# First Nations Health and Well-being

# **Interim Update**

November 12, 2015

A joint report from the Provincial Health Officer of BC and the First Nations Health Authority. This report was prepared in accordance with commitments in the 2005 *Transformative Change Accord*.





## **Table of Contents**

Executive Summary	1
Introduction	2
Background	2
Commitments by BC's Provincial Health Officer	3
Aboriginal Physician Advisor	3
Aboriginal Health Status Reports	3
Changes to First Nations Health Governance	3
First Nations Health Indicators	4
Measuring Progress	4
1. Life Expectancy	5
2. Mortality Rate	7
3. Youth Suicide Rate	9
4. Infant Mortality Rate	11
5. Diabetes Prevalence	13
6. Childhood Obesity	16
7. Number of Practising, Certified First Nations Health Care Professionals	17
Summary	18
Appendix A: Data Source – The First Nations Client File	19
Governance of the First Nations Client File	19
Data Challenges and Limitations	19
References	20

## **Executive Summary**

Commitments to improving health outcomes for First Nations peoples were agreed to in the *Transformative Change Accord* (TCA). The subsequent *Transformative Change Accord*: First Nations Health Plan (TCA:FNHP) sets out specific health targets to achieve by 2015 on seven indicators: 1) life expectancy; 2) mortality rate; 3) youth suicide rate; 4) infant mortality rate; 5) diabetes prevalence; 6) childhood obesity; and 7) practising, certified First Nations health care professionals.

This report provides an interim update on progress made on the indicators, including data analyses on the first five indicators since the baseline year of 2005, data up to 2013, and programming developments on the last two indicators. The previous interim update, released in 2012, presented data up to 2010.

This report provides analyses and projections that show the following:

- The life expectancy of Status Indians has improved since the baseline year, but is not currently projected to meet the TCA:FNHP target.
- The age-standardized mortality rate of Status Indians has improved since the baseline year, but is not currently projected to meet the TCA:FNHP target.
- The **youth suicide rate** of Status Indians has improved since the baseline year, and is currently projected to meet (or be very close to) the TCA:FNHP target.
- The infant mortality rate among Status
   Indians has slightly decreased since the
   baseline year but increased since the last
   update, and is not currently projected to meet
   the TCA:FNHP target.
- The **diabetes prevalence rate** among Status Indians has continued to increase, but the rate of increase has decelerated, and it is currently projected to meet the TCA:FNHP target.

The report also provides an update on

- Work to develop a baseline and an ongoing mechanism for collecting relevant data on childhood obesity among Status Indians.
- Work done to develop a baseline and an ongoing mechanism for collecting relevant data on the number of practising, certified First Nations health care professionals in BC, as well as work to increase those numbers.

Overall, this report shows that there have been meaningful improvements in the health and well-being of First Nations peoples in BC and progress toward these targets in many areas. The final interim update will be released in 2017 to report on data up to 2015.

#### Introduction

Over time, there has been progress in many areas of Aboriginal health and well-being in BC. Communities have shown great resiliency and many partnerships have been forged as we strive to close the gap in health status between Aboriginal and non-Aboriginal residents. However, Aboriginal people, including those in BC, still experience a higher incidence of poor health than non-Aboriginal residents as a result of long-term systemic racism (including the Indian residential school system and the Indian reservation system) and its harmful multigenerational impacts on the lives of Aboriginal people. Commitments to improving health outcomes for this population were agreed to in the Transformative Change Accord (TCA). A subsequent document, the Transformative Change Accord: First Nations Health Plan (TCA:FNHP) set out specific commitments to achieving targets on seven health indicators by 2015: 1) life expectancy; 2) mortality rate; 3) youth suicide rate; 4) infant mortality rate; 5) diabetes prevalence; 6) childhood obesity; and 7) practising, certified First Nations health care professionals.

In 2012, the BC Provincial Health Officer (PHO) reported on progress made on these indicators from 2005 to 2010. This year, the First Nations Health Authority (FNHA) and PHO are jointly reporting on progress made on the indicators from 2005 to 2013, including data analyses on the first five indicators and programming developments on the last two.

#### **Background**

In 2001, the PHO released a report entitled *The Health and Well-being of Aboriginal People in British Columbia.* This report drew attention to significant gaps in health outcomes between Aboriginal people and other BC residents and made recommendations that were developed with input and assistance from BC First Nations and Aboriginal organizations.

In March 2005, First Nations leaders and the Province of British Columbia agreed to a New Relationship guided by principles of trust, recognition, and respect for Aboriginal rights and title. In November 2005, the Province of

British Columbia, the First Nations Leadership Council, and the Government of Canada signed the TCA, which affirmed the parties' commitment to close the gaps in social and economic well-being of First Nations people, specifically in education, health, housing, and economic opportunities over the following 10 years.

Building on the TCA, the TCA:FNHP was developed by the First Nations Leadership Council and the provincial government and was released in November 2006. The TCA:FNHP identifies priority actions to close the health gap between First Nations and other BC residents. First Nations leadership and the provincial government agreed to be jointly accountable for the outcomes of this plan. The plan identifies 29 specific actions in four areas, with seven performance indicators to be tracked to measure progress in closing the health gap and improving the health of the First Nations population in BC. Data were available for five of the seven indicators, and partners determined associated targets for reducing the gaps. The targets established in the TCA:FNHP are as follows:

#### 1. Life expectancy at birth

Reduce the gap in life expectancy between Status Indians and other British Columbians by 35 per cent to less than three years difference by 2015.

