NOVA SCOTIA

Health Promotion and Protection

Annual Accountability Report
Fiscal Year 2010-11

July 2011

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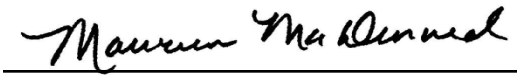
1.0 Accountability Statement

The accountability report of the Department of Health Promotion and Protection for the year ended March 31, 2011 is prepared pursuant to the *Finance Act* and government policies and guidelines. These authorities require the reporting of outcomes against Health Promotion and Protection's Statement of Mandate for the fiscal year 2010-11. The reporting of the Department of Health and Protection outcomes necessarily includes estimates, judgments and opinions by the management of Health Promotion and Protection.

We acknowledge that this accountability report is the responsibility of the management of Health Promotion and Protection. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in Health Promotion and Protection's 2010-11 Statement of Mandate.



Honourable Maureen MacDonald
Minister of Health Promotion and Protection

Kevin McNamara
Deputy Minister, Department of Health

2.0 Message from the Minister of Health Promotion and Protection

I'm pleased to present the 2010-11 Accountability Report for the Department of Health Promotion and Protection (HPP).

HPP worked with many partners across the province to develop and implement programs to promote good health, support early childhood development, prevent chronic disease and injury and protect Nova Scotians from emerging public health threats.

In 2010-11, our ongoing efforts to make Nova Scotians healthier, more physically active and safer did not waver. We continued to develop and implement new programs with that commitment in mind.

Some of our accomplishments over the past year include:

- Launching the Goodness in Many Ways social marketing campaign. This campaign, which was a partnership with the Heart and Stroke Foundation of Nova Scotia and the Canadian Cancer Society (Nova Scotia Division) focuses on encouraging Nova Scotians to eat more vegetables and fruit;

- Participating in a program to test Environment Canada's new Air Quality Health Index. Although Nova Scotia's Air Quality Health Index typically resides in the low risk category, this new system provided an additional means of notifying Nova Scotians when air pollution levels became elevated;

- Beginning work on a provincial childhood obesity strategy. This strategy will help to ensure our children are given a healthy start, and will promote healthy, active lifestyles and the consumption of healthy foods;

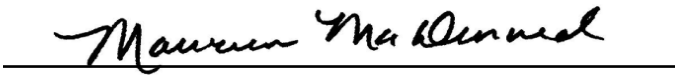
- Ensuring that everyone in our province had the opportunity to receive the influenza vaccine by making immunization free for all Nova Scotians;

- Supporting the Canada Winter Games, which were hosted by the Province of Nova Scotia in February. Staff from HPP were very involved in helping to organize this prestigious event. As well, officials from both HPP and the Department of Health worked hard to ensure that Nova Scotia was prepared to deal with any potential public health event associated with the Games;

- Providing funding to sport and recreation facilities and trail development to further increase opportunities for physical activity;

- Introducing legislation to better protect young people from the harmful effects of tanning beds. Under this legislation, people under 19 years of age are banned from using tanning beds, thus limiting their exposure to UV rays.

The beginning of 2011 will also be remembered for the merger of the former HPP and the Department of Health. Health is a continuum that requires a focus on both prevention and treatment. The merger better positions the new department to meet the needs of Nova Scotians and to improve their health in the long-term.



Honourable Maureen MacDonald
Minister of Health Promotion and Protection

3.0 Report Structure

The annual 2010-11 Accountability Report for HPP includes:
- The department's financial context; and
- The updated data for 2010-11 performance measures[1].

4.0 Department of Health Promotion and Protection – Financial Context

Item	2010-2011 Estimate ($thousands)	2010-2011 Actual ($thousands)	Variance Estimate/Actual ($thousands)
Executive Administration	3,318	2,828	490
Addictions Services	3,732	3,632	100
Corporate Services	3,157	2,702	455
Chronic Disease and Injury Prevention	3,037	2,984	53
Communicable Disease Prevention & Control	11,930	12,896	(966)
Environmental Health	633	645	(12)
Healthy Development	5,147	4,705	442
Health Services Emergency Management	223	191	32
Physical Activity, Sport and Recreation	19,917	37,083	(17,166)
Population Health Assessment and Surveillance	1,382	1,118	264
Volunteerism	408	293	115
District Health Authorities (DHAs) Funding	35,499	35,614	(115)
Total	**88,383**	**104,691**	**(16,308)**
Funded Staff (FTEs)	148	137	11
Staff Funded by External Agencies	(11)	(10)	(1)
Total FTE Net	**137**	**127**	**10**

[1] http://www.gov.ns.ca/hpp/about/business-plan.asp

Explanation for significant variances between 2010-11 Estimates and 2010-11 Actuals:

HPP spent $16.3 million or 18.5% more than budget. Building Facilities and Infrastructure Together (B-FIT) was over budget by $17.3M due to accelerated construction which was originally planned for future years. The PANORAMA[2] asset under construction, originally put on hold during the H1N1 pandemic, was re-examined and a determination reached that the project will not go forward at this time; the costs previously incurred resulted in an additional expenditure of $1.2 million. Also reflected were wage adjustments in the DHAs. These increases were offset by $1.2 million due to operational efficiencies and FTE vacancies as well as $1 million saving due to project timing delays.

The FTE vacancies are due to regular vacancies throughout the year.

5.0 Performance Measures

This section provides detailed information on the performance measures positioned for each of the department's four strategic outcomes recognizing that they are not mutually exclusive. The strategic outcomes are:

- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

In some cases, it is difficult to delineate only one strategic outcome for each performance measure and in many cases two, three or all four strategic outcomes apply to one performance measure. This approach demonstrates the integrated nature of our department's work.

In 2009-10 HPP underwent a performance measures review for a new five year business planning cycle (2010-15). The result of this review is a new suite of performance measures and targets for 2014-15 included in the department's 2010-11 Statement of Mandate.

A number of the performance measures included have directional rather than numerical targets. The reasoning for this approach considers the following factors:

- many of the performance measures are population level outcomes which are influenced by many factors that are beyond the control of this department
- rates may only change minimally each year and within the five year planning cycle

In all cases, the most current data available have been included. For some measures, however, these data may be a year or two old due to the cycle of data collection or surveying.

