

Provincial Health Officer's Special Report

The Health and Well-being of the Aboriginal Population

Interim Update

October 4, 2012

A report from the Provincial Health Officer,
prepared in order to meet the reporting requirements
of the 2005 Transformative Change Accord



Office of the
Provincial Health Officer

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INTRODUCTION

In 2001, the British Columbia Provincial Health Officer (PHO) issued a report on the health of Aboriginal people entitled *The Health and Well-being of Aboriginal People in British Columbia*. This report highlighted significant gaps in health outcomes between Aboriginal people and other BC residents, and made recommendations that were endorsed by BC First Nations.

In March 2005, the Province of British Columbia and First Nations leaders 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 *Transformative Change Accord (TCA)*, which recognized the need to strengthen relationships on a government-to-government basis, and affirmed the parties' commitment to close the gaps in education, health, housing, and economic opportunities over the next ten years.

Building on the TCA, the *Transformative Change Accord: First Nations Health Plan (TCA: FNHP)* was developed by the First Nations Leadership Council and the Province, and was released in November 2006. The TCA: FNHP identified priority actions to close the health gap between First Nations and other BC residents. First Nations and the Province will be held jointly accountable for the outcomes of this plan. The plan identified 29 specific actions in four areas, with seven performance indicators that would be tracked to measure progress in closing the health gap and improving the health of the First Nations population in BC. These seven key indicators are:

- life expectancy at birth;
- mortality rates (deaths due to all causes);
- Status Indian youth suicide rates;
- infant mortality rates;
- diabetes rates;
- childhood obesity; and
- practising, certified First Nations health care professionals.

The PHO is directly responsible for two actions in the TCA: FNHP: (1) appointing an Aboriginal physician to advise on Aboriginal health issues; and (2) issuing Aboriginal health status reports every five years, with interim updates every two years.

In 2007, Dr. Evan Adams was appointed as an Aboriginal physician advising on Aboriginal health issues, and on April 1, 2012, the Government of BC appointed him as Deputy PHO to work alongside Dr. Perry Kendall, PHO, and Dr. Eric Young, Deputy PHO. Dr. Adams has specific responsibilities for monitoring and reporting on the health of Aboriginal people in BC and for tracking the progress of these performance measures.

The PHO issued the first interim update on Aboriginal health and well-being in BC in 2007. A more extensive report was released in 2009, as the 2007 Provincial Health Officer's Annual Report, *Pathways to Health and Healing – 2nd Report on the Health and Well-being of Aboriginal People in British Columbia*. According to this report, some progress has been made in improving the determinants of Aboriginal health status and health outcomes since 2001. Despite this progress, Aboriginal people in BC continue to experience a higher incidence of poor health, and gaps in health status in comparison to other residents of BC.

This report presents a second interim update of selected health status indicators. A detailed update on the health and well-being of Aboriginal women will be released in an upcoming Provincial Health Officer's Joint Annual Report entitled *Health and Well-being of Aboriginal Women in British Columbia – A Wellness Approach*.

TERMINOLOGY

The terminology used to refer to the Indigenous population in Canada has varied over the years. Aboriginal people are the descendants of the original inhabitants of North America. The *Constitution Act* recognizes three groups of Aboriginal people: Indian, Inuit, and Métis.

“First Nations” has largely replaced the term “Indian” as the terminology preferred by many Aboriginal people in Canada. “Indian” is still used when referring to legislation or government statistics. First Nations people are often considered to be members of a First Nation band or tribe. First Nations refers to both Status Indians and Non-Status Indians. Status Indians are 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.

The Inuit are a distinct population of Aboriginal people and are registered under a 1924 revision to the *Indian Act*. The Inuit live primarily in Nunavut, the Northwest Territories, northern Labrador, and Quebec.

The Métis population consists of people of mixed First Nation and European ancestry who identify themselves as Métis, and are distinct from Status Indian people, Inuit, and non-Aboriginal people. Most Métis live in Alberta, Saskatchewan, or Manitoba. Unlike Status Indians and Inuit, the Métis are not entitled to the provisions of the *Indian Act*.

According to the 2006 Canadian Census, there were 196,075 Aboriginal people living in BC in 2006. Of these individuals, 129,580 were North American Indian, 59,445 were Métis, 795 were Inuit, and 6,255 identified with multiple or other groups.^{1,2}

Although there is considerable interest in the health status of all Aboriginal people (including Métis, Non-Status, and Inuit), in most cases relevant data are only available for Status Indians. The data presented in this report represent an estimated 157,860 Status Indians, or approximately 3.5 per cent of BC’s total population. This enumeration differs from Canadian Census data because Status Indian data presented in this report were obtained from the British Columbia Vital Statistics Agency, and Population Health Surveillance and Epidemiology in the BC Ministry of Health, through the First Nations Client File (see next section).

As in the 2001 and 2007 PHO reports, findings have been extrapolated from this population with the assumption that they are relevant to the Non-Status Aboriginal population in BC. The focus of the TCA: FNHP on First Nations people will help address health status issues for about two-thirds of the Aboriginal population in BC. Additional attention will be required to improve the health of Métis and other Aboriginal people whose needs are not directly addressed in this plan.

¹Statistics Canada, 2006 [cited 2012 Jul 30]. Available from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo60a-eng.htm>.

²It can be difficult to accurately determine the size of the Aboriginal population in BC. Canadian census data is based on self-identified reports; individuals who chose not to identify as Aboriginal are not captured in these statistics. Census statistics may also under-represent actual numbers due to non-participation, and some exclusion based on data collection methodology (e.g., people who are homeless or live in rooming houses).

FIRST NATIONS CLIENT FILE

Creating and Accessing First Nations Client File Data

The First Nations Client File (FNCF) is the best method of access to accurate health information for the identifiable majority of First Nations people residing in BC. It is a data file, or cohort of Status Indians, and their unregistered children for whom entitlement-to-register can be determined. The FNCF was first created in 2011. Prior to the FNCF, data were abstracted from the Indian Registrar and the Status Verification File.

The FNCF is not an independent database, but rather is the product of a record linkage between an extract of the Aboriginal Affairs and Northern Development Canada Indian Registry and the BC Ministry of Health Client Registry and subsequent probabilistic matching. The Personal Health Number contained in the FNCF enables linking to other administrative databases.

The FNCF is governed by a Tripartite Data and Information Planning Committee that 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. 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 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 are influentially involved in decision-making regarding the appropriate and respectful collection, use, disclosure, and stewardship of that information. This governance also recognizes that such information is integral to First Nations policy, funding, and health outcomes. The intended use

of the FNCF cohort is for research and analysis of information linked to First Nations people.