## 2. Mortality rate (deaths due to all causes)

Reduce the gap in mortality rate between Status Indians and other British Columbians by 35 per cent by 2015.

#### 3. Youth suicide rate

Reduce the gap in youth suicide rates between First Nations and other British Columbians by 50 per cent by 2015.

#### 4. Infant mortality rate

Reduce the gap in infant mortality rate between First Nations and other British Columbians by 50 per cent by 2015.

#### 5. Diabetes prevalence

Reduce the gap in the prevalence of diabetes between First Nations and other British Columbians by 33 per cent by 2015.

#### 6. Childhood obesity

Develop a baseline and an ongoing mechanism for collecting data relevant to childhood obesity.

## 7. Number of practising, certified First Nations health care professionals

Develop a baseline and an ongoing mechanism for collecting data relevant to the number of certified health care professionals in BC who are First Nations, and the number of those who are actually practising.

The PHO and FNHA acknowledge that these targets are ambitious for the 10-year timeframe allocated, but this report will show that there have been meaningful improvements in the health and well-being of First Nations peoples in BC and progress toward these targets in many areas.

# Commitments by BC's Provincial Health Officer

The TCA:FNHP also specifies two actions for which the PHO is directly responsible. First, the PHO will appoint an Aboriginal physician to advise on Aboriginal health issues. Second, the PHO will issue Aboriginal health status reports every five years, with interim updates every two years.

#### **Aboriginal Physician Advisor**

As reported in the previous update, in 2007, the BC provincial government created a position for an Aboriginal physician/Deputy PHO to work alongside the PHO. The position has specific responsibilities for monitoring and reporting on the health and well-being of Aboriginal people in BC and for tracking the progress of these performance measures. In 2007, Dr. Evan Adams was appointed to the position; he became a Deputy PHO in 2012 and remained with the Office of the PHO until moving to the FNHA in 2014. In October 2015, the PHO appointed Dr. Daniele Behn-Smith as the new Aboriginal Physician Advisor for BC.

#### **Aboriginal Health Status Reports**

The PHO issued the first interim update on Aboriginal health and well-being in BC in 2007. In 2009, the PHO released the more extensive and comprehensive Aboriginal health report, *Pathways to Health and Healing – 2nd Report on the Health and Well-being of Aboriginal People in British Columbia.* In 2012, a second interim update was released to report on progress and data up to 2010. The

current report presents a third update of the selected health status indicators. This includes updated data and analyses up to 2013 for the five indicators for which data are available and progress reports on the other two.

Currently, it is anticipated that another comprehensive Aboriginal health report will be produced with a targeted release date of the 2016/17 fiscal year. This will enable more indepth examination of progress and challenges in closing the gap between the health status of Aboriginal people and other residents of BC, and the development of a new approach and/or new targets as appropriate. In 2017, there will be a fourth interim update report that will provide a final status on progress towards reaching the 2015 targets.

# Changes to First Nations Health Governance

Since the last interim update, the First Nations Health Authority (FNHA) has been established. This provides a new health governance structure that gives First Nations peoples in the province more control over health care spending and health service delivery. The FNHA is guided by directives and values that enable communities and nations to provide service in a way that meets local needs.

In December 2014, the FNHA created the Office of the Chief Medical Officer (CMO), led by Dr. Evan Adams. The CMO's role is to provide medical leadership and act as the FNHA's representative on public health matters, as well as build strong relationships with First Nations communities and other partners to advance highquality and culturally safe clinical care, programs, services, and policies for First Nations peoples in BC. The CMO's office will also report independently on the health status of the First Nations population in BC, in collaboration with the PHO's office. The result will be twofold: (1) independent reporting will ensure that First Nations have control over how the story of their own health is told, and (2) collaboration with the PHO's office will ensure that a First Nations perspective is reflected in related provincial health status reports.

#### **First Nations Health Indicators**

According to the 2011 National Household Survey, there were 232,290 Aboriginal people living in BC,<sup>a</sup> which represented 5.4 per cent of the BC population.<sup>1</sup> This included approximately 112,400 registered Status Indians,<sup>2</sup> who made up 72.5 per cent of First Nations people in BC, 48.4 per cent of self-reported Aboriginal people in BC, and 2.6 per cent of BC's total population.

While the targets set out in the TCA:FNHP use varying terminology for Aboriginal people, the performance indicators presented in this report show a comparison between Status Indians<sup>b</sup> and other residents of BC. This report uses the term "Aboriginal" unless describing data pertaining specifically to Status Indians. See Appendix A for more information about data sources and methodology.

#### **Measuring Progress**

In this report, two figures are presented for each of the first five indicators. The first figure provides the actual data reported for both Status Indians and other residents of BC for that indicator. The second figure provides a series of projected trend lines.