[2] PANORAMA is an integrated public health electronic information system.

Breastfeeding

Breastfeeding supports the healthy development of newborns by: contributing to healthy brain and nervous system development; protecting babies against infectious diseases; and enhancing emotional development. Beyond infancy, the benefits continue to contribute to protection against childhood cancers, diabetes, allergy, and Crohn's disease.

Initiation Rate: Percentage of Infants Receiving Breastmilk and/or Who Had Early Breast Contact

Strategic Outcomes:

- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:

- Improve the health status of mothers and babies by increasing breastfeeding initiation in Nova Scotia

Change in Measure:

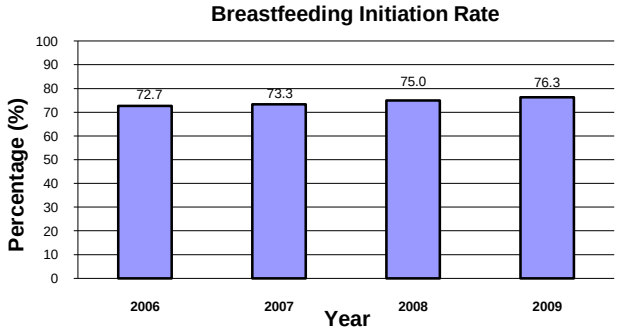
In 2009-10, breastfeeding initiation rate was determined using the Canadian Community Health Survey (CCHS). In the 2010-11 Statement of Mandate the Nova Scotia Atlee Perinatal database[3] replaced the CCHS. This database is administered by the Nova Scotia Reproductive Care Program of the then Department of Health. This change was made because the Atlee Perinatal database captures information on almost 100% of births in Nova Scotia where the CCHS looks only at a sample of Nova Scotian women that is often so small that the data cannot be accessed.

What Does the Measure Tell Us?

This measure is the percentage of infants receiving breastmilk and/or who had early breast contact.

Where Are We Now?

According to the Nova Scotia Atlee Perinatal Database, the percentage of initiation breastfeeding for Nova Scotia in 2006[4] was 72.7% and has shown a continuous rise to 76.3% in 2009[5].



[3] Nova Scotia Atlee Perinatal Database is administered by the Nova Scotia Reproductive Care Program (RCP). The database contains demographic variables, procedures, interventions, maternal and newborn diagnosis, morbidity and mortality information for all pregnancies and births occurring in Nova Scotia hospitals since 1988. Data are collected annually by physicians and/or nurses at Nova Scotia hospitals. The code for breastfeeding was revised in 2006 to capture breastfeeding initiation data.

[4] January 2006 was the first time that the Atlee database began using breastfeeding and breast contact measurements to determine breastfeeding initiation rates.

[5] There is a time lag in data availability. 2010 data are not available until near the end of 2011and all DHAs have not yet submitted their data.

Where Do We Want to Be in the Future? By 2014-15, Nova Scotia aims to continue its upward trend from the base year in the breastfeeding initiation rate.

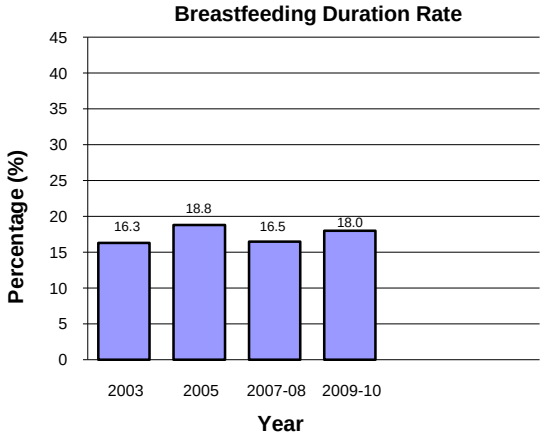
Percentage of Women Who Exclusively Breastfeed For At Least Six Months (Duration)

Strategic Outcomes:
- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:
- Improve the health status of mothers and babies by increasing breastfeeding duration in Nova Scotia

What Does the Measure Tell Us?
This measure is the percentage of women who indicated that the age of their baby was at least six months when they first added any other liquids or solid foods to the baby's feeds[6].

Where Are We Now?
According to the CCHS self-report data the percentage of women who exclusively breastfed for at least six months (duration) in Nova Scotia in 2003[7] was 16.3%, 18.8% in 2005, 16.5% in 2007-08[8] and 18.0% in 2009-10.



Where Do We Want to Be in the Future?
By 2014-15, Nova Scotia aims to continue its upward trend from the base year in its breastfeeding duration rate.

Related to breastfeeding initiation and duration rates, strategies to achieve these targets include:
- Capacity building for promotion, support and protection of breastfeeding through the DHAs, the IWK Health Centre, family resource centres and other community organizations
- Implementing and monitoring the Provincial Breastfeeding Policy
- Implementing a provincial breastfeeding education program for health care professionals
- Implementing a breastfeeding social marketing campaign
- Implementing the Baby-Friendly Initiative

[6] The 2010-11 Statement of Mandate indicated that the breastfeeding duration was for "at least six months", however, the data was inadvertently reported for "exactly six months" thereby excluding those who reported exclusive breastfeeding beyond six months. The data was re-run for the 2010-11Accountability Report and this explains the variation of the data.
[7] 2003 was selected as the base year as it was the first year that the CCHS asked breastfeeding duration questions related to this specific measure.
[8] Data related to this measure were collected every two years until 2007 when the data were collected annually with a smaller sample size. In order to be comparable to previous CCHS cycles, the yearly data were combined over two years. The latest CCHS data for breastfeeding duration are for 2009-10; and according to Statistics Canada Guidelines, these data have a high degree of sampling variability, and although they can be used, they should be used with caution.

