Health Canada Santé Canada

Correctional Service Canada Service Correctionnel Canada

Canadian Strategy on HIV/AIDS

Monitoring Report

May 1998 to November 1999

October 6, 2000

Canadian Strategy on HIV/AIDS

La Stratégie canadienne sur le VIH/sida

Canada

EXECUTIVE SUMMARY

The Canadian Strategy on HIV/AIDS (CSHA) was launched by the Minister of Health in May 1998, following unprecedented national consultations that engaged the full breadth of organizations and individuals involved in the HIV/AIDS field. The CSHA was developed and is being implemented within the broad context of ongoing HIV/AIDS activities and policy changes in Canada and internationally. It is based on a pan-Canadian approach that acknowledges that the challenges ahead are too great and too complex to be addressed by a single government, agency or stakeholder. A key highlight of the new Strategy is a commitment to long-term federal funding of HIV/AIDS programs and activities.

This is the first annual monitoring report for the CSHA, covering the period from May 1998 to November 1999. Its purpose is to inform stakeholders, decision-makers and the Canadian public about activities supported by the CSHA, as well as selected outcomes, and to serve as a management tool for CSHA partners.

As a baseline report, this document describes rather than analyses. The report summarizes information provided by stakeholders — federal and provincial governments, national non-governmental organizations (NGOs), universities, researchers, service organizations and community groups — but avoids assessing or evaluating any of the activities described. Nor does the report attempt to attribute changes or trends in the HIV/AIDS epidemic in Canada to any of the activities described herein.

While the period from May 1998 to November 1999 was one of transition from the previous National AIDS Strategy to the CSHA, it is clear from the activities reported here that a tremendous amount of work was also undertaken to implement the new Strategy. Chapter 3 provides a summary of implementation activities, which are too diverse and numerous to recap in this Executive Summary. However, it can be said that all key Strategy stakeholders have been active in pursuing the CSHA's goals and implementing its components.

Although the HIV/AIDS epidemic in Canada continues to evolve, evidence would appear to support the following general observations:

- HIV prevalence — the number of people living with HIV/AIDS in Canada — is increasing and more people are living longer with HIV/AIDS.
- The true incidence of HIV in Canada is unknown. An estimated 4,200 new infections occurred during 1996 and revised estimates for 1999 will be produced in the fall of 2000. Obtaining better data to improve incidence estimates is of critical importance for monitoring the HIV epidemic.

- There is relatively strong evidence that the epidemic continues to shift from one that primarily affected men who have sex with men (MSM) in its early stages to one that increasingly involves other groups, including injecting drug users, heterosexuals, Aboriginal people and women.
- Strong evidence also exists of an ongoing decline in reported AIDS cases and AIDS-related deaths in Canada (there is insufficient evidence to determine whether this trend will be sustained).
- Emerging information suggests the quality of life for people living with HIV/AIDS may be improving for some populations. At the same time, new quality of life issues are arising due to the fact that more people are living longer with HIV.
- A growing body of evidence suggests that members of socio-economically disadvantaged groups are more likely to experience living and working conditions that place them at risk of HIV infection; are more likely to engage in risk-related activities; are more likely to become infected with HIV; are less able to follow treatment regimens; and are more likely to die prematurely than are members of more socio-economically advantaged groups.

Impressive baseline data exists to permit ongoing monitoring of the HIV/AIDS epidemic in Canada. At the same time, there are significant gaps in Canada's HIV/AIDS information base, and several emerging issues need to be further researched to enhance our ability to monitor and respond to changes in the epidemic. Specifically, there is a need for:

- continued improvements in the measurement of HIV incidence and prevalence;
- databases that better reflect shifts in the epidemic itself;
- more focus on intermediate indicators and evaluation studies of the impacts of CSHA activities (particularly studies that focus on interventions in key communities);
- better information about HIV/AIDS from major national surveys, such as the National Population Health Survey, the First Nations and Inuit Regional Health Surveys, and the planned Canadian Community Health Survey;
- more attention to the relationship between broad determinants of health (such as income, education, shelter and security) and HIV/AIDS;
- additional research related to the quality of life for people living with HIV/AIDS; and
- more attention to the needs of different population groups affected by HIV/AIDS, which are becoming increasingly diverse over time, and more involvement of these population groups in program development.

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This is the first annual monitoring report for the Canadian Strategy on HIV/AIDS (CSHA), which was launched in May 1998 to replace the former National AIDS Strategy.

This report is intended to inform stakeholders, decision-makers and the Canadian public about activities supported by the CSHA, as well as selected outcomes, and to serve as a management tool for CSHA partners. Toward this end, the report consolidates information from all CSHA participants — federal and provincial governments, national non-governmental organizations, universities, researchers, service organizations and community groups. It focuses on activities funded using CSHA dollars, from the Strategy's inception to November 1999. Results of various activities are also reported, where available. *Because the report is based on information voluntarily provided by stakeholders, some HIV/AIDS activities may be underway that are not reported here.*

This document is a baseline report and, as such, it describes rather than analyses. The report avoids assessing or evaluating any of the activities described, and does not attempt to attribute changes or trends in the HIV/AIDS epidemic in Canada to any of the activities described herein.

Future annual monitoring reports will provide additional information on activities and outcomes and will contribute to the assessment of progress toward the goals set out in the CSHA. The monitoring process is intended to support the development of recommendations by the Ministerial Council on HIV/AIDS and the operational planning processes of all stakeholders.

ORGANIZATION OF THE REPORT

The report is organized as follows:

CHAPTER 1 provides information on the unique process leading up to the development of the CSHA, as well as the Strategy's goals and program components. Information is also provided on federal funding for HIV/AIDS.

CHAPTER 2 examines contextual factors affecting implementation of the CSHA, sets out the CSHA Monitoring Logic, and describes the roles and mandates of all key Strategy partners.

CHAPTER 3 describes implementation activities for each of the CSHA's components. Examples of specific projects and activities are included, as provided by each of the Strategy partners.

CHAPTER 4 provides an in-depth look at the key indicators used to monitor the HIV/AIDS epidemic in Canada — the incidence and prevalence of HIV, the incidence and prevalence of AIDS, AIDS-related deaths, and quality of life issues. This chapter also considers broad determinants of health and provides detailed analyses of certain at-risk population groups and transmission modes, using both known and imputed data.

The **CONCLUSION** provides a brief wrap-up of the current document and looks forward to the next monitoring report.

APPENDIX 1 provides additional information on the indicators and data sources used to develop Chapter 4.

APPENDIX 2 provides a breakdown of Regional and National ACAP Project Funding for the 1998-99 fiscal year.

ACKNOWLEDGEMENT

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CHAPTER 1

The Canadian Strategy on HIV/AIDS

BACKGROUND: RESPONDING TO A CHANGING EPIDEMIC

The Canadian Strategy on HIV/AIDS grew out of an unprecedented two-month national consultation process in the fall of 1997 on the future direction of HIV/AIDS programming in Canada. The consultations were initiated by the Minister of Health and were led by national stakeholder groups, who were concerned about the continuity of federal funding for HIV/AIDS. The process involved the full breadth of organizations and individuals involved in the field, including AIDS service organizations, at-risk groups, Aboriginal people, provincial/territorial governments, other federal departments, health care providers, the private sector, researchers and, most importantly, people living with HIV/AIDS (PWAs). [1]

Leading up to the consultations, there were strong indications that the HIV/AIDS epidemic had shifted considerably in Canada from the mid-1980s to mid-1990s (see Chapter 4 for a detailed discussion). Most notably:

- there were substantial decreases in the proportion of men having sex with men (MSM) among reported new infections;
- the proportion of intravenous drug users (IDUs) among reported new infections was increasing;
- the proportion of women among reported new infections was also increasing;
- the incidence of HIV/AIDS was increasing among Aboriginal populations;
- the incidence of HIV/AIDS was increasing among inmates in correctional environments; and
- there were growing requests for support from the families, friends and caregivers of persons living with HIV/AIDS.

