



# **Aboriginal Maternal And Infant Health In Canada: Review Of On-Reserve Programming**

**PREPARED FOR**

**Prairie Women's Health Centre of Excellence (PWHCE)**

*and the*

**British Columbia Centre of Excellence for Women's Health (BCCEWH)**

**APRIL, 2009**

**R. STOUT & R. HARP**



# Aboriginal Maternal And Infant Health In Canada: Review Of On-Reserve Programming

**R. STOUT & R. HARP**



PREPARED FOR  
Prairie Women's Health Centre of Excellence (PWHCE)  
*and the*  
British Columbia Centre of Excellence for Women's Health (BCCEWH)

APRIL, 2009

Prairie Women's Health Centre of Excellence (PWHCE) and British Columbia Centre of Excellence for Women's Health (BCCEWH) support and conduct new knowledge and research on women's health, and provide policy advice, analysis and information to governments, health organizations and non-governmental organizations. They are funded by the Women's Health Contribution Program of Health Canada. The views expressed herein do not necessarily represent the official policy of PWHCE, BCCEWH or Health Canada.

The Prairie Women's Health Centre of Excellence  
56 The Promenade  
Winnipeg, Manitoba R3B 3H9  
Telephone (204) 982-6630 Fax (204) 982-6637  
[pwhce@uwinnipeg.ca](mailto:pwhce@uwinnipeg.ca)

B C Centre of Excellence for Women's Health  
E311- 4500 Oak Street, Box 48  
Vancouver, BC V6H 3N1  
Telephone (604) 875 2633 Fax (604) 875 3716  
[bccewh@cw.bc.ca](mailto:bccewh@cw.bc.ca)

This report is also available on our websites: [www.pwhce.ca](http://www.pwhce.ca)

[www.bccewh.bc.ca](http://www.bccewh.bc.ca)

This is project #184 of the Prairie Women's Health Centre of Excellence

ISBN # 978-1-897250-21-1

# **Aboriginal Maternal And Infant Health In Canada: Review Of On-Reserve Programming**

**PREPARED FOR**

**Prairie Women's Health Centre of Excellence (PWHCE)**

*and the*

**British Columbia Centre of Excellence for Women's Health (BCCEWH)**

**APRIL, 2009**

**R. STOUT & R. HARP**





# TABLE OF CONTENTS

Acronyms.....	i
Timeline.....	iii
<b>EXECUTIVE SUMMARY.....</b>	<b>V</b>
<b>PART I</b>	
Introduction.....	1
Parameters & Design .....	1
Limitations.....	2
Project Partners .....	3
<b>PART 2</b>	
Demographic Data.....	5
Aboriginal and Maternal Health Data.....	7
First Nations and Inuit Health Branch Programs .....	11
Aboriginal Head Start On Reserve.....	13
Brighter Futures.....	19
Canada Prenatal Nutrition Program.....	25
Children’s Oral Health Initiative .....	31
Fetal Alcohol Spectrum Disorder Program.....	35
<i>Jordan’s Principle</i> .....	37
Maternal Child Health.....	39
Targeted Immunization Strategy .....	43
Cross-cutting Gaps & Issues .....	45
Aboriginal Midwifery in Canada .....	51
<b>PART 3</b>	
Concluding Remarks & Recommendations .....	55
<b>PART 4</b>	
References.....	59
Appendices & Maps.....	67
Timeline of Programs .....	70



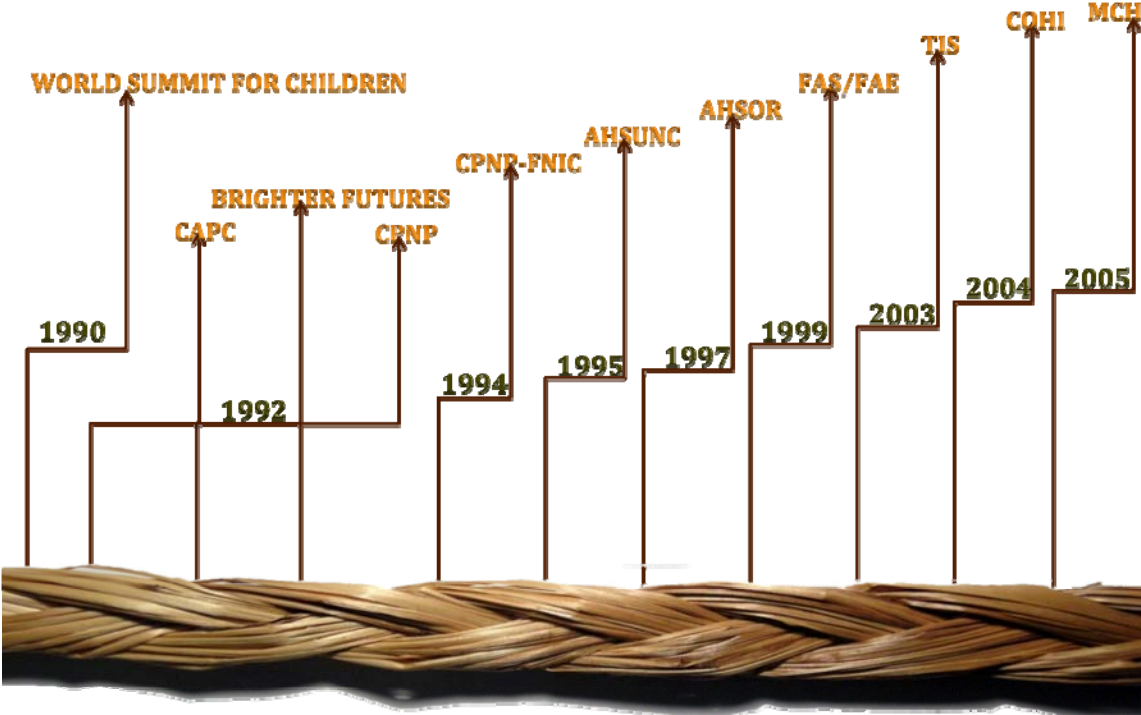
## ACRONYMS

ACS	Aboriginal Children's Survey
AHS	Aboriginal Head Start
AHSOR	Aboriginal Head Start on Reserve
AHSUN	Aboriginal Head Start in Urban and Northern Communities
BFI	Brighter Futures Initiative
CHN	Community Health Nurse
CHR	Community Health Representative
COHI	Children's Oral Health Initiative
CPNP	Canada Prenatal Nutrition Program
ECD	Early Childhood Development
ELCC	Early Learning and Child Care
FASD	Fetal Alcohol Spectrum Disorder Program
FN/I	First Nations / Inuit
FNIHB	First Nations and Inuit Health Branch, Health Canada
FV	Family Visitor
MCH	Maternal Child Health Program
NNADAP	National Native Addictions and Drug Abuse Program





**Timeline: Federal Programs Serving Aboriginal Women and Infants**





## EXECUTIVE SUMMARY

The past two decades have seen an incrementally steady development in maternal and infant health programming targeted to Aboriginal communities. This paper reviewed existing maternal and infant health programs and guidelines as administered under the First Nations and Inuit Health Branch. While the aim here is help assess the extent to which populations may be under-served or un-served by current Aboriginal maternal and infant programming, it is by no means intended to discredit the efforts of FNIHB, but simply to highlight where further spending could lead to better health outcomes for a greater number of people.

Although improvements were noted in most cases over the years, a quantitative and qualitative analysis of data sources revealed that varying levels of gaps in service still remained for these programs, including: Aboriginal Head Start On-Reserve; Brighter Futures; Canada Prenatal Nutrition Program; Fetal Alcohol Spectrum Disorder Program; Maternal Child Health; Targeted Immunization Strategy; and the Children's Oral Health Initiative. These gaps in service generated 14 recommendations for future consideration, as follows:

**RECOMMENDATION:** *That increased, multi-year funding for all Aboriginal maternal and infant health programs be offered across a greater number of First Nations and Inuit communities in order to close the gap in health outcomes for women and children in these communities.*

**RECOMMENDATION:** *That community-based focus groups/dialogues be held, alongside one-to-one interviews, in order to incorporate and give voice to the concrete experiences and perspectives of First Nations and Inuit women on current maternal and infant programming.*

**RECOMMENDATION:** *That a fuller, wider scan and gaps analysis, with a specific focus on universal provincial and territorial programs, be conducted for a truly complete picture of the scope and scale of maternal and infant health programming reaching First Nations and Inuit communities.*

**RECOMMENDATION:** *That a research methodology be designed and implemented to capture the use, limitations and experiences of urban Aboriginal populations in accessing universal provincial and territorial maternal and infant programs.*

**RECOMMENDATION:** *That analysis be conducted as to the budget actually spent on the direct, 'front-line' delivery of Aboriginal maternal and infant health programming, i.e., distinguishing federal program administration costs from what actually reaches the communities.*

**RECOMMENDATION:** *That training be made available closer-to-home in remote and rural areas and incentives investigated for retaining/recruiting trained workers in their communities.*

**RECOMMENDATION:** *That funding for Aboriginal maternal and infant health programs be moved to a multi-year arrangement with more streamlined application/reporting procedures.*

**RECOMMENDATION:** *That partnerships be encouraged and explored with cultural and educational organizations to create culturally- and linguistically-appropriate materials for health-related purposes.*

**RECOMMENDATION:** *That a review of best practices in cultural competency within other global indigenous contexts (e.g., New Zealand and Maori) be undertaken, including cost/benefit and impact assessment elements of culturally-relevant health information.*

**RECOMMENDATION:** *That communities be encouraged to develop specific metrics for gauging cultural success in their proposals, based on criteria that they themselves determine.*

**RECOMMENDATION:** *That Jordan’s Principle be implemented by all levels of government, and that it be heralded as a best practice in child-centered care.*

**RECOMMENDATION:** *That the Society of Obstetricians and Gynecologists of Canada’s Aboriginal Birthing Initiative be looked upon as a best practice in moving Aboriginal midwifery forward toward the repatriation of birthing to Aboriginal communities.*

**RECOMMENDATION:** *That the “creation of an accurate, rigorous, data-gathering mechanism for maternity care,” as called for by the SOGC be extended to all First Nations, Inuit and Métis communities.*

**RECOMMENDATION:** *That midwifery be promoted and supported as an educational and career choice for Aboriginal people.*

**RECOMMENDATION:** *That Aboriginal maternal and infant health programs integrate and promote the participation of fathers, and/or other male supports, throughout the pre-, peri- and post-natal continuum.*

## Introduction

The past two decades have seen the steady and incremental development of maternal and infant health programming targeted specifically to Aboriginal communities. The First Nations Inuit Health Branch (FNIHB) and the Public Health Agency of Canada (PHAC), entities that both operate under the authority of Health Canada, have spearheaded many of these efforts. Whereas FNIHB's mandate for program delivery covers First Nations on-reserve and Inuit settlements specifically, the reach of PHAC's programming extends to all Aboriginal peoples, including Métis and non-Status, in urban and northern settings. This paper will primarily focus on programs offered by FNIHB.

A review of existing maternal and infant health programs and guidelines specific to First Nations and Inuit will provide an overall picture of populations served by these programs. A quantitative and qualitative analysis of data sources will attempt to indicate where gaps in programming persist. While the aim here is help assess the extent to which populations may be under-served or un-served by current Aboriginal maternal and infant programming, it is by no means intended to discredit the efforts of FNIHB, but simply to highlight where further spending could lead to better health outcomes for a greater number of people.

The researchers were also tasked to review federal, provincial and territorial advancements in midwifery and Aboriginal midwifery as one example of an emerging trend in community-based and family-centered care for pre- and post natal care of Aboriginal women.

### Research Parameters, Scope & Design

A number of phases led to the development of this six-month research project. The first phase involved a mapping exercise to identify federal, provincial and territorial governmental departments and agencies whose mandate and programming included First Nations, Métis and Inuit women, children, health and early childhood education. Similarly, Aboriginal and non-Aboriginal health organizations, Aboriginal political organizations and tribal councils, and Aboriginal children's education agencies were listed in this preliminary mapping exercise.

Initial meetings between the research team, the Prairie Women's Health Centre of Excellence, direct inquiries with key government representatives and a January 2009 face-to-face meeting with the project advisory committee honed and re-directed the research to include only First Nations (on-reserve) and Inuit populations receiving FNIHB targeted programs.

Based on a draft manuscript and research methodology, the project advisory committee recommended that the project's authors draw upon both quantitative and qualitative resources to inform the gaps-analysis of Aboriginal maternal and infant health programs, which include:

- Aboriginal Head Start On-Reserve
- Brighter Futures
- Canada Prenatal Nutrition Program
- Children's Oral Health Initiative
- Fetal Alcohol Spectrum Disorder Program
- Maternal Child Health
- Targeted Immunization Strategy

The committee also recommended the inclusion of a brief scan of federal, provincial and territorial advancements in the emergent health promotion area of Aboriginal midwifery.

The paper has been divided into three sections. After a brief snapshot of demographic and health data available on Aboriginal women and infants in the first section, this paper will turn to a review of the aforementioned FNIHB-managed programs and midwifery in Canada. Cross-cutting themes and gaps will be included in the second section. Lastly, recommendations will be drawn based on the research findings and analysis.

## **Limitations**

While the vast majority of websites of governments, non-government and community agencies yielded a great deal of information, the reliance on the Internet for data collection also limited the research. In some cases, websites had not been maintained or the information was no longer up-to-date. Certainly for government websites, internal departmental changes meant that past URLs to other pages and documents were now obsolete. Others had lapsed entirely.

Current and accurate data related to Aboriginal maternal/infant health programs was not always obvious. In some cases, documents and/or sources would contradict one another. For example, one record would list a project, another listed project sites, while others had no record at all. Data sources of the same program but with differing figures meant there was no immediate or apparent way to determine which was correct. The research team relied on government key inquiries and internal and/or draft documents to fill in the gaps when possible, in the hope of bringing the true numbers forward.

In terms of determining the availability of programming relative to need (put another way, supply *vs.* demand), because the most up-to-date population figures for Aboriginal peoples come from the 2006 Census, this report could only draw upon government-supplied data from that same year in order to make fair and appropriate comparisons. Obviously, higher birth rates in some regions in the intervening three-plus years may only have increased the supply/demand gap for programs where service rates have remained constant.

## **Project Partners**

This six-month project has been co-led by Prairie Women's Health Centre of Excellence (PWHCE) and the British Columbia Centre of Excellence for Women's Health (BCCEWH). These two Centres have provided more than twelve years each of experience, knowledge generation and policy advice in the realm of maternal and infant health. Both Centres have consistently included issues specific to Aboriginal women, particularly with regard to appropriate services to women in a variety of locations.

The mission of PWHCE is to improve women's and girls' health through high quality, woman-centered, participatory, action-oriented research and policy analysis. The overarching goal of improving the health of women in Manitoba, Saskatchewan and Canada means that the PWHCE attempts to make the health system more responsive to women and girls' health and wellbeing. The working objectives of PWHCE are centered on the three main strategic thrusts of its mandate: providing policy advice, generating new knowledge through research, and promoting effective communication and citizen engagement.