Healthy Eating

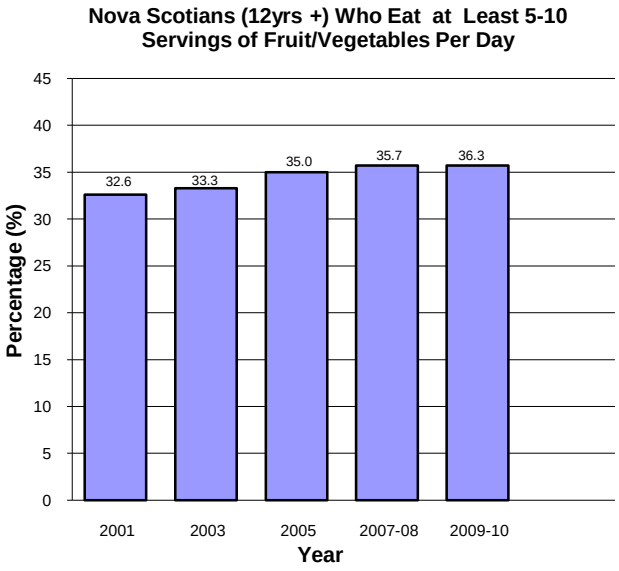
Percentage of Nova Scotia Population (12 yrs +) Who Report Eating at Least 5-10 Servings of Fruit/Vegetables Per Day[9]

Studies have shown the protective role that fruits and vegetables play in preventing chronic disease, including heart disease, stroke, type 2 diabetes, hypertension and many cancers. Consumption of fruits and vegetables remains a key public health message.

Strategic Outcomes:
- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:
- Increased affordability, accessibility, availability and consumption of fruits and vegetables for all Nova Scotians

What Does the Measure Tell Us?
This measure is the percentage of the Nova Scotian population (12 years and older) who report eating at least the recommended 5-10 servings of fruits and vegetables per day. These data include those that met and exceeded the recommended servings. The data are drawn from self-reported data from CCHS[10].



Change in Measure
Since the release of the 2010-11 Statement of Mandate, this measure has been modified slightly to be more representative of its target. Rather than providing data related to the percentage of the population (12 years and older) who only reported eating the recommended servings, the data now capture those that meet and exceed the minimum recommended servings.

Where Are We Now?
Between 2001[11] and 2007-08, the percentage of Nova Scotians (12 years and older) that consumed at least 5-10 servings of fruits and vegetables per day rose from 32.6% to 36.3%.

[9] The Canada Food Guide recommendation for 5-10 servings/per day of fruit and vegetables has changed since the development of the CCHS question. Changes to the CCHS will likely reflect the new "Eating Well with Canada's Food Guide" in the future, however, the timing for this change is still undetermined.
[10] CCHS self-reported data were initially collected every two years then yearly in 2007 using a smaller sample size. In order to be comparable to previous CCHS cycles, the yearly data are combined every two years.
[11] The base year was set at 2001 because this is a population outcome that will take time to see significant shifts and it predates the release of the Healthy Eating Nova Scotia Strategy.

Where Do We Want to Be in the Future?
By 2014-15, Nova Scotia aims to continue an upward trend from its base year in the percentage of the population (12 years and older) who report eating at least 5-10 servings of fruits and vegetables per day.

Strategies to achieve this target include:
- Continued implementation of the Healthy Eating Nova Scotia Strategy (*HENS*)
- Ensuring that any nutrition guidelines produced for government funded or regulated food service operations include efforts to increase access to fruit and vegetables
- Supporting the development of community based initiatives that increase knowledge and skills related to preparing fruit and vegetables
- Complementing work underway at the national level for fruit and vegetable promotion with activities at the local level
- Developing policy to ensure access to affordable fruit and vegetables by all Nova Scotians
- Working with the provincial Fruit and Vegetable Working Group and the *HENS* Strategy Steering Committee on identified priorities for fruit and vegetable consumption
- Working to inform the Childhood Obesity Prevention Strategy to include policy and initiatives to improve healthy eating including increases to fruit and vegetable consumption

Percentage of Food Insecure Households

Food security[12] is a prerequisite for and fundamental determinant of health. Income-related access to food is the largest contributor to food insecurity and Nova Scotia has among the highest rates of income-related household food insecurity in the country.

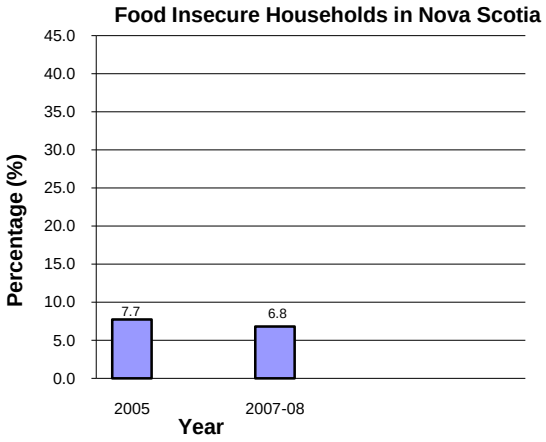
Strategic Outcomes:
- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:
- Improved access to healthy foods for all Nova Scotians by reducing the number of food insecure households

What Does the Measure Tell Us?
This measure is the percentage of food insecure households in Nova Scotia. The data are drawn from self-reported data from CCHS[13]. It is the number of respondents who report some form of food insecurity excluding respondents who reported "not stated".

[12] Food security is identified in the provincial Healthy Eating Strategy as one of its four priority areas for action. Food security means that all people, at all times, have access to nutritious, safe, personally acceptable and culturally appropriate foods that are produced, procured and distributed in ways that are sustainable, environmentally sound and socially just.
[13] CCHS self-reported data were initially collected every two years then yearly in 2007 using a smaller sample size. In order to be comparable to previous CCHS cycles, the yearly data are combined every two years.

Where Are We Now?
In 2005[14], there were 7.7% insecure households in Nova Scotia. There was a slight decline to 6.8% in 2007-08[15].



Where Do We Want To Be In The Future?
By 2014-15, Nova Scotia aims to continue a downward trend from the base year in the percentage of food insecure households[16]. Strategies to achieve this target include:

- Continuing to support implementation of the provincial Healthy Eating Nova Scotia strategy
- Continuing to work in partnership with the Nova Scotia Food Security Network and others interested in promoting and supporting food security
- Continuing to monitor income-related food insecurity
- Working to inform the Childhood Obesity Prevention Strategy to include policy and initiatives to improve healthy eating including increases to fruit and vegetable consumption

Smoking

High smoking rates translate into high rates of chronic disease. Reducing youth smoking is a key to the prevention of smoking related illnesses and to the promotion of a healthy population. This is especially important when considering that habits during the teen and young adult years tend to be maintained well into adult life.

