
**Alberta
Sexually Transmitted
Infections
and Blood Borne
Pathogens
Strategy and Action Plan**

2011–2016

**Government
of Alberta ■**

Published May 2011
Corrections: August 2011, pages 29 and 48

ISBN Print – 987-0-7785-8293-9

ISBN Online – 978-0-7785-8294-6

You can find this document on the Alberta Health and Wellness website – www.health.alberta.ca.

Acknowledgements

Alberta Health and Wellness (AHW) and Alberta Health Services (AHS) acknowledges the many individuals and organizations who contributed to the development of the Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan, 2011-2016.

In particular, appreciation is expressed to the members of the Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan Advisory Committee, who provided invaluable advice and guidance throughout the development of the strategy. Additionally, our thanks is extended to individuals on five working groups focusing on prevention; harm reduction; prenatal/congenital, treatment/contact tracing and laboratory surveillance. Individuals on the working groups shared their expertise and time to facilitate a comprehensive analysis of complex and often interconnected topics.

The names of individuals who served on the Advisory Committee and the working groups are found in Appendices C and D, respectively. The participation and contributions of these individuals and organizations were instrumental in ensuring an integrated and collaborative provincial approach to sexually transmitted infections and blood borne pathogens.

Many other stakeholders were involved in the development of the Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan. Thanks is extended to them for reviewing the strategy and providing their feedback on their roles and responsibilities. A list of all stakeholders is found on page 4 of the document.

Table of contents











Executive summary.....	1
Introduction	4
Purpose	4
Understanding the diseases and the current situation	5
Identifying the challenges common to STI and BBP	16
STI and BBP challenges.....	17
STI and BBP strategy and action plan	18
Vision and guiding principles	19
STI and BBP strategy and action plan conceptual framework.....	20
Strategic goals and objectives	21
Alberta STI and BBP action plan summary.....	22
Detailed action plan.....	28
Goal 1.0 Increase prevention of STI and BBP	28
1.1 Reduce the number of newly acquired STI and BBP cases per year in Alberta.....	28
1.2 Promote safer sex and healthy sexual behaviour.....	33
1.3 Reduce harm associated with substance use and non-prescription needle use	36
Goal 2.0 Improve early detection and diagnosis of STI and BBP	38
2.1 Increase confidential counselling and testing for individuals and groups at increased risk for STI and BBP	38
2.2 Increase identification and diagnosis of individuals who are infected and groups at increased risk for STI and BBP	41
2.3 Increase contact identification and followup for STI and BBP.....	43
2.4 Increase testing of high-risk and currently under-reached populations.....	44
Goal 3.0 Enhance management and control of STI and BBP	45
3.1 Enhance appropriate disease management services for STI and BBP.....	45
3.2 Reduce disease transmission by known infected persons	48
Goal 4.0 Strengthen support and counselling services for those infected and affected by STI and BBP	50
4.1 Enhance co-ordination of community care and support services	50
4.2 Increase capacity for self-care of chronic conditions	52
Goal 5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan	53
5.1 Strengthen human, financial and technological resources	53
5.2 Strengthen research and evaluation.....	57
5.3 Strengthen service provider education and development.....	59
5.4 Enhance surveillance of disease, behavioural and socio-demographic risk factors	60
Key partner roles and responsibilities.....	62
Reporting	76
Appendix A – Glossary.....	77
Appendix B – STI and BBP prevention and management conceptual framework	81
Appendix C – Advisory committee membership.....	82
Appendix D – Working group membership	83
Appendix D – Working group membership (continued).....	84
Appendix E – Endnotes	88

Executive summary

Alberta continues to face significant challenges involving sexually transmitted infections (STI), such as syphilis, chlamydia, and gonorrhoea, and blood borne pathogens (BBP), such as human immunodeficiency virus (HIV), hepatitis C (HCV) and hepatitis B (HBV). These diseases are preventable.

Alberta Health and Wellness (AHW) along with Alberta Health Services (AHS) and other key partners have developed the Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan, 2011-2016 to prevent and minimize the impact of these diseases on the health and well-being of Albertans. This executive summary gives an overview of the provincial Strategy and Action Plan to address these challenges.

In Alberta, the STI trends are particularly troubling.

Trend	2009 Statistics	
	13,720 cases	Chlamydia rates increased by 207% from 1999 to 2009, with over 13,000 cases reported in 2009. Many of those cases occurred in females with many younger than 25 years of age.
	1,585 cases	In 2009, gonorrhoea cases dropped to slightly more than 1,500 reported cases, but remains 2.4 times higher than 1999.
	279 cases	Infectious syphilis increased significantly, with 279 cases reported in 2009; two-thirds of the cases occurred in males.
	8 cases	Neurosyphilis* cases in adults are occurring. In 2009, five of eight cases had reduced vision as a result of ocular involvement.
	7 cases	Congenital syphilis cases are also occurring with seven cases reported in 2009 alone; all but one of these cases occurred in the Aboriginal population. Four of these seven infants were stillborn.
	6 cases	Probable congenital syphilis** cases are also occurring, with six cases identified in 2009. All of the babies were born to mothers found to have infectious syphilis very close to, or at the time of delivery. These babies were treated for syphilis following birth and continue to be followed closely. One of these babies was stillborn.
	219 cases	HIV infection continues to grow, with 219 new cases reported in 2009; 69% were male, 23% were Aboriginal.
	38 cases	AIDS cases started to increase after 2004, with 38 new cases reported in 2009; 82% were male.
	27 cases	Hepatitis B cases are declining, with 27 cases reported in 2009; two-thirds of reported cases were male. Much of this decrease can be attributed to the effectiveness of the hepatitis B immunization program.
	1,130 cases	Hepatitis C cases are declining with, 1,130 cases reported in 2009; males outnumber females 2:1; rates are higher in the Aboriginal population.

Source: Alberta Health and Wellness Communicable Disease Reporting System. Effective as of March 31, 2011.

*As of March 31, 2011, a total of 56 adults have been diagnosed with neurosyphilis since 2005. At least 18 have had ocular involvement resulting in some degree of permanent vision loss, including one who is now considered blind.

**As of March 31, 2011, 25 babies have been confirmed with congenital syphilis since 2005. Nine of these babies have died, one is blind; all are being followed by pediatric infectious diseases and other relevant health care providers.

Executive summary (continued)

Alberta's rates for chlamydia, gonorrhoea and infectious syphilis exceeded the national rates in 2009

STI	Alberta*	Canada**
Chlamydia	379.3	258.5
Gonorrhoea	43.8	33.1
Infectious Syphilis	7.7	5.0

All of these diseases result in significant health, social, emotional and economic costs, many of which will occur over the long-term. For example, we know the following information about costs for STI, HIV and HCV:

- The direct health care costs of congenital syphilis are an estimated \$16,017 for the first year of life and the cost of managing neurosyphilis over a lifetime is estimated to be as much as \$77,149 per case. These estimates are based on U.S. data from the year 2000 and have been adjusted to Canadian 2006 dollars using the Canadian Consumer Price Index.¹
- It has been estimated that for every dollar spent on early detection and treatment of chlamydia and gonorrhoea, \$12 could be saved in the associated costs of non-treatment.²
- The lifetime direct cost of one HIV infection is \$750,000.³ Total direct costs of HIV/AIDS are about \$600 million a year. Added to the \$600 million related to in-direct costs, HIV/AIDS cost Canadians more than \$2 billion in 1999.⁴
- From 2004/2005 to 2008/2009 (5 years cumulative) the cost of providing medical services to Albertans diagnosed with HCV was \$22.5 million. This was determined by an average per person/per year cost of \$3,500.⁵
- Annual health care costs for the treatment of HCV-related disease in Canada are estimated to rise from \$103 million to \$158 million over the period from 2001-2040.⁶

Alberta continues to face significant challenges related to STI and BBP

- Sexually transmitted infections are generally on the increase, particularly among the 15 to 24 year-old age group, men who have sex with men (MSM) and Aboriginals.
- Congenital syphilis rates are linked to lack of early prenatal care.
- A resurgence of HIV is occurring in MSM.
- Aboriginals continue to be disproportionately affected by STI and BBP.
- Injection drug use (IDU) is a serious public health and social problem, linked to the transmission of HIV, hepatitis C and other communicable diseases.
- In recent years, individuals born in HIV endemic countries represented a significant proportion of new infections, particularly among women.

Executive summary (continued)

STI and BBP can be reduced by:

- The risk of getting STI and BBP can be reduced by educating populations at higher risk, as well as the general public and exploring more innovative ways to promote condom use.
- The risk of transmitting STI, especially syphilis, can be reduced through screening and early prophylactic treatment, improved identification of infected individuals and partner notification and by improving access to STI services throughout the province.

AHW is committed to providing provincial leadership and working in collaboration with AHS and other partners to effectively prevent and manage STI and BBP in Alberta. The need for a provincial strategy was identified to provide direction to the health system, key partners and enable all Albertans to take the actions necessary to prevent and manage infections to reduce the health, social and economic consequences of STI and BBP.

The Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan, 2011-2016 outlines the roles, responsibilities and actions of key partners involved in prevention, care and support of those infected and affected by STI and BBP. Five strategic goals and 15 objectives have been identified in the Alberta STI and BBP Strategy and Action Plan and comprehensive actions along with performance measures to address each objective are described. The roles and responsibilities for AHW, AHS and other stakeholders are included for each goal. Partner roles and responsibilities identified in the earlier strategies that continue to be pertinent to the STI and BBP Strategy and Action Plan have been incorporated into this document.

AHW will report annually on the progress of the Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan.

STI and BBP challenges require a focused, sustained and collaborative effort among service providers in the health, social, educational, and correctional systems, provincial and community organizations, supported by provincial and federal governments.

Introduction

The Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan, 2011-2016 (STI and BBP Strategy and Action Plan) addresses the challenges to reduce STI and BBP by proposing strategies, actions and identifying the roles and responsibilities of key partners.

Purpose

The purpose of the STI and BBP Strategy and Action Plan is to provide provincial direction to focus and co-ordinate the efforts of all partners involved in STI and BBP prevention, control and management. The success of this Plan is dependent on the commitment of multiple partners to fulfilling their roles and responsibilities. Partners are expected to incorporate the STI and BBP strategies into their organizations' plans in accordance with their identified roles and responsibilities. With commitment, co-ordination and collective effort, the challenges surrounding STI and BBP can be overcome.

This document is intended for use by everyone involved in or affected by STI and BBP. AHW and AHS along with the following partners and supporters play essential roles in the prevention, control and management of STI and BBP. These include:

Provincial Government of Alberta

- Alberta Aboriginal Relations
- Alberta Advanced Education and Technology
- Alberta Agriculture and Rural Development
- Alberta Children and Youth Services
- Alberta Culture and Community Spirit
- Alberta Education
- Alberta Employment and Immigration
- Alberta Housing and Urban Affairs
- Alberta Seniors and Community Supports
- Alberta Solicitor General and Public Security

Federal Government of Canada

- Correctional Service Canada
- Health Canada, First Nations and Inuit Health
- Public Health Agency of Canada

Community-based organizations

- Community-based organizations, including Alberta Council on HIV and Community Aboriginal Organizations

Other organizations

- Canadian Blood Services
- Canadian Liver Foundation
- Health professional colleges and associations

Understanding the diseases and the current situation

This section provides an overview of the STI and BBP that are addressed in this strategy. A brief description is given of the characteristics of key STI and BBP diseases and their occurrence in Alberta.

Note: Data in this section are provided by AHW and were extracted from the following databases:

The Communicable Disease Reporting System (CDRS) database March 31, 2011. The Alberta Health Care Insurance Plan Partner Registry based mid-year population and quarterly population January 28, 2011 extraction. Readers should note that where 1998 HIV data are shown, this represents only part of that year as HIV became reportable in May 1998. Although the Strategy and Action Plan focuses on the five year span of 2011 to 2016, the data provided in this document are for the period 1999 to 2009, unless otherwise noted.

Sexually transmitted infections

Sexually transmitted infections are comprised of numerous organisms, both viral and bacterial, that are transmitted primarily through sexual contact, including chlamydia, gonorrhoea, syphilis, human papilloma virus and genital herpes. Chlamydia, gonorrhoea, and syphilis are curable but re-infections can occur. In Alberta, chlamydia, gonorrhoea, infectious syphilis, non-infectious syphilis, non-gonococcal urethritis (NGU) and mucopurulent cervicitis (MPC) are reportable diseases. STI, as a proportion of all notifiable diseases, has increased from 33% in 1999 to 72% in 2009.

Since 1999, the rates of STI have generally increased with the 15 to 24 age group continuing to have the highest rates of STI. Untreated and undetected, STI can result in chronic diseases such as pelvic inflammatory disease (PID), ectopic pregnancy, cancer and infertility in both men and women. STI also facilitates transmission and acquisition of HIV. Hence, preventing STI is also an important measure in preventing HIV.

Exhibits 1, 2 and 3 show the number and rate of reported cases of chlamydia, gonorrhoea and infectious syphilis, respectively, in Alberta from 1999 to 2009.

Exhibit 1

Number and rate of reported cases of chlamydia, Alberta, 1999-2009

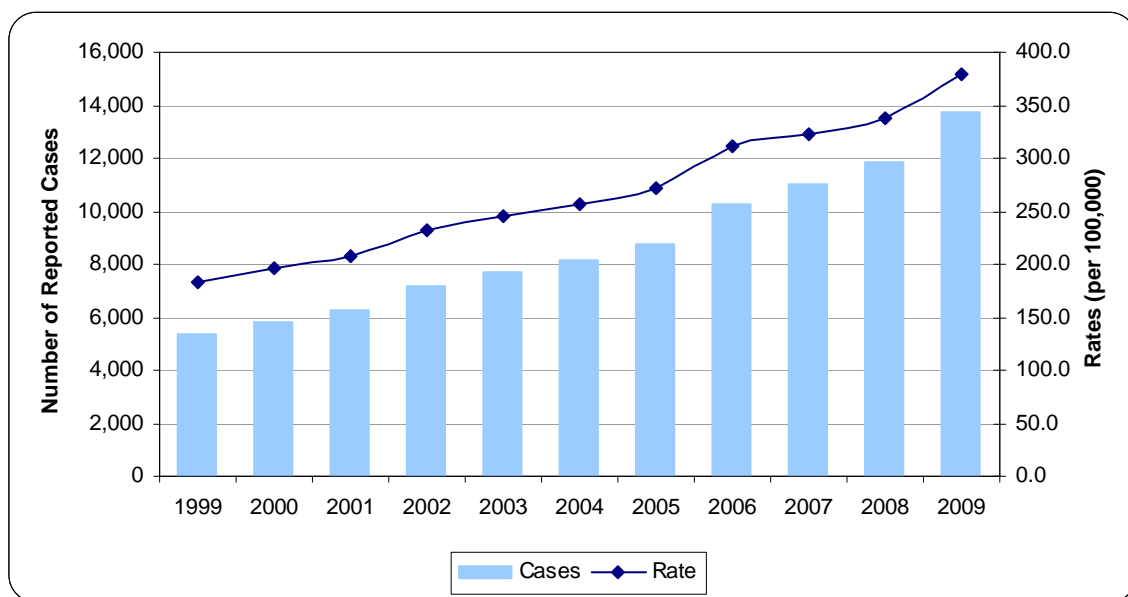


Exhibit 2
 Number and rate of reported cases of gonorrhoea, Alberta, 1999-2009

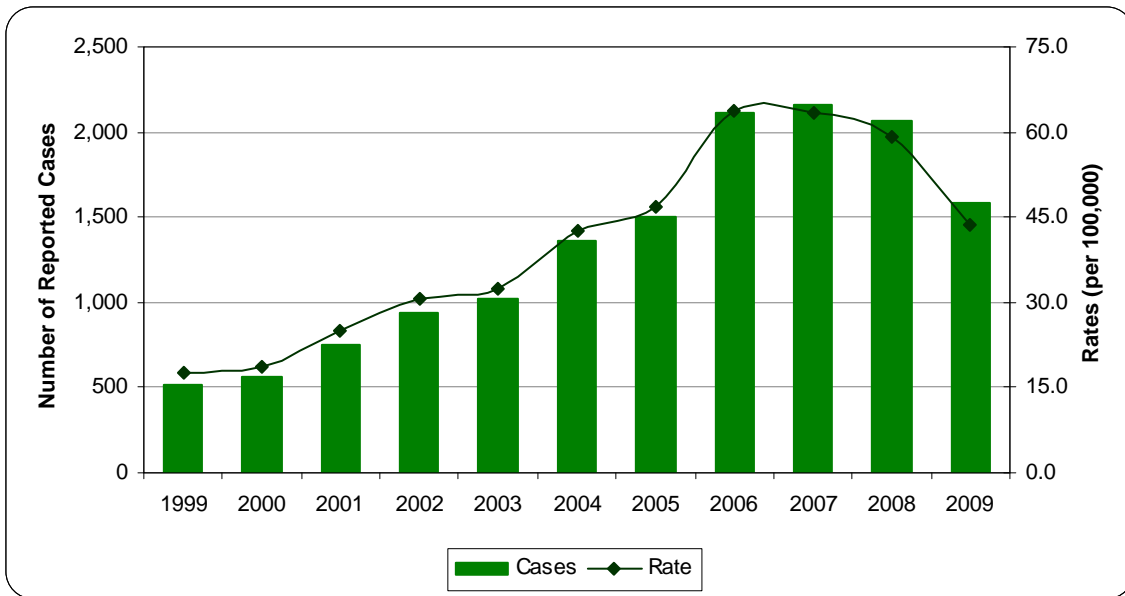
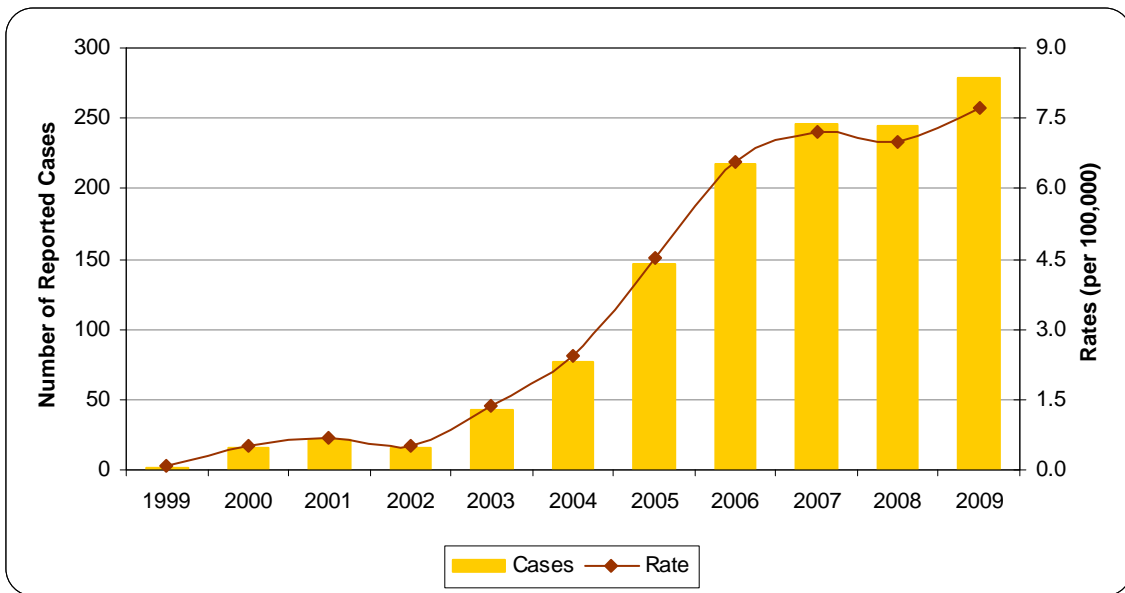


Exhibit 3
 Number and rate of reported cases of infectious syphilis, Alberta, 1999 to 2009



Some Alberta facts about sexually transmitted infections for the period 1999 to 2009

Chlamydia

- Chlamydia, gonorrhoea and syphilis are all curable with appropriate treatment but re-infection is common.
- Chlamydia rates increased by 207% in 10 years (1999 to 2009).
- 67% of chlamydia cases in 2009 were female.
- 17% of chlamydia cases were Aboriginal.
- 72% of all reported chlamydia cases between 2004 and 2009 were in people younger than 25 years of age.

Gonorrhoea

- Gonorrhoea rate (43.8 per 100,000) in 2009 was lower than the rate (63.5) in 2006, but still almost two and a half times higher than in 1999 (17.8).
- In 2009, 51% of gonorrhoea cases were male.
- In 2009, 27% of gonorrhoea cases were Aboriginal.
- Between 2004 and 2009, 52% of all cases were in people younger than 25 years of age.

Infectious syphilis

- Significant increase in infectious syphilis has occurred since 2003.
- In 2009, 279 cases were reported, a rate of 7.7 per 100,000 population.
- 67% of new infectious syphilis cases in 2009 were male, with 19% of these in homosexual males.
- In 2009, those with infectious syphilis ranged in age from 17 to 80 years, with 34% of males between 40 and 59 years of age.
- Seven cases of congenital syphilis were confirmed in 2009; four of those babies died.
- In 2009, 27% of infectious syphilis cases were Aboriginal.

Alberta's rates for chlamydia, gonorrhoea and infectious syphilis exceeded the national rates in 2009

STI	Alberta*	Canada**
Chlamydia	379.3	258.5
Gonorrhoea	43.8	33.1
Infectious Syphilis	7.7	5.0

*Source: Alberta Health and Wellness. Communicable Disease Reporting System. Effective as of March 31, 2011.

**Source: Public Health Agency of Canada. (Verified as of September 15 2010).⁷ Population estimates provided by Statistics Canada. (Source: Statistics Canada, Demography Division, Demographic Estimates Section. July Population Estimates, 2009 preliminary postcensal estimates). Rates (per 100,000) based on all reported cases for 2009.