Data Challenges

Since the FNCF is built using a record linkage between government registries, it is subject to the limitations of data linkage methods. For example, one immitigable limitation is gender bias due to differences in name traditions between the genders (i.e., females tend to change their names more often than men and so a name is a less certain identifier for females). Another limitation, which can be mitigated, is missed extra-jurisdictional death events. These can result in seemingly long-lived cohort members. To mitigate this tendency, the cohort is trimmed of individuals displaying unlikely ages, until a death event is recorded.

The FNCF is a representative cohort of the Status Indian populace residing in BC and is used to prepare a congruent population denominator for studies where the identity of BC-resident First Nations is solely determined using the file. However, the FNCF may not be the best choice for a population denominator where identity is determined using other methods such as self-identification or other proxy methods. Furthermore, the file's veracity is dependent on (1) the effectiveness of data linkage methods; (2) an individual's decision to register as a Status Indian; and (3) legislative entitlement changes affecting an individual's eligibility to have recognizable Status. As a result, the population within the FNCF may change from year to year for reasons other than births, deaths, and migration.

REPORT CONTENTS

The remainder of this report provides an update from the baseline year of 2005 on the five health indicators identified in the TCA: FNHP for which data were available. Data for some of these indicators are preliminary and are therefore subject to change.³

³ Throughout this report, confidence intervals have been added to the charts. A confidence interval is a statistical technique that measures the range of values estimated in the sample of a population. A 95 per cent confidence interval means that 19 times out of 20, the true values lies between the horizontal bars shown as (I) on the charts. Because of the fluctuations in the small numbers of events, the use of confidence intervals helps to determine whether changes from year to year are more likely to be due to chance alone or are reflecting a real change.

FIRST NATIONS HEALTH INDICATORS

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 was a reduction in the gap in life expectancy between Status Indians and other British Columbians by 35 per cent, by 2015.

Figure 1 illustrates life expectancy at birth for five-year aggregate periods from 1993–1997 to 2006–2010. Life expectancy of Status Indians has improved over the past decade, and has increased since the baseline from 73.8 years (2001–2005) to 74.7 years (2006–2010). This increase of 0.9 years for Status Indians was larger than the increase for other BC residents (0.5 years) in the same period.

If actual increases in life expectancy continue according to current projections, the gap will narrow with a life expectancy of 75.3 years for Status Indians in 2015 (Figure 2). Despite this increase, a considerable gap is still projected between the life expectancy for Status Indians and for other BC residents. To achieve the targeted 35 per cent reduction in this gap, the life expectancy of Status Indians in BC must increase to 76.8 years by 2015.

Figure 1

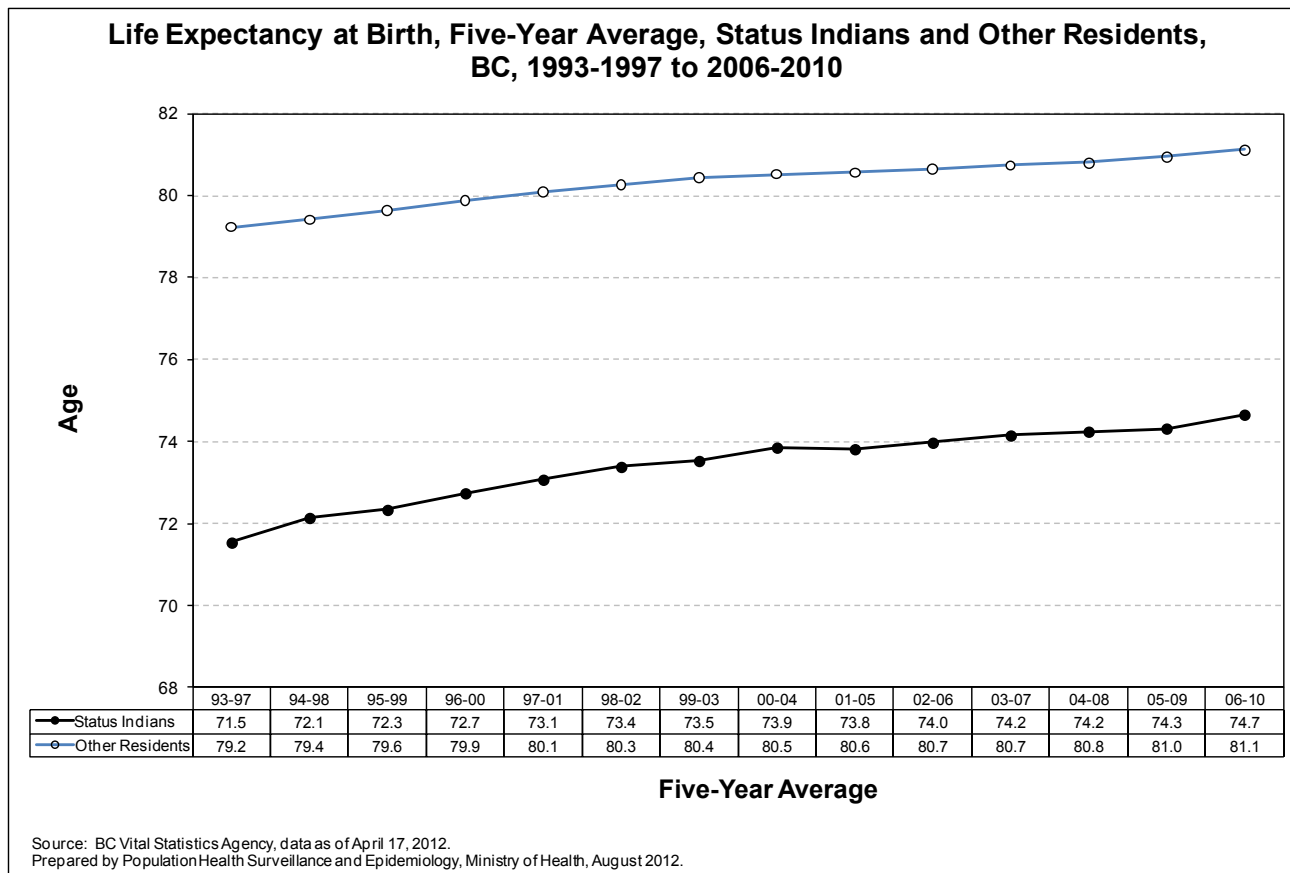
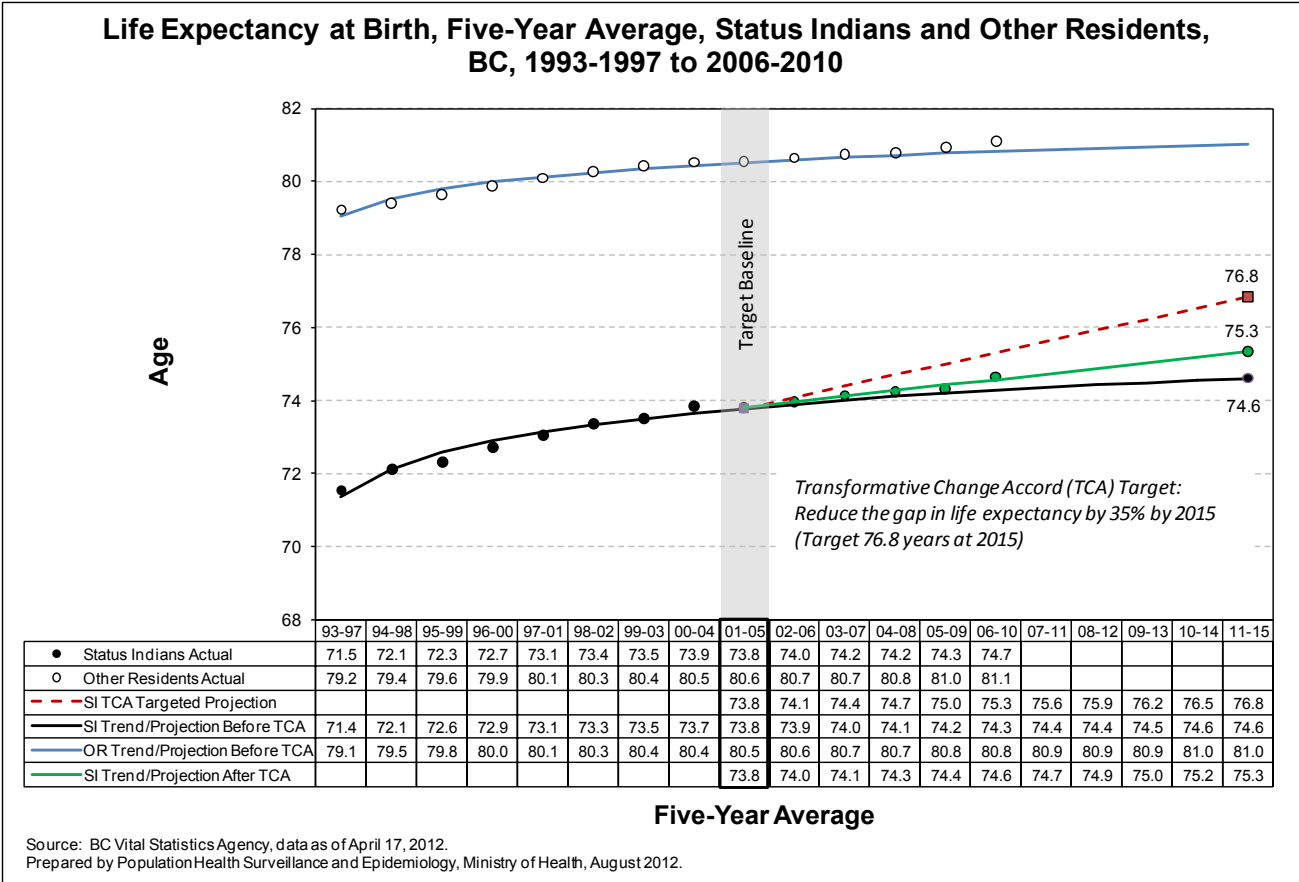


