September 29, 2003 453934

Community Partners:

I am pleased to provide you with *Priorities for Action in Managing the Epidemics – HIV/AIDS in British Columbia 2003 - 2007*.

Priorities for Action serves as a provincial blueprint to complement, guide and support community and health authority efforts to manage the HIV/AIDS epidemic in British Columbia. This directional document will assist partners at all levels in the province in targeting HIV/AIDS program priorities over the next five years to achieve the best outcomes possible.

A draft of *Priorities for Action* was presented at workshops held during March and April 2003 in partnership with Health Canada and each of British Columbia's six health authorities. Comment and feedback from health authority staff and community partners helped to shape the document's subsequent revision.

As the process for developing a provincial direction initially began, I committed to the creation of a document that focuses on actions driven by the best evidence from around the world. *Priorities for Action* incorporates lessons learned from many international jurisdictions, including those that have addressed HIV/AIDS with great success in resource-constrained environments.

These experiences, as well as BC's own successes, enable us to better focus our discussion and efforts within the HIV/AIDS sector to ensure the maximum effect in reducing the rate of new infections, improving treatment and services and ensuring a co-ordinated and collaborative approach among the many stakeholders involved in managing the HIV/AIDS epidemic. You will see these principles and best practices reflected in *Priorities for Action*, as well as targets we believe are achievable with concerted partnerships and strategic reallocation of resources.

…2

Ministry of Health Planning

Office of the Minister

Mailing Address:
Parliament Buildings
Victoria BC V8V 1X4

In British Columbia, the HIV/AIDS epidemic is a very serious public health challenge, particularly in light of the 6.5 per cent increase in new infections during 2001, and a further estimated increase of four per cent in 2002. The strategic approach recommended in the document focuses on managing the epidemics through sustained effort in four key areas: prevention; care, treatment and support; capacity; and co-ordination and co-operation.

The implementation of *Priorities for Action* will rely on active co-operation between British Columbia's health ministries, six health authorities and their community partners, as well as Health Canada. It will provide communities and health authorities with the flexibility to respond to the particular local demands of the epidemics, while at the same time providing a framework to ensure efforts are consistent with provincial goals. The BC Ministries of Health Planning and Health Services will continue to take a strong leadership role in responding to HIV/AIDS.

Priorities for Action clearly outlines provincial aims, positioning British Columbia to engage effectively in strategic discussions with Health Canada as it considers renewal and funding levels associated with the Canadian strategy on HIV/AIDS. Ministry staff and I will be working with our federal counterparts to ensure BC receives an appropriate share of the new funding associated with the federal strategy, as well as the federal hepatitis C and drug strategies.

We recognize there will be challenges associated with the goals and targets outlined in the provincial strategy, and my officials are ready and willing to work with you to ensure continued progress in the face of the HIV/AIDS epidemic and improvements in the health and well-being of British Columbians affected by this terrible disease. The directional document speaks to my commitment and that of my ministry to addressing the HIV/AIDS epidemic.

I want to extend my thanks and appreciation for your valuable work to improve the lives of people living with HIV/AIDS, your important partnership in the effort to reduce the number of people who are newly infected and your ongoing efforts to educate British Columbians on this disease. I look forward to continuing to work with you to address the HIV/AIDS epidemic in BC.

It gives me great pleasure to present the finalized *Priorities for Action in Managing the Epidemics*. This directional document furthers British Columbia's comprehensive approach to HIV/AIDS and provides an effective, flexible framework for responding to challenges in the future.

Sincerely,

Sindi Hawkins

Sindi Hawkins
Minister

Priorities for Action in Managing the Epidemics

HIV/AIDS in B.C.: 2003-2007

B.C. Ministry of Health Planning B.C. Ministry of Health Services

September 2003

EXECUTIVE SUMMARY

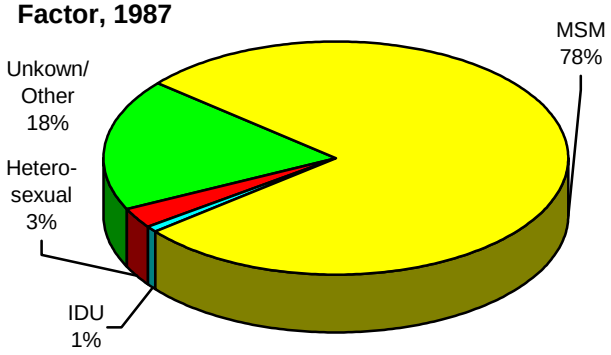
The HIV/AIDS epidemic is a human tragedy of global proportion. It has been responsible for the premature deaths of 20 million people and in many parts of the world has turned back the development clock by several decades.

In British Columbia, the HIV/AIDS epidemic is a very serious public health challenge, particularly in light of the 6.5% increase in new infections during 2001, and a further estimated increase of 4% in 2002. The Ministries of Health Planning and Health Services have developed this document to complement, guide and support community and health authority efforts to manage the HIV/AIDS epidemic in British Columbia. It further supports the government's long-term goal for B.C.'s health-care system of improved health and wellness and sustainable, affordable care, as outlined in the Ministry of Health Planning vision document "The Picture of Health."

New Trends

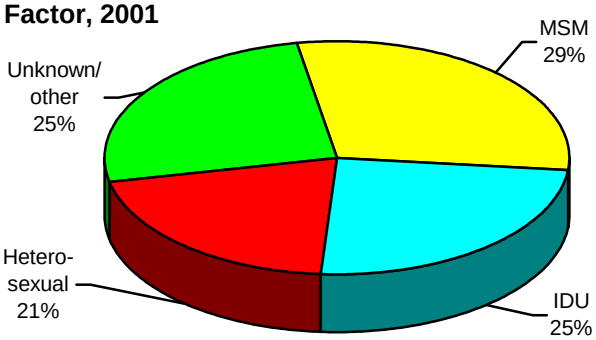
Since the 1980s, the HIV/AIDS epidemic has changed dramatically. What was once one epidemic is now several very different epidemics, each affecting a different community of people and each requiring ~~a~~ different public health response. The epidemic has gained ground among younger and more marginalized populations of injection drug users (IDU), Aboriginal people and women, while continuing to affect gay men and men who have sex with men (MSM), especially those aged 30 to 49.

Newly Reported Infections by Risk Factor, 1987



Many of those affected live at the margins of society. They are hard to reach, and challenge current techniques for monitoring and preventing spread of the epidemic. The following charts illustrate how the burden of the epidemic has changed amongst risk groups as increasing numbers of people report contracting the virus through heterosexual contact and injection drug use.

Newly Reported Infections by Risk Factor, 2001



Just as the epidemic has changed in terms of risk factors, it has changed also in terms of gender. In the past, women made up only a small proportion of those infected: for example, 4% in 1987 and 8% in 1990. They now represent 20% of all new cases. From 1987 to 2001, there was a 270% increase in the number of newly reported cases among women compared to a decrease of 40% among men.

Throughout this same period, there has also been an emerging and potent threat to the Aboriginal community, where complex socio-economic factors leave people vulnerable to HIV infection. Although Aboriginal people make up less than 4% of the province's population, they represented 16% of newly reported cases in 2001. Aboriginal women are at highest risk and represented over 36% of all women newly reported as HIV-positive in 2001.

More recently, advances in medical science, along with improved quality of care and support, have enabled many people living with HIV/AIDS to manage their health more effectively and extend their life expectancy. As a consequence, the number of people in B.C. living with HIV/AIDS has grown steadily and now numbers between 9,500 and 13,000. Health Canada estimates as many as one-third of all HIV-positive Canadians may be unaware of their condition and hence unaware of the need to take precautions to avoid infecting others.

Responding to HIV/AIDS in B.C.

British Columbia has long been at the forefront of the Canadian response to HIV/AIDS, and this document builds on that foundation. It begins with a vision, a statement of principles and strategic priorities that articulate a consistent, results-based approach to the HIV epidemic across the province's regions. The vision is *to make British Columbia a Canadian and world leader in effectively and responsibly managing the HIV/AIDS epidemic.*

Accordingly, this document incorporates lessons learned from many international jurisdictions, including jurisdictions that have addressed HIV/AIDS with great success in resource-constrained environments, such as Brazil.

Priorities for Action clearly outlines provincial priorities, positioning B.C. to engage effectively in strategic discussions with Health Canada as the federal government considers renewal and funding levels associated with the Canadian Strategy on HIV/AIDS.

This document contributes to improved health and a more sustainable health-care system for all British Columbians, as outlined in "The Picture of Health." It is consistent with B.C.'s draft framework Core Programs for Public Health, which focuses on improving health and preventing disease, disability and injury.

Health Canada estimates provincial and territorial governments contribute 67.5% of total funding to address HIV/AIDS in Canada[1]; on a per capita basis, B.C. funds one of the most robust responses in the country, largely through funding transferred to health authorities for preventive and care services delivered directly or through funded agencies. This directional document has been developed in the context of significant structural changes at health authorities, and is intended to complement, guide and support health authority and community efforts to respond to HIV/AIDS. *Priorities for Action* establishes overall goals for the province and calls for re-examining and, where necessary, realigning existing responses to ensure they effectively reach the most vulnerable communities in B.C. The Ministries of Health Planning and Health Services recognize health authorities and communities will achieve these goals by designing responses that are evidence-based and acknowledge and address local circumstances, which can vary considerably across the province.

Finally, this document recognizes that HIV/AIDS is a complex disease that cannot yet be fully prevented. The approach focuses on managing the epidemics through sustained effort in four key areas: prevention; care, treatment and support; capacity; and co-ordination and co-operation.

Prevention

This approach emphasizes preventing further spread of HIV/AIDS and commits to a 50% reduction in both the number of people becoming infected each year and the number who are HIV-positive but unaware of their infection. This will be achieved by focusing on those who are most vulnerable to HIV infection and who engage in practices that put them at risk of HIV infection. The goal is to prevent a total of 660 new HIV infections by 2007 and avert between $118.8 million and $148.5 million in future direct health-care expenditures.

---

1 ***See Canadian Strategy on HIV/AIDS Monitoring Report, October 6, 2000 at***
http://www.hcsc.gc.ca/hppb/hiv_aids/pdf/monitoring/Monitoring%20Report98_99l.pdf

Note: Successfully identifying infected but unaware persons, an important goal on its own, is also a critical support for prevention efforts, and will result in an increase in newly reported HIV infections.

Care, Treatment and Support

Care, treatment and support services are integral to prevention efforts, and need to be available in communities across B.C. and accessible to both those who are vulnerable to HIV infection and those living with HIV/AIDS. The goal in this area is to increase by 25% the proportion of HIV-positive individuals who are linked to appropriate services.

Effective services must be tailored to the populations being served. Efforts to manage the epidemic in the Aboriginal community, for example, will have to accommodate, first, the movement of people between reserve and urban communities, and, second, the relationship between the First Nations and the Government of Canada.

Care and support for people living with HIV will also assist in promoting prevention – those already living with HIV/AIDS are uniquely positioned to contribute to limiting transmission to others. "Every new HIV infection is the result of a seropositive individual inadvertently transmitting the virus."[2]

Capacity

It will be important to strengthen the capacity of the province, the health authorities and the network of community-based organizations to improve the province's response to B.C.'s current HIV/AIDS epidemics and to anticipate and respond to future developments. The province, through the B.C. Centre for Excellence in HIV/AIDS and the B.C. Centre for Disease Control, is uniquely positioned to accomplish this through improved co-ordination and better linking of existing data sources.

Co-operation and Co-ordination

Experience in Australia, Brazil and Switzerland illustrates the importance of consensus in developing and implementing a strategy founded upon knowledge and evidence, rather than stigma and stereotype.

The B.C. approach to HIV/AIDS, therefore, is designed to encourage consensus and co-operation among stakeholders at the federal, provincial, regional and community levels. It is an approach designed to maximize opportunities to address health determinants beyond the scope of the formal health sector. It also builds upon the province's strong history of co-operation across sectors, exemplified by the Pacific AIDS Network and the Red Road HIV/AIDS Network Society. This approach envisions the integration of the management of HIV and hepatitis C and enhanced contributions to the international effort to prevent HIV/AIDS in the developing world.

Implementation

Priorities for Action outlines provincial goals intended to guide service planning and delivery efforts across the province. Each B.C. health authority has developed, or is currently developing, an HIV service plan. Where necessary, this directional document promotes the realignment of existing resources to ensure they are being harnessed most effectively and engaging B.C.'s most vulnerable communities. Where required, *Priorities for Action* will be adjusted to respond to new and emerging circumstances. *Priorities for Action* includes a monitoring framework, and the Ministries of Health will report on progress annually.

---

2 National Center for HIV, STD and TB Prevention, Program Briefing 2001, 4/10/02. See www.cdc.gov/nchstp/od/program_brief_2001

CONTENTS

1. INTRODUCTION

The *Human Immunodeficiency Virus* (HIV) attacks the human immune system, leaving infected individuals vulnerable to chronic, progressive illness, opportunistic infections and cancers. Once those infected with HIV cross a certain medically defined threshold, they are described as having AIDS, the *Acquired Immunodeficiency Syndrome*.

The virus spreads as infected body fluids – blood, semen, vaginal fluids and breast milk – pass from one person to another; for example, through unprotected sexual intercourse, shared needles or vertical transmission from mother to child (in vitro, during delivery or through breastfeeding). At present, there is neither a vaccine to prevent HIV infection nor a cure for AIDS. The disease is both incurable and 100 per cent preventable.

The human tragedy associated with HIV/AIDS has reached pandemic proportions. More than 40 million people in the world today are living with HIV/AIDS, while 20 million have already died as a result of this disease. In 2001 alone, five million people became infected with HIV and a further three million died of AIDS.[3] Even in the world's developed countries where medical science is expected to solve almost every health problem, more than 75,000 people became infected with HIV and another 23,000 died of AIDS during 2001.[4]

Canada has certainly not been spared. Between 15,000 and 17,000 Canadians have died as a result of HIV/AIDS. More than 50,000 Canadians today are living with HIV/AIDS, including an estimated 15,000 who are not aware of their infection and who, inadvertently, may be passing the virus on to others.[5] Each day in Canada, 11 more people become infected.[6]

The HIV/AIDS epidemic has taken a heavy toll in British Columbia. More than 2,000 people in this province have already died as a result of HIV/AIDS, and AIDS is one of the four leading causes of death among men and women aged 25 to 44.[7] Every day, between one and two people in B.C. contract HIV and join the estimated 13,000 already living with this disease. Extrapolating from national estimates, as many as one-third of these may not know they are carrying, and possibly spreading, the virus. Vancouver's Downtown Eastside has been particularly hard hit, and it is estimated the infection rate among injection drug users there is 25%.[8]

British Columbia reports a disproportionate number of positive HIV tests. Although B.C. has only 13% of the Canadian population, the province has 20% of the HIV/AIDS cases in Canada. Nationally during 2001, British Columbians accounted for 38% of those testing positive who engaged in any heterosexual contact, 37% of men testing positive who have sex with men and 50% of injection drug users who tested positive. Aboriginal British Columbians have the highest rate of co-infection with HIV and hepatitis C of all aboriginal people in Canada.

Recent work from UNAIDS, illustrated in **Figure 1**, suggests that HIV incidence among men who have sex with men is significantly higher in Vancouver than in either Madrid or San Francisco.