In addition to these major shifts in the nature and characteristics of HIV/AIDS in Canada, new program issues were arising. For example:

- new and improved treatments were allowing persons with HIV/AIDS to live longer, which was giving rise to new issues related to quality of life (e.g., housing, employment, access to drugs, treatment);

- certain emerging populations, such as IDUs, were more difficult to reach and serve; and
- concerns were being expressed about the effectiveness of education and prevention efforts, particularly for the emerging populations.

Due to the changing face of the HIV/AIDS epidemic, the Government of Canada and stakeholders alike agreed on the need for new directions in HIV/AIDS programming, as well as continued and strengthened action in many existing areas of work. The result of their collaboration and consultation is the Canadian Strategy on HIV/AIDS.

POLICY FRAMEWORK OF THE CSHA

The CSHA is based on a pan-Canadian approach that acknowledges that the challenges ahead are too great and too complex to be addressed by a single government, agency or stakeholder. The CSHA therefore calls for cooperation and partnerships among the federal, provincial and territorial governments, voluntary organizations and the private sector.

Three over-arching policy directions guide the implementation of the Strategy:

- **enhanced sustainability and integration** — new approaches and mechanisms are being adopted to consolidate and coordinate sustained national action;
- **increased focus on those most at risk** — innovative strategies are being devised to target high-risk behaviours in populations that are often socially and economically marginalized; and
- **increased public accountability** — increased evidence-based decision making and ongoing performance review and monitoring are being undertaken to ensure that the CSHA is relevant and responsive to the changing realities of HIV/AIDS.

CSHA GOALS

The goals of the CSHA are to:

- prevent the spread of HIV infection in Canada;
- find a cure;
- find and provide effective vaccines, drugs and therapies;
- ensure care, treatment and support for Canadians living with HIV/AIDS, their families, friends and caregivers;

- minimize the adverse impact of HIV/AIDS on individuals and communities; and
- minimize the impact of social and economic factors that increase individual and collective risk of HIV infection.

PROGRAM COMPONENTS

These Strategy goals are addressed through 10 programming components, which are described briefly below:

- **Prevention** — Currently, prevention is the only defence against HIV. To prevent the spread of HIV, the Strategy is supporting new research that examines what puts people at risk of getting HIV and widely sharing the knowledge gained from this research; providing funding for innovative prevention projects for populations that are most at risk of HIV/AIDS; increasing the public's understanding of HIV/AIDS; disseminating information and knowledge about prevention activities that have been proved to work well; distributing scientific information regarding populations that are affected or vulnerable to infection, so that the necessary prevention initiatives can be undertaken; and supporting the education of health, social service and education professionals on HIV/AIDS prevention issues.

- **Community Development and Support to National NGOs** — Community development is the cornerstone of an effective response to HIV/AIDS. The CSHA is providing funding, through the AIDS Community Action Program (ACAP), to increase the abilities of non-profit, voluntary organizations and community groups to better serve the needs of those at risk of becoming infected and to sustain these organizations in their role as a direct link to rapidly changing local conditions across Canada. Financial support is also being provided to national non-governmental organizations with a primary mandate to address HIV/AIDS, to build and maintain their networks of community-based groups and organizations and to address emerging issues at the national level.

- **Care, Treatment and Support** — The need for care, treatment and support for Canadians living with HIV/AIDS is growing. This component of the CSHA is supporting the best treatment available for people living with HIV/AIDS by their professional and non-professional caregivers; and identifying and eliminating potential barriers that prevent Canada from giving the best available care and support to people living with HIV/AIDS.

- **Research** — HIV/AIDS research continues to be crucial. Building on the strong base that was established in previous years, the CSHA research program is supporting scientific excellence in HIV/AIDS research; making HIV/AIDS research a permanent part of established academic and other research institutions; increasing

the involvement of communities in deciding research priorities; ensuring that research dollars are spent effectively and that the results of research are well-used in the fight against HIV/AIDS; maintaining a strong epidemiological research base; increasing research in Aboriginal communities; improving coordination of HIV/AIDS research funding; and providing support for the Canadian HIV Trials Network.

- **Surveillance** — Since 1983, AIDS surveillance has been the principal mechanism for monitoring the AIDS epidemic. The CSHA is continuing and enhancing this work by supporting better communication and more usable surveillance systems and undertaking more specific analyses of trends and projections.

- **Prisons** — Rates of HIV infection in Canada's prison population have been estimated to be at least 10 times greater than in the population at large. The CSHA is supporting efforts to prevent the spread of HIV infection in federal penitentiaries and community corrections facilities; ensure accessibility of quality care, treatment and support for offenders living with HIV/AIDS; minimize the adverse impact of HIV/AIDS on staff, offenders and the community; develop and distribute information on HIV/AIDS in the correctional environment; and ensure a coordinated and sustainable national response to HIV/AIDS in the correctional environment.

- **Legal, Ethical and Human Rights** — Fear, stigma and discrimination still surround HIV/AIDS, creating barriers to effective prevention, care, treatment and support. The CSHA is addressing issues including human rights protection for people living with HIV/AIDS, affected communities and marginalized populations; protection from HIV/AIDS-related discrimination in the workplace, in schools and in communities; testing and confidentiality; access to care, treatment and support for injection drug users; laws and policies regulating sex trade workers; and travel and immigration restrictions.

- **Aboriginal Communities** — Since 1984, when HIV/AIDS data specific to Aboriginal people was first collected, the number of AIDS cases among Aboriginal Canadians has risen steadily. The CSHA provides dedicated funding to develop partnerships with Aboriginal communities to address the unique needs of Aboriginal peoples living on-reserve or in urban settings. For example, the Strategy is supporting HIV/AIDS prevention initiatives; community development efforts; better care, treatment and support for Aboriginal Canadians living with HIV/AIDS; and improved coordination of HIV programming within Aboriginal communities.

- **International Collaboration** — HIV is a truly worldwide issue that respects no boundaries and discriminates against no one. Canada is continuing to contribute to the global fight against HIV/AIDS by strengthening information sharing, including expertise and research, with other countries and organizations; participating in international fora related to HIV/AIDS; and increasing Canadian influence on the global response to HIV/AIDS.

- **Consultation, Evaluation, Monitoring and Reporting** — The CSHA is an enormous undertaking and must be managed efficiently and effectively to ensure maximum impact. Toward this end, the Strategy is initiating policy and program coordination mechanisms to support full Canadian participation; strengthening Canada's ability to address HIV/AIDS in the long term through the development of healthy public policy leading to better HIV/AIDS prevention and healthier lives for those infected; and increasing accountability to the public by regularly monitoring, evaluating and publicizing the results of all parts of the new Strategy.

FEDERAL FUNDING FOR HIV/AIDS

The Government of Canada has approved annual funding of $42.2 million to deliver the program components of the Canadian Strategy on HIV/AIDS. Table 1 shows how these funds are allocated.

With the exception of initiatives aimed specifically at prison populations, which are the responsibility of the Correctional Service of Canada (CSC), all components of the Strategy are delivered by Health Canada.

In addition to the $42.2 million in funding provided under the CSHA, the federal government invests $22.5 million in other HIV/AIDS initiatives. Table 2 shows the origin of these funds by department or agency.

Table 1: Funding Allocations Under the Canadian Strategy on HIV/AIDS [2]

Component	Funding Allocation
Prevention	$3.9 million
Community Development and Support to National NGOs	$10.0 million
Care, Treatment and Support	$4.75 million
Research	$13.15 million
Surveillance	$4.3 million
International Collaboration	$0.3 million
Legal, Ethical and Human Rights	$0.7 million
Aboriginal Communities	$2.6 million
Prisons (Correctional Service of Canada)	$0.6 million
Consultation, Evaluation, Monitoring and Reporting	$1.9 million
Total	**$42.2 million**

Table 2: Additional Federal Funding for HIV/AIDS Initiatives [3]

Component	Funding Allocation
Health Canada (Medical Services Branch)	$2.5 million
Correctional Service of Canada	$1.0 million
Canadian International Development Agency	$17.0 million
Medical Research Council	$2.0 million
Total	**$22.5 million**

CHAPTER 2

CSHA Context, Monitoring and Roles

INTRODUCTION

This section of the report provides an overview of:

- certain contextual factors affecting implementation of the Canadian Strategy on HIV/AIDS;
- the CSHA Monitoring Logic Model, which summarizes implementation activities and provides a "road map" for the monitoring process; and
- the roles and mandates of the diverse partners involved in implementing the Strategy.