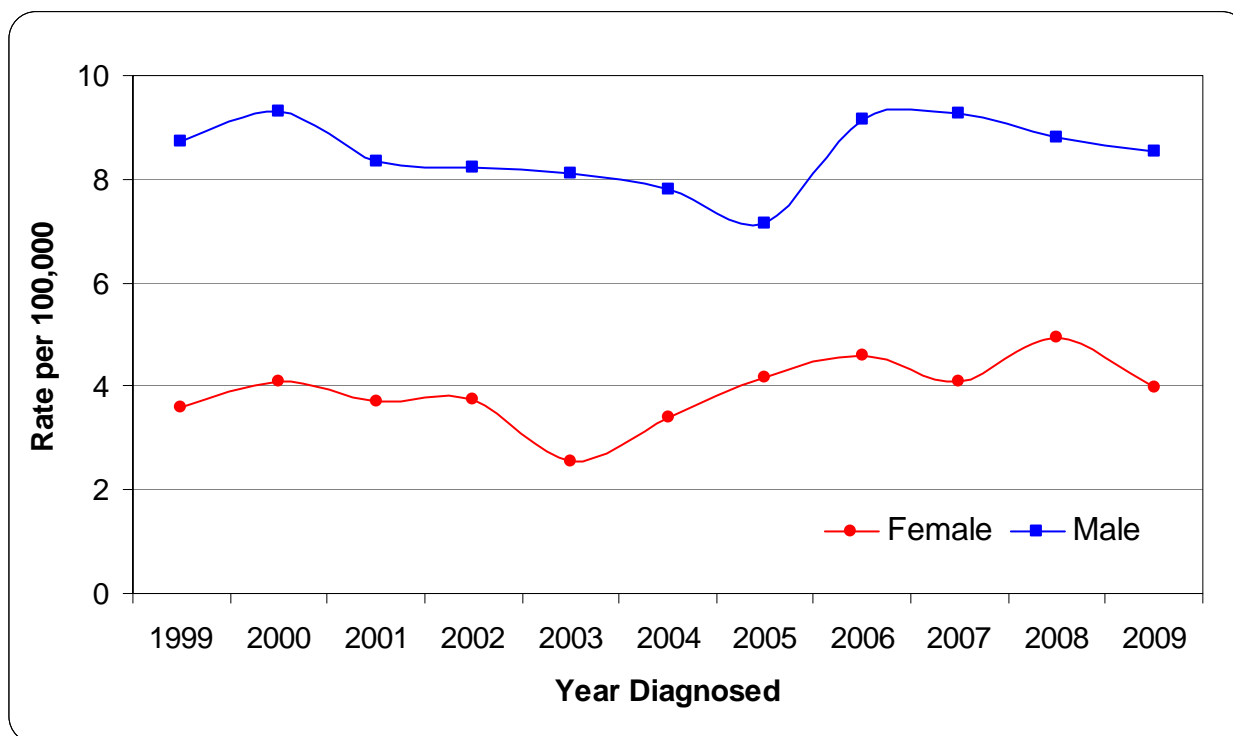
HIV

Human immunodeficiency virus (HIV) causes acquired immunodeficiency syndrome (AIDS). HIV attacks the immune system making individuals susceptible to a range of opportunistic infections and tumours. As a result of new treatments and medications, HIV infection has become a manageable chronic disease. However, there is still no cure. A person can be infected with HIV and live for many years without developing AIDS. Fewer people are being diagnosed with AIDS since highly effective antiretroviral therapy became available in the mid-1990s. However, people remain infected with HIV and are capable of transmitting the virus to others⁸. HIV is primarily transmitted through unsafe needle use and unsafe sexual activity. An HIV-positive woman can transmit the virus to her baby during pregnancy, labour and delivery or after childbirth through breast feeding.

Newly reported cases do not reflect the actual number of HIV-infected individuals living in Alberta. The Public Health Agency of Canada estimated that in 2008, there were 4,400 prevalent HIV cases in Alberta.⁹

Exhibit 4 shows the age-adjusted rates of newly reported HIV cases by gender for Alberta for the period 1999 to 2009.

Exhibit 4
Age-adjusted rate of newly diagnosed HIV cases by gender, Alberta, 1999-2009



Exhibits 5 and 6 show the percentage of newly reported HIV cases among males by exposure category and the percentage of newly reported HIV cases by year for Aboriginal and non-Aboriginal populations for Alberta for the period 1999 to 2009. For the purpose of this report, the term Aboriginal refers to individuals self-reporting to be First Nations, Métis or Inuit. Note: NIR means no inherent risk.

Exhibit 5
 Percentage of newly diagnosed HIV males cases by exposure category and year, Alberta, 1999-2009

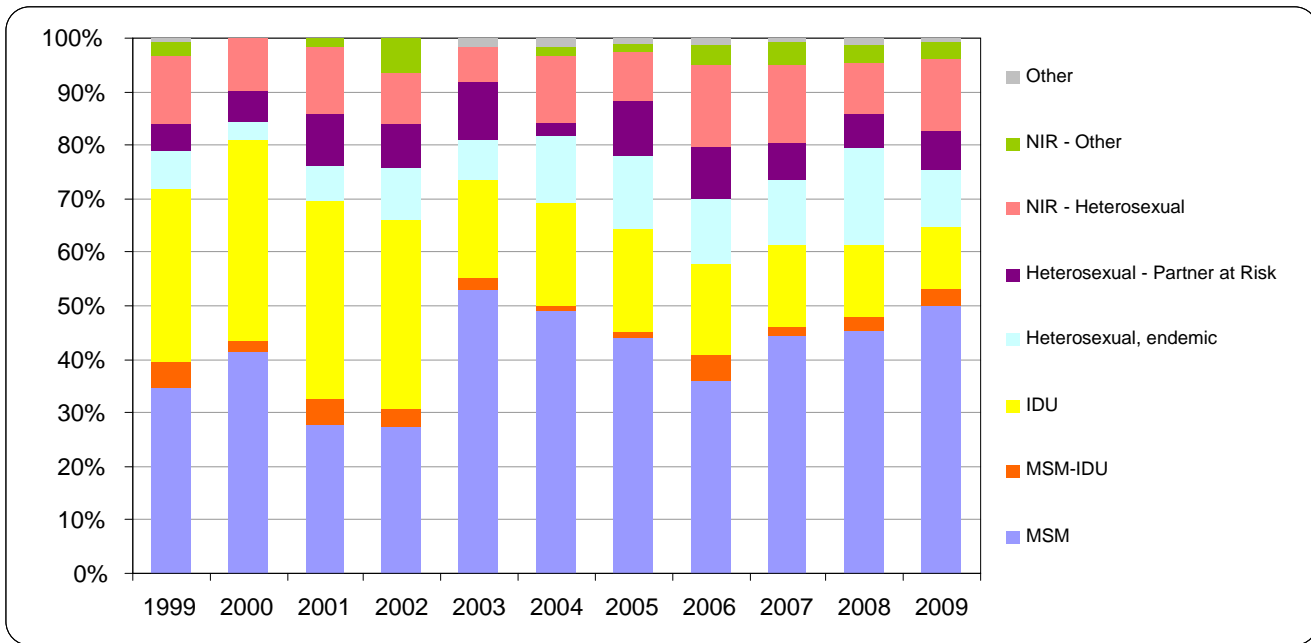
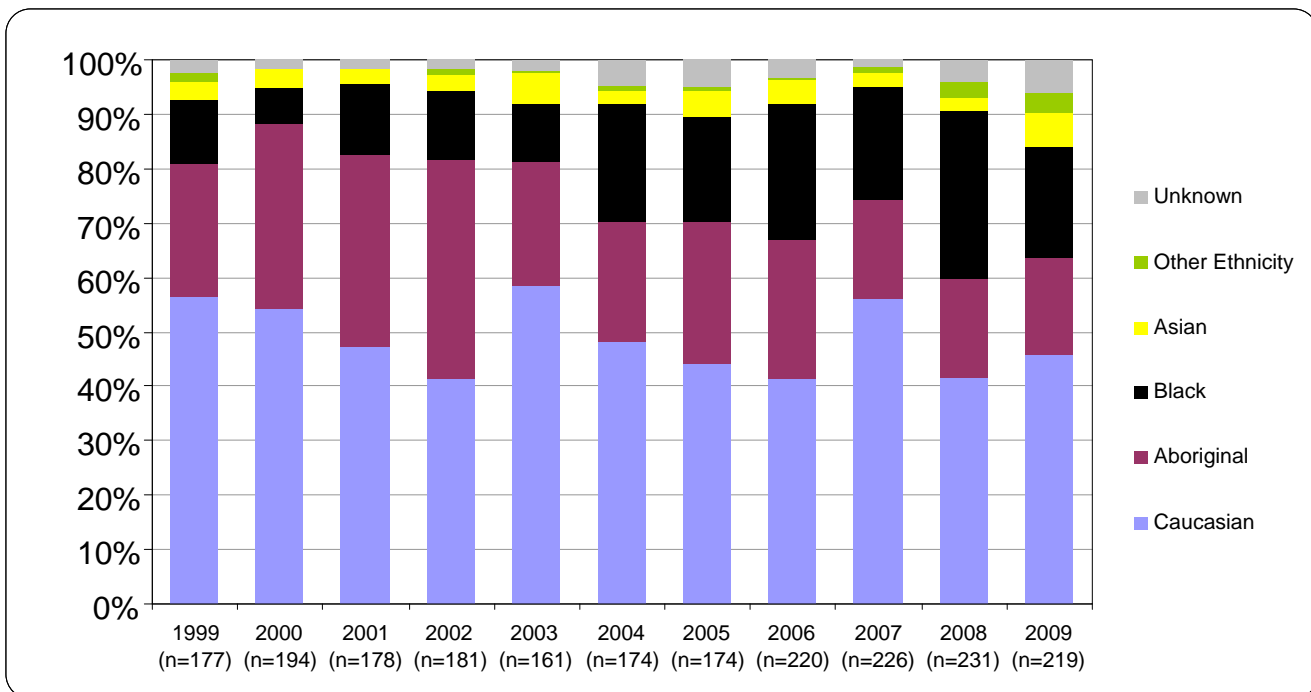


Exhibit 6
 Percentage of newly diagnosed HIV cases by year, by ethnicity, Alberta, 1999-2009



Some Alberta facts about HIV for the period 1999 to 2009

- 219 new cases of HIV infection reported in 2009; an age-adjusted rate of 6.23 newly reported cases per 100,000 population.
- 68% of newly reported HIV infections were in males.
- Most new cases were diagnosed in individuals between the ages of 40 to 50, followed by those individuals aged 30 to 39.
- More than 95% of pregnant women presenting for prenatal care were screened for HIV.
- Frequency of exposure categories varied with time. In 2009, 53% of newly diagnosed HIV cases for males were MSM and 15% were injection drug users.
- In 2009, 37% of female cases were among women from endemic countries, an increase from 16% of female cases in 2002.
- While 53% of female cases in 2002 were IDU, this declined to 13% in 2009.
- Aboriginal peoples are disproportionately represented in newly diagnosed HIV cases.
- Proportion of newly diagnosed HIV cases in Aboriginal peoples accounted for 27.4% of newly diagnosed cases in 1999, 40% in 2002 and 18% in 2009.

AIDS

AIDS is the final stage of the HIV infection and is characterized by the presence of opportunistic infections and other life-threatening conditions. The time from HIV infection to the diagnosis of AIDS averages 8 to 10 years and has a range of less than one year to 15 years or longer without treatment. With current antiretroviral therapy, it is estimated that survival after diagnosis of HIV infection is 40 plus years. AIDS has been a reportable disease in Alberta since 1983.

Exhibit 7 shows the age-adjusted rate of newly reported AIDS cases by gender in Alberta, 1986 to 2009.

Exhibit 8 shows the percentage of newly reported cases of AIDS by gender and exposure category for Alberta, 1986 to 2009.

Exhibit 7
 Age-adjusted rate of newly reported AIDS cases by gender, Alberta, 1986-2009

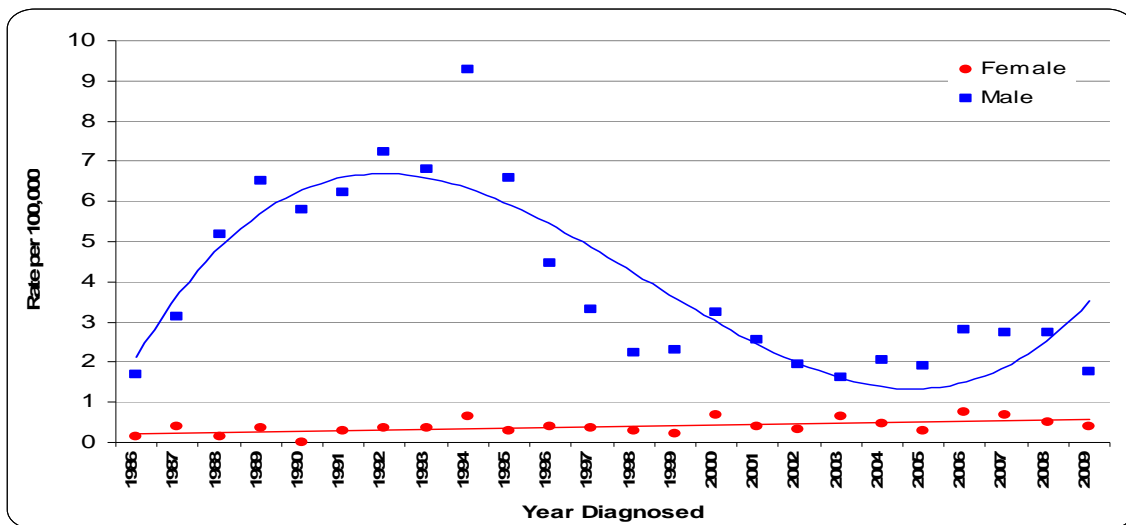
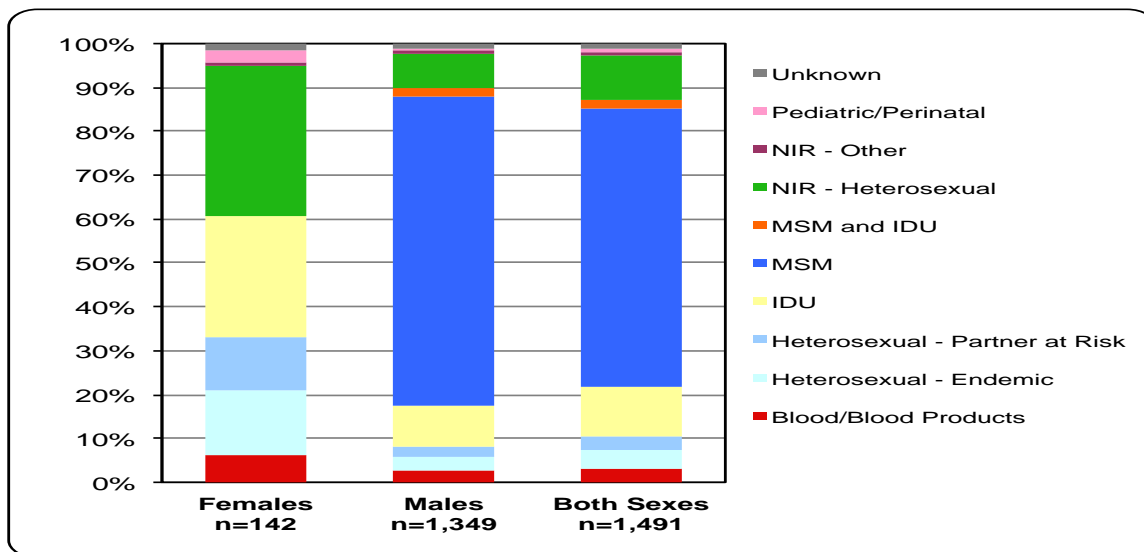


Exhibit 8
 Percent of newly reported AIDS cases by gender and exposure category, Alberta, 1986-2009 combined



Some Alberta facts about AIDS for the period 1986 to 2009

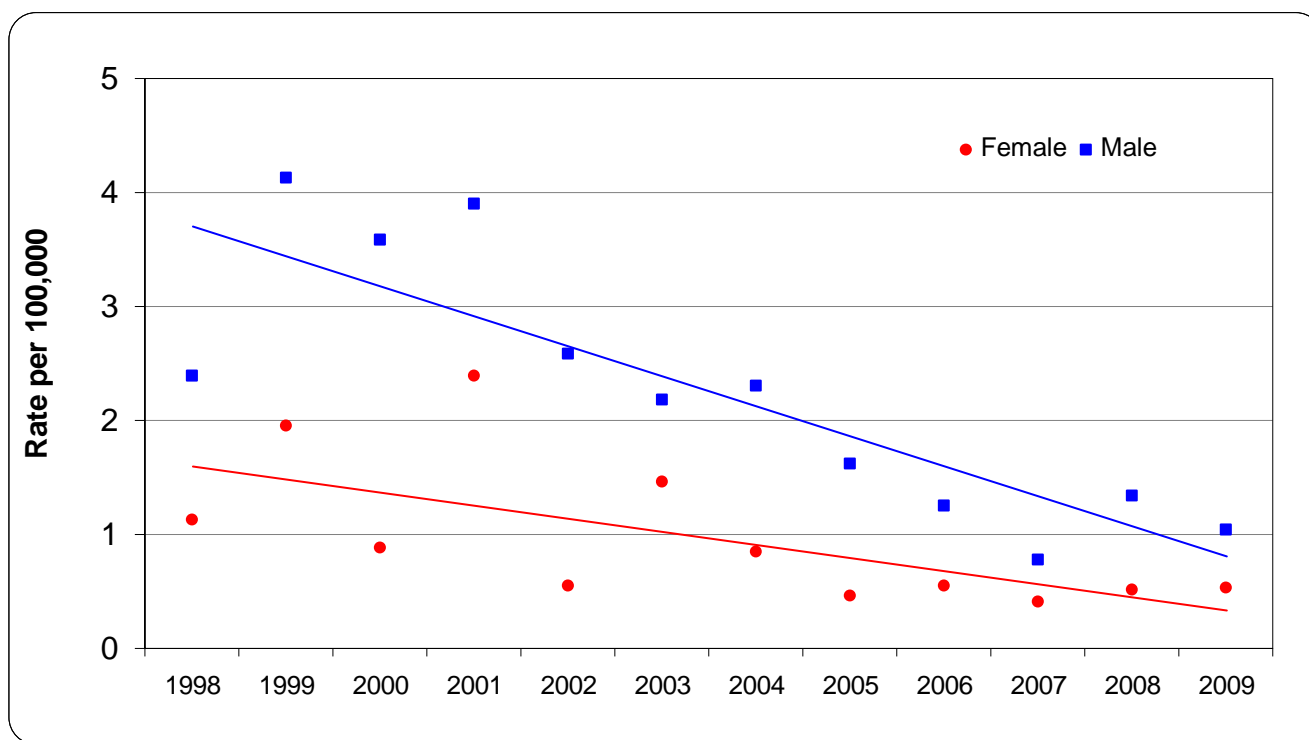
- The rate of newly reported cases of AIDS has declined significantly since 1995, to the lowest level in 2004, then has showed a trend of increasing since 2004.
- 38 new cases of AIDS were reported in 2009 resulting in an age-adjusted rate increase from 1.0 per 100,000 population in 2006 to 1.1 in 2009.
- In 2009, 82% of cases were male, the same proportion seen in 2004.
- The most common risk factor for males was men having sex with men.
- The most common risk factor for females was heterosexual exposure.

Hepatitis B

Hepatitis B (HBV) is caused by a virus that affects the liver, sometimes causing permanent liver damage, scarring, and in some cases, even death. HBV is the number one cause of liver cancer in the world. Less than 10% of children and 30-50% of adult cases develop symptoms of acute infection. The risk of developing chronic infection varies inversely with age, with infants having a 90% chance of becoming chronically infected, 25-50% of children aged 1 to 5 years and 1-10% of persons infected as older children and adults. Chronic HBV infection is common among persons with compromised immune systems. HBV is found in the blood, semen, vaginal fluid and, to a lesser extent, saliva of an infected person.¹⁰ HBV infection is primarily spread through unsafe sexual activity, perinatal and mucous membrane exposure to infected blood or body fluids. The risk of transmission from donated blood, manufactured blood products and transplanted organs and tissues is extremely low due to effective screening and processing of blood products, tissues and organs. HBV infection is preventable through immunization.

Exhibit 9

Age-adjusted rate of newly diagnosed acute HBV cases by gender, Alberta, 1998-2009



Note: Prior to 2003, the case definition of acute HBV varied by region within Alberta. The statistics are presented as reported.

Some Alberta facts about hepatitis B for the period 1998 to 2009

- Alberta began immunizing for HBV in 1995.
- Rate of acute HBV infection has steadily declined over the last 12 years.
- In 2009, 27 new cases were reported; the age adjusted rate was 0.8 per 100,000 population.
- Males accounted for two-thirds of newly reported cases in 2009.