---

3 ***UNAIDS, Fighting HIV-Related Intolerance, 2001:3.***

4 ***UNAIDS, High-Income Countries, Fact Sheet, 2002. Today, more than 1.5 million people in the developed world are living with HIV/AIDS, including 950,000 in North America and 550,000 in Western Europe.***

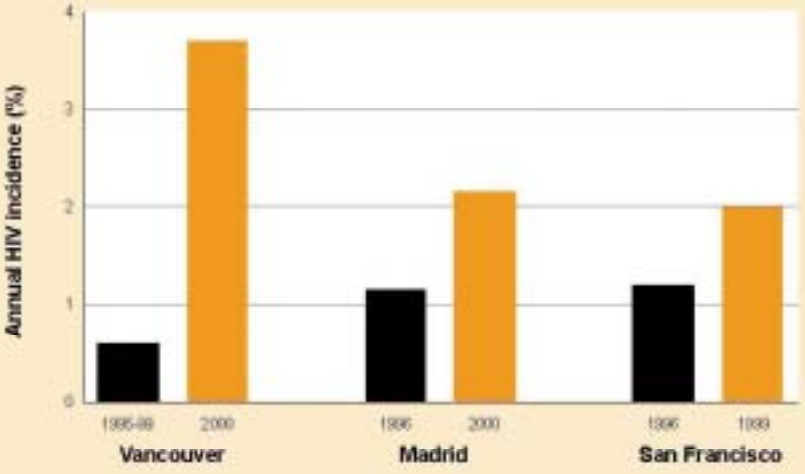
5 ***Health Canada, 2002:6. Estimate from the Canadian Centre for Infectious Disease Prevention and Control. See also Health Canada, HIV/AIDS Epi Update, April, 2002***

6 ***Health Canada, HIV and AIDS in Canada: Surveillance Report to December 31, 2001; 2002:18.***

7 ***British Columbia, 1998a: 5-6.***

8 ***See S.A. Strathdee, 1997b. See also Wiebe, 2000.***

Fig. 1: **HIV incidence among men who have sex with men in Vancouver, Madrid and San Francisco: 1995-2000**



Sources: [Vancouver] Hogg RS et al. (2001) AIDS; [Madrid] Del Romero J et al. (2001) AIDS; [San Francisco] Katz MH et al. (2002) Am. J. of Public Health

Although the number of new infections in B.C. has declined dramatically over the past decade,[9] there are indications that the epidemic may again be expanding. In 2001, the number of new infections increased by 6.5%, compared to only 2.5% for Canada as a whole, while the incidence rate (per 100,000 people) increased to 10.74 from 10.15 in 2000.[10] Furthermore, the epidemic is now taking firmer root in new populations and new neighbourhoods. While continuing to disproportionately affect gay men and men who have sex with men, HIV has clearly become an increased threat to many other groups, and increasing prevalence of HIV and hepatitis C (HCV) co-infection present new challenges to care systems. The public health system must address several HIV/AIDS epidemics at the same time.

1.1 Purpose and Organization

The B.C. Ministries of Health Planning and Health Services have developed revised priorities for action in managing HIV/AIDS through 2007. The approach is intended to complement, guide and support community and health authority efforts to address what is one of the most serious public health challenges in B.C. today.

Priorities for Action contains an epidemiological profile of HIV disease in B.C., and proposes several strategic priorities, a series of measurable goals and objectives and evidenced-based strategies that, taken together, establish a framework for action at the provincial and regional levels. Progress in achieving the provincial goals and objectives will be measured through a monitoring framework using provincial indicators.

The document primarily examines functions that fall within the domain of the province's health sector. It also acknowledges the root causes of HIV vulnerability and infection are complex and are influenced by efforts that occur outside the health sector, such as efforts to prevent discrimination, to protect children from sexual and emotional abuse and to alleviate family poverty. A population health approach to HIV/AIDS can bring about incremental change by addressing social, environmental and economic factors, as well as access to effective health services. Initiatives are evidence-based and entail surveillance, monitoring, evaluation and reporting of outcomes.

9 ***See B.C. Centre for Disease Control (BCCDC), 2002:23. See also Health Canada, 2002:19; and BCCDC, 2002:4.***

10 ***BCCDC, 2002:23.***

These more comprehensive efforts are long-term in nature and require the involvement of many different sectors. These sectors are currently brought together within the government's Interministry Committee on HIV/AIDS. *Priorities for Action* also proposes the B.C. Ministries of Health take a leadership role in bringing together stakeholders from across jurisdictions.

1.2 Document at a Glance

PREVENTION		
Goals	**Objectives**	**Key Strategies**
To reduce the incidence of HIV infection by 50% over the next five years	▪ To reduce the incidence of HIV infection among the most vulnerable groups by 50% over the next five years ▪ To reduce the proportion of seropositive individuals who are unaware of their HIV infection by 50% over the next five years ▪ To sustain effective systems of care for women living with HIV and ensure no infants are born with HIV over the next five years	▪ Ensure that current and future HIV/AIDS-related prevention efforts across the province effectively engage the most vulnerable populations ▪ Expand provincial support for low-threshold harm-reduction initiatives, including supervised consumption sites, needle exchange and addiction treatment services, and a randomized trial of prescribing controlled substances, and ensure that they are accessible and culturally appropriate to populations most at risk of HIV infection ▪ Monitor and evaluate the public health reporting requirement for HIV infection under the Health Act, including provisions for anonymous, voluntary partner notification ▪ Expand HIV testing capacity, education and prevention efforts in all of the province's correctional facilities; given the prevalence of risk behaviours for blood-borne infections in provincial jails, and the positive evaluations of needle exchange pilots in European jails (42), review the effectiveness of current HIV/HCV prevention strategies in provincial jails and assess the opportunities for evaluatable, innovative interventions to reduce HIV/HCV transmission through risk behaviours like tattooing and injection drug use; pursue the development of a partnership with Correctional Service Canada to enhance HIV/HCV services in federal institutions located in B.C. ▪ Create an HIV/AIDS roundtable involving B.C. ministries and health authorities, Health Canada and First Nations organizations to identify and pursue efforts to address the HIV epidemic among Aboriginal people

CARE, TREATMENT AND SUPPORT		
Goals	**Objectives**	**Key Strategies**
To increase the proportion of HIV+ individuals who are linked to appropriate care, treatment and support services by 25% over the next five years	▪ To ensure that HIV+ individuals are aware of the care, treatment and support services available in their communities ▪ To ensure that care, treatment and support services are readily available and accessible to vulnerable groups of HIV+ individuals ▪ To ensure HIV+ women from the most vulnerable groups access antiretroviral therapy at the same rate as women in the general population	▪ Ensure that current and future HIV/AIDS-related care, treatment and support, and prevention services across the province effectively engage the most vulnerable populations ▪ Work with the B.C. Medical Association and the B.C. College of Physicians and Surgeons to expand the provincial methadone program, and the range of addictions treatment options ▪ Work with the B.C. College of Physicians and Surgeons to increase the number of physicians providing HIV/AIDS care and treatment, and expand innovative training programs for physicians and other key health-care providers ▪ Monitor and evaluate the public health reporting requirement for HIV infection under the Health Act, including provisions for anonymous, voluntary partner notification ▪ Develop the capacity to provide continuity of care and bridging services for HIV+ individuals at time of discharge from federal and provincial correctional institutions in B.C.

CAPACITY		
Goals	**Objectives**	**Key Strategies**
To enhance the province's capacity for monitoring the HIV epidemic over the next five years	▪ To strengthen the province's ability to reach and inform persons who may be unaware of their HIV infection ▪ To strengthen the province's ability to anticipate epidemiological trends and service needs in HIV/AIDS ▪ To improve epidemiological and other knowledge about HIV/AIDS among health authorities and community-based organizations	▪ Support the expansion of HIV/AIDS-related medical and social research undertaken in B.C. and explore alternate means of disseminating new knowledge ▪ Develop an effective sentinel surveillance system through linking existing data sources that will enable the province and health authorities to anticipate new epidemiological trends and service needs with regard to HIV/AIDS, hepatitis C and other co-infections ▪ Identify and disseminate best practices information to health authorities, local governments and AIDS service organizations and other community-based organizations on a timely basis ▪ Work with health authorities in planning, monitoring and evaluating HIV/AIDS services including the public health follow-up for partners of newly reported HIV-positive individuals

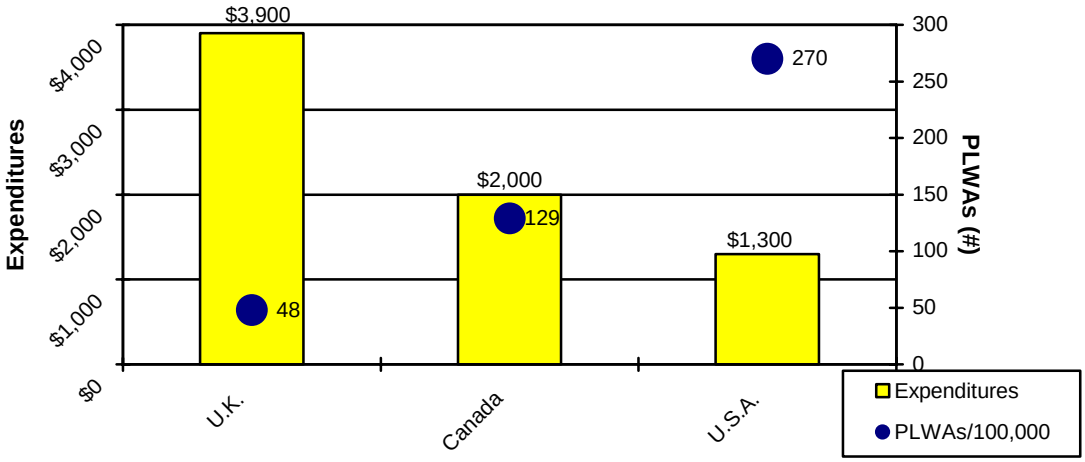
CO-ORDINATION AND CO-OPERATION		
Goals	**Objectives**	**Key Strategies**
To create and sustain broad-based support for the approach outlined in Priorities for Action	▪ To strengthen the policy, program and service co-ordination among provincial ministries, health authorities and AIDS service organizations ▪ To integrate the prevention, surveillance and treatment activities associated with HIV/AIDS and hepatitis C ▪ To contribute more fully to international efforts to combat HIV/AIDS in developing countries	▪ Create mechanisms for encouraging co-ordination and co-operation among stake-holders ▪ Forge new partnerships with Correctional Services Canada, Health Canada and Indian and Northern Affairs to foster co-ordination and co-operation in efforts directed at vulnerable populations ▪ Support efforts to share the province's HIV/AIDS knowledge and experience with countries in the developing world ▪ Explore an enhanced role for the Provincial Health Services Authority in contributing to provincial co-ordination and the identification and dissemination of best practises

2. A CASE FOR ACTION

There is a compelling public interest in managing the HIV epidemics and limiting their human, social and economic impacts. GPI Atlantic asserts that "because of the enormous economic burden of HIV/AIDS, prevention and management strategies are highly cost effective and will produce significant long-term direct and indirect cost savings to the Canadian economy."[11]

On an international and national basis, there appears to be a demonstrable relationship between the level of investment in HIV prevention and care and infection rates. In 1996, the Canadian investment in HIV prevention totalled approximately $2,044 per person living with HIV. In comparison, the United Kingdom invested $3,897 and the United States $1,300. In that year, Canada had approximately 129 people living with HIV/AIDS (PLWA) per 100,000 population, compared to 48 in the United Kingdom and 270 in the United States[12] (see **Figure 2**).

Fig. 2: Per Capita Expenditures and Number (per 100,000) Living with HIV/AIDS



Other jurisdictions that have carefully evaluated the cost benefits associated with comprehensive HIV/AIDS education and prevention programming have found impressive returns on investment. For example, Australia's Commonwealth Department of Health and Aging has released a comprehensive epidemiological and economic analysis of the public health response to HIV/AIDS and found that Australia's investment in HIV/AIDS public health programs returned substantial positive net benefits, and further found these benefits to be robust to changes in key underlying assumptions. Specifically, this analysis found the value of expenditures on HIV/AIDS education and prevention programs in 2000 prices discounted back to 1984 to be AUS $604 million, while the present value of the benefits derived from these programs is AUS $3.149 billion, with net benefits then being equal to AUS $2.541 billion.[13] Clearly, the Australian study demonstrates investment in HIV/AIDS public health programming has significant financial and human benefits. Like B.C., some Australian states noted recent increases in infection rates among particularly vulnerable communities, and have recently refocused efforts accordingly.

Turning to B.C., although the number of newly reported infections of HIV has declined dramatically over the past decade, there are indications that the incidence rate is again be on the rise. Men who have sex

---

11 ***GPI Atlantic, 2001. See http://www.gpiatlantic.org/pr_cost_aids.shtml.***

12 ***Ministerial Council on HIV/AIDS, 2001(b):ii.***

13 ***"Returns on Investment in Public Health: An epidemiological and economic analysis prepared for the Department of Health and Ageing." Canberra 2003. See pages 51-70, and appendices D, E, F & G http://www.health.gov.au/pubhlth/publicat/document/metadata/roi_eea.htm***

with men, women and Aboriginal people appear to be the most vulnerable populations. Extrapolations from the national prevalence data suggest there could be as many as 13,000 people living with HIV/AIDS in B.C. today. As many as 3,000 to 4,000 of these people may be unaware of their situation and inadvertently infecting their spouses, partners or unborn children. *Priorities for Action* acknowledges the importance of promoting prevention among those already living with HIV/AIDS in order to limit its transmission to others. "Every new HIV infection is the result of a seropositive individual inadvertently transmitting the virus."[14]

Epidemiologists and other researchers are concerned that the data from 2001 and 2002 signal a new upward trend in the number of new infections in B.C. Left unaddressed, this upward trend will not only result in considerable downstream personal and social costs, but would also place enormous additional burden on B.C.'s health-care system.

Each new HIV infection will cost the B.C. health-care system somewhere between $180,000 and $225,000 in direct costs alone per person per lifetime.[15] That means if British Columbia reduced the annual number of new infections by 50% over the next five years, from 440 in 2002 to 220 in 2007, it would prevent 660 new HIV infections and avert between $118.8 million and $148.5 million in future direct health-care costs. Among injection drug users alone, an annual investment in HIV/AIDS prevention of $1 million per year over five years would result in savings of as much as $24 million.[16]

When indirect expenses related to sickness and years of life lost are taken into account, the real cost of the epidemic rises to $1 million per lifetime for every person living with HIV/AIDS.[17]. By preventing 660 new infections over the next five years, B.C. would avert approximately $660 million in future direct and indirect costs combined.

To the extent that the highly active antiretroviral drug therapies (HAART) permit people living with HIV to return to normal patterns of living, the economic burden in terms of lost productivity and participation in society is reduced. B.C. provides universal access to HAART treatment, centrally co-ordinated through the B.C. Centre for Excellence in HIV/AIDS. The period of productive life for those people living with HIV/AIDS and receiving HAART treatment has increased by 15 percent, and the savings in indirect costs covers the increased costs of treatment.[18]

For many people living with HIV/AIDS, the advent of HAART has resulted in tremendous improvements in their ability to manage the disease. However, without access to healthy living conditions and appropriate care, treatment and support services, people living with HIV/AIDS will place significant pressures on the health-care system as their disease progresses. In late 2002, more than half of St. Paul's Hospital's palliative care beds were occupied by individuals living with HIV/AIDS, circumstances not seen since 1997[19]. Over and above the cost to the health-care system, the loss of productivity and the weakening of our social fabric due to preventable HIV infection and AIDS-related deaths will be significant.

---

14 ***National Center for HIV, STD and TB Prevention, Program Briefing 2001, 4/10/02. See www.cdc.gov/nchstp/od/program_brief_2001.***

15 ***British Columbia, 1998(a):25. See also the Canadian Medical Association Journal, 1998 (158):14.***

16 ***Canada's Drug Strategy: Reducing the harm associated with injection drug use in Canada, 2001. http://www.hc-sc.gc.ca/hppb/cds-sca/cds/publications/h36-589-2001e-chap3.htm.***

17 ***See Robin Hanvelt et al., 1999.***

18 ***Terry Albert and Greg Williams, 1997:4.***

19 ***St. Paul's Hospital, Providence Health Care, is located adjacent to neighbourhoods in central Vancouver where the early HIV/AIDS epidemic in B.C. was largely located, and has been a provincial and national leader in the provision of hospital- based care to people living with HIV/AIDS ever since.***

3. THE HIV/AIDS EPIDEMICS IN BRITISH COLUMBIA

In the 1980s, HIV infected primarily men who have sex with men and a small number of those receiving blood transfusions.[20] More recently, the epidemic has struck women, youth and Aboriginal people. Increasingly, it is taking root among those living on the margins of mainstream society, including people who are poor, homeless, the targets of violence and discrimination or struggling with mental-health problems. Their vulnerability often leads to behaviours, such as sharing needles or engaging in unprotected sex, that place them at risk of HIV infection.