Percentage of Youth Aged 15 to 19 Who Smoke

Strategic Outcome:
- Improved health outcomes for children and youth

Intended Outcome:
- Reduce tobacco use among youth aged 15 to 19 years old

What Does the Measure Tell Us?
This measure describes the percentage of Nova Scotian youth (aged 15 to 19 years) who reported daily and non-daily smoking at the time of CTUMS[17] as a percentage of the total provincial population aged 15 to 19 years.

[14] Baseline is established at 2005 because in the 2005 CCHS 3.1 survey, the food insecurity questions were changed and therefore not comparable with previous data.
[15] In 2009-10, CCHS introduced a modified food insecurity variable different from the 2005 and 2007-08 variable used in this report, therefore 2009-10 data cannot be compared to the previous years' data. This change in the performance measure will be examined to determine future use.
[16] This performance measures target will also need to be examined.
[17] Canadian Tobacco Use Monitoring Survey is a telephone self-report survey based on the calendar year. 2010 data were not available at the time this report was completed.

Where Are We Now?
According to CTUMS, in 2009, 14% of Nova Scotia's youth (aged 15 to 19 years) smoked. 2009 was selected as the base year as the impact of the renewed Comprehensive Tobacco Control Strategy will begin with its 2010 implementation.

Where Do We Want to Be in the Future?
By 2015, Nova Scotia aims to achieve a 10% smoking prevalence rate for 15 to 19 year olds.

Percentage of Young Adults Aged 20 to 24 Who Smoke

Strategic Outcomes:
- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:
- Reduce tobacco use among young adults aged 20 to 24 years old

What Does the Measure Tell Us?
This measure describes the percentage of the Nova Scotian population aged 20 to 24 years who reported daily and non-daily smoking at the time of CTUMS[18] as a percentage of the total provincial population aged 20 to 24 years.

Where Are We Now?
According to CTUMS, in 2009, 30% of Nova Scotia's young adults (aged 20 to 24 years) smoked. 2009 was selected as the base year as the impact of the renewed Comprehensive Tobacco Control Strategy will begin with its 2010 implementation.

Where Do We Want to Be in the Future?
By 2015, Nova Scotia aims to achieve a 20% smoking prevalence rate for the population of young adults aged 20 to 24 years.

Percentage of Population Aged 25 and Over Who Smoke

Strategic Outcomes:
- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

[18] Canadian Tobacco Use Monitoring Survey is a telephone self-report survey based on the calendar year. 2010 data were not available at the time this report was completed.

Intended Outcome:
- Reduce tobacco use among Nova Scotians 25 years and older.

What Does the Measure Tell Us?
This measure describes the percentage of the Nova Scotian population aged 25 years and over who reported daily and non-daily smoking at the time of CTUMS[19] as a percentage of the total provincial population aged 25 years and older.

Where Are We Now?
According to CTUMS, in 2009, 20% of Nova Scotians 25 years of age and older smoked. 2009 was selected as the base year as the impact of the renewed Comprehensive Tobacco Control Strategy will begin with its 2010 implementation.

Where Do We Want to Be in the Future?
By 2015, Nova Scotia aims to achieve a 15% smoking prevalence rate for the population of Nova Scotians aged 20 to 24 years old.

The implementation of the renewed Comprehensive Tobacco Control Strategy will help to achieve the targets for these three measures through the following actions:
- Improving sales to minors compliance rates
- Continuing social marketing campaigns
- Retaining high tobacco taxes and prices
- Preventing the tobacco industry from advertising
- Improving and broadening smoke-free places legislation

Injuries

Injury is the leading cause of death and disability during the first 45 years of life. It kills 425 Nova Scotians every year and costs our economy $518 million annually. It is a significant public health issue in Nova Scotia. In 2004, Nova Scotia became the first province in Canada to establish a government led and funded injury prevention strategy. In 2007, HPP partnered with Injury Free Nova Scotia and after consultation with stakeholders, a renewed strategy was released in 2009.

The degree to which there is large scale success in reducing injuries depends on a wide range of factors. The greatest impact will be realized when the root causes of injuries such as poverty, social exclusion, and harmful use of alcohol are addressed. These are just a few of the factors that create poor health and safety in Nova Scotia.

[19] Canadian Tobacco Use Monitoring Survey is a telephone self-report survey based on the calendar year. 2009 data were not available at the time this report was completed.

Rate of Injury Related Mortality

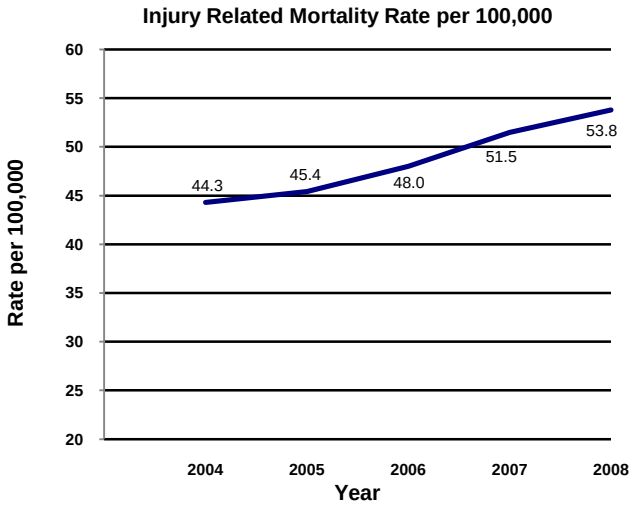
Strategic Outcomes:
- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:
- Reduction in injury related mortality

What Does This Measure Tell Us?
This measure describes the age-standardized injury related mortality rate per 100,000 of Nova Scotians[20].

Where Are We Now?
The base year of 2004 was selected because it was the year that the first Nova Scotia Injury Prevention Strategy was released. In 2004, the rate per 100,000 of injury related mortality in Nova Scotia was 44.3[21]. This rate has risen to 53.8 in 2008[22].

Where Do We Want To Be in the Future?
By 2015, Nova Scotia is aiming for a downward trend from its base year.