Figure 2



Mortality Rate

Age-standardized mortality rate (ASMR) measures the number of deaths due to all causes, expressed as a rate per 10,000 people. This measure allows for comparison in death rates between Status Indians and other BC residents by adjusting for differences in population age distribution.

The target identified in the TCA: FNHP was a reduction in the gap in mortality rates between Status Indians and other BC residents by 35 per cent, by 2015.

While ASMR for Status Indians has decreased, the rates for other BC residents has also decreased quite steadily; therefore, while there has been improvement in ASMR for Status Indians, a considerable gap between Status Indians and other BC residents has persisted. If the current trend continues, the projected ASMR in 2015 will have decreased by 3.1 per 10,000 down to 64.5 per 10,000 (Figure 4). To achieve the targeted 35 per cent reduction in mortality rate gap, the ASMR for Status Indians in BC must further decrease to 58.1 per 10,000.

Figure 3 illustrates ASMR each year from 1993 to 2010. ASMR for Status Indians has fluctuated over time, but decreased by 11.9 deaths per 10,000, from 88.2 in 2005 to 76.3 in 2010.

Figure 3

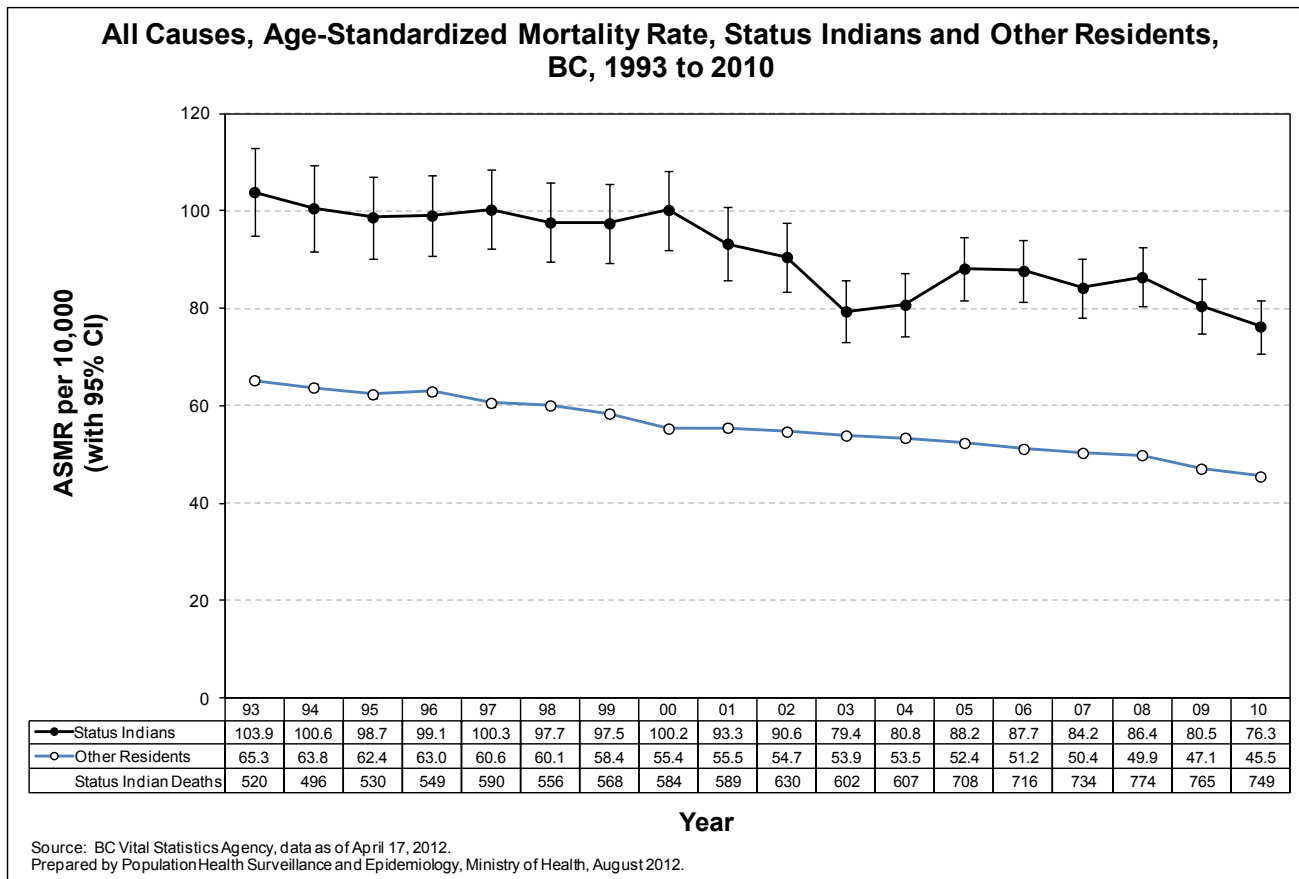
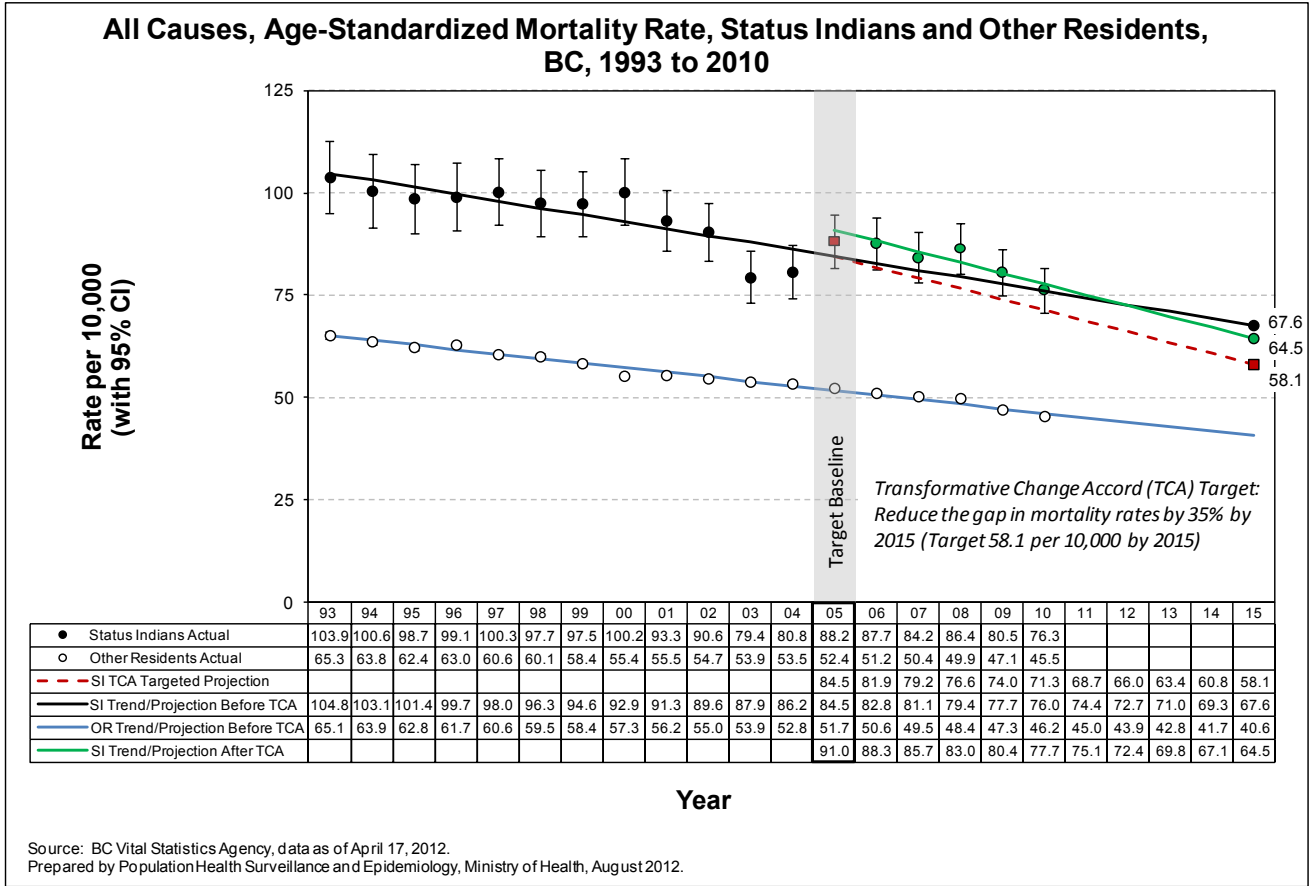