CONTEXTUAL FACTORS

The CSHA was developed and is being implemented within the broad context of ongoing HIV/AIDS activities and policy changes in Canada and internationally. Some of these contextual factors have had a profound impact on the evolution and monitoring of the Strategy to date.

One factor of note is the uncertainty that surrounded the transition from one HIV/AIDS strategy to another. The federal government's previous National AIDS Strategy was launched in 1990 and comprised two phases, the second of which expired on March 31, 1998. As this completion date neared, there was considerable anxiety among stakeholder groups about the continuity of federal funding for HIV/AIDS programming. This led stakeholders to redirect their efforts from delivering programs and services to advocating new funding for a revised and strengthened HIV/AIDS strategy.

This advocacy led to the consultation process referred to in Chapter 1 and the announcement of the CSHA on December 1, 1997. However, it also had the effect of delaying final implementation of some activities under Phase II of the previous National AIDS Strategy. As a result, these activities were carried over to the CSHA. As well, the national consultation process led to the creation of a number of new components and new directions for the CSHA, which in turn has required some partners to reorient their planning, infrastructure development and program delivery activities.

These transition issues have contributed in some part to a second contextual factor related to implementation of the CSHA — the evaluation of Strategy impacts.

While it must be noted that monitoring and evaluation processes are now being developed, their absence underscores a major limitation of the current report. Essentially, this document is restricted to reporting on the implementation of CSHA activities, with little or no substantive basis to report on the *results* of those activities. This report also describes "downstream" outcomes, such as HIV/AIDS incidence, prevalence, morbidity and mortality, but can offer little information on more immediate indicators of the CSHA's impact. It must also be noted that no mechanisms yet exist to synthesize the results of project evaluations on a component-by-component basis.

CSHA Monitoring Logic Model

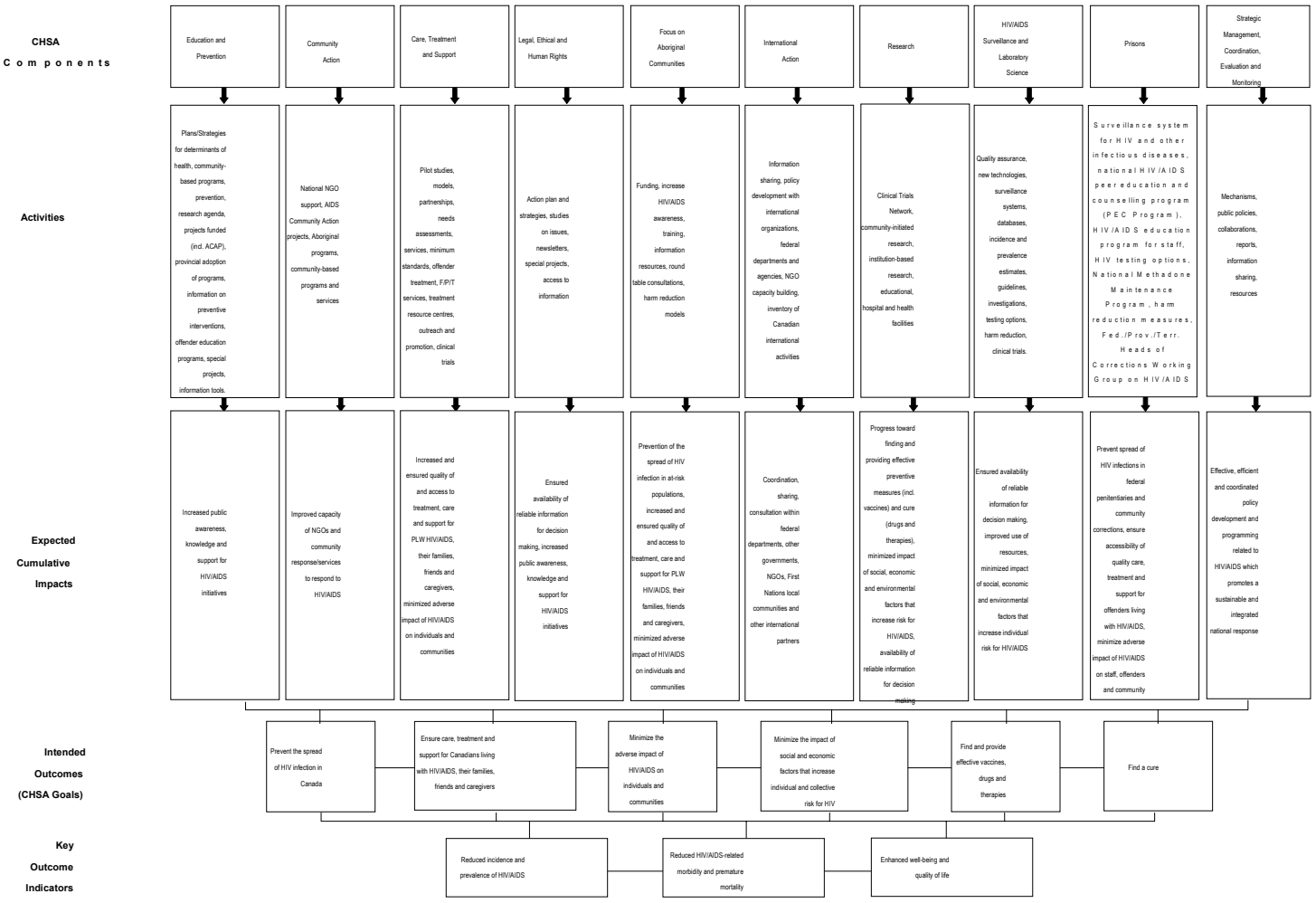
The CSHA Monitoring Logic Model (see Figure 1) highlights the major elements of the Strategy that require ongoing monitoring. The model:

- summarizes the major activities and expected cumulative impacts of each component of the Strategy;
- highlights the intended outcomes (CSHA goals) associated with these activities and cumulative impacts; and
- identifies key outcome indicators.

Certain aspects of the logic model were predetermined: specifically, the CSHA program components and the intended outcomes. The model was further developed based on CSHA descriptive documents (e.g., *The Canadian Strategy on HIV/AIDS — Moving Forward Together* and the CSHA accountability framework) and on comments and review by stakeholders.

Figure 1

CSHA MONITORING LOGIC MODEL



ROLES AND MANDATES OF STRATEGY PARTNERS

The Canadian Strategy on HIV/AIDS increases the engagement of and collaboration among:

- the federal government;
- provincial/territorial governments; and
- national non-governmental organizations and other partners.

A network of committees has been established to ensure effective coordination and management of the Strategy and to support a pan-Canadian approach to addressing HIV/AIDS. For example, several committees and working groups have been established to foster the development of linkages and partnerships among key stakeholders. These committees include the Ministerial Council on HIV/AIDS, the Federal/Provincial/ Territorial Advisory Committee on HIV/AIDS, the Federal/Provincial/Territorial Heads of Corrections Working Group on HIV/AIDS, the National Aboriginal Reference Group on HIV/AIDS, the Interdepartmental Coordinating Committee on HIV/AIDS and the Working Group on International HIV/AIDS Issues. As well, the Inter-Branch Strategy Team and Inter-Branch Committee on HIV/AIDS and Aboriginal Peoples oversee and coordinate the activities of Health Canada and the Correctional Service of Canada — the two federal departments directly involved in implementing the CSHA.

The remainder of this chapter describes the roles and mandates of current CSHA national partners, based on information provided by each organization (e.g., annual reports, brochures and web site text). Under the pan-Canadian approach, new partners may join in the future.

