

OUR BABIES, OUR FUTURE: ABORIGINAL BIRTH OUTCOMES IN BRITISH COLUMBIA



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Understanding Aboriginal Birth Outcomes Measures in British Columbia

The health of a community's infants is understood to be a downstream indicator of the health of the community more generally, as well as a reflection of underlying social determinants of health.¹ Measures such as infant mortality and the incidence of low birth weight are linked to

social determinants such as adequate food supply, adequate housing, employment, education level, and environmental exposures.²

Indigenous peoples throughout the world believe that the health and happiness of their babies and children is the centre point of health for the whole community. As sacred gifts from the spirit world, children are an integral part of the family, the community and the culture of a people.³ The health of the children, therefore, is a reflection of the health of the community. As cited above, the measures of health of babies

and children in Indigenous communities are linked to social determinants of health. Unfortunately the large majority of Aboriginal families living in Canada do not experience the relative prosperity that is enjoyed by the general Canadian population. The health of Aboriginal babies and children living in Canada is adversely impacted by significant and persistent challenges in the areas of food security, housing, employment, education and environmental exposures.⁴

The United Nations Declaration on the Rights of Indigenous Peoples recognizes that Indigenous peoples have the right to



What Does It Mean?

Total fertility rate: The average number of children that would be born to each woman in a given population if she lived to the end of her reproductive years. High fertility rates among Aboriginal populations in Canada contribute to youthful populations.

Infant mortality: The death of a baby in the first year of life.

- **Neonatal infant mortality:**
The death of a baby in the first month of life. Neonatal death is often associated with lack of access to obstetric and neonatal care.
- **Post-neonatal infant mortality:**
The death of a baby between the ages of one month and one year. Post-neonatal death is more likely to be associated with social and environmental factors.

Stillbirth: The death of a fetus after the twentieth week of pregnancy or when it weighs more than 500 grams. Stillbirth is usually associated with the mother's health and lack of access to maternity care.

Preterm birth: A birth that occurs before the 37th week of pregnancy.

Birth weight: Birth weight is one of the most important measures of infant health. Birth weight can be influenced by the conditions the baby was exposed to in the womb during pregnancy and is linked to health later in childhood and in adulthood.

- **Low birth weight:** A birth weight of less than 2,500 grams.
- **High birth weight:** A birth weight of more than 4,000 grams.

Small for gestational age (SGA): A fetus or infant whose weight lies below the 10th percentile for that gestational age.

Large for gestational age (LGA): A fetus or infant whose weight lies above the 90th percentile for that gestational age.

the improvement of their economic and social conditions, including health, and further recognizes the rights of Indigenous children to live healthy, safe, and well educated lives. It is therefore important to make the links between this right to live a healthy life and the fact that Aboriginal peoples in British Columbia, as well as in other parts of Canada, still do not have equitable birth outcomes when compared to the rest of Canadians.

According to the 2006 Census 196,070 persons, or 4.8% of the total population in BC, reported Aboriginal identity. Approximately 66% identified as 'North American Indian,' 30% identified as Métis, less than 1% identified as Inuit, and the remaining 3% identified with more than one Aboriginal group and/or self-reported as Status Indians and/or band members without identifying themselves as North American Indian, Métis or Inuit. Approximately 56% (110,545 persons) of the total Aboriginal identity population in British Columbia identified as being registered as Status Indians with the federal government.⁵

These numbers underestimate the actual Aboriginal population in BC, as there was non-participation in the census by one First Nation on-reserve community and other Aboriginal groups and individuals may not have access to or may choose not to participate in the census (for example homeless Aboriginal persons and Aboriginal persons who do not accept the jurisdiction and/or mandate of the census).

In BC, as in the rest of Canada, Aboriginal peoples represent a sizeable, youthful, and growing population group. According to the 2006 census, 28.2% of the Aboriginal population in BC was under the age of 15 years, compared to 16.5% of the total BC population. The median age of the Aboriginal population in BC was 28.1

years, compared to a median age of 40.8 years for BC.⁶ This younger population structure is linked to a higher fertility rate for the Aboriginal population compared to the non-Aboriginal population. While BC specific fertility rates are not readily available, for Canada as a whole the fertility rate between 1996 and 2001 was 2.9 children for First Nations women, 2.2 for Métis women, and 3.4 for Inuit women, compared to a rate of 1.5 among all Canadian women.⁷ Given this younger population age structure, Aboriginal populations in BC embody a significant potential for future contributions to both Aboriginal and non-Aboriginal society.