The indicator targets were established using data from 1993 up to and including the baseline TCA year (2005) to generate projections for Status Indians and other residents for 2015. This provides a picture of the anticipated gap if no actions were taken, and establishes a static baseline. Since the targets are various reductions to health indicator gaps, the numeric value for each target is generated based on a percentage reduction from that baseline gap projected for 2015. Having a static baseline allows for a clear determination of movement toward or away from targets through comparisons between the baseline

projection and the new projection lines created at different interim update points.c

Projection lines	Meaning
illes	Status Indian (SI) Trend Before TCA
	Black data points (both solid and hollow)
	, , , , , , , , , , , , , , , , , , , ,
	are actual values recorded among Status
	Indians for the year or group of years
	indicated. Solid data points up to and
	including 2005 were used to generate the
	black trend line—this establishes the
	baseline trend/projection for Status
	Indians.
	Other Residents (OR) Trend Before TCA
	Blue data points (both solid and hollow) are
	actual values recorded among other
	residents of BC for the year or group of
	years indicated. Solid data points up to and
	including 2005 were used to generate the
	blue trend line—this establishes the
	baseline trend/projection for other
	residents.
	SI TCA Target
	The dashed red line represents the
	indicator target for 2015 and is used to
	identify whether an indicator is on track to
	reach its target. It is shown as a linear path
	from the value at the baseline year to the
	•
	targeted value calculated for 2015.
	SI Projection After TCA as of 2010
	The purple line shows the 2015 projection
	for Status Indians as calculated at the time
	of the last interim update using data from
	the baseline year up to 2010. The line is
	used to determine whether changes made
	in the most recent years (represented by
	the green line) reflect continued
	advancement toward the 2015 target since
	the last update.
	SI Projection After TCA as of 2013
	The green line shows the 2015 projection
	for Status Indians as calculated for the
	current update using data from the
	baseline year up to 2013 (the most recent
	year for which data is available). The line is
	used to determine whether improvements
	have been made since the last interim
	update (represented by the purple line),
	and whether the indicator is on track to
	reach its target in 2015.

<sup>&</sup>lt;sup>a</sup> This includes those who self-identified as First Nations, Métis, Inuit, multiple Aboriginal identities, or other unspecified Aboriginal identities.

<sup>&</sup>lt;sup>b</sup> The term "Status Indian" refers to those who are entitled to receive the provisions of the *Indian Act*, while Non-Status Indians are those who do not meet the criteria for registration or who have chosen not to be registered. "First Nations" refers to both Status Indians and Non-Status Indians.

<sup>&</sup>lt;sup>c</sup> This methodology does not account for values that do not proceed according to the baseline projection for other residents.

## 1. Life Expectancy

Life expectancy at birth is a prediction of the average number of years a newborn person can be expected to live. The target identified in the TCA:FNHP is a 35 per cent reduction in the gap in life expectancy between Status Indians and other BC residents by 2015.

Figure 1 illustrates life expectancy at birth for five-year aggregate periods from 1993-1997 to 2009–2013. Life expectancy of Status Indians has improved since the TCA baseline year (2001–2005), as well as since the last update. The average life expectancy for Status Indians in the most recent period is 75.9 years, compared to 81.6 years for other residents. This is an increase of 1.6 years from the baseline of 74.3 (2001–2005) among Status Indians, which was larger than the 1.0 year increase for other residents during the same period.

Figure 1

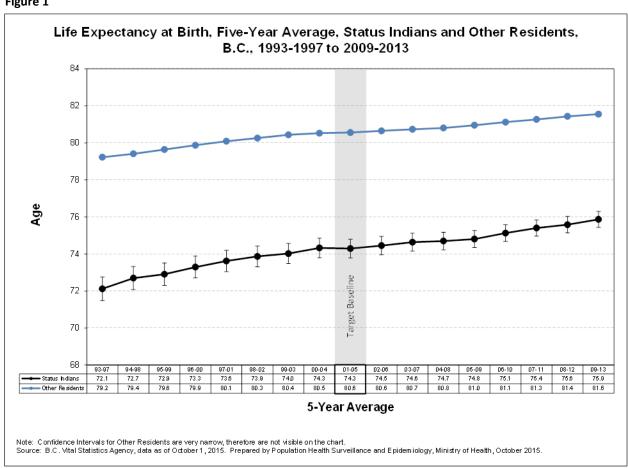
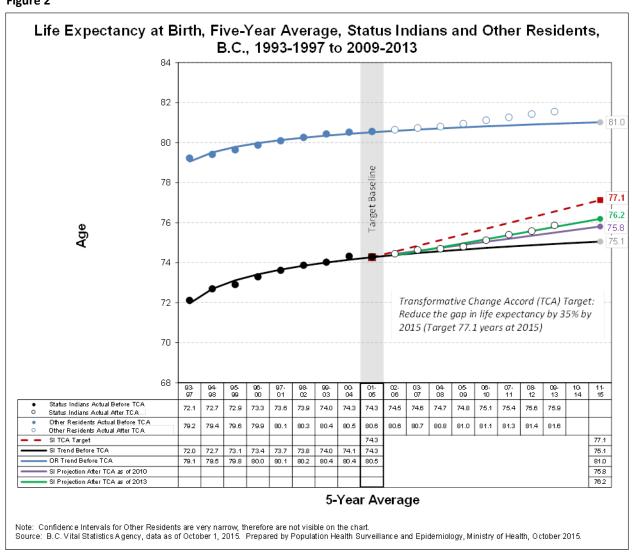


Figure 2 shows that if life expectancy continues to increase according to current projections, in 2015 life expectancy for Status Indians will be 76.2 years. This is an improvement both since the baseline projection (SI Trend Before TCA) and since the last update (SI Projection After TCA as of 2010), and it shows continuing progress toward the target. Despite this progress, life expectancy for Status Indians is currently projected to fall short of the TCA target (77.1 years). To achieve the targeted 35 per cent reduction in the gap, the

life expectancy of Status Indians in BC must further increase by another 0.9 years by 2015 beyond what is currently projected. While a comprehensive discussion of causes and explanations of trends are beyond the scope of this report, it should be noted that some indicators in this report impact the trajectory of others; for example, one way to further increase life expectancy is to improve infant mortality rates (see Figures 7 and 8).