Federal Government Partners

Health Canada

Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. In partnership with provincial and territorial governments, the department provides national leadership to develop health policy, enforce health regulations, promote disease prevention and enhance healthy living for all Canadians, including those at risk of or living with HIV/AIDS.

Health Canada is the lead federal agency responsible for the CSHA, receiving 98.6 per cent ($41.6 million) of the Strategy's annual funding allocations. [4] In the first year of the CSHA, the following five branches of the department were involved in delivering the CSHA (Health Canada's branch structure was changed on July 1, 2000): [5, 6]

- the Health Promotion and Programs Branch manages five of the Strategy's program components — Prevention; Community Action and Support to NGOs; Care, Treatment and Support; Legal, Ethical and Human Rights; and Consultation, Evaluation, Monitoring and Reporting — and co-delivers the Aboriginal Communities component;
- the Medical Services Branch delivers the Aboriginal Communities component of the CSHA;
- the Health Protection Branch has responsibilities in the areas of Research (intramural) and Surveillance;
- the Policy and Consultation Branch is responsible for the International Collaboration component of the CSHA; and
- the Information Analysis and Connectivity Branch is responsible for the National Health Research and Development Program (NHRDP), which funds extramural research, and for the Departmental Program Evaluation Division, which is responsible for monitoring and evaluating the CSHA.

These five branches deliver a wide range of programs to achieve the goals of the CSHA. In doing so, they work closely with other federal departments, provincial and territorial governments, the other national partners identified in this chapter, and international and community-based groups.

Correctional Service of Canada

CSC is the federal government agency responsible for administering sentences of a term of two years or more, as imposed by the court. In fulfilling its mandate, CSC provides professional health care services to approximately 14 000 inmates in federal penitentiaries across Canada, where the prevalence of HIV infection is known to be significantly higher than in the general population.

CSC has a significant public health role to play in addressing HIV/AIDS within the correctional environment. As well, in keeping with its legislative mandate to assist the safe reintegration of offenders into the community, the Service has a responsibility to support HIV-positive individuals in preparing to return to the community.

CSC receives 1.2 per cent ($0.6 million) of the annual allocation under the Canadian Strategy on HIV/AIDS. [7, 8, 9] Its National HIV/AIDS Program has five key elements aimed at:

- HIV/AIDS prevention and education;
- care, treatment and support;
- surveillance;
- legal, ethical and human rights issues; and
- coordination and collaboration.

Medical Research Council

The Medical Research Council (MRC), through a Memorandum of Understanding with the NHRDP of Health Canada, receives CSHA funds of $4.5 million to support extramural research on HIV/AIDS. The MRC and NHRDP have established a collaborative program to fund meritorious research projects, operating grants and personnel awards across the entire spectrum of HIV/AIDS research. [10, 11, 12] The MRC complements the CSHA funding with an additional contribution of $2 million per year from its own budget to support HIV/AIDS research.

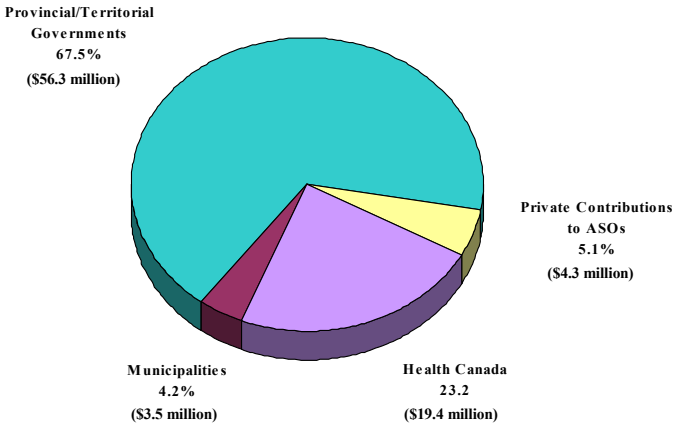
Provincial/Territorial Government Partners

Under Canada's constitution, provincial governments have primary responsibility for health care issues and therefore play a critical role in the response to HIV/AIDS. Similarly, each territorial government administers its own health care plan (although funding is provided primarily by the federal government). Provincial and territorial HIV/AIDS programs are coordinated with those of the federal government through the Federal/Provincial/Territorial Advisory Committee on HIV/AIDS. [13, 14, 15, 16, 17, 18, 19, 20]

While it is extremely difficult to quantify health care expenditures related to HIV/AIDS, a recent study estimates the direct costs of HIV/AIDS were in the order of $570 million for all of Canada in 1997, most of which was related to treatment. [21] The same study found that provincial and territorial governments contribute $56.3 million, or approximately two-thirds of total Canadian funding for HIV/AIDS education and prevention (see Figure 2).

Figure 2

Total Estimated National Expenditures on HIV/AIDS Education and Prevention, 1996-97



Provincial HIV/AIDS strategies include:

- prevention and education programs;
- care, treatment and support services;
- HIV surveillance and reporting;
- laboratory services;
- health promotion; and
- clinics.

Some provinces also provide funding for Aboriginal HIV/AIDS strategies, community development and research.

National Non-Governmental Organizations

Canadian Aboriginal AIDS Network

The Canadian Aboriginal AIDS Network (CAAN) is a national coalition of Aboriginal people and organizations that provides leadership, support and advocacy for Aboriginal people living with and affected by HIV/AIDS, regardless of where they reside. [22, 23, 24] CAAN's objectives are to:

- provide a national forum for members to express their needs and concerns on behalf of Aboriginal people living with and affected by HIV/AIDS;
- ensure access to services for Aboriginal people living with and affected by HIV/AIDS; and
- provide relevant, accurate and up-to-date HIV/AIDS information to Aboriginal people.

Canadian AIDS Society

The Canadian AIDS Society (CAS) is a national coalition of more than 100 community-based AIDS organizations across Canada. [25, 26, 27, 28, 29]

CAS is dedicated to strengthening the response to HIV/AIDS across all sectors of society and to enriching the lives of people and communities living with HIV/AIDS. Member organizations offer a full range of programs and services and represent all provinces and territories.

CAS advocates on behalf of people and communities affected by HIV/AIDS, facilitates the development of programs, services and resources for member groups, and provides a national framework for community-based participation in Canada's response to AIDS.

CAS seeks to accomplish its mission by:

- promoting education and awareness;
- mobilizing communities;
- advocating at the federal public policy level; and
- providing information and resources.

Canadian Foundation for AIDS Research

The Canadian Foundation for AIDS Research (CANFAR) is a national charitable foundation created to raise awareness and generate funds for research into all aspects of HIV infection and AIDS. [30]

CANFAR funds AIDS researchers working in Canadian educational, hospital and health facilities, research institutes and community service organizations. It is the only organization in Canada with the sole purpose of privately funding research on HIV infection and AIDS. CANFAR augments and complements existing research programs

by providing additional funding to sustain or complete ongoing efforts. The Foundation also funds research in areas that have not received necessary funding or require seed funding.

Canadian HIV/AIDS Legal Network

The Canadian HIV/AIDS Legal Network was established in 1992 to advance education and knowledge about legal, ethical and policy issues related to HIV/AIDS, and to promote responses to HIV infection and AIDS that respect human rights. [31, 32, 33, 34, 35] It is the only national, community-based charitable organization in Canada working in the area of policy and legal issues raised by HIV/AIDS.

The Legal Network provides services to persons living with HIV/AIDS, to those affected by the disease and to persons working in the area by creating and facilitating access to accurate and up-to-date legal materials on HIV/AIDS. The objectives of the Network are to:

- promote responses to HIV/AIDS that implement the United Nations International Guidelines on HIV/AIDS and Human Rights;
- ensure responses to HIV/AIDS that respect the rights of people living with HIV/AIDS and those affected by the disease;
- facilitate HIV prevention efforts;
- facilitate the care, treatment and support of people living with HIV/AIDS;
- minimize the adverse impacts of HIV/AIDS on individuals and communities; and
- address social and economic factors that increase vulnerability to HIV/AIDS and human rights abuses.