Following is an epidemiological overview of HIV/AIDS in B.C. that shows how the single epidemic of the 1980s has now become a series of epidemics affecting different groups of people.[21]

3.1 Trends[22]

Figures 3 and **4** illustrate how the numbers of new infections in B.C. and Canada have declined dramatically over the past two decades. However they also show that both jurisdictions experienced an increase in new infections in 2001. Epidemiologists and other researchers are concerned that 2001 represents the beginning of a new upward trend, confirmed by preliminary 2002 data from BCCDC.[23]

Fig. 3: Newly Reported HIV+ Infections, B.C.

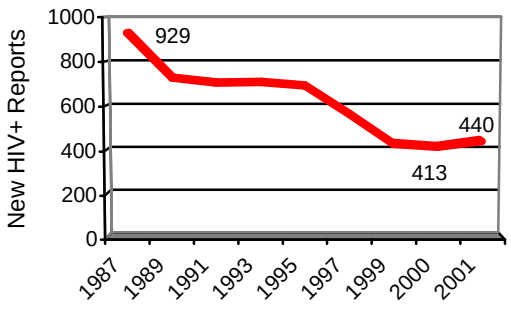
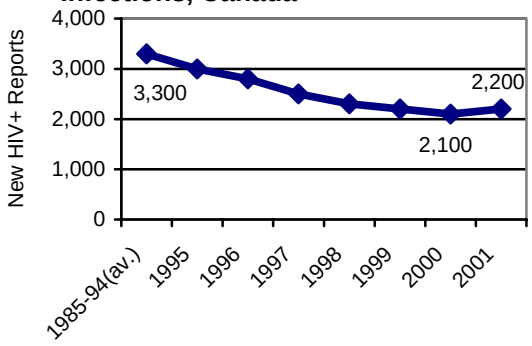


Fig. 4: Newly Reported HIV+ Infections, Canada



The number of people whose HIV infection became AIDS has also declined very dramatically since 1994.[24] This pattern is illustrated in **Figure 5**.

---

20 ***In 1987, for example, there were 735 new HIV infections reported among men who have sex with men and 44 among haemophiliacs or others receiving blood products in B.C.***

21 ***Many of the tables and charts in this section begin with data from 1987 when the B.C. Centre for Disease Control began collecting and maintaining such HIV/AIDS-related information.***

22 ***Unless otherwise noted, the data presented in the following sections were provided by the B.C. Centre for Disease Control (BCCDC) and Ministry of Health Planning. The BCCDC reports are available at http://www.BCCDC.org/stdaids/index.shtml .***

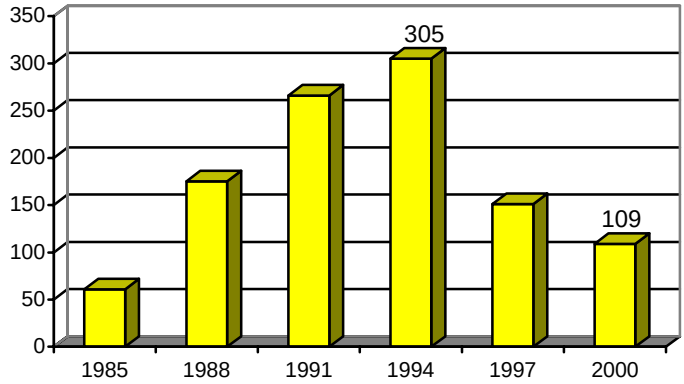
23 ***Health Canada, HIV and AIDS in Canada, Surveillance Report to December 31, 2001:8,19. Also, Dr. Michael L. Rekart, Director, STD/AIDS Control, BCCDC, personal communication February 3, 2003***

24 ***There are significant reporting delays for AIDS cases. There are currently 38 reported cases for 2001. This figure will increase as the BCCDC receives additional reports, but the number is unlikely to exceed 60.***

These incidence patterns, and the apparent decline in new HIV infections and new AIDS cases, have to be treated cautiously.

As illustrated by **Figure 6**, the pattern is somewhat different for different groups of people.

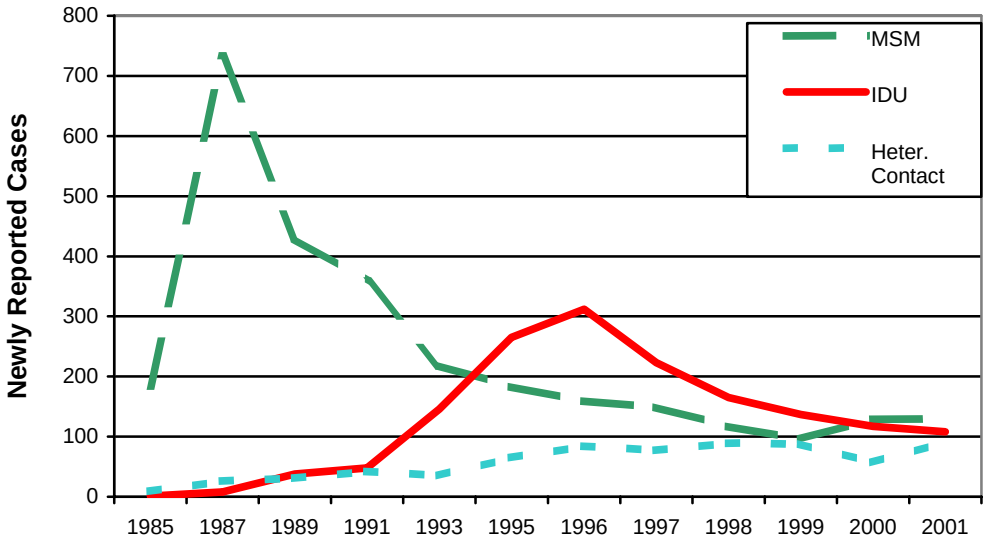
Fig. 5: AIDS Cases Reported, B.C.



The number of newly reported HIV cases among men who have sex with men began declining in 1987. However, the number has increased recently – results from the Vanguard study, a prospective cohort of young gay and bisexual men in Vancouver, have shown that the rate of new HIV infections among men who had never injected drugs has increased from 0.6 per 100 person years in 1995-99 to 3.7 per 100 person years in 2000.[25] BCCDC testing data show that among men who have sex with men (MSM) and MSM who also report using injection drugs, there was a 50% increase in the number of newly positive HIV tests between 1999 and 2002.

- Incidence among injection drug users peaked in 1996 and has been declining ever since.
- Except for a small decline in 2000, infection through self-reported heterosexual contact has continued to rise since early in the 1990s.

Fig. 6: Newly Reported HIV Cases by Risk Factor, B.C. 1985-2001



25 *Health Canada, Epi Update, 2002*

3.2 Living with HIV/AIDS

For many years, funerals seemed to be the defining characteristic of the AIDS epidemic. There were 1,482 AIDS-related deaths in Canada in 1995, for example, compared to 216 in 2000.[26] In B.C., a similar sharp decline in AIDS-related death rates is evident. However, preliminary data from the B.C. Centre for Excellence in HIV/AIDS suggest that B.C. Vital Statistics mortality reports where HIV/AIDS is the underlying cause of death are 23% lower than the number of deceased persons identified as having had HIV/AIDS, primarily because these individuals died of causes not directly attributable to HIV/AIDS. [27]

More recently, advances in medical science, the use of antiretroviral drugs and the quality of the care and support now available have enabled many people living with HIV/AIDS to manage their condition very effectively. Many continue in their employment and continue to participate in community life.

As a consequence, the number of people living with HIV/AIDS is higher now than ever before. As recently as 1996, an estimated 7,400 people were living with HIV/AIDS in British Columbia. Today there are between 9,500 and 13,000.[28] This population is heavily concentrated in the Lower Mainland, although significant numbers live in the other regions as well.[29] **Figures 7** and **8** compare the distribution of newly reported HIV-positive cases, by health authority region, in the year 2000 relative to the period 1989-2001.[30] They show that the proportion of total cases on Vancouver Island and in the Interior is increasing while the proportion in the Lower Mainland is declining. The North has only 1% of all cases but northerners infected with HIV often move south for treatment, care or support. In any case, the flow of people between regions speaks to the need for addressing the epidemic everywhere in B.C. HIV does not respect any boundaries.

In spite of tremendous advances in treatment, the burden of care still lies in the future in British Columbia's HIV epidemics. The current situation at St. Paul's Hospital in Vancouver, which delivers a large proportion of the entire province's tertiary AIDS care, serves as an early warning with respect to future acute and community care needs across the

Fig. 7: Persons Testing HIV Positive, by Region of Test 1989-2001 (n=8113)

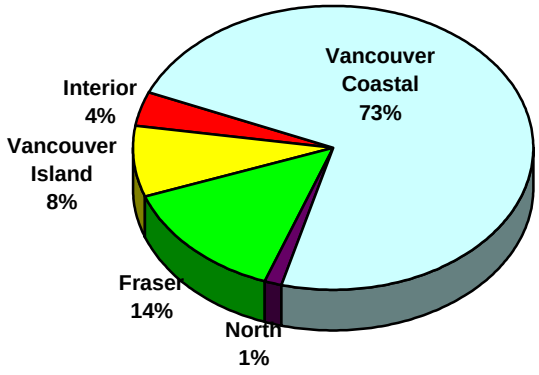
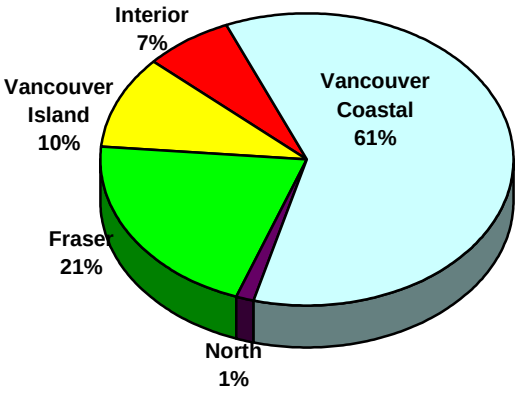


Fig. 8: Persons Testing HIV Positive, by Region of Test 2000 (n=413)



26 Health Canada, HIV and AIDS in Canada: Surveillance Report to December 31, 2002; 2002:43.

27 Personal communication, Dr. R.S. Hogg, Population Health Program, B.C. Centre for Excellence in HIV/AIDS, October 21, 2002. (Abstract: An Estimation of the Degree of Underreporting of HIV/AIDS Deaths by Vital Event Registries).

28 See BCCDC, 2002:4. The 1996 estimate was also provided by the BCCDC.

29 See BCCDC, 2002:10-11 and 36-37.

30 The regional numbers are estimates that endeavour to accommodate the health region reorganization and restructuring of the past decade.

province as a whole. By the beginning of 2003, St. Paul's was reporting a significant increase in the number of in-patients living with HIV disease – as many as 35 to 39 on any given day. These numbers have not been seen at St. Paul's since the early 1990s, before the advent of improved treatment.

Hospital staff and researchers suggest this renewed pressure on acute-care capacity is in large part the result of a convergence of two epidemics:

- large number of individuals for whom all existing treatment options have failed, many of whom are gay men infected relatively early in the epidemic; and
- individuals who have never received treatment, mostly injection drug users infected in Vancouver's Downtown Eastside during the HIV outbreak in that community during the early and mid 1990s.

Many patients are receiving their HIV diagnosis in hospital and are found to have CD4 counts of less than 200 at diagnosis, meeting the clinical criteria for an AIDS diagnosis. In other words, patients in this situation are likely being diagnosed many years after initial infection, often having lived with related health complications without any effective treatment. Further complicating the picture, researchers suggest that, while AIDS is reportable in B.C., the number of in-patients being seen at St. Paul's with low CD4 counts and AIDS defining illnesses are not well reflected in the provincial statistics, and cite "reporting fatigue" among health-care providers as a contributing factor. This is not new: as early as 1988, Dr. Ruth Berkelman, then chief of the surveillance branch in the U.S. Centre for Disease Control AIDS program, said "the issue of reporting fatigue (among health-care workers) is real" and can have an impact on completeness of surveillance data.

Further complicating the situation, as many as one-third of HIV positive in-patients at St. Paul's are ready for discharge to a sub-acute setting, but must remain in acute care because facilities offering more appropriate levels of care are not available.

This situation is not unique to the Lower Mainland. For example, health authority staff in Prince George report in-patients with HIV disease, though relatively few in number, require increasingly complex care and are developing conditions associated with advanced, untreated HIV disease such as pneumonia and AIDS-related dementia. Discharge back to home community is further complicated by the difficulty of locating appropriate housing.

Persons living with HIV/AIDS in northern and isolated communities face challenges brought on simply by their geographic location, such as access. Such issues can be exacerbated in very small communities where concerns about confidentiality may be heightened.

Also important to consider is the relationship between HIV infection and mental health. HIV infection is associated with increased vulnerability to depression and anxiety. HIV-related dementia can develop in the late stages of disease progression – this can be especially challenging for younger people, as most programs and services for persons living with dementia in B.C. are structured to meet the needs of older people, while HIV disease most frequently affects individuals who are young or middle-aged.[31]

31 ***For an expanded discussion of HIV-related mental health issues see "Dementia due to HIV Disease," Emedicine, University of Southern California, 2002. http://www.emedicine.com/med/topic3151.htm***

3.3 Gender

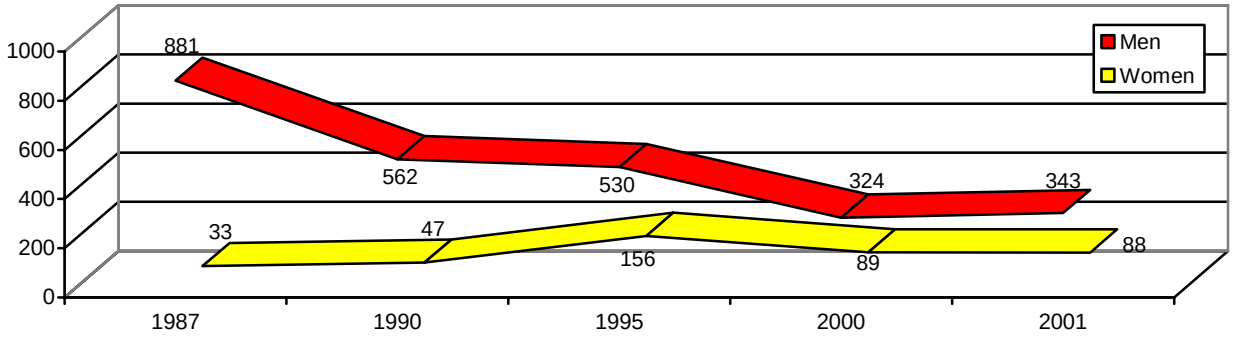
In the past, women made up only a small proportion of the total number of newly reported HIV-positive cases. **Table 1** illustrates how this pattern is changing. Whereas women made up only 4% of newly reported cases in 1987 and 8% in 1990, they now represent 20% of such cases.

Table 1: Newly Reported HIV-Positive Cases in B.C., by Gender

	1987		1990		1995		2000		2001	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Number	881	33	562	47	530	156	324	89	343	88
% of Total Cases	96%	4%	92%	8%	77%	23%	78%	22%	80%	20%

From 1987 to 2001, there was a 270% increase in the number of newly reported cases among women compared to a decrease of 40% among men. This pattern is illustrated in **Figure 9**. The epidemic's spread across gender lines poses new challenges for managing the epidemic and providing services to those living with HIV/AIDS.

