750 - 1999 | 7 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 7 | 291 | 24 |
| 2000 - 2499 | 11 | 0 | 11 | 11 | 0 | 1 | 1 | 0 | 12 | 1,375 | 9 |
| 2500 - 3999 | 47 | 2 | 49 | 45 | 0 | 8 | 8 | 6 | 57 | 29,646 | 2 |
| ≥4000 | 8 | 0 | 8 | 8 | 0 | 6 | 6 | 6 | 14 | 4,710 | 3 |
| Total | 150 | 10 | 160 | 136 | 3 | 81 | 84 | 47 | 244 | 36,605 | 7 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

- Notes:
1. Major anomalies excluded.
 2. Total Antepartum Deaths + Total Intrapartum Deaths (excludes four still births with no specified weight).
 3. Live births for each weight category from Alberta Health (2000) Vital Statistics Annual Review (excludes one live birth with no specified weight).
 4. Ratio: Stillbirths/Live births = (Total Antepartum Deaths + Total Intrapartum Deaths)/Live births x 1,000.
- Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A64 Stillbirths by weeks of gestation, Alberta, 1986 - 2000

| Year | Stillbirths | Number of weeks gestation | | | | | | | |
|------|-------------|---------------------------|------------------|-------|------------------|-------|------------------|---------|------------------|
| | | <37 | | 37-42 | | >42 | | Unknown | |
| | | Cases | % of stillbirths | Cases | % of stillbirths | Cases | % of stillbirths | Cases | % of stillbirths |
| 86 | 267 | 178 | 66.7 | 85 | 31.8 | 3 | 1.1 | 1 | 0.4 |
| 87 | 253 | 171 | 67.6 | 81 | 32.0 | 1 | 0.4 | 0 | 0.0 |
| 88 | 297 | 210 | 70.7 | 86 | 29.0 | 0 | 0.0 | 1 | 0.3 |
| 89 | 254 | 182 | 71.7 | 72 | 28.3 | 0 | 0.0 | 0 | 0.0 |
| 90 | 296 | 222 | 75.0 | 74 | 25.0 | 0 | 0.0 | 0 | 0.0 |
| 91 | 310 | 234 | 75.5 | 75 | 24.2 | 1 | 0.3 | 0 | 0.0 |
| 92 | 279 | 205 | 73.5 | 72 | 25.8 | 0 | 0.0 | 2 | 0.7 |
| 93 | 267 | 175 | 65.5 | 91 | 34.1 | 0 | 0.0 | 1 | 0.4 |
| 94 | 266 | 189 | 71.1 | 77 | 28.9 | 0 | 0.0 | 0 | 0.0 |
| 95 | 262 | 200 | 76.3 | 61 | 23.3 | 1 | 0.4 | 0 | 0.0 |
| 96 | 236 | 172 | 72.9 | 64 | 27.1 | 0 | 0.0 | 0 | 0.0 |
| 97 | 249 | 189 | 75.9 | 60 | 24.1 | 0 | 0.0 | 0 | 0.0 |
| 98 | 192 | 144 | 75.0 | 45 | 23.4 | 0 | 0.0 | 0 | 0.0 |
| 99 | 260 | 191 | 73.5 | 69 | 26.5 | 0 | 0.0 | 0 | 0.0 |
| 00 | 238 | 179 | 75.2 | 59 | 24.8 | 0 | 0.0 | 0 | 0.0 |

Sources: Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A65 Multiple and Singleton Stillbirth Rates, Alberta, 1986 - 2000

| Year | Multiple Births ¹ | | | | Singleton Births | | | |
|-----------|------------------------------|-------------|--------------|------------------------------|------------------|-------------|--------------|------------------------------|
| | Live Births | Stillbirths | Total Births | Stillbirth Rate ² | Live births | Stillbirths | Total Births | Stillbirth Rate ² |
| 86 | 809 | 19 | 828 | 22.9 | 42,495 | 248 | 42,743 | 5.8 |
| 87 | 863 | 21 | 884 | 23.8 | 40,844 | 232 | 41,076 | 5.6 |
| 88 | 820 | 30 | 850 | 35.3 | 40,849 | 267 | 41,116 | 6.5 |
| 89 | 916 | 16 | 932 | 17.2 | 42,063 | 238 | 42,301 | 5.6 |
| 90 | 869 | 26 | 895 | 29.1 | 41,764 | 270 | 42,034 | 6.4 |
| 91 | 878 | 24 | 902 | 26.6 | 41,491 | 286 | 41,777 | 6.8 |
| 92 | 948 | 19 | 967 | 19.6 | 40,725 | 260 | 40,985 | 6.3 |
| 93 | 860 | 27 | 887 | 30.4 | 39,045 | 240 | 39,285 | 6.1 |
| 94 | 870 | 16 | 886 | 18.1 | 38,589 | 250 | 38,839 | 6.4 |
| 95 | 900 | 25 | 925 | 27.0 | 37,628 | 237 | 37,865 | 6.3 |
| 96 | 887 | 20 | 907 | 22.1 | 36,584 | 216 | 36,800 | 5.9 |
| 97 | 932 | 19 | 951 | 20.0 | 35,614 | 230 | 35,844 | 6.4 |
| 98 | 1,002 | 12 | 1,014 | 11.8 | 36,525 | 177 | 36,702 | 4.8 |
| 99 | 1,029 | 24 | 1,053 | 22.8 | 36,742 | 235 | 36,977 | 6.4 |
| 00 | 1,098 | 20 | 1,118 | 17.9 | 35,515 | 218 | 35,733 | 6.1 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Stillbirth File, Department of Government Services, January 2002 release.

Notes: 1. Multiple birth refers to birth in which more than one infant is born.

2. Stillbirth rates are per 1,000 total births.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A66 Weight Specific Perinatal and Neonatal Mortality, Alberta, 1999

| Birth Weight (Grams) | Perinatal | | | | | Neonatal | | | | |
|----------------------|---------------------------|-------------------------------|---|---------------------------------------|---|---------------|-----------------|--|--------------------------------------|--|
| | Total Births ¹ | Perinatal Deaths ² | Perinatal Deaths Excluding Major Congenital Anomalies | Perinatal Mortality Rate ³ | Corrected Perinatal Mortality Rate ⁴ | Live Births | Neonatal Deaths | Neonatal Deaths Excluding Major Congenital Anomalies | Neonatal Mortality Rate ⁵ | Corrected Neonatal Mortality Rate ⁶ |
| <500 | 122 | *132 | 93 | 1000.0 | 1000.0 | 31 | 31 | 28 | 1000 | 1000.0 |
| 500 - 749 | 104 | 61 | 40 | 586.5 | 481.9 | 68 | 33 | 21 | 485.3 | 375.0 |
| 750 - 999 | 97 | 28 | 20 | 288.7 | 224.7 | 85 | 18 | 11 | 211.8 | 141.0 |
| 1000 - 1249 | 98 | 23 | 14 | 234.7 | 157.3 | 85 | 7 | 2 | 82.4 | 25.0 |
| 1250 - 1499 | 114 | 11 | 6 | 96.5 | 55.0 | 106 | 2 | 0 | 18.9 | 0.0 |
| 1500 - 1749 | 190 | 15 | 13 | 78.9 | 69.1 | 179 | 4 | 3 | 22.3 | 16.9 |
| 1750 - 1999 | 266 | 12 | 6 | 45.1 | 23.1 | 259 | 5 | 0 | 19.3 | 0.0 |
| 2000 - 2499 | 1,441 | 26 | 16 | 18.0 | 11.2 | 1,428 | 8 | 2 | 5.6 | 1.4 |
| 2500 - 2999 | 5,607 | 40 | 30 | 7.1 | 5.4 | 5,574 | 17 | 6 | 3.0 | 1.1 |
| 3000 - 3999 | 25,218 | 51 | 41 | 2.0 | 1.6 | 25,182 | 25 | 11 | 1.0 | 0.4 |
| 4000 - 4499 | 4,001 | 6 | 6 | 1.5 | 1.5 | 3,997 | 2 | 2 | 0.5 | 0.5 |
| ^a 4,500 | 768 | 4 | 2 | 5.2 | 2.6 | 765 | 1 | 0 | 1.3 | 0.0 |
| Total | 38,026 | 409 | 287 | 10.8 | 7.6 | 37,759 | 153 | 86 | 4.1 | 2.3 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals. Vital Statistics Annual Review 1999, Alberta Vital Statistics.

- Notes:**
1. Figures obtained from Vital Statistics Annual Review 1999.
 2. Excludes two deaths with no recorded weight.
 3. $((\text{Stillbirths} + \text{Early Neonatal Deaths}) / \text{Total Births}) \times 1000$.
 4. $((\text{Stillbirths} + \text{Early Neonatal Deaths}) - \text{Congenital Anomalies}) / (\text{Total Births} - \text{Congenital Anomalies}) \times 1000$.
 5. $((\text{Early Neonatal Deaths} + \text{Late Neonatal Deaths}) / \text{Live Births}) \times 1000$.
 6. $((\text{Early Neonatal Deaths} + \text{Late Neonatal Deaths}) - \text{Congenital Anomalies}) / (\text{Live Births} - \text{Congenital Anomalies}) \times 1000$.
- *Perinatal Deaths total more than Total Births in this category due to the fact that some live births and stillbirths are inconsistently registered. Total birth numbers are from the Vital Statistics database, in which some births < 500 grams are apparently not registered. The perinatal deaths come from the Medical Records departments, which have the death records for these unregistered births. The rates have consequently been adjusted downward to 1,000 to correct for this fact. Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A67 Weight Specific Perinatal and Neonatal Mortality, Alberta, 2000

| Birth Weight (Grams) | Perinatal | | | | | Neonatal | | | | |
|----------------------|---------------------------|-------------------------------|---|---------------------------------------|---|---------------|-----------------|--|--------------------------------------|--|
| | Total Births ¹ | Perinatal Deaths ² | Perinatal Deaths Excluding Major Congenital Anomalies | Perinatal Mortality Rate ³ | Corrected Perinatal Mortality Rate ⁴ | Live Births | Neonatal Deaths | Neonatal Deaths Excluding Major Congenital Anomalies | Neonatal Mortality Rate ⁵ | Corrected Neonatal Mortality Rate ⁶ |
| <500 | 120 | *122 | 80 | 1000.0 | 1000.0 | 48 | 48 | 31 | 1000 | 1000.0 |
| 500 - 749 | 117 | 77 | 55 | 658.1 | 578.9 | 74 | 40 | 31 | 540.5 | 476.9 |
| 750 - 999 | 107 | 23 | 17 | 215.0 | 168.3 | 92 | 11 | 9 | 119.6 | 100.0 |
| 1000 - 1249 | 95 | 11 | 6 | 115.8 | 66.7 | 89 | 6 | 5 | 67.4 | 56.8 |
| 1250 - 1499 | 127 | 11 | 3 | 86.6 | 25.2 | 121 | 5 | 1 | 41.3 | 8.5 |
| 1500 - 1749 | 164 | 9 | 5 | 54.9 | 31.3 | 160 | 3 | 0 | 18.8 | 0.0 |
| 1750 - 1999 | 298 | 15 | 7 | 50.3 | 24.1 | 291 | 8 | 1 | 27.5 | 3.5 |
| 2000 - 2499 | 1,385 | 16 | 11 | 11.6 | 8.0 | 1,375 | 8 | 0 | 5.8 | 0.0 |
| 2500 - 2999 | 5,396 | 36 | 27 | 6.7 | 5.0 | 5,366 | 11 | 3 | 2.0 | 0.6 |
| 3000 - 3999 | 24,310 | 41 | 30 | 1.7 | 1.2 | 24,280 | 17 | 6 | 0.7 | 0.2 |
| 4000 - 4499 | 3,937 | 9 | 9 | 2.3 | 2.3 | 3,931 | 2 | 1 | 0.5 | 0.3 |
| ^a 4,500 | 784 | 8 | 8 | 10.2 | 10.2 | 779 | 2 | 2 | 2.6 | 2.6 |
| Total | 36,840 | 378 | 258 | 10.3 | 7.0 | 36,606 | 161 | 90 | 4.4 | 2.5 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals. Vital Statistics Annual Review 2000, Alberta Vital Statistics.

Notes:

1. Figures obtained from Vital Statistics Annual Review 2000; one live birth with no recorded weight is excluded.
2. Excludes four deaths with no recorded weight.
3. $((\text{Stillbirths} + \text{Early Neonatal Deaths}) / \text{Total Births}) \times 1000$.
4. $((\text{Stillbirths} + \text{Early Neonatal Deaths}) - \text{Congenital Anomalies}) / (\text{Total Births} - \text{Congenital Anomalies}) \times 1000$.
5. $(\text{Early Neonatal Deaths} + \text{Late Neonatal Deaths}) / \text{Live Births}) \times 1000$.
6. $(\text{Early Neonatal Deaths} + \text{Late Neonatal Deaths} - \text{Congenital Anomalies}) / (\text{Live Births} - \text{Congenital Anomalies}) \times 1000$.

*Perinatal Deaths total more than Total Births in this category due to the fact that some live births and stillbirths are inconsistently registered. Total birth numbers are from the Vital Statistics database, in which some births < 500 grams are apparently not registered. The perinatal deaths come from the Medical Records departments, which have the death records for these unregistered births. The rates have consequently been adjusted downward to 1,000 to correct for this fact. Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A68 Weight Specific Perinatal and Neonatal Mortality,
Alberta, 1996 - 2000 Combined

| Birth Weight (Grams) | Perinatal | | | | | Neonatal | | | | |
|----------------------|----------------|------------------|---|---------------------------------------|---|--------------------------|-----------------|--|--------------------------------------|--|
| | Total Births | Perinatal Deaths | Perinatal Deaths Excluding Major Congenital Anomalies | Perinatal Mortality Rate ¹ | Corrected Perinatal Mortality Rate ² | Live Births ³ | Neonatal Deaths | Neonatal Deaths Excluding Major Congenital Anomalies | Neonatal Mortality Rate ⁴ | Corrected Neonatal Mortality Rate ⁵ |
| <500 | 527 | *577 | 429 | 1000.0 | 1000.0 | 183 | 176 | 138 | 961.7 | 951.7 |
| 500 - 749 | 541 | 340 | 255 | 628.5 | 559.2 | 348 | 177 | 145 | 508.6 | 458.9 |
| 750 - 999 | 488 | 106 | 75 | 217.2 | 164.1 | 426 | 61 | 44 | 143.2 | 107.6 |
| 1000 - 1249 | 537 | 92 | 52 | 171.3 | 104.6 | 486 | 43 | 20 | 88.5 | 43.2 |
| 1250 - 1499 | 625 | 50 | 26 | 80.0 | 43.3 | 592 | 18 | 4 | 30.4 | 6.9 |
| 1500 - 1749 | 907 | 60 | 42 | 66.2 | 47.2 | 867 | 17 | 5 | 19.6 | 5.8 |
| 1750 - 1999 | 1,451 | 70 | 37 | 48.2 | 26.1 | 1,410 | 31 | 5 | 22.0 | 3.6 |
| 2000 - 2499 | 7,431 | 120 | 78 | 16.1 | 10.6 | 7,358 | 42 | 8 | 5.7 | 1.1 |
| 2500 - 2999 | 28,475 | 146 | 113 | 5.1 | 4.0 | 28,346 | 48 | 19 | 1.7 | 0.7 |
| 3000 - 3999 | 125,181 | 230 | 178 | 1.8 | 1.4 | 124,995 | 110 | 53 | 0.9 | 0.4 |
| 4000 - 4499 | 19,329 | 33 | 33 | 1.7 | 1.7 | 19,307 | 14 | 10 | 0.7 | 0.5 |
| >=4500 | 3,566 | 21 | 18 | 5.9 | 5.1 | 3,550 | 4 | 3 | 1.1 | 0.8 |
| Total | 189,058 | 1,845 | 1,336 | 9.8 | 7.1 | 187,868 | 741 | 454 | 3.9 | 2.4 |

Sources: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals. Vital Statistics Annual Review 1996 - 2000, Alberta Vital Statistics.