Canadian HIV Trials Network

The Canadian HIV Trials Network (CTN) is a national non-profit organization created to facilitate HIV/AIDS clinical trials in Canada. [36, 37, 38]

The Network was established in response to the needs and concerns of Canadian clinical investigators, persons living with HIV/AIDS, the pharmaceutical industry, community physicians, specialists and laboratories. Jointly sponsored by the University of British Columbia and St. Paul's Hospital in Vancouver, the Network includes a national head office in Vancouver, six regional offices and more than two dozen satellite sites. Its objectives are to:

- develop treatments, vaccines and a cure for HIV/AIDS by conducting scientifically sound and ethical clinical trials;
- pursue scientific excellence and ethical integrity in all of its undertakings; and
- work in partnership with the national and international pharmaceutical industry, people living with HIV/AIDS, researchers and physicians.

Canadian Public Health Association

The primary role of the Canadian Public Health Association (CPHA), in relation to the CSHA, is to manage the Canadian HIV/AIDS Clearinghouse, the largest information centre on HIV/AIDS in Canada. [39, 40, 41]

The Clearinghouse has a mandate to provide information on HIV/AIDS prevention, care and support, with a specific focus on HIV prevention, to health professionals, schools, community-based organizations, individuals and other groups. Toward this end, the Clearinghouse:

- collects, produces and disseminates information on HIV prevention, care and support;
- promotes and supports effective HIV prevention practice; and
- facilitates networking and information exchange.

Canadian Treatment Advocates Council

The Canadian Treatment Advocates Council (CTAC) is a non-profit organization made up primarily of people who are living with HIV/AIDS and who are experienced in HIV/AIDS treatment issues. [42, 43] Its objectives are to:

- provide policy development and advocacy on therapies and treatments for people living with HIV/AIDS;
- provide mentoring and skills building to people living with HIV/AIDS; and
- encourage the exchange of relevant HIV/AIDS treatment information.

CTAC works at both the national and provincial levels, with the pharmaceutical industry and other relevant stakeholders. The Council consists of 20 representatives, including voting members from each province and territory and representatives of major organizations representing persons living with AIDS, Aboriginal people, women and hemophiliacs. CAS and the Community AIDS Treatment Information Exchange are non-voting members.

Community AIDS Treatment Information Exchange

The Community AIDS Treatment Information Exchange (CATIE) provides reliable, comprehensive, timely, useful and easily accessible information on the diagnosis and treatment of HIV infection and related conditions and on clinical advances in the field of HIV infection. [44, 45, 46] Its primary target audiences are persons living with HIV/AIDS and their professional and non-professional caregivers.

CATIE contributes to the clinical management of HIV infection in Canada by:

- maintaining an extensive treatment resource centre, including print and electronic information;
- operating a bilingual 1-800 telephone consultation service, with optional print or electronic text follow-up;
- researching, writing and publishing a range of information tools, including fact sheets, brochures, newsletters, clinical trial updates, manuals and books;
- maintaining a web site to provide access to the above publications and other treatment information available via the Internet;
- distributing news items and other information via Internet mailing lists;
- participating in skills building and treatment information conferences and workshops;
- offering expert advice and advocacy to government, industry, research and community organizations and initiatives; and
- undertaking outreach and promotion activities.

Interagency Coalition on AIDS and Development

The Interagency Coalition on AIDS and Development (ICAD) is a coalition of international development and AIDS service organizations that is mobilizing human and financial resources in Canada in response to the HIV/AIDS epidemic in resource-poor communities and countries. [47, 48]

ICAD's objectives are to:

- create awareness and understanding of global HIV/AIDS issues and the role Canadians play in addressing the challenges of the global HIV/AIDS epidemic;
- motivate ICAD members, and enhance their capacity, to undertake, sustain or improve programming;

- create awareness of and opportunities for Canadian NGOs and their partners to undertake HIV/AIDS programming globally; and
- create opportunities for collaboration between Canadian international development NGOs and HIV/AIDS NGOs.

CHAPTER 3

Strategy Implementation Activities

INTRODUCTION

This chapter describes selected CSHA implementation activities carried out during fiscal year 1998-99. The activities are grouped by Strategy component and include a description of the significance of the component, excerpted from the document *Canada's Report on HIV/AIDS: Shared Vision, Shared Hope, 1998*. [49]

The activities and descriptions in this chapter were compiled from materials provided by Strategy partners, including:

- annual reports;
- web sites;
- progress reports;
- publications;
- presentations; and
- management reports.

Under each component, projects and activities are presented according to "categories" of implementation activities. Where activities do not fall neatly into a single component or category, they have been assigned to the most appropriate component and category.

PREVENTION

Prevention is the only defence against HIV transmission. The cost of preventing a case of HIV is only a fraction of the cost of treating and caring for someone once he or she becomes infected. This fact, together with Canada's commitment to averting human suffering whenever possible, makes prevention an important component of the Strategy.

For the Prevention component, activities are presented according to the following categories:

- Collection and Synthesis of Information;
- Dissemination of Information;
- Strategic Planning;
- Training; and
- Specific Population Approaches.

Collection and Synthesis of Information

Health Canada undertook or funded a number of activities to expand the collection and synthesis of information to support the development of effective prevention programming. [50, 51, 52, 53] These activities included:

- development of a status report on HIV prevention education in Canada's school and public health systems;
- a synthesis of research on the determinants of HIV risk behaviour among women and gay men;
- a prevention needs assessments for Aboriginal communities;
- evaluation of an outreach program for gay, lesbian and bisexual youth; and
- a synthesis of research on HIV transmission from mother to child.

Health Canada also supported a review of Canadian documentation on the role of male sex workers in HIV prevention among sex workers and their clients. [54, 55]

The Canadian AIDS Society produced a "Synopsis of Current Issues in Gay, Bisexual and MSM Prevention Education Research and Program Development." [56]

A manual entitled "Bright Red Hair and Sliced Bread: Models of HIV/AIDS Youth Programs in Canada," was also prepared by CAS. [57]

The Canadian HIV/AIDS Legal Network, under contract to Health Canada, produced the paper "HIV Testing and Pregnancy: Medical and Legal Parameters of the Policy Debate." The paper provides an analysis of medical and legal issues to inform the policy debate regarding the HIV testing of pregnant women. [58]

Dissemination of Information

The Canadian HIV/AIDS Clearinghouse responded to more than 25 000 information requests and distributed more than 860 000 items during 1998-99 (see Table 3 below for details). [59, 60, 61, 62]

As part of National AIDS Awareness and National Youth Awareness campaigns, CAS, with funding from Health Canada and the private sector, developed public service announcements, posters, rave cards, brochures and other resource guides. The materials were distributed to the public by the Canadian HIV/AIDS Clearinghouse. [63, 64, 65, 66]

Health Canada provided opportunities for stakeholders and others to exchange information and generate or discuss ideas at various conferences and workshops. [67]

The Canadian HIV/AIDS Clearinghouse offered electronic access to its holdings via its web site. The Clearinghouse also supported a network of HIV/AIDS information resource centres across Canada and worked with international HIV/AIDS centres. [68]

The Clearinghouse developed prevention information, including a new quarterly newsletter (*HIV Prevention Plus*) targeted at prevention educators and FAQ's on HIV/AIDS information and prevention issues.