Fig. 9: Newly Reported Cases in B.C., by Gender



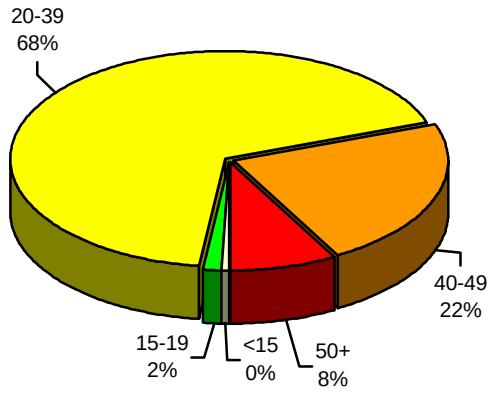
The number of women with HIV/AIDS remains relatively small, however. Table 1 above indicates that in 2000 there were only 89 women newly reported as HIV-positive (4.35 per 100,000) compared to 324 men (16.88 per 100,000). In 2000 also, there were only 9 newly reported AIDS cases among women compared to 96 among men, while the rate per 100,000 population was 0.44 for women and 4.75 for men. [32]

32 BCCDC, 2002:5.

3.4 Age

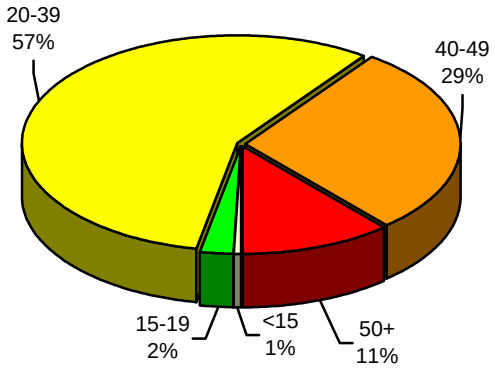
Since 1985, 22 infants (younger than 18 months) have tested positive for HIV, including four in 1993 and five in 1994. There has not been a single case reported to the B.C. Centre for Disease Control (BCCDC) since 1998. However, approximately 17 cases of perinatal transmission known to the Oak Tree Clinic have not been reported to the BCCDC. There have also been 30 children (19 months to 14 years) who tested positive for HIV during this period. Recent estimates suggest about 36,000 B.C. women are screened for HIV each year, about 80% of pregnant women.

Fig. 10: New HIV+ Cases by Age, BC 1990



Figures 10 and **11** illustrate, for 1990 and 2001, the proportion of people newly testing HIV-positive by age. They show a trend toward a significantly larger proportion of cases among older individuals (40-49 years and 50+). [33] There is also a slightly larger proportion of cases among those under 15 years of age. This has implications for the nature of the services available: they must be able to accommodate a more diverse population of people living with HIV/AIDS.

Fig. 11: New HIV+ Cases by Age, B.C. 2001



3.5 Risk Factors and Vulnerability

Studies undertaken by the Ministerial Council on HIV/AIDS, the B.C. Centre for Excellence in HIV/AIDS [34] and elsewhere emphasize how those who engage in high-risk behaviours – for example, needle sharing or unprotected anal sex – very often:

- have experienced sexual, physical or emotional violence, either as a child or as an adult;
- have suffered from discrimination, perhaps because of their race or sexual orientation; or
- are poor and homeless.

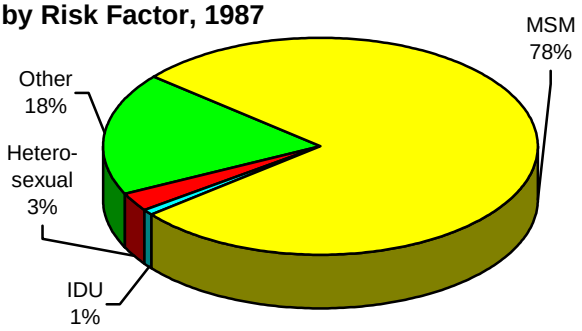
The UNAIDS best practice collection points to a broadened approach to HIV/AIDS that focuses not only on individual risk-taking behaviour, but also on the immediate environmental and societal factors that influence such behaviour, and the influence exercised by families and communities on individual behaviour. For example, in many communities, important decisions, such as those related to child-bearing, often involve the family, rather than only the individual or the couple. More significantly, there is a

33 ***BCCDC, 2002:23***

34 ***For example, see Ministerial Council on HIV/AIDS, 2002 and Steffanie Strathdee, 1997.***

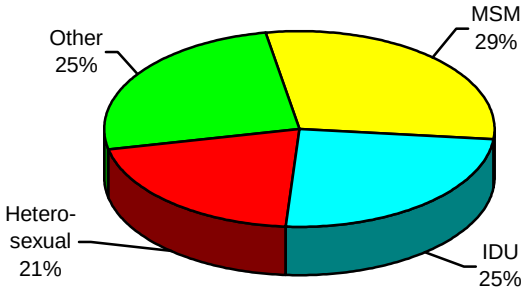
growing realization of the key role that power relationships and social inequities play in influencing risk. Overarching the concept of risk and risk-taking behaviour is thus the broader paradigm of vulnerability and vulnerability reduction. Individual risk is seen, through this perspective, as influenced by societal factors that increase and perpetuate the vulnerability of certain individuals and sections of society more than others. This recognition merits an approach to HIV/AIDS that goes beyond the immediate risk-taking act and the immediate environmental factors affecting it, to addressing underlying factors that create an overall climate in which such risk-taking behaviours are maintained and prove difficult to change.
In expanding the response, the individual, familial and community aspects must be addressed more comprehensively and in a complementary fashion[35]. A good example in B.C. is the government's new strategy to help children with fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE). This strategy aims to eliminate FAS and FAE over one generation by addressing multiple vulnerabilities at the individual, family and community levels. This strategy, led by the Ministry for Children and Family Development, also involves the Health and Education ministries.

Fig. 12, Newly Reported Infections by Risk Factor, 1987



In the context of HIV/AIDS, broader contributors to vulnerability can be difficult to determine. Consequently, it has been easier to track and report the individual behaviours that most likely contributed to a person's HIV infection. These "risk factors" include men having sex with men (MSM), injection drug use (IDU) and needle sharing, engaging in the sex trade and heterosexual activity with a person at risk.

Fig. 13: Newly Reported Infections by Risk Factor, 2001



Strategies to prevent the epidemic's spread have focused on these behaviours. In the 1980s, for example, AIDS was concentrated among men who were having sex with men, and the public health and community response could be directed almost exclusively to that population. As illustrated in **Figures 12** and **13**, this situation has changed dramatically over the years.

As **Table 2** indicates, this pattern of greater diversity is evident not only in B.C. but across Canada as well.

Table 2: Newly Reported HIV-Positive Cases, B.C. and Canada, 2001

Risk Factor	B.C.	Canada
MSM	29.5%	36.6%
IDU	24.5%	24.6%
Sex Trade	2.5%	22.4%
Heterosexual Contact	20.6%	
Other	22.9%	16.4%

35 ***See UNAIDS best practice collection, "Expanding the global response to HIV/AIDS through focused action: reducing risk and vulnerability," Geneva, 1998***

As illustrated earlier (Figure 5), the number of infections among injection drug users and sex trade workers has continued to decline in recent years. This is not the case among men who have sex with men. **Figure 14** shows how the number of infections among this population is again increasing.

Researchers suggest that young men are vulnerable for a number of reasons. First, they did not witness the deadly impact of AIDS in the 1980s and, second, they have come to believe that HIV and AIDS are now curable. "Condom fatigue" may be an additional factor. Young men who have sex with men and are street-involved appear to be especially vulnerable. However, men who have sex with men and gay men between ages 30 and 49 continue to comprise the majority of newly reported HIV infections amongst all men who have sex with men in B.C. – see **Figure 14a**.

Fig. 14: Newly Reported Cases among Men who have Sex with Men

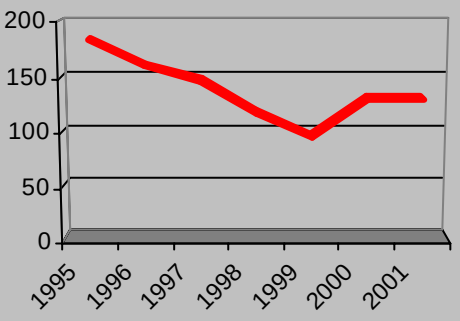
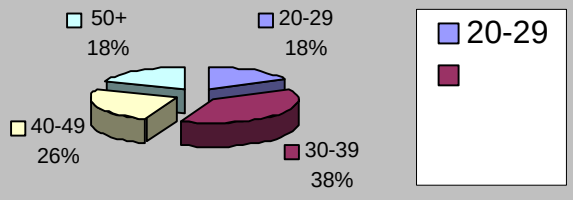


Figure 14a: Newly recorded HIV infections among MSM in B.C. by age, 2002



Multiple vulnerabilities are also reflected in the available data. For example, the Vancouver Injection Drug User Study (VIDUS) reported in 2002 that 15.3% of VIDUS participants who are MSM are HIV positive, compared to 7.7% of all participants.

Figures 15 and **16** present trends by major risk factor for both men and women. They show that different factors are at play and that the number of newly reported cases resulting from heterosexual contact is increasing most rapidly among women. Among women:

- 28% contracted HIV through injection drug use and 45% through heterosexual contact in 2001, many through partners who use injection drugs; and
- 42% contracted HIV through injection drug use and 23% through heterosexual contact in 1996.

The pattern for all people since 1985 serves to illustrate how the HIV/AIDS epidemic has evolved and, indeed, how there are now different epidemics confronting health authorities.

Fig. 15: Risk Factors, Male

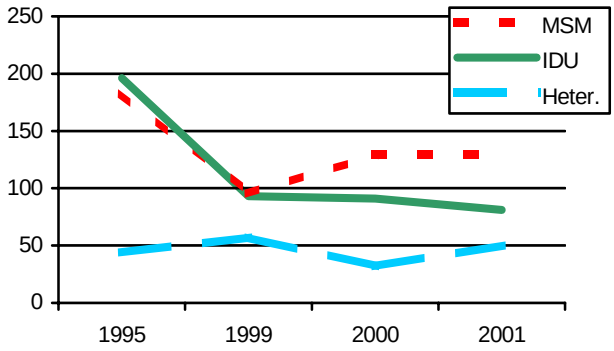


Fig. 16: Risk Factors, Female

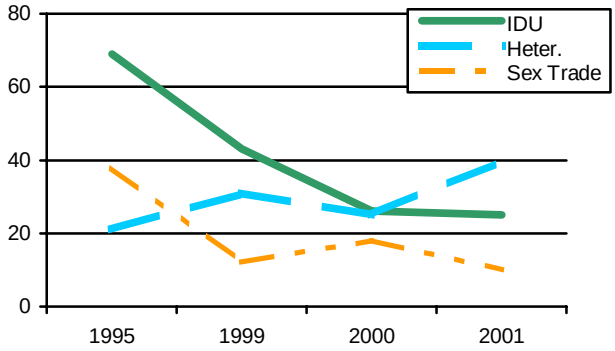
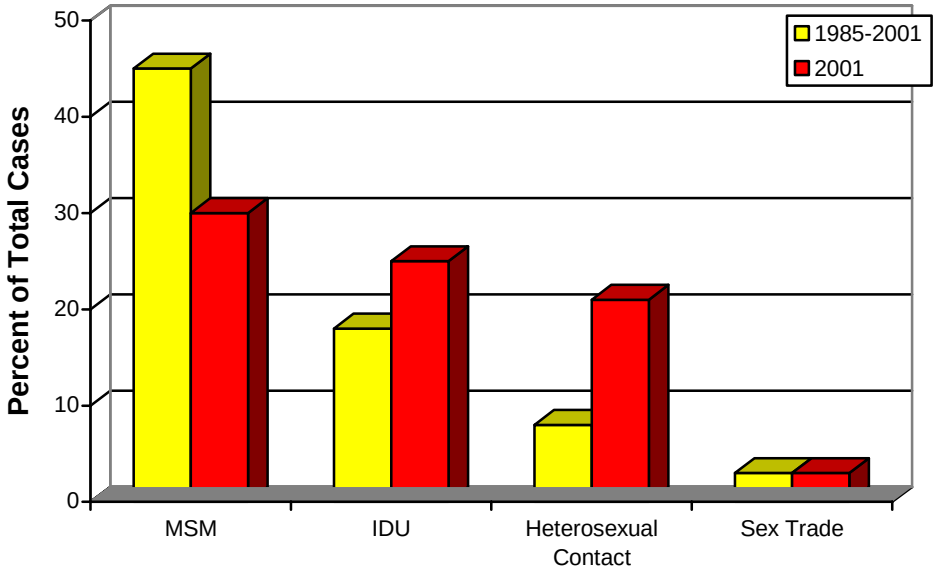


Figure 17 compares cases newly reported in 2001 to cases reported throughout the entire period 1985-2001. It shows significant increases among injection drug users and through heterosexual contact. It shows no change among those engaged in the sex trade, a pattern that is consistent with data from elsewhere in Canada.

Fig. 17: Changes in Risk Factor - Percent of All Newly Reported HIV+ Tests, 1985-2001



The data also speak to the impending crisis within the Aboriginal community, where socio-economic factors exacerbate vulnerability to HIV infection. **Table 3** illustrates the distribution of newly reported HIV cases by ethnicity and year.

Table 3: Newly Reported HIV-Positive Cases by Ethnicity and Year

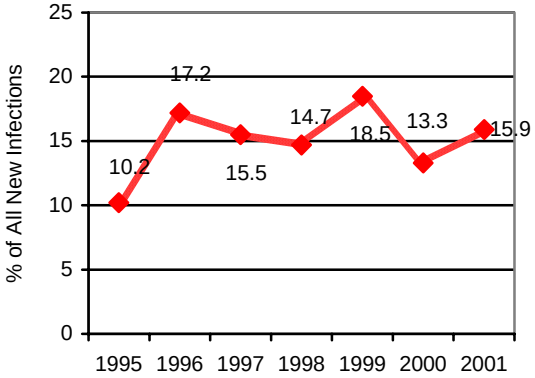
Ethnicity	1995	1996	1997	1998	1999	2000	2001	Total	% of Total
White	388	413	340	273	253	252	288	**2,207**	**59.6**
Aboriginal[36]	68	123	87	71	79	55	70	**553**	**14.9**
Asian	29	30	25	32	23	32	18	**189**	**5.1**
Black	14	17	12	22	19	26	34	**144**	**3.9**
Hispanic	19	17	14	14	12	20	12	**108**	**2.9**
Unknown	149	114	83	70	40	28	18	**502**	**13.6**
Total	**667**	**714**	**561**	**482**	**426**	**413**	**440**	**3,703**	**100.0**

36 Includes First Nations, Metis and Inuit people.

While Aboriginal people make up less than 4% of the province's population, they accounted for almost 15% of the HIV infections reported between 1995 and 2001, and almost 16% in 2001. The situation has worsened considerably since 1995, when only 10.2% of the newly reported infections occurred among Aboriginal people.[37]

Figure 18 shows the pattern through these years. Nationally, Aboriginal Canadians accounted for 1% of total newly reported HIV infections in 1990; by 1999, Aboriginals accounted for 15% of all newly reported HIV infections. Injection drug use is more likely to be the attributed reason for infection among Aboriginal people than among other populations.

Fig. 18: Aboriginal People as % of New Cases, B.C. by Year



Aboriginal people in general are at increased risk for HIV, figuring too prominently among vulnerable populations. HIV infection rates were about twice as high among both male and female aboriginal injection drug users compared with non-aboriginals. In 2001, 36.3% of all women newly reported as HIV-positive in B.C. were Aboriginal. The incidence rate among Aboriginal women is increasing while among Aboriginal men it is declining.[38]

Figure 19 illustrates the greater proportion of women testing newly positive in the Aboriginal population as compared to the non-Aboriginal population.

Additionally, HIV/AIDS appears to take a much harder toll on Aboriginal people. **Figure 20** presents the mortality rate from HIV/AIDS for both Status Indians and other residents of B.C.[39] Not only is the rate for Status Indians much higher than for other residents, but the trend line amongst Status Indians is ascending while the trend line for other residents is descending.

