HEALTH STATUS AND WELLNESS

RHS
QUEBEC FIRST NATIONS
REGIONAL HEALTH SURVEY

FIRST NATIONS OF QUEBEC AND LABRADOR HEALTH AND SOCIAL SERVICES COMMISSION

MATERNAL AND CHILD HEALTH

Highlights

- The proportion of children 0 to 5 years old who were breastfed rose from less than four in ten in 2008 to more than half in 2015.
- Among children 0 to 5 years old who have been breastfed, half were breastfed for at least six months.
- Just under one-third of children from 0 to 5 years old have a mother who smoked throughout the pregnancy.
- More than one in five children (0-5 years old) have been exposed to gestational diabetes. In communities in Zones 2, 3 and 4, the proportion is nearly two in five children.
- More than one in five mothers report having suffered from depression during their pregnancy or in the year following delivery.

CONTEXT

Traditionally, for First Nations, the extended family and the community play an important role in supporting the mother during pregnancy, childbirth and breastfeeding. However, colonial policies have disrupted the way in which First Nations care for mothers and children, and the social and economic marginalization created by these policies disproportionately affects Aboriginal women. This largely explains the health inequities they face, especially during and after pregnancy (NCCAH, 2014).

However, the importance of acting early to promote the good development of children is known. It starts in pregnancy by promoting the health and well-being of pregnant women through good nutrition, healthy lifestyles and adequate social support. Access to good health and social services is also important to support parents before, during and after childbirth (Encyclopedia on Early Childhood Development, 2018).

This booklet therefore highlights some of the results of the RHS on the state of health of mothers and young children living in First Nations communities in Quebec, as well as some particularly important health determinants during and after pregnancy. They include access to maternal and child health services, risk behaviours and recommended practices.

The information in this booklet is derived from answers provided by the parents. Since some topics are particularly sensitive, the possibility of a social desirability bias on the part of respondents should not be discounted.