The BCCEWH is a centre of innovation and creativity in the effort to ensure that health and wellness for women is a consideration for policy makers and clinicians. Their original and overall mission is to improve the health of women through innovative research and the development of women-centered programs, practice, and policies and, more broadly, to address gender and other disparities in health. The

BCCEWH pays particular attention to policy that will improve the health status of those who are marginalized and who face multiple disadvantages in health due to socioeconomic status, race, culture, age, sexual orientation, geography, disability and/or addiction.



## Demographic Data

According to the 2006 Census (Statistics Canada, 2008), the total number of Aboriginal people in Canada exceeded the one million mark for the first time ever at 1,172,785. This figure breaks down as follows<sup>1</sup>:

- 698,025 First Nations people
- 389,785 Métis
- 50,485 Inuit
  
- 600,695 Aboriginal females (51% of total population)
- Aboriginal females, age 15-19 years: 161,855 (14% of total population)
  
- Aboriginal children, age 0-6 years: 131,000 (11% of total population)
- 91,000 off-reserve
- 40,000 on-reserve

This figure of 40,000 on-reserve children ages 0-6 (Statistics Canada, 2008a:72) is probably best regarded as conservative for the purposes of this paper. For one, it does not include Inuit/Inuvialuit communities. Then there are those challenges to data collection that have long hampered efforts to generate accurate estimates of the overall First Nations population. As Statistics Canada cautions (2008c), not every First Nation took part in the latest Census (in fact, 22 communities were not included), for reasons ranging from difficulty of access to people in remote areas to community distrust of the federal government (Doolittle, 2008).

Population data collected by other federal departments also vary from the Census. The Registry of Indian and Northern Affairs Canada indicated that, in 2006, there was a total of 763,555 registered Status Indians in Canada—or 65,530 (or 8.6%) more than the Census recorded that same year (INAC, 2007). This Registry/Census discrepancy only grows when one compares on-reserve populations: whereas the 2006 Census indicates that as many as 342,865 First Nations people resided on-reserve (Statistics Canada, 2008), the Indian Registry reported a total of 404,117 (INAC, 2007). Meanwhile, a Health Canada estimate from 2003 seems to suggest

---

<sup>1</sup> See Appendices for population maps.

that as many as 58,000 infants and young children were resident on-reserve that year—18,000 (or 31%) more children than the Census would count three years later, a significant difference (Health Canada, 2003).

Potentially adding to the confusion is the fact that not all First Nations people have Indian Status. So while such ‘non-Status’ people may reside on-reserve, they are not technically entitled to participate in programs targeted at their Status counterparts. The upshot of all these statistical variances is that, where data inadequacies may be found to exist, governments would run the very real risk of understating, and thus under-serving, the true need for maternal child health programming. Obviously, any upward adjustments to population figures to reflect these higher estimates could see a widening of gaps in service coverage.

At any rate, it is widely understood that as a whole the Aboriginal population in Canada continues to be younger than the non-Aboriginal population. The following table (Statistics Canada, 2008) offers a side-by-side comparison for children 5 years and under:

**Proportion of Population 5 Years and under (2006)**

	<b>5 AND UNDER</b>	<b>TOTAL POP'N</b>	<b>% TOTAL = 0 - 5 YEARS</b>
<i>First Nations</i>	71,720	698,025	10.27
<i>Métis</i>	29,030	389,785	7.45
<i>Inuit</i>	5,875	50,480	11.64
Total Aboriginal	108,895	1,172,790	9.29
Non-Aboriginal	1,581,500	30,068,240	5.26

While the proportion of Aboriginal people overall (9.29%) falling into the 5-and-under cohort is sizably larger than that for non-Aboriginal people (5.26%), one sees an even larger difference in the specific case of Inuit (11.64%).

Between 1996 and 2006, the overall Aboriginal population grew by 45 per cent, compared with just 8 per cent for the non-Aboriginal population (ibid). Indeed, the current birth rate among the overall Aboriginal population continues to be much greater than that of the general Canadian population. At last measure, Aboriginal women could on average expect to have 2.6 children over their lifetime, whereas the average for women as a whole in Canada was 1.5 children (Statistics Canada 2008d).

## Aboriginal Maternal And Infant Health

Aboriginal health indicators—or, for that matter, Aboriginal health data in general—are widely regarded as inadequate and incomplete in this country. As one report put it in 2005:

[D]ue to the varied ways that information is collected or not collected in some instances, an accurate assessment of the health status of Aboriginal peoples remains beyond reach at the present time (Health Council of Canada, 2005).

That statement describes the situation for Aboriginal peoples as a whole, but turn to the specific case of health surveillance for Métis, and things only get worse:

For example, the life expectancy of the Métis is unknown as are rates for infant mortality, low birth weight, and types of cancer that most commonly cause death in the Métis population. Other major mortality causes are unknown ... The rate and type of communicable diseases affecting the Métis are also unknown, with the exception of some data on HIV/AIDS (ibid).

Although Métis people account for roughly a quarter of Aboriginal people in Canada, “there are few specific data, including health data, on the Métis population” (Canadian Institute for Health Information [CIHI], 2004). In fact, one estimate puts the total amount of Aboriginal health research dedicated to Métis populations at less than one per cent (Young, 2003). In the absence of reliable, Métis-specific data, some feel that the result has been that “the health issues and concerns of Métis communities—in particular Métis women—have largely been ignored in health research and in program and policy development” (Krieg and Martz 2008). Yet, while “data gaps are most obvious for the Métis and Inuit populations,” a significant lack of information for First Nations also exists (Health Council of Canada, 2005:31). In other words, what information does exist is, in most cases, provisional at best.

Most of the Aboriginal maternal health data available exists in the form of circumstantial health indicators, for example, their age, income level or family/marital status:

More Aboriginal mothers than non-Aboriginal ones are single, and more are adolescents. In fact, the number of First Nations children born to teenagers has remained high since 1986, at about 100 births per 1,000 women—a rate seven times higher than that for other Canadian teenagers (Guimond, 2008).

By contrast, direct health data for Aboriginal infants were much more readily available, if somewhat dated. What follows is a quick sampling.

The 2001 Aboriginal Peoples Survey reported that 8 per cent of off-reserve Aboriginal children had low birth weights, as compared to 5.6% of children in the general population of Canada (Human Resources and Social Development Canada [HRSDC], 2007a). At the other end of the spectrum, 21% of First Nations children were born at a high weight compared to 13.1% nationally in 2002/03 (First Nations Centre, 2004). One study found that, of all Aboriginal children aged 3 to five, virtually half (49%) were obese (ibid).

A survey in the early nineties found that 91% of First Nations and Inuit children were affected by dental decay, with 5 to 6 year olds averaging 7.8 decayed teeth each (ibid). An Ontario study found decay rates two to five times higher among First Nations/Inuit children than non-Aboriginal children (Fearn, 2006:22). Conversely, non-Aboriginal children were 3 to 4 times more likely to be free of such decay.

According to Health Canada estimates, on-reserve immunization rates have been historically 20% lower than the general population (Health Canada, 2007); not surprisingly, reserves have also suffered higher rates of vaccine-preventable diseases such as rubella and mumps.

Aboriginal children also endure a significantly higher rate of hospitalization according to Health Canada, with infants up to one year old hospitalized 50 times more frequently with streptococcal pneumonia, and 80 times more frequently with chickenpox, than their non-Aboriginal counterparts (ibid).

In 1999, the First Nations infant mortality rate—the number of infants who die in the first year of life, expressed as a rate (per 1,000 live births) for that year—was 8.0/1,000 live births (compared to 5.5/1,000 for Canada as a whole), with Sudden Infant Death Syndrome identified as the leading cause of death (Health Council of Canada, 2005:45). In two studies conducted in the 1990s, the rate of SIDS in the First Nations population was 5-10 times higher than the rates in the non-First Nations populations of British Columbia and Alberta respectively (ibid). In 1999, Nunavut saw an infant mortality rate of 15/1,000 live births (Nunavut Department of Health and Social Services, 2002:12). While the infant mortality rate has since fallen in Inuit communities, it is still estimated to be about four times higher than the overall Canadian rate (Wilkins, 2008). In terms of birth weight, 35% more infants were born at a low weight in Nunavut compared to the rest of Canada, with a slightly higher rate among females (8/1,000) over males (7/1,000) (Nunavut Department of Health and Social Services, 2002:13).

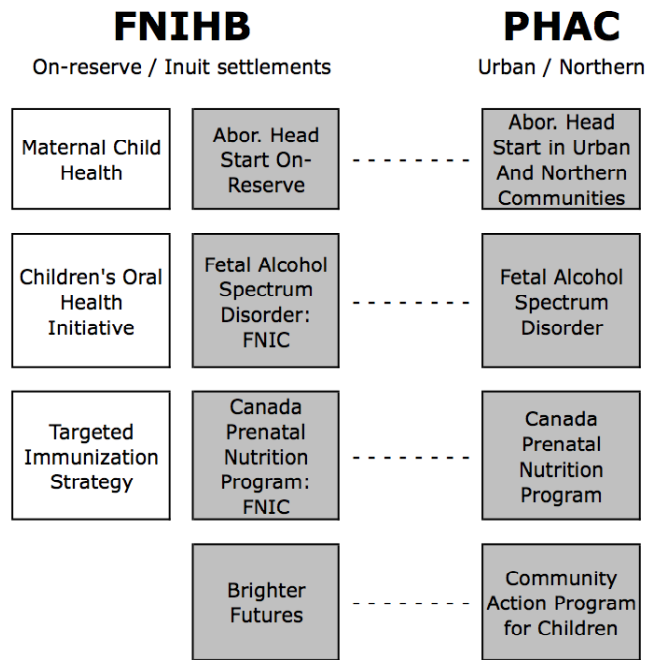
Aboriginal children are much more likely than other children in Canada to die from injuries. The rate of death from injury is four times greater for Aboriginal infants: among preschoolers, the rate is five times greater (Canadian Council on Social Development, 2002:25).

There are positives to report. Among off-reserve Aboriginal children aged three and under, breastfeeding was reported in 73% of cases. Although comparatively lower than the 82% rate among other children in the same age group, it actually represented an increase in the Aboriginal cohort (Turcotte, and Zhao 2004). This upward trend appears to be occurring on-reserve as well: whereas 50% of First Nations children were breastfed in 1997, it was 60% by 2002/03 (First Nations Centre, 2004).



# First Nations Inuit Health Branch Program Review

As mentioned earlier, federal programming in the realm of Aboriginal maternal and infant health is predominately under the control of both PHAC and FNIHB. Again, whereas the PHAC mandate is to serve vulnerable populations in urban and northern communities (including First Nations, Inuit and Métis), FNIHB programming is exclusively concerned with First Nations (on-reserve) and Inuit communities. Of potential confusion is the fact that a number of the programs under discussion here are simply versions of each other applied in the two jurisdictions (see table below).



This paper will focus its analysis exclusively on FNIHB-funded programming. What follows is a program-by-program overview, including an assessment of quantitative and qualitative gaps, from gaps in service coverage to gaps in cultural competency.





## Aboriginal Headstart On Reserve

<b>Aboriginal Head Start On-Reserve (AHSOR)</b>
<b>Mandate</b>
To provide early childhood interventions that target the needs of young First Nations and Inuit children and their families in their communities
<b>Year Announced</b>
1997
<b>Client Group</b>
0 to 6 years of age
<b>Key Activities</b>
promotion and protection of First Nations language and culture; nutrition; education; health promotion; social support; parental and family involvement
<b>Program Objectives</b>
Support the spiritual, emotional, intellectual and physical growth of each child
Support and encourage children to enjoy life-long learning
Support parents, guardians and extended family members as the primary teachers
Encourage parents and broader First Nations community to play major role in planning, developing, implementing and evaluating the program
Build relationships and coordinate with other community programs and services to enhance the effectiveness of the program
Encourage the best use of resources for children, as well as for their parents, families and communities

Inspired by the 1990 World Summit for Children, Canada announced its \$83.7 million Aboriginal Head Start Initiative in 1994 (Centre of Excellence for Children & Adolescents with Special Needs, 2005). Spread over four years beginning in 1995, the Aboriginal Head Start in Urban and Northern Communities (AHSUN) was envisioned as an early intervention program serving Aboriginal parents and children in both urban and large northern communities. This is currently delivered through PHAC, previously known as the Population and Public Health Branch of Health Canada.

In 1997 the Aboriginal Head Start On-Reserve (AHSOR) was announced, essentially applying the AHSUN model to First Nations reserves and Inuit communities. It aims to reduce the negative health effects experienced by some Aboriginal children due to high rates of poverty and lack of social supports in many Aboriginal communities.

Funding for AHSOR began in 1998/1999. The program is proposal-driven: that is, communities must submit applications to regional Aboriginal Head Start committees for approval in order to receive operational funding. The committees take into account national criteria and regional considerations such as other existing children's programming. Approved proposals are funded for a 3-year period.

AHSOR funding has steadily increased over the years. So too have the number of children served. In the six-year time frame seen below, one can see that, by fiscal year 2005/06, both funding levels and the number of children served grew by 121% and 42% respectively.

Despite such progress, the gap between available supply and potential demand for AHSOR programming remains wide.

Of potential confusion is the fact that the number of project sites does not necessarily equate to the number of communities served. Reporting and methodological issues have been identified over the years in this regard so these figures should be taken as rough benchmarks at best. For example, one report indicated that the number of AHSOR project sites likely remained stable at 354 over the period of 2003/04 through 2005/06 but only appear to drop due to issues with reporting (Allium Consulting Group, 2008).

### **AHSOR: Annual Funding**

Years 2000/01 through 2005/06

<b>Fiscal Year</b>	<b>Budget</b>	<b>Project Sites</b>	<b>Children 0-6</b>	<b>Communities Served</b>
2000/2001 <sup>a</sup>	\$24.4M	314	6,467	<i>n/a</i>
2001/2002	\$22.6M	307	7,150	<i>n/a</i>
2002/2003	\$34.7M	307	7,429	317
2003/2004	\$35.1M	354	9,101	383
2004/2005	\$41.5M	332	9,415	383
2005/2006 <sup>b, c</sup>	\$54.0M	328	9,173	398
2006/2007 <sup>c</sup>	\$57.3M	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
2007/2008 <sup>c</sup>	\$57.7M	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

Sources:

a. Treasury Board Secretariat. "Early Learning and Childcare: Aboriginal Head Start On-Reserve. (Health Canada)"

b. Human Resources and Social Development Canada, et al. "The Well-being of Canada's Young Children," 2006 report

c. Allium Consulting Group Inc. "Performance Report 2004-2005 to 2006-2007: Children and Youth Cluster, First Nations and Inuit Health Branch, Health Canada"

For purposes of assessment, the 2006 Census indicated that 40,000 Aboriginal children aged 0 to 6 lived on-reserve that same year. With about 9,100 children being served by AHSOR at that time, that would indicate a shortfall in service coverage of just under 31,000 children, or 77%, in 2006 (see Table). Seen through the lens of communities, just over 60% have been reached by programming, leaving the remaining 40% un-served.

**AHSOR: Program Reach (2006)**

AHSOR Projects	Total Clients, Actual (0-6)	Project to child ratio	Total Potential Clients	% of Clients Under-served	Communities served	% of all communities
328	9,173	1:28	40,000	77.07 %	398	60.4%

The above gaps notwithstanding, where programming does in fact reach the intended population, the ratio of projects to children is relatively positive, at one project for every 28 children.