- Notes:**
1. ((Perinatal Deaths) / Total Births) x 1000.
 2. ((Perinatal Deaths - Congenital Anomalies) / (Total Births - Congenital Anomalies)) x 1000.
 3. Figures obtained from Vital Statistics Annual Review 1996 - 2000; data on births <500 grams from AMA hospital database.
 4. ((Early Neonatal Death + Late Neonatal Deaths) / Live Births) x 1000.
 5. ((Early Neonatal Deaths + Late Neonatal Deaths - Congenital Anomalies) / (Live Births - Congenital Anomalies)) x 1000.

*Perinatal Deaths total more than Total Births in this category due to the fact that some live births and stillbirths are inconsistently registered. Total birth numbers are from the Vital Statistics database, in which some births < 500 grams are apparently not registered. The perinatal deaths come from the Medical Records departments, which have the death records for these unregistered births. The rates have consequently been adjusted downward to 1,000 to correct for this fact. Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A69 Perinatal and Neonatal Mortality Rates by Length of Gestation, Alberta, 1999

| Gestational Age (Weeks) | Live Births ¹ | % of Total Deaths ² | Stillbirths | Early Neonatal Deaths | Late Neonatal Deaths | Perinatal Mortality Rate (per 1,000 total births) ^{3,4} | Neonatal Mortality Rate (per 1,000 live births) ⁴ |
|-------------------------|--------------------------|--------------------------------|-------------|-----------------------|----------------------|--|--|
| <24 | 51 | 22.7 | 99 | *49 | *3 | 986.7 | 1000.0 |
| 24 | 23 | 2.8 | 5 | 5 | 2 | 357.1 | 304.3 |
| 25 | 21 | 3.7 | 9 | 6 | 1 | 500.0 | 333.3 |
| 26 | 40 | 4.1 | 10 | 7 | 1 | 340.0 | 200.0 |
| 27 | 42 | 2.3 | 7 | 3 | 0 | 204.1 | 71.4 |
| 28 | 65 | 4.6 | 9 | 11 | 0 | 270.3 | 169.2 |
| 29 | 38 | 1.1 | 4 | 1 | 0 | 119.0 | 26.3 |
| 30 | 78 | 2.5 | 8 | 3 | 0 | 127.9 | 38.5 |
| 31 | 94 | 2.5 | 5 | 5 | 1 | 101.0 | 63.8 |
| 32 | 138 | 2.5 | 9 | 1 | 1 | 68.0 | 14.5 |
| 33 | 228 | 2.8 | 11 | 1 | 0 | 50.2 | 4.4 |
| 34 | 410 | 3.0 | 10 | 3 | 0 | 31.0 | 7.3 |
| 35 | 570 | 3.2 | 12 | 2 | 0 | 24.1 | 3.5 |
| 36 | 1,134 | 3.7 | 9 | 5 | 2 | 12.2 | 6.2 |
| 37 | 2,252 | 6.4 | 21 | 5 | 2 | 11.4 | 3.1 |
| 38 | 5,540 | 8.0 | 27 | 4 | 4 | 5.6 | 1.4 |
| 39 | 8,788 | 4.8 | 11 | 6 | 4 | 1.9 | 1.1 |
| 40 | 11,706 | 5.0 | 13 | 5 | 4 | 1.5 | 0.8 |
| 41 | 5,913 | 1.1 | 2 | 3 | 0 | 0.8 | 0.5 |
| 42 | 603 | 1.1 | 2 | 3 | 0 | 8.3 | 5.0 |
| >42 | 21 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 |
| Total | 37,755 | 100.0 | 283 | 128 | 25 | 10.8 | 4.1 |

Sources: Vital Statistics Annual Review 1999, Alberta Vital Statistics.

Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

Notes: 1. Gestational age was not specified for 4 live births.

2. Total number of deaths = 436.

3. Total Births = Live births + Stillbirths.

4. Perinatal and neonatal mortality rates are not corrected.

*Neonatal Deaths total more than Live Births in this category due to the fact that some live births and neonatal deaths are inconsistently registered. Live birth numbers are from the Vital Statistics database, in which some births < 24 weeks gestation are apparently not registered. The neonatal deaths come from the Medical Records departments, which have the death records for these unregistered births. The rates have consequently been adjusted downward to 1,000 to correct for this fact.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A70 Perinatal and Neonatal Mortality Rates by Length of Gestation, Alberta, 2000

| Gestational Age (Weeks) | Live Births ¹ | % of Total Deaths ² | Stillbirths | Early Neonatal Deaths | Late Neonatal Deaths | Perinatal Mortality Rate (per 1,000 total births) ^{3,4} | Neonatal Mortality Rate (per 1,000 live births) ⁴ |
|-------------------------|--------------------------|--------------------------------|-------------|-----------------------|----------------------|--|--|
| <24 | 81 | 37.7 | 81 | 69 | 4 | 925.9 | 901.2 |
| 24 | 18 | 6.1 | 15 | 9 | 1 | 727.3 | 555.6 |
| 25 | 27 | 4.6 | 9 | 6 | 4 | 416.7 | 370.4 |
| 26 | 30 | 2.7 | 8 | 2 | 1 | 263.2 | 100.0 |
| 27 | 57 | 2.7 | 7 | 4 | 0 | 171.9 | 70.2 |
| 28 | 41 | 1.7 | 4 | 1 | 2 | 111.1 | 73.2 |
| 29 | 57 | 1.5 | 5 | 1 | 0 | 96.8 | 17.5 |
| 30 | 93 | 2.4 | 8 | 1 | 1 | 89.1 | 21.5 |
| 31 | 91 | 1.7 | 6 | 1 | 0 | 72.2 | 11.0 |
| 32 | 157 | 2.0 | 2 | 5 | 1 | 44.0 | 38.2 |
| 33 | 189 | 2.0 | 6 | 2 | 0 | 41.0 | 10.6 |
| 34 | 421 | 2.2 | 7 | 2 | 0 | 21.0 | 4.8 |
| 35 | 600 | 2.9 | 8 | 1 | 3 | 14.8 | 6.7 |
| 36 | 1,235 | 6.1 | 20 | 4 | 1 | 19.1 | 4.0 |
| 37 | 2,346 | 4.6 | 14 | 4 | 1 | 7.6 | 2.1 |
| 38 | 5,631 | 4.6 | 12 | 5 | 2 | 3.0 | 1.2 |
| 39 | 8,359 | 5.9 | 13 | 8 | 3 | 2.5 | 1.3 |
| 40 | 11,046 | 5.4 | 13 | 7 | 2 | 1.8 | 0.8 |
| 41 | 5,564 | 2.9 | 10 | 1 | 1 | 2.0 | 0.4 |
| 42 | 532 | 0.2 | 0 | 1 | 0 | 1.9 | 1.9 |
| >42 | 29 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 |
| Total | 36,604 | 100.0 | 248 | 134 | 27 | 10.4 | 4.4 |

Sources: Vital Statistics Annual Review 2000, Alberta Vital Statistics.

Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

Notes:

1. Gestational age was not specified for 2 live births.
 2. Total number of deaths = 409.
 3. Total Births = Live births + Stillbirths.
 4. Perinatal and neonatal mortality rates are not corrected.
- Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A71 Perinatal and Neonatal Mortality Rates by Length of Gestation, Alberta, 1996 - 2000 Combined

| Gestational Age (Weeks) | Live Births | % of Total Deaths ¹ | Stillbirths | Early Neonatal Deaths | Late Neonatal Deaths | Perinatal Mortality Rate (per 1,000 total births) ^{2,3} | Neonatal Mortality Rate (per 1,000 live births) ³ |
|-------------------------|----------------|--------------------------------|--------------|-----------------------|----------------------|--|--|
| <24 | 199 | 21.2 | 426 | **263 | **14 | 1000.0 | 1000.0 |
| 24 | 100 | 5.4 | 57 | 46 | 6 | 656.1 | 520.0 |
| 25 | 135 | 4.2 | 41 | 32 | 11 | 414.8 | 318.5 |
| 26 | 165 | 2.9 | 28 | 25 | 6 | 274.6 | 187.9 |
| 27 | 203 | 3.0 | 38 | 19 | 4 | 236.5 | 113.3 |
| 28 | 221 | 2.0 | 22 | 17 | 2 | 160.5 | 86.0 |
| 29 | 289 | 1.9 | 29 | 7 | 2 | 113.2 | 31.1 |
| 30 | 382 | 2.6 | 41 | 10 | 2 | 120.6 | 31.4 |
| 31 | 454 | 2.3 | 31 | 13 | 2 | 90.7 | 33.0 |
| 32 | 714 | 2.0 | 30 | 9 | 2 | 52.4 | 15.4 |
| 33 | 1,066 | 2.1 | 35 | 7 | 1 | 38.1 | 7.5 |
| 34 | 1,815 | 2.9 | 41 | 14 | 4 | 29.6 | 9.9 |
| 35 | 2,783 | 2.7 | 39 | 11 | 4 | 17.7 | 5.4 |
| 36 | 5,775 | 4.1 | 61 | 17 | 4 | 13.4 | 3.6 |
| 37 | 11,286 | 6.6 | 64 | 58 | 11 | 10.7 | 6.1 |
| 38 | 27,449 | 6.2 | 85 | 25 | 14 | 4.0 | 1.4 |
| 39 | 43,655 | 5.3 | 63 | 29 | 15 | 2.1 | 1.0 |
| 40 | 58,579 | 5.6 | 65 | 36 | 11 | 1.7 | 0.8 |
| 41 | 28,130 | 2.3 | 28 | 15 | 4 | 1.5 | 0.7 |
| 42 | 3,186 | 0.6 | 7 | 5 | 1 | 3.8 | 1.9 |
| >42 | 108 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 |
| Total | 186,694 | 100.0 | 1,231 | 658 | 120 | 10.1 | 4.2 |

Sources: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

*Vital Statistics Annual Review 1996-2000, Alberta Vital Statistics - excluding live births <24 weeks.

- Notes:**
1. Total number of deaths = 2009.
 2. Total Births = Live births + Stillbirths.
 3. Perinatal and neonatal mortality rates are not corrected.

Table A72a Perinatal and Neonatal Mortality Rates by Maternal Age Group, Alberta, 1999

| Maternal Age Group | Live Births* | % of Total Births ¹ | Stillbirths | Early Neonatal Deaths | Late Neonatal Deaths | Perinatal Mortality Rate (PMR) ² | PMR Corrected for Congenital Anomalies | Neonatal Mortality Rate (NMR) ³ | NMR Corrected for Congenital Anomalies | Mortality Rate ⁴ | Mortality Rate Corrected for Congenital Anomalies |
|--------------------|--------------|--------------------------------|-------------|-----------------------|----------------------|---|--|--|--|-----------------------------|---|
| £17 | 861 | 2.3 | 7 | 2 | 0 | 10.4 | 6.9 | 2.3 | 0.0 | 10.4 | 6.9 |
| 18-29 | 21,237 | 56.2 | 152 | 66 | 14 | 10.2 | 7.9 | 3.8 | 2.5 | 10.8 | 8.3 |
| 30-39 | 14,887 | 39.4 | 113 | 57 | 11 | 11.3 | 7.2 | 4.6 | 2.2 | 12.1 | 7.6 |
| ³35 | 5,382 | 14.3 | 52 | 24 | 6 | 14.0 | 8.5 | 5.6 | 2.8 | 15.1 | 9.3 |
| ³39 | 772 | 2.0 | 11 | 2 | 0 | 16.6 | 6.5 | 2.6 | 0.0 | 16.6 | 6.5 |

Sources: *Number of live births for maternal age from Vital Statistics Annual Review, 1999; 2 births have no recorded maternal age.

Still Births and neonatal deaths as reported to Committee on Reproductive Care by Medical Records Departments of the hospitals.

Notes: 1. Total Births = Live Births + Stillbirths (= 38,040 across all age groups).

2. Per 1,000 total births in each age group.

3. Per 1,000 live births in each age group.

4. ((Stillbirths + Neonatal Deaths) / Total Births in each age Group) x 1,000.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A72b Perinatal and Neonatal Mortality Rates by Maternal Age Group, Alberta, 2000

| Maternal Age Group | Live Births* | % of Total Births ¹ | Stillbirths | Early Neonatal Deaths | Late Neonatal Deaths | Perinatal Mortality Rate (PMR) ² | PMR Corrected for Congenital Anomalies | Neonatal Mortality Rate (NMR) ³ | NMR Corrected for Congenital Anomalies | Mortality Rate ⁴ | Mortality Rate Corrected for Congenital Anomalies |
|--------------------|--------------|--------------------------------|-------------|-----------------------|----------------------|---|--|--|--|-----------------------------|---|
| £17 | 760 | 2.0 | 6 | 2 | 1 | 10.4 | 6.6 | 3.9 | 3.9 | 11.7 | 7.9 |
| 18-29 | 20,437 | 54.1 | 132 | 66 | 19 | 9.6 | 6.8 | 4.2 | 4.2 | 10.5 | 7.2 |
| 30-39 | 14,637 | 38.8 | 99 | 58 | 7 | 10.7 | 7.0 | 4.4 | 4.4 | 11.1 | 7.4 |
| ³35 | 5,385 | 14.3 | 41 | 26 | 3 | 12.3 | 8.3 | 5.4 | 5.4 | 12.9 | 8.7 |
| ³39 | 777 | 2.1 | 10 | 8 | 0 | 22.9 | 17.9 | 10.3 | 10.3 | 22.9 | 17.9 |

Sources: *Number of live births for maternal age from Vital Statistics Annual Review, 2000; 2 births have no recorded maternal age.

Still Births and neonatal deaths as reported to Committee on Reproductive Care by Medical Records Departments of the hospitals.

Notes: 1. Total Births = Live Births + Stillbirths (= 36,858 across all age groups).