Figure 2



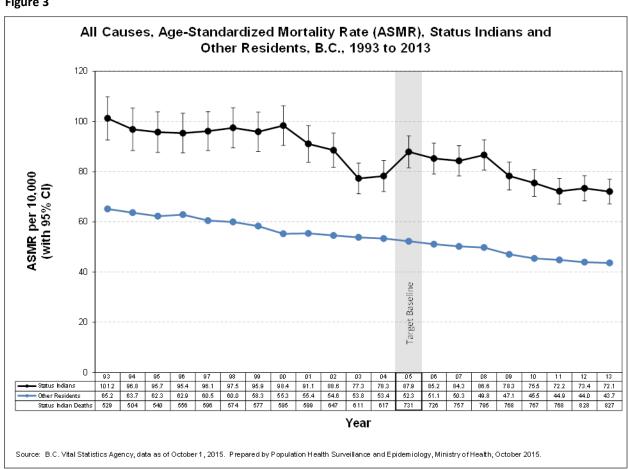
#### 2. Mortality Rate

Age-standardized mortality rate (ASMR) measures the number of deaths due to all causes, expressed as a rate per 10,000 population. This measure allows for comparison in death rates between Status Indians and other BC residents by adjusting for differences in population age distribution. The TCA:FNHP target is a 35 per cent reduction in the gap in mortality rates between Status Indians and other BC residents by 2015.

Figure 3 illustrates ASMR each year from 1993 to 2013. ASMR for Status Indians has fluctuated over time but continues to decrease. It has

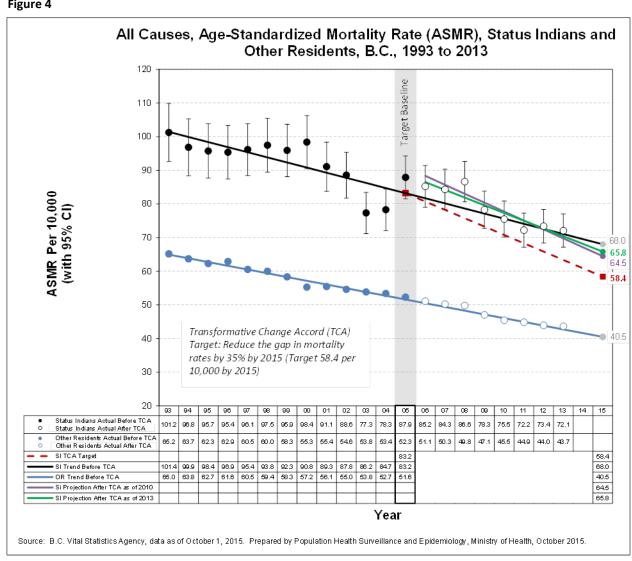
improved both since the baseline year (2005) and since the last update year (2010). In 2013, the AMSR for Status Indians was 72.1 per 10,000 population, compared to 43.7 per 10,000 for other residents. While there has been an increase in the raw count of Status Indian deaths from 2005 to 2013, the ASMR for Status Indians decreased by 15.8 deaths per 10,000 population (from 87.9 deaths per 10,000 population among Status Indians in 2005, to only 72.1 per 10,000 in 2013). This decrease in rate was larger than the 8.6 per 10,000 population reduction in ASMR for other residents over the same period.

Figure 3



According to projections shown in Figure 4, in two years' time the AMSR is anticipated to be 65.8 deaths per 10,000 population. This would be a decrease from the baseline year (SI Trend Before TCA); however, it indicates an increase from the projection of 64.5 per 10,000 population at the last update (SI Projection After TCA as of 2010). To achieve the targeted 35 per cent reduction in the gap between Status Indians and other residents, the ASMR of Status Indians in BC must regain and surpass the progress seen in previous years, declining to 58.4 deaths per 10,000 in two years' time. As previously noted, a comprehensive discussion of causes and explanations of trends are beyond the scope of this report, but it should be noted that reductions in both youth suicide and infant mortality rates would result in decreases in ASMR (see Figures 5 and 7).

Figure 4



#### 3. Youth Suicide Rate

Youth suicide rates represent deaths among youth ages 15-24 years who deliberately take their own lives, expressed as a rate per 10,000 population. The target identified in the TCA:FNHP is a 50 per cent reduction in the gap in youth suicide rates between First Nations and other BC residents by 2015. Year-to-year variation among Status Indians should be interpreted with caution due to the small number of Status Indian youth suicides and the related large confidence intervals shown here.