Hepatitis C

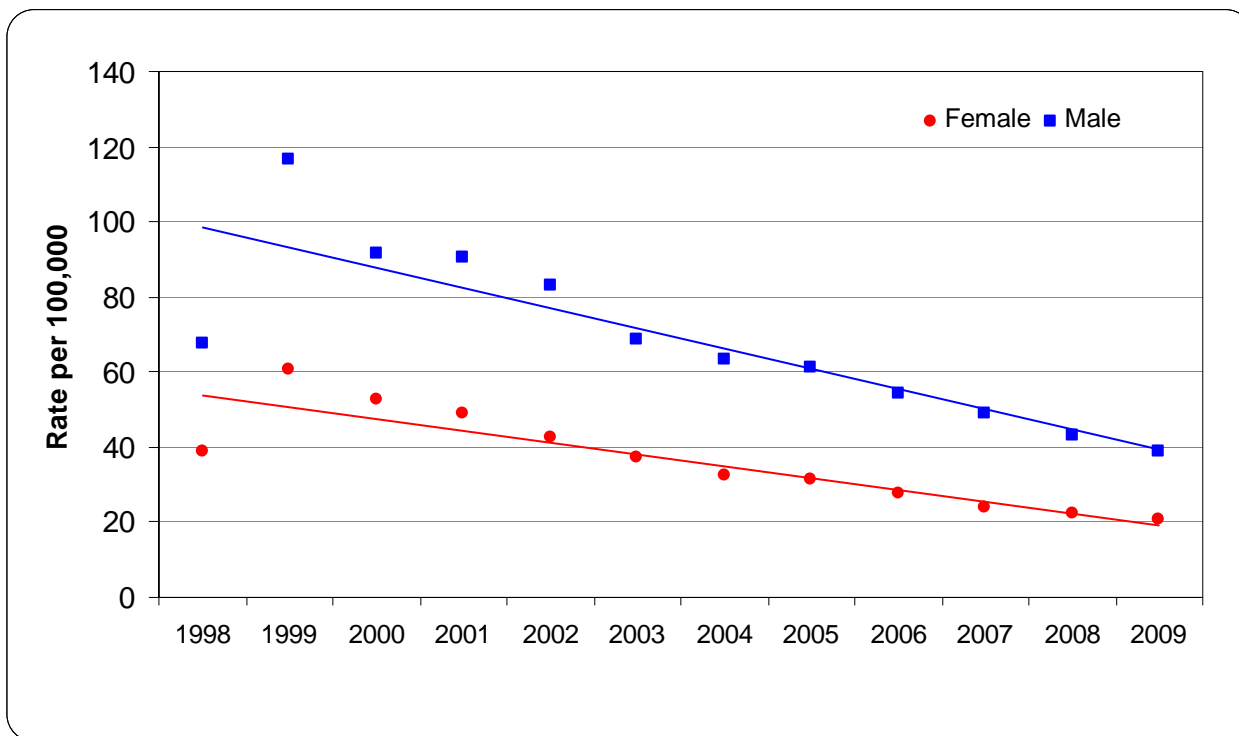
Hepatitis C (HCV) is caused by a virus that affects the liver. The disease was known as Non-A Non-B hepatitis until the hepatitis C virus was identified in 1989. The most common means of spreading HCV is through injection drug use, even if the drug use was many years ago or happened only once. Anyone with HCV infection can pass it on to others by sharing needles or other activities that may result in exposure to blood and body fluids. Activities such as tattooing and body piercing, which may occur under less-than-sterile conditions, can also spread the virus. The spread of the virus through unsafe sexual activity is considered rare. Since 1990, the risk of getting HCV infection from blood transfusions is very rare due to precautions taken in screening blood donors and increasingly sensitive laboratory testing of blood products. Limited evidence to date suggests that pregnant women with HCV infection seldom pass along the infection to the baby in the womb and it is not known for certain if the virus can be transmitted through breast milk.¹¹ Studies of mother-to-child transmission of HCV have reported average transmission rates of about 5% in women with HCV alone and about 15% in women co-infected with HIV.¹²

The majority of people with HCV infection (60-70%) have no symptoms. About 80% of persons with HCV progress to chronic and persistent infection. Up to 20% of chronically infected persons may develop liver cirrhosis or liver cancer after 20-30 years of infection. Hepatitis C occurs in 50-90% of HIV-positive people with intravenous risk factors.¹³

Newly diagnosed cases of HCV do not reflect the actual number of HCV-infected individuals living in Alberta. Health Canada estimated that in 2004, there were 24,081 persons infected with HCV in Alberta.¹⁴

Exhibit 10

Age-adjusted rate of newly diagnosed HCV infections by gender, Alberta, 1998-2009



Some Alberta facts about hepatitis C for the period 1998 to 2009

- 1,130 cases of HCV infection were reported in 2009.
- The number of cases of HCV reported annually has declined. The age-adjusted rate was 30 cases per 100,000 population in 2009, while the rate was 46 in 2005 and 70 in 2001.
- Cases in males outnumber females by almost 2:1.
- Rates of HCV have peaked between the ages of 25 and 54.
- Rates in 2009 were higher among Aboriginal persons than non-Aboriginal persons.
- HCV rates in federal and provincial correctional facilities are high.

Identifying the challenges common to STI and BBP

STI and BBP are significant public health issues for Albertans. The challenges to be addressed are common across all the diseases caused by STI and BBP. Many of these challenges are influenced by a combination of factors including those often referred to as health determinants. Several, but not all, factors are clustered into five key areas below:

Disease Factors

- Multiple sources of infection: different body fluids
- Multiple modes of transmission: sexual transmission, injection drug use
- Co-infections of STI and BBP are common
- BBP treatment and management regimens are complex and costly
- Persons infected with STI and BBP may be asymptomatic with no or minimal knowledge of their ability to infect others
- Some STI increase the transmission and acquisition of HIV

Psychological Factors

- Feelings of poor self-worth
- Lack of social and personal awareness and skills
- May not perceive their personal risks
- Fear of stigma delays seeking testing or treatment
- Lack of fear of acquiring HIV
- Hopelessness and despair about present and future situation
- Poor future orientation with a focus on meeting immediate, urgent needs, combined with anxiety and insecurity about ability to meet basic needs such as food and housing

Socio-Demographic Factors

- Affects all ages, but primarily youth and young adults
- People coming from countries where HIV is endemic may be at greater risk
- Cultural practices, beliefs and attitudes may impact acceptability and accessibility to the prevention, care and management of diseases
- Both men and women are at risk, but women are more often economically dependent on men and also at higher risk of sexual violence, which could result in infection
- Those with lower incomes and education are at higher risk
- Transient and homeless persons are at higher risk
- Those with low literacy skills may make prevention materials inappropriate for individuals; therefore, putting them at higher risk
- Social exclusion or lack of community involvement

Behavioural Factors

- High-risk and unprotected sexual practices
- Multiple sex partners, involvement in the sex trade, early initiation of sexual behaviour, use of alcohol and drugs, sex with partners of unknown status
- Addictions, alcohol and drug misuse affect decision-making
- Mental and emotional disorders that impair judgment and ability to consent
- For BBP, injection drug use involving sharing of needles, syringes and other drug mixing paraphernalia
- For BBP, use of cocaine, and shooting galleries
- For BBP, percutaneous exposure such as body piercing, tattooing using unclean needles or ink

Environmental Factors

- Life circumstances, poor safer sex negotiations/skills, domestic violence, early history of child abuse and system involvement such as child welfare and corrections
- Social norms, stigma, community sensitivity, religious beliefs, gender role norms, marginalization, sexism, racism, and homophobia
- Media (including Internet and social media) influences on sexual behaviours
- Barriers to accessibility to preventive and culturally appropriate health services and resources
- Lack of anonymity, availability of services and access to information can be problematic in small communities
- Unemployment and poverty

STI and BBP challenges

While progress has been made on several fronts, partners working in STI and BBP prevention, control and support field identified challenges that Alberta needs to continue working on to reduce the incidence and the burden of STI and BBP diseases. These challenges are similar to those identified at national and international levels. A summary of these challenges follows:

- The **populations most at risk** for STI and BBP **face multiple barriers** to accessing services, tend to be on the margins of society and are difficult to reach with prevention messages.
- **Stigma, marginalization, prejudice** and **discrimination** continue to be associated with STI and BBP.
- **Mainstream youth are at increased risk** for STI and BBP due to a number of factors: lack of negotiating skills, limited planning and preventive measures, peer pressure to conform, use of alcohol and drugs impairing their decision-making and wide use of birth control pills with neglect of condom use. Rural youth may be further constrained to seek medical attention for several reasons: fear that their parents or others will find out, lack of transportation to attend clinics and laboratory appointments, limited finances, no drug plan and limited time to attend appointments when attending school or working.
- **There is a false sense of security and unfounded optimism** in the community, especially about HIV. This is found particularly among youth, some who believe there is a cure for HIV. This may be contributing to complacency, lack of ownership of individual and community problems and overall increased levels of unsafe sexual behaviours.
- STI and BBP are **competing with other diseases** for public attention, financial and human resources, research and political commitment.
- STI and BBP are **more than health issues**. They have significant socioeconomic contributing factors and implications as well as political, cultural, legal, ethical and human rights considerations, all of which may impede use of effective preventive and therapeutic interventions, including harm reduction and addictions programs.
- **Genetic variants of HIV and ongoing shifts in the disease** continue to present challenges for researchers, policy makers and practitioners.
- **Fragmentation, competition and fatigue among community organizations** impede community co-ordinated and collaborative efforts and partnerships.
- Demands for services can result in a **focus on care and support** and limit resources available for education and prevention within community organizations.
- **Public misconception** that information and education on sexual health and harm reduction strategies increases sexual activity and participation in harmful activities. The harm reduction or risk reduction approach continues to be misunderstood or rejected in some communities in favour of more abstinence-based approaches.
- **National concerns about privacy of personal health information** impede notification of detected infections and diseases, such as immigration testing for HIV.
- **Inadequate provisions** to deal with recalcitrant patients.
- **National and provincial jurisdictional concerns** may limit the amount of collaboration undertaken in addressing preventive and therapeutic interventions.
- The **amount and quality of sexual health education** in the school system varies in Alberta.
- Access to **harm reduction programs** varies throughout the province.
- Labor intensive activities such as contact tracing and case followup are not readily ramped up to respond to increased demand.

STI and BBP strategy and action plan

Effectively addressing the challenges posed by STI and BBP requires a broad and collaborative population health approach be taken along the full health-to-disease continuum. The STI and BBP Strategy and Action Plan requires actions in the following five key areas:

- **Prevention for the well and uninfected population (primary prevention).** Prevent infections from occurring in the first place by promoting and supporting healthy behaviours, supportive environments, harm reduction approaches, counselling and surveillance activities. Effective prevention activities help to prevent movement to the next stage in the health-to-disease continuum (see illustration, page 20), for those who are at increased risk of infection.
- **Early detection and diagnostic (secondary prevention) for the increased risk population.** Counselling and testing, contact identification and followup, early intervention, harm reduction approaches and controlled risk factors are the focus in this stage. The intent is to prevent the infection from progressing to an established disease and to prevent re-infection and co-infection.
- **Management and control (tertiary prevention) for the population with established disease.** In this stage, providing and monitoring adherence to effective treatment and acute care activities are key. Any complications need to be managed while assuring that any further transmission of disease is prevented. The overall intent of this stage is to prevent or delay any complications.
- **Support and counselling for the population with managed disease.** In this stage, the management of disease is focused on promoting and supporting the quality of life for those infected and affected by the disease.
- **Infrastructure** is needed to support and enhance the effectiveness of the interventions along the disease continuum. It includes human, financial and technological resources, research and evaluation, professional education and surveillance activities.

For each of the five key areas, the STI and BBP Strategy and Action Plan identifies:

- **Strategic goals** set the direction according to the population health-disease continuum.
- **Objectives** target specific challenges requiring action.
- **Issue and background information** describe the specific challenges that need to be addressed.
- **Performance measures** identify areas to be measured to help determine progress being made in reducing STI and BBP. In some cases disease incidence measures are used; in other cases, measures describe actions for disease prevention, control and management. It should be noted that in some cases, taking specific actions such as increasing the level of STI and BBP testing will most likely lead to increased new STI cases as more infected individuals are identified. Targets are identified where possible.
- **Actions** describe the range of activities that will be undertaken to address the challenges of reducing STI and BBP.
- **Roles and responsibilities of partners** are identified.

The next section describes the vision and guiding principles as well as the framework used to develop the STI and BBP Strategy and Action Plan.

Vision and guiding principles

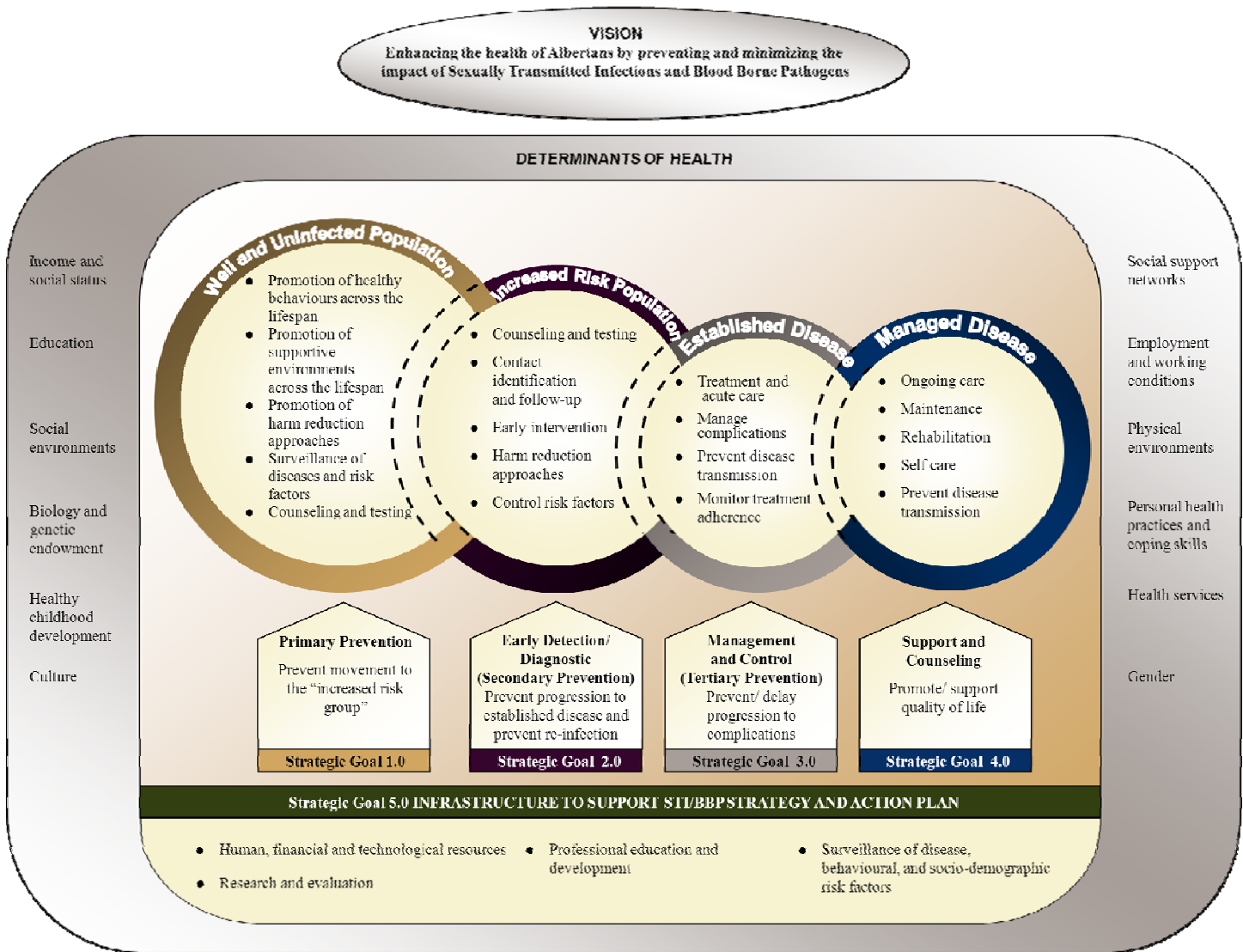
Vision

Enhancing the health of Albertans by preventing and minimizing the impact of sexually transmitted infections and blood borne pathogens.

Guiding Principles

- **Comprehensive, participative and long-term preventive focus**—focus on primary prevention involving target groups, including those who are infected and affected, to reduce the risk factors and the risk of transmission, thus reducing the risk of acquiring an infection and developing a chronic disease or complications over the long term.
- **Population health approach**—the population as a whole and specific groups at increased risk are targeted considering the determinants of health within their physical, social and interpersonal environments that influence their health.
- **Holistic health approach**—the whole person, their physical, emotional, mental and spiritual needs, diverse lifestyles and values are understood and addressed in an open, comprehensive and compassionate manner.
- **Client-centered services and confidentiality**—services are focused on the needs of the client given their life circumstances with confidentiality being assured at all times.
- **Evidence-based and sustained strategies**—strategic approaches and interventions are evidence-informed and sustained over extended periods of time as shown to be effective.
- **Balanced individual and community rights and obligations**—program policies and standards respect the rights of individuals as reflected in federal and provincial legislation in balance with measures to reinforce individual responsibilities and obligations and the interests of public safety.
- **Effective communication**—information is shared and understanding facilitated through effective listening, openness and honesty.
- **Integrated and co-ordinated partnerships**—approaches are co-ordinated and integrated within communities, non-governmental organizations, industry and the private sector and governments to address community participation, supportive policy decisions, intersectoral action, appropriate legislation and delivery of health services across the province, with a focus on optimizing the use of resources.
- **Harm reduction**—recognizes there will always be a portion of the population who will engage in higher risk behaviours, such as the use of unprescribed injection drugs and/or have unprotected sex with more than one sex partner. Harm reduction focuses upon reducing or minimizing the harms associated with higher-risk behaviours. Harm reduction helps protect individuals from the most harmful health consequences of addiction behaviours for themselves, their families/partners and their communities, while facilitating referrals to treatment and rehabilitation services.

STI and BBP strategy and action plan conceptual framework



The STI and BBP Strategy and Action Plan conceptual framework illustrated above begins with the vision. The framework shows the well and uninfected to the infected/managed disease continuum as represented by four circles. Each circle identifies the key activities pertinent to each stage along the continuum. The outer border shows the health determinants that have a major influence on the health status of individuals, families and communities. These health determinants need to be considered in planning and implementing strategies by all partners or stakeholders if the strategies are to be as effective as they can be.

The lower part of the graphic shows the five strategic goals for the strategy. Four described in the arrow boxes pertinent to each stage along the continuum—primary prevention, early detection and diagnosis (secondary prevention), management and control (tertiary prevention), support and counselling—and the fifth goal at the bottom of the graphic indicating the foundation required to support implementation of the strategies—infrastructure. The strategic goals are colour-coded to correspond with the text that describes the specific objectives, issue and background information, performance measures and actions that are included for each goal. Partner roles and responsibilities are also identified for each of the strategic goals.

Strategic goals and objectives

Strategic Goals		Objectives	
1	Increase prevention of STI and BBP	1.1	Reduce the number of newly acquired STI and BBP cases per year in Alberta
		1.2	Promote safer sex and healthy sexual behaviour
		1.3	Reduce harm associated with substance use and non-prescription needle use
2	Improve early detection and diagnosis of STI and BBP	2.1	Increase confidential counselling and testing for individuals and groups at increased risk for STI and BBP
		2.2	Increase identification and diagnosis of individuals who are infected and groups at increased risk for STI and BBP
		2.3	Increase contact identification and followup for STI and BBP
		2.4	Increase testing of high-risk and currently under-reached populations
3	Enhance management and control of STI and BBP	3.1	Enhance appropriate disease management services for STI and BBP
		3.2	Reduce disease transmission by known infected persons
4	Strengthen support and counselling services for those infected and affected by STI and BBP	4.1	Enhance co-ordination of community care and support services
		4.2	Increase capacity for self-care of chronic conditions
5	Strengthen infrastructure to support the Alberta STI and BBP Strategy and Action Plan	5.1	Strengthen human, financial and technological resources
		5.2	Strengthen research and evaluation
		5.3	Strengthen service provider education and development
		5.4	Enhance surveillance of disease, behavioural and socio-demographic risk factors

Alberta STI and BBP action plan summary

The table below summarizes the actions, key partners and expected results for the STI and BBP Strategy and Action Plan. The health system, including AHW and AHS have major roles and responsibilities. However, efforts are underway by a large number of stakeholders to address STI and BBP in the province. A more detailed description and list of actions begins on page 28. The roles and responsibilities of key partners start on page 63.

Goal 1.0 Increase primary prevention of STI and BBP

Objective 1.1: Reduce the number of newly acquired STI and BBP cases per year

Objective 1.2: Promote safer sex and healthy sexual behaviour

Objective 1.3: Reduce harm associated with substance use and non-prescription needle use

	Actions	Key Partners	Expected Results
1.1	Increase education initiatives regarding the continuing risk and consequences of STI and BBP to minimize high-risk sexual and other risk behaviours.	AHW AHS	Albertans are informed about STI and the actions they can take to prevent acquiring infections and protecting their health.
	Increase access to and participation in harm reduction programs and strategies.	AHW AHS	More Albertans use harm reduction services.
	Improve overall STI and BBP awareness and prenatal care in vulnerable and marginalized populations.	AHS First Nations and Inuit Health (FNIH) Community Organizations	Women, their families, friends, health professionals, community workers and others are more informed how to prevent infections and seek prenatal care. Prenatal care is accessible for all women regardless of their circumstances.
	Improve co-ordination and collaboration among partners.	AHW AHS	Community, provincial and federal organizations collaborate, communicate and co-ordinate access to and provision of services across sectors, such as health, housing and income support.
	Increase awareness of and accessibility to hepatitis B and human papillomavirus (HPV) vaccine.	AHW AHS	More Albertans are immunized for hepatitis B as the result of increased opportunities for access to information, education, support and availability of vaccination programs, sites and providers. More girls and young women are immunized with HPV vaccine.

	Actions	Key Partners	Expected Results
1.2	Develop and deliver public education and communication campaigns, including web-based education and social network strategies, such as Facebook and Twitter, to provide accurate and culturally appropriate information.	AHW AHS Alberta Education (AE)	People from specific target groups are reached and have more information about their risks for infections and how to prevent them and get treatment if they need it.
	Address factors such as education and income that affect STI rates.	AHW AHS Alberta Aboriginal Relations (AAR) FNIH Alberta Seniors and Community Supports (ASCS)	Customized programs and services are available to meet the needs of specific groups of Albertans.
	Promote, maintain and reinforce the provision of quality sexual health information in the school system by offering programs that help young people delay sexual activity and help them develop safer sex practices if they are sexually active.	AHW AHS AE	Programs and services are designed to consider the factors that affect health such as early childhood development, culture, education, income, housing, employment, social environments, supports, recreation, age and gender.
	Develop and implement clear standards for and training on sexual health information and STI/BBP prevention activities, including effective counselling about safer sex practices, to be carried out by professionals and other front line workers.	AHW AHS	Alberta students have the information they need to make healthy choices and seek help when they need it. Those individuals who help prevent, treat and support Albertans, infected or affected by STI and BBP, are trained and have clear standards to use for their work.
1.3	Provide training and harm reduction education for medical, pharmacy, nursing and social work staff/students, police, prison guards and probation officers.	AHS Alberta Solicitor General and Public Security (ASGPS) Alberta Advanced Education and Technology (AAET)	People who help prevent, treat and support Albertans infected or affected by STI and BBP are trained and have clear standards to use for their work.
	Implement strategies to increase access to methadone treatment, in provincial correctional centres and those being released from custody.	AHW AHS ASGPS	Methadone treatment is accessible for those who need it including those involved with the correctional system.