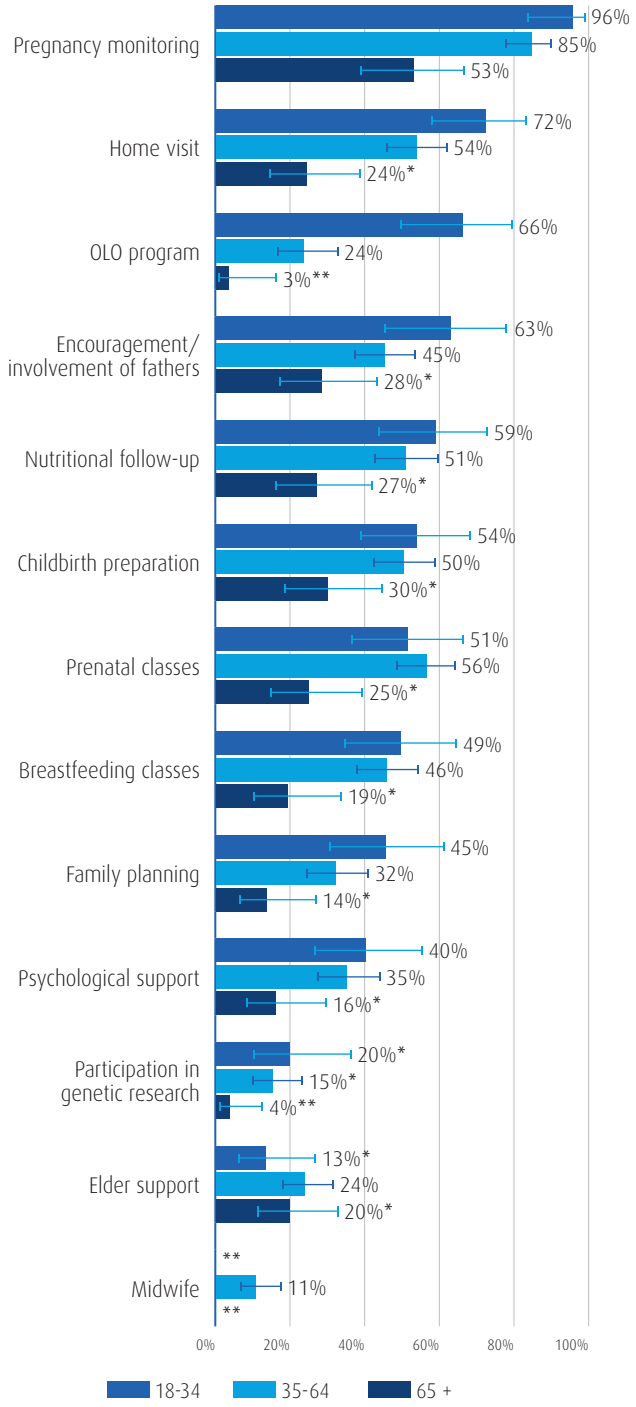
ACCESS TO SERVICES

In its *Blueprint – Quebec First Nations Health and Social Services, 2007-2017*, the FNQLHSSC (2007) reported that access to maternal and child health services for pregnant women, young mothers and newborns living in First Nations communities was difficult. In the document, the lack of resources and the distance required to access services are particularly highlighted. In 2008, Health Canada established the Maternal and Child Health Services Program for all First Nations communities in Canada.

The data of the RHS do not tell us whether access to most services has improved since 2008. On the other hand, it is possible to make comparisons between age groups. As shown in **FIGURE 1**, mothers 18-34 years old appear to have had better access to various services than mothers 35-64 years old, but especially as compared to mothers 65 years and over. While remaining cautious, it can be hypothesized that this apparent improvement for younger women has been influenced, at least in part, by the provision of better services since the Health Canada program was implemented in 2008.

Among all the available services, access to the OLO program has improved the most. In addition, regardless of the mother's age, pregnancy monitoring was and remains the most accessible service. In 2015, almost all mothers 18-34 years old said they had access. However, there has been no improvement in access to prenatal classes and elder support, and high proportions – sometimes a majority – of mothers 18-34 years old say they have not had access to many services. **(FIGURE 1)**.

FIGURE 1
Access to maternal and child health services based on the mother's age



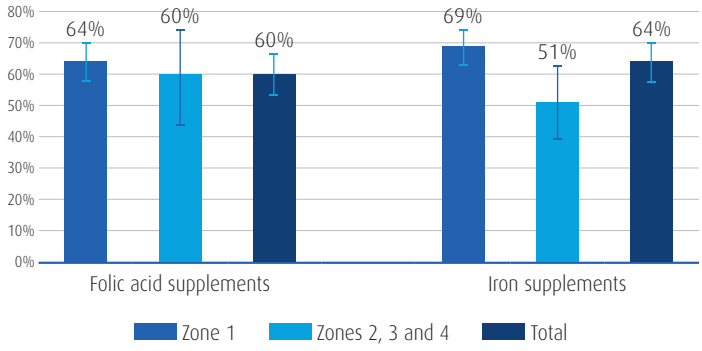
RECOMMENDED PRACTICES

Nutritional supplements

Pregnant women are usually advised to take folic acid and iron supplements to promote growth and development during pregnancy (Naître et grandir, 2018).

As shown in FIGURE 2, the data reveal that almost two-thirds of children (0-5 years old) were born to mothers who took folic acid or iron supplements during pregnancy. In addition, taking iron supplements seems less common in Zones 2, 3 and 4 than in Zone 1.

FIGURE 2
Children (0-5 years old) whose mother took folic acid and iron supplements during the pregnancy, based on geographical zone



Breastfeeding

Exclusive breastfeeding is recommended for the first six months of life. It has many benefits for infants, both in terms of physical health and the development of motor, intellectual, social and emotional abilities. In addition, breastfed babies are less likely to suffer from obesity later in life (Encyclopedia on Early Childhood Development, 2018). Breastfeeding is also beneficial for the mother, including helping her lose the excess weight gained during pregnancy and controlling her blood sugar, and preventing Type 2 diabetes (Diabète Québec, 2018).

From 2008 to 2015, the proportion of children (0-5 years old) who were breastfed increased from less than four in ten to more than half. Throughout that timespan, the proportion of breastfed children appears to be higher in Zone 1 than in Zones 2, 3 and 4 (FIGURE 3). In addition, for about half of the children who were breastfed, the duration of breastfeeding was six months or more (FIGURE 4).