What We Know and Don't Know About First Nations/Indian, Inuit, and Métis Birth Outcomes in British Columbia

Infant Mortality

There is inconsistent provincial and territorial tracking of Aboriginal infant mortality in Canada, despite the fact that socio-demographic profiles of Aboriginal populations indicate that they are at risk for a disproportionate burden of infant mortality. The Joint Working Group on Aboriginal Birth Outcomes has identified that in Canada, high quality and current infant mortality rates are only available for two provincial subgroups of First Nations (Status Indians living on reserve and Status Indians living off-reserve) and for Inuit living in Inuit inhabited areas.⁸ There are no infant mortality rates in Canada for non-Status Indians and Métis,⁹ despite the fact that combined, these two populations represent almost half of the Aboriginal identity population in Canada.¹⁰

In BC, a longitudinal study using vital statistics data from 1981 to 2000 found that overall death rates were at least twice as high for infants born to parents who were

⁵ In this study this included persons registered as Status Indians with the federal government and persons who self-identified as Aboriginal on the provincial birth registration, which at the time also asked for a status number for all who did identify as Aboriginal.

First Nationsⁱ compared to the non-First Nations population (Figure 1).ⁱⁱ Specifically, Infant Mortality Rates (IMRs) were 2.3 times higher for First Nations infants born to parents living in rural areas and 2.1 times higher for First Nations infants born to parents living in urban areas.¹¹

The disparities in First Nations compared to non-First Nations IMRs are most marked for post-neonatal infant mortality (Figure 1).¹² For example, the study referenced above found the First Nations neonatal IMR was 1.5 and 1.3 times higher than the non-First Nations neonatal IMR for rural and urban areas, respectively. However, the First Nations post-neonatal IMR was 3.6 times higher than the non-First Nations post-neonatal IMR in both rural and urban areas. Most of the extra post-neonatal deaths for First Nations infants were due to preventable causes such as sudden infant death syndrome (SIDS) and infections. This data supports the need to address the difficult living conditions facing many Aboriginal families in order to reduce this excessive infant death.¹³ It also points to the need for a better understanding of the relevance, effectiveness and accessibility of SIDS prevention information and programming in Aboriginal communities.

Preterm Birth

In Canada, there is also no consistent provincial or territorial tracking of preterm birth rates among Aboriginal groups. According to the study referenced above, preterm birth rates among First Nations in British Columbia were consistently over 1.5 times higher than those of non-First Nations.ⁱⁱ Specifically, First Nations preterm birth rates were 1.8 times higher for infants born to parents living in rural areas and 1.5 times higher for infants born to parents living in urban areas (Figure 2).¹⁴

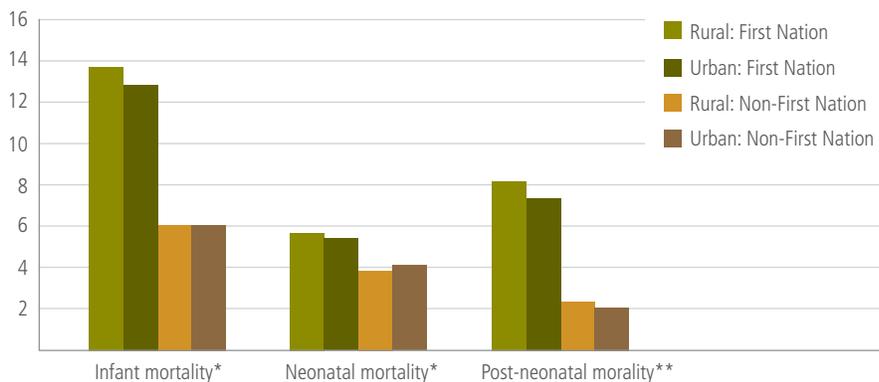
Birth Weight

At a national level, according to parental reporting of birth weight on the Aboriginal Children's Survey,¹⁵ First Nations Regional Longitudinal Health Survey¹⁶ and National Longitudinal Survey of Children and Youth,¹⁷ rates of low birth weight for First Nations with status living both on and off-reserve are similar to those of the Canadian population, while rates of low birth weight for non-Status Indians living off-reserve are higher than those of the Canadian population. The rate of low birth weight was slightly higher for both Inuit and Métis infants compared to the Canadian population.¹⁸

Nationally, rates for high birth weight also show some variation, with substantially higher rates observed for First Nations with status living on and off reserve compared to the Canadian population.¹⁹ Rates of high birth weight were higher for non-Status Indians and Métis and slightly lower for Inuit again compared to Canadian rates.²⁰