Goal 2.0 Improve early detection and diagnosis

Objective 2.1: Increase confidential counselling and testing of STI and BBP

Objective 2.2: Increase identification and diagnosis

Objective 2.3: Increase contact identification and followup

Objective 2.4: Increase testing of high-risk and currently under-reached populations

	Actions	Key Partners	Expected Results
2.1	Increase awareness about and access to testing and counselling for persons at increased risk for STI and BBP.	AHS Community Organizations	Albertans can access early detection testing, treatment and support services for STI and BBP through a wide range of programs, services and facilities throughout Alberta regardless of their individual circumstances.
	Promote, maintain and reinforce screening of all pregnant women including those who do not seek prenatal care for STI and BBP including education of health care providers and caseworkers in non-traditional obstetrical settings.	AHS	Pregnant women will be screened for STI and BBP. Health care providers and those working with women at risk are educated about how to assist pregnant women to be screened.
2.2	Strengthen case finding through education and training of health care and other service providers who work with individuals at increased risk for STI and BBP.	AHS	Health care and other service providers are trained to support infected persons to assist with identifying their contacts.
	Promote the standardization and wide availability of diagnostic and point-of-care testing for STI and BBP and their complications.	AHS	Testing is standardized and widely accessible to meet different needs.
2.3	Increase awareness of and support for those infected with STI and BBP about the risk of transmission and facilitate the identification of and followup with those who may have been infected, including linkage with appropriate community resources.	AHS Community Organizations	People who are infected receive treatment, help others at risk to receive treatment and are connected to community services they need.
	Enhance and sustain STI and public health resources, including partner notification nurse capacity, for contact identification and followup.	AHS	More front line nurses and public health services are in place to help Albertans.
2.4	Increase testing of high-risk and currently under-reached populations.	AHS	Marginalized populations can access innovative outreach programs.

Goal 3.0 Enhance management and control of STI and BBP
Objective 3.1: Enhance appropriate disease management services for STI and BBP
Objective 3.2: Reduce disease transmission by known infected persons

	Actions	Key Partners	Expected Results
3.1	Facilitate access to medical, dental and other health services, including specialized services for those infected with STI and BBP and for those with co-infections by assisting with transportation, language translation and building culturally appropriate service delivery.	AHS Community Organizations	Culturally appropriate health and support services are accessible.
	Strengthen collaboration with and enhance access to primary health care service teams and the array of community-based services, including wellness services, holistic approaches and complementary therapies.	AHS Community Organizations	Programs, services and interventions are based on the best available evidence. Programs, services, and interventions are community-based and use a variety of approaches that effectively meet the variation in needs of Albertans.
	Strengthen collaboration between service providers in urban and rural settings, including the use of technologies such as Telehealth to serve rural and remote communities.	AHS	Technology is used creatively and effectively.
	Ensure the availability of specialist consultation for infected individuals no matter where they live in the province.	AHS	Access to medical expertise is available across Alberta.
3.2	Increase education and support for infected people about the risk of transmission of STI and BBP.	AHS Community Organizations	People infected with STI and BBP have information and support to protect their health including any factors that affect their well-being and individual circumstances. Programs and services are available to help individuals who are at risk of harming themselves or others.
	Provide access to effective prenatal care to reduce mother-to-child transmission.	AHS	Access to prenatal care especially for those at risk is improved.

Goal 4.0 Strengthen support and counselling services for those infected and affected by STI and BBP

Objective 4.1: Enhance co-ordination of community care and support services

Objective 4.2: Increase capacity for self-care of chronic conditions

	Actions	Key Partners	Expected Results
4.1	Create community partnerships, communication and collaboration for planning, delivery and evaluation of community care and support programs.	AHS Community Organizations AAR	Co-ordination of programs and services delivery is improved.
	Work with Aboriginal leaders and Elders to positively influence how infected people and their families are supported in their communities.	AHS AAR Community Organizations FNIH	Aboriginal people infected and affected by STI and BBP are supported by the leadership of their communities.
	Enhance the quality of care for people living with STI and BBP by including peer support, complementary therapies, rehabilitation and social support services.	AHW AHS ASCS Alberta Employment and Immigration (AEI)	Support services to assist people living with STI and BBP are accessible and effectively meet their needs.
4.2	Enhance education and training services to clients to manage their own chronic care needs in compliance with recommended treatment regimens and with adequate financial and other supports.	AHS Community Organizations	Clients are supported to manage their health and treatment needs.
	Create awareness that financial and psychosocial burdens and other factors that adversely affect the self-care of chronic conditions.	AHW AHS ASCS AEI	Policies, programs and services reflect consideration of the health social and economic factors affecting the ability of people to manage their health successfully.

Goal 5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan
Objective 5.1: Strengthen human, financial and technological resources
Objective 5.2: Strengthen research and evaluation
Objective 5.3: Strengthen service provider education and development
Objective 5.4: Enhance surveillance of disease, behavioural and socio-demographic risk factors

	Actions	Key Partners	Expected Results
5.1	Adjust priorities for allocation of financial and human resources for STI and BBP preventive treatment and population health interventions to strengthen capacity within AHS.	AHS	Human, financial and technological resources are allocated to address priorities.
5.2	Evaluate all STI and BBP programming and interventions.	AHW AHS	Policies, programs and services are informed by research, evaluation and other evidence.
5.3	Incorporate sexual health, harm reduction and addictions, including epidemiology and effective prevention, management and support interventions for STI and BBP in health, education, social service and law enforcement post-secondary curricula.	AHW AAET	Post-secondary education curricula include training in prevention, management and interventions for STI and BBP particularly for health, education, social service and law enforcement students.
	Develop and implement standards and clinical practice guidelines for evidence-based interventions in the prevention, treatment and management of STI and BBP.	AHW AHS	Standards and clinical practice guidelines are implemented.
5.4	Use surveillance data to establish program priorities, develop effective programs and interventions and monitor progress and results.	AHW AHS	Surveillance data is available and used to inform decisions.
	Train service providers on the interpretation and use of epidemiological data and research to improve policy development and program planning and to monitor service provision and effectiveness.	AHS	Service providers are trained to effectively use evidence in their decisions.
	Improve the standardization, collection, analysis and dissemination of data in a timely manner on the prevalence of behavioural and social risk factors, incidence and prevalence of STI and BBP.	AHW AHS	Standards are used in the collection, analysis and use of data to improve the quality of planning, service delivery and understanding of the impact of STI and BBP.

Detailed action plan

Goal 1.0 Increase prevention of STI and BBP

1.1 Reduce the number of newly acquired STI and BBP cases per year in Alberta

Issue:

Despite the progress in the prevention and management of STI and BBP, Albertans continue to be infected with STI and BBP.

Performance Measures

Performance Measure		Baseline (2009)	Target by 2016	Data Source
STI	Rates of newly reported infectious syphilis	7.7 per 100,000 population	Ministry of Health and Wellness Business Plan Targets ¹⁵ : 2011-2012 = 6.5 2012-2013 = 6.0 2013-2014 = 5.8	AHS STI Database
		7 reported cases of congenital syphilis; four of those died ¹⁶	No cases of congenital syphilis within five years	AHS STI Database
	Rates of newly reported gonorrhea	43.8 per 100,000 population	Ministry of Health and Wellness Business Plan Targets: 2011-2012 = 50 2012-2013 = 45 2013-2014 = 40	AHS STI Database
	Rates of newly reported chlamydia	379.3 per 100,000 population	Ministry of Health and Wellness Business Plan Targets: 2011-2012 = 330 2012-2013 = 320 2013-2014 = 310	AHS STI Database
		15-19 year old age group Females 2,363.3 per 100,000 Males 522.6 per 100,000 20-24 year old age group Females 2,551.9 per 100,000 Males 1,292.2 per 100,000 population	25% decline in rates of chlamydia among 15-24 year olds	AHS STI Database

Performance Measure		Baseline (2009)	Target by 2016	Data Source
HIV	Age-adjusted rate of newly reported HIV cases	6.2 per 100,000 population	Decline in rates of HIV and AIDS	AHW Communicable Disease Reporting System (CDRS)
	Newly reported cases in MSM	75 newly reported cases	Stabilization in number of newly reported cases in MSM	CDRS
	Newly reported cases in Aboriginal peoples	39 newly reported cases	Continued decline in number of newly reported cases in Aboriginal peoples	CDRS
	Newly reported cases in IDU	22 newly reported cases	Continued decline in number of newly reported cases in IDU	CDRS
HBV	Age-adjusted rate of acute HBV	0.8 per 100,000 population	Continued decline in rates of acute HBV	CDRS
	Collection of data on prevalence of chronic HBV infection	713	Continued decline in the rates of chronic HBV infection	CDRS
	Immunization rates in Grades 5 and 9	95%*	95% HBV immunization rates in Grades 5 and 9	AHW/AHS Immunization Program
HCV	Age-adjusted rate of HCV infection	29.8 per 100,000 population	Continued decline in rates of HCV	CDRS
HPV	Immunization rates in Grades 5 and 9 girl	61%**	95% HPV immunization rates in Grades 5 and 9 girls	AHW/AHS Immunization Program

*Since the launch of the Grade 5 Hepatitis B Vaccination Program in 1995, the former health regions consistently reported immunization rates of 95% over a five-year period. This manual process of data collection was discontinued in 1999.

** Grade 5 girls in Calgary and Edmonton during 2008/2009 school year.

Background

- In Alberta, **chlamydia, gonorrhea and syphilis** are reportable diseases under the Alberta Public Health Act. Chlamydia, gonorrhea and syphilis have increased substantially over the past 10 years. Preventive measures focus on safer sex practices to avoid contracting the infections and to avoid transmission of the infections from infected persons¹⁷.
- Syphilis is primarily heterosexual in nature, resulting in women of childbearing age and their babies being at risk for syphilis infection. Alberta leads the country in the number of confirmed cases, which spiked in 2009, with seven confirmed congenital syphilis cases; four of those died.
- In 1998, **HIV** became a notifiable disease in Alberta. Preventive and harm reduction approaches are intended to help people avoid contracting or transmitting HIV. Harm reduction approaches include a focus on safer sex, needle exchange programs, distribution of safer drug paraphernalia and methadone programs. Their acceptability and accessibility varies across target groups, communities and geographic locations.^{18 19}
- The rate of acute **HBV** appears to be moving in a downward trend. Preventive measures include hepatitis B immunization and prenatal screening as well as information and prophylactic measures to prevent the transmission of hepatitis B from infected persons.²⁰
- In 1997, **HCV** became notifiable. Preventive measures address injection drug use, tattooing and body piercing as well as occupational exposure. Information is also available to prevent the transmission of HCV from infected persons.²¹
- **HPV**, although not a reportable disease, is a common infection that is transmitted through sexual contact. It is estimated that over 70 per cent of people will have at least one genital HPV infection in their lifetime. Certain types of HPV infection cause almost all cases of cervical cancer.²² In September 2008, immunization against HPV was implemented for all Grade 5 girls to protect against cervical cancer. In September 2009, immunization was expanded to include all Grade 9 girls, as part of a catch-up program that will run for a three-year period ending June 2012.

1.0 Action plan for reducing the number of new STI and BBP

Sexual Transmission

- Increase and target awareness and education initiatives regarding the continuing risks and consequences of STI and BBP and minimize high-risk sexual and other risk behaviours.
- Increase access to and participation in harm reduction programs and strategies.
- Improve prenatal care in vulnerable and marginalized populations:
 - **Outreach capacity and programs:** Evaluate current situations, outreach capacity in various communities, including communities that do not have established outreach programs.
 - **Best practice models:** Identify best practice models that could be applied to Alberta communities such as the Women in Shadows Program, CUPS Women’s Health Centre and the Aboriginal Prenatal Wellness Program and use the knowledge for improvement of services.
 - **Build professional knowledge:** Include Aboriginal maternal-child health in courses and conferences for professionals.
- Improve overall STI and BBP awareness in vulnerable and marginalized populations:
 - **Community engagement:** Engage the communities most affected by syphilis to understand their perspective on the situation and their suggestions for solutions.
 - **Education in partnership:** Collaborate as partners to identify and address barriers to education in vulnerable populations about syphilis infection, the high-risk of transmission and ways to access care.
 - **Harm reduction collaboration:** Increase and support the efforts of harm reduction groups, such as needle exchange programs, to arrange disease testing and serology and to work in concert to develop mechanisms for testing, treatment and followup.
- Normalize syphilis and HIV testing to make such testing routine, thereby reducing stigma attached to such testing.
- Improve co-ordination and collaboration among partner agencies, considering as much as possible the problems exacerbated by the determinants of health:
 - **Enhance access to preventive and treatment programs for vulnerable women:** Identify potential existing and future partnerships such as drop-in centres, shelters, food banks and focus on developing trusting relationships between health professionals, front line workers and others with vulnerable women.
 - **Co-ordinate AHS resources for vulnerable women:** Enhance co-ordination among various portfolios within AHS that deal with vulnerable populations such as mental health, addictions and harm reduction to facilitate testing and/or referral of pregnant women.
 - **Work with advocacy agencies:** Identify and work with advocacy agencies that provide services to homeless or at risk populations, such as the Mustard Seed Church, Kindred House, Bissell Centre, CUPS and INN From the Cold.
 - **Target on-reserve pregnant women:** Partner with FNIH to identify and target reserve communities at high-risk for syphilis and STI, including nursing stations, community health workers and physicians who provide services in these communities.

- **Target off-reserve pregnant women:** Partner with agencies and community groups that focus on Aboriginal people living off-reserve such as Elbow River Healing Lodge, Native Friendship Centres, and build strategies for identifying pregnant women and linking them with prenatal care as soon as possible.
- **Engage Primary Care Networks:** Particularly in rural areas of the province, to reduce barriers to accessing prenatal care for vulnerable pregnant women.

Immunization

- Increase awareness of and accessibility to hepatitis B vaccine in the general population in addition to school programs and to populations at increased risk.
- Increase awareness of and accessibility to hepatitis B and human papillomavirus vaccine.
- Increase awareness of medication programs, such as the Non-Occupational Post-Exposure Program (nPEP) and support for those who have experienced sexual assault.

1.0 Increase prevention of STI and BBP

1.2 Promote safer sex and healthy sexual behaviour

Issue:

Unsafe sexual practices are major risk factors for acquiring and transmitting STI and BBP.

Performance Measures

Performance Measures
Establish baseline for the proportion of Albertans who report safer sexual practices.
Establish baseline for the proportion of individuals in high-risk situations who report safer sexual practices.
Establish baseline for the proportion of children and youth receiving healthy sexuality education.

Background

- Promoting safer sexual behaviours depends on individuals valuing their sexual health and accepting their vulnerability, having access to culturally appropriate information, developing health promoting personal and social skills and having access to services that meet their needs.
- Promoting responsible adolescent sexual behaviour means helping adolescents abstain from high-risk sexual practices or helping them to overcome pressure to be sexually active, providing accessible, confidential counselling and clinical services for those who are or have been sexually active.
- Considerable information is available and targeted to individuals and groups through the educational system, community service organizations, AHS, family planning and STI clinics, health professionals and employee health services. However, the extent to which the information is provided on a consistent basis is unknown. Several factors may contribute to unsafe sexual practices:
 - **Biological factors** related to the asymptomatic nature of some infections, especially STI, and the lag time between exposure and the occurrence of the disease. The absence of symptoms of some of the STI and BBP diseases is a significant factor.
 - **Social and behavioral factors** including complacency about the consequences of disease given the availability and efficacy of current and emerging therapies; attitudes associating promotion of sexual health with negative views surrounding sexuality; limited accessibility to services and knowledgeable professionals skilled in sexual health; poverty and marginalization; substance abuse and personal discomfort in openly discussing sexual matters.
- People's attitudes and beliefs affect their sense of vulnerability to diseases and their comfort in addressing safe behaviours to prevent the spread of disease. For example, in some Aboriginal or ethnic communities, there is a strong disapproval of sexuality education and homosexuality. Many Aboriginal peoples who get infected are street involved and dealing with addictions. These risks, if accompanied by low self-esteem and lack of social supports will negatively influence the choices made.²³
- Correctional Service Canada offers a Reception Awareness Program that provides standard education to all newly admitted inmates about transmission and prevention including harm reduction and screening of STI and BBP. The program also provides education about health services, such as screening, testing and treatment. Correctional Service Canada also provides a Peer Education Course that educates select individuals of the federal inmate population to act as confidential resources of STI and BBP information for the general federal prison population. This program is also offered in Aboriginal-based and women-based versions. In addition, monthly health promotion packages featuring STI and BBP education are circulated throughout the federal prison population.

1.0 Increase prevention of STI and BBP

Action plan for promoting safer sex and healthy sexual behaviour

General Population

- Develop and deliver effective public education and communication campaigns, including provincial web-based education and social network services, such as Facebook and Twitter, to provide accurate, accessible and culturally appropriate information to support cultural norms for safer sex.
- Engage community outreach and opinion leaders in changing social and community norms so people receive consistent messages and reinforcement for safer sex behaviours.
- Promote increased focus on responsible sexual behaviours in the media, entertainment and especially television industry.

Persons and Situations at Increased Risk

- Develop, implement and sustain relevant and culturally appropriate sexual health information and interventions targeted to specific groups such as youth, Aboriginal people and other ethnic groups, men having sex with men, injection drug users, adults and children living with HIV, sex workers, people in prisons, youth in youth correction centres and persons with mental health problems.
- Promote, maintain and reinforce safer sex practices addressing the false sense of security and increasing complacency among men having sex with men and among other groups.
- Promote and maintain the relevance of safer sex messages for sexually active persons who have been exposed to the messages for an extended period of time and for those who are newly sexually active and who have re-entered the dating scene, in collaboration with community members.
- Promote and reinforce the necessity for safer sex behaviours in high-risk and power-related situations involving the use of alcohol and drugs.
- Facilitate male and female condom distribution to sexually active persons, including those in provincial prisons, reinforcing proper condom use, negotiation and refusal.
- Collaborate to address health determinants such as education and income that influence the circumstances contributing to STI and BBP.
- Include affected clients in providing support to at-risk individuals as peer educators and as participants in strategic planning and implementation.

Youth

- Promote and reinforce the provision of quality sexual health information in the school system, offering programs that help young people delay sexual activity and help them develop safer sex practices if they are sexually active.
- Provide accessible and relevant quality sexual health information to out-of-school youth, homeless youth, street-involved youth, and other youth at higher risk.
- Increase youth awareness of the risks and consequences of unsafe sexual activity and provide information on how STI and BBP can be prevented, identified and treated.
- Provide timely education to help youth develop healthy approaches to sexual behaviour before they establish unhealthy practices.

Professional Education and Training

- Provide school educators with the training, tools and resources, including web-based approaches, required to deliver quality sexual health education.
- Develop and implement clear standards for and training on sexual health information and STI and BBP prevention activities, including effective counselling about safer sex practices, to be carried out by professionals and other front line workers.

1.0 Increase prevention of STI and BBP

1.3 Reduce harm associated with substance use and non-prescription needle use

Issue:

Substance use, especially injection drug use, is a major risk factor for contracting and transmitting STI and BBP.

Performance Measures

Performance Measures
Establish a baseline for accessibility to and use of harm reduction programming and supplies including rural Alberta and prison populations.

Background

- Harm reduction refers to a policy or program directed towards decreasing the adverse health, social and economic consequences of drug use without requiring abstinence from drug use. Harm reduction approaches are restricted to those strategies which place first priority on reducing the negative consequences of drug use for the individual, the community and society while the user continues to use drugs at least for the present time. However, a harm reduction approach does not rule out abstinence in the longer term.²⁴
- Harm reduction programs and policies include condom distribution, needle exchange programs, distribution of drug paraphernalia, methadone maintenance programs, education and outreach programs, law enforcement policies and tolerance areas/safe injection sites.
- Harm reduction programs, while found to be generally successful, may also be controversial. Harm reduction strategies often involve the needs of those who are socially disadvantaged or marginalized which raises broader issues related to poverty and discrimination, history of abuse, poor self esteem, negative societal and personal beliefs regarding support for continuing drug use and associated supply costs.
- Harm reduction programs in Alberta are limited in geographic scope with availability and accessibility being an issue in rural and remote areas of the province. Needle exchange programs are available in Edmonton, Calgary, Fort McMurray, Grande Prairie, Lethbridge, Medicine Hat and Red Deer.
- Injection drug use is one of the most prevalent risk factors exposing Aboriginal people to HIV and HCV. Underlying injection drug use may be histories of multiple abuses, addictions, poverty and overall, low self-esteem – all of these leading to poor choices and decision making.
- The harm reduction approach continues to be misunderstood or rejected in some Aboriginal communities in favour of more abstinence-based approaches.
- The prevalence of HIV/AIDS and HCV in correctional facilities continues to be a significant concern.

Action plan for reducing harm associated with substance use and non-prescription drug use

Professional Education and Training

- Explore opportunities for harm reduction awareness, education and support for target groups such as police, prison guards and parole officers.
- Explore strategies to provide ongoing training for medical, nursing, pharmacy and social work students and staff working in harm reduction.

Access

- Examine access to and need for expansion of harm reduction programs across the province:
 - Conduct an environmental scan of theoretical underpinnings, best practices, successful initiatives and current harm reduction activities, including those provided by AHS, external agencies and other community groups; and
 - Conduct a provincial needs assessment.
- Implement strategies to increase the number of physicians licensed to provide methadone.
- Implement strategies to increase access to methadone treatment in provincial correctional facilities for those being released from custody.
- Implement strategies to encourage pharmacists to dispense methadone.
- Examine alternatives to physician centered methadone treatment currently being utilized in other countries.

Harm Reduction Supplies

- Explore options for bulk purchase and distribution of harm reduction supplies.

Prisons

- Examine opportunities for harm reduction in provincial correctional facilities, including increased access to methadone treatment.
- Examine opportunities to enhance the transition process for those on methadone being released from custody to communities.
- Provide prevention, care and support to those with HIV in provincial correctional facilities through service organizations (federal and provincial), AHS and community organizations.
- Correctional Service Canada offers a variety of harm reduction programs, including condom, lubricant and dental dam distribution, bleach programs, methadone maintenance programs and education and release planning programs. Federal custodial staff receive education on STI and BBP prevention during their orientation program and on a regular basis thereafter.

Goal 2.0 Improve early detection and diagnosis of STI and BBP

2.1 Increase confidential counselling and testing for individuals and groups at increased risk for STI and BBP

Issue:

Confidential counselling and testing are critical in reducing the transmission of STI and BBP by identifying and screening those at increased risk of infection.

Performance Measures

Disease	Performance Measures
STI and BBP	Establish baseline for proportion of pregnant women screened for STI and BBP.
	Establish baseline for proportion of inmates in Alberta's provincial correctional facilities tested for HIV and HCV.