Expressed in per capita terms, funding allocations can be understood two ways, be it relative to the 9,173 clients actually served, or, to all potential 40,000 clients in need, as seen in the table below.

**AHSOR: Expenditures Per Capita (2006)**

AHSOR Total Projects Budget, 2005/06	Actual clients: \$ per capita	
	<b>\$54M</b>	\$5,887
Potential clients: \$ per capita		
\$1,350		\$150 / month

These figures are additionally expressed on a monthly basis per child. Assuming 20 working days a month as well as a 9-month programming cycle (consistent with the school year), actual clients in 2005/06 received an average of \$32.71 in funding per day. Had all potential clients been served under that same budget, each would received an average of \$7.50 in funding per day.

Here, the question emerges as to what expenditure-per-child ‘baseline’ might be appropriately utilized to evaluate funding levels for any of the early childhood development-related programs under review in this paper. Some American researchers have attempted to effectively determine such baselines, using a social “cost-benefit” analysis approach to assess the impacts of Early Childhood Educator (ECE) programs. Given the complexity of the various formulae used to arrive at these funding levels, the figures included here serve mainly as a point of departure for further discussion and comparison.

A January 2007 study conducted by Isaacs and published by the Brookings Institution (Issacs, 2007) explored a number of funding options for urban ECE programs in the United States, ranging in cost from US\$4,500 to US\$13,000 per child. At the higher end of the spectrum was perhaps the most elaborate option, the Abecedarian Project in North Carolina, which offered infants ages 0 to 5 a full-day, year-round program with a high infant-teacher ratio of 3:1 (and a child-teacher ratio of 6:1 as they grew older) right up until kindergarten, supplemented by home visits over the first three years. The next tier down was Ypsilanti, Michigan's Perry Preschool, a half-day (2.5 hour) weekday program for 3 to 4 year olds that operated for 8 months of the year. It also included a weekly home visit by the teacher. Its average child-teacher ratio was around 6:1.

Impressive though these numbers may be, it should be noted that both Abecedarian and Perry were pilot projects mounted in the 1960s and 1970s that featured small groups of children (111 and 123 respectively). It remains to be seen how a large-scale, multi-site version of either program would fare in today's context, especially in relatively remote locations such as reserves. In any event, the results were found to be significant in terms of a positive return on social investment, implying that funds allocated early in life had indeed paid off in fewer social ills later on for participants. The other example cited was a contemporary one in the Chicago Child-Parent Centers multi-site program, where some twenty centers in the city's public schools provide half-day preschool programming for 9 months, with an additional six weeks in the summer, to over 1,500 children (ages 3 to 4).

Based on a rough average of costs among the aforementioned programs (plus the U.S. Head Start program), Isaacs ultimately recommends the widespread institution of half-day, center-based programs for 3 to 4 year olds (ibid:10), composed of classes capped at 16 children, and a child-to-staff ratio no greater than 8:1. In this scenario, Isaacs puts estimated annual costs at roughly US\$9,200 per child (expressed in 2008 dollars), or just over \$9,800 in Canadian dollars<sup>2</sup>. Even allowing for the increased dollars flowing to AHSOR in 2007/08 (with no apparent increase in the number of children served), the \$57.7 million allocation still only works out to \$6,290 per child annually, or almost 36 per cent short of Isaacs' recommended amount. Again, given that the U.S. examples are city-based, there may be additional costs to factor in when considering on-reserve delivery.

In 2006, Indigenous scholar Margo Greenwood stated that "Aboriginal early childhood development programming and policy must be anchored in Indigenous

---

<sup>2</sup> Based on the average 2008 US/Canadian exchange rate of 1.06601429. Source: Bank of Canada, Financial Markets Department. Year Average of Exchange Rates (2008). Retrieved 10 February 2009 from <http://www.bankofcanada.ca/pdf/nraa08.pdf>

ways of knowing and being” (Ball, 2008:13). Greenwood also claimed Aboriginal peoples have articulated this belief for well over 40 years. As demonstrated by the inclusion of cultural and language components guiding AHSOR programming, there has been movement towards this ideal.

AHSOR has over a decade of program experience and delivery. While it is exemplary for its community and cultural responsiveness, there is much room for improvement to effectively include children with special needs and of course more First Nations children on-reserve generally. Addressing these gaps would necessarily involve the recruitment of more qualified staff. Yet burdensome workloads, high staff turnover, and the recruitment of accredited Aboriginal Early Childhood Education professionals are on-going struggles. By way of adapting to this challenge, communities are building up their capacity by hiring and then providing training for new staff (Health Canada, n.d.a). Current wages do not offer incentive enough for the retention of AHSOR workers.

As well, it is important to note that while the costs of running, maintaining, improving or repairing infrastructure have gone up incrementally, funding has not kept pace (BC Aboriginal Child Care Society, n.d.). AHSOR is a proven bridge to better education outcomes for First Nations children. Having a program that is grounded in community needs, and that is sufficiently funded and staffed by qualified Aboriginal ECEs, are basic steps to ensuring that First Nations children have the opportunity to enter the mainstream education system at the same level playing field as their non-Aboriginal peers.



## Brighter Futures

### Mandate

To provide funding for First Nations and Inuit community-based activities intended to support the well-being of children, individuals and families

### Year Announced

1992

### Client Group

All members of First Nations and Inuit communities

### Key Activities

mental health; child development; parenting; healthy babies; and injury prevention

### Program Objectives

Increase awareness of mental health, child development, healthy babies and parenting skills

Build on knowledge and skills of front-line health workers and community members

Provide opportunities to improve health services and develop community-based model projects

Address serious health problems in a community-based, holistic and integrated manner

Support optimal health and social development of infants, toddlers and pre-school age children

Facilitate prevention and early intervention for health problems and promote better integration of health services

Assist with information about knowledge and skills necessary to improved health of children

Support communities to find their own solutions

Ensure integrated care by coordinating human service sectors

Increase awareness of mental health, child development, healthy babies and parenting skills

## Brighter Futures

Brighter Futures (BFP), a universal program reaching every First Nations and Inuit community in Canada to varying levels, assists the development of locally-based approaches to better health that are culturally-appropriate and holistic. The program focuses on health promotion and ill-health prevention through learning-related activities to increase awareness, change attitudes, build knowledge and enhance skills.

The *Child Development* component aims to strengthen the existing child development network of social, health, medical, educational and cultural services. This ensures that children receive the nurturing they need to reach their full potential. Examples of supported programs and activities include school breakfasts, math learning, parent-child crafts, and cultural heritage activities.

The *Parenting* component promotes culturally-sensitive parenting skills. It supports the development and delivery of training programs for parents of children aged two and older. Sample initiatives include parenting workshops and training, as well a support group for parents of children with Attention Deficit Hyperactivity Disorder.

*Healthy Babies* works to improve the physical, mental and social health and well-being of mothers and infants. Eligible services and activities include pre- and post-pregnancy services, pregnancy-related education (e.g., breastfeeding, nutritional education).

## Brighter Futures (continued)

### Principles

A holistic approach is essential to support individuals, families and communities

The most holistic approach coordinates and links BFP's components: both with each other and with other services

Including community members in program design increases the likelihood it will meet their needs

Design should occur at pace determined by the community

A comprehensive approach offers a continuum of programs and services, from promotion and prevention to intervention and rehabilitation

Brighter Futures is delivered by a variety of service providers including mental health workers, wellness workers, youth workers, and Elders. Communities have the flexibility to determine which program component(s) will be utilized in providing services and/or activities, and the program recognizes that the needs of children cannot be separated from those of their families and communities. Generally, BFP supports long-term wellness programming as opposed to addressing more immediate needs such as intervention.

The annual funding levels for BFP listed below come with two caveats.

Firstly, while BFP's wide range of

activities does include a special emphasis on children, it is because of that wide range that it is difficult to accurately determine just how many children are served in any given fiscal year (HRSDC, 2007). Secondly, from 2001 through 2006, some First Nation communities assumed control over services through the Health Services Transfer process and saw BFP funds folded within their Transfer allocation. So while there is no actual loss of funds to the community or the Brighter Futures Program, the funds do not show up elsewhere, making comparisons difficult for those years.

However, by 2005/06, a new expenditure tracking procedure allowed BFP funds to be specifically tallied once more (ibid). Accordingly, comparisons and conclusions will only be drawn against the year with the most inclusive or reflective data, namely, 2005/06.



## Brighter Futures: Annual Funding

Years 2000/01 through 2005/06

Fiscal Year	Budget	Project Sites	Children (0-6) & Families	Communities Served
2000/2001	\$20.1M	650	45,000	<i>n/a</i>
2001/2002	\$18.6M	650	<i>n/a</i>	<i>n/a</i>
2002/2003	\$18.0M	650	<i>n/a</i>	<i>n/a</i>
2003/2004	\$17.8M	650	<i>n/a</i>	<i>n/a</i>
2004/2005	\$18.9M	600	<i>n/a</i>	<i>n/a</i>
2005/2006	\$31.2M	600	<i>n/a</i>	<i>n/a</i>

Source: Early Learning And Child Care Activities and Expenditures: Government of Canada Report 2004–2005 and 2005-2006

Here, given the absence of information indicating otherwise, the assessment of program reach will have to assume that the number of communities served was at least equal to the number of projects. Thus, at 600 projects, the percentage of 659 First Nations/Inuit communities served is quite high at 91 per cent.

### BFP: Program Reach (2006)

BFP Projects	Communities served	% of all communities
600	600	91.0%

Due to limitations in the BFP data, comparisons can only be rendered on a per capita basis of potential clients (conservatively restricted here to the 40,000 children ages 0-6 living on-reserve in 2006) and on a per community basis (divided among 659 communities). These figures are additionally expressed on a monthly basis over the course of a full year.

**BFP: Expenditures Per Capita/Community (2006)**

<b>BFP Total Projects Budget, 2005/06</b>  \$31.2M	<b>Potential clients: \$ per capita</b>	
	\$780	\$ 65 / month
	<b>\$ per community</b>	
	\$47,344	\$ 3,945 / month

Given that this program’s clientele is ‘global’ in nature—aimed at families as a unit, not just the mother and/or children—the per capita amount is in a sense the maximum possible.

In a first-ever evaluation in November 2003 / December 2004, participants felt BFP programs were relevant to the needs of First Nations and Inuit people, that programs were generally successful in what they do, though some communities needed assistance in program design, delivery and reporting, which tended “to focus on transactions and events, rather than on the actual performance and impact of the program” (Health Canada, 2007a). Most thought that allowing communities the flexibility to direct resources to particular needs was critical to the program’s success, as it gave people a sense of ownership and trust.

A 2006 evaluation once again found BFP to be “relevant” to communities’ health and wellness needs and priorities, although they remain hampered by limits to resources, capacity and access to training, and by other factors like community size and isolation (Health Canada, 2006). A positive note was again sounded about the flexibility of design for community-based, community-paced wellness services and delivery models.

However, criticisms also surfaced about BFP’s reporting mechanisms. While enhanced accountability measures were appreciated, evaluation respondents observed that reporting requirements could be “onerous” relative to the benefits obtained by communities or, for that matter, by FNIHB (Health Canada, 2006a). Requirements varied from region to region; in some cases, they were changed unilaterally without consultation. It was also seen as inappropriate to require projects with budgets of a few thousand dollars to file the same level of reporting as projects with budgets of over a hundred thousand dollars. Lastly, despite the program’s stated commitment to long-term programs, communities found their ability to execute plans in that time-frame “hindered” by BFP’s yearly funding cycle.

Many communities with limited health/wellness programming capacity—*e.g.*, education, training, infrastructure, tools, facilities, research—received no technical, management or planning assistance from FNIHB: branch staff reductions have only made the situation worse. This gap in assistance affected all communities, none more so than those located in remote and isolated areas.

In the specific matter of health human resources, communities face something of a dilemma caused by underfunding. On the one hand, there is the “ongoing, but unmet, demand for professionally trained First Nation and Inuit health and wellness workers,” a gap some pin on the lack of training opportunities leading to accreditation (*ibid*). But on the other hand, once staff do receive training, “few communities have the financial resources to retain [them],” as they become qualified to work for larger, better-funded organizations. Absent sufficient funding, a frustrating irony emerges as organizations indirectly facilitate the departure of staff by providing them educational opportunities. And so, while it seems the addition of options like the First Nations Community Wellness Worker Diploma Program (seen as a model of culturally appropriate and accessible health) would be of benefit to communities, it will have the opposite effect unless and until funding supports competitive wages for staff.

BFP’s similarities with other federal health programming have been noted by others, along with “a lack of consistency of purpose” among the programs (Leitch, 2007). This situation has led to the recommendation that BFP be amalgamated with other existing programs dealing with issues such as injury prevention and mental health so as to “eliminate duplication and streamline funding for those local organizations that wish to... reach more children in their local communities.”



## Canada Prenatal Nutrition Program

<p><b>Canada Prenatal Nutrition Program: First Nations and Inuit Component (CPNP-FNIC)</b></p>
<p><b>Mandate</b></p> <p>To improve the nutritional health of First Nations and Inuit women who are either pregnant, of childbearing age, or mothers of infants, as well as infants (0-1)</p>
<p><b>Year Announced</b></p> <p>1994</p>
<p><b>Client Group</b></p> <p>Pregnant women living in poverty, teens, women living in isolation or with poor access to services; all women of childbearing age</p>
<p><b>Key Activities</b></p> <p>Nutritional screening; education and counseling; maternal nourishment; breastfeeding promotion, education and support</p>
<p><b>Program Objectives</b></p> <p>Improve the adequacy of diets among prenatal and breastfeeding women</p> <p>Increase breastfeeding initiation and duration rates</p> <p>Support parents, guardians and extended family members as the primary teachers</p> <p>Increase awareness and knowledge of maternal and infant nutritional health</p> <p>Build community human resource skills in maternal and infant nutritional health</p> <p>Increase the number of infants fed age-appropriate foods in the first year</p>

The Canada Prenatal Nutrition Program (CPNP) is another initiative featuring both on- and off-reserve streams, administered by FNIHB and PHAC, respectively. In each case, CPNP targets ‘high-risk’ pregnant women, those whose life circumstances (*e.g.*, low-income) have been identified as potentially threatening their own health and the development of their babies. Participants begin the program on average five months prior to birth, and conclude about five months after birth.

For CPNP-FNIC, the primary target population resides on-reserve or in Inuit communities. It funds new or existing community-based projects that conform to CPNP objectives and guiding principles. The purpose is to attract vulnerable women to prenatal care and support their connection to the broader community through health and social supports. CPNP community development approach is meant to strengthen collaboration.

Some of the most commonly funded activities include provision of food (or vouchers) to supply nutrients essential to healthy pregnancy, community kitchens and gardens. Other funded projects include education about infant attachment and child development, social support and skill development; and referral and counseling on health, social and lifestyle issues. Seventy-five per cent

## CPNP-FNIC (cont'd)

### Guiding Principles

- culturally grounded
- involve training and capacity building
- provide links to other services
- accountability and evaluation

of any project's funding must be devoted to the core program elements, leaving the remainder available for supports that facilitate client access like transportation and child care. The program is delivered by community health and social service providers via local agencies and coalitions, with additional services provided by dietitians, nutritionists, lactation consultants and physicians.