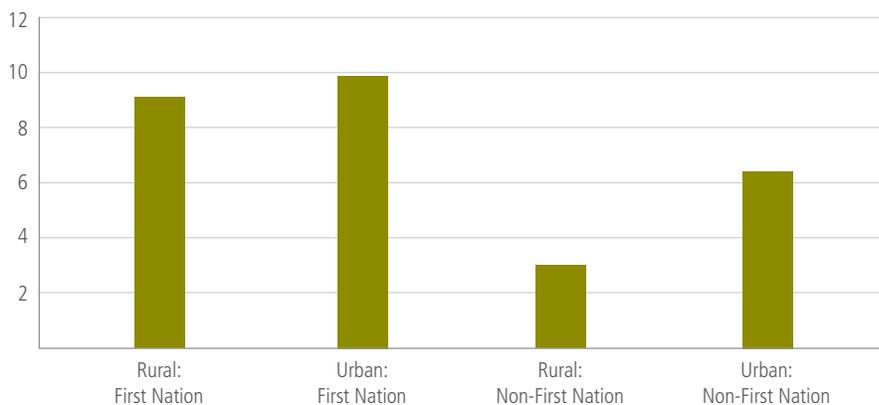
In British Columbia, parentally reported rates of low and high birth weight for First Nations with status living off reserve, non-Status Indians and Métis are similar to the national rates reported above. For First Nations with status living on

Figure 1: Infant Mortality Rates – Province of British Columbia 1981-2000



* per 1000 live births
** per 1000 neonatal survivors

Figure 2: Preterm Birth Rates (%) – Province of British Columbia 1981-2000



ⁱⁱ In this study this would have included non-Status Indians, Métis and Inuit.

reserve, the parentally reported rate of low birth weight was also similar to that reported nationally and comparable high birth weight data was not available. BC specific rates are not available for Inuit. The previously referenced longitudinal study in BC demonstrated higher rates of large for gestational age and lower rates of small for gestational age for First Nations populations compared to the non-First Nations population.²¹

Low birth weight is associated with higher rates of illness and death throughout the life cycle and the elevated rates for Inuit, non-Status Indians, and Métis are a signal that additional maternity care and socio-economic supports may be required for these groups. The markedly higher rates of high birth weight and large for gestational age for First Nations/Indian groups living on and off-reserve have been linked to relatively high and increasing rates of maternal diabetes for this population and higher rates of birth complications.²² Although high birth weight and large for gestational age are not routinely identified as major birth outcomes of interest, they are important to monitor among Aboriginal groups.

How Do Current Aboriginal Birth Outcomes Data Link to Health Determinants, Health Services, and Health Policy?

The persistence of Aboriginal/non-Aboriginal birth outcome disparities provides compelling evidence of Aboriginal/non-Aboriginal health inequity. Health inequity has been defined as “differences in health that are not only unnecessary and avoidable, but in addition unfair and unjust.”²³ The persistence of these birth outcome disparities in affluent countries is particularly problematic from a human rights and population health perspective.

Improvement of the quality and coverage of Aboriginal birth outcomes data

and health information systems is a priority. A major challenge in Canada is the accurate, consistent and culturally appropriate identification of First Nations, Indian, Inuit, and Métis peoples on vital registration and hospitalization records.

In Canada, there is an under-registration of Aboriginal births and deaths and, in some cases, entire groups of Aboriginal peoples (most commonly Métis and non-Status Indians) are excluded from Aboriginal data sets. This exclusion of Aboriginal persons or communities from basic public health surveillance based on their chosen place of residence, ethnic identity, or the use of government defined Aboriginal categories over Aboriginal determinations of identity and membership clearly violates the United Nations Declaration on the Rights of Indigenous Peoples.²⁴

Improvement is also required in the scope of available birth outcomes data. For example, there is little information about the incidence of stillbirth among Aboriginal populations, yet this is recognized as an important indicator of maternal health, including maternal environmental exposures and access to maternity care. More information and analysis is also needed with respect to the causes of adverse birth outcomes, including their relative contributions. This will require the collection of more information about social determinants of health and access to services on vital registration forms and/or the linkage of vital registration systems to other databases.