Figure 4



Youth Suicide Rate

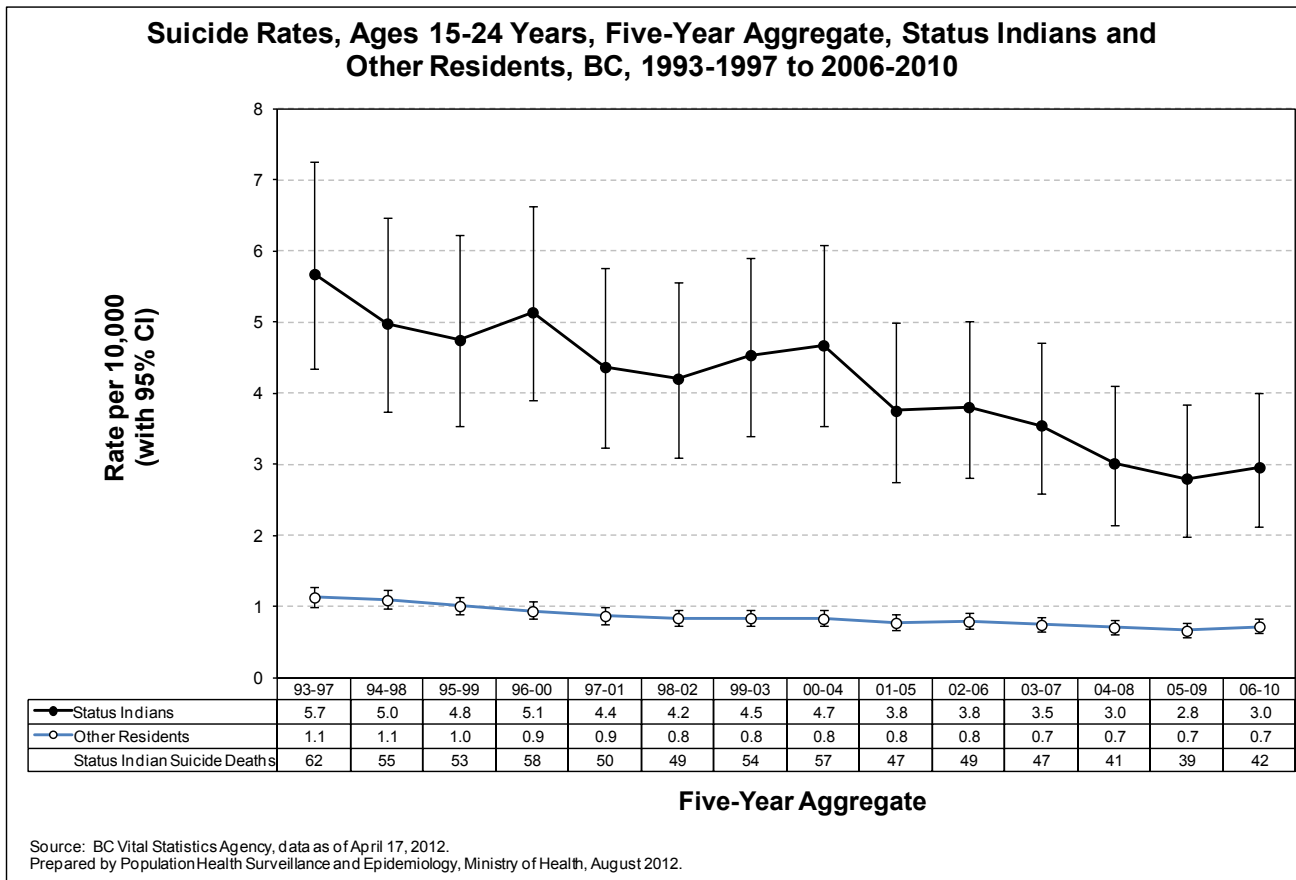
Youth suicide rates represent deaths among 15- to 24-year-olds who deliberately take their own lives, expressed as a rate per 10,000 people.

The target identified in the TCA: FNHP was a reduction in the gap in youth suicide rates between First Nations and other BC residents by 50 per cent, by 2015.

Figure 5 presents youth suicide rates for five-year aggregate periods from 1993–1997 to 2006–2010. The Status Indian youth suicide rate has fluctuated during this time, but does show an overall decrease, including a reduction from 3.8 per 10,000 in the baseline aggregate period (2001–2005) to 3.0 per 10,000 in 2006–2010.

Until the most recent five-year aggregate period (2006–2010), the decline in youth suicide rate projected would have been sufficient to meet the 2015 target. If this rate of decline can be regained, it may still be possible to achieve a 50 per cent reduction in Status Indians youth suicide down to 2.2 per 10,000 by 2015 (Figure 6). If this decline cannot be regained, the downward trend will level off at 2.6 per 10,000, and fall short of the target.

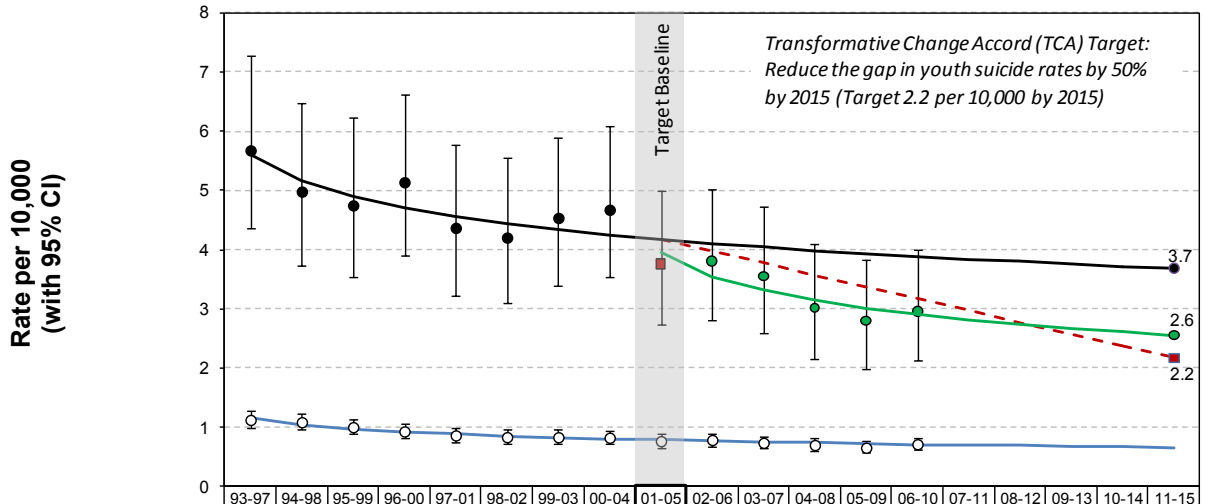
Figure 5



⁴ While the TCA: FNHP includes two targets to improve health outcomes of “Status Indians” and three targets to improve the health of “First Nations,” for reasons described earlier in the document regarding the FNCF population data, all analyses presented here refer to the health outcomes of Status Indians.