Rate of Injury Related Morbidity

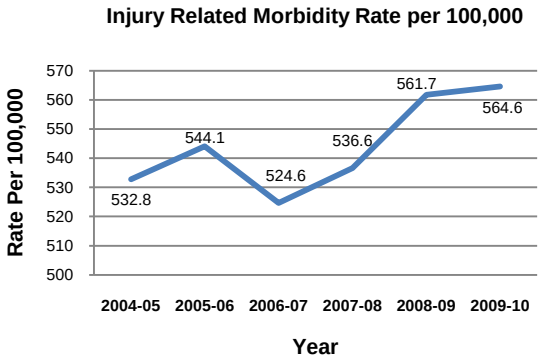
Strategic Outcomes:
- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:
- Reduction in injury related morbidity

[20] Data are collected through Vital Statistics with analysis by the Department of Health and based on the calendar year.
[21] The data are slightly different than those presented in 2010-11 Statement of Mandate as a small proportion of the related population were inadvertently double-counted in the Statement of Mandate.
[22] Data collection can be more than a year behind the reporting period as data are dependent on cleaning and analysis by Vital Statistics. The most current data are included.

What Does This Measure Tell Us?
This measure describes the age-standardized injury related hospitalization rate per 100,000 of Nova Scotians[23].

Where Are We Now?
The base year of 2004-05 was selected because it was the year that the first Nova Scotia Injury Prevention Strategy was released. In 2004-05, the rate per 100,000 of injury-related hospitalizations in Nova Scotia was 532.8[24]. There was a drop in 2006-07 to 524.6, however in 2009-10, it was 564.6[25].



Where Do We Want To Be in the Future?
By 2014-15, Nova Scotia is aiming for a downward trend from its base year.

The Nova Scotia Injury Prevention Strategy creates a foundation for reducing injuries to achieve these targets. The strategy identifies priority issues, populations, and settings for injury prevention:

- Priority issues:
  - road safety
  - seniors' falls prevention
  - suicide and attempted suicide
- Priority populations:
  - children and youth
  - seniors
  - other populations at increased risk of injury
- Priority settings:
  - schools, workplaces, homes, and communities
  - roads and streets, health care settings, and recreation and leisure environments

Physical Activity

Percentage of Municipalities Developing or Implementing a Comprehensive Physical Activity Plan

A comprehensive municipal physical activity plan aimed at inactive populations is an example of best practice based on evidence. This includes changes to policy, natural and built environments, public awareness, active transportation and program opportunities. These plans will lead to supportive environments that will increase population levels of physical activity over time. The Municipal Physical Activity Leadership Program (MPAL) provides cost sharing with municipal

[23] Data are drawn from the Canadian Institute for Health Information (CIHI) Hospital Discharge Abstract Database (DAD) with analysis by the Department of Health and based on the fiscal year.
[24] The data are slightly different than those presented in 2010-11 Statement of Mandate as a small proportion of the related population were inadvertently double-counted in the Statement of Mandate.
[25] Data collected can be more than a year behind the reporting period as data are dependent on cleaning and release by CIHI. The most current data are shown above.

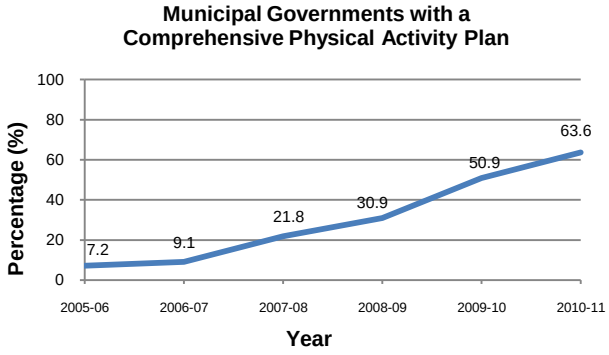
governments to employ one full time staff to develop and implement a comprehensive plan. The MPAL program builds on existing strong partnerships with municipal governments and the numerous levers municipal governments have on all types of physical activity.

Strategic Outcomes:
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities

Intended Outcome:
- Community capacity to create supportive environments for physical activity

What Does the Measure Tell Us?
This measure is the percentage of municipal governments with a staff person developing and implementing a comprehensive physical activity plan based on the total of 55 municipalities in Nova Scotia.

Where Are We Now?
The program was first introduced as a pilot program in 2005-06 with 7.2% of municipalities developing or implementing a comprehensive physical activity plan. The percentage has increased steadily each year to 35/55 or 63.6 % of municipalities in 2010-11.



Where Do We Want to Be in the Future?
By 2014-15, 100% of the municipalities will have comprehensive physical activity plans.
Strategies to achieve this target include:
- Maintaining support for and expanding the existing MPAL Program
- Increasing the number of municipalities in the program
- Raising awareness of municipal officials about the value of the program

Percentage of Students who Participate in After School Programs

After school programs, at school or in the community, between 3 and 6 PM have significant potential to increase the amount of physical activity in children and youth as this time period is their most sedentary.

Strategic Outcome:
- Improved health outcomes for children and youth

Intended Outcome:
- A contribution to improved physical activity rates for all students

What Does the Measure Tell Us?
This measure is a representative sample of the percentage of students in grades 3 and 7 participating in after school programs in the time period of 3 to 6 PM at least three days per week. The data are from the Keeping PACE (formerly PACY) surveillance initiative. *Keeping Pace* is a research initiative that identifies the physical activity and dietary intake of children and youth in Nova Scotia. Physical activity data are collected, using accelerometers, (motion detectors) every four years (2001-02, 2005-06, 2009-10), in a random sample of schools for Grades 3, 7 and 11.

Where Are We Now?
Nova Scotia's target for 2014-15 will be determined when the 2009-10 data are available. A delay from the research contractors has postponed the availability of the 2009-10 Keeping Pace data until December 2011.

Where Do We Want to Be in the Future?
When the target is determined, strategies to achieve this target, will include:
- Preparing an inventory of after school program opportunities to identify gaps
- Developing an after school plan in cooperation with other government departments at the municipal, provincial and federal levels and the voluntary sector

Percentage of Adults Reporting Physical Activity that Provides Health Benefits

Physical inactivity is a significant factor in the onset of chronic diseases and a major risk factor for heart disease, type 2 diabetes and depression. The best public health gains are obtained by moving people from sedentary to moderate levels of physical activity.