Strategic Planning

Health Canada began to develop plans, strategic directions and funding guidelines to ensure that CSHA prevention activities address the needs of those most at risk of HIV/AIDS. [69]

Table 3: Distribution of Materials by the Canadian HIV/AIDS Clearinghouse

Number of Requests and Total Shipped by Month, 1997 to 1999						
	1997		1998		1999	
Month	No. of Requests	Total Shipped	No. of Requests	Total Shipped	No. of Requests	Total Shipped
January	1 355	9 927	1 475	37 937	1 428	32 046
February	1 653	30 567	1 598	88 913	2 464	55 578
March	1 696	28 129	1 647	45 274	1 993	54 546
April	1 481	24 729	1 456	39 673	3 012	53 023

May	1 750	80 763	1 943	75 283	2 689	137 523
June	2 059	38 088	1 590	7 733	1 670	133 633
July	7 047	325 599	2 776	79 267	1 819	72 579
August	1 821	66 476	1 063	17 875	1 356	28 409
September	2 159	123 809	3 434	173 052	1 015	61 296
October	1 902	59 399	4 380	191 455	1 224	36 551
November	1 494	22 747	2 098	70 801	1 468	128 673
December	1 250	36 243	966	36 109	1 187	143 725
TOTAL	**25 667**	**846 476**	**24 426**	**863 372**	**21 325**	**937 582**

Preliminary consultations were undertaken by Health Canada to establish a framework for action for prevention activities among MSM. [70]

Health Canada prepared funding guidelines for HIV prevention programming among urban and off-reserve Aboriginal populations, based on a national consultation. [71]

Federal, provincial and territorial HIV prevention coordinators held regular meetings to share information and undertake collaborative activities on certain issues. [72, 73, 74]

Health Canada supported a multi-disciplinary international forum — the 4th International AIDS Impact Conference — in Ottawa in July 1999, to address biopsychosocial issues. [75, 76]

CAS began a process to define its prevention role and to initiate a national dialogue on priority issues in prevention education. [77]

CAS also held a series of round tables to examine trends in HIV prevention and to discuss related strategies. [78, 79, 80, 81, 82]

Health Canada surveyed a selected group of professional organizations to identify current HIV prevention activities and information needs. [83]

CAS advised the Planned Parenthood Federation of Canada on a project to assess the HIV/AIDS activities of 11 of its affiliate agencies. Skills and needs assessments were completed for the affiliates. [84]

Health Canada continued to support a federal/ provincial/territorial working group established to address issues related to mother-to-infant HIV transmission. [85, 86, 87]

A physician-evaluated prevention intervention program for women seeking reproductive counselling was implemented nationally by Health Canada. [88, 89]

Stakeholders participated in a number of national prevention coordination committees, including the Safe Space National Project Advisory Committee; the National Program Committee for Planned Parenthood Federation of Canada's Best Practices Source Book on Sexuality; the National AIDS Awareness Week Committee; the National Program Partners' Committee for the Canadian HIV/AIDS Skills Building Symposium; and the National Program Partners' Committee for the National Women and HIV/AIDS Conference.

Training

CAS organized the 2nd Canadian HIV/AIDS Skills Building Symposium., which was held in November 1999 and offered 100 workshops for 800 participants. [90]

Health Canada formed a national advisory committee to review resources on HIV, sexual violence and women. Among the resources developed was "HIV and Sexual Violence Against Women," a guide for counsellors working with women survivors of sexual violence. [91]

Health Canada collaborated with Canadian schools of social work to establish an HIV and sexual violence curriculum. [92]

CAS produced and disseminated the third edition of the document, "HIV Transmission: Guidelines for Assessing Risk."

Specific Population Approaches

Health Canada funded several projects aimed at specific at-risk populations, as described below.

Youth

- The Youth Community Outreach AIDS Society (YouthCO) delivered a peer education program. [93]

- Injection drug using street youth in Quebec were targeted through a prevention project operated by Le Centre d'action communautaire auprès des toxicomanies utilisateurs de seringues (CACTUS). [94]
- Youth injection drug users in Guelph, Ontario, were contacted through a street and bar peer outreach project. [95]
- CAS's Spring Youth Campaign included a brochure on HIV/AIDS and safer sex, a poster and rave cards (all of which were distributed by the Canadian HIV/AIDS Clearinghouse). Fact sheets were also developed on youth and HIV/AIDS; young women and HIV/AIDS; young gay men and HIV/AIDS; and youth, substance use and HIV/AIDS. [96]

Ethno-Cultural Communities

- Asian Community AIDS Services in Toronto addressed issues such as the lack of culturally and linguistically appropriate HIV/AIDS legal services, the lack of knowledge and awareness of Asian community members, the availability of culturally appropriate health services, discrimination and gay and lesbian issues. [97]
- Culturally specific, language-appropriate HIV/AIDS outreach programs were also developed and implemented for the Asian community in Vancouver. [98]

Women

- Support workers received training on HIV and sexual assault. [99, 100, 101]
- CAS, CTAC, CAAN and CATIE co-sponsored a national conference on women and HIV/AIDS. [102, 103, 104]
- A campaign aimed at high-risk communities, including women, was added to CAS's National AIDS Awareness Campaign. [105]

COMMUNITY ACTION

Community development is the cornerstone of an effective response to HIV/AIDS. Much of the progress made so far in reducing the spread of HIV, and in caring for and supporting infected individuals, has been accomplished by non-profit, voluntary organizations and community groups.

For the Community Action component of the CSHA, activities are presented under the following categories:

- Funding Categories;
- Funding Guidelines;
- Coordination;
- Partnerships;
- Projects and Services;
- Evaluation;
- Training;
- Advocacy; and
- Funding Categories.

Health Canada provided operational funding to five national HIV/AIDS non-governmental organizations: the Canadian AIDS Society, the Canadian HIV/AIDS Legal Network, the Canadian Treatment Advocates Council, the Canadian Aboriginal AIDS Network and the Interagency Coalition on AIDS and Development. Operational funding was also provided to the Canadian HIV/AIDS Clearinghouse and the Community AIDS Treatment Information Exchange.

Health Canada's AIDS Community Action Program (ACAP) provided both project and operational funding for more than 130 initiatives by non-governmental organizations to address HIV/AIDS at the local level. Projects were aimed at creating supportive environments; health promotion for people living with HIV/AIDS; prevention initiatives; and strengthening community-based organizations. A list of the organizations and initiatives funded through ACAP is provided in Appendix 2. Some examples of ACAP-supported initiatives have also been included in the appropriate component sections of this document.

Funding Guidelines

Based on regional and national consultations, Health Canada developed new ACAP funding guidelines for regional projects, regional operational funding and national projects. The consultations recommended that non-community-based organizations continue to be eligible for project funding at both the regional and national levels. [106, 107]

Coordination

Health Canada organized regular meetings between ACAP program consultants working at the regional and national levels to develop a coordinated ACAP response to HIV/AIDS issues. [108]

The Canadian AIDS Society provided advocacy alerts to member groups and partners to help keep communities informed about HIV/AIDS issues and implementation of the CSHA. [109, 110]

Partnerships

The ACAP regional organization in Alberta, in collaboration with provincial, federal and community partners, developed and implemented a joint HIV funding model entitled the Alberta Community HIV Fund. The model uses a population health approach and transfers responsibility for stewardship of funding to a community-based organization. [111, 112]

In Nova Scotia, the ACAP regional organization supported the AIDS Coalition of Nova Scotia in developing a comprehensive provincial volunteer program and in strengthening partnerships with key organizations addressing HIV/AIDS issues. [113]

COCQ-sida in Quebec began a three-year process to develop an organizational strategic plan, as well as information to encourage community action on HIV/AIDS issues. [114]

In Ontario, the ACAP regional organization supported the Peterborough AIDS Resource Network in building coalitions as a means of addressing HIV vulnerability. [115]

In Manitoba, four community-based AIDS organizations, in collaboration with federal, provincial and community partners, developed a coordinated response to HIV/AIDS in the province, based on increased partnerships. The Nine Circles Community Health Centre was established to house the four organizations and the STD clinic of the Winnipeg Regional Health Authority.