Disease	Performance Measure	Baseline	Target by 2016	Data Source
HIV and HCV	Total number of tests for HIV antibody and HCV antibody	2006: 141,485 HIV tests; 78,275 HCV tests	Ongoing increase in total number of tests for HIV and HCV each year, concomitant with population increase	Provincial Laboratory for Public Health

Background

- Individuals who are at increased risk of infection or who are unknowingly infected need to know their infection status in order to receive appropriate therapies and counselling as soon as possible and to reduce the risk of infecting others.
- Counselling and testing strategies vary for those who deny their risk, those who recognize their risk but have not been tested and those who underestimate or are unaware of their risk. Approaches need to be targeted to the specific needs of individuals, including cultural adaptations to increase acceptance and subsequent uptake. Individuals also need to understand that testing is not a method of prevention.
- Confidentiality is essential in encouraging testing to avoid client fears of stigmatization and discrimination especially in smaller communities in Alberta. Confidentiality fears, particularly in small reserve communities, Métis settlements and other ethnic minority communities, may prevent some Aboriginal people from seeking testing.²⁵
- The passive role of the patient in the conventional healing system with its focus on the body and the active role of the Aboriginal traditional healing with its focus on the holism of body, mind and spirit create confusion for some Aboriginal people. Testing and counselling within the conventional health system is available to Aboriginal peoples as it is to all Albertans. However, lack of awareness of and access to Aboriginal-specific programs or services incorporating culturally appropriate approaches may be barriers to effective prevention and management.
- Health professionals and other workers need to have knowledge and awareness of those who may be at increased risk. They need the skills necessary for infection recognition, effective counselling and the knowledge needed to determine the most effective approach out of the range of options available.

Action plan for counselling and testing for STI and BBP

Knowledge and Awareness

- Conduct provincial and community campaigns encouraging individuals at increased risk of infection to be tested.

General Population

- Promote, maintain and reinforce screening of all pregnant women for STI and BBP and especially for those who do not obtain prenatal care early in pregnancy. Include health care providers and caseworkers working in non-traditional obstetrical settings.
- Continue to screen all donations of blood, blood products, tissues, organs and semen for syphilis, HIV, HCV and HBV.

Persons and Situations at Increased Risk

- Explore opportunities for increased testing, including pre-test and post-test counselling for persons at increased risk for STI and BBP. This includes young men and women, those in correctional facilities, tuberculosis clinics, drug treatment facilities, family planning and prenatal clinics, STI clinics, facilities that offer services to individuals at higher risk for infection such as men having sex with men, people from HIV-endemic countries and their partners, homeless shelters, group homes, street-involved people and youth and contacts or partners of individuals at risk.
- Normalize testing for STI and BBP by making testing routine, thereby reducing the stigma.
- Allocate appropriate resources to identify, test and treat all contacts of persons diagnosed with STI and BBP.
- Promote screening of all BBP positive persons for other STI and BBP. If individuals have one BBP, screen for other STI and BBP.
- Promote screening of all HIV-positive persons for STI, other BBP, and other communicable diseases, such as tuberculosis.
- Introduce best practice guidelines for staff who interview STI contacts.

Programs and Policies

- Expand routine discussion of STI testing, when appropriate, into routine Pap testing during women's health assessments.
- Work with physicians and other professionals on evidence-based guidelines for STI testing.
- Examine new rapid testing technologies for HIV for their use in non-traditional health settings to increase access and provide immediate testing results to difficult-to-reach populations.

Professional Education and Training

General:

- Promote and support adequate training and education among community physicians and other health care workers to improve adherence to guidelines for confidential and informed consent as well as pre-and post-test counselling.
- Increase professional recognition of STI and BBP infections and other health conditions that may be indicative of disease in order to promote appropriate and timely testing.

Specific to Congenital Syphilis:

- Partner with obstetricians, pediatricians and other physicians to increase awareness for testing, ensure standardized treatment protocols and increase awareness for followup of pregnant women and infants.
- Educate physicians to think about testing for syphilis when suspicious symptoms are present and to be aware of the need for testing and re-testing in pregnancy including those working in non-traditional health settings.
- Educate health care providers and caseworkers in non-traditional obstetrical settings to be alert for pregnant women and to initiate syphilis serology.
- Investigate the possibility of posting complete prenatal record, including prenatal syphilis letters to Netcare so this information is available to health professionals wherever prenatal, childbirth or postnatal care is provided.
- Conduct regular forums to support training and sharing of best practices among physicians, nurses and other health care providers as necessary.
- Produce on-going STI updates and information for provincial partner notification nurses and sexual health educators throughout the province.

2.0 Improve early detection and diagnosis of STI and BBP

2.2 Increase identification and diagnosis of individuals who are infected and groups at increased risk for STI and BBP

Issue:

Identification and diagnosis of those who are infected is critical in treating infections to prevent complications and in reducing the transmission of STI and BBP.

Performance Measures

Performance Measures	Baseline	Target by 2016	Data Source
Testing rates for STI and BBP among youth in detention facilities and inmates in provincial correctional facilities	2009 Baseline: not established/ work ongoing	Increase in testing rates for STI and BBP	Alberta Solicitor General and Public Security
Immunization rates against HBV among inmates while in provincial correctional facilities	2009 Baseline: not established/work ongoing	95% HBV immunization rates	Alberta Health Services
Proportion of HIV-positive individuals > age 14 tested for other STI at time of HIV diagnosis	2009 Baseline: not established/ work ongoing	Increase proportion of HIV-positive individuals > age 14 tested for other STI at time of HIV diagnosis	Northern Alberta Clinic (NAC) and Southern Alberta Clinic (SAC) databases
HPV serotyping testing	To be determined	1. Appropriate sample size determined 2. High-risk populations testing strategy developed	System-wide HPV testing

Background

- Individuals who are infected need to receive appropriate therapies and counselling as soon as possible to manage and treat their infections and to reduce the risk of infecting others. Following counselling and testing, early and accurate diagnosis is essential.
- Access to health services supplied by knowledgeable and skilled health professionals is important. Individuals at increased risk of infection may be transient, living in poverty, often marginalized or subject to discrimination. They often have fewer life skills, lower language or literacy levels and resources to manage their health needs and overall living situation. These individuals may be difficult to reach. Hence strategies and approaches need to be sensitive to the unique needs and life circumstances that many of these individuals face.
- The creation of a safe, secure environment is important for people to disclose their STI and BBP status without fear of rejection, prejudice or loss of confidentiality.
- Correctional Service Canada is federally mandated to offer a comprehensive health assessment to all offenders upon admission to a federal correctional facility and throughout their incarceration. This assessment includes an update of immunizations status, including hepatitis A and B, confidential pre-test and post-test counseling and confidential screening for STI and BBP. National aggregate testing rates for STI and BBP are collected and disseminated; however, provincial baseline rates are not tabulated. An electronic reporting system for monitoring immunization rates in federal correctional institutions is currently not available.

Action plan for identification and diagnosis of STI and BBP

Infection Identification

- Strengthen case finding through education and training of health care and other service providers who work with individuals at increased risk for STI and BBP, including support for infected persons to disclose both their sexual contacts and their social contacts.
- Encourage and support integration of services and partnerships to reach individuals at increased risk of infection such as injection drug users, men who have sex with men, and populations at higher risk such as Aboriginals and individuals from endemic countries.

Diagnostic Programs and Policies

- Promote the standardization and wide availability of diagnostic and point-of-care testing for STI and BBP and their complications, to promote early diagnosis and implementation of appropriate treatment practices.

2.0 Improve early detection and diagnosis of STI and BBP

2.3 Increase contact identification and followup for STI and BBP

Issue:

Individuals who are unknowingly infected may start or contribute to a chain of STI or BBP involving their partners and other contacts.

Performance Measures

Performance Measures		Baseline	Target by 2016	Data Source
STI	Proportion of partners located and tested	2002: 63%	75% of partners with traceable information will be located, and tested	AHW CDRS Database
	Increase number of partners named by each case	Baseline to be determined	An average of two partners named per case	

Background

- Identifying and treating the partners or contacts of individuals who are infected is critical to controlling the transmission of disease and preventing or minimizing complications resulting from the infections. Efforts are needed to shorten the length of time of infectivity by reducing the time between the source contact and treatment.
- Health professionals and other providers need up-to-date information and advice on counselling strategies to encourage infected individuals to refer their partners for screening and possible treatment. Infections involving an extensive network of contacts may require rapid outbreak response approaches.
- In Alberta, AHS is responsible for partner notification. However, in the case of HIV, there is no standardized approach to followup for people moving from one geographic area to another.
- Awareness of and access to programs and followup services may be a problem, particularly for rural and Aboriginal communities. A high degree of movement between reserves, settlements and urban centres increases the challenges of locating Aboriginal peoples for followup services.

Action plan for contact identification and followup for STI and BBP

Contact Identification

- Increase awareness of and support for those infected with STI and BBP about the risk of transmission.
- Facilitate the identification of and followup with those who may have been infected including linkages with appropriate community resources.

Professional Education and Training

- Review and revise protocols regarding contact tracing.
- Maximize the use of public health resources to enhance the capacity for contact identification and followup.

2.0 Improve early detection and diagnosis of STI and BBP

2.4 Increase testing of high-risk and currently under-reached populations

Issue:

Marginalized populations who are at high-risk for STI may not actively seek medical care or come to STI clinics for testing and treatment. Because of this, these individuals are often unaware of their infections and unknowingly spread their infections to others.

Performance Measures

Disease	Performance Measure
STI	Establish baseline for number of STI tests done in non-traditional settings.
	Establish baseline for number of pregnant women referred for prenatal care from outreach programs.

Background

- Marginalized populations are often uncomfortable with or have difficulty accessing traditional health settings. Marginalized populations may include men who have sex with men, street-involved and homeless people, people with mental health and addictions issues, sex workers and their customers, adult entertainment industry workers, youth, refugees, incarcerated people, mobile populations and Aboriginal people.
- Many STI do not have symptoms, but undetected infections can have serious consequences that include infertility, pelvic inflammatory disease, cervical cancer and adverse pregnancy outcomes. Individuals are unaware of their infection and the risk of transmitting infections to others.
- Syphilis in pregnancy causes stillbirth, spontaneous abortion, intra-uterine growth retardation or pre-term delivery in up to 50% of cases. Congenital syphilis is preventable if infected mothers are identified and treated appropriately as early as possible in their pregnancies.
- Marginalized populations with symptoms may delay seeking care or consult unqualified sources for treatment. STI are not always detected and treated correctly.
- Re-infection is likely among marginalized populations if partner treatment and prevention advice is not followed.

Action plan for increased testing of high-risk and hard-to-reach populations

Outreach Testing

- Establish formalized outreach programs with dedicated outreach staff to actively seek out and work with high-risk groups.
- Develop innovative outreach strategies including STI and HIV testing, treatment and partner notification in non-traditional settings.
- Enhance access to timely prenatal care for marginalized women.
- Expand capacity in seeking out high-risk individuals and groups by collaborating with community service organizations also serving marginalized populations.
- Work with health service providers in areas that may be accessed by marginalized populations to increase their knowledge of detection and treatment of STI and BBP.

Goal 3.0 Enhance management and control of STI and BBP

3.1 Enhance appropriate disease management services for STI and BBP

Issue:

STI and BBP can require different treatment approaches. STI are typically acute and curable diseases that are readily treated in generalized health practices. BBP such as HIV, HBV and HCV are complex and chronic diseases requiring specialized knowledge and experience in appropriately managing and monitoring treatments and their impact on the course of the disease and infections over the long term. While primary STI cases may be managed successfully through generalized health practices, STI may include co-infections involving HIV, HBV or HCV that require additional expertise.

Performance Measures

Infection	Performance Measures	Baseline	Target by 2016	Data Source
STI	Compliance with Alberta Treatment Guidelines for notifiable STI	2002: 94%	Maintain > 95% compliance with Alberta Treatment Guidelines for notifiable STI	AHW CDRS Database
	Compliance in completion of NH-1 Forms	2005: physicians completed NH1 forms on 88.9% of laboratory confirmed chlamydia and gonorrhoea	> 95% compliance in completion of NH-1 forms	AHS STI database

Background

- Specific treatment guidelines were developed for sexually transmitted infections in adolescents and adults by a committee of provincial STI representatives convened by AHW.²⁶ These guidelines provide the most current evidence on effective treatment regimens for a variety of STI and are readily available to all health practitioners. Medications are also supplied free of charge to physicians and clinics for treatment of STI. The extent to which health practitioners follow the recommended guidelines and provide the free medications is unknown.
- HIV, AIDS, HBV and HCV are complex and chronic disease conditions, which may be compounded by co-infections. Current and emerging therapies are also becoming more complex as a result of new research, in particular treatment modalities for HCV. The management and monitoring of these conditions require knowledgeable and experienced health practitioners, usually experts or consultants who specialize in these areas. However, recommendations for a given patient may be discussed with general practitioners in collaboration with specialists.
- The time at which individuals seek treatment vary widely. Ideally individuals should receive treatment as soon as possible after infection. However, depending on the infection and the presence of symptoms, some individuals may be infected for some time before seeking treatment. The treatment approaches will vary in reaching those who are newly infected and those who have been living with the infection for some time but not receiving care.
- Traditional Aboriginal treatments may be lacking or underdeveloped, including availability of and access to culturally appropriate information on how to manage and control disease.

- Other behavioural, cultural, social and environmental factors may be obstacles to accessing service delivery. As noted earlier, many infected individuals live in poverty, are often marginalized and may have substance use and mental health problems. Decision-making ability and a sense of personal autonomy may vary among ethnic and cultural minorities. These individuals have extensive health and social support service needs but may be intimidated by the traditional care system and its providers, or be unfamiliar with the Canadian health system. Traveling distances for specialized care and stigma may prevent people in remote Aboriginal communities from accessing treatment. Alternative approaches to service delivery may be required but may not be available in the more remote and rural areas of Alberta.

Action plan for management and control of STI and BBP

General:

Knowledge and Awareness

- Enhance the knowledge of infected individuals about treatment options and support their capability to negotiate treatment regimens that are effective.

Programs and Policies

- Provide access to medical, dental and other health services, including specialized services for those infected with STI and BBP and for those with co-infections by assisting with transportation, language translation and building culturally appropriate service delivery.
- Improve the availability of specialist consultation for infected individuals no matter where they live in the province.
- Consider access to evidence-based therapies and treatment regimens proven to be most effective, such as direct observed therapy for HIV.
- Improve access to legal services and human rights protection to address discrimination and marginalization.
- Improve collaboration between primary health care service teams and the array of community-based services, including wellness services, holistic approaches and complementary therapies.
- Strengthen collaboration between service providers in urban and rural settings, including the use of technologies such as Telehealth to serve rural and remote communities.
- Strengthen collaboration between medical and psychosocial practitioners.
- Support and facilitate co-ordinated case management services for those with STI and BBP.

Professional Education and Training

- Support the development of up-to-date knowledge and skills, including the use of evidence-based clinical practice guidelines and counselling resources for health care providers, for effective management of and counselling about STI and BBP.
- Build STI and BBP treatment interventions into professional educational and training curricula.
- Increase the understanding and knowledge of senior administrators and health providers about the specific challenges experienced by marginalized or vulnerable populations in accessing and receiving appropriate services such as those challenges related to addiction, mental health, culture, discrimination, poverty, homelessness, income and employment insecurity and literacy.

Specific to STI Program:

- Maintain the strengths of the current centralized program.
- Optimize the medication distribution system for rural areas and outreach programs.
- Create and strengthen STI outreach programs.
- Expand partner treatment programs throughout the province, such as the Test and Treat by RN model and Expedited Partner Treatment.

3.0 Enhance management and control of STI and BBP

3.2 Reduce disease transmission by known infected persons

Issue:

Individuals who know they are infected risk infecting their partners and other contacts if specific precautions are not taken.

Performance Measures

Performance Measures		Baseline	Target for 2016	Data Source
STI	Treatment of laboratory confirmed cases of gonorrhoea, chlamydia and syphilis	2002: 96% chlamydia and 96% gonorrhoea cases treated with first or second line antibiotics	98% chlamydia and gonorrhoea cases treated with first or second line antibiotics	AHW CDRS database
HIV HCV HBV	Number of substance-using clients unable to access harm reduction or treatment services	Baseline to be established	Decrease in number of substance-using individuals unable to access harm reduction or treatment services	Methadone Maintenance Treatment (MMT) Clinics and detox centres
STI HIV HBV	Number of babies born whose mothers were not tested prenatally	Baseline to be established	Decrease in number of babies born to mothers who were not tested prenatally	Provincial Laboratory for Public Health AHW CDRS
Syphilis	Number of babies and stillborns with diagnosis of syphilis	2009: 7	Decrease in number of babies and stillborns with diagnosis of syphilis.	Provincial Laboratory for Public Health
	Percentage of women in high-risk groups who receive prenatal care	Baseline to be established	Enhance mechanism to evaluate outcomes of pregnant women with syphilis.	AHW Surveillance and Assessment
HBV	Percentage of mothers eligible for appropriate HBV vaccine who receive it Percentage of infants of non-carrier mothers receiving followup serology at 18 months	Baseline to be established	Increase in the percentage of mothers eligible for appropriate HBV vaccine who receive it Increase in the percentage of infants of carrier mothers receiving followup serology at 18 months	Provincial Laboratory for Public Health

Background

- The modes and sources of transmission for STI and BBP are well documented, including the precautions to be taken to prevent transmission. Practitioners need to be knowledgeable and skilled in educating and counselling infected persons about the precautions to prevent transmission of the infections to their partners and other contacts.
- Infected people need to be motivated and equipped with the necessary capabilities to prevent transmission of their infection to their partners and other contacts.
- Provincial legislation exists to address situations involving recalcitrant individuals infected with STI and HIV/AIDS. Individuals who are unwilling or unable to take appropriate precautions to prevent the spread of STI and HIV/AIDS infection are to be reported to the Medical Officer of Health.
- HIV/AIDS requires assessment by the HIV designated nurses.²⁷
- Timely and consistent HIV Partner Notification (PN) work throughout the province, which is supported by adequate staffing and resources, can reduce the risk of additional transmission. Anecdotally, increasing numbers of HIV recalcitrant cases in Edmonton area reflects inconsistent and under supported HIV followup and partner notification for newly diagnosed individuals, especially in early stages of diagnosis.
- Disparate models for the management of HIV clients, partners, and issues of recalcitrant patients exist in Alberta. For example, Calgary has 1.74 FTE HIV nurses dedicated to HIV followup, PNN work and followup of recalcitrant HIV clients (2009). For all other areas of the province, HIV PN work falls onto PNN dealing with all STI. The Edmonton area has adopted new HIV PN guidelines and is formally collecting and entering partner information in a database to evaluate outcomes of the program.

Action plan for reducing the transmission of STI and BBP

Knowledge and Awareness

- Increase awareness and educate the general public about the risk of transmission of STI and BBP to partners and other contacts including mother-to-child transmission.
- Increase awareness, educate and support those who are infected about the risk of transmission of STI and BBP and help them to integrate preventive and risk reduction behaviours into their lifestyles by addressing issues related to health determinants, mental health, addiction and negotiating skills for safer sex.

Programs and Policies

- Develop, initiate and enhance the existing unwilling and unable management program, including housing options, to address transmission issues with infected individuals.
 - Review, standardize and enhance the HIV PN approach throughout the province.
 - Explore expansion of the Calgary Un2 (Unable/Unwilling to protect partners) throughout the province.
- Develop and implement the revised protocol for the management of recalcitrant HIV-positive individuals.
- Promote, expand and sustain harm reduction programs.
- Provide access to effective prenatal care that includes treatment and prophylaxis to reduce mother-to-child transmission.

Goal 4.0 Strengthen support and counselling services for those infected and affected by STI and BBP

4.1 Enhance co-ordination of community care and support services

Issue:

Effective community care and support services are essential in helping infected individuals and their support networks cope with the impact of their diseases on their quality of living.

Performance Measures

Performance Measures
Establish baseline for accessibility to and participation of infected individuals and their support networks in programs providing community care and support services.

Background

- Individuals infected with STI and BBP often face multiple barriers in accessing services. They tend to be on the margins of society and are difficult to reach through traditional services and service settings. Stigma, discrimination and prejudice are often associated with their diseases and infections, compounding the difficulties in managing their conditions.
- The demand for community-based services continues to increase. This means that more support is needed for complex treatment decisions involving HIV, HBV and HCV, adherence to those treatments, managing side effects and overall health maintenance. This is further complicated by dual diagnoses or co-infections, such as STI or BBP with other conditions such as tuberculosis, addictions or mental illness. Health and social services need to be accessible and flexible to respond to the multiple needs and life circumstances being faced by those affected by STI and BBP.
- A co-ordinated continuum of care is needed to integrate the services that support clients over time and among service providers. Collaborative partnerships are essential across health and social service organizations; between on- and off- reserve communities and Métis Settlements and community and hospital/clinic settings.
- Collaborative partnerships are also essential with provincial and federal corrections services to maintain continuity of care between institutions and the community. Effective and efficient care and support must be focused on meeting the needs of the clients. Services addressing mental health concerns and substance use also need to be accessible and integrated within the continuum of services.
- Alberta's experience in collaborative partnerships and working relationships is generally positive. However, as resources become more constrained, collaboration may be compromised as organizations become more protective of their resources to achieve their specific goals and objectives.
- Given the rise in new infection rates among people from endemic countries, collaboration and enhanced partnerships between refugee and immigrant-serving agencies and cultural groups need to be established and maintained.

Action plan for enhancing co-ordination of community care and support services for STI and BBP

Partnerships and Participation

- Create community partnerships, communication and collaboration for planning, delivery and evaluation of community care and support programs.
- Work with Aboriginal leaders and Elders to positively influence how infected people and their families are supported in their communities.
- Continue to empower those affected by STI and BBP to participate in the planning and implementation of health and support service programs, including representation on appropriate policy and planning bodies.

Programs and Policies

- Enhance the quality of care for people living with STI and BBP by including peer support, complementary therapies, rehabilitation and social support services.
- Develop and implement policies, programs and services to address health determinants that affect the health status and living circumstances of individuals affected by STI and BBP.

Capacity and Accountability

- Support and improve the capacity of community organizations to carry out their activities, including outreach and the provision of care and support to those infected and affected.
- Support community and government investments in key sectors including health, education, social and correctional services.
- Enhance processes for continuing accountability.

4.0 Strengthen support and counselling services for those infected and affected by STI and BBP

4.2 Increase capacity for self-care of chronic conditions

Issue:

HIV, HBV and HCV involve long-term treatment and care regimens that require clients' adherence to generate the most benefits.

Performance Measures

Performance Measures
Establish baseline for participation of clients in self-care initiatives through home care, rehabilitation and counselling services.