Strategic Outcome:
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities

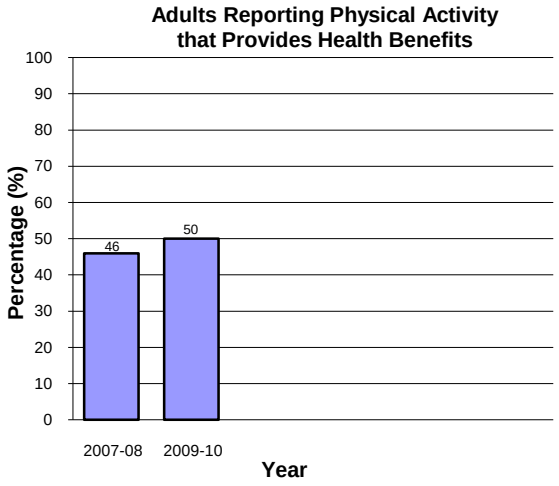
Intended Outcome:
- Improved physical activity rates for the adult population

What does the Measure Tell Us?
The CCHS[26] self-reported data collected annually classifies adults as: active (30 minutes of physical activity per day) and obtaining optimal health benefits; those who are moderately active (15-29 minutes of physical activity per day) and getting some health benefits; and inactive people (less than 15 minutes of physical activity per day) and getting very little, if any, health benefit.

[26] Canadian Community Health Survey self-reported data were initially collected every two years then yearly in 2007 using a smaller sample size. In order to be comparable to previous CCHS cycles, the yearly data are combined every two years.

Where Are We Now?

According to the CCHS in 2007-08[27], 46% of Nova Scotian adults, 20 years and older, reported being active or moderately active. This percentage increased by four percentage points to 50% in 2009-10.



Where Do We Want to Be in the Future?

In 2005 the Integrated Pan Canadian Healthy Living Strategy was approved by federal/provincial/territorial (FPT) Ministers. The strategy sets new targets for 2014-15. Based on these new targets, Nova Scotia aims to have 54% of its adult population active enough for health benefits by 2014-15. Strategies to reach this target include:

- Maintaining and expanding the MPAL Program
- Developing a strategy to improve walking, biking, and the built environment
- Developing a provincial recreational policy

Percentage of Girls Active Enough for Health Benefits

Physical activity is essential to the healthy development of all children and youth. There is a significant disparity between the levels of physical activities between girls and boys. The decrease in physical activity for girls occurs between Grade 3 and 7. More research is required to identify the factors contributing to this disparity.

Strategic Outcomes

- Improved health outcomes for children and youth
- Reduced health disparities

Intended Outcome:

- Reduced disparity in physical activity levels between girls and boys

What Does the Measure Tell Us?

This measure is the percentage of junior high girls active enough for health benefits. Active enough is defined as accumulating at least 60 minutes of moderate to vigorous physical activity on 5 days per week. The data are from the Keeping PACE (formerly PACY) surveillance initiative. *Keeping Pace* is a research initiative that identifies the physical activity and dietary intake of children and youth in Nova Scotia. Physical activity data are collected, using accelerometers, (motion detectors) every four years (2001-02, 2005-06, 2009-10), in a random sample of schools for Grades 3, 7 and 11.

[27] 2007-08 was selected as base year as it is the year with most current data from which to develop a realistic target for the new business planning cycle.

Where Are We Now?
2009-10 is the base year[28]. A delay from the research contractors has postponed the availability of the 2009-10 Keeping Pace data until December 2011.

Where Do We Want to Be in the Future?
Nova Scotia's target for 2014-15 will be determined when the 2009-10 data are available. Strategies to achieve this target, when determined, will include:

- Continuing to support Active Kids Healthy Kids Strategy
- Continuing to work with the Department of Education on curriculum and non-curriculum actions
- Contributing to the development of the government's Childhood Obesity Prevention Strategy.

Addictions

Percentage of Adults with a Gambling Problem
As of 2007, there were 19,000 problem gamblers in Nova Scotia. Problem gambling is associated with higher rates of financial problems, marital discord, and mental health concerns.

Strategic Outcomes:

- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:

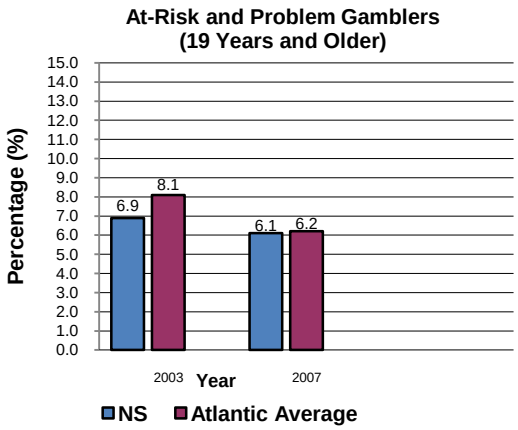
- Reduce the percentage of the Nova Scotia population aged 19 and older identified as at-risk and problem gamblers

What Does the Measure Tell Us?
The Canadian Problem Gambling Index (CPGI)[29] is used in all prevalence studies. It is the only instrument that is reliable and valid for measuring gambling prevalence in the general population. Based on the CPGI, Nova Scotia classifies people as "non gamblers," "non problem gamblers," "at-risk gamblers" or "problem gamblers"[30]. At-risk and problem gamblers are experiencing adverse consequences from their gambling and reported in the prevalence studies. Whereas Nova Scotia conducts its prevalence study every four years, other provinces conduct their prevalence studies at different times. A floating average within four years of the Nova Scotia prevalence study will make comparison more meaningful by minimizing possible time effects.[31]

[28] 2009-10 was selected as the new base year in this business planning cycle so as the most current data may be used to inform the decision on a new and realistic target.
[29] CPGI is a self-report survey used in prevalence studies to determine non-gamblers, non-problem gamblers, at-risk gamblers or problem gamblers.
[30] Those scoring 1 or higher on the scale are considered at-risk; those scoring 3 or higher are considered problem gamblers.
[31] An Atlantic average rather than a national average is used as there is greater similarity in gambling related options and activities among the Atlantic provinces. Including other jurisdictions where the culture of gambling is different from Nova Scotia precludes meaningful comparison.