Fig. 19: Persons Testing Newly Positive for HIV by Gender, BC 1996-2001

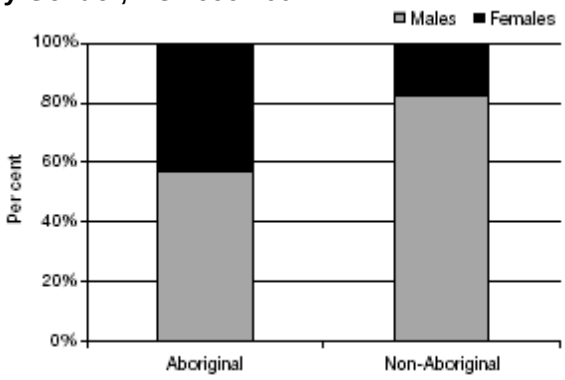
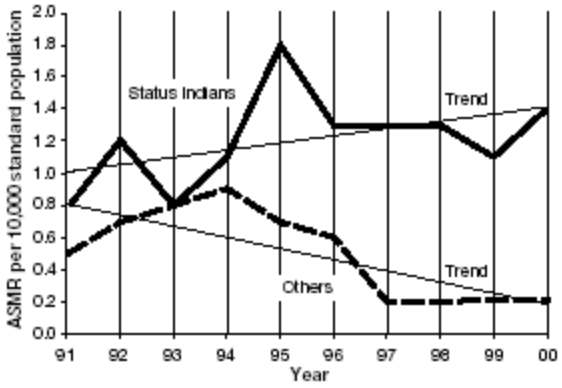


Fig. 20: HIV/AIDS Mortality Rates, Status Indians and Other Residents of BC, 1991-2000



37 *BCCDC 2002:35*

38 *BCCDC, 2002:30-31. See also Ministerial Council on HIV/AIDS, 2001(a):iv. See also Risk factors for elevated HIV incidence among female injection drug users in Vancouver, Spittal et al. (CMAJ, April 2, 2002)*

39 *Age standardized mortality rate per 10,000 standard population (Canada 1991 Census). Source: B.C. Vital Statistics Agency. Unpublished tables, June 2002.*

As mentioned above, infection rates among injection drug users have been declining in recent years, perhaps as the result of epidemic saturation. Nevertheless, infection rates among injection drug users remain unacceptably high. The need for preventive action among young injectors is particularly urgent. Researchers with the Vancouver Injection Drug User Study have concluded that "relative to older injectors, youth in our study have lower prevalences of HIV and HCV, but alarmingly high incidence rates, particularly among female and Aboriginal youth."[40] In other words, young Aboriginals are becoming newly infected at a rate much higher than previously. The window of opportunity is short, and preventive actions are urgently required.

Further complicating the situation in B.C. is the relationship between injection drug use and commercial sex work. Addressing HIV among these populations is a major public health challenge, as both injection drug use and prostitution are considered criminal activities.[41]

UNAIDS has identified global migration and mobility as a contributor to HIV vulnerability, and an important factor that should be considered when exploring effective responses to HIV/AIDS at the national and local levels.[42] British Columbia is a significant destination within Canada for refugees, foreign students, foreign workers and new immigrants from around the globe, many of whom originate in, have traveled through or visit countries where HIV/AIDS is endemic.[43] UNAIDS points to a number of programmatic approaches worthy of consideration when addressing HIV among migrant populations, including: culturally and linguistically appropriate outreach; assisting settlement organizations incorporate HIV awareness and education into their work; and ensuring local health programs are accessible and user-friendly to immigrants and refugees.[44]

In British Columbia, engaging new Canadians and their communities in developing culturally competent programs and services has been an essential component in improving accessibility and relevance of formal services. For example, Bridge Community Health Clinic, operated by Vancouver Coastal Health at Mount St. Joseph's Hospital in East Vancouver has developed an admirable track record for serving new Canadians using the principles of cultural competence, and has effectively incorporated HIV testing and care into its overall health program. Bridge Clinic has accomplished this, in part, through an extensive network of collaborative partnerships with immigrant serving organizations and community groups.[45] Important contributions have been made by a range of health and social service organizations that engage in culturally and linguistically appropriate outreach services.

Evidence from the United States suggests that HIV disease is a significant issue for persons living with mental illness. While discussion above has outlined mental-health problems that can develop as a consequence of HIV infection, pre-existing mental-health conditions can themselves contribute to HIV vulnerability. For example, in New York City, studies show HIV infection rates among psychiatric in-patients ranging from 4% to 23%. Also in New York City, HIV rates among female psychiatric patients are many times higher than rates among females in the general population.[46] In addition, there is a complex

---

40 ***Risk factors for HIV and HCV prevalence and incidence among young injection drug users in a Canadian city coping with an epidemic, Miller et al. (CAHR, 2002).***

41 ***Risky sexual behaviour among female IDUs, Tyndall et al. (CAHR, 2002).***

42 ***See Population Mobility and AIDS, UNAIDS Technical Update, February, 2001 http://www.unaids.org/publications/documents/specific/rufugees/JC513-PopulationTU-E.pdf***

43 ***Statistical Overview, Facts and Figures, Policy, Planning and Research Unit, Citizenship and Immigration Canada, July 2001. See http://www.cic.gc.ca/english/pdf/pub/facts-temp2001.pdf***

44 ***See Population Mobility and AIDS, UNAIDS Technical Update, February, 2001 http://www.unaids.org/publications/documents/specific/rufugees/JC513-PopulationTU-E.pdf***

45 ***See http://www2.vpl.vancouver.bc.ca/DBs/RedBook/orgPgs/8/822.html for a description of BridgeCommunity Health Clinic and its partnerships***

46 ***HIV/AIDS and People with Mental Illness, Francine Cournos, MD, American Psychiatric Association AIDS Program Office, 1998 see http://www.columbia.edu/~fc15/Oct.PDF***

relationship between mental-health issues, problematic substance use and addictions. People with mental-health issues are over-represented among British Columbia's estimated 15,000 injection drug users. Further, use of other substances and involvement in the sex trade can contribute to HIV vulnerability, both issues of particular concern for those living with mental-health problems. In British Columbia, the Ministries of Health Planning and Health Services and health authorities are currently working toward increasingly integrated approaches to mental-health and addictions issues.[47]

3.6 HIV, Hepatitis C and Tuberculosis

Co-infection with HIV and Hepatitis C Virus

In 1998, an estimated 52,500 British Columbians were living with hepatitis C (HCV) infection, a prevalence rate of more than 1.3% – by far the highest in Canada. Approximately 3,350 British Columbians are infected with both HIV and HCV, approximately 30% of the total estimated number of HIV/HCV co-infected persons in Canada. [48]

HCV is transmitted primarily by large or repeated direct percutaneous (i.e., passage through the skin by puncture) exposures to contaminated blood. Therefore, co-infection with HIV and HCV is common among HIV-infected injection drug users. Co-infection is also common among persons with hemophilia who received clotting factor concentrates before concentrates were effectively treated to inactivate both viruses (i.e., products made before 1987). For persons infected with HIV through sexual exposure, the rate of co-infection with HCV is not significantly different from the rate among similarly aged adults in the general population

.

While some of those infected with HCV appear to remain asymptomatic, chronic HCV infection develops in 75%-85% of infected persons and leads to chronic liver disease in 70% of these chronically infected persons. HIV/HCV co-infection has been associated with higher levels of HCV virus in the blood, more rapid progression to HCV-related liver disease and an increased risk for HCV-related cirrhosis of the liver. As highly active antiretroviral therapy (HAART) and prophylaxis of opportunistic infections increase the life span of persons living with HIV, HCV-related liver disease has become a major cause of hospital admissions and deaths among HIV-infected persons.

The effects of HCV co-infection on HIV disease progression are less certain. More data are needed to determine if HCV infection influences the long-term natural history of HIV infection.

Public Health/Infectious Diseases guidelines in many jurisdictions now recommend that all HIV-infected persons should be screened for HCV infection. Prevention of HCV infection for those not already infected and reducing chronic liver disease in those who are infected are important concerns for HIV-infected individuals and their health-care providers.

Interaction between HIV and Tuberculosis

There is a critical interaction between HIV infection and tuberculosis (TB). HIV and TB are synergistic, that is, one enhances the effect of the other. Thus individuals infected with HIV and TB have a higher risk of developing active tuberculosis. This is of particular concern in British Columbia. Nationally, TB prevalence is estimated to be 6/100,000, while in Vancouver the rate is 25/100,000 cases, and in the Downtown Eastside the rate reaches 85/100,000. HIV could well contribute to increasing rates of TB infections and active disease in the province.

---

47 ***For an expanded discussion of reform in the Mental Health and Addictions area, see Ministry of Health Services, http://www.healthservices.gov.bc.ca/addictions/index.html***

48 ***R. Remis, Epidemiology of Hepatitis C co-infection in Canada, First Canadian Conference on Hepatitis C, Montreal, 2002; see also R. Remis, Final Report: Estimating the number of persons co-infected with hepatitic C and HIV in Canada, population and Public Health Branch, Health Canada, 2002***

For the HIV-infected individual, there is a 14% risk of developing TB over two years. For the non-HIV-infected individual, there is a 5% to 10% lifetime risk of developing TB[49] All HIV-infected persons should be monitored closely for evidence of infection with TB and treated appropriately. Conversely, all TB-positive persons should be offered HIV testing and appropriate treatment.

49 Tuberculosis Fact Sheet, Tuberculosis Prevention and Control, Health Canada, 2002

4. MANAGING THE EPIDEMICS

Priorities for Action in Managing the Epidemics – HIV/AIDS in BC 2003-2007 has been developed by the Ministries of Health Planning and Health Services to guide, complement and support health authority and community efforts to address HIV/AIDS in B.C. The document draws on previous experience in B.C., and experience from other jurisdictions. Incorporating knowledge and advice contributed by health authority and community stakeholders, it seeks to improve the alignment of goals among all stakeholders including the federal government and sets challenging but achievable provincial goals in the context of disturbing increases in HIV infection rates reported in 2000 and 2001.

Priorities for Action will assist in ensuring existing resources are appropriately focused through evidence-based approaches, and that potential new resources, such as may become available through a renewed Canadian Strategy on HIV/AIDS, can be well-aligned with provincial priorities.

4.1 Building on our Strengths

The B.C. experience with its earlier *Framework for Action*, as well as the experience of other Canadian and international jurisdictions, speaks to the importance of building an approach on a solid, evidence-based foundation. British Columbia has long been at the forefront of the Canadian response to HIV/AIDS. It was the first province in Canada, for example, to develop a province-wide voluntary prenatal HIV screening program, and in 1999, the B.C. Aboriginal HIV/AIDS Task Force prepared a groundbreaking strategy for addressing the HIV/AIDS epidemic among the Aboriginal population in this province.[50] An implementation plan for *The Red Road, Pathways to Wholeness: An Aboriginal Strategy for HIV/AIDS in B.C.* is currently being developed.

There are needle exchange programs in 14 municipalities around B.C., distributing more than six million needles annually and preventing both many new infections and major new treatment expenditures.[51] Health authorities have been active in further expanding the accessibility of needle exchange services. There is also the province's centrally co-ordinated drug treatment program for HAART and other HIV medications.

Contributing to the province's achievements is the B.C. Centre for Excellence in HIV/AIDS, a world leader in scientific and social research and a pioneer in applied research. The centre integrates research and treatment, and its efforts help to ensure that the newest and best treatments are available to people living with HIV/AIDS and that expert advice is available to clinicians. The centre has developed methods of drug resistance testing, and it does serotyping/genotyping of all HIV isolates, which provides information on which strains of the virus are present in B.C.

Several research projects with large cohorts from vulnerable population groups are being conducted by the B.C. Centre for Excellence in HIV/AIDS in partnership with a wide range of organizations. Specific projects include the Vanguard study, which has recruited a large cohort of gay men; the Vancouver Injection Drug User Study; and a new study that will investigate vulnerability among Aboriginal British Columbians. These cohorts give policy-makers and program planners in B.C. a unique opportunity to understand the determinants of vulnerability among these three population groups, and to base policy and programs on solid, locally obtained evidence. Such research can be particularly helpful in guiding the development of effective prevention programs tailored to particular vulnerable communities.

---

50 ***See British Columbia Aboriginal HIV/AIDS Task Force, 1999, The Red Road, Pathways to Wholeness: An Aboriginal Strategy for HIV and AIDS in BC***

51 ***The needle exchange locations are listed at http://www.healthservices.gov.bc.ca/hiv/needle.html.***

One of the Centre for Excellence's many accomplishments has been the discovery that CD4 count (which measures levels of white blood cells called CD4 T-cells to determine the strength of the immune system) is the major driving force in predicting disease progression. This discovery has enabled physicians to delay antiretroviral therapy and avoid subjecting patients to the side effects that often accompany such treatments. The discovery has also enabled the health-care system to defer the expenditure of millions of drug treatment dollars and, in so doing, to redirect those funds over the short- and medium-term to address other HIV prevention and treatment needs.

British Columbia is home to more than 50 community-based organizations that deliver HIV/AIDS prevention, care and support programming at the community level. These groups have been important partners in efforts to control HIV/AIDS in B.C., through raising awareness and delivering programs and services both to the general population and to vulnerable groups. Both membership and service organizations have developed extensive experience working with and among hard-to-reach populations, and have been important partners in a range of research efforts.

Importantly, innovative approaches to prevention, care and support often spring from community experience. For example, B.C. Persons with AIDS Society, with support from Health Canada, is exploring the "positive prevention" concept, which recognizes that support, care, treatment and prevention are intrinsically linked. Positive prevention seeks to maximize the physical, mental and sexual health of HIV-positive individuals, providing them with the necessary foundation for maintaining safer behaviors and maximizing quality of life. This programmatic approach is intended to complement more traditional primary prevention efforts.[52]

In another example of innovation, AIDS service organizations operating on Vancouver Island, in the Interior and in the North have developed fruitful working relationships with local First Nations communities to work more effectively with aboriginal British Columbians who either live off-reserve or move frequently between on-reserve and off-reserve settings.

There is also a good history in B.C. of co-operation across sectors. For example, the Boys R Us project in Vancouver, which reaches young males involved in the sex trade, brings together a broad range of funding and service agencies, including two levels of government, the Vancouver Foundation, the Vancouver Coastal Health Authority, the Vanguard Project, AIDS Vancouver, YouthCO AIDS Society, and the private sector, especially small business. In Prince George, collaboration among local AIDS organizations, First Nations groups, the health authority and researchers has been critical in efforts to better understand the dynamics of HIV in northern B.C.

A strong network of community-based AIDS service organizations and organizations of persons living with HIV/AIDS exists in the province, along with coalitions and partnerships such as the Pacific AIDS Network and the Red Road HIV/AIDS Network Society. This is consistent with the Paris AIDS Summit Declaration (1994), to which Canada is a signatory. Article 1 of the declaration affirms the central role that people living with HIV/AIDS and community organizations must play to ensure effective policy and program development. [53] UNAIDS international guidelines for access to prevention, care treatment and support, revised in 2003, recommend that government bodies "recognize, affirm and strengthen the involvement of communities as a part of comprehensive HIV/AIDS prevention, care treatment and support." [54]

---

52 ***Schiltz,MA and Sandfort, ThGM. (2000) HIV-positive people, risk and sexual behavior. Social Science and Medicine, 50, 1571 – 1588.***

53 ***See Paris AIDS Summit Declaration, article 1, full text available at http://www.unaids.org/whatsnew/conferences/summit/dece.html***

54 ***See Revised Guideline 6f (2003) at http://www.unaids.org/publications/documents/care/general/JC905-Guideline6_en.pdf***

Implementing *Priorities for Action* will require significant co-ordinated efforts by researchers, health authorities, health-care providers, community groups, people living with HIV/AIDS and many other allied sectors. Engaging partners from various disciplines and jurisdictions, including affected communities and those living with HIV/AIDS "ensures a more strategic approach, results in better-targeted initiatives, reduces duplication of effort and minimizes the impact of limited human and financial resources."[55]

4.2 Learning from Other Jurisdictions

Prevention, Care, Treatment and Support

There are lessons to be learned from the lost ground in the fight against the HV/AIDS epidemic, and there can be far-reaching consequences for not acting or acting inappropriately. Evidence from other jurisdictions indicates that good results are best achieved through a combination of efforts simultaneously aimed at the general population and focused on groups particularly vulnerable to HIV infection. UNAIDS emphasizes that "the most effective responses to the epidemic have integrated education, prevention and care strategies. Experience has shown communities are more active in mobilizing against the epidemic when they are motivated by concerns about prevention, care and support together."[56]

For example, Brazil's widely praised efforts to provide universal treatment and care, delivered in conjunction with its comprehensive prevention programs, are estimated to have avoided 234,000 hospitalizations in the period 1996–2000.