FIGURE 3
Proportion of breastfed children (0-5 years old), based on age and geographical zone

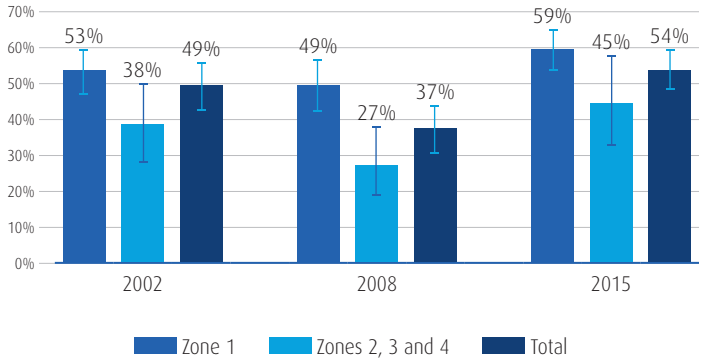
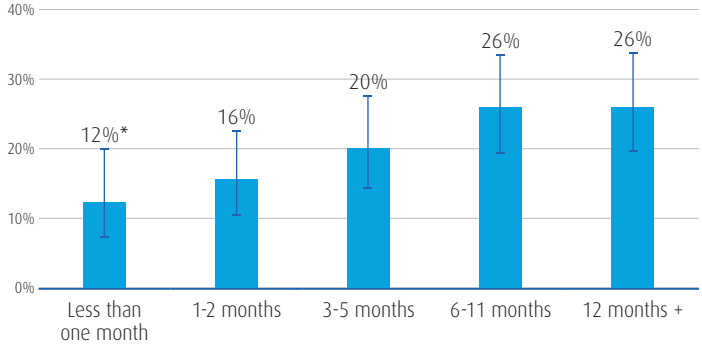


FIGURE 4
Distribution of breastfed children (0-5 years old), based on the duration of breastfeeding



RISK BEHAVIOURS

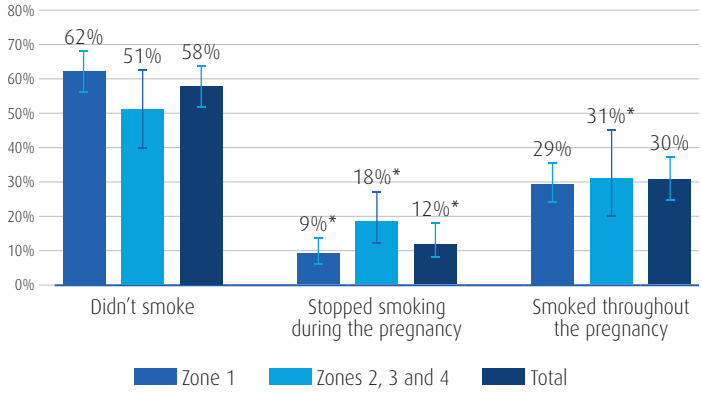
Smoking during pregnancy

It is well documented that "there [is] a significant relationship between smoking during pregnancy for Aboriginal mothers with low-income, alcohol use during pregnancy, low support from others, inadequate prenatal care, a family history of residential school attendance, low education levels, and location in a remote and isolated community. Conversely, having a paid job and living in communities with multi-community health services reduce[s] the odds of smoking during pregnancy" (Heaman, 2005).

Also, smoking is associated with an increased risk of adverse pregnancy outcomes, including risks of miscarriage, premature birth, and low birth weight (Encyclopedia on Early Childhood Development, 2018).

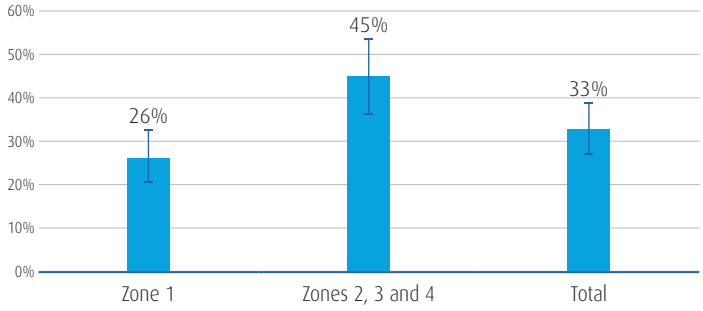
According to the results of the RHS, nearly three in five children (0-5 years old) were born to mothers who did not smoke cigarettes at all during the pregnancy. It can be seen, however, that just under one-third have a mother who smoked throughout the pregnancy. The proportion of children whose mothers did not smoke during pregnancy appears to be higher in Zone 1 than in Zones 2, 3 and 4 (FIGURE 5).