Indigenous peoples around the world have clearly articulated their desire to be actively involved in the development, governance, and management of their health measurement systems.²⁵ This mandate is linked to Article 23 of the United Nations Declaration on the Rights of Indigenous Peoples, which recognizes the right of Indigenous peoples “to be actively involved in developing and determining health, housing and other economic and social

programmes affecting them and, as far as possible, to administer such programmes through their own institutions.”²⁶ Hence, any improvement to Aboriginal birth outcomes surveillance and response must be based on solid partnerships with Aboriginal groups. These partnerships will also ensure that services and programs are tailored to meet First Nations, Inuit, and Métis specific needs.

Aboriginal birth outcomes are significantly worse than those of non-Aboriginal populations across every major birth outcome. This is not only unfortunate, but unnecessary and unjust, as these adverse Aboriginal birth outcomes are clearly linked to underlying and potentially reversible disparities in the social determinants of health and access to health services. Improvement of Aboriginal birth outcome assessment and response under the leadership of, and/or in partnership with, Aboriginal stakeholders is a priority. Aboriginal birth outcomes data in British Columbia and Canada points towards the need for timely and broad health service, program, and policy responses, with special emphasis on the amelioration of Indigenous/non-Indigenous disparities in the social and environmental determinants of infant health.

A Best Practice in Aboriginal Birth Outcomes Assessment and Response

Aboriginal Maternal and Child Health Committee

The Aboriginal Maternal and Child Health Committee was initiated by the First Nations Health Council as part of the implementation of the 10 year Tripartite First Nations Health Plan. It was established to ensure the implementation of the maternal and child health actions in the Tripartite and Transformative Change Accord First Nations Health Plans. These actions included:



- Addressing the disproportionate mortality rate of Aboriginal children in British Columbia
- Implementing hearing, dental and vision screening for Aboriginal children under age six
- Implementing a Maternity Access project to improve maternal health services for Aboriginal women and bring birth “closer to home and back into the hands of women”²⁷

Recognizing that Métis and urban Aboriginal people also needed a voice, this committee now includes eleven First Nations representatives from British Columbia’s five regions, as well as one representative each from the British Columbia Association of Indian Friendship Centres and the Métis Nation of British Columbia. The federal and provincial governments are represented by representatives from First Nations and Inuit Health, Health Canada; Public Health Agency of Canada; the British Columbia Ministry of Active Living and Sport; and the Provincial Health Service Authority.

The work of the committee focuses on review and recommendations of policies, programs, and services in three priority areas. For example, committee members recently reviewed the provincial tools for early hearing screening, making recommendations to ensure these tools were culturally relevant for Aboriginal children and their families. With respect to child death review, the committee recently reviewed and contributed recommendations to the recently released *Special Report of the Child Death Review Unit on Sudden Infant Death Syndrome*.²⁸

This committee is notable as a best practice as it facilitates the active involvement of Aboriginal people from multiple jurisdictions in the design and delivery of health policies, programs, and services. In the case of the *Safe and Sound Report*, the committee ensured that Aboriginal community representatives were core partners in the assessment and response to public health surveillance data regarding infant death from SIDS. In the words of Marilyn Ota, Vice President of Health Planning for the First Nations

Health Council, this committee involves “Aboriginal people saying and making recommendations regarding what we need...ensuring our services and programs are more appropriate for our children and our people.”²⁹ The tripartite framework supports this function by recognizing Aboriginal people as an equal partner at the table and ensuring that both the federal and provincial governments are working in alignment.

Additional Resources

- 2006 Aboriginal Population Profile www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-594/
- 2006 Profile of Aboriginal Children, Youth and Adults www12.statcan.ca/census-recensement/2006/dp-pd/89-635/
- Aboriginal Children’s Survey www.statcan.gc.ca/aboriginal/acs/5801793-eng.htm
- Aboriginal Peoples Survey, 2006 An overview of the health of the Métis population: www.statcan.gc.ca/pub/89-637-x/89-637-x2009004-eng.htm
- Canadian Perinatal Surveillance System www.phac-aspc.gc.ca/rhs-ssg/
- First Nations Health Council www.fnhc.ca
- First Nations Regional Longitudinal Health Survey www.rhs-ers.ca/english/pdf/rhs2002-03reports/rhs2002-03-technicalreport-afn.pdf
- National Aboriginal Health Organization (NAHO) www.naho.ca
- Nuu-chah-nulth Tribal Council Infant Development Program www.nuuchahnulth.org/tribal-council/infant.html
- Report on Indigenous Children’s Health www.stmichaelshospital.com/media/detail.php?source=editorial/articles/media/hospital_news/2009/20090409_ki
- United Nations Declaration on the Rights of Indigenous Peoples www.unhcr.org/refugees/doc/4946646.html

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- ¹³ Ibid.
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