Figure 5 presents youth suicide rates for five-year aggregate periods from 1993-1997 to 2009-2013. The suicide rate for Status Indian youth has fluctuated over time but shows an overall downward trend in the raw counts and the rate per 10,000 and improvements both since the baseline and since the last update. The suicide rate for Status Indian youth ages 15-24 decreased by 1.20 per 10,000 population—from the baseline of 3.52 per 10,000 (2001-2005) to 2.32 per 10,000 in the most recent period (2009-2013).

Figure 5

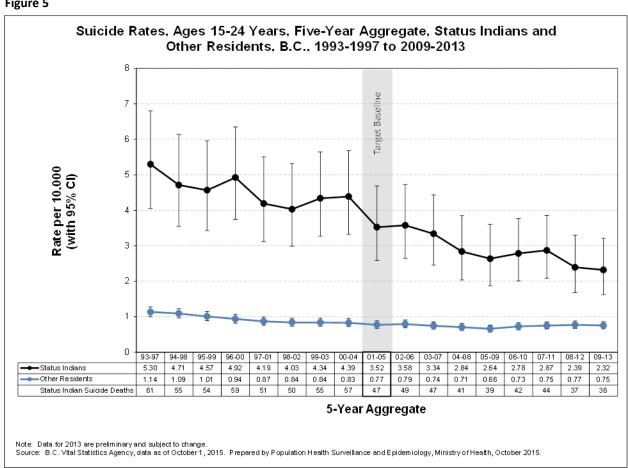
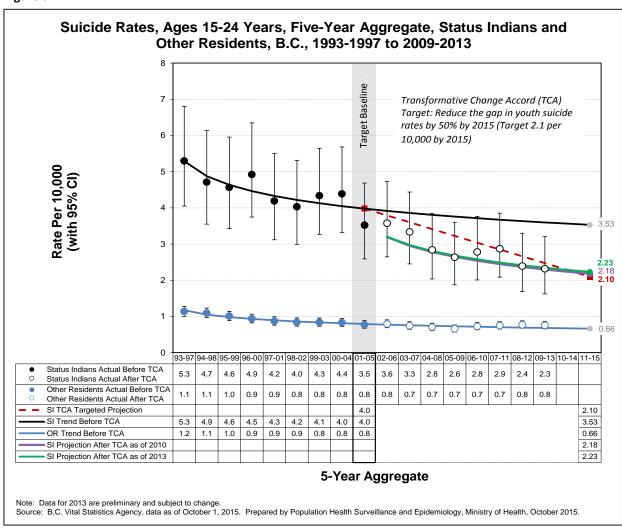


Figure 6 shows that if the youth suicide rate among Status Indians continues to decrease according to current projections, in two years' time it will be 2.23 per 10,000. This is an improvement from the baseline projection

(SI Trend Before TCA) and is very close to reaching the target of 2.10 per 10,000 population for Status Indians.

Figure 6



#### 4. Infant Mortality Rate

Infant mortality rate refers to the number of infants who die during the first year of life per 1,000 live births. The target identified in the TCA:FNHP is a 50 per cent reduction in the gap in infant mortality rates between First Nations and other BC residents by 2015. Year-to-year variation among Status Indians should be interpreted with caution due to the small number of Status Indian infant deaths and the related large confidence intervals shown here.

Figure 7 illustrates infant mortality rate for five-year aggregate periods from 1993–1997 to 2009–2013. The infant mortality rate for Status Indians has fluctuated over time; although it appears to have decreased in the five years following the baseline, it appears to have increased over the last three years. At 8.12 deaths per 1,000 live births in 2009-2013, the infant mortality rate is slightly lower than at the baseline in 2001–2005 (8.78 per 1,000 live births), but higher than it was during the last update time period of 2006–2010 (6.96 per 1,000 live births).

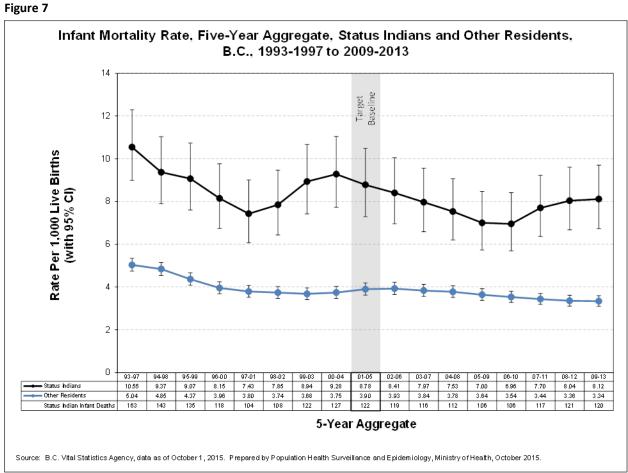
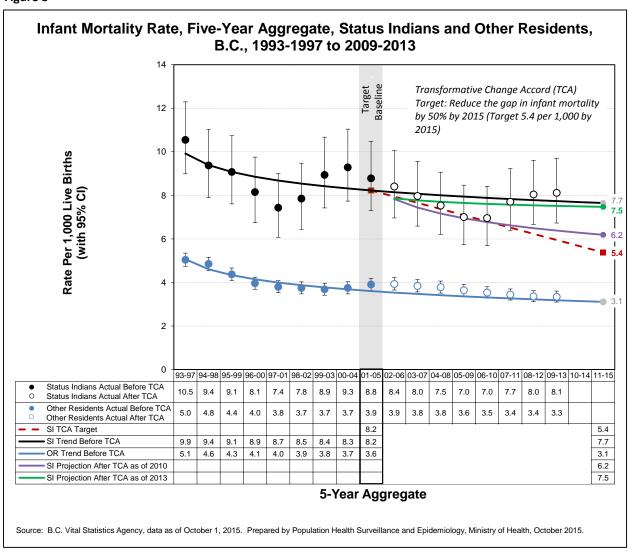