FIGURE 5
Distribution of children (0-5 years old) based on the smoking habits of the mother during the pregnancy and by geographical isolation



In addition, as shown in FIGURE 6, about one-third of children (0-5 years old) have a mother who was exposed to second-hand smoke at home during their pregnancy. The proportion is about one-quarter in communities in Zone 1 and more than two out of five in communities in Zones 2, 3 and 4.

FIGURE 6
Proportion of children (0-5 years old) whose mother was exposed to second-hand smoke at home during the pregnancy, based on geographical isolation

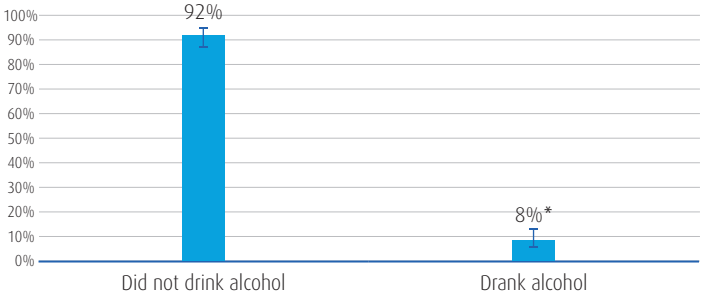


Alcohol consumption

The consumption of alcohol during pregnancy is the main cause of congenital anomalies (birth defects). It is also linked to certain risks of cognitive and behavioural problems that may arise later in the life of the child. These various problems constitute the Fetal Alcohol Spectrum Disorder (FASD). To date, scientific research has not been able to determine how much alcohol can be safely consumed during pregnancy; it is therefore recommended that no alcohol be consumed from the moment one plans to become pregnant (Encyclopedia on Early Childhood Development, 2018).

According to the data, more than nine out of ten children (0-5 years old) were born to a mother who did not drink alcohol during pregnancy (FIGURE 7).

FIGURE 7
Distribution of children (0-5 years old) based on the mother's consumption of alcohol during the pregnancy



The majority of respondents 12 years and over say they know about FASD or how to obtain information on FASD (FIGURE 8). On the other hand, people seem to know less about FASD in more remote regions (Zones 2, 3 and 4) than in Zone 1 (FIGURE 9).

FIGURE 8
Individuals (12 years and over) who know about FASD or know how to obtain information about FASD, based on age group

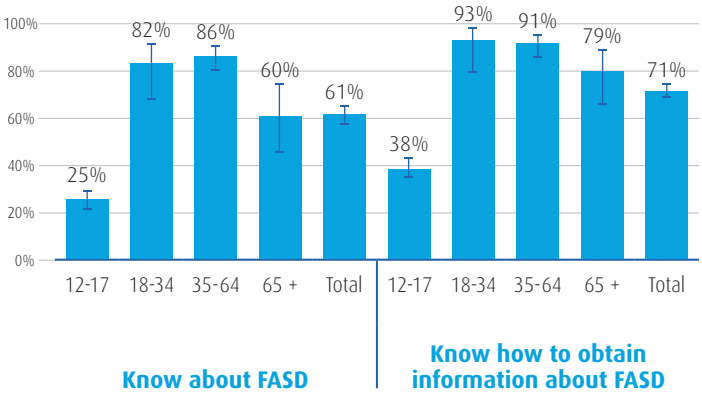
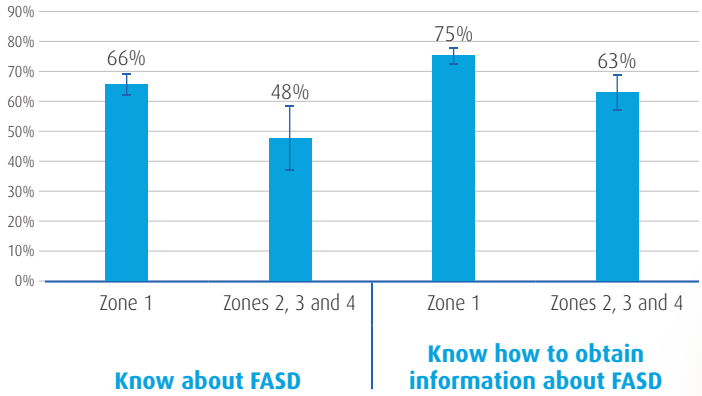


FIGURE 9
Individuals (12 years and over) who know about FASD or know how to obtain information about FASD, based on geographical isolation