Background

- Individuals infected with HIV, HBV and HCV are living longer due to progressive and complex treatment regimens. The chronic nature of the diseases means that the diseases and their effects must be managed over the long term, which requires support of the clients.
- Effective self-care requires clients to be knowledgeable about their disease conditions and the corresponding treatment regimens, including the ways to maintain overall healthy lifestyles through proper nutrition, physical activity, and safer sex. Education in these areas is required to enable clients to develop the knowledge and skills to manage their conditions and to live healthy lives.
- Effective self-care also requires a healthy, holistic, supportive environment in home communities. This is particularly important for Aboriginal people wishing to remain on their reserve or settlement or to return home once diagnosed.
- Infected individuals with low or limited income and/or education may experience financial hardship and compromise their adherence to their self-care regimens. Attention to the influence of broader determinants of health is also important in maintaining or improving the overall health status.

Action plan for increasing capacity for self-care of chronic BBP conditions

Knowledge and Awareness

- Enhance education and training services to clients to manage their own chronic care needs in compliance with recommended treatment regimens and with adequate financial and other supports.
- Provide opportunities for individuals living with STI and BBP to be involved in self-care initiatives.

Health Determinants

- Address determinants of health that support or adversely affect the self-care of chronic conditions.

Goal 5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

5.1 Strengthen human, financial and technological resources

Issue

Sufficient and sustained human, financial and technological resources are required to address the complex and growing challenges posed by STI and BBP.

Performance Measures

Performance Measures
Establish baseline for supply of health human resources (FTE) dedicated to STI programs and services, specifically STI nurses and PNN.
Establish baseline for accessibility to physicians specializing in STI and BBP.
Establish baseline for accessibility to STI services and clinics across Alberta.
Establish baseline for accessibility to workplace technologies, including use of electronic contact approaches and electronic record keeping.

Background

General:

- STI and BBP compete with other diseases for public attention, financial and human resources, research and political commitment. In addition, the factors that contribute to STI and BBP indicate that these diseases are more than health issues. These diseases have significant socio-economic contributing factors and implications which stigmatize those infected and affected by them. This makes it more difficult to elicit public support to increase resources to address them.
- Few providers are specialized and designated solely for the prevention and management of STI and BBP, thereby putting further strain on those limited resources available.
- Community-based organizations are challenged to provide prevention, management and support services for the wide range of diseases and their unique requirements. Caseloads for staff are increasing significantly. The number of infected individuals is growing. Because diseases become chronic, people remain on caseloads much longer and the complexity of the circumstances of people coping with STI and BBP increases. Fatigue of staff and fragmentation of services are occurring.
- Aboriginal facilitators, educators, health professionals, community developers with specific knowledge and skills in STI and BBP are in short supply.

Specific to STI:

- The proportion of notifiable STI within total reportable communicable diseases increased dramatically from 2001 to 2009, including a continuous increase in numbers and rates of all STI, including complex syphilis cases. The volume of cases directly affects the STI workload.

5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

Background (continued)

- STI workloads create a number of problems:
 - Unable to meet completion target timelines for most of the investigations as outlined by the STI Partner Notification Manual.
 - Delay in starting investigations, which results in increased risk for complications of untreated infections, such as Pelvic Inflammatory Disease.
 - Delays in testing and treating partners, which results in increased transmission and risk for re-infection.
 - Less time to assist, educate and maintain crucial working relationships creating an adverse impact on relationships with co-workers, physician partners, emergency room and urgent care centres physicians, other staff, First Nations Health Centres and other community agencies.
- STI workloads are exacerbated by:
 - Partner Notification Nurses (PNN) and STI staff shortages especially in rural areas.
 - When PNN function in a generalist role, they are sometimes reassigned to other public health duties or are expected to carry other public health duties.
 - Lack of access to provincial database which would expedite STI followup.
 - Lack of electronic solutions, including an electronic health record, to reduce use of and potential confidentiality breaches with the dissemination of hard copy STI investigation reports, including timely receipt of the reports and to reduce duplicate record keeping.
 - Lack of access to electronic devices such as cell phones and Internet social media networks, including consideration of on-line notification (messages can be sent anonymously by either the index client or the PNN, and the notification can be linked to local treatment facilities where appropriate testing and treatment can occur) to facilitate STI investigations. Solutions must be found to overcome firewall and security issues that limit use of social networking sites by staff in managing contacts and cases.

5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

Action plan for STI and BBP human, financial and technological resources

Human, Financial and Technological Resources

General:

- Explore opportunities to examine scope of practice for providers to creatively address alternate ways of providing service.
- Allocate provincial financial and human resources for population/public health, disease control and surveillance policy development, consultation and monitoring responsibilities to meet increased professional and public demands.
- Increase the capacity of Aboriginal community leaders to serve as advocates, educators and community developers within Aboriginal communities.
- Allocate appropriate financial and human resources for STI and BBP preventive, treatment and population health interventions to strengthen capacity within AHS and community-based organizations, especially PNN and STI physician consultant role.

Specific STI Resources:

Staffing:

- Identify staffing requirements throughout the province for STI Services, including medical leadership and nursing staff.
- Implement strategies to improve access to STI clinics beyond current locations in Edmonton, Calgary and Fort McMurray.
 - Explore whether the services provided through the STI Clinic in Lethbridge (Chinook Sexual Health Centre) are adequate to meet the growing number of syphilis cases being reported in this region of the province.
 - Consider satellite clinics in Red Deer, Jasper and Banff.
 - Examine increasing hours of operation at STI clinics to be more customer focused, accommodate evening and weekend availability and walk-in appointments. Establish protocols for handling clients who walk in late, to avoid turning people away and missing potential cases.
- Strengthen knowledge development and exchange among the PNN through for example, the number of PNN working group meetings.

Technologies:

- Provide STI Clinic and PNN access to the Provincial STI Database and future replacement databases, Communicable Disease and Outbreak Management (CDOM).
- Establish direct electronic distribution of STI investigations to PNN staff.
- Introduce innovative forms of communication, including use of cell phones for texting clients and use of other social media to connect with clients.
- Introduce electronic health records for effective STI management.
- Explore use of on-line contact notification techniques.

5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

Action plan for STI and BBP human, financial and technological resources (continued)

Finances:

- Investigate the use of fee codes for physicians to complete the STI Notification Report forms, to identify partners and for office visits for those clients without health care coverage to ensure appropriate remuneration for services delivered.
- Consider the value and feasibility of a specific innovations fund to enhance capacity to examine new ideas. Some examples are:
 - Physician office testing kits
 - Point-of-care testing for syphilis and HIV to be used in outreach and other non-traditional settings
 - Train PNN staff in phlebotomy to allow them to collect blood for syphilis, HIV and hepatitis testing
 - Improve screening of at-risk clients wherever they access any kind of health services, for example, in emergency rooms, urgent care centres and walk-in clinics
 - Provide information on STI rates; redevelop STI/HIV 1-800 line to provide online assistance and information on STI services available in Alberta
 - Encourage industries, especially those operating camps for workers and employing tourism service workers, to include STI prevention in their general health messaging and wellness programs for employees, for distribution to all occupational health and safety nurses.

Relationships and Partnerships

General:

- Enhance provincial and local partner collaboration such as involvement of volunteers to optimize the use of financial and human resources in the planning, delivery and evaluation of STI and BBP services.
- Continue to support the strengthening of partnerships and information sharing among Aboriginal communities, AHS, First Nations and Inuit Health of Health Canada, Alberta Aboriginal Relations, STI and BBP agencies and other service organizations addressing Aboriginal issues, such as substance use, housing, addictions and federal and provincial facilities.

Specific STI Relationships:

- Support networking and relationships between STI health service providers including physicians and community agencies.
- Enhance relationships with other sexual health providers and educators, such as re-establishing joint PNN and sexual health education meetings.

5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

5.2 Strengthen research and evaluation

Issue:

Research and evaluation are critical to support effective policy development, prevention and management of STI and BBP.

Performance Measures

Performance Measures
Establish baseline for volume and type of research initiatives being funded.
Establish baseline for volume and type of STI and BBP program evaluations being conducted.

Background

- Research refers to those activities directed at assessing the current situation to ensure programs are consistent with population needs, facilitating continuous improvement in programs, advancing knowledge on risk factors, diseases and infections caused by STI and BBP, and assessing the effectiveness of disease prevention and management strategies.
- The field of research in the STI and BBP field is broad, including basic science, medical science, clinical medicine, epidemiology, surveillance, public health, health promotion, social marketing, program development, documentation, evaluation and needs assessment. Investment is required to address priorities in all of these areas.
- Evaluation involves those activities that assess the implementation of interventions and programs (formative evaluation) and their outcomes (summative evaluation). While research most often occurs on a large scale, evaluation needs to occur at all levels to assess the impact of various interventions and programs.
- Research and evaluation are necessary to continually advance knowledge and leading practices in the STI and BBP field.
- Evidence on the effectiveness and efficiency of Aboriginal STI and BBP prevention and treatment programs and services is needed. Evaluations should be participatory and findings need to be better documented, collected and shared in order to determine best or promising practices, particularly those successful pilot projects, which could be sustained or brought to a provincial level.

Action plan for STI and BBP research and evaluation

Research

- Promote research to include community-based participatory and behavioural research about:
 - Overall effectiveness of educational, preventive and harm reduction strategies
 - Curriculum content on sexuality, harm reduction and addiction for educators, physicians and other health care workers
 - Assessment of public knowledge, attitudes, behaviours and practices
 - Accessing and serving socially isolated populations
 - Cost effectiveness and program outcomes
 - Cultural barriers, and
 - Social and economic impacts.
- Use sound research findings to inform and continually advance practices all areas of programs and services for STI and BBP.

Evaluation

General:

- Evaluate STI and BBP programming and interventions to:
 - Assure consistency with the population needs
 - Stimulate continuous improvement
 - Contribute to the knowledge of the disease processes, social and behavioural determinants and behaviour change
 - Assess the effectiveness of prevention and control strategies to demonstrate cost-effectiveness and accountability.
- Continue evaluation as a requirement of all funded prevention, management and support programs directed at STI and BBP.

Specific to STI Programs:

- Evaluate the STI programs, including, but not necessarily limited to the following areas:
 - Effectiveness of STI screening
 - Effectiveness of the processes used in the centralized STI program, for example, compliance of physicians using recommended treatments and the submission of STI Notification Report forms provided by STI Services, and
 - Implementation of the Expedited Partner Therapy.

5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

5.3 Strengthen service provider education and development

Issue:

Information is continually evolving and expanding on the prevention and management of diseases caused by STI and BBP, challenging providers to remain abreast of the most up-to-date information and advice.

Performance Measures

Performance Measures
Establish baseline for proportion of targeted professionals involved in educational and training initiatives directed at epidemiology, prevention, diagnosis and management of STI and BBP.
Establish baseline for proportion of professionals using identified leading practices for the prevention, identification, followup and treatment of those infected with STI and BBP and their partners.

Background

- Information about STI and BBP is complex and continually evolving, making it difficult for providers to be knowledgeable of the most current information. Success in the prevention and management of STI and BBP requires providers who are aware, knowledgeable and skilled in identifying individuals who may be at increased risk of infection, diagnosing STI and diseases caused by BBP, counselling individuals and referring or managing the diseases and their impact on all those affected.
- Training initiatives including current and reliable information sources, with ongoing and easy access, are critical in assisting providers to maintain and enhance skills in STI and BBP prevention, control and management.
- Good public health and clinical practices are reliant on the availability of evidence-informed recommendations and guidelines from professional and government organizations. Program standards and clinical practice guidelines are necessary to assure consistency in using leading practices based on evidence to prevent, diagnose and manage STI and BBP.

Action plan for STI and BBP provider education and development

Education and Development

- Develop education and training initiatives and resources targeted at provider groups in the epidemiology, prevention, diagnosis, and management of STI and BBP.
- Incorporate sexual health, harm reduction and addictions in health, education, social service and law enforcement post-secondary curricula.
- Support ongoing professional development to enable professionals to remain abreast of the current and emerging information surrounding STI and BBP.

Standards and Clinical Practice Guidelines

- Develop, implement and continually update standards and clinical practice guidelines for evidence-informed interventions in the prevention and management of STI and BBP.

5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

5.4 Enhance surveillance of disease, behavioural and socio-demographic risk factors

Issue:

More information is needed on the prevalence of behavioural and socio-demographic risk factors, as well as the incidence and prevalence of STI and BBP.

Performance Measures

Performance Measures
Establish baseline for accessibility to timely and comprehensive surveillance data on STI and BBP diseases, behavioural and socio-demographic risk factors.

Background

- Surveillance is essential to monitor the incidence and prevalence of STI and BBP, to identify those at risk of infection to accurately target prevention and care initiatives and to provide data to assist in the evaluation of these interventions.
- Epidemiological data are needed in a timely fashion at the provincial and local levels to monitor disease trends, develop policy and plan appropriate interventions.
- In Alberta, positive test results are provided by the provincial public health laboratories and private laboratories to AHS. Consolidation and interpretation of the data for epidemiological purposes are done by AHW, as well as by public health experts in AHS. Some confusion and duplication of effort is apparent in the production and dissemination of information for use by public health personnel.
- Timeliness, interpretation and use of surveillance data are critical for program planning and monitoring. Timeliness needs to address both the current situation and emerging trends, including disease projections for the future. Such trend data are not currently available.
- Complete epidemiological data on HIV and HCV in the Aboriginal population is not always accurate. This is largely due to an inability to assess data on the basis of ethnicity as ethnic origin is not always identified or requested. Lack of confidentiality or a perceived lack of confidentiality also impacts the epidemiological data available for Aboriginal populations. An accurate picture of Aboriginal STI and BBP in Alberta requires information about risk behaviours, outbreaks, disease trends, co-factors as well as incidence and prevalence. Collection of Aboriginal health information needs to be standardized to enable comparability and consistent reporting.

5.0 Strengthen infrastructure to support the Alberta STI and BBP strategy and action plan

Action plan for STI and BBP surveillance

Knowledge and Awareness

- Promote and maintain the use of surveillance data to establish program priorities, develop effective programs and interventions and monitor progress and results. Specifically:
 - Develop an STI Laboratory Liaison Committee to address data requirements necessary for program evaluation and surveillance and plan strategies to meet these requirements.
 - Determine the possibility of aligning the laboratory database with surveillance data and the birth outcome data routinely collected by AHW to precisely identify the at risk population, such as women without routine prenatal care.
- Provide education and training for service providers on the interpretation and use of epidemiological data and research to improve policy development and program planning and to monitor service provision and effectiveness.

Programs and Policies

- Improve the standardization, collection, analysis and dissemination of data in a timely manner on the prevalence of behavioural and social risk factors, incidence and prevalence of STI and BBP at provincial and local levels. Specifically:
 - Enhance the STI Notification of Sexually Transmitted Infections Form and database to allow more detailed tracking of cases (e.g., location of contact with partners and information on social networks).
 - Plan activities around database testing and data cleaning to minimize delay in day-to-day data entry.
- Develop and provide future disease projections based on existing knowledge and prevalence.

Organizational Structure and Resources

- Enhance comprehensive provincial surveillance. Specifically:
 - Enhance AHW and AHS access to, and sharing of, clinical STI data as outlined in the (draft) Alberta Public Health Surveillance Strategy.
- Maintain and reinforce surveillance infrastructures, including financial, human and physical resources, to carry out necessary surveillance activities in local communities.

Key partner roles and responsibilities

This section describes the roles and responsibilities of key partners in the prevention, control and management of STI and BBP with respect to each of the strategic goals.

Alberta Health and Wellness

Strategic Goal 1: Increase prevention of STI and BBP

- Provide provincial leadership and co-ordination in Alberta's overall response to STI and BBP prevention.
- Develop and implement provincial policies to support program and services for STI and BBP.
- Provide funding to AHS and other organizations for STI and BBP programs and services.
- Monitor and evaluate the Alberta STI and BBP Strategy and Action Plan and related provincial initiatives.
- Develop and sustain collaborative working relationships with other provincial government ministries, AHS, community-based organizations and the federal government, involved in the prevention of STI and BBP.
- Encourage Albertans to avoid personal risk of STI and BBP and adopt safer behaviours.
- Encourage Aboriginal leaders and communities to participate in addressing STI and BBP issues through resources, information and skill development.
- Promote and support the use of the Canadian Guidelines for Sexual Health Education in the school system.
- Collaborate with relevant partners, including AHS and Alberta Solicitor General and Public Security and others to explore opportunities for harm reduction in prisons, including increased access to methadone treatment in provincial correctional facilities and an improved transition process for those on methadone being released from custody.
- Encourage the use of evidence-informed program development, practices and evaluation in the prevention of STI and BBP.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Promote the development and use of provincial standards and guidelines for practices related to counselling, testing, contact identification and followup of STI and BBP.
- Provide funding to AHS for STI and BBP testing and contact identification and followup, including partner notification.

Strategic Goal 3: Enhance management and control of STI and BBP

- Provide provincial leadership in Alberta's overall response to STI and BBP treatment and management.
- Develop and promote the use of provincial standards and guidelines for leading practices in reportable STI and BBP treatment and management.
- Provide funding to AHS to maintain the two existing HIV clinics in Edmonton and Calgary as centres of excellence in providing care and support services.
- Provide dedicated funding to AHS for specific antiretroviral therapies through the extraordinary drug cost program.
- Encourage the use of evidence-informed program development, practices and evaluation in the treatment and management of STI and BBP.

Alberta Health and Wellness (continued)

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Provide provincial leadership in Alberta's overall response to the integration of health and support services to those affected by STI and BBP.
- Develop and promote provincial standards and guidelines for leading practices in STI and BBP support and counselling initiatives.
- Provide funding to AHS and other organizations for STI and BBP support and counselling programs and other related services.
- Collaborate with other provincial and federal government departments, AHS, the federal government, community-based organizations, and others regarding interventions and initiatives at the provincial and local levels for the development and implementation of actions to address factors, such as housing, literacy and education that influence those affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

Surveillance:

- Develop reporting requirements for case management and provincial monitoring of STI and BBP in collaboration with AHS, service providers and others.
- Continue the development of the infrastructure required to support the collection of relevant information.
- Continue to collect, analyze and share information about STI and BBP to service providers, organizations, and Albertans.
- Provide information to national surveillance systems as appropriate.

Research and Evaluation:

- Use best practices research and findings from scientific investigations to support standards development, policy planning and service performance evaluation.
- Monitor public knowledge, attitudes and behaviours, through public surveys.
- Use research and evaluation results.

Financial and Human Resources:

- Provide funding to AHS and other organizations for STI and BBP programs and services.

Alberta Health Services

Alberta Health Services provides delivery of STI and BBP health services in a centrally co-ordinated program throughout the province in collaboration with key stakeholders.

Strategic Goal 1: Increase prevention of STI and BBP

General:

- Identify local health needs, service priorities and strategies in the education and prevention of STI and BBP.
- Collaborate in the planning, co-ordination and evaluation of STI and BBP programs and services with other organizations in local communities.
- Allocate and manage resources based on community needs assessments and in accordance with the Alberta STI and BBP Strategy and Action Plan.
- Develop and sustain collaborative working relationships with provincial government departments, federal government departments, community-based organizations, school jurisdictions and other sectors involved in the prevention of STI and BBP.

Aboriginal Population:

- Provide prevention services to the Aboriginal population who live off-reserve and collaborate with Health Canada and Aboriginal communities regarding on-reserve services.
- Continue to find ways to include the Aboriginal population in decisions regarding their health, while respecting cultural and traditional values.

Offenders and Ex-offenders:

- Provide STI and BBP prevention programming to at-risk populations such as offenders and ex-offenders.

Public and Professional Education and Development:

- Provide continuing education for sexual health educators and partner notification nurses.
- Distribute print and audio-visual resources to the public and to support professional in-service training.
- Design, implement and evaluate STI and BBP prevention and education strategies, social marketing campaigns and social media initiatives, including presentations and workshops for professionals, non-professionals and the public.
- Procure, develop and provide STI and BBP resources for Alberta Solicitor General and Public Security, community agencies and the public in support of prevention education. Where appropriate, these messages to be targeted to high risk groups.
- Design and implement multimedia public information campaigns that encourage Albertans to avoid personal risk of STI and BBP and to adopt safer behaviours.

Surveillance and Assessment:

- Monitor, report on and evaluate services regarding STI and BBP prevention and education.
- Provide provincial surveillance services in collecting, analyzing and disseminating data related to STI and BBP, related risk factors and underlying determinants of health.

Alberta Health Services (continued)

Addiction and Mental Health:

- Promote and deliver sexual health and education initiatives to individuals, families and communities experiencing substance use issues.
- Deliver community prevention programs that delay onset of alcohol or other drug use.
- Develop and distribute print materials and other information sources that assist staff, clients and partners in acquiring knowledge about the risks and impacts of injection drug use.
- Educate clients regarding the transmission of infectious diseases, help them identify risk behaviours and promote STI and BBP testing as appropriate.
- Collaborate with relevant partners; including Correctional Service Canada, Alberta Solicitor General and Public Security and AHW, to explore opportunities for harm reduction in provincial correctional facilities, including increased access to methadone treatment and an improved transition process for those on methadone being released from custody.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

General:

- Establish a formalized outreach program with dedicated staff to actively seek out high risk groups.
- Report all confirmed cases of reportable STI and BBP to AHW.

Testing, Contact Identification and Notification:

- Implement provincial standards and guidelines for counselling and testing of contacts and followup of STI and BBP.
- Provide education to health providers regarding confidential testing and counselling for those at increased risk, including partner notification policies and procedures for those found to be infected.
- Allocate funding for STI and BBP testing and contact identification and followup, including resources for partner notification.
- Conduct partner notification in collaboration with physicians and assist with referral for clinical evaluation, testing, treatment and health education.
- Deploy social network analysis as part of the contact tracing process.
- Provide identified contacts with information that includes modes of transmission, disease process, how to modify risk behaviours and addresses/telephone numbers of support agencies and testing clinics.

Laboratories:

- Continue to provide diagnostic serological testing for HIV-1 and HIV-2 and report positive laboratory results to the AHS Senior Medical Officer of Health (Provincial Laboratories of Public Health).
- Provide diagnostic testing for HBV, HCV and STI and report positive laboratory results to the AHS, Senior Medical Officer of Health (Calgary Laboratory Services, Chinook Laboratory Services, DynaLIFEDX).