Figure 8 shows that as a result of the increase in infant mortality rate among Status Indians during the last three years, the infant mortality rate among Status Indians is currently projected to be 7.5 infant deaths per 1,000 live births in two years' time (SI Projection After TCA as of 2013). Current projections do not indicate that

meaningful improvement has been made since the baseline (SI Trend Before TCA) nor do they show progress toward the target of 5.4 per 1,000 live births. If no change is seen in the next two years, the decreasing trends for both Status Indians and other residents are projected to level off, leaving a persistent and steady gap between the two groups.

Figure 8



#### 5. Diabetes Prevalence

Diabetes is a chronic condition of high blood sugar that has complex causes including lifestyle and environmental causes, genetic influences, and other factors, resulting in a deficiency or ineffective use of insulin in the body. The target identified in the TCA:FNHP is a 33 per cent reduction in the gap in the prevalence of diabetes between First Nations and other BC residents by 2015.

Over the last several years, increased testing for diabetes across BC has generated a more accurate picture of diabetes in BC. This will improve the actual prevention and management of the disease in the long term but contributes to an apparent rate increase in the short term. As such, the increases in age-standardized diabetes prevalence rates for both Status Indians and other residents are due, at least in part, to this increased testing and identification of people living with diabetes.

Figure 9 illustrates that from fiscal year 1993/1994 to 2013/2014, both Status Indians and other BC residents have experienced an increase in the agestandardized prevalence rates of diabetes. For Status Indians the rate increased to 8.1 cases per 100 population in 2013/2014 from the baseline year of 6.7 cases per 100. However, the rate of increase appears to be slowing among both groups over the last three years. The increase in prevalence rate is slightly larger among Status Indians compared to other residents, resulting in a somewhat larger gap between the groups than in previous years; however, with the deceleration in this increase in the last three fiscal years, the growth in this gap appears to have been stopped.

Figure 9

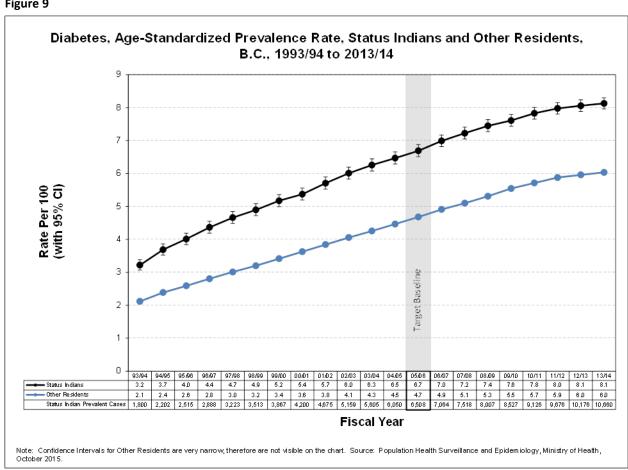
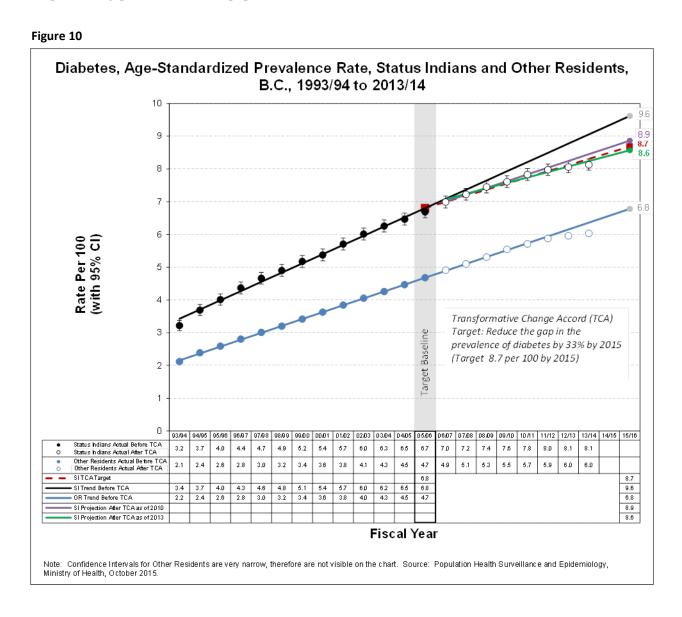


Figure 10 shows that the projections of Status Indians and other residents prior to the baseline (SI Trend Before TCA, and OR Trend Before TCA) were on diverging paths, creating a continuous widening of the projected gap over time. The recent deceleration in increasing prevalence rates is somewhat greater among Status Indians, which has resulted in a reduction in the projected gap between the two populations.