CPNP is developed and delivered in partnership with the provinces and territories through joint management agreements and with First Nations and Inuit communities. CPNP-FNIC prefers evidence-based approaches be taken to address maternal and infant nutritional health issues, while allowing community workers to tailor their program activities to the priorities and culture of their communities.

Turning to funding, the table below illustrates annual budget levels for CPNP-FNIC since 2000/01. While the number of project sites has remained constant at about 450, the number of clients jumped significantly beginning in 2004/05, from 6,000 to 9,000, or a full 50%. Beginning in 2006/07, the overall budget has expanded considerably, nearly tripling from around \$9 million to \$25 million.

### CPNP-FNIC: Annual Funding

Years 2000/01 through 2007/08

Fiscal Year	Budget	Project Sites	Women & Infants (0-1)	Communities Served
2000/2001	\$7.2M	450	6,000	
2001/2002	\$9.4M	450	6,000	
2002/2003	\$8.9M	450	6,000	
2003/2004	\$9.3M	450	6,000	
2004/2005	\$8.9M	450	9,012	600
2005/2006	\$9.3M	450	9,000	
2006/2007	\$20 M	424	7,661	600+
2007/2008	\$25 M			

In assessing the per capita reach of CPNP across First Nations and Inuit communities, the first question that must be answered is the matter of eligibility. According to the program’s own description, the primary client group includes pregnant women living in poverty, teens, women living in isolation or with poor access to services; all other women of childbearing age are, relatively speaking, the secondary client group.

With no indication as to the methodology used to identify which women fit within the primary group criteria, one is forced to present the following Health Canada data at more or less face value.

### CPNP-FNIC: Female Participants

(2004/05 and 2006/07)

2004–2005 †			2006–2007 ‡		
Eligible participants	Actual participants	% of eligible participants	Eligible participants	Actual participants	% of eligible participants
9,684	9,012	93%	9,369	7,661	81.8%

Source: CPNP-FNIC data.

† Based on reports from 304 of 423 projects funded. ‡ Based on reports from 267 of 424 projects funded.

Looking at it from a per capita basis, the average allocation among the 7,661 female participants in 2006/07 was just over \$2600 each in CPNP funding. Include all eligible clients (as determined by Health Canada) and that figure drops to \$2134 per client. Of course, given the high number of communities already receiving CPNP funds, the average among all of Canada’s 659 First Nations and Inuit communities (roughly \$30,350 each) is probably not far off the total for the “600-plus” locations funded.

### CPNP/FNIC: Expenditures Per Capita/Community (2006)

Total Budget, 2005/06	Actual clients: \$ per capita	Eligible clients: \$ per capita	\$ per eligible community
\$20 M	\$2,610	\$2,134	\$30,349

If the ‘secondary’ group, as we have called them (all other women of childbearing age), were to be understood more broadly, then for the purposes of this paper, it remains an open question as to which methodology should be used for assessing the

full potential reach of CPNP-FNIC. In 2006, a total of 68,715 Aboriginal women of childbearing age (defined here as 15 to 44 years of age) lived on-reserve in 2006 (Statistics Canada, 2008c). To have only 9,369 (or 13.6%) of these women considered eligible or suitable for CPNP-FNIC programming could be seen as potentially low, and the means and criteria for eligibility needs to be better understood.

Nonetheless, in terms of reach, close to 91% of 659 communities (606 First Nations; 53 Inuit) (INAC, 2008) were served by CPNP programming.

### **CPNP-FNIC: Project / Client Analysis (2006/07)**

<b>CPNP-FNIC Projects</b>	<b>Total Clients, Actual</b>	<b>Project to client ratio</b>	<b>Communities served</b>	<b>% of all communities</b>
424	7,661	1:18	600	94.8%

The ratio of project to client where programming actually reached the intended population is strong at one project for every 18 clients.

For purposes of comparison with the North, the following is a picture of how many CPNC projects are available to residents in the predominately-Aboriginal<sup>3</sup> territory of Nunavut versus the number of communities potentially needing these services. Note that these are projects administered through PHAC, whose mandate is to serve vulnerable populations in urban and northern communities (including, but not limited to, First Nations, Inuit and Métis).

There are 3,300 Aboriginal women of childbearing age in these communities. Absent birth statistics, some assumptions are in order. Apply Canada's crude national birth rate (10.9/1000) and you come up with 36 births (Statistics Canada 2008e:19). Doubling that number results in a conservative estimation of the total eligible client population (mothers plus single-birth babies) for the territory at 72 per year.

---

<sup>3</sup> 85% in 2007 (Government of Nunavut Department of Education, n.d.:3)



## CPNP in Nunavut

(as of April 2008)

No. of CPNP Projects <sup>a</sup>	Project Locations	Women of childbearing age <sup>b</sup>	Total: Potential Clients	Project to client ratio	Communities served	% of all Communities
4 projects	Iqaluit Rankin Inlet Arviat Baker Lake	940 1,470 470 420	72	1:18	26	15%

<sup>a</sup> Source: PHAC (2008). Total Number of Projects by Region (April 2008). Retrieved from <http://www.phac-aspc.gc.ca/dca-dea/programs-mes/pdf/CanadaMap.pdf>.

<sup>b</sup> Source: Statistics Canada (2007). Age (123) and Sex (3) for the Population of Canada, Provinces, Territories, Census Divisions and Census Subdivisions, 2006 Census - 100% Data. Retrieved from <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=97-551-XWE2006011&lang=eng#formatdisp>

There are two limitations to this table. One is that these population figures are taken from the 2006 Census while the program data are from 2008. The other stems from the project to client ratio, which, to be completely accurate, would require that one know whether each project is confined to one site or in fact includes multiple sites.

Note that the above 15-to-49 cohort includes only Aboriginal women. Bear in mind too that the 1:18 program-to-women ratio is based only on communities with projects.

CPNP-FNIC is the closest to a universally available program amongst all the programs under discussion here. According to a 2003 AFN evaluation of the CPNP-FNIC, the program had “theoretical” reach to 90% of First Nations women on reserve (Andersson, 2003). That said, similar to AHSOR’s situation, increased funding could greatly benefit overall program delivery by mediating such chronic staffing issues as high turn-over rates. Again, wages do not stand alone in retaining current health human resources (Allium Consulting Group, 2008).



## Children's Oral Health Initiative

<b>Children's Oral Health Initiative (COHI)</b>
<b>Goal</b>
To improve the oral health of First Nations and Inuit children, reduce dental health disparities with general Canadian population, and help build local capacity
<b>Year Introduced</b>
2004
<b>Client Groups</b>
0 to 4 years of age (pre-school); 5 to 7 years of age (school age); pregnant women and primary caregivers
<b>Key Activities</b>
Dental screening, fluoride varnish applications, pit and fissure sealants, Alternative Restorative Treatment and instruction on healthy dental habits
<b>Objectives</b>
Improve children's oral health to improve their overall health
Show children they can have a healthy smile by taking care of teeth
Provide parents/caregivers information on the transmission/prevention of dental disease
Show babies and children that visits to the dentist can be fun and pain-free
Prevent cavities in young children to avoid restorative dental care and reduce medical intervention risk

Launched on a trial basis in Fall 2004, the Children's Oral Health Initiative aims to prevent and control dental disease, to reduce the risk from oral surgery under general anesthetic for children under five, and to promote and develop healthy dental practices for both children and caregivers. The goal is to shift the emphasis from a primarily treatment-based approach to one more balanced between prevention and treatment.

To help address the high yet preventable rate of tooth decay among First Nations and Inuit children, COHI-supported activities include the application of fluoride varnish to help prevent dental caries, and, depending on each province's legislation, the provision by either a dentist or dental therapist/hygienist of sealant materials on first permanent molars to help protect against decay, as well as Alternative Restorative Technique (ART) to treat minor cavities.

Educational activities aim to help parents, caregivers and pregnant women to understand that dental caries are a transmissible disease. Adults are therefore encouraged to keep their own mouths healthy as well as their children's. Other advice includes giving children healthy drinks and snacks, using milk or water only in baby bottles, practicing good feeding habits, and visiting a dental professional regularly.

Activities also include referrals for complex treatment, as well as opportunities to inform and build capacity among parents, caregivers, and community partners through educational strategies. Home visits also take place if necessary.

Dental therapists and hygienists oversee COHI in the communities, offering screenings, fluoride varnishes, and associated preventive treatment. They collaborate closely with COHI Aides, who serve as key links for the hygienists with the community. Pre-school and Aboriginal Head Start workers, nurses, and other children’s program agents such as nutritionists, are also involved with COHI.

Looking at relative levels of funding and participation, COHI has expanded the number of children it serves nearly sevenfold in the four years it has been in operation. Even so, looking at 2006, the roughly 9,600 participants represented only about a quarter of the 40,000 children (ages 0 to 6) that could have been reached. It should also be noted that the stated age range for COHI includes 5 to 7 year olds, which would obviously affect the numbers because of the extra year of age. Moreover, its status as a trial or pilot project may explain why COHI reached less than one in 4 possible communities that year.

**COHI: Annual Reach**

Years 2004/05 through 2007/08

<b>Fiscal Year</b>	<b>Budget</b>	<b>Children 0-6</b>	<b>Communities Served</b>
2004/2005	\$0.6M	2,164	38
2005/2006	\$2.6M	7,968	148
2006/2007	\$3.0M	9,641	146
2007/2008	\$4.8M	15,025	175

Source: Primary Health Care and Public Health, FNIHB, Health Canada

### COHI: Project / Client Analysis (2006)

COHI Projects	Total Clients, Actual (0-7)	Project to child ratio	Total Potential Clients (0-6)	% of Clients Under-served	Communities served	% of all communities
146	9,641	1:66	40,000	76%	146	22%

The ratio of projects to children where programming actually reached the intended population appears decent at one project for every 66 children (a ratio that changes to 1:274 when all potential clients are included). And yet, overall, three out of four FNIHB-eligible communities did not enjoy any access whatsoever to COHI services in 2006.

### COHI: Expenditures Per Capita/Community (2006)

Total Budget, 2006/07	Actual clients: \$ per capita	Potential clients: \$ per capita	\$ per community, actual	\$ per community (actual and potential)
\$3.0M	\$311	\$75	\$20,548	\$4,552

Still in fiscal year 2006/07, when over 9600 children aged 0 to 7 accessed COHI services, one sees an outlay of \$311 per child. Distributed across all potentially eligible on-reserve children, however, that per capita expenditure drops to \$75/child. Calculated on a per community basis, the \$3 million budget worked out to just over \$20,500 per community served. Factor in all 659 First Nations and Inuit communities and that figure is reduced to just over \$4500 per community.

Though COHI is a significant program for improving the overall health of First Nations and Inuit children, there undoubtedly remain considerable strides required before making this a truly globally effective program. As of 2007, an astounding “91% of Aboriginal children are affected by dental decay, with children averaging 7.8 decayed teeth by the age of six” (Leitch, 2008).

Possibly the greatest challenge facing COHI is the lack of dental infrastructure, including the lack of human resources such as dental therapists and hygienists. The vast majority of communities have limited to no access to dentists. Evaluations of oral health generally have shown this situation to be particularly acute for First Nations in remote communities and Inuit living in northern communities. According to a 2008 report on Nunavut’s health system:

Tooth decay causes pain and suffering for young children, can lead to misaligned adult teeth, poor jaw development and speech impediments. Poor dental hygiene and esthetics is also a cause for social embarrassment for older children and adults contributing to lower self-esteem (Nunavut Tunngavik Incorporated, 2008).

Yet as of 2008, there were no dentists or dental assistants residing and working in Nunavut (ibid), a gap that has resulted in close to a million dollars being expended *on travel alone* for dental services for 592 children from Nunavut in 2004/05 (ibid). To help address this appalling situation, the great need for training within Nunavut has led to discussion around the development of the Community Dental Health and Nutrition Promotion Specialist program through the territory's Arctic College to increase the pool of dental therapists resident in the region.

## Fetal Alcohol Spectrum Disorder Program

<b>Fetal Alcohol Spectrum Disorder Program (FASD–FNIC)</b>	
<b>Mandate</b>	To reduce the number of babies born with FASD, and to support children diagnosed with FASD and their families
<b>Year Announced</b>	1999
<b>Client Groups</b>	First Nations and Inuit children age 0-6, and women of child bearing age
<b>Key Activities</b>	Public Awareness and Education; Research and Community Capacity; Early Identification/Diagnosis; Coordination and Integration; Surveillance
<b>Program Objectives</b>	<p>Building awareness of FASD in First Nations and Inuit communities</p> <p>Targeted interventions for women at risk of having a child with FASD</p> <p>Collaboration with communities to address broader determinants of health</p> <p>Education and training for front-line workers and health professionals</p> <p>Early diagnosis and intervention for pre-school aged children with FASD and their families</p>

In 1999, as part of the expansion of the CPNP, additional funding was earmarked for FAS/FAE issues, including the First Nations and Inuit FAS/FAE Initiative. The Fetal Alcohol Spectrum Disorder (FASD) program addresses a number of health problems associated with alcohol use by mothers during pregnancy. It funds education and training to increase FASD awareness and community readiness, targeted initiatives for those at risk of having an FASD birth, supports for parents and families of FASD-affected children, and collaborative initiatives with partners on issues such as early identification, assessment and diagnosis (Public Health Agency of Canada, 2007).

Service providers are typically early childhood educators, community workers, administrators, parents, and volunteers. Meanwhile, FNIHB works in partnership with PHAC to develop screening and diagnostic tools and approaches for FASD identification and surveillance activities, as well as the Canadian Perinatal Surveillance System (CPSS) regarding the collection, analysis and dissemination of information relevant to FASD.

Public education and awareness activities focus on prevention via culturally appropriate information and resource materials, distributed through hosting and/or facilitating conferences, workshops and focus group sessions with First Nations and Inuit. Training on FASD for health care professionals, parents, women and their

partners, Elders and service providers, supports the program's capacity building objectives. Capacity building could also involve conducting workshops on asset mapping and multi-disciplinary team building.

**FASD-FNIC: Annual Funding**

Years 1999/2000 through 2005/06

Fiscal Year	Budget	No. of Clients	Project Sites
1999/2000	\$0.8M	n/a	n/a
2000/2001	\$1.3M	n/a	n/a
2001/2002	\$1.7M	n/a	n/a
2002/2003	\$1.7M	n/a	n/a
2003/2004	\$7.3M	n/a	n/a
2004/2005	\$10.7M	n/a	n/a
2005/2006	\$14.9M	n/a	n/a

Sources:

FY 1999/2000: Health Canada, 1997

Other FYs: Human Resources and Social Development Canada, 2007

In attempting to convey the annual rate of new cases (or incidence) of FAS/FAE in the Aboriginal community—an exceedingly difficult spectrum of conditions to diagnose—Health Canada has estimated that, each year, somewhere between one out of every 500 live births and one out of every 3,000 live births will see a baby born with FAS (Health Canada, 2007b). The FAE incidence rate is 5 to 10 times higher than the FAS rate.

With no data available on actual clients served in 2005/06, comparisons can nonetheless be made based on potential clientele, using 2006 Statistics Canada data (2008c), which indicated that a total of 68,715 Aboriginal women of childbearing age (15-44) lived on-reserve that year:

Based on these 68,715 eligible clientele, one sees in the following table that the total spent on FASD programming in 2006 effectively amounted to \$216 per potential client. Put another way, Canada’s 659 First Nations and Inuit communities would be allocated roughly \$22,600 each for FASD programming.