Where are We Now?

2003 was selected as the base year as it was the first year that Nova Scotia used the CPGI for measuring prevalence of problem gambling. In 2003, 6.9% of Nova Scotians 19 years and older were classified as at-risk and problem gamblers as compared to 2007, where 6.1% classified as at-risk and problem gamblers. When compared to the Atlantic averages, Nova Scotia had fewer at-risk and problem gamblers compared to the Atlantic average of 8.1%[32] in 2003. In 2007, Nova Scotia was again only slightly lower at 6.1% compared to 6.2%[33].



Where Do We Want to Be in the Future?

Nova Scotia aims to be at or below the four year floating average of the percentages of all the Atlantic provinces by 2015 (excluding Nova Scotia). Strategies to achieve this target include:

- Continuing to raise the profile of gambling as a public health issue
- Placing greater emphasis on social marketing campaigns to reduce the stigma associated with gambling in an effort to increase help along the continuum of supports and services
- Strengthening the relationship with the Nova Scotia Health Research Foundation to contribute to Nova Scotia's research agenda on health promotion, prevention and treatment as it relates to gambling
- Continuing to develop a collaborative working relationships with key departmental and community stakeholders in an effort to address at-risk and problem gambling
- Continuing to monitor research into the links between the supply of gambling opportunities, associated gambling problems and the impact of existing provincial supply reduction measures
- Exploring factors that contribute to gambling problems in populations at greater risk
- Building on strategies and approaches aimed at increasing awareness of youth gambling and youth problem gambling
- Liaising with key jurisdictions on matters such as: consumer protection initiatives/player choices technologies (e.g., card technology, internet based initiatives; predictive modeling)

Prevalence of High-Risk Alcohol Use

Harmful alcohol consumption is linked to a growing number of short and long-term health and social harms. Alcohol is currently the second leading causal risk factor (after tobacco) for burden of disease[34]. The Nova Scotia per capita rate for alcohol consumption is increasing and the province has a high rate of heavy drinkers, particularly among young adults and youth. Population level alcohol policies in the areas of pricing, access, and advertising combined with targeted interventions, have the greatest impact on reducing high risk alcohol use.

[32] The Atlantic average in 2003 included New Brunswick as the only Atlantic province other than Nova Scotia to undertake a prevalence study.
[33] The Atlantic average in 2007 included Newfoundland and Labrador and Prince Edward Island's prevalence studies.
[34] World Health Organization

Strategic Outcomes:

- Improved health outcomes for children and youth
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:

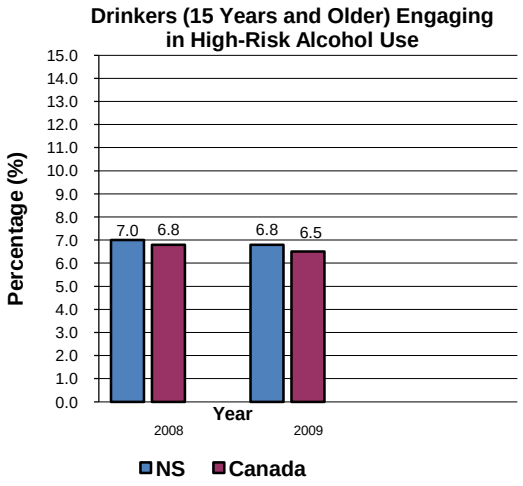
- To reduce the percentage of the Nova Scotia population aged 15 years and older currently experiencing harms from their drinking

What Does this Measure Tell Us?

The Canadian Alcohol and Drug Use Monitoring Survey (CADUMS)[35] is an annual survey that includes the prevalence of those experiencing harms from their alcohol consumption in the past year. Harms are defined as occurring as a result of alcohol use in the following areas: physical health; friendships and social life; financial position; home life or marriage; work, studies or employment opportunities; legal problems; difficulty learning; and housing problems.

Where Are We Now?

2008 is the base year as it is the first year CADUMS was produced. Based on CADUMS, in 2008, 7.0% of Nova Scotian drinkers aged 15 years and older engaged in high-risk use compared to 6.8% in 2009[36]. National data for 2008 and 2009 was 6.8% and 6.5% respectively. Although only slightly above the national rate, both rates are showing a decline in this group's engagement in high-risk alcohol use. Based on this data, there are currently in Nova Scotia approximately 54,000 residents 15 years of age and older are engaged in high risk alcohol use.



Where Do We Want to Be in the Future?

By 2015, Nova Scotia aims to decrease the percentage of the Nova Scotia population aged 15 years and older and currently experiencing harms from their drinking to be at or below the national percentage based on CADUMS.

Strategies to achieve this target are included in the *2007 Nova Scotia Alcohol Strategy: Changing the Culture of Alcohol Use* which sets out a comprehensive plan to prevent and reduce alcohol-related acute and chronic health, social, and economic harms and costs among individuals, families, and communities in Nova Scotia. Some key activities of the strategy include:

- Raising the profile of alcohol as a public health and safety issue
- Communicating low-risk drinking guidelines that promote moderate consumption
- Targeting prevention and early identification
- Promoting available services for those experiencing negative impacts from alcohol.

[35] CADUMS is based on the calendar year, conducted annually, and provides directly comparable national and provincial data.
[36] 2010 data are not yet available.

- Conducting/participating in research related to social and economic costs of alcohol use especially for high risk or hazardous drinkers, including surveillance
- Supporting the development and implementation of policies/legislation that address drinking behaviours in high-risk contexts; e.g. Responsible Beverage Service Programs in licensed establishments

Vaccines

Human Papillomavirus (HPV) Vaccine Coverage Rate for School-Based Grade 7 Female Population

This vaccine prevents infection from the types of Human Papilloma viruses that cause most cases of cervical cancer and genital warts. This school-based program is funded by HPP, and delivered at the DHA level. Maintaining high vaccination coverage rates not only reduces the risk of infection for vaccinated individuals but also reduces the risk of disease transmission to others within a population. High vaccination coverage will contribute to the protection of the population from this preventable disease.