2. Per 1,000 total births in each age group.

3. Per 1,000 live births in each age group.

4. ((Stillbirths + Neonatal Deaths) / Total Births in each age Group) x 1,000.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A73 Perinatal and Neonatal Statistics by Facility RHA, Alberta, 1999

| Facility RHA | Total Births $\geq 500g^1$ | Stillbirth Rate $\geq 500g^2$ | Perinatal Mortality Rate $\geq 500g^3$ | Neonatal Mortality Rate $\geq 500g^4$ | Total Cesarean Section Rate ⁵ | Primary Cesarean Section Rate ⁶ | Extremely Low Birth Weight % ⁷ | Very Low Birth Weight % ⁸ | Low Birth Weight % ⁹ |
|----------------|----------------------------|-------------------------------|--|---------------------------------------|--|--|---|--------------------------------------|---------------------------------|
| 1 | 2,128 | 4.7 | 6.6 | 1.9 | 18.6 | 11.1 | 0.2 | 0.7 | 5.6 |
| 2 | 1,245 | 4.8 | 6.4 | 1.6 | 13.0 | 9.2 | 0.4 | 0.6 | 5.2 |
| 3 | 530 | 3.8 | 3.8 | 0.0 | 17.0 | 10.4 | 0.2 | 0.2 | 1.9 |
| 4 | 12,460 | 3.9 | 7.1 | 4.0 | 20.4 | 14.4 | 0.7 | 1.4 | 7.0 |
| 5 | 360 | 8.3 | 8.3 | 0.0 | 18.1 | 10.3 | 0.0 | 0.0 | 1.4 |
| 6 | 2,452 | 3.3 | 4.9 | 1.6 | 20.4 | 13.5 | 0.2 | 0.4 | 4.8 |
| 7 | 824 | 4.9 | 4.9 | 1.2 | 21.0 | 15.1 | 0.0 | 0.0 | 1.7 |
| 8 | 438 | 4.6 | 4.6 | 0.0 | 12.8 | 9.6 | 0.0 | 0.0 | 2.5 |
| 9 | 606 | 5.0 | 6.6 | 1.7 | 7.1 | 3.0 | 0.0 | 0.5 | 3.2 |
| 10 | 12,349 | 5.6 | 9.0 | 4.5 | 19.6 | 12.8 | 0.7 | 1.5 | 7.5 |
| 11 | 554 | 3.6 | 3.6 | 0.0 | 13.9 | 9.9 | 0.0 | 0.0 | 2.0 |
| 12 | 1,084 | 4.6 | 4.6 | 0.0 | 17.9 | 11.5 | 0.1 | 0.1 | 2.1 |
| 13 | 1,301 | 8.5 | 10.0 | 1.6 | 18.8 | 11.5 | 0.2 | 0.5 | 4.0 |
| 14 | 357 | 0.0 | 0.0 | 0.0 | 21.2 | 14.0 | 0.0 | 0.0 | 2.8 |
| 15 | 357 | 5.6 | 5.6 | 0.0 | 13.6 | 9.2 | 0.6 | 0.8 | 2.8 |
| 16 | 622 | 0.0 | 1.6 | 1.6 | 20.5 | 12.1 | 0.6 | 1.0 | 5.3 |
| 17 | 416 | 2.4 | 2.4 | 0.0 | 10.8 | 7.9 | 0.5 | 0.5 | 2.9 |
| Alberta | 38,083 | 4.6 | 7.1 | 3.2 | 19.1 | 12.7 | 0.5 | 1.1 | 6.0 |

Source: Statistics reported to the Reproductive Care Committee from Canadian Institute of Health Information, Alberta Health and Wellness.

- Notes:**
1. Out-of-hospital births excluded.
 2. (Stillbirths $\geq 500g$ / Total Births $\geq 500g$) x 1000.
 3. ((Stillbirths $\geq 500g$ + Early Neonatal Deaths $\geq 500g$) / Total Births $\geq 500g$) x 1000.
 4. ((Early + Late Neonatal Deaths $\geq 500g$) / Live Births $\geq 500g$) x 1000.
 5. (Total Cesarean Sections / Total Mothers Delivered) x 100.
 6. (Primary Cesarean Sections / Total Mothers Delivered) x 100.
 7. (Live Births < 1000g / All Live Births) x 100.
 8. (Live Births < 1500g / All Live Births) x 100.
 9. (Live Births < 2500g / All Live Births) x 100.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A74 Perinatal and Neonatal Statistics by Facility RHA, Alberta, 2000

| Facility RHA | Total Births $\geq 500g^1$ | Stillbirth Rate $\geq 500g^2$ | Perinatal Mortality Rate $\geq 500g^3$ | Neonatal Mortality Rate $\geq 500g^4$ | Total Cesarean Section Rate ⁵ | Primary Cesarean Section Rate ⁶ | Extremely Low Birth Weight % ⁷ | Very Low Birth Weight % ⁸ | Low Birth Weight % ⁹ |
|----------------|----------------------------|-------------------------------|--|---------------------------------------|--|--|---|--------------------------------------|---------------------------------|
| 1 | 2,015 | 3.5 | 3.5 | 0.5 | 19.3 | 13.1 | 0.1 | 0.5 | 5.6 |
| 2 | 1,211 | 5.8 | 7.4 | 1.7 | 16.0 | 12.1 | 0.1 | 0.6 | 4.4 |
| 3 | 590 | 3.4 | 3.4 | 0.0 | 18.3 | 14.1 | 0.0 | 0.5 | 1.4 |
| 4 | 12,493 | 4.2 | 6.4 | 2.8 | 20.7 | 14.1 | 0.7 | 1.4 | 7.5 |
| 5 | 338 | 3.0 | 3.0 | 3.0 | 17.9 | 11.2 | 0.6 | 2.1 | 1.8 |
| 6 | 2,298 | 5.2 | 7.8 | 2.6 | 24.5 | 15.4 | 0.3 | 0.7 | 4.3 |
| 7 | 759 | 0.0 | 0.0 | 1.3 | 21.7 | 13.0 | 0.0 | 1.1 | 1.7 |
| 8 | 396 | 2.5 | 5.1 | 2.5 | 15.5 | 11.2 | 0.0 | 2.0 | 2.5 |
| 9 | 540 | 3.7 | 3.7 | 0.0 | 5.6 | 2.6 | 0.0 | 1.7 | 3.7 |
| 10 | 11,834 | 4.8 | 8.2 | 4.4 | 21.0 | 14.1 | 1.0 | 1.9 | 7.8 |
| 11 | 499 | 4.0 | 8.0 | 6.0 | 14.2 | 10.4 | 0.6 | 3.2 | 4.0 |
| 12 | 953 | 3.1 | 4.2 | 1.1 | 21.2 | 15.5 | 0.0 | 1.7 | 2.8 |
| 13 | 1,228 | 3.3 | 4.1 | 1.6 | 19.2 | 11.3 | 0.0 | 1.2 | 4.6 |
| 14 | 327 | 9.2 | 9.2 | 0.0 | 21.5 | 12.6 | 0.0 | 4.3 | 3.1 |
| 15 | 355 | 5.6 | 11.3 | 5.7 | 13.3 | 8.5 | 0.0 | 4.2 | 1.7 |
| 16 | 636 | 4.7 | 4.7 | 0.0 | 22.0 | 15.0 | 0.0 | 2.5 | 3.8 |
| 17 | 431 | 9.3 | 18.6 | 9.4 | 12.1 | 7.9 | 0.7 | 4.9 | 3.0 |
| Alberta | 36,903 | 4.4 | 6.7 | 3.0 | 20.2 | 13.6 | 0.6 | 1.2 | 6.3 |

Source: Statistics reported to the Reproductive Care Committee from Canadian Institute of Health Information, Alberta Health and Wellness.

- Notes:**
1. Out-of-hospital births excluded.
 2. (Stillbirths $\geq 500g$ / Total Births $\geq 500g$) x 1000.
 3. ((Stillbirths $\geq 500g$ + Early Neonatal Deaths $\geq 500g$) / Total Births $\geq 500g$) x 1000.
 4. ((Early + Late Neonatal Deaths $\geq 500g$) / Live Births $\geq 500g$) x 1000.
 5. (Total Cesarean Sections / Total Mothers Delivered) x 100.
 6. (Primary Cesarean Sections / Total Mothers Delivered) x 100.
 7. (Live Births < 1000g / All Live Births) x 100.
 8. (Live Births < 1500g / All Live Births) x 100.
 9. (Live Births < 2500g / All Live Births) x 100.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A75 Perinatal and Corrected (for Major Anomalies) Perinatal Mortality Rates by Facility RHA, Alberta, 1999

| Place of Birth | Total Births ¹ | Total Births | | Stillbirths | | | | Early Neonatal Deaths | | | | Perinatal mortality Rate ^{2,3} | | Corrected perinatal mortality Rate ^{4,5} | |
|--------------------------------|---------------------------|---------------|---------------|-------------|------------|-----------------|-----------|-----------------------|-----------|-----------------|-----------|---|------------|---|------------|
| | | ≥500g | ≥1000g | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | ≥500g | ≥1000g |
| | | | | | | ≥500g | ≥1000g | | | ≥500g | ≥1000g | | | | |
| RHA Hospitals | | | | | | | | | | | | | | | |
| 1 | 2,134 | 2,128 | 2,123 | 10 | 8 | 2 | 2 | 4 | 2 | 0 | 0 | 6.6 | 4.7 | 5.6 | 3.8 |
| 2 | 1,249 | 1,245 | 1,241 | 6 | 6 | 0 | 0 | 2 | 2 | 0 | 0 | 6.4 | 6.4 | 6.4 | 6.4 |
| 3 | 530 | 530 | 530 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3.8 | 3.8 | 3.8 | 3.8 |
| 4 | 12,521 | 12,460 | 12,361 | 49 | 33 | 10 | 6 | 39 | 18 | 21 | 10 | 7.1 | 4.1 | 4.6 | 2.8 |
| 5 | 360 | 360 | 360 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8.3 | 8.3 | 8.3 | 8.3 |
| 6 | 2,433 | 2,452 | 2,449 | 8 | 7 | 1 | 1 | 4 | 2 | 1 | 1 | 4.9 | 3.7 | 4.1 | 2.9 |
| 7 | 824 | 824 | 824 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4.9 | 4.9 | 4.9 | 4.9 |
| 8 | 438 | 438 | 438 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4.6 | 4.6 | 4.6 | 4.6 |
| 9 | 607 | 606 | 606 | 3 | 3 | 0 | 0 | 1 | 1 | 1 | 1 | 6.6 | 6.6 | 5.0 | 5.0 |
| 10 | 12,401 | 12,349 | 12,269 | 69 | 49 | 15 | 9 | 42 | 25 | 28 | 20 | 9.0 | 6.0 | 5.5 | 3.7 |
| 11 | 556 | 554 | 553 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 3.6 | 1.8 | 1.8 | 0.0 |
| 12 | 1,086 | 1,084 | 1,081 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4.6 | 2.8 | 4.6 | 2.8 |
| 13 | 1,304 | 1,301 | 1,298 | 11 | 10 | 0 | 0 | 2 | 1 | 1 | 1 | 10.0 | 8.5 | 9.2 | 7.7 |
| 14 | 358 | 357 | 357 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 361 | 357 | 357 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5.6 | 5.6 | 5.6 | 5.6 |
| 16 | 623 | 622 | 619 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1.6 | 0.0 | 1.6 | 0.0 |
| 17 | 418 | 416 | 416 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 | 2.4 | 2.4 | 2.4 |
| Total Hospital Births | 38,203 | 38,083 | 37,882 | 177 | 134 | 29 | 19 | 95 | 51 | 52 | 33 | 7.1 | 4.9 | 5.0 | 3.5 |
| Out-of-Hospital Births* | 376 | 375 | 374 | 3 | 2 | 3 | 0 | 2 | 1 | 1 | 1 | 13.3 | 8.0 | 2.7 | 5.4 |
| Alberta | 38,579 | 38,458 | 38,256 | 180 | 136 | 32 | 19 | 97 | 52 | 53 | 34 | 7.2 | 4.9 | 5.0 | 3.5 |

Sources: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals and Canadian Institute of Health Information, Alberta Health and Wellness.

*Out-of-hospital data from Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes:

- Weights were not recorded for 2 stillbirths.
- (Stillbirths \geq 500g + Early Neonatal Deaths \geq 500g) / Total Births \geq 500g X 1000.
- (Stillbirths \geq 1000g + Early Neonatal Deaths \geq 1000g) / Total Births \geq 1000g X 1000.
- (Stillbirths \geq 500g Corrected + Early Neonatal Deaths \geq 500g Corrected) / Total Births \geq 500g Corrected X 1000.
- (Stillbirths \geq 1000g Corrected + Early Neonatal Deaths \geq 1000g Corrected) / Total Births \geq 1000g Corrected X 1000.

Corrected rates exclude deaths due to major anomalies.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A76 Perinatal and Corrected (for Major Anomalies) Perinatal Mortality Rates by Facility RHA, Alberta, 2000

| Place of Birth | Total Births ¹ | Total Births | | Stillbirths | | | | Early Neonatal Deaths | | | | Perinatal mortality Rate ^{2,3} | | Corrected perinatal mortality Rate ^{4,5} | |
|--------------------------------|---------------------------|---------------|---------------|-------------|------------|-----------------|-----------|-----------------------|-----------|-----------------|-----------|---|------------|---|------------|
| | | ≥500g | ≥1000g | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | ≥500g | ≥1000g |
| | | | | | | ≥500g | ≥1000g | | | ≥500g | ≥1000g | | | | |
| RHA Hospitals | | | | | | | | | | | | | | | |
| 1 | 2,018 | 2,015 | 2,005 | 7 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 3.5 | 2.5 | 3.0 | 2.5 |
| 2 | 1,213 | 1,211 | 1,204 | 7 | 6 | 0 | 0 | 2 | 2 | 1 | 1 | 7.4 | 6.6 | 6.6 | 5.8 |
| 3 | 590 | 590 | 588 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3.4 | 3.4 | 3.4 | 3.4 |
| 4 | 12,545 | 12,493 | 12,364 | 53 | 31 | 19 | 7 | 27 | 13 | 11 | 9 | 6.4 | 3.6 | 4.0 | 2.3 |
| 5 | 339 | 338 | 336 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 6 | 2,304 | 2,298 | 2,282 | 12 | 7 | 0 | 0 | 6 | 3 | 2 | 2 | 7.8 | 4.4 | 7.0 | 3.5 |
| 7 | 759 | 759 | 759 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 397 | 396 | 395 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 5.1 | 5.1 | 5.1 | 5.1 |
| 9 | 540 | 540 | 538 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3.7 | 3.7 | 3.7 | 3.7 |
| 10 | 11,893 | 11,834 | 11,688 | 57 | 37 | 11 | 7 | 40 | 19 | 22 | 15 | 8.2 | 4.8 | 5.4 | 2.9 |
| 11 | 501 | 499 | 495 | 2 | 2 | 0 | 0 | 2 | 1 | 1 | 1 | 8.0 | 6.1 | 6.0 | 4.0 |
| 12 | 953 | 953 | 950 | 3 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 4.2 | 2.1 | 4.2 | 2.1 |
| 13 | 1,229 | 1,228 | 1,224 | 4 | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 4.1 | 3.3 | 4.1 | 3.3 |
| 14 | 327 | 327 | 324 | 3 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 9.2 | 6.2 | 0.0 | 0.0 |
| 15 | 355 | 355 | 353 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 11.3 | 8.5 | 2.8 | 0.0 |
| 16 | 636 | 636 | 633 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4.7 | 3.2 | 4.7 | 3.2 |
| 17 | 431 | 431 | 424 | 4 | 3 | 1 | 0 | 4 | 4 | 3 | 3 | 18.6 | 16.5 | 9.4 | 9.5 |
| Total Hospital Births | 37,030 | 36,903 | 36,562 | 163 | 107 | 36 | 17 | 86 | 46 | 42 | 33 | 6.7 | 4.2 | 4.6 | 2.8 |
| Out-of-Hospital Births* | 353 | 352 | 350 | 5 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 19.9 | 8.6 | 19.9 | 8.6 |
| Alberta | 37,383 | 37,255 | 36,912 | 168 | 109 | 36 | 17 | 88 | 47 | 42 | 33 | 6.9 | 4.2 | 4.8 | 2.9 |

Sources: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals and Canadian Institute of Health Information, Alberta Health Services and Wellness.