### **FASD: Expenditures Per Capita/Community (2006)**

<b>Total Budget, 2005/06</b>	<b>Potential clients: \$ per capita</b>	<b>Potential communities: \$ per community</b>
\$14.9M	\$216	\$22,610

There is both a general shortage of programming available for First Nations and Inuit children with special needs and funding to support health professionals to work towards assessment and diagnosis. According to the 2002-2003 First Nations Regional Health Survey, “12% of First Nations children on reserve have one or more disabilities, significantly higher than the 4.4% of other Canadian children” (Allium Consulting Group, 2008). There are also many barriers for First Nations children with disabilities, including the absence of culturally appropriate screening and diagnostic tools, geographic isolation, transportation needs and location of service providers.

Again, some First Nations and Inuit individuals in need of specialized services have no option but to leave their communities (New Economy Development Group, 2005). Special needs are of course not limited to FASD but extend to hearing, vision and dental care, in addition to other ancillary health services, like occupational, physical and speech therapies. These increase needs are only compounded by the lack of culturally-appropriate resources and by jurisdictional confusion around who cares for children with special needs.

### **Jordan’s Principle**

Such jurisdictional wrangling came to a head in the case of a young Cree boy named Jordan Anderson from northern Manitoba. After spending the first two years of his life in a Winnipeg hospital due to a rare neuromuscular disorder, Jordan found himself at the center of a federal/provincial dispute over which level of government should pay for his home care. Despite being cleared to leave by doctors, Jordan would be forced to stay another two years in Winnipeg before the dispute was settled. Sadly, this resolution did not come in time for Jordan, who passed away at age five having only known a hospital for a home (First Nations Child and Family Caring Society of Canada [FNCFCFS], 2005:16).

But Jordan's story is far from unique. A 2005 study revealed nearly 400 such jurisdictional disputes in that year alone, either between two federal departments or between federal and provincial/territorial governments (ibid). Frustrated by the situation that led to Jordan's death, child advocates called upon governments to adopt a "child-first" principle—now known as "Jordan's Principle" (see sidebar)—in any jurisdictional dispute involving the care of First Nations children. Jordan's Principle was unanimously passed as a Private Members Motion 296 in the House of Commons on December 12, 2007, but critics claim the federal government has yet to fully implement it in practice.

While these kind of disputes clearly need to be addressed in the immediate term, the core issue stems at root from the fact that the services Jordan's family required were not available in their home community, and likely remain unavailable today. Putting aside jurisdictional arguments, while important, ultimately does nothing to address the underlying issue of the lack of universal services on reserve.

#### **JORDAN'S PRINCIPLE**

Named after the late Jordan River Anderson of Norway House, Manitoba, Jordan's "child first" Principle is intended to resolve "jurisdictional disputes within and between federal and provincial/territorial governments. It applies to all government services available to children, youth and their families" such as health and education.

In cases where such disputes arise, the Principle "requires that the government department of first contact pays for the service to the child without delay or disruption. [It] can then refer the matter to inter-governmental processes to pursue repayment of the expense."

With the needs of the child understood to be "a first priority," it follows that the "obligation to meet the needs of the child first always supersedes government interests to establish jurisdictional dispute processes or policy implementation policies."

*Source: First Nations Child and Family Caring Society of Canada*

## Maternal Child Health

<b>Maternal Child Health (MCH)</b>	
<b>Mandate</b>	To support pregnant women and families with infants and young children to reach their fullest developmental and lifetime potential
<b>Year Announced</b>	2005 (for on reserve)
<b>Client Groups</b>	All pregnant women and new parents, with long term support for those families who require additional services
<b>Key Activities</b>	Home visits; integrating culture into care; screening and assessment; case management; health promotion
<b>Program Objectives</b>	<ul style="list-style-type: none"> <li>Increase First Nations training opportunities for MCH service providers</li> <li>Increase participation of on reserve community members in planning and developing services;</li> <li>Increase coordination of services for on-reserve clients</li> <li>Develop and/or use existing evaluation tools to measure progress using evidence-based models and approaches</li> </ul>

The Maternal Child Health (MCH) program aims for contact with all pregnant women and new parents on reserve, with long-term home visits for families who require additional follow-up, referrals, and case management. MCH tries to coordinate with other broad strategies and programs operating in the community.

MCH moves beyond the scope of medically-based prenatal and postpartum services to integrate cultural values, customs and beliefs into all program components. Community Health Nurses (CHNs) and Family Visitors (FVs) carry out the home visits. After initial family assessment, a service plan is created that reflects their goals and available individual, family and community strengths, with any special needs or referrals addressed, followed by determination of most beneficial level and type(s) of services.

Case Management involves early intervention, coordination of services for families and provision of culturally competent care. Additional services may be offered by other health care professionals, early childhood educators, community volunteers, and Elders.

Health promotion includes physical activity and healthy nutrition, substance abuse prevention, preconception health counselling, and injury prevention. MCH's links to other health promotion initiatives such as CPNP and FASD allow families to benefit from a variety of approaches. Services offered through MCH must provide their clients access to local, integrated and effective activities.

MCH's longer-term objectives include the identification of opportunities to bring safe birthing options closer to First Nations communities, building an ever-more

comprehensive and integrated approach to MCH services, and developing on-reserve programs and services comparable to the rest of the country.

Obviously, MCH is a young program, having only been announced by the government in 2005/06. The following year's planning and structuring saw only some regions actually implement MCH projects. Ontario, Quebec and Alberta were not among them (Allium Consulting Group, 2008), nor were any of the three northern territories.

### **MCH: Annual Funding**

Years 2004/05 through 2007/08

<b>Fiscal Year</b>	<b>Budget</b>	<b>Project Sites</b>	<b>Families Served</b>	<b>Communities Served</b>
2005/2006 <sup>a</sup>	\$3M	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
2006/2007	\$20M <sup>b</sup>	40	2,221	50
2007/2008	\$25M <sup>b</sup>	76 <sup>c</sup>	<i>n/a</i>	176 <sup>c</sup>

Sources:

- a. Human Resources and Social Development Canada, 2007a
- b. Allium Consulting Group, 2008
- c. Health Canada, 2008:78

MCH clients are taken in at the family (not the individual) level. However, as the program's own data suggests in the following table, it may not always be clear when a client is an individual or a family, and so some reports may be inaccurate. In terms of actual clients, home visits are to be understood as the main statistic, with referrals and case management services effectively extensions of those visits. Referrals are the largest number possibly because there were more than one in some cases.

### **MCH Services Received by Families, by Region (2006–2007)**

<b>Region <sup>a</sup></b>	<b>Home visits</b>	<b>Referrals</b>	<b>Case Management Services</b>
Atlantic	78	53	101
BC	743	628	300
Manitoba	164	58	88
Saskatchewan	1,236	2,005	704
<b>Total</b>	<b>2,221</b>	<b>2,744</b>	<b>1,193</b>

<sup>a</sup> Alberta, Ontario and Québec Regions are excluded as they did not begin service delivery until 2007/08.  
Source: Allium Consulting Group, 2008:23.

Turning to Isaacs' American examples once again, her recommended level of funding is based on a model program known as the Nurse-Family Partnership, which sends public health nurses into the homes of low-income first-time mothers to support them in making healthy choices for themselves and their infant. Typically, prenatal visits lasting up to 90 minutes occur weekly from the second trimester onward, and monthly postnatal. Activities cover prenatal health, sensitive and competent childrearing, family planning and education/work counselling. (Isaacs, 2007:13) According to Isaacs' calculations, "Costs per family are assumed to be [US]\$10,083 in 2008 dollars ... [where] costs per family would be spread over a two-and-a-half-year period, from pregnancy through age two" (ibid:15).

At C\$10,749 over 2.5 years, the equivalent annual expenditure would work out to just under \$4,300. With 2,221 families reported as clients in 2006/7 (the only year for which we have data), and MCH receiving \$20 million that same year, the per client average worked out to \$9,005 each, over double the amount recommended by Issacs. However, these numbers come with two caveats: firstly, given how many provinces and territories did not take part that year, the funding-to-family ratio would likely dip in subsequent years once the program goes truly national. Secondly, some if not a lot of the funding in 2006/07 was either tied up in planning and structuring, or in indirect supports such as training for home visitors, nurses and Maternal Child Health workers, as opposed to funding program delivery to clients *per se*.

The MCH is the newest of programs being offered to First Nations women. Currently too new to evaluate, the MCH program will need to extend its reach across First Nations communities to have any real broad-based impact. At present, no First Nations or Inuit communities North of 60 are being served at all by the program. This lack of coverage could be seen as the greatest gap needing to be filled by MCH in the coming years.

This last point is particularly pertinent given the long-standing calls from First Nations and Inuit communities alike to foster pre-natal and post-natal maternal programming closer to home. As will be discussed further in the midwifery section of this paper, it is all too common that Aboriginal women in northern and remote communities requiring maternal care (a great number of them teenagers) must leave their community to obtain that care and to deliver their babies. The result has been needless isolation, duress and distress for Aboriginal women forced to give birth apart from their partners and families (New Economy Development Group, 2008). This situation would be unacceptable amongst the Canadian population in general.

Northern communities have also expressed the need for more culturally-specific information and education on sexual health, pre-pregnancy readiness and awareness around health specific issues, such as nutrition and substance use, for women of

child-bearing age. Additionally, the shortage of culturally-specific parental education and support services has been identified as a gap.

However, the greatest gap for pregnant women remains the continued “absence of obstetricians, obstetrical nurses, midwives, doulas, maternal care workers and lactation consultants” (ibid). This human resource shortage has in turn resulted in “a weakened maternal and child health prevention and promotion environment” (ibid).

## Targetted Immunization Strategy

<b>Targeted Immunization Strategy (FNIHB-TIS)</b>	
<b>Mandate</b>	
Develop a national approach to immunization for First Nations/Inuit children that will reduce the incidence of vaccine preventable diseases and their sequelae over the next 5 years	
<b>Year Announced</b>	
2003	
<b>Client Groups</b>	
First Nations and Inuit children 0-6	
<b>Program Objectives</b>	
Improve on-reserve coverage rates for routine immunizations (ultimate target: 95%)	
Implement newly recommended vaccines	
Improve data and understanding of immunization coverage rates, incidence of vaccine-preventable diseases, barriers to immunization and best practices in implementation	

The goal of the Targeted Immunization Strategy is to reduce the on-reserve rate of diseases that are otherwise preventable through vaccines. This goal, to be achieved through integration with the larger Canadian national immunization strategy, originally came with a target completion date of March 2008. The international immunization coverage rate of 95% was the ultimate target of the Strategy.

The Strategy looked to provide newly recommended vaccines, namely, conjugate pneumococcal, conjugate meningococcal C, and *varicella* (chickenpox) across the country or within the targeted population.

Surveys were undertaken to determine 'bench-marks' for immunization coverage, immunization best practices, and immunization knowledge, attitudes and beliefs among parents and health care workers in March 2005; final reports were set to be released later that year.

In 2003, \$32 million was dedicated over five years towards FNIHB-TIS development and implementation. The Immunization Program continues to work within the current TIS for fiscal 2008-2009 while working towards new authorities for expansion (transition) to Vaccine Preventable Diseases and Immunization.

### Targeted Immunization Strategy: Annual Funding

Years 2005/06 through 2006/07

<b>Fiscal Year</b>	<b>Budget</b>
2005/2006	\$5.7M
2006/2007	\$8.2M

Source: Direct inquiry, Vaccine Preventable Diseases & Immunization, Communicable Disease Control Division, FNIHB

In terms of coverage and reach for First Nations children, “immunizations are available to all communities. Non-transferred communities are serviced by Health Canada employed nurses and transferred communities through Band-employed nurses” (source: direct inquiry to Vaccine Preventable Diseases & Immunization section of FNIHB’s Communicable Disease Control Division). Meanwhile, “immunization activities are fully transferred to Inuit communities and not directly funded through the Targeted Immunization Strategy” (ibid).



## **Cross-Cutting Gaps & Issues**

[P]olicies, treaties, legislation, wait times, transportation, language, funding for programming, elder care, recreation and the numbers of healthcare workers (doctors and nurses) in a community all affect one's ability to access appropriate health related services in a timely manner... (Prairie Women's Health Centre of Excellence for Women's Health, 2005)

Persistent gaps in the provision of health services for First Nations on-reserve and Inuit (residing in remote and northern communities) result in the continued health inequities experienced by those populations (Ball, 2008:13). Notwithstanding the best intentions of current maternal and child programming aimed at improving the health outcomes of First Nations and Inuit women and their infants, there remain outstanding challenges to their success. Broadly speaking, there exist cross-cutting and interconnected barriers related to funding, access, health human resources, and the availability of culturally-relevant and responsive resources and will be explored in this section of the paper.

### **Funding Gaps / Issues**

AHSOR and the CPNP-FNIC are the longest running programs and certainly have achieved broad-based reach. Both programs have been well received by communities and include culturally-specific components within their criteria. That said, there is certainly room for improvement as well as lessons to be learned from the other, less established programs, such as MCH.

Program collaboration is common amongst maternal child programming. An employee of AHSOR may also work on programs related to CPNP-FNIC and FASD, for example. With limited training currently available in communities, health professionals and program staff are often recruited from outside, southern communities. Given the isolation of many First Nations and Inuit communities, recruitment is an immediate obstacle, compounded by salary levels. Limited staff reduces the capacity to deliver programming, chase funding and/or conduct reporting. Proposal-driven processes continue to be rigid, onerous and competitive. Communities who do not have the human resources or capacity to undertake these processes find themselves left out of programming altogether. Those who receive funding find it time-consuming to meet reporting deadlines and difficult to deliver services without sustainable multi-year funding (BC Aboriginal Child Care Society, n.d.). This barrier in turn affects the possibility for staff retention and professional development.

The domino effect of insufficient funding is that the needs of women and their children go unmet. Therefore funding, adequate and sustained funding is key to ensuring that quality universal health programming is provided to First Nations and Inuit populations.

## **Health Human Resources Gaps / Issues**

While Canada generally grapples with the lack of trained health human resources, this shortage is acutely felt on First Nations and Inuit communities. For remote and northern communities, it is more likely that a health professional will fly in to First Nations and Inuit communities to provide care than to reside and work there. Difficulties in recruiting and retaining health professionals are at the crux of why many First Nations and Inuit mothers and children need to leave their communities for basic and specialized care (ibid). In the north, these shortages of doctors, dentists and specialized health professionals are only worsened by a general lack of culturally-sensitive medical personnel who can best treat Inuit clientele (New Economy Development Group, 2005).

Where there are such professionals, burn out is common. Typically, it is insufficiently trained, non-Aboriginal nurses who are called upon to practice maternal care beyond their knowledge. As noted in a report published by Nunavut Tunngavik:

Nurses are almost exclusively non-Inuit and the lack of cultural sensitivity and the cultural divide continued to emerge among respondents as a service barrier. Staff recruitment and retention was listed as a primary obstacle to the delivery of effective sexual, maternal and child health programs (ibid).

## **Cultural Gaps / Issues**

A shortage of culturally appropriate training materials continues to challenge every program in this realm (Allium Consulting Group, 2008). To some extent, Elders' involvement helps with this gap, along with other Aboriginal organizations that can adapt materials and deliver training. But language- and culture-based activities do not always 'translate' across regions and/or the cost of duplication and shipping is often prohibitive.