Figure 6

Suicide Rates, Ages 15-24 Years, Five-Year Aggregate, Status Indians and Other Residents, BC, 1993-1997 to 2006-2010



	93-97	94-98	95-99	96-00	97-01	98-02	99-03	00-04	01-05	02-06	03-07	04-08	05-09	06-10	07-11	08-12	09-13	10-14	11-15
● Status Indians Actual	5.7	5.0	4.8	5.1	4.4	4.2	4.5	4.7	3.8	3.8	3.5	3.0	2.8	3.0					
○ Other Residents Actual	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7					
- - - SI TCA Targeted Projection									4.2	4.0	3.8	3.6	3.4	3.2	3.0	2.8	2.6	2.4	2.2
— SI Trend/Projection Before TCA	5.6	5.2	4.9	4.7	4.6	4.4	4.3	4.2	4.2	4.1	4.0	4.0	3.9	3.9	3.8	3.8	3.8	3.7	3.7
— OR Trend/Projection Before TCA	1.2	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
— SI Trend/Projection After TCA									4.0	3.5	3.3	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.6

Five-Year Aggregate

Source: BC Vital Statistics Agency, data as of April 17, 2012.
 Prepared by Population Health Surveillance and Epidemiology, Ministry of Health, August 2012.

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 was a reduction in the gap in infant mortality rates between First Nations and other BC residents by 50 per cent, by 2015.

Figure 7 illustrates infant mortality rate for five-year aggregates periods from 1993–1997 to 2006–2010. The infant mortality rate for Status Indians has decreased considerably over time. This trend shows an increased rate from 1997–2001 to 2000–2004, and a resulting net decrease of 0.5 per 1,000 over the last decade. Since the baseline year 2001–2005, infant mortality for Status Indians declined by 1.5 per 1,000 from 8.7 per 1,000 in 2001–2005 to 7.2 per 1,000 in 2006–2010.

While infant mortality rates for Status Indians declined from 2001–2005 to 2006–2010, current projections indicate that there may be only a small improvement by 2015, and the target reduction will not be met (Figure 8). If no changes are made to address these rates, the decreasing trends for both Status Indians and other BC residents are projected to level off, leaving a persistent gap between the two groups. To achieve the 50 per cent target reduction in this gap by 2015, the Status Indian infant mortality rate must decrease by an additional 1.5 per 1,000, down to 5.3 per 1,000.

Figure 7

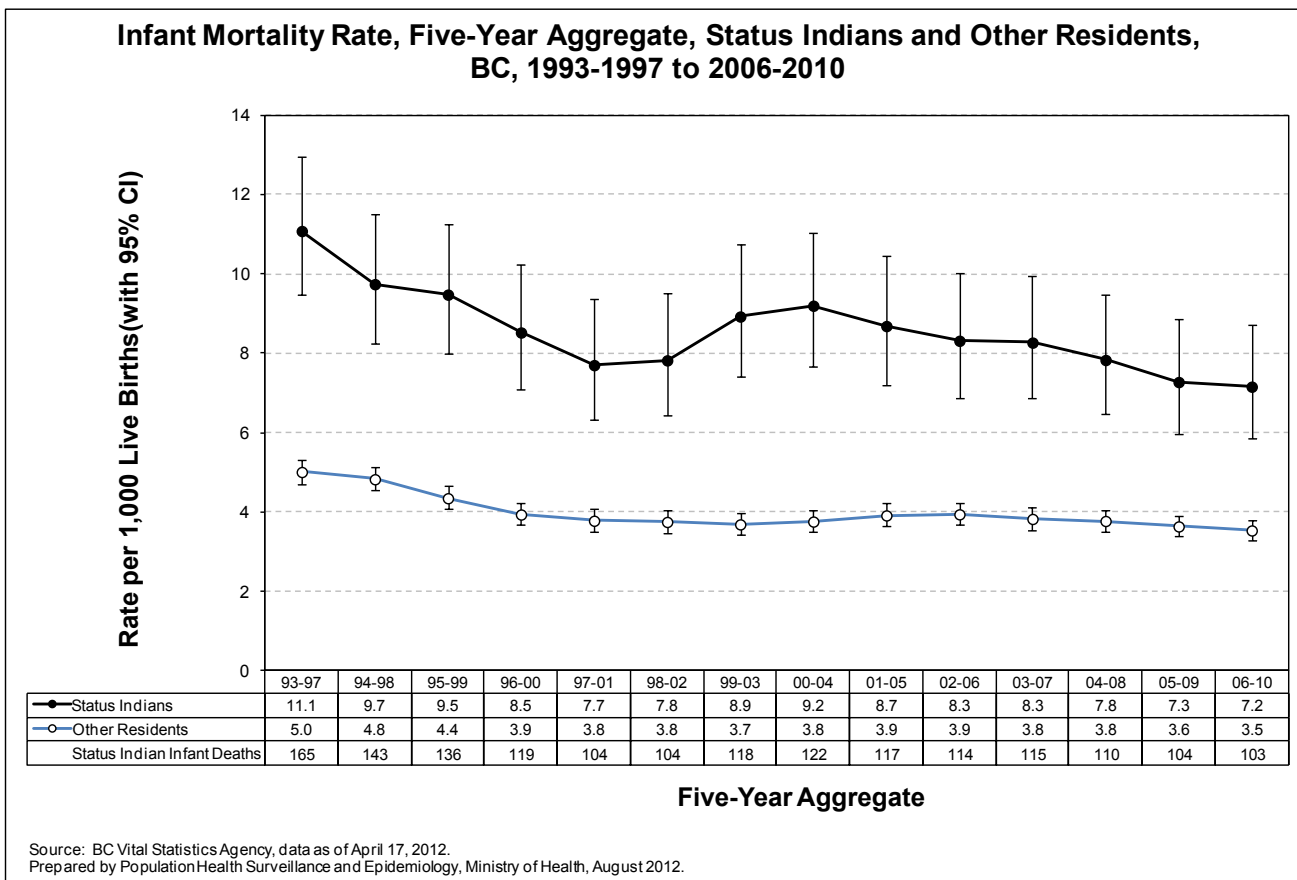
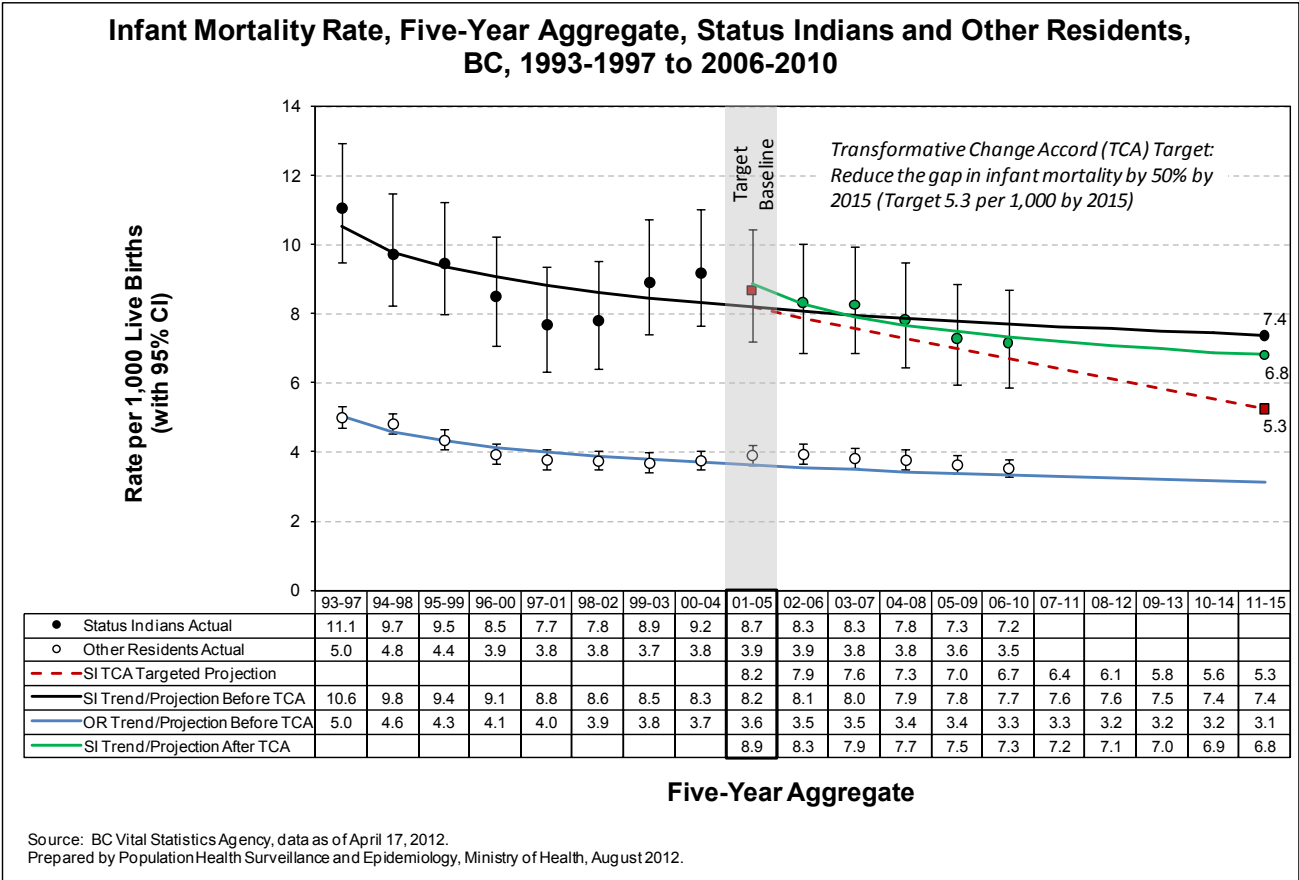