Alberta Health Services (continued)

Strategic Goal 3: Enhance management and control of STI and BBP

- Identify health needs, service priorities and strategies in the treatment and management of STI and BBP, which may include the provision of clinic sites.
- Plan and deliver health services in acute care, continuing care, home care and public health as they relate to the treatment and management of STI and BBP.
- Use prophylactic Azithromycin therapy at abortion clinics.
- Include condoms in the pre-packaged medications distributed by AHS for use in treating STI.
- Collaborate in the planning, co-ordination and evaluation of STI and BBP treatment and management programs and services with other organizations in local communities.
- Allocate and manage treatment and management resources based on community needs assessments and in accordance with the Alberta STI and BBP Strategy and Action Plan.
- Carry out legislative provisions for recalcitrant individuals in accordance with provincial legislation and guidelines.
- Where appropriate, conduct research aimed at preventing STI and BBP and at supporting and treating those with STI and BBP.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Collaborate with other community-based organizations in the planning, co-ordination, delivery and evaluation of support and counselling services addressing the needs of those populations affected by HIV and STI.
- Provide access to support and counselling services to those affected by STI and BBP.
- Assist in accessing special care housing required by persons infected with BBP.
- Work with community-based organizations, local municipal and housing organizations to assess and address housing needs of individuals and families with STI and BBP.
- Designate and administer funding for STI and BBP support and counselling programs and services.
- Facilitate and support the ongoing development of self-care knowledge and skills in those affected by STI and BBP.
- Collaborate with provincial government departments, the federal government, community-based organizations and other sectors regarding interventions and initiatives at the provincial and local levels for the development and implementation of collaborative and co-ordinated approaches in addressing health determinants as they impact those affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

Surveillance:

- Conduct surveillance and provide reporting to AHW.
- Provide comprehensive data as defined by AHW.
- Participate in defining the data requirements for STI and BBP surveillance and monitoring purposes.
- Where appropriate, disseminate information to local service providers and planners.
- Use the surveillance data to plan and evaluate services and programs.

Alberta Health Services (continued)

Research and Evaluation:

- Conduct and participate in STI and BBP research activities and conduct needs assessments as required.
- Support cost-effectiveness and program outcome studies.

Financial and Human Resources:

- Support the allocation of human and financial resources to respond effectively to the prevention, education and disease management needs of the populations affected by STI and BBP.

Professional Education and Development:

- Conduct provider education and training through the availability of and access to up-to-date information and expert advice on the prevention and management of STI and BBP.

Provincial Government of Alberta

Alberta Aboriginal Relations

Strategic Goal 1: Increase prevention of STI and BBP

- Provide advice on the promotion and access to sexual health education and prevention information and initiatives on STI and BBP involving Aboriginal people and their communities.
- Provide advice on the promotion of education and training of Aboriginal leaders, teachers and other services providers in the prevention and education of STI and BBP.
- Develop and sustain collaborative working relationships with other provincial government departments, the federal government, community-based organizations, AHS and other sectors involved in the prevention of STI and BBP.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Support the promotion of and access to confidential counselling and testing for Aboriginal people within or near their communities.
- Support contact identification and followup of Aboriginal people found to be infected.

Strategic Goal 3: Enhance management and control of STI and BBP

- Support the promotion of and access to appropriate treatment and management of STI and BBP involving the Aboriginal population.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Support the promotion of and access to support, counselling and referral services as appropriate for the Aboriginal population affected by STI and BBP.
- Support the promotion of and access to ongoing development of self-care knowledge and skills in the Aboriginal population affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Advise what human and financial resources are needed to respond effectively to the prevention, education and disease management needs of the Aboriginal population affected by STI and BBP.

Alberta Advanced Education and Technology

Strategic Goal 1: Increase prevention of STI and BBP

- Support the development of literacy skills to enhance the abilities of youth and adults to assist them in making informed choices, including understanding the potential consequences of their choices.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Promote the development of literacy competencies, especially for those who are vulnerable, through community adult learning programs and alignment of commitments and actions within the Living Literacy: A Framework for Alberta's Next Generation.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Promote and support partnerships to enhance research to improve health and well-being through the Alberta Health Research and Innovation Strategy and organizations such as Alberta Innovates – Health Solutions.

Alberta Agriculture and Rural Development

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Strengthen collaboration between service providers in urban and rural areas making the full use of the available technology to enable information sharing and improve health delivery in rural Alberta.

Alberta Children and Youth Services

Strategic Goal 3: Enhance management and control of STI and BBP

- Front line staff collaborate with AHS, to make certain that the medical needs of children and youth are assessed and addressed.
- Ensure the safety and well-being of children, youth and families, who come to the attention of Children and Youth Services (CYS) under the Child, Youth and Family Enhancement Act (CYFEA) and the Protection of Sexually Exploited Children Act (PSECA).
- Continue to support youth who are placed in protective safe houses under PSECA, by connecting them to AHS so they are aware of appropriate resources to access health services, including STI prevention, testing and treatment for follow up and/or ongoing care.
- Share information with cross ministry partners and AHS.

Alberta Culture and Community Spirit

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Support the action to improve access to legal services and human rights protection through the work of the Alberta Human Rights Commission.
- Offer resources that assist in facilitation and skill development in areas such as building community partnerships and public/stakeholder consultation through the Community Development Branch.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Provide financial and consultative supports to Alberta's nonprofit and voluntary sector, such as the Community Initiatives Program, Human Rights Education and Multiculturalism Fund, Community Spirit Program and the Alberta Nonprofit/Voluntary Sector Initiative.

Alberta Education

Strategic Goal 1: Increase prevention of STI and BBP

- Promote and support comprehensive sexual health in the school system consistent with mandatory school curricula and in accordance with the Canadian Guidelines for Sexual Health Education.
- Promote and support the Teaching Sexual Health Website (www.teachingsexualhealth.ca) and continue to designate it as an authorized teaching resource.
- Provide education, training, resource materials and experts to support teachers in sexual health education.
- Develop and sustain collaborative working relationships with other provincial government departments, the federal government, community-based organizations, AHS and other sectors involved in the prevention of STI and BBP.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Promote and support the availability of and access to information and counselling regarding the indications for STI and BBP testing within the health education curriculum.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Facilitate access to support, counselling and referral services as appropriate for those students affected by STI and BBP.
- Collaborate with other provincial government departments, the federal government, community-based organizations, AHS and other sectors regarding interventions and initiatives at the provincial and local levels for the development and implementation of collaborative and co-ordinated approaches in addressing health determinants for those affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Continue to support the allocation of human and financial resources to respond effectively to the educational needs of students, including those related to STI and BBP.

Alberta Employment and Immigration

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Support efforts to make services client-centered and less stigmatizing for individuals with STI and BBP.
- Support ongoing efforts to increase service access to improve co-ordination and integration of services through initiatives such as Alberta Supports.

Alberta Housing and Urban Affairs

Strategic Goal 1: Increase prevention of STI and BBP

- Continue to work with the seven Community Based Organizations (CBOs) that collaborate with local agencies in incorporating harm reduction, educational and prevention programs and life-skills training into the agencies' service delivery plans.
- Collaborate with AHS to provide training to Housing First workers to increase client awareness and build prevention capacity in the areas of STI and BBP, self-care of chronic conditions and the practice of harm reduction.
- Share information resources developed with housing management bodies for distribution to low-to-moderate-income families living in community housing or to seniors living independently in senior's self-contained units.
- Continue to have Housing First incorporate harm reduction and life-skills training into programming.
- Support CBO's partnership with a community clinic or a contracted service from AHS to provide additional health care advice.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Support CBO's partnership with a community clinic or a contracted service from AHS to provide additional health care advice.
- Continue to have housing support workers connect clients with the appropriate health care giver, clinic, or agency for STI and BBP screening and care.

Strategic Goal 3: Enhance management and control of STI and BBP

- Support CBO's partnership with a community clinic or a contracted service from AHS to provide additional health care advice.
- Continue to have housing support workers connect clients with the appropriate health care giver, clinic, or agency for STI and BBP screening and care.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Support CBO's partnership with a community clinic or a contracted service from AHS to provide additional health care advice.
- Continue to have housing support workers connect clients with the appropriate health care giver, clinic, or agency for STI and BBP screening and care.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Continue to work with the seven Community Based Organizations (CBOs) that collaborate with local agencies in incorporating harm reduction, educational and prevention programs, and life-skills training into the agencies' service delivery plans.
- Collaborate with AHS to provide training to Housing First workers to increase client awareness and build prevention capacity in the areas of STI and BBP, self-care of chronic conditions and the practice of harm reduction.

Alberta Seniors and Community Supports

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Collaborate and work closely with other government departments, such as AHW, AEI to make certain that support services to assist people living with STI and BBP are accessible and effectively meet their needs and those policies, programs and services reflect consideration of health. Social and economic factors affect the ability of people to manage their health successfully.
- Provide supports to Albertans with disabilities through programs, such as the Assured Income for the Severely Handicapped (AISH) and the Persons with Developmental Disabilities (PPD) program.

Alberta Solicitor General and Public Security

Strategic Goal 1: Increase prevention of STI and BBP

- Continue to support access to sexual health and harm reduction education programs and services related to STI and BBP to the prison population.
- Continue to support education, training and resource materials/experts to support custodial staff in the education and prevention of STI and BBP.
- Collaborate with relevant partners, including Correctional Service Canada, AHW and AHS, to explore opportunities for harm reduction in provincial correctional facilities, including increased access to methadone treatment and an improved transition process for those on methadone being released from custody.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Support access to confidential counselling and testing involving the prison population at increased risk of infection.

Strategic Goal 3: Enhance management and control of STI and BBP

- Support access to appropriate treatment and management of STI and BBP involving the prison population, including the provision of methadone as appropriate.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Support access to counselling and referral services as appropriate for the prison population affected by STI and BBP.
- Support the ongoing development of self-care knowledge and skills in those affected by STI and BBP.
- Collaborate with other provincial and federal government departments, the federal government, community-based organizations, AHS and other sectors regarding interventions and initiatives at the provincial and local levels for the development and implementation of collaborative and co-ordinated approaches in addressing health determinants as they impact those affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Support the allocation of human and financial resources to respond effectively to the prevention, education and disease management needs of the prison population affected by STI and BBP.

Federal Government of Canada

First Nations and Inuit Health, Health Canada

Strategic Goal 1: Increase prevention of STI and BBP

- Collaborate with provincial government departments, other federal government departments, community-based organizations, AHS and other sectors regarding the prevention of STI and BBP.

Public Health Agency of Canada

Strategic Goal 1: Increase prevention of STI and BBP

- Collaborate with provincial government departments, other federal government departments, community-based organizations, AHS and other sectors regarding the prevention of STI and BBP.

Correctional Service Canada

Strategic Goal 1: Increase prevention of STI and BBP

- Continue to promote and provide access to sexual health and education programs and services related to STI and BBP to the federal prison population appropriately designing information for those with specific cultural affiliations and limited literacy skills.
- Continue to provide education, training and resource materials/experts to support custodial staff in the prevention of STI and BBP.
- Continue to collaborate with relevant partners, including AHW, Alberta Solicitor General and Public Security and AHS, to enhance current harm reduction initiatives in federal correctional facilities.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Continue to promote and provide access to confidential counselling and testing involving the federal prison population at increased risk of infection.

Strategic Goal 3: Enhance management and control of STI and BBP

- Continue to promote and provide access to appropriate treatment and management of STI and BBP involving the federal prison population.
- Continue to provide education, training and resource materials/experts to support custodial staff in the management of STI and BBP.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Continue to provide access to support, counselling and referral services as appropriate for the federal prison population affected by STI and BBP.
- Continue to build collaborative partnerships that facilitate integrated services and service providers to support clients over time.
- Continue to facilitate and support the ongoing development of self-care knowledge and skills in those affected by STI and BBP.
- Continue to collaborate with relevant partners in the development and implementation of collaborative and co-ordinated approaches in addressing health determinants as they impact those affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Continue to support the allocation of human and financial resources to respond effectively to the prevention, education and disease management needs of the prison population affected by STI and BBP.

Community-based organizations

Community-based organizations, including Alberta Council on HIV and Aboriginal Organizations such as Friendship Centres

Strategic Goal 1: Increase prevention of STI and BBP

- Collaborate in the planning, co-ordination, delivery, and evaluation of programs and services addressing the needs of those populations most at risk of STI and BBP.
- Design, implement and evaluate STI and HIV prevention initiatives, education and training programs, particularly targeted to hard-to-reach, at-risk populations, and addressing the special needs of Aboriginal individuals.
- Plan, deliver and evaluate prevention programming and services to individuals, families and the community-at-large as they relate to injection drug use, including needle exchange programs as appropriate.
- Provide culturally appropriate prevention and education services to those at greatest risk of STI and HIV and for those who are affected.
- Conduct STI and HIV prevention presentations, other workshops involving service providers, other community groups and the public.
- Develop and sustain collaborative working relationships with provincial government departments, the federal government, other community-based organizations, AHS and other sectors involved in the prevention of STI and BBP.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Promote access to confidential counselling and testing for persons at increased risk of STI and BBP.
- Promote and support contact identification and followup of those clients found to be infected.

Strategic Goal 3: Enhance management and control of STI and BBP

- Collaborate in the planning, co-ordination, delivery and evaluation of treatment and management programs and services addressing the needs of those affected by HIV and STI.
- Provide counselling, support, referral and care services to those affected by STI and BBP.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Collaborate with relevant partners on interventions and initiatives at the provincial and local levels in the planning, co-ordination, delivery, and evaluation of support and counselling services and the development and implementation of collaborative and co-ordinated approaches in addressing health determinants as they impact those affected by STI and BBP.
- Provide support and counselling services to those affected by STI and BBP.
- Work with AHS and housing organizations to identify and address gaps in housing options for individuals or families affected by STI and BBP.
- Provide advocacy regarding accessible and affordable housing and services on behalf of clients.
- Support the ongoing development of self-care knowledge and skills those affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Participate in defining the data requirements for HIV surveillance and monitoring purposes.
- Determine additional elements to be captured, reflecting the changing nature of the epidemiology, as required.
- Participate in STI and BBP research activities and needs assessments as appropriate.
- Support development of easily understood information.
- Submit funding proposals to support STI and BBP initiatives and services.
- Support the allocation of human and financial resources to respond effectively to the prevention, education and disease management needs of the populations affected by STI and BBP.
- Promote and support enhanced provider education and training on the prevention and management of STI and BBP.

Alberta Community Council on HIV

Strategic Goal 1: Increase prevention of STI and BBP

- Provide a provincial voice by collaborating in the planning, co-ordination, delivery and evaluation of HIV prevention and education programs and services.
- Support community-based responses to STI and HIV prevention and education.
- Develop and sustain collaborative working relationships with provincial government departments, the federal government, other community-based organizations, AHS and other sectors involved in the prevention of STI and BBP.

Strategic Goal 3: Enhance management and control of STI and BBP

- Provide a provincial voice by collaborating in the planning, co-ordination, delivery and evaluation of HIV treatment and management programs and services.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Provide a provincial voice by collaborating in the planning, co-ordination, delivery and evaluation of HIV support and counselling programs and services.
- Collaborate with relevant partners regarding the development and implementation of collaborative and co-ordinated approaches in addressing health determinants as they impact those affected by HIV and HCV.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Support the allocation of human and financial resources to respond effectively to the prevention, education and disease management needs of the populations affected by STI and BBP.

Other organizations

Canadian Blood Services

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Report positive STI and BBP donors to AHS as required.

Canadian Liver Foundation

Strategic Goal 1: Increase prevention of STI and BBP

- Educate the general public about the prevention of liver disease, including HBV and HCV, by providing a variety of print and audiovisual resources.
- Provide HCV education programs that include medical education initiatives and public education programs.
- Develop and sustain collaborative working relationships with provincial government departments, the federal government, other community-based organizations, AHS and other sectors involved in the prevention of STI and BBP.

Strategic Goal 2: Improve early detection and diagnosis of STI and BBP

- Support individuals at increased risk of HBV and HCV infections to access confidential counselling and testing.
- Support individuals with liver disease (HBV, HCV) by providing educational programs and resources on liver disease and its management.
- Promote the National Help Line for in-depth information as needed.
- Provide referral service to offer timely and accurate information for those with liver disease.

Strategic Goal 4: Strengthen support and counselling services for those infected and affected by STI and BBP

- Collaborate with relevant partners on the development and implementation of collaborative and co-ordinated approaches in addressing health determinants as they impact those affected by STI and BBP.

Strategic Goal 5: Strengthen infrastructure to support STI and BBP Strategy

- Provide research grants to support liver disease research.
- Support the allocation of human and financial resources to respond effectively to the prevention, education and disease management needs of those with liver disease caused by HBV and/or HCV.

Health professional colleges and associations

- Health Professional Colleges and Associations will support the appropriate actions within the Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan, 2011-2016.

Reporting

Alberta Health and Wellness will report annually on the progress of the Alberta Sexually Transmitted Infections and Blood Borne Pathogens Strategy and Action Plan.

Appendix A – Glossary

Aboriginal Friendship Centres ²⁸	The Alberta Native Friendship Centres Association (ANFCA) is a provincial, charitable organization that represents and provides support to 20 urban Aboriginal Friendship Centres located in Alberta. Additional information can be obtained by visiting their website: www.anfca.com .
Aboriginal Peoples ²⁹	The descendants of the original inhabitants of North America. The Canadian Constitution recognizes three groups of Aboriginal people: First Nations, Métis people and Inuit. These are three separate peoples with unique heritages, languages, cultural practices and spiritual beliefs.
Acquired immuno-deficiency syndrome (AIDS) ³⁰	A syndrome defined by the development of serious opportunistic infections, neoplasm or other life threatening manifestations resulting from progressive HIV-induced immuno-suppression.
Age-adjusted rate ³¹	Age adjustment is a method used to reduce differences related to age when comparing two or more populations. This is required when two or more populations have very different age distributions.
First Nations ³²	A term that came into common usage in the 1970s to replace the word Indian, which many people found offensive. Although the term First Nations is widely used, no legal definition of it exists. Among its uses, the term First Nations peoples refers to the Indian people in Canada, both Status and Non-Status. Many First Nations people have also adopted the term First Nations to replace the word 'band' in the name of their community.
Blood borne pathogen (BBP) ³³	A pathogen that may be transmitted via blood or body fluids that contain blood.
Capacity building ³⁴	An approach to working with the community that aims not only to involve the community in dealing with the problem at hand but also to increase the community's capacity to deal with any future problems that arise.
Culturally appropriate ³⁵	Activities and programs that take into account the practices and beliefs of a particular social group, so that the programs and activities are acceptable, accessible, persuasive and meaningful.
Discrimination, infectious disease ³⁶	Any unfavourable treatment on the basis of known or imputed infectious disease status; any action or inaction that results in a person being denied full or partial access to otherwise generally available services or opportunities because of known or imputed infectious disease status. The definition includes discrimination on the grounds of known or implied membership of particular groups that are commonly associated with infectious diseases.
Endemic ³⁷	The continual, low-level presence of disease in a community.
Epidemiology ³⁸	The study of the distribution and determinants of health-related states or events in specified populations and the application of the knowledge thus gained to deal with health problems.
Evidence-Based, Science-Based ³⁹	Behavioural, social and policy interventions that are relevant and

	methodologically rigorous are evidence- or science-based.
Expedited Partner Therapy (EPT) ⁴⁰	EPT is a concept in which the index case, rather than medical or nursing personnel, delivers treatment to sexual partners directly. The idea is to increase treatment of infected partners who would not otherwise access health care or who might not be named by the index case.
Harm Reduction ⁴¹	A policy or program directed towards decreasing the adverse health, social, and economic consequences of drug use without requiring abstinence from drug use. Harm reduction approaches are restricted to those strategies, which place first priority on reducing the negative consequences of drug use for the individual, the community and society while the user continues to use drugs at least for the present time. However, a harm reduction approach does not rule out abstinence in the longer term.
Health Determinants ⁴²	The range of personal, social, economic and environmental factors, which determine the health status of individuals or populations.
Hepatitis C virus ⁴³	A virus transmitted through blood-to-blood contact that affects the liver.
Incidence ⁴⁴	The number of new cases of a disease in a defined population within a defined period.
Needle exchange ⁴⁵	Programs authorized to distribute and dispose of needles and syringes.
Neurosyphilis	Neurosyphilis is an infection of the central nervous system and is divided into early and late forms. Early neurosyphilis occurs in the primary and secondary stages of syphilis and can cause vision loss and stroke. In the late form it can cause dementia.
Non-Occupational Post Exposure Program (nPEP)	This is a set of province-wide standards for post-exposure and followup of blood borne pathogens in community and other non-occupational settings.
Opportunistic infection ⁴⁶	Infection caused by an organism or organisms that are normally innocuous but that become pathogenic when the body's immune system is compromised, as happens with AIDS.
Outreach ⁴⁷	The activity of an organization in contacting, educating and providing services, advice to people in the community, especially outside its usual centres.
Peer education ⁴⁸	Any education process devised and implemented by members of a population subgroup specifically to alter the behaviours and attitudes of other members of that subgroup; for example, gay men delivering education programs relating to gay men's sexual health.
Prevalence rate ⁴⁹	The total number of all individuals who have an attribute or disease at a particular time or period divided by the population risks of having the attribute or disease at this time or midway through the period. For example, chlamydia is 10 times more common in street youth than in general population youth.