Building culture and traditions into services such as home visits and referrals is another goal across all programs. Here, Elders have been important mentors and advisors, acting in roles as varied as language instructors, nature walk leaders,

storytellers and traditional food handlers. Reports from communities indicate over half of project activities (57% in 2006/07) featured discussions of traditional beliefs, practices and values by participants. Similarly, in 2004/05, almost half (45%) of CPNP-FNIC projects offered traditionally-prepared food and snacks as part of their educational activities (about the same percentage in 2006/07)<sup>4</sup>.

Some AHSOR projects developed teaching materials for Aboriginal language and culture. Most notably, a CD of Mi'kmaq language songs (along with 10 Mi'kmaq books) for classroom use in the Atlantic region, and joint projects in the BC region with the First Peoples' Cultural Foundation and the BC Aboriginal Child Care Society helped generate new language resources.

Not surprisingly, the most frequently identified challenges to developing culturally appropriate, pedagogically sound materials were the costs of production (many resources had to be developed in-house by parents, teachers, Elders and other volunteers), and the costs of dissemination. When resources to promote health are culturally relevant, it has led to increased participation in programs by individuals, families and communities, but the bottom line is that such resources remain scarce.

## **Jurisdictional Gaps / Issues**

At a 2003 forum on early childhood development in Vancouver, some delegates spoke of a system-wide lack of coordination among the different levels of government, various agencies, and among programs and departments. As they saw it, the result is

a frustrating duplication of certain program mandates at the administrative level, inconsistent policies at the provincial and federal levels, and a waste of resources at the service level. Trying to coordinate provincial and federal resources... is a massive undertaking (BC Aboriginal Child Care Society, n.d.).

This criticism was echoed in 2007 in the report of the Advisor on Healthy Children and Youth who noted how First Nations and Inuit health and health-related programs for children and youth on- and/or off-reserve are together administered by “three federal departments – Health Canada, the Department of Indian and Northern Affairs and Human Resources and Social Development Canada – and one federal agency –

---

<sup>4</sup> Performance Report 2004–2005 to 2006–2007 Children and Youth Cluster  
First Nations and Inuit Health Branch, Health Canada – DRAFT, not available on-line

the Public Health Agency of Canada” (Leitch, 2007). Further adding to the confusion, some programs and services are available both on- and off-reserve while others are not, which creates “either duplication or scarcity of resources.”

## **Reporting Gaps / Issues**

Delegates at the 2003 Vancouver forum claimed reporting requirements were “so unwieldy as to be prohibitive” (BC Aboriginal Child Care Society, n.d.). Time-consuming and laborious, reports were seen to be taking valuable energy and resources away from service delivery: “to do it properly required a dedicated, full-time position, at substantial added cost” (ibid). Health Canada itself has had direct feedback to this effect. Participants in most programs identified this “paper burden” as a challenge to projects at both the community and regional level (Allium Consulting Group, 2008).

## **Information Gaps / Issues**

It is said that information is power and that is exceptionally true for health. Here, relatively isolated Aboriginal communities face tremendous challenges. For example, in Nunavut, authorities have discovered large gaps in the available data, at the local Hamlet level in particular. What is available is seen to be of “questionable reliability and accuracy” (New Economy Development Group, 2005). In Nunavik, poor communication between community health professionals and government, as well as with other community organizations, has added to a lack of co-ordination between service organizations (Ajungniq Centre, 2006). Unreliable access to communication technologies in smaller communities acts as a barrier to capacity building and service provision, often making interactions with professionals in other communities difficult.

But information from outside can prove equally inadequate, for different reasons. For example, FASD books written for the southern reader pose an obvious barrier for unilingual Inuktitut speakers:

Many of the resources are brought up from the south, and are therefore predominantly in English and not culturally appropriate. For Inuit, culturally appropriate means Inuit-specific (ibid).

Health Canada is aware of this all-too-familiar gap in information. Collection of consistent and reliable data has been a source of “frustration” for all program participants, from the lack of commonly understood terminology (including

confusion as to the differences between ‘project,’ ‘site’ and ‘community’) to incomplete reporting (Allium Consulting Group, 2008). In response, the department has introduced its new “Community-Based Reporting Template,” to be used by most of the federal programs serving children and youth discussed in this report. Connected to the Results-Based Management and Accountability Framework (RMAF), each program will possess a “plan for tracking, monitoring and reporting on progress in meeting the objectives of the programs and services.” The department has faith that their improved reporting template is “a vital first step towards achieving reliable and valid data” on community-level participation rates.



## Aboriginal Midwifery In Canada

This review of federal, provincial and territorial advancements in midwifery and Aboriginal midwifery highlights the emerging trend in community-based and family-centered care for pre- and post natal care of Aboriginal women.

With evacuations all-too-common for expectant Aboriginal mothers living in remote/northern communities, many jurisdictions are increasingly (if slowly) exploring midwifery as a means to reduce the 'need' for a practice that effectively separates women from their families and communities (Ajunnginiq Centre, 2006a). This section of the report offers a brief sketch of ground-level developments and milestones in Aboriginal midwifery and birthing services at the provincial and territorial levels.

In 1991, Ontario regulated midwifery as a profession, making it the first jurisdiction to do so. As a result, only individuals registered with the College of Midwives could legally practice in the province. The sole exception was Aboriginal midwifery (Six Nations Health Services [Six Nations], n.d.a). However, at this point, neither a formal provincial regulatory body nor a set of criteria for acceptance formally exists for Aboriginal midwives in Ontario (Six Nations, n.d.b), a vacuum that leaves questions of standards up to the province.

On the Six Nations of the Grand River reserve in southern Ontario, Tsi Non:We Ionnakeratstha Ona:Grahsta', *aka* the Six Nations Maternal and Child Centre, counts both midwifery training and community-based birthing facilities among its many services and programs (Ajunnginiq Centre, 2006a). Since 1996, the Centre's five full-time Aboriginal midwives have employed a balance of traditional and contemporary methods as part of its prenatal, labour, birth and postpartum care. It is funded in part by the Ontario's health ministry (Benoit, 2006).

In the Centre's first year, women from 13 community families accessed its services, giving birth either at the Centre or in hospital with support of the midwives. From 1996 through 2002, it served a total of 252 clients (NAHO, 2004). The training program for Aboriginal midwives, which came later, was the first of its kind in Canada. A Grandparents Group of elders provides spiritual/cultural direction and guidance to the Centre, hears ethical issues to assist staff with decision-making regarding client or student situations, and offer counselling to clients (Six Nations, n.d.b).

Still in Mohawk territory, the Iewirokwas Midwifery Program of Akwesasne (traversing Quebec, Ontario and USA) focuses on education, empowerment and

Aboriginal healing practices. It has reportedly led to an increase in traditional birthing practices such as birthing stools and smudging among Mohawk women. The program trains Mohawk midwives in Akwesasne and beyond (NAHO, 2004).

In Manitoba, midwifery became a provincially funded, autonomous, regulated health care service in 2000 (College of Midwives of Manitoba, n.d.). The Manitoba Act includes specific reference to midwifery by and for Aboriginal women, with a statutory committee as part of the College of Midwives to help ensure appropriate care and service. Yet despite increased availability of midwifery services, many women continue to be evacuated to urban areas like Thompson and Winnipeg to give birth. In a joint initiative with Nunavut, the culturally-based Aboriginal Midwifery Education Program was developed in 2004, and is now delivered by the University College of the North, since 2007. Known as the Kanaci Otinowawosowin Baccalaureate (KOB) program, it is one of just six midwifery training programs available in Canada (Midwives Association of Saskatchewan, n.d.). According to its program description,

The KOB Program is a 4-year degree program combining theory, laboratory, camps, and clinical experience in a mentor-style learning environment. The curriculum addresses midwifery from an Aboriginal perspective while ensuring that all core midwifery competencies, as dictated by the College of Midwives of Manitoba, are incorporated (University College of the North, n.d.).

Only five students may enroll annually (although 10 were admitted in year one). In 2009 Manitoba announced an expansion of the program to increase the number of new midwives trained. Additionally, Manitoba allows for competency-based training by other routes, meaning that some women could train as apprentices.

Like Ontario, Quebec's 1999 midwifery law permitted some "exceptions" for Aboriginal participation (Benoit, 2006). A more general exception gave band/community councils the ability to negotiate individual "traditional midwifery" arrangements with the health ministry. Another exception specifically pertained to the Inuulitsivik Maternity Centre, where midwives were only allowed to operate within their home territory of Nunavik. But in September 2008, two Inukjuak midwives were granted full licensure by the Quebec midwifery association OSFQ, even taking their oath in Inuktitut (Regroupement les sages-femmes du Quebec [Regroupement], 2008). This has opened the door for other midwives currently holding restricted licenses to change their status to "full" licensure.

Operating in Puvirnituk since 1986, the world-renowned Inuulitsivik Health Centre is one of Canada's oldest Aboriginal midwifery initiatives (George, 2006). It is one of three birthing centres serving seven villages along the Hudson Bay Coast in northern



Quebec; the other two are in Inukjuak and Salluit, established in 1998 and 2004 respectively. Collectively, the three centres attend to all of the region's pregnant women, which amounts to about 200 births per year (Regroupement, 2008). Midwives see pregnant woman weekly, and provide full care during labour and delivery—all in Inuktitut. They then follow each woman and baby for six weeks after the birth, including daily home visits the first week. A multidisciplinary committee decides whether a pregnant woman can deliver locally or should leave for delivery. Early years of the Centre saw staff manage 84% of 350 births in eight communities, achieving perinatal mortality rates comparable to or lower than the rates for Quebec as a whole.

In Salluit, the goal is to create a team of four or five senior Inuit midwives, with Southern midwives as back-up and trainers (Benoit, 2006). In terms of outcomes, Inukjuak saw the rate at which expectant mothers were transferred out (to Montreal or Puvirnituk) drop from 56 per cent in its first year to about 14-to-21 per cent in 2006, with no increase in the number of medivacs (George, 2006). In turn, Puvirnituk reduced its transfer rate to the south from 91 per cent in 1983 to less than 9 per cent in 1998 (*ibid*). Such results have helped inspire efforts elsewhere in Quebec to establish midwifery services in places like Kuujjuak and in the James Bay Cree villages of Mistissini and Chisasibi (Regroupement, 2008).

Since 2005, Seventh Generation Midwives Toronto (SGMT) has targeted its services to traditionally underserved and marginalized groups in the city's downtown, Aboriginal families in particular (Seventh Generation Midwives Toronto, n.d.). Currently comprised of five Aboriginal and non-Aboriginal midwives—all of whom are registered with the province and members of the Association of Ontario Midwives—SGMT has access to Sunnybrook Health Sciences Centre. SGMT's culturally-sensitive midwifery care is provided throughout pregnancy, labour and birth, plus the first six weeks postpartum. Advising the group are members of the Toronto Aboriginal Midwifery Initiative (TAMI), a group made up of trained and student midwives (Benoit, 2006).

In Nunavut, a birthing centre that grew out of a 1993 pilot project in Rankin Inlet was continually plagued by recruitment and retention problems, even to the point of temporary shut down (NAHO, 2004). In 2004, there were only two permanent midwives working in the territory (Benoit, 2006). Still, by September of 2008, Nunavut passed the Midwifery Profession Act, which included many provisions dedicated to traditional Inuit practices (Legislative Assembly of Nunavut, 2008). The Midwives Association of Nunavut is now a registered society with board members from across the territory. It advocates for the reintroduction of Inuit traditional midwifery, supports registered practitioners, and backs territorial efforts to develop programs and training for midwives at Nunavut Arctic College (NAHO, 2007). In

December 2008, Nunavut Arctic College awarded its first-ever midwifery diploma to a Rankin Inlet graduate, whose three-year course of study is to be followed by a one-year internship (Greer, 2008). (NAC is assisted with its program by UCN in Manitoba.) Elders were involved in developing the curriculum, and defined the program's cultural components.

If the past decade has seen relative progress in some jurisdictions in furthering the cause of traditional Aboriginal midwifery, it has witnessed only marginal gains in many others. British Columbia for example has some ways to go in order to catch up to the pioneering efforts displayed in parts of the North. (In 2005, Nunavik formed its very own Aboriginal midwifery association, whereas BC has no such group.) As before, the terms of the debate remain centered around matters of “appropriate legislation, educational requirements, models of training, registration, licensing and questions concerning safety issues and financial costs” (NAHO, 2004).

## Concluding Remarks & Recommendations

Over the past decade, FNIHB has steadily developed and incrementally increased funding levels for maternal and infant health programs aimed at First Nations (on-reserve) and Inuit populations. While this increase has meant progressively better outcomes for the pre- and post-natal needs of First Nations and Inuit, there remains a substantial under-served or un-served population.

**RECOMMENDATION:** *That increased, multi-year funding for all Aboriginal maternal and infant health programs be offered across a greater number of First Nations and Inuit communities in order to close the gap in health outcomes for women and children in these communities.*

In examining federal programs intended to close the health gaps between women and infants in mainstream Canada and those from First Nations and Inuit communities, this paper has primarily employed a macro-level, quantitative lens. Yet, in the course of its examination of these on-going service disparities, that bird's-eye view has left the personal, experiential voices of the community all but silent.

**RECOMMENDATION:** *That community-based focus groups/dialogues be held, alongside one-to-one interviews in order to incorporate and give voice to the concrete experiences and perspectives of First Nations and Inuit women on current maternal and infant programming.*

While provincial and territorial governments also deliver universal maternal and infant health programs, it is unclear how far or how well these programs extend to those Aboriginal communities falling within their boundaries.

**RECOMMENDATION:** *That a fuller, wider scan and gaps analysis, with a specific focus on universal provincial and territorial programs, be conducted for a truly complete picture of the scope and scale of maternal and infant health programming reaching First Nations and Inuit communities.*

There is limited evidence showing the reach of national, provincial, and territorial services to off-reserve and urban Aboriginal populations, even less so for Métis and non-Status women and children.

**RECOMMENDATION:** *That a research methodology be designed and implemented to capture the use, limitations and experiences of urban Aboriginal populations in accessing universal provincial and territorial maternal and infant programs.*

In any assessment of the efficacy and reach of a government program, one must be aware of the potential for the program to be weighed down by administrative costs, as questions have been raised as to the percentage of program budgets that actually reach the community.

**RECOMMENDATION:** *That analysis be conducted as to the budget actually spent on the direct, 'front-line' delivery of Aboriginal maternal and infant health programming, i.e., distinguishing federal program administration costs versus what actually reaches the communities.*

The efficacy and ability of First Nations and Inuit communities to run maternal and infant programs has been persistently hampered by the lack of community capacity, and the often-acute shortage of resident health human resources.

**RECOMMENDATION:** *That training be made available closer-to-home in remote/rural areas and incentives investigated for retaining/recruiting trained workers in their communities.*

Communities complain they spend too much time bogged down with onerous funding and reporting formulae for various government programs.

**RECOMMENDATION:** *That funding for Aboriginal maternal and infant health programs be moved to a multi-year arrangement with more streamlined application/reporting procedures.*

Evidence shows that mainstream health resources and information continue to be the common currency in many First Nations and Inuit communities. English and French are the predominant languages of health information and services.