Projects and Services

ACAP regional organizations supported initiatives aimed at HIV-vulnerable populations, including the Street Health HIV/AIDS Prevention Project in Toronto, which addresses the HIV prevention needs of homeless people. [116]

The ACAP national organization supported the adaptation of a comic book developed in Quebec City and its subsequent dissemination to other parts of Canada. The comic book aims to educate youth about HIV, homophobia and drug use. [117]

In Winnipeg, a projected called Breaking Down Barriers developed and facilitated a training module for health and social service professionals on understanding homophobia. The goals were to increase awareness of homophobia and heterosexism as health issues and to impact practices when dealing with persons living with HIV/AIDS, gay men, bisexuals and lesbians. [118]

Evaluation

At the regional level, ACAP worked with operational and time-limited community projects to enhance project and program evaluations. [119]

Training

The Ontario AIDS Network received ACAP funding to deliver skills training and evaluation for community-based AIDS service organizations. [120, 121]

ACAP regional organizations provided funding to provincial coalitions to develop skills building workshops for member groups. [122, 123]

Advocacy

CAS, advocating on behalf of its members, expressed certain concerns to Health Canada about ACAP: [124, 125] Community consultations were launched to address two issues:

- Community project funding, once used almost exclusively to support the community-based AIDS movement, is now being distributed more widely, which is placing increased pressures on existing services.
- Community-based organizations believe improvements are needed in the process for peer review of ACAP applications.

- Health Canada and CAS initiated discussions about the future of ACAP, recognizing that community stakeholder engagement is critical to articulate and clearly define the components required for program success. [126]

CARE, TREATMENT AND SUPPORT

The abilities of individuals and communities to respond to HIV across the continuum of care must be strengthened. The increasing complexity of the epidemic makes it harder to treat some individuals and to support their caregivers. More and more, people with HIV/AIDS exist outside the social, economic and cultural mainstream of society. As a result, they have difficulty getting the services they need to cope with HIV.

For the Care, Treatment and Support component, activities are presented under the following categories:

- Training of Care Providers;
- Dissemination of Information;
- Needs Assessment Based on Emerging Trends;
- Modalities of Care;
- Modalities of Treatment;
- Modalities of Support;
- Drug Review Process and Post-Approval Surveillance System; and
- Specific Populations.

Training of Care Providers

Health Canada supported training and mentorship programs to assist health care professionals and informal caregivers in providing HIV/AIDS care, treatment and support. [127]

The Canadian Association of Social Workers and the Canadian Psychological Association developed training modules on the psychosocial care and mental health of persons living with HIV/AIDS. [128, 129]

A mentorship model for nurses working with HIV/AIDS patients was developed through a partnership between Canadian Nurses in AIDS Care, the Quebec Order of Nurses, the Canadian Nurses Association and the Victorian Order of Nurses. [130]

Health Canada and the Canadian Association for Community Care developed the eighth module of the "Comprehensive Guide for the Care of Persons with HIV," focusing on HIV home care for families and non-professional caregivers. [131, 132]

CAS developed a project to undertake additional caregivers research. The project will be implemented in the 1999-2000 fiscal year. [133]

Dissemination of Information

The Community AIDS Treatment Information Exchange (CATIE) hosted a workshop to discuss ways to facilitate communication and information exchange between organizations involved in treatment issues at both the national and local level. Several working groups were established, with representation from CATIE, CAS, CTAC and other organizations, to deal with issues such as establishing an electronic forum for treatment advocates. [134, 135, 136]

CATIE gathered information about HIV-treatment issues from published research data, expert opinion and people living with HIV/AIDS. This information was subsequently organized, analysed and reproduced for distribution to diverse audiences. CATIE also organized information workshops and seminars and undertook other outreach initiatives. [137, 138]

The Canadian Treatment Advocates Council developed a plan to increase its regional, provincial/territorial and local membership base. [139, 140, 141]

Needs Assessments Based on Emerging Trends

A national study by the College of Family Physicians of Canada identified trends, changes and emerging issues in HIV care. The study also considered caregivers' experiences related to the use of anti-retroviral drugs and the course of HIV-related infections. [142, 143]

Health Canada funded an assessment of the unique needs of inmates of correctional institutions who are dying from AIDS-related and other terminal illnesses. [144]

Modalities of Care

CAS completed a research project on modalities of care in collaboration with the Canadian Association for Community Care. A new CAS research proposal was approved by the NHRDP for the 1999-2000 fiscal year. [145, 146]

The HIV Education Committee of the Canadian Palliative Care Association was overseeing a project on substance use, HIV and end-of-life or palliative care issues. [147, 148]

CAS developed a Position Statement on Euthanasia and Assisted Suicide. [149]

Modalities of Treatment

A national conference on non-occupational post-exposure prophylaxis was organized by the Federal/Provincial/Territorial Advisory Committee on HIV/AIDS. [150, 151]

CAS began to develop a national workshop on complementary therapies. [152]

CTAC held skills building workshops on treatment advocacy at the 2nd Canadian HIV/AIDS Skills Building Symposium and the conference of the Canadian Association for HIV Research (CAHR). [153]

CTAC held discussions with pharmaceutical companies on a collaborative model for providing compassionate and expanded access to more than one drug in development at a time. CTAC also prepared a position paper on the issue of compassionate/expanded access. [154]

CTAC began to develop a system of provincial Treatment Advocacy Networks. Toward this end, a meeting of provincial representatives was organized to draft terms of reference for such networks. CTAC has committed to provide start-up funds for planning and organizing networks where none currently exist, and to support the existing network in Quebec. [155]

CAS prepared a guide on treatment access issues based on interviews with front-line workers whose clients — people living with HIV/AIDS — had experienced treatment access problems. [156]

Modalities of Support

A booklet to help people living with HIV/AIDS manage their insurance benefits and understand health, disability and life insurance benefits was produced by CAS. The booklet was widely distributed to community-based AIDS organizations, benefits counsellors, pharmaceutical representatives, insurance agents and primary care physicians. [157]

CAS assessed and prioritized recommendations from the Labour Force Participation Project's final report, *Force for Change*. The report recommended that CAS develop partnerships in this area, promote and inventory workplace programs, and fund further research and discussion papers. [158]

The Canadian Council on Social Development conducted a workshop on "Factors Associated with Labour Force Participation Among Persons Living With HIV/AIDS" at the Ninth Canadian Social Policy Conference. The workshop used information from the CAS Labour Force Participation Project. [159]

Staff of CAS participated in consultations on a federal disability strategy, which will outline the future role of the federal government (vis-a-vis the provinces/territories) on disability issues. Among the concerns brought forward by CAS were the need for adequate levels of income support, the portability of disability benefits (such as drug coverage) and the need for a more coordinated disability benefit system. [160]

Drug Review Process and Post-Approval Surveillance System

A report entitled *Timeliness and Transparency: Assessment of the Review and Post Approval Surveillance Process for HIV Drugs* was published by CAS, CATIE and CTAC. The report examines issues related to the drug review process from the perspective of people living with HIV/AIDS and community-based AIDS organizations. The report provided recommendations for reform of the drug review process in Canada and for the creation of a comprehensive, consumer-driven post-approval surveillance system. [161, 162, 163]

CTAC and other stakeholders promoted change in the drug regulatory process by participating in public actions (petitions and demonstrations at the XII International Conference on AIDS in Geneva, Switzerland) and letter writing. [164, 165]

Health Canada's Health Protection Branch (HPB) organized a meeting in August 1998 to hear stakeholder concerns and feedback about the drug review process. CAS, CTAC, CATIE and other organizations participated in the meeting. [166, 167, 168]

CTAC and CAS participated in a working group established by the HPB to make recommendations about this issue.

CTAC met with stakeholders (e.g., pharmaceutical companies, pharmacists and physicians) to develop a pilot study to evaluate consumer-driven methods of collecting post-approval information on drug effects. CTAC subsequently began working with the Community Research Initiative of Toronto to develop the protocol for the pilot study. [169, 170]

With support from CAS, CTAC developed a strategy for working with the Patented Medicine Prices Review Board (PMPRB), which assesses prices for patented medicines in Canada. Based on a CTAC challenge, the Board issued a non-binding decision that found the price for one medicine to be excessive (the Board cannot issue a final ruling until a patent is awarded).