*Out-of-hospital data from Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes:

- Weights were not recorded for 3 hospital births and 1 out-of-hospital birth.
- (Stillbirths \geq 500g + Early Neonatal Deaths \geq 500g) / Total Births \geq 500g X 1000.
- (Stillbirths \geq 1000g + Early Neonatal Deaths \geq 1000g) / Total Births \geq 1000g X 1000.
- (Stillbirths \geq 500g Corrected + Early Neonatal Deaths \geq 500g Corrected) / Total Births \geq 500g Corrected X 1000.
- (Stillbirths \geq 1000g Corrected + Early Neonatal Deaths \geq 1000g Corrected) / Total Births \geq 1000g Corrected X 1000.

Corrected rates exclude deaths due to major anomalies.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A77 Perinatal and Neonatal Mortality Rates by Level of Hospital, Alberta, 1999

| Hospitals | Total Births ≥500g ¹ | Stillbirth Rate ≥500g ² | Perinatal Mortality Rate ≥500g ³ | Neonatal Mortality Rate ≥500g ⁴ | Total Cesarean Section Rate ⁵ | Primary Cesarean Section Rate ⁶ | Extremely Low Birth Weight % ⁷ | Very Low Birth Weight % ⁸ | Low Birth Weight % ⁹ |
|---------------------------------------|------------------------------------|---------------------------------------|---|--|---|---|---|--|------------------------------------|
| Level III | | | | | | | | | |
| Royal Alexandra/University of Alberta | 4,496 | 9.8 | 17.6 | 9.4 | 23.0 | 15.5 | 1.7 | 3.9 | 14.3 |
| Foothills | 4,429 | 5.0 | 12.0 | 8.8 | 19.2 | 14.1 | 2.0 | 3.5 | 10.8 |
| LEVEL III TOTAL | 8,925 | 7.4 | 14.8 | 9.1 | 21.1 | 14.8 | 1.8 | 3.7 | 12.5 |
| Level II | | | | | | | | | |
| Misericordia | 2,649 | 1.9 | 2.6 | 1.5 | 16.8 | 10.5 | 0.1 | 0.2 | 4.0 |
| Grey Nuns | 3,594 | 5.0 | 5.8 | 1.7 | 19.8 | 12.9 | 0.1 | 0.1 | 4.4 |
| Lougheed | 3,812 | 3.9 | 5.2 | 1.3 | 19.9 | 13.2 | 0.1 | 0.4 | 5.9 |
| Rockyview | 4,219 | 2.8 | 3.6 | 1.4 | 22.2 | 15.7 | 0.0 | 0.1 | 4.1 |
| Red Deer | 1,772 | 4.5 | 6.8 | 2.3 | 23.7 | 15.9 | 0.2 | 0.4 | 5.8 |
| Grande Prairie | 1,120 | 9.8 | 11.6 | 1.8 | 21.8 | 13.4 | 0.2 | 0.6 | 4.4 |
| Lethbridge Reg. | 1,626 | 5.5 | 7.4 | 1.9 | 19.7 | 12.2 | 0.2 | 0.9 | 6.4 |
| Medicine Hat | 908 | 3.3 | 4.4 | 1.1 | 12.8 | 9.0 | 0.6 | 0.8 | 6.6 |
| LEVEL II TOTAL | 19,700 | 4.1 | 5.3 | 1.6 | 20.1 | 13.3 | 0.1 | 0.3 | 5.0 |
| Level I | | | | | | | | | |
| North | 7,487 | 2.8 | 3.3 | 0.8 | 15.2 | 9.8 | 0.1 | 0.2 | 2.4 |
| South | 1,971 | 4.6 | 5.6 | 1.0 | 14.7 | 8.8 | 0.2 | 0.2 | 1.9 |
| LEVEL I TOTAL | 9,458 | 3.2 | 3.8 | 0.8 | 15.1 | 9.6 | 0.1 | 0.2 | 2.3 |
| TOTAL | 38,083 | 4.6 | 7.1 | 3.2 | 19.1 | 12.7 | 0.5 | 1.1 | 6.0 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records

Departments of the hospitals.

Notes:

1. Out-of-hospital births excluded.
2. (Stillbirths ≥500g / Total Births ≥500g) x 1000.
3. ((Stillbirths ≥500g + Early Neonatal Deaths ≥500g) / Total Births ≥500g) x 1000.
4. ((Early + Late Neonatal Deaths ≥500g) / Live Births ≥500g) x 1000.
5. (Total Cesarean Sections / Total Mothers Delivered) x 100.
6. (Primary Cesarean Sections / Total Mothers Delivered) x 100.
7. (Live Births < 1000g / All Live Births) x 100.
8. (Live Births < 1500g / All Live Births) x 100.
9. (Live Births < 2500g / All Live Births) x 100.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A78 Perinatal and Neonatal Mortality Rates by Level of Hospital, Alberta, 2000

| Hospitals | Total Births ≥500g ¹ | Stillbirth Rate ≥500g ² | Perinatal Mortality Rate ≥500g ³ | Neonatal Mortality Rate ≥500g ⁴ | Total Cesarean Section Rate ⁵ | Primary Cesarean Section Rate ⁶ | Extremely Low Birth Weight % ⁷ | Very Low Birth Weight % ⁸ | Low Birth Weight % ⁹ |
|---------------------------------------|------------------------------------|---------------------------------------|---|--|---|---|---|--|------------------------------------|
| Level III | | | | | | | | | |
| Royal Alexandra/University of Alberta | 4,124 | 6.8 | 14.8 | 10.3 | 24.4 | 17.0 | 2.8 | 5.1 | 15.0 |
| Foothills | 4,264 | 7.3 | 11.3 | 5.9 | 19.8 | 14.0 | 1.9 | 3.4 | 11.4 |
| LEVEL III TOTAL | 8,388 | 7.0 | 13.0 | 8.0 | 22.1 | 15.5 | 2.3 | 4.3 | 13.2 |
| Level II | | | | | | | | | |
| Misericordia | 2,690 | 4.1 | 4.8 | 0.7 | 18.2 | 11.6 | 0.1 | 0.1 | 3.7 |
| Grey Nuns | 3,606 | 3.9 | 5.3 | 2.2 | 20.9 | 14.1 | 0.1 | 0.2 | 4.8 |
| Lougheed | 4,070 | 2.7 | 4.4 | 1.7 | 20.1 | 13.4 | 0.1 | 0.4 | 6.6 |
| Rockyview | 4,159 | 2.6 | 3.4 | 0.7 | 22.3 | 15.0 | 0.1 | 0.2 | 4.5 |
| Red Deer | 1,730 | 5.8 | 9.2 | 3.5 | 28.3 | 18.2 | 0.3 | 0.4 | 5.1 |
| Grande Prairie | 1,065 | 3.8 | 4.7 | 1.9 | 22.2 | 13.1 | 0.0 | 0.2 | 5.0 |
| Lethbridge Reg. | 1,610 | 3.7 | 3.7 | 0.6 | 20.5 | 13.4 | 0.2 | 0.6 | 6.6 |
| Medicine Hat | 916 | 4.4 | 5.5 | 1.1 | 15.6 | 11.3 | 0.1 | 0.4 | 5.5 |
| LEVEL II TOTAL | 19,846 | 3.6 | 4.8 | 1.5 | 21.1 | 13.9 | 0.1 | 0.3 | 5.2 |
| Level I | | | | | | | | | |
| North | 6,856 | 3.6 | 5.1 | 1.6 | 16.3 | 10.5 | 0.1 | 0.2 | 2.6 |
| South | 1,814 | 4.4 | 5.0 | 1.1 | 17.0 | 12.5 | 0.1 | 0.2 | 1.4 |
| LEVEL I TOTAL | 8,669 | 3.8 | 5.1 | 1.5 | 16.5 | 11.0 | 0.1 | 0.2 | 2.4 |
| TOTAL | 36,903 | 4.4 | 6.7 | 3.0 | 20.2 | 13.6 | 0.6 | 1.2 | 6.3 |

Source: Statistics reported to the Committee on Reproductive Care by Medical Records

Departments of the hospitals.

Notes:

1. Out-of-hospital births excluded.
2. (Stillbirths ≥500g / Total Births ≥500g) x 1000.
3. ((Stillbirths ≥500g + Early Neonatal Deaths ≥500g) / Total Births ≥500g) x 1000.
4. ((Early + Late Neonatal Deaths ≥500g) / Live Births ≥500g) x 1000.
5. (Total Cesarean Sections / Total Mothers Delivered) x 100.
6. (Primary Cesarean Sections / Total Mothers Delivered) x 100.
7. (Live Births < 1000g / All Live Births) x 100.
8. (Live Births < 1500g / All Live Births) x 100.
9. (Live Births < 2500g / All Live Births) x 100.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A79 Neonatal, Post-neonatal and Infant Mortality Rates,
Alberta, 1986 - 2000

| Year | Neonatal Deaths ¹ | Post-Neonatal Deaths ² | Infant Deaths ³ | Neonatal Mortality Rate (per 1,000 Live Births) | Post-Neonatal Mortality Rate (per 1,000 Live Births) | Infant Mortality Rate (per 1,000 Live Births) |
|------|------------------------------|-----------------------------------|----------------------------|---|--|---|
| 86 | 214 | 172 | 386 | 4.9 | 4.0 | 8.9 |
| 87 | 179 | 132 | 311 | 4.3 | 3.2 | 7.5 |
| 88 | 183 | 157 | 340 | 4.4 | 3.8 | 8.2 |
| 89 | 180 | 139 | 319 | 4.2 | 3.2 | 7.4 |
| 90 | 215 | 123 | 338 | 5.0 | 2.9 | 7.9 |
| 91 | 145 | 138 | 283 | 3.4 | 3.3 | 6.7 |
| 92 | 194 | 105 | 299 | 4.7 | 2.5 | 7.2 |
| 93 | 157 | 105 | 262 | 3.9 | 2.6 | 6.6 |
| 94 | 185 | 105 | 290 | 4.7 | 2.7 | 7.3 |
| 95 | 187 | 80 | 267 | 4.9 | 2.1 | 6.9 |
| 96 | 150 | 81 | 231 | 4.0 | 2.2 | 6.2 |
| 97 | 128 | 51 | 179 | 3.5 | 1.4 | 4.9 |
| 98 | 129 | 74 | 203 | 3.4 | 2.0 | 5.4 |
| 99 | 141 | 77 | 218 | 3.7 | 2.0 | 5.8 |
| 00 | 149 | 89 | 238 | 4.1 | 2.4 | 6.5 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Death File, Department of Government Services, May 2001 release.

Notes: 1. Neonatal deaths refers to deaths of live born infants less than 28 full days after birth.

2. Post-neonatal deaths refers to deaths of children between 28 full days and one year of age.

3. Infant deaths refers to deaths of children under one year of age.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A80 Neonatal and Corrected (for Major Anomalies) Neonatal Mortality Rates by Facility RHA, Alberta, 1999

| Place of Birth | Live Births | Live Births | | Early Neonatal Deaths | | | | Late Neonatal Deaths | | | | Neonatal Mortality Rate ^{1,2} | | Corrected neonatal Mortality Rate ^{3,4} | |
|-------------------------------|----------------|---------------|---------------|-----------------------|-----------|-----------------|-----------|----------------------|-----------|-----------------|-----------|--|------------|--|------------|
| | | ≥500g | ≥1000g | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | ≥500g | ≥1000g |
| | | | | | | ≥500g | ≥1000g | | | ≥500g | ≥1000g | | | | |
| RHA Hospitals | | | | | | | | | | | | | | | |
| 1 | 2,120 | 2,118 | 2,115 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 | 0.9 | 1.9 | 0.9 |
| 2 | 1,240 | 1,239 | 1,235 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1.6 | 1.6 | 1.6 | 1.6 |
| 3 | 528 | 528 | 528 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 12,424 | 12,411 | 12,328 | 39 | 18 | 21 | 10 | 11 | 6 | 3 | 3 | 4.0 | 1.9 | 2.1 | 0.9 |
| 5 | 357 | 357 | 357 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 2,421 | 2,444 | 2,442 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1.6 | 0.8 | 1.2 | 0.4 |
| 7 | 820 | 820 | 820 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1.2 | 1.2 | 1.2 | 1.2 |
| 8 | 436 | 436 | 436 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 603 | 603 | 603 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1.7 | 1.7 | 0.0 | 0.0 |
| 10 | 12,300 | 12,280 | 12,220 | 42 | 25 | 28 | 20 | 13 | 12 | 8 | 8 | 4.5 | 3.0 | 1.6 | 0.7 |
| 11 | 552 | 552 | 552 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 1,079 | 1,079 | 1,078 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 1,290 | 1,290 | 1,288 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1.6 | 0.8 | 0.8 | 0.0 |
| 14 | 357 | 357 | 357 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 357 | 355 | 355 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 623 | 622 | 619 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.6 | 0.0 | 1.6 | 0.0 |
| 17 | 417 | 415 | 415 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL HOSPITAL BIRTHS | 37,924 | 37,906 | 37,748 | 95 | 51 | 52 | 33 | 25 | 19 | 11 | 11 | 3.2 | 1.9 | 1.5 | 0.7 |
| OUT-OF-HOSPITAL BIRTHS | 376 | 375 | 374 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 5.3 | 2.7 | 2.7 | 0.0 |
| PROVINCIAL TOTAL | 38,300* | 38,281 | 38,122 | 97 | 52 | 53 | 34 | 25 | 19 | 11 | 11 | 3.2 | 1.9 | 1.5 | 0.7 |