**RECOMMENDATION:** *That partnerships be encouraged and explored with cultural/educational organizations to create culturally- and linguistically appropriate materials for health-related purposes*

**RECOMMENDATION:** *That a review of best practices in cultural competency within other global indigenous contexts (e.g., New Zealand and Maori) be undertaken, including cost/benefit and impact assessment elements of culturally-relevant health information*

Many of the Aboriginal maternal and infant health programs include at least some support for cultural components in their guidelines. However, the definition of culture has been left open to communities themselves to determine, which, absent a comparable baseline, can make measuring success a challenge.

**RECOMMENDATION:** *That communities be encouraged to develop specific metrics for gauging cultural success in their proposals, based on criteria that they themselves determine.*

“Jordan’s Principle” speaks to the persistence of jurisdictional wrangling over the provision of health care services to on-reserve First Nations people and seeks to ensure that all government services are available to children, youth and their families free of delays due to such inter-governmental disputes. According to the First Nations Child and Family Caring Society of Canada (FNCFCS), “full and proper implementation” of this principle should include “an implementation plan developed with full participation of First Nations and Inuit governments and non-governmental organizations.” However, to date (Canadian Medical Association Journal:2008), this principle has yet to be fully implemented by any provincial/territorial government.

**RECOMMENDATION:** *That Jordan’s Principle be implemented by all levels of government, and that it be heralded as a best practice in child-centered care.*

Midwifery is receiving growing recognition as a strategic mother/child and family-centered practice rooted in community. Among the more notable proposals for change in this regard is the Society of Obstetricians and Gynecologists of Canada’s (2008) Aboriginal Birthing Initiative, which, in bringing Aboriginal women’s voices to the table, promotes greater partnership and guarantees of cultural competency and safety. Similarly, the limited number of studies available about the *personal* experiences of Aboriginal women with birthing and midwifery require that much more be done in this area.

**RECOMMENDATION:** *That the SOGC's Aboriginal Birthing Initiative be looked upon as a best practice in moving Aboriginal midwifery forward toward the repatriation of birthing to Aboriginal communities.*

**RECOMMENDATION:** *That the "creation of an accurate, rigorous, data-gathering mechanism for maternity care," as called for by the Society of Obstetricians and Gynecologists of Canada, be extended to all First Nations, Inuit and Metis communities.*

**RECOMMENDATION:** *That midwifery be promoted and supported as an educational and career choice for Aboriginal people.*

With the focus of maternal/infant programs falling almost entirely on the expectant woman and her children, the role and responsibilities of the father (and other potentially supportive men) can be underestimated.

**RECOMMENDATION:** *That Aboriginal maternal and infant health programs integrate and promote the participation of fathers, and/or other male supports, throughout the pre-, peri- and post-natal continuum.*

## References

- Ajunnginiq Centre [NAHO] (2006). Fetal Alcohol Spectrum Disorder: An Environmental Scan of Services and Gaps in Inuit Communities. Retrieved from <http://www.naho.ca/inuit/english/documents/2006InuitFASDe-scan.pdf>.
- (2006a). Exploring Models for Quality Maternity Care in First Nations and Inuit Communities: A Preliminary Needs Assessment. Final Report of Inuit Women's Needs Assessment. Retrieved from <http://www.naho.ca/inuit/midwifery/documents/MaternityCareInuitChapter-English.pdf>.
- Allium Consulting Group (2008). Performance Report 2004–2005 to 2006–2007: Children and Youth Cluster, First Nations and Inuit Health Branch, Health Canada. Internal document.
- Andersson, Neil, Deborah Milne, Tina Martin, Earl Nowgesic, Steve Mitchell, Dawn Caldwell and Sharmila Mhartre (2003). Final Report. PR-CA-cnp-03. AFN-CPNP Evaluation. Report to the Assembly of First Nations Prenatal Health and Nutrition Subcommittee in collaboration with CIET Canada. Retrieved from [http://www.ciet.org/en/documents/projects\\_library\\_docs/2006224123859.pdf](http://www.ciet.org/en/documents/projects_library_docs/2006224123859.pdf)
- Ball, Jessica (2008). Promoting Equity and Dignity for Aboriginal Children in Canada. IRPP Choices 14 (7). Retrieved from <http://www.irpp.org/choices/archive/vol14no7.pdf>.
- BC Aboriginal Child Care Society (no date). Many Voices, Common Causes: A Report on the Aboriginal Leadership Forum on Early Childhood Development. March 10-11, 2003. Vancouver BC. Retrieved from [http://www.acc-society.bc.ca/files\\_new/pdf\\_documents/Addressing%20Training%20Needs%202004.pdf](http://www.acc-society.bc.ca/files_new/pdf_documents/Addressing%20Training%20Needs%202004.pdf).
- Benoit, Cecilia, Dena Carroll, M. Rachel Eni (2006). To Watch, To Care: Stories of Aboriginal Midwifery in Canada. Canadian Journal of Midwifery Research and Practice. Volume 5, Number 1. Fall 2006. Retrieved 12 January 2009 from <http://www.naho.ca/inuit/midwifery/english/documents/ToWatchToCare.pdf>
- Canadian Council on Social Development. The Progress of Canada's Children: 2002 Highlights. In Fearn, A Sense of Belonging: Supporting Healthy Child Development in Aboriginal Families.

Canadian Institute for Health Information (2004). Improving the health of Canadians: 78. Retrieved from [http://www.cihi.ca/cihiweb/disPage.jsp?cw\\_page=PG\\_39\\_E&cw\\_topic=39&cw\\_rel=AR\\_322\\_E#full](http://www.cihi.ca/cihiweb/disPage.jsp?cw_page=PG_39_E&cw_topic=39&cw_rel=AR_322_E#full).

Centre of Excellence for Children & Adolescents with Special Needs (2005). Building a Community of Communities. Results & Discussion of the National Roundtable on Aboriginal ECD: What Can Research Offer Aboriginal Head Start? Lakehead University. Retrieved from <http://www.coespecialneeds.ca/PDF/ahsroundtable.pdf>.

College of Midwives of Manitoba (no date). [College website home page]. Retrieved 30 March 2009 from <http://www.midwives.mb.ca/index.html>.

Doolittle, Robyn. No charges sought for 35,000 natives who ignore census. January 15, 2008. Toronto Star. Retrieved 26 February 2009 from <http://www.thestar.com/News/article/294018>.

Fearn, Terrellyn (2006). A Sense of Belonging: Supporting Healthy Child Development in Aboriginal Families. Best Start: Ontario's Maternal, Newborn and Early Child Development Resource Centre. Retrieved from [http://www.beststart.org/resources/hlthy\\_chld\\_dev/pdf/aboriginal\\_manual.pdf](http://www.beststart.org/resources/hlthy_chld_dev/pdf/aboriginal_manual.pdf)

First Nations Centre [NAHO] (2004). Preliminary Findings of the First Nations Regional Longitudinal Health Survey (RHS) 2002-03. Children's Survey. In T. Fearn, A Sense of Belonging: Supporting Healthy Child Development in Aboriginal Families. Best Start: Ontario's Maternal, Newborn and Early Child Development Resource Centre.

First Nations Child and Family Caring Society of Canada (2005). Wen: de: We are Coming to the Light of Day. Retrieved from <http://www.fncfcs.com/docs/WendeReport.pdf>.

George, Jane (2006). Nunavik women giving birth closer to home. May 12, 2006. Nunatsiaq News. Retrieved from [http://www.nunatsiaq.com/archives/60512/news/nunavik/60512\\_02.html](http://www.nunatsiaq.com/archives/60512/news/nunavik/60512_02.html).

Government of Nunavut Department of Education (no date). Nunavut Early Childhood Development: Update Report 2004-2007 & Early Learning & Child Care Update Report 2004-2007. Retrieved 11 February 2009 from <http://www.gov.nu.ca/education/eng/pubdoc/2004-2007%20-%20English%20-%20ECD%20Update%20Report.pdf>.

Greer, Darrell (2008). First midwifery diploma awarded in Rankin Inlet. Northern News Services. December 3, 2008. Retrieved from: [http://www.nnsl.com/northern-news-services/stories/papers/dec3\\_08md.html](http://www.nnsl.com/northern-news-services/stories/papers/dec3_08md.html).



Guimond, E., and N. Robitaille (2008). When Teenage Girls Have Children: Trends and Consequences. In, *Hope or Heartbreak: Aboriginal Youth and Canada's Future*. Horizons10 (1): 49-51.

Health Canada (1997). It Takes A Community. Framework for the First Nations and Inuit Fetal Alcohol Syndrome and Fetal Alcohol Effects Initiative. A Resource Manual for Community-based Prevention of Fetal Alcohol Syndrome and Fetal Alcohol Effects. Retrieved from [http://www.hc-sc.gc.ca/fniah-spnia/alt\\_formats/fnihb-dgspni/pdf/pubs/preg-gros/2001\\_takes-prend-commun-eng.pdf](http://www.hc-sc.gc.ca/fniah-spnia/alt_formats/fnihb-dgspni/pdf/pubs/preg-gros/2001_takes-prend-commun-eng.pdf)

—— (2003). Oral Health Plan: Update June 2003 [Powerpoint file].

—— (2006). Brighter Futures & Building Healthy Communities Initiatives: Evaluation Summary. Retrieved 11 February 2009 from [http://www.hc-sc.gc.ca/fniah-spnia/alt\\_formats/fnihb-dgspni/pdf/pubs/mental/2006-sum-rpt-eng.pdf](http://www.hc-sc.gc.ca/fniah-spnia/alt_formats/fnihb-dgspni/pdf/pubs/mental/2006-sum-rpt-eng.pdf)

—— (2006a). Evaluation of First Nations and Inuit Health Branch's Brighter Futures and Building Healthy Communities Programs Final Report, Health Canada Departmental Audit and Evaluation Committee.

—— (2007). About Health Canada: First Nations and Inuit Health. Retrieved from <http://www.hc-sc.gc.ca/ahc-asc/activit/strateg/fnih-spni-eng.php>

—— (2007a). Brighter Futures and Building Healthy Communities. Retrieved 12 February 2009 at [http://www.hc-sc.gc.ca/fniah-spnia/promotion/mental/brighter\\_grandir-eng.php](http://www.hc-sc.gc.ca/fniah-spnia/promotion/mental/brighter_grandir-eng.php).

—— (2007b). Fetal Alcohol Syndrome/Fetal Alcohol Effects. 1997/2001. Accessed 12 February 2009 at <http://www.hc-sc.gc.ca/fniah-spnia/famil/preg-gros/intro-eng.php>.

—— (2008). Departmental Performance Report. Health Canada: 2007-2008. p78. Retrieved 12 February 2009 from <http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/inst/shc/shc-eng.pdf>

Health Council of Canada (2005). The Health Status of Canada's First Nations, Métis And Inuit Peoples: A Background Paper to Accompany Health Care Renewal in Canada: Accelerating Change. Retrieved from <http://healthcouncilcanada.ca.c9.previewyoursite.com/docs/papers/2005/BkgrdHealthyCdnsENG.pdf>

Human Resources and Social Development Canada, Public Health Agency of Canada, and Indian and Northern Affairs Canada (2007). Early Childhood Development Activities and Expenditures and Early Learning and Child Care Activities and Expenditures: Government of

Canada Report 2004-2005 and 2005-2006. Retrieved 12 February 2009 from [http://www.socialunion.gc.ca/ecdelcc\\_ae/2007/en/chapter\\_6.shtml](http://www.socialunion.gc.ca/ecdelcc_ae/2007/en/chapter_6.shtml).

—— (2007a). The Well-Being of Canada's Young Children: Government of Canada Report 2006. Retrieved from [http://www.socialunion.gc.ca/well\\_being/2007/en/well\\_being.pdf](http://www.socialunion.gc.ca/well_being/2007/en/well_being.pdf).

——, Socio-Economic and Demographic Statistics Section (2007). Historical Trends: Registered Indian Population, Canada, 1982-2007. Retrieved 26 February 2009 from <http://www.ainc-inac.gc.ca/ai/rs/pubs/sts/ht/ht-can-eng.pdf>.

Indian and Northern Affairs Canada (2008). Fact Sheet: First Nations and Inuit Health in Canada. Retrieved 11 February 2009 from <http://www.ainc-inac.gc.ca/ai/mr/is/fnihb-eng.asp>.

Isaacs, Julia B. (2007). Cost-Effective Investments in Children. The Brookings Institution. Retrieved 10 February 2009 from [http://www.brookings.edu/~media/Files/rc/papers/2007/01childrenfamilies\\_isaacs/01childrenfamilies\\_isaacs.pdf](http://www.brookings.edu/~media/Files/rc/papers/2007/01childrenfamilies_isaacs/01childrenfamilies_isaacs.pdf).

Krieg, Brigitte and Diane Martz, 2008, Meeting the Health Care Needs of Elderly Métis Women in Buffalo Narrows, Saskatchewan. The Journal of Aboriginal Health, January 2008. Vol. 4, Issue 1. NAHO. Retrieved from [http://www.naho.ca/english/journal/jah04\\_01/JAH\\_04\\_01.pdf](http://www.naho.ca/english/journal/jah04_01/JAH_04_01.pdf). p34.

Leitch, K. Kellie (2007). Reaching for the Top: A Report by the Advisor on Healthy Children & Youth. Retrieved 11 February 2009 from [http://www.hc-sc.gc.ca/hl-vs/alt\\_formats/hpb-dgps/pdf/child-enfant/2007-advisor-conseillere/advisor-conseillere-eng.pdf](http://www.hc-sc.gc.ca/hl-vs/alt_formats/hpb-dgps/pdf/child-enfant/2007-advisor-conseillere/advisor-conseillere-eng.pdf).

Legislative Assembly of Nunavut. Chapter 18: Midwifery Profession Act. September 18, 2008. Retrieved from [http://action.attavik.ca/home/justice-gn/attach-en\\_sourcelaw/e2008snc18.pdf](http://action.attavik.ca/home/justice-gn/attach-en_sourcelaw/e2008snc18.pdf).

Midwives Association of Saskatchewan (no date). Becoming a Midwife. Retrieved 12 January 2009 from <http://www.saskatchewanmidwives.com/midwife-education.html>.

National Aboriginal Health Organization [NAHO], (2004). Midwifery and Aboriginal Midwifery in Canada. Retrieved 12 January 2009 from [http://www.naho.ca/english/pdf/aboriginal\\_midwifery.pdf](http://www.naho.ca/english/pdf/aboriginal_midwifery.pdf).

New Economy Development Group (2005). Piliriqatigiinnngniq – Working Together for the Common Good. Health Integration Initiative Project in Nunavut. Retrieved from <http://www.tunngavik.com/documents/2004-2005-Health-Integration-Initiative-Final-Report-English.pdf>.

Nunavut Department of Health and Social Services. Report on Comparable Health Indicators for Nunavut and Canada. In, *The Health Status of Canada's First Nations, Métis And Inuit Peoples*.