Strategic Outcomes:
- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:
- Contribute to the protection of the Nova Scotia female population by reducing the risk of cervical cancer

What Does the Measure Tell Us?
This measure describes the percentage of the Nova Scotia Grade 7 female student population vaccinated with the HPV vaccine. Because new evidence and operational circumstances impact decisions regarding the optimal grades in which the immunizations are delivered, the grades in which the immunization programs are delivered may change. Grade 7 was chosen in order to reach girls before they become sexually active.

Where Are We Now?
The base year selected is 2010-11[37]. The vaccine coverage data for school-based immunizations are not submitted until after the end of the 2010-11school year[38], therefore, baseline data are not available at the time of this report[39].

[37] HPP undertook a performance measures review in 2009-10 in preparation for the 2010-11 to 2014-15 business planning cycle. The results of this review established 2010-11 as the base year for this performance measure.
[38] School year begins September 2010 and ends June 2011.
[39] Data received between June and September 2010 require cleaning thereby potentially delaying data release up to more than a year behind the reporting period.

Where Do We Want to Be in the Future?
Nova Scotia aims to maintain an HPV vaccine coverage rate at or above 80%[40]. Immunization for prevention of HPV is a key public health intervention. Strategies to achieve this target include:

- Providing vaccine to district public health to deliver school-based vaccine programs
- Undertaking an awareness campaign through information delivery to the Grade 7 students' parents, physicians and other health care professionals
- Preparing vaccine coverage reports to inform school-based vaccine programs

Hepatitis B Vaccine Coverage Rate through School-Based Immunization Program

This vaccine prevents infection with Hepatitis B. This school-based program is funded by HPP and delivered at the DHA level. Maintaining high vaccination coverage rates not only reduces the risk of infection for vaccinated individuals but also reduces the risk of disease transmission to others within a population. High vaccination coverage will contribute to the protection of the population from this preventable disease.

Strategic Outcomes:

- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:

- Contribute to the protection of the Nova Scotia population through disease prevention

What Does the Measure Tell Us?
This measure describes the percentage of the Nova Scotia Grade 7 student population vaccinated with the Hepatitis B vaccine. Because new evidence and operational circumstances impact decisions regarding the optimal grades in which the immunizations are delivered, the grades in which the immunization programs are delivered may change. Grade 7 was chosen in order to reach students before they are sexually active and to ensure efficiency of vaccine delivery by having all school-based vaccines given in the same grade.

Where Are We Now?
The base year selected is 2010-11[41]. The vaccine coverage data for school-based immunizations are not submitted until after the end of the 2010-11school year[42], therefore, baseline data are not available at the time of this report[43].

[40] The target of 80% is based on the average uptake of the vaccine in this population since its introduction in 2007.
[41] HPP undertook a performance measures review in 2009-10 in preparation for the 2010-11 to 2014-15 business planning cycle. The results of this review established 2010-11 as the base year for this performance measure.
[42] School year begins September 2010 and ends June 2011.
[43] Data received between June and September 2010 require cleaning thereby potentially delaying data release up to more than a year behind the reporting period.

Where Do We Want to Be in the Future?
Nova Scotia aims to maintain a Hepatitis vaccine coverage rate at or above 90%[44]. Immunization for the prevention of Hepatitis B is a key public health intervention. Strategies to achieve this target include:

- Providing vaccine to district public health to deliver school-based vaccine program
- Undertaking an awareness campaign through information delivery to the Grade 7 students' parents, physicians and other health care professionals
- Preparing vaccine coverage reports to inform school-based vaccine programs

Vaccine Coverage Rate for Meningococcal and Tdap through School-Based Immunization Program

These vaccines prevent meningococcal disease, diphtheria, tetanus and pertussis. This school-based program is funded by HPP, and delivered at the DHA level. High vaccination coverage rates will contribute to the protection of the population from these diseases. Maintaining high vaccination coverage rates not only reduces the risk of infection for vaccinated individuals but also reduces the risk of disease transmission to others within a population.

Strategic Outcomes:

- More Nova Scotians taking an active role in promoting and protecting the health of individuals, families and communities
- Safer citizens, populations and communities
- Reduced health disparities

Intended Outcome:

- Contribute to the protection of the Nova Scotia population through disease prevention

What Does the Measure Tell Us?
This measure describes the percentage of the Nova Scotia Grade 7 student population vaccinated with meningococcal and Tdap vaccines. Because new evidence and operational circumstances impact decisions regarding the optimal grades in which the immunizations are delivered, the grades in which the immunization programs are delivered may change. Grade 7 was chosen in order to ensure efficiency of vaccine delivery by having all school-based vaccines given in the same grade.

Where Are We Now?
The base year selected is 2010-11[45]. The vaccine coverage data for school-based immunizations are not submitted until after the end of the 2010-11school year[46], therefore, baseline data are not available at the time of this report[47].

[44] The target of 90% is based on the average uptake of the vaccine in this population since its introduction in 1995. In addition, it is higher than the target for HPV because the HPV currently has the lowest uptake of school-based vaccines.
[45] HPP undertook a performance measures review in 2009-10 in preparation for the 2010-11 to 2014-15 business planning cycle. The results of this review established 2010-11 as the base year for this performance measure.
[46] School year begins September 2010 and ends June 2011
[47] Data received between June and September 2010 require cleaning thereby potentially delaying data release up to more than a year behind the reporting period.

Where Do We Want to Be in the Future?

Nova Scotia aims to maintain a vaccine coverage rate at or above 90%[48] for meningococcal disease, diphtheria, tetanus and pertussis. Immunization for the prevention of meningococcal disease, diphtheria, tetanus and pertussis is a key public health intervention. Strategies to achieve this target include:

- Providing vaccine to district public health to deliver school-based vaccine program
- Undertaking an awareness campaign through information delivery to the Grade 7 students' parents, physicians and other health care professionals
- Preparing vaccine coverage reports to inform school-based vaccine programs

[48] The target of 90% is based on the average uptake of the vaccine in this population since its introduction in 2005. In addition, it is higher than the target for HPV because the HPV vaccine currently has the lowest uptake of school-based vaccines.