Evidence from several western European nations and Australia has demonstrated the efficacy of implementing a range of low-threshold harm-reduction programs to help contain HIV and HCV infection rates among injection drug users. For example, a mid-term evaluation conducted at a safe injection facility pilot in Sydney, Australia reports positive health and social outcomes for those using the program. Evaluations of needle exchange programs in correctional facilities in Germany, Spain and Switzerland have demonstrated their effectiveness in preventing the spread of HIV and HCV without placing correctional staff at risk. In the Netherlands, a recently conducted multi-site, controlled randomized trial of prescribing injectable and inhalable heroin to long-term addicts concluded that the supervised co-prescription of heroin to chronic, treatment resistant methadone patients leads to improvement in all health outcome domains: physical health, mental status and social functioning. [57]

Jurisdictions in Europe and Australia and parts of Africa have also built on the harm-reduction concepts first developed to address HIV risk among injection drug users to create more effective programming for other risk groups, or groups with multiple risks. Closer to home, an Ontario study funded by Canada's National Health Research Development Program concluded prevention programming aimed at men who have sex with men "should emphasize personal choice, holistic health and options to reduce the harm of drug use and sexual engagement." [58]

---

55 ***See Lessons Learned: Reframing the Response Canada's Report on HIV/AIDS 2002, Health Canada http://www.hc-sc.gc.ca***

56 ***See UNAIDS. 2002(b). Report on the global HIV/AIDS epidemic. See "Prevention: applying the lessons learned."***

57 ***UNAIDS Fact Sheet, 2002. The Impact of HIV/AIDS. See also Medical Co-prescription of Heroin: Two Randomized, Controlled Trials. Central Committee on the Treatment of Heroin Addicts, Dutch Ministry of Health and Amateur Sport, 2002. See also Kimber, J. MacDonald, M. Six Month Process Report on the Medically Supervised Injecting Centre, NDARC, NCHECR, UNSW, 2002***

58 ***„Drug Use & HIV Risk Among Gay Men in the Dance/Club Scene in Toronto: How Should AIDS Prevention Programmes Respond?„ AIDS Committee of Toronto, 2000***

As outlined above, "positive prevention" focuses on engaging those already living with HIV in efforts to prevent new infections. It has become an increasingly important component of some jurisdictions' overall prevention efforts, especially the United Kingdom, Spain, the Netherlands and Australia.[59]

Experience in Canada, the United Kingdom and elsewhere also speaks to the importance of adapting HIV/AIDS-related initiatives to the different at-risk communities. Measures that are effective for middle-aged men may not work for youth or for women who are injection drug users; service models and supports developed for Aboriginal people may hold little appeal for Asian men who are HIV-positive. Efforts to manage the epidemic in the Aboriginal community in B.C. will require special measures that acknowledge, first, the movement of people between reserve and urban communities, and, second, the relationship between the First Nations and the Government of Canada. Partnerships with Aboriginal organizations such as the Red Road HIV/AIDS Network Society will be important in adapting HIV/AIDS-related measures to the needs of Aboriginal people and their urban and reserve communities.

Capacity, Co-ordination and Co-operation

UNAIDS, the World Health Organization and Canada's Ministerial Council on HIV/AIDS emphasize that the fight against HIV/AIDS requires a long-term commitment of adequate resources in order to promote greater co-operation and lessen the degree of competition among the different stakeholders. On a per capita basis, B.C. is among Canadian provinces that invest most in the response to HIV, through its transfers to health authorities. Health Canada is also a significant funder through the Canadian Strategy on HIV/AIDS. But investing in the response is not, in itself, enough. In examining HIV/AIDS strategies across jurisdictions, UNAIDS has identified co-ordinated multilevel responses at the national, provincial, regional and community levels as a key success factor.

The Australian model illustrates the importance of a non-partisan approach that includes political leaders from all parties, informed media and an educated public. In the United Kingdom, the Community HIV/AIDS Prevention Strategy Network has successfully assisted local communities in translating research findings into effective social marketing and outreach activities.

UNAIDS also emphasizes that to improve policies and programs and to sustain awareness, it is important to effectively monitor the epidemic and risk behaviours and to disseminate the findings. This requires a commitment to sentinel surveillance so that prevention efforts are as dynamic as the epidemic itself. Research and the dissemination of knowledge are vital components of an effort to effectively manage the HIV/AIDS epidemic. The experience of countries as diverse as Australia, Thailand and Switzerland indicates the importance of "sentinel surveillance systems" that allow authorities to anticipate developments instead of always chasing the epidemic.

There is also evidence from other jurisdictions of the importance of special efforts to transform scientific and social research findings into practice at the community level. To achieve this transition, community-based service agencies need to incorporate research findings into their daily activities, and researchers must make their work relevant to community-level practitioners. Australia, for example, has a national council that brings together the full range of research stakeholders to identify HIV-related research priorities.

4.3 Vision

The province's vision is *to make British Columbia a Canadian and world leader in effectively and responsibly managing the HIV/AIDS epidemic*.

Managing the epidemic means:

---

59 ***Summerside,J and Davis,M. (2001). HIV prevention and sexual health promotion for people with HIV. London, UK: National HIV Prevention Information Service, Professional Briefing 4.***

- ✓ **Preventing** the further spread of HIV/AIDS by focusing efforts on those groups of people who are at highest risk of infection
- ✓ **Providing appropriate care, treatment and support** to those already infected, regardless of where they live or their particular cultural needs
- ✓ **Building public awareness** and understanding through both research and efforts to share and disseminate new knowledge
- ✓ **Developing the capacity** to address the challenges presented by the epidemic at the community, regional and provincial levels
- ✓ **Coordinating B.C.'s efforts** and co-operating with other governments, in Canada and internationally

4.4 Guiding Principles

Principles serve to articulate common beliefs and common commitments. They serve as a road map to guide action and they enhance accountability by allowing agencies to check whether their activities conform to their intentions. The following six principles are intended to bring a basic level of consistency to efforts undertaken in the province's different regions.

1. The first principle is to focus on prevention and includes efforts to promote prevention among those who are most vulnerable to infection, those who are already infected with HIV, and among the general population. At the same time, however, the approach will be to focus equitably on other aspects of the epidemic such as care, treatment and support for those living with HIV/AIDS.

2. The second is to acknowledge that each population has different needs and faces different barriers. Prevention, care, treatment and support efforts will accommodate and reflect these differences. The ideal is a seamless continuum of action and support directed both at those at high risk of HIV infection and at those living with HIV/AIDS.

3. The third is, in the short term, to prioritize those population groups at greatest risk for HIV infection – for example, Aboriginal people. Over the long term, the approach must address the social and economic conditions and individual behaviours that contribute to HIV vulnerability.

4. The fourth principle is to ground the approach in good science and careful monitoring. The approach will encourage scientific, clinical and social research and will use the findings to guide change. Research involving large cohorts drawn from vulnerable populations in B.C. will help tailor prevention efforts. Research currently being undertaken with the VIDUS, Vanguard and Aboriginal study cohorts will provide B.C. with a unique opportunity to base policy and program decisions on solid, locally-obtained evidence. Ongoing evaluation will be used to adjust activities and efforts as appropriate.

5. In B.C., health authorities are responsible for the delivery of HIV/AIDS prevention, care, treatment and support services in their regions. The government of British Columbia will provide leadership and assist health authorities to plan their activities and to monitor and assess progress. The province and health authorities will work co-operatively with other community, provincial, national and international organizations.

6. The province and health authorities will be fully accountable for their activities to the general public and to people living with HIV/AIDS. Efficiency, cost-effectiveness and service quality will serve as key accountability benchmarks.

4.5 Goals, Objectives and Key Strategies

Prevention

Goal: *To reduce the incidence of HIV infection by 50% over the next five years*

- To reduce the *number* of people testing newly positive for HIV from 440 per year in 2001 to 220 per year in 2007
- To reduce the *rate* of HIV infection from 10.7 per 100,000 population in 2001 to 5.4 in 2007

Objectives:

- To reduce the incidence of HIV infection by 50% over the next five years among the most vulnerable groups, including gay men and other men who have sex with men, Aboriginal people and particularly Aboriginal women, and injection drug users
- To reduce the proportion of seropositive individuals who are unaware of their HIV infection by 50% over the next five years
- To ensure that no infants are born with HIV over the next five years

Key Strategies:

- Ensure that current and future HIV/AIDS-related prevention efforts across the province, including testing, education and prevention, effectively engage the most vulnerable populations
- Expand provincial support for low-threshold harm-reduction initiatives, including supervised consumption sites, needle exchange programs and addiction treatment services, and a randomized trial of prescribing controlled substances and ensure that they are accessible and culturally appropriate to populations most at risk of HIV infection
- Monitor and evaluate the public health reporting requirement for HIV infection under the Health Act, including provisions for anonymous, voluntary partner notification
- Expand HIV testing capacity, education and prevention efforts in all of the province's correctional facilities; given the prevalence of risk behaviours for blood borne infections in provincial jails, and the positive evaluations of needle exchange pilots in European jails (42), review the effectiveness of current HIV/HCV prevention strategies in provincial jails and assess the opportunities for evaluatable, innovative interventions to reduce HIV/HCV transmission through risk behaviours like tattooing and injection drug use; pursue the development of a partnership with Correctional Service Canada (CSC) to enhance HIV/HCV services in federal institutions located in B.C.
- Create an HIV/AIDS roundtable involving B.C. ministries and health authorities, Health Canada and First Nations organizations to identify and pursue efforts to address the HIV epidemic among Aboriginal people

Care, Treatment and Support

Goal: *To increase the proportion of HIV+ individuals who are linked to appropriate care, treatment and support services by 25% over the next five years*

Objectives:

- To ensure that HIV-positive individuals are aware of the care, treatment and support services available in their communities
- To ensure that care, treatment and support services are readily available and accessible to vulnerable groups of HIV-positive individuals, including homeless youth, injection drug users and those with intellectual disabilities or mental illnesses
- To ensure HIV-positive women from the most vulnerable groups access antiretroviral therapy at the same rate as women in the general population

Key Strategies:

- Ensure that current and future HIV/AIDS-related care, treatment and support services across the province effectively engage the most vulnerable populations
- Work with the B.C. Medical Association and the College of Physicians and Surgeons to expand the provincial methadone program, and the range of addictions treatment options
- Monitor and evaluate the public health reporting requirement for HIV infection under the Health Act, including provisions for anonymous, voluntary partner notification
- Work with the College of Physicians and Surgeons to increase the number of physicians providing HIV/AIDS care and treatment, and expand innovative training programs for physicians and other key health-care providers
- Develop the capacity to provide continuity of care and bridging services for HIV-positive individuals at time of discharge from federal and provincial correctional institutions in B.C.

Capacity

Goal: *To enhance the province's capacity for monitoring the HIV epidemic over the next five years*

Objectives:

- To strengthen the province's ability to reach and inform persons who may be unaware of their HIV infection
- To strengthen the province's ability to anticipate epidemiological trends and service needs in HIV/AIDS
- To improve epidemiological and other knowledge about HIV/AIDS among health authorities and community-based organizations

Key Strategies:

- Support the expansion of HIV/AIDS-related medical and social research undertaken in the province and explore alternative means of disseminating new knowledge
- Develop an effective sentinel surveillance system through linking existing data sources that will enable the province and health authorities to anticipate new epidemiological trends and service needs with regard to HIV/AIDS, hepatitis C and other co-infections
- Identify and disseminate best practices information to health authorities, local governments and AIDS service organizations and other community-based organizations on a timely basis
- Work with Health Authorities in planning, monitoring and evaluating HIV/AIDS services including the public health follow-up for partners of newly reported HIV-positive individuals.

Co-ordination and Co-operation

Goal: *To create and sustain broad-based support for* Priorities for Action

Objectives:

- To strengthen the policy, program and service co-ordination among provincial ministries, health authorities and AIDS service organizations
- To integrate the prevention, surveillance and treatment activities associated with HIV/AIDS and hepatitis C
- To contribute more fully to the international effort to combat HIV/AIDS in developing countries

Key Strategies:

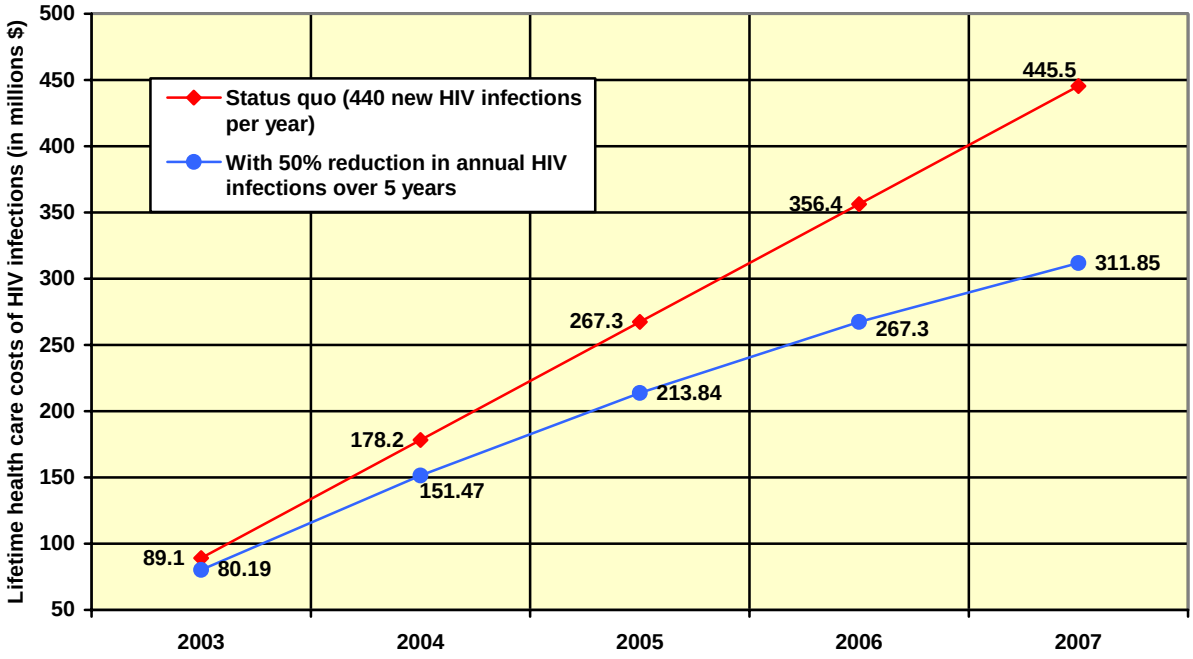
- Create mechanisms for encouraging co-ordination and co-operation among stakeholders
- Forge new partnerships with Correctional Services Canada, Health Canada and Indian and Northern Affairs to foster co-ordination and co-operation in efforts directed at vulnerable populations
- Support efforts to share the province's HIV/AIDS knowledge and experience with countries in the developing world
- Explore an enhanced role for the Provincial Health Services Authority in contributing to provincial co-ordination and the identification and dissemination of best practise information

4.6 Resource Implications

Priorities for Action envisions a 50% reduction in the annual number of new infections by 2007. Reaching this prevention target necessitates action to achieve a steady year-over-year decline in new HIV infections over the five years, 2003 to 2007. This ambitious target would see a 10% reduction in the first year, 20% in the second year, and so on until 2007 when the target of 220 new HIV infections per year is reached.

As **Figure 21** shows, by cutting the annual number of new infections in half over the next five years, B.C. could prevent a total of 660 new HIV infections and avoid approximately $133.6 million in health-care expenditures over the long term; a significant proportion of these savings would be accrued by 2007. The combined lifetime direct and indirect costs associated with 660 new HIV infections, including lost productivity associated with morbidity and premature mortality, exceeds $650 million.

Fig. 21: Potential Reduction in Direct Lifetime Health Care Costs*



* *Based on an estimated average lifetime cost per HIV infection of $202,500; assumes a 10% reduction in the number of new infections each year.*

The B.C. Ministries of Health Planning and Health Services currently invest in the response to B.C.'s HIV epidemics in a number of ways:

Directly, through ministry programs such as:

- Medical and pharmaceutical services
- B.C. Vital Statistics Agency
- B.C. Ambulance Service

Indirectly, through funding to the Provincial Health Services Authority, which is accountable for managing the quality, co-ordination, accessibility and cost of selected province-wide health-care programs and services. In the context of HIV/AIDS, this includes:

- B.C. Centre for Disease Control
- Needle exchange supplies
- Children and Women's Health Centre of B.C.
- Province-wide community groups that deliver or support HIV/AIDS programming.