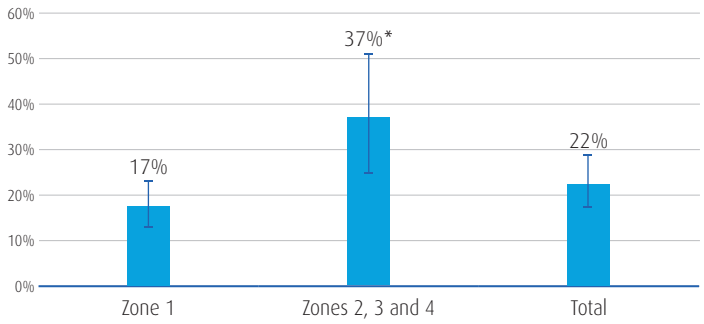
PROFILE OF THE HEALTH OF MOTHERS AND INFANTS

Gestational diabetes and weight of children at birth

According to Diabète Québec (2018), gestational diabetes affects between 3% and 20% of pregnant women, and Aboriginal women are at higher risk. Females with gestational diabetes are more likely to experience various health conditions during pregnancy and to experience complications during childbirth. Babies are more likely to be born with high weight (macrosomia), to have low blood sugar at birth and, as adults, to suffer from obesity and glucose intolerance.

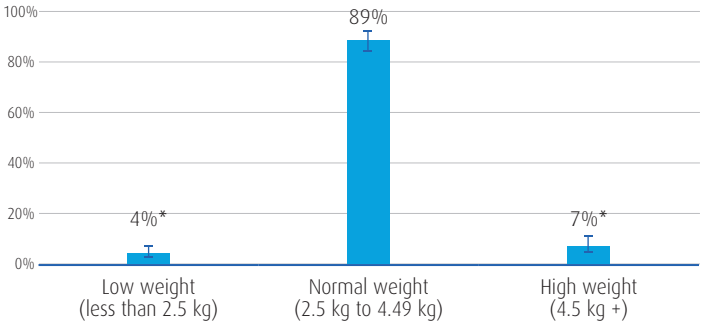
The results presented in the booklet on diabetes and obesity (FNQLHSSC, 2018) show that about one out of every five mothers of young children (0-5 years old) has a history of gestational diabetes. In addition, as shown in **FIGURE 10**, a similar proportion of children 0 to 5 years old were born to a mother diagnosed with gestational diabetes. By analyzing the results based on geographical zone, we can see that the proportion, already higher in Zone 1, is accentuated in Zones 2, 3 and 4, and affects nearly two out of five children. In the Quebec population in 2012, the prevalence of exposure of newborns to gestational diabetes was approximately 8% (INSPQ, 2017).

FIGURE 10
Proportion of children (0-5 years old) whose mother suffered from gestational diabetes, based on geographical isolation



Despite the high rates of gestational diabetes, it can be observed that about nine out of ten children (0-5 years old) are born with normal weight, between 2.5 and 4.49 kg **(FIGURE 11)**.

FIGURE 11
Distribution of children (0-5 years old) based on birth weight

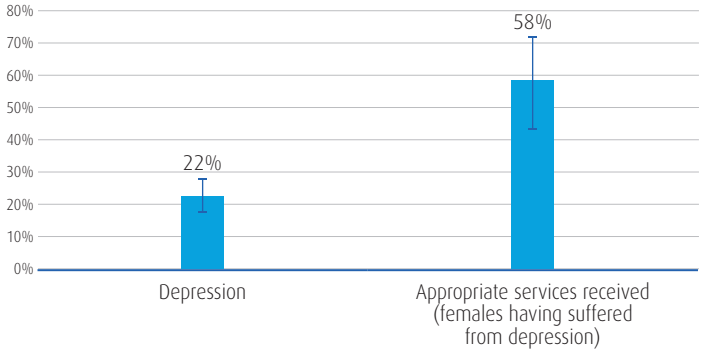


Maternal depression

During pregnancy and after delivery, some mothers may have symptoms associated with depression (perinatal or postpartum). While "baby blues" is transient and affects most females after childbirth, maternal depression "can have a major impact on the child's development, the mother's mental health, and the family environment" (Encyclopedia on Early Childhood Development, 2018).

More than one in five mothers (12 years and over) reported having suffered from depression during their pregnancy or in the year following delivery. Of these, only three in five report having received the appropriate support services during their depression (FIGURE 12).