Figure 8



Diabetes

Diabetes is a chronic condition resulting from a deficiency or ineffective use of insulin in the body.

The target identified in the TCA: FNHP was to reduce the gap in the prevalence of diabetes between First Nations and other BC residents by 33 per cent, by 2015.

Increased testing for diabetes has now established a more accurate picture of diabetes in BC. In the short term, this will generate the appearance of an increase in the number of cases identified, and potentially mask a reduction in overall rates. In the longer term, this will help inform how and where to better focus prevention and management strategies.

Figure 9 illustrates that from fiscal year 1993/1994 to 2010/2011, both Status Indians

and other BC residents have experienced a steady increase in the age-standardized prevalence rates of diabetes. With a rate of 7.0 per 100 in the baseline fiscal year 2005/2006, increasing to 8.0 per 100 in 2010/2011, the count of Status Indian diabetes prevalent cases increased by over 40 per cent during this time from 6,215 to 8,762.

Based on Status Indian diabetes prevalence rates from fiscal year 2005/2006 to 2010/2011, the steep increase in diabetes rates may be beginning to slow. As Figure 10 demonstrates, if more work is done to continue to support and/or enhance a slower rate of increase in diabetes among Status Indians, it may be possible to achieve the targeted 33 per cent reduction in the gap between Status Indians and other BC residents by fiscal year 2015/2016.