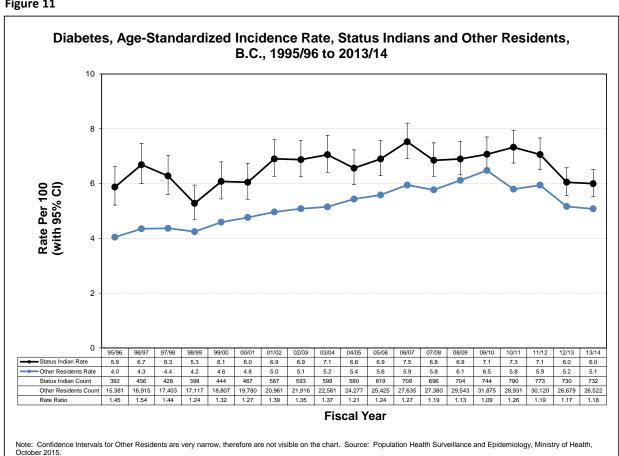
If the increase in prevalence for Status Indians continues to decelerate according to current projections, it will reach 8.6 cases per 100 population in 2015. This reflects improvement since the baseline year and since the last update (SI Projection After TCA as of 2010), and the TCA target of 8.7 cases per 100 population would be achieved.



While further exploration of indicators is beyond the scope of this report, Figure 11 presents diabetes incidence rates for Status Indians and other residents. Similar to the trends seen in Figure 9, this figure shows that there was a steady increase in diabetes incidence rates among Status Indians from 1995/1996 to 2010/2011,

followed by a substantial drop off. This suggests that the impact of increased testing and related identification of people living with diabetes may have now peaked, and/or that improvements in lifestyle and environmental factors are successfully having preventative benefits.

Figure 11



#### 6. Childhood Obesity

Childhood obesity has the potential for both immediate and long-term effects on health and well-being. At the time of the TCA there were no routinely collected measures of childhood obesity among First Nations peoples in BC. Therefore, the target identified in the TCA:FNHP was to develop a baseline and an ongoing mechanism for collecting relevant data.

In accordance with this target, a baseline measure of childhood obesity among Aboriginal children in BC is currently being developed by the FNHA as part of a broader initiative to collect child health data. The FNHA is leading the development, implementation, analysis, and reporting of the First Nations Regional Health Survey. This survey includes an age-specific health questionnaire with questions about a child's height and weight. The answers can be used to calculate Body Mass Index (BMI), thereby determining the prevalence of childhood obesity. However, there are challenges with using BMI to identify obesity among children. Since the percentage of body fat in children changes as they grow, and because there are differences in body fat between the sexes, BMI cannot be considered a direct measurement of obesity in children. To account for these differences, the most current age- and sex-specific BMI charts available are being used.

In October 2015, the FNHA launched the survey in communities and data collection is underway at the time of this report. The FNHA anticipates that the provincial-level analyses and reports will be released by the end of 2017 and the regional-level reports will be released by the end of 2018. It is possible that an initial baseline of Aboriginal childhood obesity will be available to report on in the 2017 interim update.

# 7. Number of Practising, Certified First Nations Health Care Professionals

Increasing the number of trained First Nations health care professionals was one of the four areas for action identified in the TCA:FNHP to help close the health gaps between Status Indians and other BC residents. At the time of the TCA:FNHP, there was no accurate information on the number of certified health care professionals in BC who were First Nations or the number who were actually practicing. Therefore, the target identified in the TCA:FNHP was to develop a baseline and an ongoing mechanism for collecting this information.

Regional health authorities in BC are now starting to identify how many First Nations and Aboriginal health care providers they employ (through self-identification), which will provide a baseline for measuring an increase in the number of these professionals.

While the establishment of this baseline is underway, the FNHA has begun work to increase the number of practising, certified First Nations health care professionals in several ways:

- Committing itself to recruiting and hiring Aboriginal health care professionals The FNHA is committed to recruiting and hiring candidates with a variety of educational and professional backgrounds who fit well with the organization's culture. As of October 2, 2015, one-third of FNHA staff self-identify as First Nations and 29 per cent are Status Indians. The FNHA offers many professional development opportunities that contribute to the retention of qualified, practising, certified First Nations health care professionals.
- Building partnerships with scholarship and bursary providers to assist health care students who are Aboriginal The FNHA is partnering with the First Nations Education Steering Committee and New Relationship Trust to provide scholarships and bursaries to recruit and retain Aboriginal students in the health sciences. There are plans to contribute over \$755,000 towards supporting these students in the health system and science fields.

• Working with regional health authorities to support Aboriginal recruitment programs — The FNHA is also partnering with several regional health authorities to offer Aboriginal-specific recruitment programs that provide opportunities for Aboriginal candidates to work for health authorities. This includes participating in career fairs that encourage Aboriginal youth to study in health science fields and staying connected with students to enable them to successfully transition into health authority positions.