Sources: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

*Out-of-hospital data from Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes:

- (Early Neonatal Deaths \geq 500g + Late Neonatal Deaths \geq 500g) / Live Births \geq 500g X 1000.
- (Early Neonatal Deaths \geq 1000g + Late Neonatal Deaths \geq 1000g) / Live Births \geq 1000g X 1000.
- (Early Neonatal Deaths \geq 500g Corrected + Late Neonatal Deaths \geq 500g Corrected) / Live Births \geq 500g Corrected X 1000.
- (Early Neonatal Deaths \geq 1000g Corrected + Late Neonatal Deaths \geq 1000g Corrected) / Live Births \geq 1000g Corrected X 1000.
- Vital Statistics Alberta reported 38,314 live births in Alberta in 1999 (37,759 of these to Alberta residents).
Corrected rates exclude deaths due to major anomalies.
RHA boundaries are current as of 2001.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A81 Neonatal and Corrected (for Major Anomalies) Neonatal Mortality Rates by Facility RHA, Alberta, 2000

| Place of Birth | Live Births ¹ | Live Births | | Early Neonatal Deaths | | | | Late Neonatal Deaths | | | | Neonatal Mortality Rate ^{2,3} | | Corrected Neonatal Mortality Rate ^{4,5} | |
|----------------------------|---------------------------|---------------|---------------|-----------------------|-----------|-----------------|-----------|----------------------|-----------|-----------------|-----------|--|------------|--|------------|
| | | ≥500g | ≥1000g | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | Major Anomalies | | ≥500g | ≥1000g | ≥500g | ≥1000g |
| | | | | | | ≥500g | ≥1000g | | | ≥500g | ≥1000g | | | | |
| RHA Hospitals | | | | | | | | | | | | | | | |
| 1 | 2,008 | 2,008 | 2,005 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0.5 | 0.5 | 0.0 | 0.0 |
| 2 | 1,205 | 1,204 | 1,204 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1.7 | 1.7 | 0.8 | 0.8 |
| 3 | 588 | 588 | 588 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 12,453 | 12,440 | 12,364 | 27 | 13 | 11 | 9 | 8 | 3 | 2 | 1 | 2.8 | 1.3 | 1.8 | 0.5 |
| 5 | 338 | 337 | 336 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3.0 | 0.0 | 3.0 | 0.0 |
| 6 | 2,288 | 2,286 | 2,282 | 6 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 2.6 | 1.3 | 1.8 | 0.4 |
| 7 | 759 | 759 | 759 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 395 | 395 | 395 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2.5 | 2.5 | 2.5 | 2.5 |
| 9 | 538 | 538 | 538 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 11,808 | 11,777 | 11,688 | 40 | 19 | 22 | 15 | 12 | 8 | 7 | 6 | 4.4 | 2.3 | 2.0 | 0.5 |
| 11 | 498 | 497 | 495 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6.0 | 4.0 | 2.0 | 0.0 |
| 12 | 950 | 950 | 950 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 1.1 | 1.1 | 1.1 |
| 13 | 1,224 | 1,224 | 1,224 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1.6 | 0.8 | 1.6 | 0.8 |
| 14 | 324 | 324 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 353 | 353 | 353 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 5.7 | 5.7 | 0.0 | 0.0 |
| 16 | 633 | 633 | 633 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 427 | 427 | 424 | 4 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 9.4 | 9.4 | 2.4 | 2.4 |
| TOTAL HOSPITAL BIRT | 36,789 | 36,740 | 36,562 | 86 | 46 | 42 | 33 | 24 | 14 | 11 | 9 | 3.0 | 1.6 | 1.6 | 0.5 |
| OUT-OF-HOSPITAL BIR | 353 | 352 | 350 | 2 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 8.5 | 5.7 | 5.7 | 2.9 |
| PROVINCIAL TOTAL | 37,142⁶ | 37,092 | 36,912 | 88 | 47 | 42 | 33 | 25 | 15 | 12 | 10 | 3.0 | 1.7 | 1.6 | 0.5 |

Sources: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

*Out-of-hospital data from Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Notes:

- Weights were not recorded for 3 hospital births and 1 out-of-hospital birth.
- (Early Neonatal Deaths_{≥500g} + Late Neonatal Deaths_{≥500g}) / Live Births_{≥500g} X 1000.
- (Early Neonatal Deaths_{≥1000g} + Late Neonatal Deaths_{≥1000g}) / Live Births_{≥1000g} X 1000.
- (Early Neonatal Deaths_{≥500g} Corrected + Late Neonatal Deaths_{≥500g} Corrected) / Live Births_{≥500g} Corrected X 1000.
- (Early Neonatal Deaths_{≥1000g} Corrected + Late Neonatal Deaths_{≥1000g} Corrected) / Live Births_{≥1000g} Corrected X 1000.
- Vital Statistics Alberta reports 37,155 live births in Alberta in 2000 (36,606 of these to Alberta residents). Corrected rates exclude deaths due to major anomalies. RHA boundaries are current as of 2001. Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A82 Neonatal, Post-neonatal and Infant Mortality Rates
By Residence and Facility RHA, Alberta, 1998 - 2000 combined

| RHA | Neonatal Deaths | Post-Neonatal Deaths | Infant Deaths | Live Births | Neonatal Mortality Rate (per 1,000 Live Births) | Post-Neonatal Mortality Rate (per 1,000 Live Births) | Infant Mortality Rate (per 1,000 Live Births) |
|------------------|-----------------|----------------------|---------------|----------------|---|--|---|
| Residence | | | | | | | |
| 1 | 15 | 18 | 33 | 6,099 | 2.5 | 3.0 | 5.4 |
| 2 | 11 | 6 | 17 | 3,681 | 3.0 | 1.6 | 4.6 |
| 3 | 5 | 13 | 18 | 2,659 | 1.9 | 4.9 | 6.8 |
| 4 | 111 | 57 | 168 | 35,018 | 3.2 | 1.6 | 4.8 |
| 5 | 5 | 3 | 8 | 1,889 | 2.6 | 1.6 | 4.2 |
| 6 | 28 | 21 | 49 | 7,460 | 3.8 | 2.8 | 6.6 |
| 7 | 7 | 4 | 11 | 2,918 | 2.4 | 1.4 | 3.8 |
| 8 | 10 | 8 | 18 | 3,427 | 2.9 | 2.3 | 5.3 |
| 9 | 7 | 3 | 10 | 1,895 | 3.7 | 1.6 | 5.3 |
| 10 | 122 | 58 | 180 | 29,451 | 4.1 | 2.0 | 6.1 |
| 11 | 16 | 7 | 23 | 3,638 | 4.4 | 1.9 | 6.3 |
| 12 | 15 | 11 | 26 | 3,979 | 3.8 | 2.8 | 6.5 |
| 13 | 4 | 13 | 17 | 3,935 | 1.0 | 3.3 | 4.3 |
| 14 | 3 | 1 | 4 | 1,081 | 2.8 | 0.9 | 3.7 |
| 15 | 11 | 8 | 19 | 1,479 | 7.4 | 5.4 | 12.8 |
| 16 | 7 | 1 | 8 | 1,769 | 4.0 | 0.6 | 4.5 |
| 17 | 14 | 7 | 21 | 1,519 | 9.2 | 4.6 | 13.8 |
| Unknown | 28 | 1 | 29 | 14 | | | |
| Alberta | 419 | 240 | 659 | 111,911 | 3.7 | 2.1 | 5.9 |
| Facility | | | | | | | |
| 1 | 6 | 14 | 20 | 6,188 | 1.0 | 2.3 | 3.2 |
| 2 | 5 | 4 | 9 | 3,472 | 1.4 | 1.2 | 2.6 |
| 3 | 2 | 7 | 9 | 1,683 | 1.2 | 4.2 | 5.3 |
| 4 | 149 | 63 | 212 | 37,258 | 4.0 | 1.7 | 5.7 |
| 5 | 2 | 1 | 3 | 773 | 2.6 | 1.3 | 3.9 |
| 6 | 12 | 12 | 24 | 7,392 | 1.6 | 1.6 | 3.2 |
| 7 | 2 | 4 | 6 | 2,314 | 0.9 | 1.7 | 2.6 |
| 8 | 1 | 7 | 8 | 1,231 | 0.8 | 5.7 | 6.5 |
| 9 | 4 | 6 | 10 | 1,719 | 2.3 | 3.5 | 5.8 |
| 10 | 216 | 91 | 307 | 36,262 | 6.0 | 2.5 | 8.5 |
| 11 | 3 | 4 | 7 | 1,620 | 1.9 | 2.5 | 4.3 |
| 12 | 1 | 9 | 10 | 3,053 | 0.3 | 2.9 | 3.3 |
| 13 | 3 | 11 | 14 | 3,742 | 0.8 | 2.9 | 3.7 |
| 14 | 0 | 0 | 0 | 1,075 | 0.0 | 0.0 | 0.0 |
| 15 | 3 | 4 | 7 | 1,112 | 2.7 | 3.6 | 6.3 |
| 16 | 3 | 0 | 3 | 1,731 | 1.7 | 0.0 | 1.7 |
| 17 | 7 | 3 | 10 | 1,281 | 5.5 | 2.3 | 7.8 |
| Unknown | 0 | 0 | 0 | 5 | | | |
| Alberta | 419 | 240 | 659 | 111,911 | 3.7 | 2.1 | 5.9 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.
Vital Statistics, Death File, Department of Government Services, May 2001 release.

Notes: 1. Neonatal deaths refers to deaths of live born infants less than 28 full days after birth.
2. Post-neonatal deaths refers to deaths of children between 28 full days and one year of age.
3. Infant deaths refers to deaths of children under one year of age.
RHA boundaries are current as of 1998.
Data include Alberta Residents only.
Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A83 Wigglesworth Classification of Perinatal and Neonatal Deaths, Alberta, 1996 - 2000

| Wigglesworth Classification | Year | | | | | | | | | |
|---|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|
| | 96 | | 97 | | 98 | | 99 | | 00 | |
| | Cases | % of Total | Cases | % of Total | Cases | % of Total | Cases | % of Total | Cases | % of Total |
| Group 1 - Death before the start of labour. | 111 | 27.8 | 106 | 26.5 | 96 | 28.7 | 125 | 28.7 | 97 | 23.7 |
| Group 2 - Lethal or potential lethal malformation. | 89 | 22.3 | 96 | 24.0 | 107 | 32.0 | 132 | 30.3 | 131 | 32.0 |
| Group 3 - Deaths associated with prematurity. | 119 | 29.8 | 107 | 26.8 | 74 | 22.2 | 98 | 22.5 | 109 | 26.7 |
| Group 4 - Intrapartum Deaths, Neonatal Deaths <4 hours old, Neonatal Deaths >1000grams & >4hours old with evidence of cerebral birth trauma/asphyxia. | 25 | 6.3 | 19 | 4.8 | 12 | 3.6 | 26 | 6.0 | 19 | 4.6 |
| Group 5 - Neonate 37+ weeks gestation, stillbirth/neonatal death with defined specific condition. | 55 | 13.8 | 72 | 18.0 | 45 | 13.5 | 55 | 12.6 | 53 | 13.0 |
| Total | 399 | 100.0 | 400 | 100.0 | 334 | 100.0 | 436 | 100.0 | 409 | 100.0 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A84 Wigglesworth Classification of Perinatal and Neonatal Deaths, Alberta, 1999

| Group Classification | Number of Babies |
|---|------------------|
| Group 1 - Deaths before the start of labour | 125 |
| <37 weeks | 83 |
| >36 weeks | 42 |
| <1000 grams | 50 |
| >999 grams | 74 |
| <2500 grams | 88 |
| >2499 grams | 36 |
| * one baby not weighed in this category | |
| Subgroup 1.1 - Abruption | 33 |
| Group 2 - Lethal or potentially lethal malformation | 132 |
| Stillbirths | 65 |
| Neonatal Deaths | 67 |
| Subgroup 2.1 - Secondary malformation | 11 |
| Group 3 - Deaths associated with prematurity | 98 |
| Neonatal Deaths <37 weeks | 58 |
| <1000 grams | 94 |
| <1000 gram Stillbirths - Intrapartum | 27 |
| <1000 grams Early Neonatal Deaths | 51 |
| <1000 grams Late Neonatal Deaths | 5 |
| Subgroup 3.1 - Extreme immaturity | 78 |
| * one baby not weighed in this category | |
| Group 4 - Intrapartum Deaths, neonatal deaths <4 hours old, neonatal deaths >1000 grams and >4 hours old with evidence of cerebral birth trauma/asphyxia. | 26 |
| Intrapartum Deaths | 9 |
| Neonatal Deaths <4 hours of age | 0 |
| Neonatal Deaths >1000 grams >4 hours of age cerebral birth trauma or asphyxia | 13 |
| Subgroup 4.1 - Massive antepartum hemorrhage/abruptio | 11 |
| Group 5 - Neonatal 37+ weeks gestation, stillbirths/neonatal death with defined specific conditions. | 55 |
| Antepartum deaths | 38 |
| Intrapartum deaths | 2 |
| Neonatal deaths | 15 |
| <1000 grams | 10 |
| >999 grams | 44 |
| <2500 grams | 22 |
| >2499 grams | 33 |
| Defined Specific Conditions: | |
| Cord accident/Cord anomaly | 28 |
| Inborn error of Metabolism | 1 |
| Twin to twin transfusion | 7 |
| Specific or unusual infection | 4 |
| Fetomaternal Bleed | 0 |
| Placental Pathology | 0 |
| Birth Trauma | 1 |
| Hydrops not associated with malformation | 2 |
| Unexpected, Unusual Finding: | |
| Unexplained death in term newborn | 6 |
| Sudden Infant Death Syndrome | 3 |
| Other - cocaine associated death, overlaying of sibling, complications of intrauterine transfusion | 3 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A 85 Wigglesworth Classification of Perinatal and Neonatal Deaths, Alberta, 2000