Indirectly, through funding to the five health authorities with regional responsibilities. These health authorities deliver or fund a range of health-care services. In the context of HIV/AIDS, this includes:

- Acute care
- Community care
- Community clinic services
- Addictions services
- Prevention and public health services
- Regionally-based community groups that deliver HIV/AIDS programming

Devolved Funding

Health authorities have historically held responsibility for operating or contracting acute care, community care, community clinics and public health services within their geographical region.

Responsibility and approximately $11 million in annualized funding for contracted community-based HIV/AIDS services, including AIDS service organizations, consumer groups and needle exchange programs, were transferred from the Ministries of Health Planning and Health Services to the health authorities effective April 1, 2002.

Responsibility for addictions services was transferred from the Ministries of Health to the Vancouver Coastal Health Authority in 2001. More recently, responsibility for addictions services has also been transferred to other health authorities.

Centralized Funding

The Ministry of Health Services continues to hold responsibility for directly funding several programs vital to reaching the goals outlined in this document, including:

- B.C.'s HIV/AIDS Drug Treatment Program. In 2002, there were 2,700 patients on treatment, and an additional 1,500 patients enrolled in the program but not currently on treatment, for a total of 4,200 patients. The budget for this program in 2002–2003 was $36,788,000.
- The B.C. Methadone Program, which currently involves 8,300 patients and 600 doctors. For the twelve-month period October 2001 to September 2002, the total costs for this program were $18,422,724.36, including ingredients costs, professional and other fees. In addition, the College of Physicians and Surgeons received $250,000 during the 2002–2003 fiscal year to manage the program.

Implications for the Future

Implementing *Priorities for Action* may entail realigning the current mix of provincial, health authority and contracted programming to ensure current resources are spent where they can best assist in achieving the goals articulated in this plan. For example:

- Meeting the prevention target may require that some resources and programming efforts currently delivered directly by or under contract with health authorities be refocused or realigned to increase the impact of prevention efforts in those communities most vulnerable to HIV.
- Meeting the care, treatment and support target may require realignment of resources within existing programs in the short term. This goal is an integral component of the overall prevention effort and resultant cost avoidance. For example, engaging individuals currently unaware they are infected with HIV in a program of care may slightly increase the number of patients enrolled in the HIV/AIDS Drug Treatment Program operated through the B.C. Centre for Excellence in HIV/AIDS. Currently, approximately nine new patients a month are enrolled in the program. It is important to note that the centre's post-marketing monitoring and evaluation of drugs has resulted in on-going modifications of its therapeutic guidelines for the treatment and management of HIV disease. Recent changes, for example, have spared patients unnecessary side effects associated with the initiation of drug treatment drug treatment too early in the course of HIV disease, while also permitting some cost savings.
- Meeting the care, treatment and support target may also have an impact on programs with broader purposes than HIV care alone. For example, key strategies targeting injection drug users may also see an increase in the number of methadone patients in B.C.; again, analysis shows that engaging injection drug users in methadone care is very cost-effective.

Please see Appendix 1 for further analysis of investment implications associated with each key strategy.

5. ROLES AND RESPONSIBILITIES

Priorities for Action is intended to provide guidance and support to efforts being undertaken at the community, health authority and provincial levels, clearly identifying provincial priorities in the context of a renewed Canadian Strategy on HIV/AIDS. Co-ordinated action at all levels is required to achieve progress in managing the HIV epidemics in B.C.

5.1 B.C. Ministries of Health Planning and Health Services

The health ministries have a vital role to play in managing the HIV epidemics in the province. The health authorities, working independently without a province-wide perspective, are unlikely to as effectively contain these epidemics. Using proposed mechanisms for enhancing inter-jurisdictional and inter-ministerial approaches to HIV/AIDS in British Columbia, the Ministries of Health will lead efforts to effectively address over time the broader determinants of health that influence vulnerability to HIV/AIDS. This complements the ministries' overall goal to improve the health and wellness of British Columbians.

In addition to setting broad strategic direction, the ministries will maintain a planning and monitoring function that will enable the government and health authorities to anticipate emerging trends and respond quickly should the epidemic make its way into new populations and regions. The ministries will also help to ensure a consistent level of service quality across the regions with no significant service gaps, again in keeping with the important overall goal of ensuring accessible, high quality health care.

Building on concepts developed at the World Health Organization, this role could be described as:

- **articulating** consistent, ethical and evidence-based policy positions;
- **managing information** by assessing trends and comparing performance; setting the agenda for and stimulating research and development;
- **catalyzing change** through technical and policy support, in ways that stimulate co-operation and action and help to build sustainable province-wide capacity;
- **negotiating and sustaining** inter-governmental and inter-sectoral partnerships;
- setting, validating, monitoring and pursuing the implementation of **norms and standards**;
- **stimulating the development and testing of new technologies**, tools and guidelines for disease control, risk reduction, health-care management, and service delivery.

The ministries will support the B.C. Centre for Disease Control and the B.C. Centre for Excellence in HIV/AIDS in disseminating new knowledge and building greater awareness of best practices in HIV prevention, care, treatment and support.

5.2 Health Authorities

Health authorities have the most immediate role to play in managing the HIV epidemics, as they either provide or fund direct HIV prevention, care, treatment, and support services. Health authorities must consider whether existing or planned services will effectively engage vulnerable populations. They must also draw on the best available evidence as they consider ways to get ahead of the epidemic and prevent infection and illness, perhaps through new education, prevention and harm-reduction efforts.

HIV prevention, care, treatment and support services must be available and accessible to British Columbians across the province, in every region. This can best be achieved through the co-operation of all stakeholders, including health authorities, community-based organizations and government.

The Provincial Health Services Authority, with its province-wide mandate, has a special role to play. Currently, organizations with province-wide mandates are contracted through the Provincial Health Services Authority; involving province-wide membership and consumer organizations in both service delivery and capacity-building efforts will be important, since HIV infection transcends regional boundaries and manifests itself principally within population groups.

5.3 Community-Based Organizations

Internationally, best results in addressing HIV/AIDS are consistently obtained where government has supported the development of capacity within civil society, and enabled people and groups to be active participants in, rather than passive targets of, programming. Supporting both the ministries and the health authorities in British Columbia is the network of AIDS service organizations and coalitions working at the community level with vulnerable groups and with people living with HIV/AIDS.

Community is a vital partner in addressing HIV/AIDS in B.C. Community organizations play several important roles, such as: participating in policy development; program design, implementation and evaluation; and the provision of services, especially at the community level.

The Pacific AIDS Network includes most British Columbia community organizations involved in HIV/AIDS work. This province-wide structure offers opportunities for collaboration, sharing of skills and information, and the development of strategies for collective action – all with the goal of enhancing community capacity to respond to HIV/AIDS.

Given the ambitious goals proposed in this document, community organizations will provide critical strategic support by:

- engaging members of groups most vulnerable to HIV in prevention and care efforts;
- engaging those already living with HIV in enhanced prevention efforts; and
- providing a vital bridge for mainstream health and research initiatives.

5.4 Government of British Columbia

Finally, there is an important role for the government of British Columbia as a whole, and that is to address the broader social and economic issues that underlie the HIV/AIDS epidemic. The population health model provides the most promising long-term prevention strategy. Its pursuit, however, requires a commitment from across government.

Research from Canada and other countries clearly indicates that factors such as emotional, physical and sexual abuse and inequities based on income, race and gender leave groups of people particularly vulnerable to HIV infection.

These health determinants operate on an individual level when, for example, child abuse and adult homelessness increase the likelihood of a person engaging in high-risk behaviours. They are at work at the societal level when, for example, economic inequalities affect a woman's ability to negotiate safe sex practices.

Health determinants such as living and working conditions, social status and social environments, and culture may influence:

- whether a person or certain groups will engage in behaviours that place them at risk of HIV infection;
- the speed with which HIV infection will progress to AIDS; and
- a person's or community's ability to manage and live with HIV/AIDS.

Co-ordinated efforts across government to address the public health determinants that contribute to HIV vulnerability are essential to a strategic and effective HIV/AIDS response throughout B.C.

6. MONITORING FRAMEWORK

The implementation and the results of *Priorities for Action* will be monitored annually using outcome and progress measures.

The short-, medium- and longer-term results of the approach will be monitored using the following set of provincial indicators and data sources.

PREVENTION		
Goals	**Core Indicators**	**Data Sources**
To reduce the incidence of HIV infection by 50% over the next five years	▪ Numbers and rates of HIV incidence among the general population and target populations, including women, youth, infants, Aboriginal people, men who have sex with men and injection drug users	▪ B.C. Centre for Disease Control; Vancouver Injection Drug Use Study; Vanguard study; Aboriginal study
	▪ Estimated proportion of HIV+ people who do not know that they are infected	▪ BCCDC – (e.g., use partner notification and aggressive outreach in high risk populations to encourage testing among people who may be unaware they are infected)

CARE, TREATMENT AND SUPPORT		
Goals	**Core Indicators**	**Data Sources**
To increase the proportion of HIV+ individuals who are linked to appropriate care, treatment and support services by 25% over the next five years	▪ Proportion of HIV+ individuals receiving care, treatment and support services by target population	▪ B.C. Centre for Excellence in HIV/AIDS – health authorities (e.g., track HIV-related service utilization at hospitals and health clinics)
	▪ Number and proportion of women receiving antiretroviral therapies by target population	▪ B.C. Centre for Excellence in HIV/AIDS, Drug Treatment Program database
	▪ Rates of HIV/AIDS disease progression among the general and target populations	▪ B.C. Centre for Excellence – to be developed

CAPACITY		
Goals	**Core Indicators**	**Data Sources**
To enhance the province's capacity for monitoring the HIV epidemic over the next five years	▪ HIV partner notification system is in place ▪ HIV testing uptake within the most vulnerable groups ▪ HIV/AIDS service plans and monitoring systems developed by each health authority	▪ BCCDC – to be developed ▪ B.C. health authorities; B.C. Centre for Excellence in HIV/AIDS; VIDUS; Vanguard; B.C. Aboriginal study ▪ B.C. health authorities

CO-ORDINATION AND CO-OPERATION		
Goals	**Core Indicators**	**Data Sources**
To create and sustain broad-based support for Priorities for Action	▪ Inventory of *Priorities for Action* stakeholders by role, responsibility and sector ▪ Report by Inter-Ministry Committee on HIV/AIDS ▪ Inventory of B.C. involvement in international HIV/AIDS work	▪ B.C. health authorities, Ministry of Health Planning ▪ Inter-Ministry Committee on HIV/AIDS ▪ Ministry of Health Planning; Canadian International Development Agency; Health Canada

REFERENCES

1. Albert, Terry and Williams, Gregory. 1997. The Economic Burden of HIV/AIDS in Canada. November. CPRN Study Number H02. [CPRN1997] [paper]
2. Alberta, Health and Wellness. 2001. Healthy Response to HIV/AIDS. Alberta Aboriginal HIV/AIDS Strategy. Spring.
3. Anderson R, Garnett G and Weiss P. 1999. The Dynamics and Determinants of HIV in High-Income Countries. Dialogue on AIDS. Montebello, November 8-10. [Montebello –Disc] [paper]
4. Australia, Health and Aged Care. 2000. Nations HIV/AIDS Strategy, 1999-2000 to 2003-2004. Changes and Challenges.
5. Australian National Council on AIDS and Related Diseases. 1999. Proving Partnership. Review of the Third National HIV/AIDS Strategy. May.
6. Backmund M, Meyer K, Von Zielonka M, Eichenlaub D. 2001. Treatment of hepatitis C infection in injection drug users. Hepatology, July, 34(1):188-93.
7. British Columbia. 1998a. British Columbia's Framework for Action on HIV/AIDS. Prepared by the B.C. Ministry of Health and Ministry Responsible for Seniors in consultation with the Provincial HIV/AIDS Strategy Advisory Committee.
8. ___. 1998b. HIV, Hepatitis and Injection Drug Use in British Columbia. Pay Now or Pay Later? Prepared by Dr. John S. Millar, Provincial Health Officer. June.
9. ___. 2002. Provincial Health Officer's Report on HIV Reportability. Prepared by Dr. P.R.W. (Perry) Kendall, Provincial Health Officer. February.
10. British Columbia Aboriginal HIV/AIDS Task Force. 1999. The Red Road, Pathways to Wholeness: An Aboriginal Strategy for HIV and AIDS in B.C.
11. British Columbia Centre for Disease Control (BCCDC), 2002. HIV/AIDS Update Annual 2001.
12. Brundtland, Dr Gro Harlem (Director General, WHO). 2001. Opening Remarks to a meeting of Interested parties, Geneva, 18/6/01. http://www.who.int/directorgeneral/speeches/2001/english/20010618_mipgeneva2001.en.html (accessed 5/6/02)
13. Canada, House of Commons. 1996. Standing Committee on Health, Report on the AIDS Epidemic in Canada.
14. Canadian HIV/AIDS Legal Network. 1999. Legal, Ethical, and Human Rights Issues Raised by HIV/AIDS: Where Do We Go From Here? Planning for 1998-2003. A Planning Report. January [AIDS-Law, successes and shortcomings; criteria for allocating funding]
15. Centers for Disease Control and Prevention. 2001. HIV Prevention Strategic Plan through 2005. Atlanta.
16. Futures Group International, The. 2002. Literature Database for Evaluating HIV/AIDS Interventions. March.
17. Glen Brown and Associates. 2002. From Direction to Action – Environmental Scan Report for the Montreal Direction-Setting Follow-Up Meeting on the Canadian Strategy on HIV/AIDS, April 14-16, 2002. Prepared for Health Canada.
18. Globe and Mail. 2002. An investment of $27-billion could halt march of AIDS. By Andre Picard. Friday July 5, A3.
19. Hanvelt, Robin, Copley, Tobin, Schneider, David and Meagher, Nancy. "The Economic Costs and Resource Impacts of HIV/AIDS in British Columbia." Vancouver: Community Health Resource Project, 1999.
20. Health Canada. 1997. The Canadian Strategy on HIV/AIDS: Moving Forward Together.

21. ___. 1998. Reviewing Canada's Strategy on HIV/AIDS. Successes, Barriers and Lessons Learned.
22. ___ and UNAIDS. 2000. Dialogue on HIV/AIDS: Policy Dilemmas Facing Governments. November.
23. ___. 2001a. Current Realities: Strengthening the Response. Canada's Report on HIV/AIDS 2001.
24. ___. 2001b. Meeting Report. Canadian Strategy on HIV/AIDS Annual Direction-Setting Meeting. Gray Rocks Inn, Mont Tremblant, Quebec. October 29-November 1, 2000. February.
25. ___. 2002a. HIV/AIDS Epi Update[s]
26. ___. 2002b. HIV and AIDS in Canada: Surveillance Report to December 31, 2001.
27. Institute of Medicine. 2000. No Time to Lose – Getting More from HIV Prevention (Prepublication Copy). Washington, DC: National Academy Press.
28. Martin Spigelman Research Associates. 2001. Sharing Experiences: Learning from Five Countries Experiences with the HIV/AIDS Epidemic. Prepared for the Departmental Program Evaluation Division, Health Canada, as part of the CSHA Evaluation. June.
29. Ministerial Council on HIV/AIDS. 2001(a). Situational Analysis: A Background Paper on HIV/AIDS and Aboriginal People.
30. ___. 2001(b). Taking Stock: Assessing the Adequacy of the Government of Canada Investment in the Canadian Strategy on HIV/AIDS. Prepared by Martin Spigelman Research Associates. January.
31. ___. 2002. HIV/AIDS and Health Determinants. Lessons for Coordinating Policy and Action. Prepared by Martin Spigelman Research Associates. January.
32. Murray C and Frenk J. 2001. "World Health Report 2000: a step towards evidence-based health policy." Lancet, 357:1698-700.
33. National Center for HIV, STD and TB Prevention. Program Briefing 2001, 4/10/02. www.cdc.gov/nchstp/od/program_brief_2001.
34. National HIV/AIDS Organizations. 2001. AIDS in Canada 2001. Report from the National HIV/AIDS Organizations. November 30.
35. Pacific AIDS Network. 2002. Organizing for Effective Action: Health Care Restructuring and HIV/AIDS in British Columbia. Prepared by Martin Spigelman Research Associates for discussion by the Government of British Columbia and the Pacific AIDS Network. January.
36. Riley D, Teixeira P and Hausser D. 1999. HIV/AIDS policy issues related to large-scale targeted interventions for injection drug users. Dialogue on AIDS, Montebello, November 8-10.
37. Schwartlander, B. et al. 2001. AIDS: Resource Needs for HIV/AIDS. Science, 292 (5526), 29 June, 2434-2436.
38. Spittal PM, Craib KJP, et. al. 2002. "Risk Factors for elevated HIV incidence rates among female injection drug users in Vancouver." Canadian Medical Association Journal, 166(7):894-99.
39. SPR Associates Ltd. 2002. Final Report on the Year Three Evaluation of the Canadian Strategy on HIV/AIDS. A Report to Health Canada. January.
40. Stover, John et al. 2002. Can we reverse the HIV/AIDS pandemic? The Lancet, 360, July 6: 73-77.
41. Strathdee, SA. 1997a. Social determinants related to the risk of HIV infection and progression to AIDS. The Clarion 4, no. 1: 2-4.
42. Strathdee SA, Patrick DM, Currie SL, Cornelisse PGA, Rekart ML, Montaner JSG, Schechter MT, O'Shaughnessy MV. 1997b. Needle exchange is not enough: lessons from the Vancouver injection drug use study. AIDS, 11:F59-F65.