## **Summary**

This report has provided a progress update on the seven selected indicators in the Transformative Change Accord: First Nations Health Plan (TCA:FNHP) through 2013. It includes data analyses for the five indicators for which data were available (life expectancy, mortality rate, youth suicide rate, infant mortality rate and diabetes prevalence) and programming developments on the last two (childhood obesity and practising, certified First Nations health care professionals). This update has shown improvement in the life expectancy of Status Indians at birth (indicator #1) and in the successful slowing of the increase in the diabetes prevalence rate (indicator #5). Age-standardized mortality rate (indicator #2) and youth suicide rate (indicator #3) have both improved since the baseline year but not since the last update. Unfortunately, data also show that the infant mortality rate (indicator #4) has increased and is currently higher than it was at the last update. Finally, there has been substantial progress in developing baseline data and ongoing mechanisms for collecting data to monitor both childhood obesity and the number of practising, certified First Nations health care professionals in BC (indicators #6 and #7).

Overall, this interim update is an opportunity to assess progress on improving the health status of First Nations in BC, and to determine progress on meeting the targets set out in the TCA:FNHP. Progress shown here indicates that infant mortality rate, age-standardized mortality rate, and life expectancy are not currently projected to meet the targets and that programming and initiatives that support these outcomes should be assessed and revised as needed to be more effective. Programming and initiatives aimed at reducing youth suicide appear to have had positive effects and should be celebrated and leveraged to build on this momentum and ensure even greater success in future years. Similarly, the diabetes prevalence rate is projected to reach its target and is an area to recognize, celebrate, and leverage the successes seen over the last few years. A more detailed assessment of targets within the TCA:FNHP and related achievements will be presented in the final interim update in 2017.

# Appendix A: Data Source – The First Nations Client File

The First Nations Client File (FNCF) is the best available method to access accurate health information for First Nations people in BC. The file accesses information that identifies those Status Indians and any of their unregistered children for whom entitlement-to-register can be determined and who have had a BC Services Card and Provincial Health Number and were residing in BC. This serves as the denominator, or Status Indian population, used in analyses throughout this report.

The FNCF is not an independent database: it is the product of a record linkage between an extract of the Aboriginal Affairs and Northern Development Canada Indian Registry, the BC Ministry of Health Client Registry, and subsequent probabilistic matching. The Personal Health Number enables linking to other datasets. For this report, linkages were made with three datasets within the Ministry of Health's HealthIdeas data warehouse: the Discharge Abstract Database, Medical Services Plan (physician billing), and PharmaNet (pharmacy dispensing).

# **Governance of the First Nations Client File**

The FNCF is governed by the Data and Information Planning Committee, which consists of representatives from the First Nations Health Authority, BC Ministry of Health, and Health Canada. The Committee meets monthly to review FNCF data access requests and to develop policy regarding health data linkages. The Committee has established processes and procedures for the submission and review of FNCF data access requests, balancing the need for high-quality First Nations health data with the need to protect individual and community privacy and to respect the principles of First Nations health information governance. First Nations health information governance refers to the structure, process, and protocols by which First Nations in BC have access to First Nations data and ensures influential involvement in decision-making regarding the appropriate and respectful collection, use, disclosure, and stewardship of that information.

This governance structure also recognizes that such information is integral to First Nations policy, funding, and health outcomes. The intended use of the FNCF cohort is to provide information about the health and well-being of First Nations people to support health planning, surveillance, and evaluation.

## **Data Challenges and Limitations**

As with any data analyses, this report has been subject to some challenges and limitations with the data presented. First, the datasets are live and are therefore subject to change as cases are resolved and/or corrected retroactively. Therefore, while consistent methodology is applied for interim reports, data are re-run and presented again in the current report. Second, since different datasets employ different methodologies for identifying Aboriginal people in BC and Canada, they can have different estimates of population denominators. The population denominator for this report was generated by the definition described earlier, which is the most accurate measure available at the current time. Third, there is a possibility that data on deaths that occur outside of a specified jurisdiction will be missed, which can result in seemingly long-lived cohort members. To overcome this, the data for this cohort is trimmed of individuals displaying unlikely ages for analysis purposes. Fourth, the FNCF count of Status Indians in BC is dependent upon an individual's decision to register as a Status Indian, and legislative entitlement changes can affect an individual's eligibility to have status if they decide to register. As a result, the population within the FNCF may change from year to year for reasons other than births, deaths, and migration. In addition to these issues, the availability of the FNCF is dependent upon the availability and quality of the datasets required for the linkages.d

<sup>&</sup>lt;sup>d</sup> The lack of availability of Vital Statistic data delayed the linkages for the FNCF and production of this interim report by one year.

## **References**

<sup>1</sup> Statistics Canada. Number and distribution of the population reporting an Aboriginal identity and percentage of Aboriginal people in the population, Canada, provinces and territories, 2011 (table). Aboriginal Peoples in Canada: First Nations People, Métis and Inuit. National Household Survey 2011 [Catalogue no. 99-011-X2011001]. Ottawa, ON: Minister of Industry; 2013 [cited 2015 Oct 28]. Available from: <a href="http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.pdf">http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.pdf</a>.

<sup>2</sup> Statistics Canada. Distribution of First Nations people, First Nations people with and without registered Indian status, and First Nations people with registered Indian status living on or off reserve, Canada, provinces and territories, 2011 (table). Aboriginal Peoples in Canada: First Nations People, Métis and Inuit. National Household Survey 2011 [Catalogue no. 99-011-X2011001]. Ottawa, ON: Minister of Industry; 2013 [cited 2015 Oct 28]. Available from:

http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.pdf