| Group Classification | Number of Babies |
|---|------------------|
| Group 1 - Deaths before the start of labour | 97 |
| <37 weeks | 69 |
| >36 weeks | 28 |
| <1000 grams | 44 |
| >999 grams | 53 |
| <2500 grams | 63 |
| >2499 grams | 34 |
| * one baby not weighed in this category | |
| Subgroup 1.1 - Abruption | 17 |
| Group 2 - Lethal or potentially lethal malformation | 131 |
| Stillbirths | 60 |
| Neonatal Deaths | 71 |
| Subgroup 2.1 - Secondary malformation | 4 |
| Group 3 - Deaths associated with prematurity | 109 |
| Neonatal Deaths <37 weeks | 73 |
| <1000 grams | 104 |
| <1000 gram Stillbirths - Intrapartum | 40 |
| <1000 grams Early Neonatal Deaths | 59 |
| <1000 grams Late Neonatal Deaths | 9 |
| Subgroup 3.1 - Extreme immaturity | 87 |
| * one baby not weighed in this category | |
| Group 4 - Intrapartum Deaths, neonatal deaths <4 hours old, neonatal deaths >1000 grams and >4 hours old with evidence of cerebral birth trauma/asphyxia. | 19 |
| Intrapartum Deaths | 14 |
| Neonatal Deaths <4 hours of age | 1 |
| Neonatal Deaths >1000 grams >4 hours of age cerebral birth trauma or asphyxia | 3 |
| Subgroup 4.1 - Massive antepartum hemorrhage/abruptio | 5 |
| Group 5 - Neonatal 37+ weeks gestation, stillbirths/neonatal death with defined specific conditions. | 53 |
| Antepartum deaths | 38 |
| Intrapartum deaths | 2 |
| Neonatal deaths | 13 |
| <1000 grams | 15 |
| >999 grams | 38 |
| <2500 grams | 25 |
| >2499 grams | 28 |
| Defined Specific Conditions: | |
| Cord accident/Cord anomaly | 33 |
| Inborn error of Metabolism | 1 |
| Twin to twin transfusion | 4 |
| Specific or unusual infection | 4 |
| Fetomaternal Bleed | 5 |
| Placental Pathology | 0 |
| Trauma - Maternal motor vehicle accident | 0 |
| Hydrops not associated with malformation | 1 |
| Unexpected, Unusual Finding: | |
| Unexplained death in term newborn | 4 |
| Other - bilirubin encephalopathy | 1 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A86 Wigglesworth 1.0 Factors Related to Death Before the Start of Labour, Alberta 1999 - 2000

| | 1999 | 2000 |
|---|------|------|
| Placental Insufficiency | 13 | 20 |
| Abruptio Placenta / Placenta Previa | 35 | 20 |
| Cord Accident | 15 | 18 |
| Maternal Disease - Pregnancy-Induced Hypertension, Diabetes | 11 | 8 |
| Unexplained | 51 | 31 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A87 Wigglesworth 3.0 Factors Related to Deaths Associated with Prematurity, Alberta, 1999 - 2000

| | 1999 | 2000 |
|---|------|------|
| Abruptio Placenta / Placenta Previa | 23 | 36 |
| Maternal Disease - Hemolysis, Elevated Liver Enzymes and Low Platelet Count, Pregnancy-Induced Hypertension, Diabetes | 4 | 7 |
| Multiple Pregnancies | 14 | 8 |
| Incompetent Cervix | 12 | 13 |
| Infection | 11 | 8 |
| Preterm Rupture of Membranes | 28 | 32 |
| Unexplained / No prenatal care | 6 | 5 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A88 Wigglesworth 4.0 Factors Related to Intrapartum Deaths, Neonatal Deaths <4 Hours Old, Neonatal Deaths >1000 grams and >4 Hours Old with Evidence of Cerebral Birth Trauma/Asphyxia, Alberta, 1999 - 2000

| | 1999 | 2000 |
|---|------|------|
| Placental Insufficiency | 1 | 1 |
| Abruptio Placenta / Placenta Previa | 14 | 7 |
| Cord Accident | 0 | 3 |
| Maternal Disease - Pregnancy-Induced Hypertension, Diabetes | 2 | 4 |
| Birth Trauma / Delayed Birth | 1 | 2 |
| Intrauterine Infection | 2 | 0 |
| Unexplained | 6 | 2 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A89 Wigglesworth 5.0 Neonatal Deaths ³37 weeks Gestation, Stillbirths, and Neonatal Deaths with Defined Specific Conditions, Alberta, 1996 - 2000

| Defined Specific Conditions/ Unusual Finding | Year | | | | |
|---|------|----|----|----|----|
| | 96 | 97 | 98 | 99 | 00 |
| Cord accident/Cord anomaly | 11 | 32 | 15 | 28 | 33 |
| Inborn error of Metabolism | 0 | 1 | 2 | 1 | 1 |
| Twin to twin transfusion | 3 | 9 | 5 | 7 | 4 |
| Specific or unusual infection | 6 | 5 | 4 | 4 | 4 |
| Fetomaternal Bleed | 0 | 5 | 1 | 0 | 5 |
| Placental Pathology | 0 | 0 | 0 | 0 | 0 |
| Trauma-birth or motor vehicle accident | 0 | 0 | 1 | 1 | 0 |
| Hydrops not associated with malformation | 1 | 3 | 0 | 2 | 1 |
| Unexplained death in term newborn | 11 | 11 | 8 | 6 | 4 |
| Sudden Infant Death Syndrome | 3 | 2 | 4 | 3 | 0 |
| Other - bowel perforation, cardiomyopathy, severe maternal anemia, iatrogenic, persistent pulmonary hypertension, meconium aspiration, peritonitis/appendicitis, overlaying of sibling, maternal cardiac arrest, alveolar dysplasia, cocaine related death, bilirubin encephalopathy. | 5 | 1 | 5 | 3 | 1 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A90a Major Anomalies as Cause of Death, Alberta, 1999

| Anomaly Classification | Stillbirths | | | Early Neonatal Deaths | | | Late Neonatal Deaths | | | Total ¹ | | |
|------------------------------|-------------|------------|-----------|-----------------------|------------|-----------|----------------------|------------|-----------|--------------------|-----------------------|----------------------|
| | <500g | 500 - 999g | >999g | <500g | 500 - 999g | >999g | <500g | 500 - 999g | >999g | Stillbirths | Early Neonatal Deaths | Late Neonatal Deaths |
| Neural Tube Defects | 4 | 1 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 8 | 3 | 0 |
| Other Central Nervous System | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Heart | 4 | 0 | 2 | 0 | 0 | 8 | 0 | 0 | 4 | 6 | 8 | 4 |
| Circulatory System | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Respiratory System | 1 | 1 | 0 | 0 | 1 | 4 | 0 | 0 | 2 | 2 | 5 | 2 |
| Gastrointestinal System | 2 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 5 | 1 | 1 |
| Genital Organs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Urinary System | 2 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 1 | 2 | 5 | 1 |
| Musculoskeletal Deformity | 2 | 0 | 1 | 0 | 3 | 2 | 0 | 0 | 0 | 3 | 5 | 0 |
| Integument | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chromosomal | 17 | 4 | 4 | 2 | 8 | 11 | 0 | 0 | 1 | 25 | 21 | 1 |
| Other/Unspecified Congenital | 4 | 4 | 5 | 0 | 1 | 5 | 0 | 0 | 2 | 13 | 6 | 2 |
| Total | 36 | 10 | 19 | 3 | 19 | 34 | 0 | 0 | 11 | 65 | 56 | 11 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

1. Total deaths due to congenital anomalies = 132; total deaths (Stillbirth + Neonatal) = 436.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A90b Major Anomalies as Cause of Death, Alberta, 2000

| Anomaly Classification | Stillbirths | | | Early Neonatal Deaths | | | Late Neonatal Deaths | | | Total ¹ | | |
|------------------------------|-------------|------------|-----------|-----------------------|------------|-----------|----------------------|------------|-----------|--------------------|-----------------------|----------------------|
| | <500g | 500 - 999g | >999g | <500g | 500 - 999g | >999g | <500g | 500 - 999g | >999g | Stillbirths | Early Neonatal Deaths | Late Neonatal Deaths |
| Neural Tube Defects | 3 | 2 | 2 | 2 | 1 | 2 | 0 | 0 | 1 | 7 | 5 | 1 |
| Other Central Nervous System | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 |
| Heart | 0 | 0 | 4 | 3 | 0 | 2 | 0 | 1 | 6 | 4 | 5 | 7 |
| Circulatory System | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 0 |
| Respiratory System | 0 | 1 | 0 | 0 | 1 | 5 | 0 | 1 | 1 | 1 | 6 | 2 |
| Gastrointestinal System | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |
| Genital Organs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Urinary System | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 0 |
| Musculoskeletal Deformity | 3 | 3 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 7 | 5 | 0 |
| Integument | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chromosomal | 9 | 6 | 4 | 4 | 1 | 6 | 0 | 0 | 1 | 19 | 11 | 1 |
| Other/Unspecified Congenital | 6 | 4 | 5 | 7 | 2 | 13 | 0 | 0 | 2 | 15 | 22 | 2 |
| Total | 23 | 20 | 17 | 17 | 8 | 33 | 0 | 2 | 12 | 60 | 58 | 14 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

1. Total deaths due to congenital anomalies = 132; total deaths (Stillbirth + Neonatal) = 409.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A91 Major Anomalies as Cause of Death, Alberta, 1996 - 2000

| Anomaly Classification | Year | | | | | | | | | | | | | | |
|---|-----------------|------------------|--------------------------------|-----------------|------------------|--------------------------------|-----------------|------------------|--------------------------------|-----------------|------------------|--------------------------------|-----------------|------------------|--------------------------------|
| | 96 | | | 97 | | | 98 | | | 99 | | | 00 | | |
| | SB ¹ | NND ² | % of Total Deaths ³ | SB ¹ | NND ² | % of Total Deaths ³ | SB ¹ | NND ² | % of Total Deaths ³ | SB ¹ | NND ² | % of Total Deaths ³ | SB ¹ | NND ² | % of Total Deaths ³ |
| Neural Tube Defects/ Other Central Nervous System | 8 | 9 | 4.3 | 15 | 7 | 5.5 | 10 | 5 | 4.5 | 8 | 5 | 3.0 | 9 | 7 | 3.9 |
| Cardio-Respiratory | 6 | 19 | 6.3 | 5 | 10 | 3.8 | 5 | 15 | 6.0 | 9 | 19 | 6.4 | 6 | 22 | 6.8 |
| Gastrointestinal / Musculoskeletal / Integument | 9 | 2 | 2.8 | 4 | 7 | 2.8 | 2 | 7 | 2.7 | 8 | 7 | 3.4 | 8 | 6 | 3.4 |
| Genitourinary | 9 | 3 | 3.0 | 8 | 4 | 3.0 | 2 | 9 | 3.3 | 2 | 6 | 1.8 | 3 | 1 | 1.0 |
| Chromosomal | 8 | 9 | 4.3 | 13 | 12 | 6.3 | 22 | 16 | 11.4 | 25 | 22 | 10.8 | 19 | 12 | 7.6 |
| Other/Unspecified Congenital | 11 | 5 | 4.0 | 7 | 6 | 3.3 | 8 | 8 | 4.8 | 13 | 8 | 4.8 | 15 | 24 | 9.5 |
| Total | 51 | 47 | 24.6 | 52 | 46 | 24.5 | 49 | 60 | 32.8 | 65 | 67 | 30.3 | 60 | 72 | 32.3 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Notes: 1. SB = Stillbirths.

2. NND = Neonatal deaths (Early + Late).

3. Total (Stillbirths + Early Neonatal Deaths + Late Neonatal Deaths) for specific anomaly / Total deaths for that year (Stillbirths + Early Neonatal Deaths + Late Neonatal Deaths) x 100.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A92 Summary of Antepartum Deaths ≥ 2500 grams,
Alberta, 1999 and 2000

| Cause of Death | 1999 | | 2000 | |
|--|-----------|--------------|-----------|--------------|
| | Cases | % | Cases | % |
| Intrauterine Asphyxia - Cause Unknown | 31 | 50.0 | 23 | 40.4 |
| Nuchal cord/Knot/Occlusion | 19 | 30.6 | 17 | 29.8 |
| Placental Abruptio/Previa | 6 | 9.7 | 7 | 12.3 |
| Placental Insufficiency | 3 | 4.8 | 4 | 7.0 |
| Intrauterine Infection | 1 | 1.6 | 0 | 0.0 |
| Congenital Anomaly | 2 | 3.2 | 3 | 5.3 |
| Circulatory - Twin to Twin Transfusion, Feto-maternal hemorrhage | 0 | 0.0 | 3 | 5.3 |
| Total | 62 | 100.0 | 57 | 100.0 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A93 Causes of Death for Intrapartum and Neonatal Deaths ≥ 2500 grams (Excluding Congenital Anomalies), Alberta, 1999 and 2000

| Cause of death | 1999 | | 2000 | |
|------------------------------|-----------|--------------|-----------|--------------|
| | Cases | % | Cases | % |
| Sudden Infant Death Syndrome | 3 | 12.0 | 0 | 0.0 |
| Cord Accident | 2 | 8.0 | 5 | 21.7 |
| Intrapartum Hemorrhage | 7 | 28.0 | 6 | 26.1 |
| Birth Trauma | 1 | 4.0 | 1 | 4.3 |
| Infection | 2 | 8.0 | 0 | 0.0 |
| Meconium Aspiration | 1 | 4.0 | 0 | 0.0 |
| Severe Pulmonary Hypoplasia | 1 | 4.0 | 0 | 0.0 |
| Hydrops - caused by anemia | 1 | 4.0 | 0 | 0.0 |
| Septic Shock | 0 | 0.0 | 1 | 4.3 |
| Bilirubin encephalitis | 0 | 0.0 | 1 | 4.3 |
| Cause undetermined | 7 | 28.0 | 9 | 39.1 |
| Total | 25 | 100.0 | 23 | 100.0 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Note: Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A94 Infant Mortality Rates by Gender, Alberta, 1986 - 2000

| Year | Infant Mortalities ¹ | | Live Births ² | | Infant Mortality Rate ³ | |
|------|---------------------------------|------|--------------------------|--------|------------------------------------|------|
| | Female | Male | Female | Male | Female | Male |
| 86 | 162 | 224 | 21,133 | 22,171 | 7.7 | 10.1 |
| 87 | 135 | 176 | 20,208 | 21,499 | 6.7 | 8.2 |
| 88 | 142 | 198 | 20,535 | 21,134 | 6.9 | 9.4 |
| 89 | 128 | 190 | 21,036 | 21,942 | 6.1 | 8.7 |
| 90 | 144 | 194 | 20,654 | 21,979 | 7.0 | 8.8 |
| 91 | 129 | 154 | 20,755 | 21,614 | 6.2 | 7.1 |
| 92 | 140 | 159 | 20,395 | 21,278 | 6.9 | 7.5 |
| 93 | 117 | 144 | 19,428 | 20,476 | 6.0 | 7.0 |
| 94 | 123 | 167 | 19,110 | 20,349 | 6.4 | 8.2 |
| 95 | 117 | 150 | 18,858 | 19,670 | 6.2 | 7.6 |
| 96 | 99 | 132 | 18,065 | 19,406 | 5.5 | 6.8 |
| 97 | 76 | 103 | 17,806 | 18,740 | 4.3 | 5.5 |
| 98 | 84 | 119 | 18,232 | 19,295 | 4.6 | 6.2 |
| 99 | 101 | 117 | 18,545 | 19,226 | 5.4 | 6.1 |
| 00 | 99 | 139 | 18,003 | 18,610 | 5.5 | 7.5 |

Sources: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Vital Statistics, Death File, Department of Government Services, May 2001 release.