Figure 9

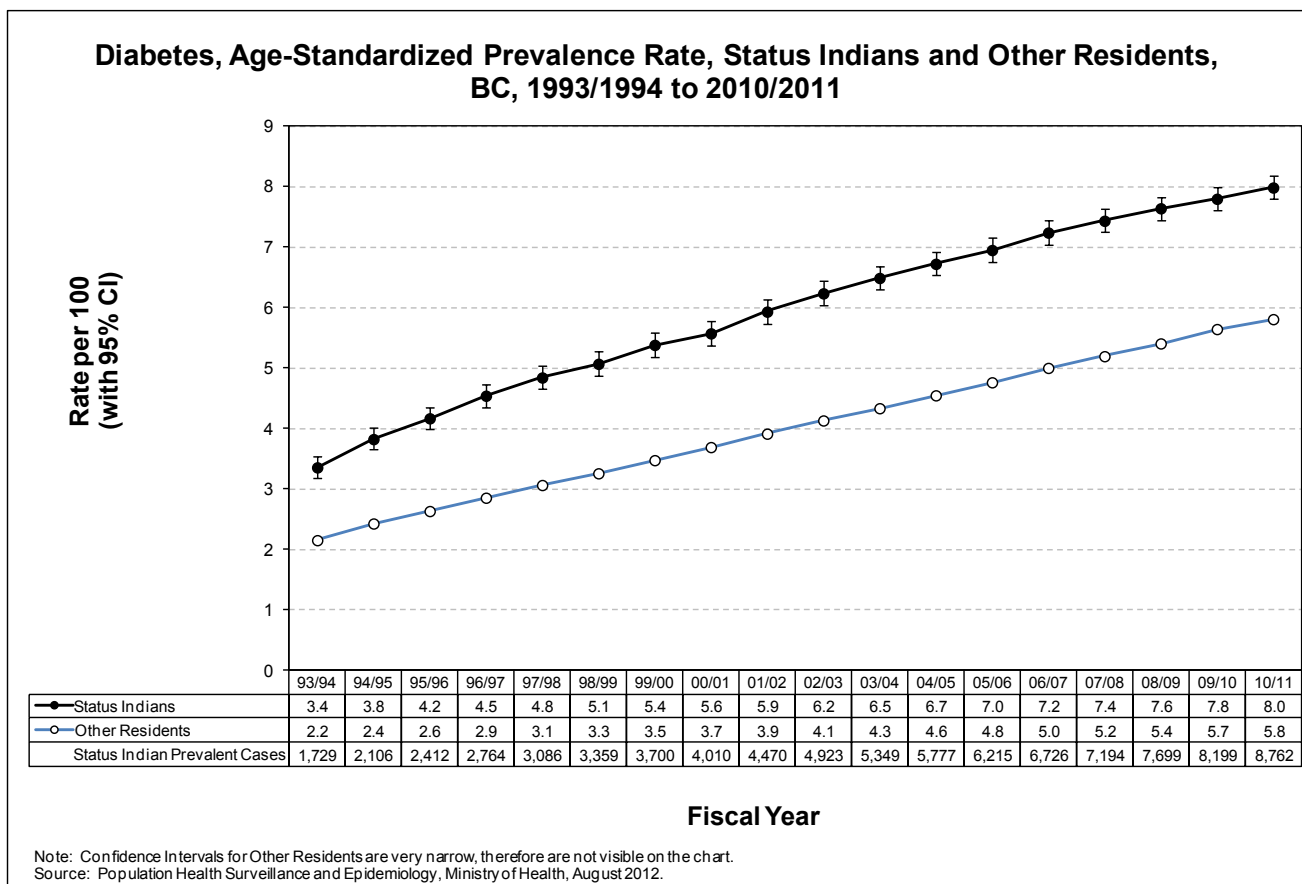
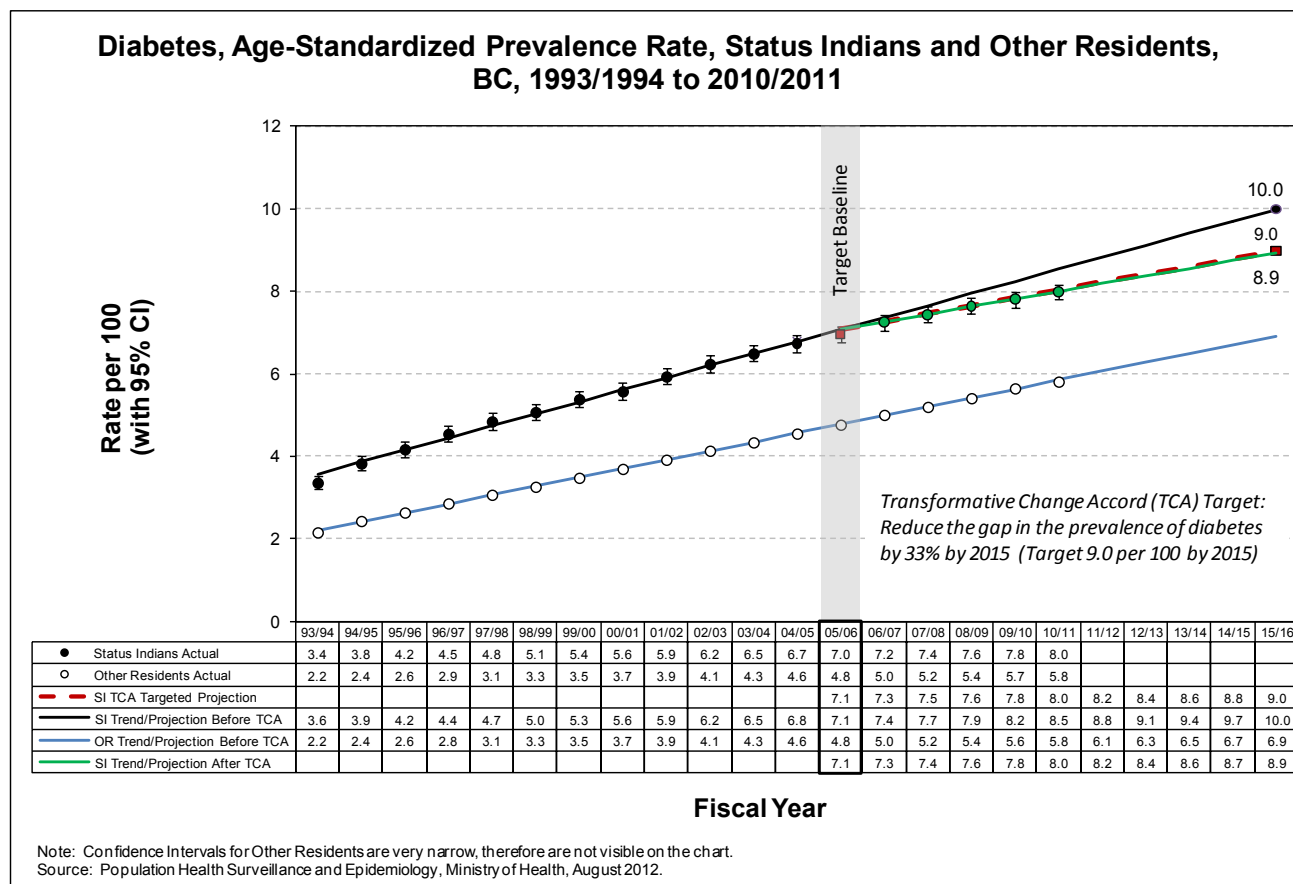


Figure 10



Childhood Obesity

There are currently no routinely collected measures of childhood obesity for First Nations in BC. One item for further action identified in the TCA: FNHP was to develop a baseline and an ongoing mechanism for collecting relevant data. Data regarding childhood obesity for on-reserve Status Indians will be available in the Fall of 2012, with the release of the BC Regional Health Survey Report by the First Nations Health Authority.

Practising, Certified First Nations Health Care Professionals

There is currently no accurate information to determine the number of certified health care professionals in BC who are First Nations, or to establish how many of those individuals are practising. Actions set out in the TCA: FNHP included the development of a baseline and an ongoing mechanism for collecting relevant data.

Preliminary plans are underway to develop a survey instrument and database of health care professionals, which would help to establish this baseline.

SUMMARY

For all performance indicators examined in this interim update report, there are persistent gaps in health outcomes between First Nations and other residents in BC. Despite these gaps, improvements have been made that reflect progress among these five indicators. Life expectancy, ASMR, and infant mortality rates have improved somewhat but more work is required to support continued improvement. Rates of youth suicide and diabetes prevalence have shown the greatest improvement and progress toward targets. Overall, more work is required to enhance all indicators and narrow these gaps to meet the targets by 2015.