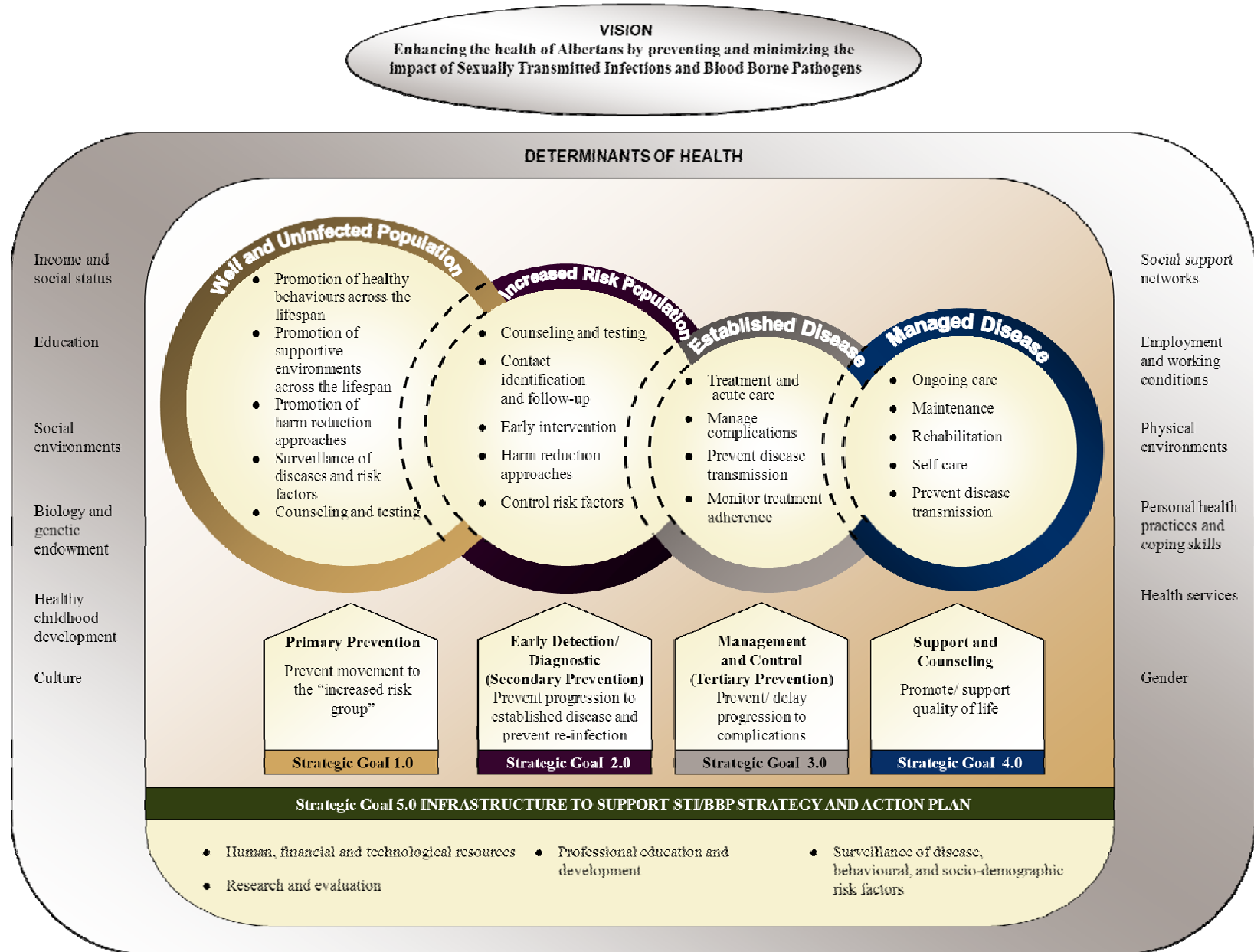
Appendix A – Glossary (continued)

Primary prevention ⁵⁰	Targets the well population, those who have not been diagnosed with BBP or STI. The intent of primary prevention is to keep those people healthy and to prevent them from acquiring the diseases. As a result, primary prevention involves stopping or delaying the development of the diseases.
Probable Congenital Syphilis ⁵¹	Probable Congenital Syphilis cases are infants who meet the probable case definition that is being developed by Health Canada. These are babies, with no obvious sign of congenital syphilis at delivery, that were born to mothers with infectious syphilis who were either not treated for their infectious syphilis or were treated within 30 days of delivery. Each of the probable babies will stay as probable perhaps for a lifetime. However, if after two years, their serology remains positive, their status will be changed to congenital and they will be added to the congenital syphilis cases.
Prophylaxis ⁵²	Any measure taken to prevent an adverse outcome from occurring. In this context, prescribing medication that is known to prevent an infection from taking hold at a time when a person may not be infected or ill but is at risk of developing that infection or illness.
Safer sex, safer sexual practice ⁵³	Sexual activity in which there is no exchange of body fluids such as semen, vaginal fluids or blood.
Secondary prevention ⁵⁴	Targets those who may be at risk of BBP or STI where efforts are directed at detecting the disease while it is in its early stages and before any major complications occur. For those diagnosed with the disease, measures are undertaken to help them manage their disease effectively to prevent any major complications. At this point, the preventive measures become tertiary.
Sexually transmitted infection (STI) ⁵⁵	An infection such as gonorrhoea, syphilis or chlamydia that is transmitted through sexual contact.
Tertiary prevention ⁵⁶	Targets those who are already diagnosed with BBP or STI. The focus of tertiary prevention is to prevent or delay any complications that may result from the disease. Tertiary prevention is aimed at effective management of the disease.
Test and Treat by RN ⁵⁷	This strategy allows the registered nurse to test and treat suspected cases and named partners of STI cases under the direction of the MOH. This approach is used for clients who would not seek care in a traditional setting.

Appendix A – Glossary (continued)

Un2 ⁵⁸	<p>The term Un2 means unwilling and/or unable.</p> <p>Unwilling - an HIV-positive individual who intentionally engages in behaviours with known potential to transmit HIV yet possesses the capacity and opportunity to prevent HIV transmission. Note, this definition applies as long as the source understands and has been counselled on risk of transmission, and the recipient (partner) has not given or does not have the capacity to consent.</p> <p>Unable - a HIV-positive individual who does not have the capacity to prevent HIV transmission for physical, mental or environmental reasons such as in coercive, subordinate or abusive relationships and in homeless or incarcerated individuals.</p>
-------------------	--

Appendix B – STI and BBP prevention and management conceptual framework



Appendix C – Advisory committee membership

ADVISORY COMMITTEE		
Name	Position/Title	Organization
Mr. Neil MacDonald	Executive Director (co-chair)	Public Health Strategic Policy and Planning Branch (PHSPP), Alberta Health and Wellness (AHW)
Dr. Gerry Predy	Senior Medical Officer of Health (MOH), Senior Medical Director (co-chair)	Population and Public Health, Alberta Health Services (AHS)
Ms. Janice Tait	Senior Manager	PHSPP, AHW
Ms. Helen Legg	Project Manager	PHSPP, AHW
Ms. Patti Kowalski	Senior Manager	Surveillance and Assessment Branch, AHW
Dr. James Talbot	Senior Provincial Medical Officer of Health	Office of the Chief Medical Officer of Health (OCMOH), AHW
Dr. André Corriveau	Chief Medical Officer of Health	OCMOH, AHW
Ms. Kathy Ness	Executive Director	Surveillance and Assessment Branch, AHW
Ms. Kathy Ahearn	Executive Director	Health Protection Population and Public Health, AHS
Ms. Shelly Philley	Director, Reproductive Health, Healthy Child and Youth Development	Population and Public Health, AHS
Ms. Barbara Anderson	Manager	STI Unit Northern Alberta, AHS
Ms. Colleen Roy	Manager	STI Services Southern Alberta, AHS
Ms. Anita Hanrahan	Director	Communicable Disease Control, AHS
Ms. Karen L. Sutherland	Manager	STI Services, AHS
Ms. Donna Neufeld	Director, Public Health Projects	Office of the Senior MOH, Senior Medical Director, Population and Public Health, AHS
Dr. George Zahariadis	Medical Virologist and Infectious Disease Consultant	ProvLab, Edmonton STI Centre and Provincial STI Program, AHS
Dr. Ron Read	Medical Director, Calgary STI Clinic, Associate Professor of Medicine and Microbiology, Immunology and Infectious Diseases, University of Calgary	Calgary STI Clinic, AHS
Dr. Wadieh Yacoub	Medical Officer of Health, Director	Health Protection, Health Assessment and Surveillance, First Nations and Inuit Health (FNIH), Alberta Region

Appendix D – Working group membership

Prevention Working Group		
Name	Position/Title	Organization
Ms. Anita Hanrahan	Director (co-chair)	Communicable Disease Control, AHS
Ms. Nora Johnston	Senior Manager (co-chair)	PHSPP, AHW
Ms. Shelly Philley	Director, Reproductive Health, Healthy Child and Youth Development	Population and Public Health, AHS
Mr. Ray Harrison	Community Development Coordinator	Sexual and Reproductive Health, Population and Public Health, AHS
Ms. Julie Campbell-Hansen	Public Health Nurse	Sexual Health Program, Central Zone, AHS
Dr. Albert de Villiers	Zone Lead Medical Officer of Health and North West area	AHS
Ms. Colleen Roy	Manager	STI Services Southern Alberta, AHS
Ms. Barbara Anderson	Manager	STI Unit Northern Alberta, AHS
Ms. Helen Legg	Project Manager	PHSPP, AHW
Ms. Sherri Wilson	Senior Manager	OCMOH, AHW

Appendix D – Working group membership (continued)

Harm Reduction Working Group		
Name	Position/Title	Organization
Ms. Kathy Ahearn	Executive Director (co-chair)	Health Protection Population and Public Health, AHS
Mr. Neil MacDonald	Executive Director (co-chair)	PHSPP, AHW
Dr. Brent Friesen	Zone Medical Officer of Health, Calgary	AHS
Ms. Barbara Ross	Harm Reduction Coordinator	AHS
Ms. Jennifer Currie	Executive Director	Public Health and Primary Care, Central Zone, AHS
Ms. Ruth Richardson alternate Ms. Karen Saganiuk	Regional CDC Nurse Manager	FNIH, Alberta Region
Ms. Rashmi Joshee alternates Ms. Tanis Liebreich & Ms. Pamela Amulaku	Manager	Population Health Section, PHAC
Ms. Nora Johnston	Senior Manager	PHSPP, AHW
Ms. Bobbi Brownrigg	Project Manager	OCCMOH, AHW

Appendix D – Working group membership (continued)

Treatment And Contact Tracing Working Group		
Name	Position/Title	Organization
Dr. Ron Read	Medical Director, Calgary STI Clinic, Associate Professor of Medicine and Microbiology, Immunology and Infectious Diseases, University of Calgary (Chair)	Calgary STI Clinic, AHS
Ms. Colleen Roy	Manager (Chair)	STI Services Southern Alberta, AHS
Dr. George Zahariadis	Medical Virologist and Infectious Disease Consultant	ProvLab, Edmonton STI Centre and Provincial STI Program, AHS
Dr. Laura McLeod	Zone Medical Officer of Health	AHS
Ms. Barbara Forth	Nurse Consultant	STI Services, AHS
Mr. Josh Bergman	Clinical Development Nurse	Edmonton STI Centre, AHS
Mr. Ron Scarrott	Partner Notification Nurse (Urban)	Calgary STI Clinic, AHS
Ms. Karen McCammon	Partner Notification Nurse (Rural)	AHS
Mr. Daniel Helm	Partner Notification Nurse (Rural)	AHS
Dr. Martin Lavoie	Deputy Chief Medical Officer of Health	OCMOH, AHW
Dr. Wadieh Yacoub	Medical Officer of Health, Director	Health Protection, Health Assessment and Surveillance, FNIH, Alberta Region
Ms. Karen Saganiuk	Blood Borne Pathogens/Sexually Transmitted Infections Prevention Program Coordinator	FNIH, Alberta Region
Ms. Caley Boyes	STI Clinic and Partner Notification Nurse	Fort McMurray STI Clinic, AHS
Ms. Marcy Thompson	HIV Designate Nurse	Harm Reduction/Public Health, AHS

Appendix D – Working group membership (continued)

Prenatal And Congenital Working Group		
Name	Position/Title	Organization
Ms. Karen L. Sutherland	Manager (Chair)	STI Services, AHS
Dr. Deena Hinshaw	Zone Medical Officer of Health, Central	AHS
Dr. Bonita Lee	Associate Professor	Department of Pediatrics, University of Alberta
Ms. Barbara Anderson	Manager	STI Unit Northern Alberta, AHS
Ms. Brenda Blore-Seniuk	Supervisor	Calgary STI Clinic, AHS
Ms. Louise Forest	Project Manager	OCCMOH, AHW

Appendix D – Working group membership (continued)

Laboratory Surveillance Working Group		
Name	Position/Title	Organization
Dr. George Zahariadis	Medical Virologist and Infectious Disease Consultant (chair)	ProvLab, Edmonton STI Centre and Provincial STI Program, AHS
Dr. Ron Read	Medical Director, Calgary STI Clinic, Associate Professor of Medicine and Microbiology, Immunology and Infectious Diseases, University of Calgary	Calgary STI Clinic, AHS
Dr. Marie Louie	Acting Medical Director	ProvLab (Calgary)
Dr. Errol Prasad	Clinical Virologist	DynaLIFEDX
Dr. Robert Verity	Microbiology Division Director	DynaLIFEDX
Dr. Dan Gregson	Microbiology Division Director	Calgary Lab Services
Dr. James Talbot	Senior Provincial Medical Officer of Health	OCMOH, AHW
Dr. Steve Drews	Clinical Microbiologist	ProvLab (Calgary)
Ms. Pamela Stepan	Manager, Infectious Disease Epidemiology	Surveillance and Assessment Branch, AHW
Ms. Theresa St. Jean	Manager, Communicable Disease Control	Surveillance and Assessment Branch, AHW
Ms. Jennifer Gratrix	Epidemiologist	Communicable Disease Control, Health Protection, AHS
Ms. Cheryl Hicks	Manager, Rural Laboratory Applications	Community and Clinical Application Services, AHS
Ms. Monica Kearns	Data Coordinator Laboratory Services	AHS
Mr. Mike Schmidt	Millennium Team Lead	AHS
Ms. Patti Kowalski	Senior Manager	Surveillance and Assessment Branch, AHW
Ms. Kathy Ness	Executive Director	Surveillance and Assessment Branch, AHW
Ms. Kathy Ervin	Director	LIS & Millennium System Support, AHS
Ms. Jackie Kohut	Team Lead	Laboratory Information Systems, AHS
Mr. John Knoch	Executive Director	ProvLab, AHS

Appendix E – Endnotes

- ¹ Chuck, A., Ohinmaa, A., Tilley, P., Singh, A., & Jacobs, P. (n.d.). *Cost effectiveness of enzyme immunoassay and immunoblot testing for the diagnosis of syphilis.*
- ² Council of Ministers of Education (2003). *Canadian youth, sexual health and HIV/AIDS study: Factors influencing knowledge, attitudes and behaviours.* Retrieved May 9, 2007 from http://www.cmec.ca/publications/aids/CYSHHAS_2002_EN.pdf
- ³ Source: Alberta Community Council on HIV (2006). *Making a difference: Alberta's community-based HIV/AIDS service organizations.*
- ⁴ Dodds, C., Colman, R., Amaratunga, C., & Wilson, J. (n.d.). *The cost of HIV/AIDS in Canada.* Retrieved May 8, 2007 from http://www.aidsida.cpha.ca/english/res_e/index.htm
- ⁵ Alberta Health and Wellness. (2010). *Communicated by email from Samantha Cassie dated December 13, 2010. Information on HCV costs was provided through a calculation using all PHNs with a diagnosis of HCV in the following databases: "Claim"s, "In-patient" and "Out-patient" and include hospital stays, ambulatory care, physician services, lab costs, and non-hospital drugs.*
- ⁶ El Saadany, S., Coyle, D., Giulivi, A., & Afzal, M. (2005). *Economic burden of hepatitis C in Canada and the potential impact of prevention: Results from a disease model.* Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada, Ottawa, Canada. Retrieved May 7, 2007 from http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=15761777&dopt=Abstract
- ⁷ Public Health Agency of Canada. Verified as of September 15, 2010. *Reported cases of notifiable STI from January 1 to June 30, 2009 and January 1 to June 30, 2010 and corresponding annual rates for the years 2009 and 2010.* <http://www.phac-aspc.gc.ca/std-mts/stdcases-casmts/pdf/sti-its-2010-eng.pdf>. Accessed December 6, 2010.
- ⁸ Alberta Health and Wellness. <http://www.health.gov.ca/healthier/diseases/STI/STIs.htm>. Accessed April 2003.
- ⁹ Surveillance and Risk Assessment Division, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada, 2006.
- ¹⁰ Alberta Health and Wellness. <http://www.health.gov.ab.ca/healthier/immunes/hepatitisB/hepb.html>. Accessed April 2003.
- ¹¹ Alberta Health and Wellness. <http://www.health.gov.ab.ca/healthier/immunes/hcfacts.html>. Accessed April 2003.
- ¹² Resti M et al. *British Medical Journal* 1998; 317:437-41; AAR Committee on Infectious Diseases. *Pediatrics* 1998; 101:481-85; Toro PA et al. *Clinical Infectious Diseases* 1997; 25:1121-24; Thomas SL et al. *International Journal of Epidemiology* 1998; 27:108-17; Dore GJ et al. *British Medical Journal* 1997; 315:333-37.
- ¹³ Alberta Health and Wellness. (2003). *Hepatitis C. Draft March 3, 2003.* Edmonton: Disease Control and Prevention Branch.
- ¹⁴ Alberta Health and Wellness. *Ministry of Health and Wellness Business Plan 2010-2013.*
- ¹⁵ *Health and Wellness Business Plan 2011-14.*
- ¹⁶ Alberta Health and Wellness Communicable Disease Reporting System. July 16, 2010. Alberta.
- ¹⁷ <http://www.health.gov.ab.ca/system/rhas/require/b8-01a-98.htm>. Accessed 04 June 2003.
- ¹⁸ Alberta Health and Wellness. (2003). *Human Immunodeficiency Virus (HIV) Infection. Draft March 3, 2003.* Edmonton: Disease Control and Prevention Branch.
- ¹⁹ Alberta Health and Wellness. (2003). *Acquired Immunodeficiency Syndrome (AIDS). Draft March 3, 2003.* Edmonton: Disease Control and Prevention Branch.
- ²⁰ Alberta Health and Wellness. (2003). *Hepatitis B (Acute and Chronic). Draft March 3, 2003.* Edmonton: Disease Control and Prevention Branch.
- ²¹ Alberta Health and Wellness. (2003). *Hepatitis C. Draft March 3, 2003.* Edmonton: Disease Control and Prevention Branch.
- ²² Alberta Health and Wellness. <http://www.health.alberta.ca/health-info/imm-types-of-vaccines.html#HPV>. Accessed December 11, 2010.
- ²³ Alberta Health and Wellness. *The Alberta Aboriginal HIV Strategy 2001-2004.* Edmonton.
- ²⁴ Canadian Centre on Substance Abuse. (1996). *Harm Reduction: Concepts and Practices. A Policy Discussion Paper.* Ottawa: Canadian Centre on Substance Abuse National Working Group on Policy. <http://www.ccsa.ca>
- ²⁵ Alberta Health and Wellness. *The Alberta Aboriginal HIV Strategy 2001-2004.* Edmonton.
- ²⁶ Alberta Health and Wellness. (2008). *Alberta Treatment Guidelines for Sexually Transmitted Infections in Adolescents and Adults.* Edmonton.
- ²⁷ Alberta Health and Wellness. (2003). *Human Immunodeficiency Virus (HIV) Infection. Draft March 3, 2003.* Edmonton: Disease Control and Prevention Branch.
- ²⁸ <http://www.anfca.com/> accessed on March 25, 2011.
- ²⁹ Alberta Aboriginal Affairs and Northern Development. *Treaties with Aboriginal People in Canada.* <http://www.aand.gov.ab.ca>. Accessed 20 August 2003.
- ³⁰ Commonwealth Department of Health and Aged Care. (2000). *National HIV/AIDS Strategy, 1999 – 2000 to 2003 – 2004.* Australia.
- ³¹ Alberta Health and Wellness. (2011). *Communicated via e-mail from Larry Svenson, dated March 24, 2011.*
- ³² Alberta Aboriginal Affairs and Northern Development. *Treaties with Aboriginal People in Canada.* <http://www.aand.gov.ab.ca>. Accessed 20 August 2003.

-
- ³³ Adapted from: Commonwealth Department of Health and Aged Care. (2000). *National HIV/AIDS Strategy, 1999 – 2000 to 2003 – 2004*. Australia.
- ³⁴ Commonwealth Department of Health and Aged Care. (2000). *National HIV/AIDS Strategy, 1999 – 2000 to 2003 – 2004*. Australia.
- ³⁵ *Ibid.*
- ³⁶ *Ibid.*
- ³⁷ Centers for Disease Control and Prevention. <http://www.cdc.gov/vaccines/about/terms/glossary.htm#e>. Accessed December 22, 2010.
- ³⁸ *Ibid.*
- ³⁹ Centers for Disease Control and Prevention. (2001). *HIV Prevention Strategic Plan Through 2005*. Atlanta.
- ⁴⁰ Adapted from the Treatment and Contact Tracing Working Group Report, (September 2009)
- ⁴¹ Canadian Centre on Substance Abuse. (1996). *Harm Reduction: Concepts and Practices. A Policy Discussion Paper*. Ottawa: Canadian Centre on Substance Abuse National Working Group on Policy. <http://www.ccsa.ca>
- ⁴² World Health Organization. (1998). *Health Promotion Glossary*. http://www.who.int/hpr/NPH/docs/hp_glossary_en.pdf. Accessed December 13, 2010.
- ⁴³ Commonwealth Department of Health and Aged Care. (2000). *National HIV/AIDS Strategy, 1999 – 2000 to 2003 – 2004*. Australia.
- ⁴⁴ *Ibid.*
- ⁴⁵ *Ibid.*
- ⁴⁶ *Ibid.*
- ⁴⁷ Alberta Health and Wellness. (2005). Communicated via e-mail from Linda Findlay, dated January 12, 2005.
- ⁴⁸ *Ibid.*
- ⁴⁹ *Ibid.* <http://www.phac-aspc.gc.ca/sti-its-surv-epi/qf-fr/chlamydia-eng.php#jmp-lan2>
- ⁵⁰ Adapted from: Alberta Health and Wellness. (2003). *Alberta Diabetes Strategy, 2003 – 2013*. Edmonton.
- ⁵¹ Alberta Health Services. Communicated via email from Karen L. Sutherland, dated December 16, 2010.
- ⁵² Commonwealth Department of Health and Aged Care. (2000). *National HIV/AIDS Strategy, 1999 – 2000 to 2003 – 2004*. Australia.
- ⁵³ *Ibid.*
- ⁵⁴ Adapted from: Alberta Health and Wellness. (2003). *Alberta Diabetes Strategy, 2003 – 2013*. Edmonton.
- ⁵⁵ Commonwealth Department of Health and Aged Care. (2000). *National HIV/AIDS Strategy, 1999 – 2000 to 2003 – 2004*. Australia.
- ⁵⁶ Adapted from: Alberta Health and Wellness. (2003). *Alberta Diabetes Strategy, 2003 – 2013*. Edmonton.
- ⁵⁷ Adapted from the Treatment and Contact Tracing Working Group Report, (September 2009)
- ⁵⁸ Alberta Health and Wellness. (2011) Communicated via e-mail from Bobbi Brownrigg dated March 24, 2011. Adapted from: *Guideline for the Management of Recalcitrant HIV-positive Individuals Unwilling and/or Unable to Prevent the Spread of HIV* (July 2009).