- Notes:**
1. Infant deaths refers to deaths of children under one year of age.
 2. Live births with unknown gender are excluded from these columns.
 3. Rate per 1,000 live births.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A95 Infant Deaths by Residence RHA and Facility RHA, Alberta, 1986 - 2000

| RHA | Year | | | | | | | | | | | | | | |
|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| Residence | | | | | | | | | | | | | | | |
| 1 | 20 | 24 | 14 | 23 | 18 | 19 | 14 | 16 | 20 | 18 | 14 | 15 | 8 | 12 | 13 |
| 2 | 8 | 3 | 11 | 11 | 10 | 7 | 8 | 5 | 6 | 8 | 9 | 6 | 11 | 3 | 3 |
| 3 | 3 | 5 | 6 | 4 | 5 | 9 | 7 | 7 | 9 | 4 | 3 | 5 | 5 | 6 | 7 |
| 4 | 92 | 72 | 82 | 83 | 111 | 63 | 86 | 73 | 72 | 68 | 58 | 41 | 44 | 64 | 60 |
| 5 | 4 | 11 | 8 | 3 | 2 | 4 | 4 | 10 | 8 | 4 | 7 | 4 | 1 | 2 | 5 |
| 6 | 29 | 18 | 18 | 21 | 23 | 18 | 11 | 32 | 21 | 20 | 16 | 8 | 13 | 18 | 18 |
| 7 | 16 | 11 | 10 | 7 | 8 | 9 | 10 | 3 | 12 | 9 | 8 | 5 | 3 | 4 | 4 |
| 8 | 10 | 9 | 11 | 10 | 12 | 9 | 9 | 2 | 11 | 5 | 4 | 7 | 7 | 7 | 4 |
| 9 | 8 | 3 | 11 | 10 | 6 | 6 | 8 | 2 | 8 | 7 | 8 | 6 | 3 | 4 | 3 |
| 10 | 132 | 111 | 106 | 91 | 92 | 98 | 90 | 62 | 82 | 82 | 53 | 56 | 45 | 63 | 72 |
| 11 | 8 | 14 | 13 | 6 | 8 | 9 | 12 | 9 | 10 | 6 | 6 | 4 | 5 | 4 | 14 |
| 12 | 10 | 14 | 16 | 16 | 9 | 9 | 15 | 16 | 10 | 12 | 11 | 8 | 7 | 11 | 8 |
| 13 | 16 | 4 | 12 | 18 | 14 | 9 | 6 | 8 | 9 | 10 | 12 | 6 | 5 | 4 | 8 |
| 14 | 7 | 0 | 2 | 1 | 2 | 5 | 3 | 3 | 2 | 2 | 4 | 2 | 2 | 0 | 2 |
| 15 | 9 | 2 | 4 | 6 | 5 | 4 | 5 | 3 | 4 | 3 | 7 | 2 | 2 | 10 | 7 |
| 16 | 5 | 5 | 10 | 4 | 6 | 3 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| 17 | 9 | 5 | 6 | 5 | 7 | 2 | 6 | 6 | 3 | 6 | 8 | 1 | 12 | 2 | 7 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 2 | 0 |
| Alberta | 386 | 311 | 340 | 319 | 338 | 283 | 299 | 262 | 290 | 267 | 231 | 179 | 203 | 218 | 238 |
| Facility | | | | | | | | | | | | | | | |
| 1 | 12 | 17 | 9 | 18 | 14 | 16 | 10 | 7 | 11 | 11 | 9 | 8 | 4 | 8 | 8 |
| 2 | 4 | 1 | 5 | 5 | 3 | 2 | 4 | 5 | 5 | 6 | 6 | 2 | 5 | 3 | 1 |
| 3 | 1 | 1 | 3 | 1 | 2 | 6 | 1 | 1 | 3 | 1 | 1 | 2 | 4 | 2 | 3 |
| 4 | 103 | 94 | 99 | 91 | 121 | 73 | 98 | 99 | 90 | 81 | 73 | 54 | 67 | 73 | 72 |
| 5 | 2 | 3 | 4 | 1 | 0 | 1 | 3 | 0 | 3 | 1 | 2 | 1 | 2 | 0 | 1 |
| 6 | 12 | 6 | 6 | 12 | 10 | 10 | 6 | 16 | 9 | 8 | 13 | 3 | 7 | 6 | 11 |
| 7 | 5 | 7 | 4 | 1 | 2 | 5 | 3 | 2 | 2 | 2 | 2 | 1 | 0 | 2 | 4 |
| 8 | 7 | 3 | 3 | 5 | 2 | 2 | 4 | 0 | 9 | 1 | 1 | 1 | 2 | 3 | 3 |
| 9 | 3 | 0 | 8 | 6 | 5 | 2 | 3 | 2 | 5 | 4 | 2 | 2 | 3 | 4 | 3 |
| 10 | 210 | 161 | 172 | 155 | 154 | 144 | 140 | 108 | 138 | 133 | 99 | 93 | 95 | 101 | 111 |
| 11 | 1 | 5 | 5 | 2 | 4 | 3 | 5 | 1 | 3 | 2 | 3 | 0 | 2 | 1 | 4 |
| 12 | 3 | 9 | 5 | 8 | 3 | 5 | 7 | 9 | 5 | 5 | 3 | 5 | 2 | 5 | 3 |
| 13 | 7 | 1 | 6 | 8 | 7 | 6 | 5 | 3 | 2 | 3 | 6 | 3 | 5 | 3 | 6 |
| 14 | 5 | 0 | 1 | 0 | 1 | 3 | 2 | 3 | 1 | 1 | 2 | 1 | 0 | 0 | 0 |
| 15 | 3 | 2 | 1 | 2 | 3 | 2 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 4 | 2 |
| 16 | 2 | 1 | 6 | 2 | 3 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 1 | 2 | 0 |
| 17 | 6 | 0 | 3 | 2 | 4 | 2 | 5 | 2 | 2 | 3 | 6 | 1 | 3 | 1 | 6 |
| Alberta | 386 | 311 | 340 | 319 | 338 | 283 | 299 | 262 | 290 | 267 | 231 | 179 | 203 | 218 | 238 |

Source: Vital Statistics, Death File, Department of Government Services, May 2001 release.

Notes: Infant deaths refers to deaths of children under one year of age.

RHA boundaries are current as of 1998.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A96 Maternal Mortality Rates,
Alberta, 1961 - 2000

| Year ² | Maternal Deaths | | | | Rates ¹ | |
|-------------------|-----------------|--------|----------|-----------|--------------------|--------|
| | Total | Direct | Indirect | Unrelated | Overall | Direct |
| 61-65 | 18 | 8 | 4 | 6 | 1.0 | 0.4 |
| 66-70 | 11 | 4 | 2 | 5 | 0.7 | 0.3 |
| 71-75 | 10 | 3 | 1 | 6 | 0.7 | 0.2 |
| 76-80 | 6 | 1 | 2 | 3 | 0.3 | 0.1 |
| 81-85 | 7 | 2 | 2 | 3 | 0.3 | 0.1 |
| 86-90 | 8 | 2 | 1 | 5 | 0.4 | 0.1 |
| 91-95 | 5 | 2 | 2 | 1 | 0.2 | 0.1 |
| 96 | 6 | 2 | 2 | 2 | 1.6 | 0.5 |
| 97 | 1 | 1 | 0 | 0 | 0.3 | 0.3 |
| 98 | 3 | 1 | 2 | 0 | 0.8 | 0.3 |
| 99 | 1 | 0 | 0 | 1 | 0.3 | 0.0 |
| 00 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

Sources: Statistics reported to the Committee on Reproductive Care by Medical Records Departments of the hospitals.

Vital Statistics Annual Reviews, Alberta Vital Statistics.

Notes:

1. Rates are per 10,000 live births.
2. All figures (except 1996 to 2000) are for the five year period combined.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A97 Live Births by Number of Live Births to Mother,
Alberta, 1986 - 2000

| Year | Total ¹ | Number of live births to mother | | | | | | | |
|--|--------------------|---------------------------------|--------|-------|-------|-----|-----|-----|-----------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 or more |
| Live births | | | | | | | | | |
| 86 | 42,571 | 17,302 | 15,173 | 6,677 | 2,258 | 651 | 258 | 118 | 134 |
| 87 | 40,976 | 16,345 | 14,458 | 6,735 | 2,249 | 684 | 269 | 107 | 129 |
| 88 | 40,875 | 16,450 | 14,274 | 6,649 | 2,261 | 713 | 260 | 134 | 134 |
| 89 | 42,128 | 16,694 | 14,861 | 6,955 | 2,338 | 714 | 292 | 126 | 148 |
| 90 | 41,925 | 16,833 | 14,504 | 6,919 | 2,346 | 796 | 284 | 118 | 125 |
| 91 | 41,639 | 16,680 | 14,360 | 6,863 | 2,391 | 786 | 309 | 123 | 127 |
| 92 | 40,932 | 16,498 | 14,195 | 6,530 | 2,338 | 759 | 338 | 152 | 122 |
| 93 | 39,239 | 15,771 | 13,610 | 6,366 | 2,170 | 746 | 296 | 153 | 127 |
| 94 | 38,923 | 15,969 | 13,376 | 6,183 | 2,147 | 692 | 306 | 127 | 123 |
| 95 | 37,938 | 15,531 | 13,143 | 5,915 | 2,089 | 690 | 276 | 151 | 143 |
| 96 | 36,964 | 14,911 | 12,992 | 5,741 | 2,015 | 690 | 326 | 142 | 147 |
| 97 | 36,085 | 14,684 | 12,714 | 5,396 | 1,987 | 712 | 333 | 125 | 134 |
| 98 | 36,942 | 15,223 | 12,868 | 5,609 | 1,944 | 694 | 305 | 143 | 156 |
| 99 | 37,214 | 15,562 | 12,741 | 5,593 | 2,008 | 736 | 275 | 148 | 151 |
| 00 | 36,217 | 15,298 | 12,354 | 5,370 | 1,912 | 653 | 314 | 154 | 162 |
| Percent of live births² | | | | | | | | | |
| 86 | 100.0 | 40.6 | 35.6 | 15.7 | 5.3 | 1.5 | 0.6 | 0.3 | 0.3 |
| 87 | 100.0 | 39.9 | 35.3 | 16.4 | 5.5 | 1.7 | 0.7 | 0.3 | 0.3 |
| 88 | 100.0 | 40.2 | 34.9 | 16.3 | 5.5 | 1.7 | 0.6 | 0.3 | 0.3 |
| 89 | 100.0 | 39.6 | 35.3 | 16.5 | 5.5 | 1.7 | 0.7 | 0.3 | 0.4 |
| 90 | 100.0 | 40.2 | 34.6 | 16.5 | 5.6 | 1.9 | 0.7 | 0.3 | 0.3 |
| 91 | 100.0 | 40.1 | 34.5 | 16.5 | 5.7 | 1.9 | 0.7 | 0.3 | 0.3 |
| 92 | 100.0 | 40.3 | 34.7 | 16.0 | 5.7 | 1.9 | 0.8 | 0.4 | 0.3 |
| 93 | 100.0 | 40.2 | 34.7 | 16.2 | 5.5 | 1.9 | 0.8 | 0.4 | 0.3 |
| 94 | 100.0 | 41.0 | 34.4 | 15.9 | 5.5 | 1.8 | 0.8 | 0.3 | 0.3 |
| 95 | 100.0 | 40.9 | 34.6 | 15.6 | 5.5 | 1.8 | 0.7 | 0.4 | 0.4 |
| 96 | 100.0 | 40.3 | 35.1 | 15.5 | 5.5 | 1.9 | 0.9 | 0.4 | 0.4 |
| 97 | 100.0 | 40.7 | 35.2 | 15.0 | 5.5 | 2.0 | 0.9 | 0.3 | 0.4 |
| 98 | 100.0 | 41.2 | 34.8 | 15.2 | 5.3 | 1.9 | 0.8 | 0.4 | 0.4 |
| 99 | 100.0 | 41.8 | 34.2 | 15.0 | 5.4 | 2.0 | 0.7 | 0.4 | 0.4 |
| 00 | 100.0 | 42.2 | 34.1 | 14.8 | 5.3 | 1.8 | 0.9 | 0.4 | 0.4 |
| Fertility Rate (per 1,000 women aged 15-49) | | | | | | | | | |
| 86 | 55.4 | 22.5 | 19.7 | 8.7 | 2.9 | 0.8 | 0.3 | 0.2 | 0.2 |
| 87 | 53.3 | 21.3 | 18.8 | 8.8 | 2.9 | 0.9 | 0.3 | 0.1 | 0.2 |
| 88 | 52.7 | 21.2 | 18.4 | 8.6 | 2.9 | 0.9 | 0.3 | 0.2 | 0.2 |
| 89 | 53.8 | 21.3 | 19.0 | 8.9 | 3.0 | 0.9 | 0.4 | 0.2 | 0.2 |
| 90 | 52.5 | 21.1 | 18.2 | 8.7 | 2.9 | 1.0 | 0.4 | 0.1 | 0.2 |
| 91 | 51.4 | 20.6 | 17.7 | 8.5 | 2.9 | 1.0 | 0.4 | 0.2 | 0.2 |
| 92 | 49.8 | 20.1 | 17.3 | 8.0 | 2.8 | 0.9 | 0.4 | 0.2 | 0.1 |
| 93 | 47.3 | 19.0 | 16.4 | 7.7 | 2.6 | 0.9 | 0.4 | 0.2 | 0.2 |
| 94 | 46.6 | 19.1 | 16.0 | 7.4 | 2.6 | 0.8 | 0.4 | 0.2 | 0.1 |
| 95 | 45.1 | 18.5 | 15.6 | 7.0 | 2.5 | 0.8 | 0.3 | 0.2 | 0.2 |
| 96 | 43.5 | 17.6 | 15.3 | 6.8 | 2.4 | 0.8 | 0.4 | 0.2 | 0.2 |
| 97 | 41.9 | 17.0 | 14.7 | 6.3 | 2.3 | 0.8 | 0.4 | 0.1 | 0.2 |
| 98 | 41.9 | 17.3 | 14.6 | 6.4 | 2.2 | 0.8 | 0.3 | 0.2 | 0.2 |
| 99 | 41.3 | 17.3 | 14.1 | 6.2 | 2.2 | 0.8 | 0.3 | 0.2 | 0.2 |
| 00 | 39.7 | 16.8 | 13.5 | 5.9 | 2.1 | 0.7 | 0.3 | 0.2 | 0.2 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note:
 1. Total = total number of live births to mothers who have not had a stillbirth.
 2. Percent of live births= percent of live births to mothers who have not had a stillbirth.
 Data include Alberta residents only.
 Populations are estimated at June 30, as viewed at December 31 of each year.
 Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A98 Selected Indicators by Number of Live Births to Mother, Alberta,
1998 - 2000 Combined

| Indicator | Number of Live Births to Mother | | | | |
|--|---------------------------------|-------|-------|-------|-------|
| | Total ¹ | 1 | 2 | 3 | 4 |
| Mean birth weight for singleton term births (grams) | 3,485 | 3,429 | 3,520 | 3,540 | 3,539 |
| Low birth weight rate per 100 live births | 6.0 | 6.2 | 5.5 | 6.0 | 6.8 |
| Small for gestational age rate per 100 live singleton births | 8.4 | 10.3 | 7.0 | 6.7 | 7.6 |
| High birth weight (>=4000 g) rate per 100 live births | 12.5 | 10.1 | 13.8 | 15.3 | 15.4 |
| Large for gestational age rate per 100 live singleton births | 11.6 | 8.7 | 13.3 | 14.9 | 15.0 |
| Preterm rate per 100 live births | 7.7 | 8.0 | 7.3 | 7.6 | 9.2 |
| Midwife attendant rate per 1,000 live births | 5.1 | 3.2 | 5.9 | 7.3 | 9.2 |

Source: Vital Statistics, Birth File, Department of Government Services, January 2002 release.