FIGURE 12
Mothers (12 years and over) reporting having suffered from depression during the pregnancy or after delivery, and the percentage of them who received appropriate services



CONCLUSION

While females 18-34 years old seem to enjoy better access to services in general and to maternal and child health services in particular than their older counterparts, it seems that this access is often limited, except for pregnancy monitoring. This may partly explain the high prevalence of certain adverse behaviours during pregnancy and the persistence of various health conditions in pregnant women living in communities. These include smoking, gestational diabetes, and maternal depression. We note that the situation generally seems worse in Zones 2, 3 and 4 than in Zone 1. However, it is important to underline the increasing proportion of children who were breastfed between 2008 and 2015 in all communities. Continuing efforts to promote good access to maternal and child health services is therefore essential.

BIBLIOGRAPHY

National Collaborating Centre for Aboriginal Health (2014). *Strong Women, Strong Nations: Aboriginal Maternal Health in British Columbia*, Prince George, 12 p.
Accessible online: https://www.ccnsa-nccah.ca/docs/health/FS-AboriginalMaternalHealth-Smylie-EN.pdf.

First Nations of Quebec and Labrador Health and Social Services Commission (2007). *Quebec First Nations Health and Social Services Blueprint, 2007-2017, Closing the gaps ... Accelerating change*, p. 33.
Accessible online: http://www.cssspnql.com/docs/centre-de-documentation/final-ang.pdf?sfvrsn=2.

First Nations of Quebec and Labrador Health and Social Services Commission (2018). *First Nations Regional Health Survey – 2015: Diabetes and Obesity*, Wendake.

Diabète Québec. [Online]. [https://www.diabete.qc.ca/] (accessed January 12, 2018).

Naître et grandir. *Les vitamines et minéraux durant la grossesse*, [Online].
[https://naitreetgrandir.com/fr/grossesse/sante-bien-etre/fiche.aspx?doc=vitamines-mineraux-durant-grossesse#_Toc348440814] (accessed January 16, 2018).

Encyclopedia on Early Childhood Development. [Online]. [http://www.child-encyclopedia.com/maternal-depression/according-experts/perinatal-depression-and-children-developmental-perspective] (accessed March 26, 2018).

Heaman, M. (2005); cited in Reading, J. (2009). *A Life Course Approach to the Social Determinants of Health for Aboriginal Peoples*, p. A-84. Accessible online: https://sencanada.ca/content/sen/Committee/402/popu/rep/appendixAjun09-e.pdf.

Institut national de santé publique du Québec (2017). *Évolution du diabète gestationnel au Québec de 1989 à 2012, Rapport de surveillance*, 20 p. Accessible online: https://www.inspq.qc.ca/sites/default/files/publications/2275_evol_diabete_gestationnel.pdf.

METHODOLOGY IN BRIEF

The third phase of the First Nations Regional Health Survey (RHS) aims to describe the health status of the population in First Nations communities in Quebec. It was conducted from February 2015 to May 2016 in 21 communities from eight nations and reached 3,261 people (825 children aged 0 to 11 years, 769 adolescents aged 12 to 17 years and 1,667 adults aged 18 years and over) who responded to an electronic questionnaire submitted by field agents.

Data followed by the "*" sign have a coefficient of variation of 16.6% to 33.3% and should be interpreted with caution. The sign "**" indicates a coefficient of variation greater than 33.3%. This data is not published, except for estimates below 5%, which must be interpreted with caution. The lines presented in the bar or line charts are the confidence intervals calculated using a 95% confidence level.

In certain cases, the data are presented according to the geographic zone of the community of the respondents. These zones are defined as follows:[1]

– Zone 1 (urban): less than 50 km from a service centre with road access;

– Zone 2 (rural): between 50 and 350 km from a service centre with road access;

– Zone 3 (isolated): more than 350 km from a service centre with road access;

– Zone 4 (difficult to access): no road.

Service centre: The nearest access to suppliers, banks and government services.

In the context of the RHS, the term "community" is used to represent "Indian reserves."

For more details, please refer to the *Methodology* booklet of the RHS.

The RHS report consists of 20 thematic booklets. All the booklets can be consulted at the FNQLHSSC documentation center: https://centredoc.cssspnql.com.

1 INAC, http://fnp-ppn.aandc-aadnc.gc.ca/fnp/main/Definitions.aspx?lang=eng [accessed 2018-01-03].

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