Nunavut Tunngavik Incorporated [NTI] (2008). *Nunavut's Health System: A Report Delivered as Part of Inuit Obligations Under Article 32 of the Nunavut Land Claims Agreement, 1993 – Annual Report on the State of Inuit Culture and Society, 2007-2008*. Retrieved from [http://www.tunngavik.com/documents/2007-2008%20Annual%20Report%20on%20the%20State%20of%20Inuit%20Culture%20and%20Society%20\(English\).pdf](http://www.tunngavik.com/documents/2007-2008%20Annual%20Report%20on%20the%20State%20of%20Inuit%20Culture%20and%20Society%20(English).pdf)

Prairie Women's Health Centre of Excellence for Women's Health. *A Gathering for First Nations and Métis Women's Health in Northern Manitoba*. November 29, 2005. Retrieved from <http://www.pwhce.ca/pdf/GatherinFirstNations.pdf>.

Public Health Agency of Canada [PHAC] (2007). *Fetal Alcohol Spectrum Disorder (FASD): What We're Doing*. Retrieved from <http://www.phac-aspc.gc.ca/fasd-etcaf/what-eng.php>

Regroupement les sages-femmes du Quebec (2008). *Midwifery in Canada – Quebec*. Retrieved 12 January 2009 at <http://www.canadianmidwives.org/quebec.htm>.

Seventh Generation Midwives Toronto (no date). Website. Retrieved 12 January 2009 from <http://chic.oise.utoronto.ca/~jmcguire/sgmtbkup/SGMTabout.html>.

Six Nations Health Services (no date a). *Aboriginal Midwifery Training Program: Aboriginal Midwifery Background*. Retrieved from <http://www.snhs.ca/midBackground.htm>.

—— (no date b). *Birthing Centre: Background*. Retrieved from <http://www.snhs.ca/bcBackground.htm>.

Society of Obstetricians and Gynecologists of Canada (2008). *A National Birthing Initiative for Canada*. Retrieved from <http://www.sogc.org/projects/pdf/BirthingStrategyVersioncJan2008.pdf>

Statistics Canada (2004). *A Portrait of Aboriginal Children Living in Non-reserve Areas: Results from the 2001 Aboriginal Peoples Survey*. In, *The Well-being of Canada's Young Children, 2006 report*.

—— (2005). *Low birth weight (less than 2,500 grams), rate and confidence interval, by sex, three-year average, Canada, provinces, territories, health regions and peer groups, 2001*. *Health Indicators*. In, *The Well-being of Canada's Young Children, 2006 report*.

— (2007). Age (123) and Sex (3) for the Population of Canada, Provinces, Territories, Census Divisions and Census Subdivisions, 2006 Census - 100% Data. Catalogue no. 97-551-XWE2006011. Retrieved from <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=97-551-XWE2006011&lang=eng#formatdisp>

— (2008). Aboriginal Identity (8), Area of Residence (6), Age Groups (12) and Sex (3) for the Population of Canada, Provinces and Territories, 2006 Census - 20% Sample Data. Catalogue no. 97-558-XCB2006006. Retrieved from <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=97-558-X2006006&lang=eng>

— (2008a). Selected findings of the Aboriginal Children's Survey 2006: Family and Community. Retrieved from <http://www.statcan.gc.ca/pub/11-008-x/2008002/article/10729-eng.pdf>.

— (2008b). Aboriginal peoples: Release no. 5: January 15, 2008. Retrieved 28 December 2008 from <http://www12.statcan.ca/census-recensement/2006/rt-td/ap-pa-eng.cfm>.

— (2008c). Aboriginal Identity (3), Registered Indian Status (3), Age Groups (12), Sex (3) and Area of Residence (6) for the Population of Canada, Provinces and Territories, 2006 Census - 20% Sample Data. Catalogue no. 97-558-XWE2006010. Retrieved from <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=97-558-X2006010&lang=eng>.

— (2008d). Half of the Aboriginal population comprised of children and youth. In, Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census. Retrieved from <http://www12.statcan.ca/english/census06/analysis/aboriginal/children.cfm>.

— (2008e). Births 2006. Catalogue no. 84F0210X. Retrieved from <http://www.statcan.gc.ca/pub/84f0210x/84f0210x2006000-eng.pdf>.

— (2008f). Aboriginal Identity (8), Sex (3) and Age Groups (12) for the Population of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 2006 Census - 20% Sample Data. Catalogue no. 97-558-XWE2006007. Retrieved from <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?lang=eng&catno=97-558-X2006007>.

Turcotte, Martin and Zhao, John (2004). Wellbeing of off-reserve Aboriginal children. Statistics Canada. Canadian Social Trends Winter 2004. In, *The Well-Being of Canada's Young Children: Government of Canada Report 2006*.

University College of the North (no date). Kanáci Otinawáwasowin (Aboriginal Midwifery) Baccalaureate Program. Retrieved from [http://is-8668.ucn.ca/webpages/xml/xml\\_output/2009\\_2\\_30/Program\\_List\\_1238467367669.xml](http://is-8668.ucn.ca/webpages/xml/xml_output/2009_2_30/Program_List_1238467367669.xml)

Wilkins, R., S. Uppal, P. Finès, S. Senécal, É. Guimond and R. Dion (2008). Life expectancy in the Inuit-inhabited areas of Canada, 1989-2003. Health Reports. Vol. 19, No. 1, January. In H. Tait, Aboriginal Peoples Survey, 2006: Inuit Health and Social Conditions. Catalogue no. 89-637-X, No. 001. Retrieved from <http://www.statcan.gc.ca/pub/89-637-x/89-637-x2008001-eng.pdf>.

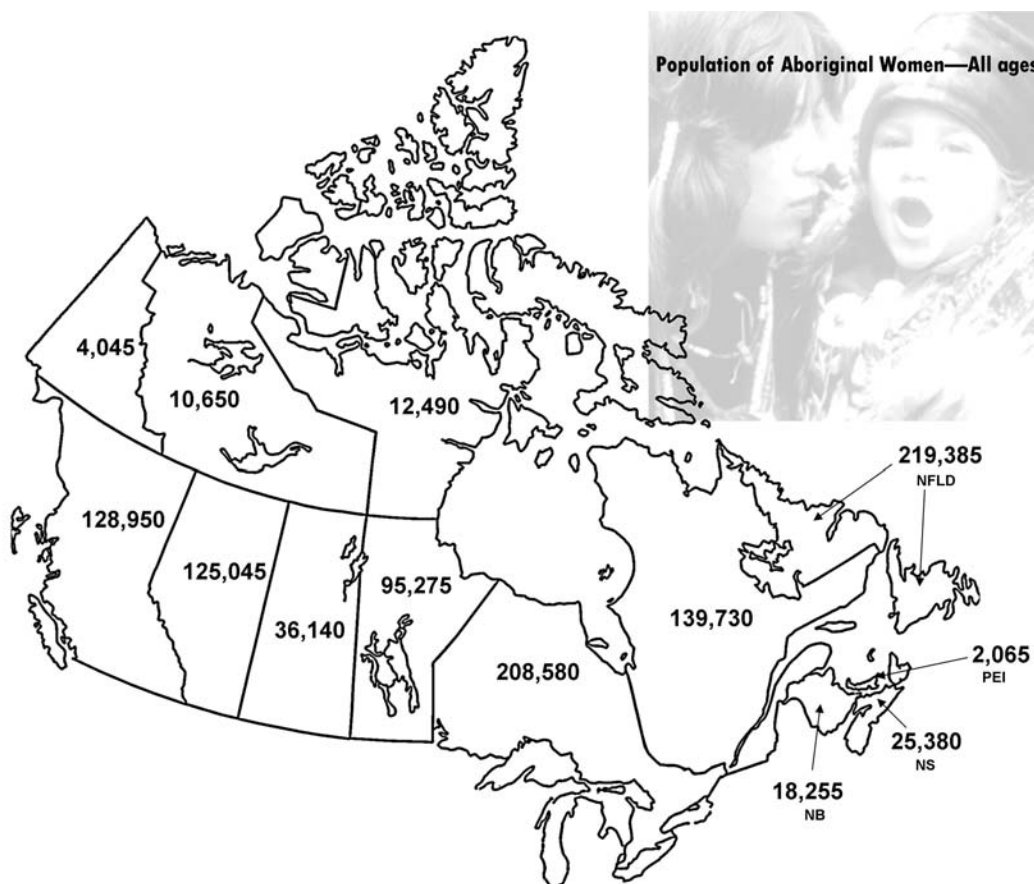
Young, T. K. (2003). Review of research on Aboriginal populations in Canada: Relevance to their health needs. *British Medical Journal*, 327(7412), 419–422. Cited in “Meeting the Health Care Needs of Elderly Métis Women in Buffalo Narrows, Saskatchewan,”



# APPENDICES

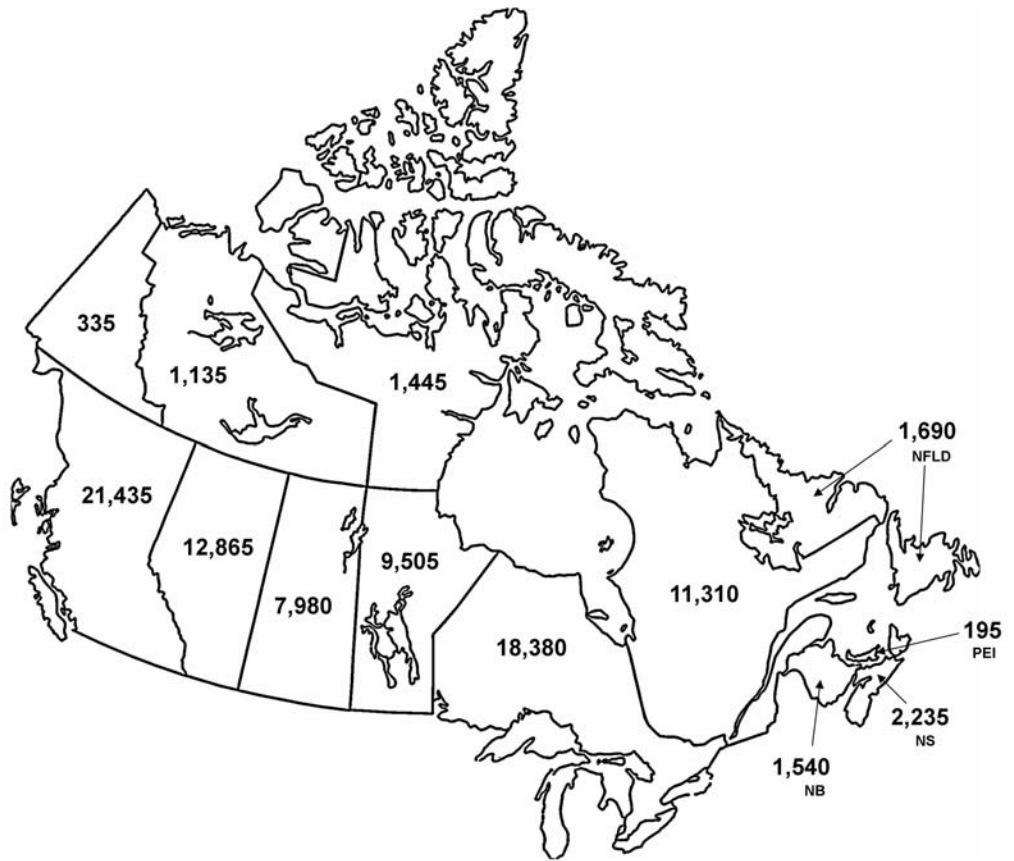
## APPENDIX A

### ABORIGINAL FEMALE POPULATION, ALL-AGES BY PROVINCE/TERRITORY (2006)



APPENDIX B

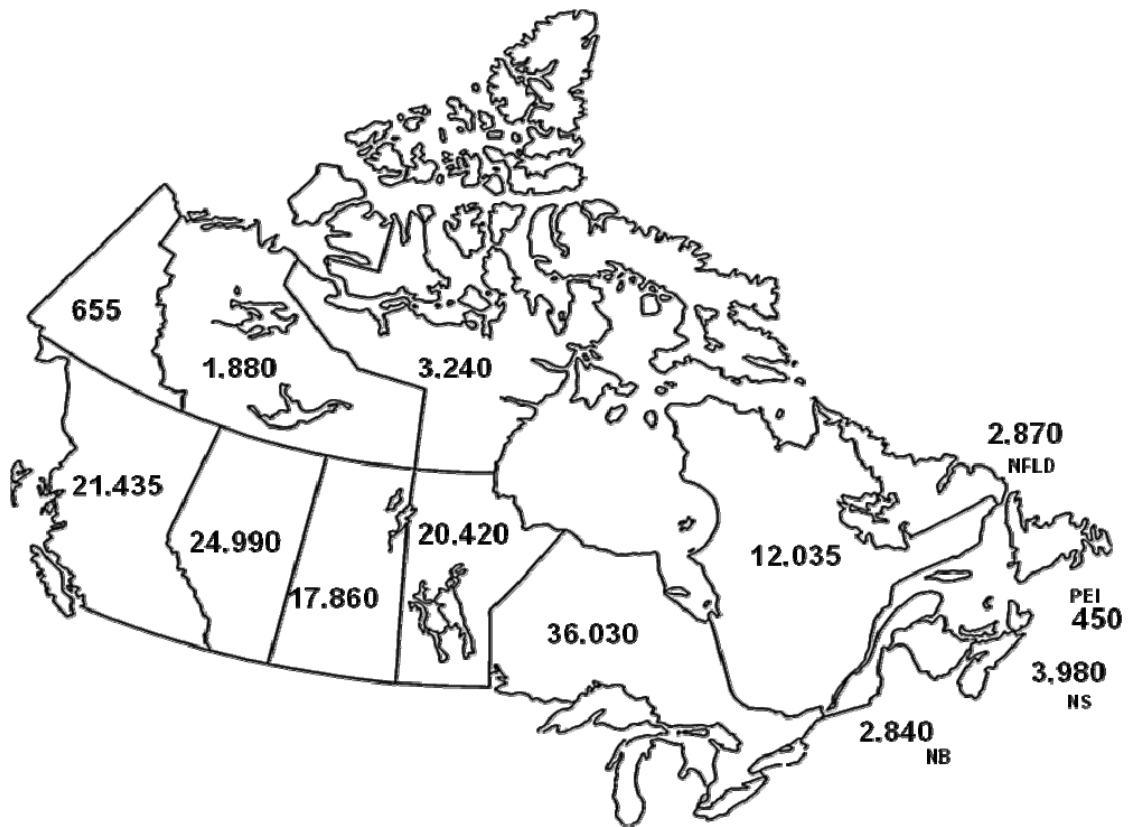
**ABORIGINAL FEMALE POPULATION, AGE 15-19  
BY PROVINCE/TERRITORY  
(2006)**





APPENDIX C

**ABORIGINAL CHILD POPULATION, AGE 0-5  
BY PROVINCE/TERRITORY  
(2006)**



## TIMELINE

1992	Brighter Futures Program (BFP) Community Action Program for Children (CAPC)
1994	Canada Prenatal Nutrition Program (CPNP)
1995	Aboriginal Head Start (AHSUNC)
1996	Six Nations Maternal and Child Centre
1997	Aboriginal Head Start On Reserve (AHSOR)
1999	First Nations and Inuit FAS/FAE Initiative
2002	Toronto Aboriginal Midwifery Initiative (TAMI) founded
2003	Targeted Immunization Strategy (FNIHB-TIS)
2004	Children's Oral Health Initiative (COHI)
2005	Maternal Child Health (MCH)