Note: 1. Total = All births where number of live births for the mother is between 1 and 4, and number of stillbirths for the mother is 0.

Data include Alberta residents only.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A99 Selected Maternal Postnatal Conditions,
Alberta, 1999 and 2000 Combined

| Condition | Cases ¹ | Rate ² |
|-------------------------------------|--------------------|-------------------|
| Shoulder dystocia ³ | 2,438 | 3.3 |
| Postpartum hemorrhage ⁴ | 12,271 | 16.5 |
| Depressive disorders ⁵ | | |
| Prenatal ⁶ | 1,827 | 2.5 |
| Postnatal ⁷ | | |
| Up to one month postpartum | 1,617 | 2.2 |
| Up to six months postpartum | 5,534 | 7.4 |
| Up to twelve months postpartum | 9,493 | 12.8 |
| Up to twenty-four months postpartum | 12,428 | 16.7 |

Sources: Fee for Service Claims File, Alberta Health and Wellness.

Ambulatory Care Classification System, Alberta Health and Wellness.

Inpatient Hospital Morbidity Data, Alberta Health and Wellness.

Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

- Notes:**
1. The number of women with a given disease/condition defined by the first three diagnoses recorded in any of the three data sources (Fee For Service Claims, Ambulatory Care Classification System, Inpatient Hospital Morbidity data) between January 1st, 1999 and December 31, 2000.
 2. Rate is per 100 hospital deliveries.
 3. ICD-9 diagnostic code 660.4.
 4. ICD-9 diagnostic code 666.
 5. ICD-9 diagnostic codes 296.2-3, 298.0, 301.1, 309.0-1, 311, 313.1.
 6. The first date of visit for depressive disorder is within 40 weeks prior to giving birth.
 7. The first date of visit for depressive disorder is between one month and twenty-four months after giving birth.

Table A100 Breastfeeding Upon Discharge
Rates, Alberta, 1996 - 2000

| Year | Number of Women Delivering | Number Breastfeeding Upon Discharge | % Breastfeeding on Discharge ¹ |
|------|----------------------------|-------------------------------------|---|
| 96 | 31,402 | 26,089 | 83.1 |
| 97 | 31,148 | 26,186 | 84.1 |
| 98 | 32,553 | 27,754 | 85.3 |
| 99 | 37,658 | 31,817 | 84.5 |
| 00 | 36,392 | 31,504 | 86.6 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Notes: 1. Number of women breastfeeding upon discharge / Number of women delivering x 100.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A101 Breastfeeding Initiation Rates by Facility RHA, Alberta, 1998 - 2000

| RHA | Year | | | | | | | | |
|----------------|----------------------------|-------------------------------------|---|----------------------------|-------------------------------------|---|----------------------------|------------------------------------|---|
| | 98 | | | 99 | | | 00 | | |
| | Number of Women Delivering | Number Breastfeeding Upon Discharge | % Breastfeeding on Discharge ¹ | Number of Women Delivering | Number Breastfeeding Upon Discharge | % Breastfeeding on Discharge ¹ | Number of Women Delivering | Women Breastfeeding Upon Discharge | % Breastfeeding on Discharge ¹ |
| 1 | 2,079 | 1,790 | 86.1 | 2,104 | 1,821 | 86.5 | 1,975 | 1,753 | 88.8 |
| 2 | 1,242 | 987 | 79.5 | 1,234 | 988 | 80.1 | 1,194 | 992 | 83.1 |
| 3 | 562 | 534 | 95.0 | 530 | 432 | 81.5 | 590 | 550 | 93.2 |
| 4 | 12,078 | 10,688 | 88.5 | 12,299 | 11,010 | 89.5 | 12,305 | 11,129 | 90.4 |
| 5 | 366 | 318 | 86.9 | 360 | 287 | 79.7 | 340 | 294 | 86.5 |
| 6 | 2,300 | 1,935 | 84.1 | 2,406 | 2,083 | 86.6 | 2,262 | 1,989 | 87.9 |
| 7 | 837 | 719 | 85.9 | 821 | 699 | 85.1 | 756 | 639 | 84.5 |
| 8 | 433 | 311 | 71.8 | 437 | 354 | 81.0 | 394 | 338 | 85.8 |
| 9 | 575 | 471 | 81.9 | 605 | 497 | 82.1 | 535 | 454 | 84.9 |
| 10 | 7,536 | 6,403 | 85.0 | 12,183 | 10,095 | 82.9 | 11,637 | 9,775 | 84.0 |
| 11 | 515 | 411 | 79.8 | 554 | 410 | 74.0 | 500 | 414 | 82.8 |
| 12 | 1,124 | 900 | 80.1 | 1,085 | 751 | 69.2 | 949 | 757 | 79.8 |
| 13 | 1,164 | 1,001 | 86.0 | 1,285 | 1,040 | 80.9 | 1,220 | 1,041 | 85.3 |
| 14 | 401 | 270 | 67.3 | 358 | 297 | 83.0 | 325 | 279 | 85.8 |
| 15 | 393 | 302 | 76.8 | 360 | 257 | 71.4 | 354 | 267 | 75.4 |
| 16 | 639 | 460 | 72.0 | 619 | 421 | 68.0 | 626 | 463 | 74.0 |
| 17 | 309 | 254 | 82.2 | 418 | 375 | 89.7 | 430 | 370 | 86.0 |
| Alberta | 32,553 | 27,754 | 85.3 | 37,658 | 31,817 | 84.5 | 36,392 | 31,504 | 86.6 |

Source: Statistics reported to the Reproductive Care Committee by Medical Records Departments of the hospitals.

Notes: 1. Number of women breastfeeding upon discharge / Number of women delivering x 100.

RHA boundaries are current as of 2001.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A102 Female Population Aged 15 - 49 by Residence RHA, Alberta, 1986 - 2000

| Residence RHA | Year | | | | | | | | | | | | | | |
|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| 1 | 34,236 | 34,419 | 34,476 | 34,453 | 34,901 | 35,220 | 35,519 | 35,657 | 35,883 | 36,153 | 36,337 | 36,526 | 36,667 | 37,116 | 37,409 |
| 2 | 20,461 | 20,316 | 20,343 | 20,349 | 20,554 | 20,687 | 20,663 | 20,774 | 21,205 | 21,519 | 21,928 | 22,240 | 22,759 | 23,342 | 23,661 |
| 3 | 13,668 | 13,919 | 14,272 | 14,556 | 15,066 | 15,515 | 15,977 | 16,529 | 17,097 | 17,611 | 18,199 | 18,769 | 19,280 | 19,996 | 20,477 |
| 4 | 207,497 | 208,002 | 211,594 | 215,338 | 220,629 | 224,432 | 227,104 | 228,413 | 230,325 | 233,511 | 237,666 | 244,327 | 253,690 | 261,754 | 266,606 |
| 5 | 11,213 | 11,152 | 11,166 | 11,179 | 11,375 | 11,566 | 11,833 | 12,087 | 12,267 | 12,567 | 12,731 | 12,822 | 13,187 | 13,631 | 13,740 |
| 6 | 40,020 | 40,009 | 40,212 | 40,647 | 41,474 | 42,082 | 42,784 | 43,246 | 43,634 | 44,113 | 44,558 | 45,141 | 46,712 | 48,006 | 48,906 |
| 7 | 23,798 | 23,461 | 23,254 | 23,143 | 23,092 | 23,292 | 23,607 | 23,776 | 24,105 | 24,193 | 24,402 | 24,551 | 24,865 | 24,909 | 25,029 |
| 8 | 19,563 | 19,484 | 19,693 | 20,113 | 20,493 | 21,115 | 21,659 | 21,873 | 22,227 | 23,057 | 23,451 | 23,823 | 24,166 | 24,751 | 24,793 |
| 9 | 10,026 | 10,136 | 10,221 | 10,393 | 10,571 | 10,888 | 11,082 | 11,167 | 11,187 | 11,269 | 11,379 | 11,541 | 11,774 | 11,934 | 12,062 |
| 10 | 207,960 | 209,264 | 210,060 | 211,648 | 215,261 | 217,676 | 219,705 | 221,756 | 220,016 | 217,496 | 216,389 | 217,284 | 219,710 | 223,860 | 226,152 |
| 11 | 20,714 | 20,632 | 20,875 | 21,125 | 21,566 | 21,940 | 22,457 | 22,861 | 23,260 | 23,146 | 23,165 | 23,143 | 23,276 | 23,698 | 23,786 |
| 12 | 23,787 | 23,495 | 23,610 | 23,625 | 23,534 | 23,522 | 23,687 | 23,746 | 23,704 | 23,626 | 23,500 | 23,742 | 24,175 | 24,160 | 24,104 |
| 13 | 20,349 | 20,317 | 20,278 | 20,283 | 20,631 | 20,784 | 20,920 | 20,716 | 20,851 | 21,530 | 22,220 | 22,684 | 23,459 | 24,082 | 24,315 |
| 14 | 6,528 | 6,488 | 6,416 | 6,460 | 6,630 | 6,605 | 6,537 | 6,456 | 6,509 | 6,495 | 6,474 | 6,417 | 6,414 | 6,458 | 6,415 |
| 15 | 5,514 | 5,590 | 5,737 | 5,737 | 5,851 | 5,957 | 6,038 | 6,139 | 6,290 | 6,476 | 6,549 | 6,671 | 6,734 | 6,811 | 6,902 |
| 16 | 12,195 | 11,430 | 11,297 | 11,434 | 11,514 | 11,686 | 11,756 | 11,630 | 11,392 | 11,192 | 11,202 | 11,712 | 12,173 | 12,377 | 12,748 |
| 17 | 3,729 | 3,753 | 3,824 | 3,883 | 3,843 | 3,942 | 3,985 | 4,079 | 4,180 | 4,292 | 4,432 | 4,715 | 4,911 | 5,044 | 5,038 |
| Unknown | 181 | 116 | 86 | 86 | 81 | 56 | 64 | 72 | 46 | 39 | 24 | 39 | 107 | 52 | 39 |
| Women aged 15-49 | 681,439 | 681,983 | 687,414 | 694,452 | 707,066 | 716,965 | 725,377 | 730,977 | 734,178 | 738,285 | 744,606 | 756,147 | 774,059 | 791,981 | 802,182 |
| Total population | 2,451,247 | 2,463,466 | 2,491,050 | 2,526,431 | 2,578,216 | 2,617,771 | 2,653,654 | 2,677,485 | 2,694,339 | 2,713,375 | 2,741,189 | 2,791,334 | 2,854,621 | 2,923,449 | 2,967,755 |

Source: Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Note: Populations are estimated at June 30, as viewed at December 31 of each year.

Data may differ from previously published data due to differences in definitions and dates of data extraction.

Table A103 Female Population by Age Group, Alberta, 1986 - 2000

| Residence RHA | Age Group (Years) | | | | | | | | | | | |
|--------------------|-------------------|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--|
| | Total | 10-14 | 15-17 | 18-19 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | >44 | |
| Live Births | | | | | | | | | | | | |
| 86 | 768,458 | 87,019 | 55,127 | 38,167 | 93,294 | 118,088 | 132,057 | 115,774 | 95,561 | 70,473 | 56,192 | |
| 87 | 769,144 | 87,161 | 54,219 | 37,782 | 92,001 | 111,633 | 130,051 | 118,514 | 95,833 | 76,153 | 57,798 | |
| 88 | 775,008 | 87,594 | 53,020 | 38,423 | 91,443 | 106,771 | 128,548 | 121,388 | 98,282 | 80,443 | 60,539 | |
| 89 | 783,622 | 89,170 | 52,113 | 38,438 | 90,551 | 102,514 | 126,986 | 124,072 | 102,606 | 84,476 | 63,247 | |
| 90 | 798,348 | 91,282 | 52,590 | 37,479 | 90,069 | 101,248 | 124,971 | 127,304 | 108,045 | 89,373 | 66,056 | |
| 91 | 810,573 | 93,608 | 53,142 | 36,530 | 89,672 | 100,525 | 121,069 | 129,253 | 113,450 | 93,921 | 69,075 | |
| 92 | 821,208 | 95,831 | 54,308 | 36,084 | 90,392 | 98,970 | 116,520 | 130,649 | 118,162 | 95,627 | 75,057 | |
| 93 | 829,802 | 98,825 | 54,766 | 36,172 | 90,938 | 97,717 | 111,181 | 131,026 | 121,944 | 98,397 | 79,774 | |
| 94 | 835,058 | 100,880 | 55,567 | 36,496 | 92,063 | 95,253 | 106,040 | 129,354 | 124,645 | 102,825 | 83,998 | |
| 95 | 841,009 | 102,724 | 56,240 | 37,088 | 93,328 | 93,701 | 102,546 | 125,921 | 126,934 | 107,201 | 88,654 | |
| 96 | 849,223 | 104,617 | 58,103 | 37,383 | 95,486 | 92,886 | 101,308 | 121,346 | 128,478 | 112,471 | 92,631 | |
| 97 | 862,177 | 106,030 | 60,090 | 38,136 | 98,226 | 95,077 | 101,729 | 117,541 | 130,859 | 117,949 | 94,766 | |
| 98 | 881,205 | 107,146 | 62,489 | 39,617 | 102,106 | 98,376 | 104,141 | 114,614 | 132,964 | 123,113 | 98,745 | |
| 99 | 900,757 | 108,776 | 64,531 | 40,965 | 105,496 | 102,104 | 105,731 | 112,685 | 133,934 | 127,749 | 104,282 | |
| 00 | 912,255 | 110,073 | 65,499 | 42,723 | 108,222 | 103,552 | 105,981 | 110,996 | 132,554 | 131,234 | 109,643 | |

Source: Alberta Health Care Insurance Plan Registration File, Alberta Health and Wellness.

Note: Populations are estimated at June 30, as viewed at December 31 of each year.

Data may differ from previously published data due to differences in definitions and dates of data extraction.