43. UNAIDS. 2002(a). Opening Up the HIV/AIDS Epidemic. Guidance on encouraging beneficial disclosure, ethical partner counselling and appropriate use of HIV case-reporting. Geneva.
44. ___. 2002(b). Report on the global HIV/AIDS epidemic. Geneva. Prepared for the Barcelona Conference.
45. ___. 2002(c). Fact Sheet: High Income Countries. http://www.unaids.org/barcelona/presskit/factsheets
46. ___. 2002(d). Fact Sheet: The Impact of HIV/AIDS.
47. ___. n.d. Canada. National Consultation to Renew Canada's Strategy on HIV/AIDS. Best Practices Summary Booklet.
48. Vancouver Richmond Health Board. 1998. Vancouver Downtown Eastside HIV/AIDS Action Plan. Evaluation Report. Prepared by Wolfe-Gordon Consulting. November.
49. Vanguard Project. 2001. Five Year Report. Summary of Research Findings, 1995-2000. July.
50. Wiebe J and Single E. 2000. Profile of Hepatitis C & Injection Drug Use in Canada: A Discussion Paper. Prepared for Hepatitis C Prevention, Support & Research Program, Population & Public Health Branch. Ottawa: Health Canada.
51. World Health Organization and UNAIDS. 2000. Key Elements in HIV/AIDS Care and Support. A Working Document. December. http://www.who.int/HIV_AIDS/HIV_AIDS_Care/Key_elements_HIV_AIDS_care.htm-_Toc506380342
52. Young, Jim. 2000. Legacy Discussion Paper: An Overview of HIV/AIDS in Canada – Past, Present, and Future (Working Draft). October 10.

APPENDIX 1

Investment Implications

The tables that follow provide further analysis for each key strategy by:

- identifying responsibility, impact and funding (existing, new or external); and
- identifying the annual level of investment required, as outlined below.

Level	Amount
Minimal	Less than $50,000
Low	$50,000 to $500,000
Medium	$500,000 to $2 million
High	More than $2 million

Prevention Strategies

1. Ensure that current and future HIV/AIDS-related prevention efforts across the province effectively engage the most vulnerable populations

	Province	Health Authorities
Investment	n/a	low
Impact	n/a	high
Type of funding	n/a	existing

n/a = not applicable

2. Expand provincial support for low-threshold harm-reduction initiatives, including supervised consumption sites, needle exchange programs and addiction treatment services, and a randomized trial of prescribing controlled substances and ensure that they are accessible and culturally appropriate to populations most at risk of HIV infection

	Province	Health Authorities
Investment	low	medium
Impact	high	high
Type of funding	existing	existing (and external)

3. Monitor and evaluate the public health reporting requirement for HIV infection under the Health Act, including provisions for anonymous, voluntary partner notification

	Province	Health Authorities
Investment	n/a	low
Impact	n/a	medium
Type of funding	n/a	Existing and new (external)

4. (a) Expand HIV testing capacity, education and prevention efforts in all of the province's correctional facilities; (b) given the prevalence of risk behaviours for blood borne infections in provincial jails, and the positive evaluations of needle exchange pilots in European jails (42), review the effectiveness of current HIV/hepatitis C (HCV) prevention strategies in provincial jails and assess the opportunities for evaluatable, innovative interventions to reduce HIV/HCV transmission through risk behaviours like tattooing and injection drug use; (c) pursue the development of a partnership with Correctional Services Canada to enhance HIV/HCV services in federal institutions located in B.C.

(a)	Province	Health Authorities
Investment	low	n/a
Impact	high	n/a
Type of funding	existing	n/a

(b)	Province	Health Authorities
Investment	low	n/a
Impact	high	n/a
Type of funding	existing	n/a

(c)	Province	Health Authorities
Investment	n/a	n/a
Impact	medium	n/a
Type of funding	n/a	n/a

5. Create an HIV/AIDS roundtable involving B.C. ministries and health authorities, Health Canada and First Nations organizations to identify and pursue efforts to address the HIV epidemic among Aboriginal people

	Province	Health Authorities
Investment	n/a	minimal
Impact	medium	medium
Type of funding	n/a	n/a

Treatment Strategies

1. Ensure that current and future HIV/AIDS-related care, treatment and support services across the province effectively engage the most vulnerable populations

	Province	Health Authorities
Investment	n/a	medium
Impact	n/a	high
Type of funding	n/a	existing

2. Work with the B.C. Medical Association and B.C. College of Physicians and Surgeons to expand the provincial methadone program, and the range of addictions treatment options

	Province	Health Authorities
Investment	high	high
Impact	high	high
Type of funding	existing	existing

3. Monitor and evaluate the public health reporting requirement for HIV infection under the Health Act, including provisions for anonymous, voluntary partner notification. See Prevention Strategy #3, above.

4. Work with the B.C. College of Physicians and Surgeons to increase the number of physicians providing HIV/AIDS care and treatment, and expand innovative training programs for physicians and other key health-care providers

	Province	Health Authorities
Investment	low	n/a
Impact	medium	n/a
Type of funding	existing	n/a

5. Develop the capacity to provide continuity of care and bridging services for HIV-positive individuals at time of discharge from federal and provincial correctional institutions in B.C.

	Province	Health Authorities
Investment	low	n/a
Impact	high	n/a
Type of funding	existing	n/a

Capacity Strategies

1. Support the expansion of HIV/AIDS-related medical and social research undertaken in the province and explore alternative means of disseminating new knowledge

	Province	Health Authorities
Investment	low	low
Impact	medium	medium
Type of funding	existing	existing

2. Develop an effective sentinel surveillance system through linking existing data sources that will enable the province and health authorities to anticipate new epidemiological trends and service needs with regard to HIV/AIDS, hepatitis C and other co-infections

	Province	Health Authorities
Investment	n/a	low
Impact	n/a	high
Type of funding	n/a	existing

3. Identify and disseminate best practices information to health authorities, local governments and AIDS service organizations and other community-based organizations on a timely basis

	Province	Health Authorities
Investment	low	n/a
Impact	medium	medium
Type of funding	existing	n/a

4. Work with health authorities in planning, monitoring and evaluating HIV/AIDS services including the public health follow-up for partners of newly reported HIV positive individuals.

	Province	Health Authorities
Investment	low	n/a
Impact	low	low
Type of funding	existing	n/a

Co-ordination and Co-operation Strategies

1. Create mechanisms for encouraging co-ordination and co-operation among stakeholders

	Province	Health Authorities
Investment	minimal	n/a
Impact	medium	n/a
Type of funding	existing	n/a

2. Forge new partnerships with Correctional Service Canada, Health Canada and Indian and Northern Affairs to foster co-ordination and co-operation in efforts directed at vulnerable populations

	Province	Health Authorities
Investment	low	n/a
Impact	medium	n/a
Type of funding	existing	n/a

3. Support efforts to share the province's HIV/AIDS knowledge and experience with countries in the developing world

	Province	Health Authorities
Investment	minimal	n/a
Impact	low	n/a
Type of funding	external	n/a

4. Explore an enhanced role for the Provincial Health Services Authority in contributing to provincial co-ordination and identification and dissemination of information on best practises

	Province	Health Authorities
Investment	n/a	minimal
Impact	n/a	low
Type of funding	n/a	existing

APPENDIX 2

GLOSSARY

ABORIGINAL
Indian, Metis and Inuit people (Constitution Act, 1982)

ACQUIRED IMMUNO-DEFICIENCY SYNDROME
A syndrome defined by the development of serious opportunistic infections, neoplasms or other life-threatening manifestations resulting from progressive HIV-induced immuno-suppression.

ANTIRETROVIRAL
An agent that is active against a retrovirus. In this context, any medication that is designed to inhibit the process by which HIV replicates.

BLOOD-BORNE VIRUS OR PATHOGEN
A virus or pathogen that may be transmitted via blood or body fluids that contain blood. Such transmission can result from sharing injecting equipment.

CAPACITY BUILDING
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. In the context of HIV/AIDS, such an approach is used to establish community norms and standards that support health-enhancing behaviours.

CO-INFECTION
In this context, the term used to describe the circumstance in which a person is concurrently infected with HIV and another blood-borne virus such as the hepatitis C virus.

CONTINUUM OF CARE
Defined as an integrated, client-oriented system of care consisting of services and integrating mechanisms that support clients over time, across a comprehensive array of health and social services, and spanning all levels of intensity of care.

CULTURALLY APPROPRIATE or CULTURALLY COMPETENT
Terms used to describe 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.

EPIDEMIOLOGY
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.

GAY MAN
A homosexually active man identifies himself as gay or is attached to the gay community, or both. Individuals can alter both their self-definition and the level of their community attachment over time. Education and prevention programs typically distinguish between gay men and other men who have sex with men – see also MSM.

HARM-REDUCTION
The primary principle underpinning the Canada's Drug Strategy; Underlying the principle is the intention to improve health, social and economic outcomes for both the community and the

individual. A variety of approaches are taken, including abstinence-oriented strategies in the case of drug use. Harm-reduction includes preventing anticipated harm and reducing actual harm. It is consistent with a comprehensive approach to drug-related harm, involving a balance between demand reduction, supply reduction and harm reduction. More recently, this approach has also been applied in other contexts, such as programs that support sex trade workers to structure their inherently dangerous work so as to minimize the risk of violence, sexually transmitted infections and other harms.

HAART
Highly Active Antiretroviral Therapy, involving the prescription of a combination of medications from several classes of antiretroviral drugs.

HEALTH STATUS
Health status is the state of health of an individual and, by extension, the state of health of the overall population. Health status has been traditionally measured by length of life (life expectancy), rates of disease and death (mortality and morbidity) and physical health and functioning. Today, health status is also measured by years of healthy life, quality of life and well-being, the impact of health problems on everyday life, and mental, social and emotional health (Report on the Health of Canadians, Health Canada).

HEPATITIS C VIRUS
An RNA virus transmitted through blood-to-blood contact.

HUMAN IMMUNO-DEFICIENCY VIRUS (HIV)
A human retrovirus that leads to AIDS.

INCIDENCE
The number of new cases of a disease in a defined population within a defined period.

LOW-THRESHOLD PROGRAMS A low-threshold program is defined as one that seeks to minimize barriers to treatment or care by reducing entry and retention criteria.

MSM – MEN WHO HAVE SEX WITH MEN
Men who engage in male-to-male sexual behaviour, regardless of whether they identify as gay, heterosexual or bisexual. Education and prevention programs typically distinguish between gay men and other men who have sex with men. See also Gay Men

NEEDLE EXCHANGE PROGRAMS
Programs that distribute sterile injecting equipment, and collect and dispose of used syringes.

OBJECTIVE
An objective is a specific and measurable description of what is to be achieved. Whereas a goal is broadly stated, an objective is more focused and narrowly stated.

OPPORTUNISTIC INFECTION
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.

PEER EDUCATION
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, or young people delivering education programs to other youth.

POPULATION HEALTH OUTCOME
A population health outcome is a desired or intended result for a given population group. It is usually concerned with the longer term or ultimate effects of a particular action on society, rather than the short-term effects of a program or service on the participants.

POSITIVE PREVENTION
Positive prevention seeks to maximize the physical, mental and sexual health of HIV-positive individuals, providing them with the necessary foundation for maintaining safer behaviors and maximizing quality of life – positive prevention engages those already living with HIV in efforts to prevent new infections.

PREVALENCE RATE
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.

PROPHYLAXIS
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.

RETROVIRUS
A virus that inserts a DNA copy of its genome into the host cell in order to replicate. HIV is a retrovirus.

SAFE SEX, SAFE SEXUAL PRACTICE
Sexual activity in which there is no exchange of body fluids such as semen, vaginal fluids or blood.

SEROPOSITIVE
Seropositive refers to an individual whose blood contains the Human Imuno-deficiency Virus (HIV).

SERVICE OUTCOME
A service outcome is the desired or intended result of a particular service or program. This type of outcome is usually directly attributable to the service or program. A service outcome primarily benefits the consumer or participant, although there may be secondary benefits to the larger community or population groups.

SENTINEL SURVEILLANCE
Monitoring activities, often conducted through research cohorts, that are intended to provide early identification of disease outbreaks in defined population groups. An effective sentinel surveillance system can assist programs in responding more effectively to a dynamic epidemic.

UNIVERSAL PRECAUTIONS
Universal precautions are general measures intended to prevent the transmission of blood-borne pathogens, especially HIV and the hepatitis B virus (HBV), between health-care workers and patients. They are designed to prevent contact between certain potentially infectious bodily fluids of one person and the mucous membranes or non-intact skin of others. Universal precautions focus on the avoidance of accidental punctures by used needles or scalpels and involve the use of protective barriers such as latex gloves, adherence to established procedures for use/disposal of sharp objects, and immunization of health-care workers for HBV. Universal precautions are especially important in exposure-prone invasive procedures such as surgery. (Encyclopedia of AIDS: A Social, Political, Cultural and Scientific Record of the HIV Epidemic)

VIRAL LOAD
The amount of virus present per cubic millilitre of blood, as measured by a viral-load test. HAART therapy can suppress viral load, reducing the risk of opportunistic infections associated with HIV/AIDS.

VISION
A vision describes what an organization is striving to become in the future. It paints a picture of an ideal world that an organization wants to help create. A vision is intended to galvanize an organization into greater action and co-operation.

VULNERABILITY
Vulnerability in the context of HIV/AIDS means having little of no control over the risk of acquiring HIV infection or, for those already infected with or affected by HIV, to have little or no access to appropriate care and support. Vulnerability is the net result of the interplay among many personal (including biological) and societal factors, and can be increased by a range of cultural, demographic, legal, economic and political factors. (United Nations Joint Programme on HIV/AIDS).

APPENDIX 3

REGIONAL WORKSHOPS

Six workshops were held during March and April 2003 for the purpose of reviewing a draft version of this document, soliciting comment and feedback on the draft document from health authority staff and their community partners, and exploring unified approaches to evaluation and reporting across jurisdictions. These workshops were organized and presented co-operatively by the Ministry of Health Planning, Health Canada's Population and Public Health Branch (B.C. Regional Office), and each of British Columbia's six health authorities.

Location	**Date**	**Health Authority**
Kelowna	March 28, 2003	Interior Health
Nanaimo	March 31, 2003.	Vancouver Island Health
Vancouver	April 4, 2003	Vancouver Coastal Health
Vancouver	April 7, 2003	Provincial Health Services Authority
Surrey	April 15, 2003	Fraser Health
Prince George	April 16, 2003	Northern Health