Specific Populations

The Calgary Urban Aboriginal Outreach Project established linkages with other services, both Aboriginal and non-Aboriginal, to improve access to care and support services for First Nations, Inuit and Métis people. [171, 172]

The Canadian Working Group in HIV and Rehabilitation developed guidelines for policies on rehabilitation services and return-to-work for persons living with HIV/AIDS. [173, 174, 175]

The Federal/Provincial/Territorial Advisory Committee on HIV/AIDS assessed progress in implementing the National Action Plan on HIV/AIDS and Drug Use. [176]

LEGAL, ETHICAL AND HUMAN RIGHTS

Fear, stigma and discrimination — unfortunately HIV/AIDS still evokes these reactions in Canada and around the world. A key component of the Canadian Strategy on HIV/AIDS is to address HIV/AIDS legal, ethical and human rights issues, and to protect and advance the human rights of people living with or affected by HIV/AIDS.

For the Legal, Ethical and Human Rights component of the CSHA, activities are presented under the following categories:

- New Component of the CSHA;
- Strategic Planning;
- Research and Analysis;
- Information Dissemination;
- Policy Development/Advocacy;
- Test Cases; and
- Partnerships.

New Component of the CSHA

Legal, ethical and human rights issues were included as a separate component of the new Canadian Strategy on HIV/AIDS. [177, 178, 179, 180, 181, 182, 183]

Strategic Planning

The Canadian HIV/AIDS Legal Network developed a strategic plan for the Legal, Ethical and Human Rights component of the CSHA, based on national consultations involving more than 70 meetings and 60 organizations across Canada. The plan is set out in the Legal Network document, *Legal Ethical and Human Rights Issues Raised by HIV/AIDS: Where Do We Go From Here? Planning for 1998-2003*. [184, 185]

Research and Analysis

The Canadian HIV/AIDS Legal Network produced three reports to help ensure that policy and legal responses to HIV/AIDS:

- respect the rights of people living with HIV/AIDS;
- facilitate HIV prevention efforts; and
- facilitate efforts to provide care, treatment and support to people living with HIV/AIDS. [186, 187]

A national workshop was held by the Legal Network on the implications of the *R. v. Cuerrier* decision, which involved the use of the assault provisions of the *Criminal Code* to criminalize non-disclosure of HIV-positive status (see Test Cases below). Reports and fact sheets were also produced. [188, 189]

Information Dissemination

The Canadian HIV/AIDS Legal Network continued to disseminate information on HIV/AIDS legal, ethical and human rights issues. For example:

- three discussion papers were produced during 1998-89: *Discrimination, HIV/AIDS and Aboriginal People*; *Problems of Jurisdiction and Funding*; and *HIV Testing and Confidentiality Issues for the Aboriginal Community*. Information sheets were also produced on various issues addressed in these papers. [190, 191, 192]

The Legal Network published articles on HIV/AIDS in prisons in the *Canadian HIV/AIDS Policy and Law Newsletter* and made presentations at the XII International Conference on AIDS in Geneva.

In partnership with CAS, the Legal Network developed information sheets on gay and lesbian legal issues and HIV/AIDS, HIV testing and confidentiality, and HIV/AIDS in prisons.

Injection Drug Use and HIV/AIDS: Legal and Ethical Issues, a 116-page report with 66 recommendations, was published by the Legal Network. A volume of background materials was also published, along with a series of information sheets on legal, ethical and policy issues related to injection drug use and HIV/AIDS. [193]

A fact sheet on the implications of immigration policies for persons living with HIV/AIDS was produced and distributed by CAS. [194, 195]

A synopsis of the booklet *Countries with HIV-Related Entry Restrictions* was distributed to CAS members, along with an order form. Produced by the Travel Medicine Bureau of Health Canada, the booklet describes entry restrictions for persons living with HIV/AIDS wishing to travel outside Canada. [196, 197]

Policy Development and Advocacy

Officials of CAS and the Department of Citizenship and Immigration met to review Canada's policy on HIV/AIDS and immigration and to discuss potential changes. [198, 199]

Both CAS and the Legal Network wrote to the Department of Citizenship and Immigration to comment on proposed changes to the *Immigration Act*, which had serious implications for people living with HIV/AIDS planning to immigrate to Canada. [200, 201]

Test Cases

R. v. Cuerrier: In the Cuerrier case, the Supreme Court of Canada ruled that a person living with HIV/AIDS may be found guilty of assault if he or she has unprotected sexual intercourse without disclosing their HIV-positive status. The Canadian HIV/AIDS Legal Network produced a discussion document and held community meetings on the Supreme Court decision against Cuerrier and its implications for people living with HIV, health care workers, and workers in AIDS service organizations. [202, 203]

Little Sisters Bookstore: CAS was granted intervener status in the Little Sisters Bookstore case, to be heard by the Supreme Court of Canada. This case deals primarily with the issue of Customs Canada blocking sexually explicit HIV/AIDS information at the border.

CAS was also granted intervener status by the Supreme Court of Canada in the Latimer case, which deals with the issues of euthanasia and assisted suicide.

Partnerships

A partnership was formed between the Canadian HIV/AIDS Legal Network and the Canadian Aboriginal AIDS Network to complete work on legal issues relating to HIV/AIDS in Aboriginal populations. [204, 205, 206]

The Legal Network also developed a partnership agreement with the AIDS Law Project in South Africa, along with a proposal for specific activities. [207]

Focus on Aboriginal Communities

Since 1984, the number of reported AIDS cases among Aboriginal Canadians has risen steadily. Although Aboriginal men who have sex with men still represent a high percentage of Aboriginal HIV infections, rates are rising quickly for Aboriginal injection drug users and women, followed by the under-thirty age group. As with all populations threatened with HIV, knowledge is key to prevention and effective treatment. Aboriginal peoples have been working to address these issues. Funds have been allocated to prevention, care, treatment and support initiatives for Aboriginal peoples living on-reserve and in urban settings and for the Inuit, with an emphasis on activities which increase the ability of Aboriginal communities to respond to HIV/AIDS issues.

For the Focus on Aboriginal Communities component, activities are presented under the following categories:

- New Component of the CSHA;
- Surveillance;
- Community Development;
- Legal Issues;
- Jurisdictional, Program and Organizational Coordination and Collaboration ;
- Research; and
- Specific Issues.

(Aboriginal HIV/AIDS programming activities are also included under several other program components.)

New Component of the CSHA

This is one of three new components of the Canadian Strategy on HIV/AIDS (i.e., it did not exist as a separate component of the previous National AIDS Strategy). This component complements the First Nations and Inuit HIV/AIDS Program of the Medical Services Branch (MSB) of Health Canada. Within MSB, the HIV/AIDS Focus Group developed an operational plan outlining key activities. [208, 209, 210]

Surveillance

The Health Protection Branch of Health Canada continued to monitor the HIV epidemic among Aboriginal Canadians. This task is difficult due to such factors as under-reporting of ethnicity, delays in reporting HIV/AIDS status, transient residency and concerns about confidentiality. [211, 212]

Health Canada's Laboratory Centre for Disease Control (LCDC) collected, analysed, synthesized and disseminated data on risk behaviours and HIV/AIDS testing among Aboriginal sub-populations. As a result of this work, Aboriginal communities and public health officials have shifted additional resources into prevention programs directed at injection drug users and women. [213]

The Aboriginal Working Group on HIV/AIDS Epidemiology and Surveillance assisted Health Canada in interpreting data relevant to Aboriginal people and in disseminating the results at regional, national and international meetings. [214]

Health Canada's Bureau of HIV/AIDS, STD and TB continued to publish reports and make presentations to increase public awareness of the epidemiology of HIV among Aboriginal people in Canada. [215]

Community Development

The Canadian Aboriginal AIDS Network, Health Canada and the National Aboriginal Reference Group on HIV/AIDS undertook consultations to develop administrative guidelines for managing Aboriginal HIV/AIDS project funding in non-reserve urban and rural areas. The National Round Table Discussions were held to facilitate the development of funding guidelines and criteria. [216, 217, 218]

Twenty-one projects addressing HIV/AIDS issues across Canada were funded through the non-reserve allocation. For example, the Manitoba Aboriginal AIDS Task Force began developing a peer education project to address injection drug use issues for street-involved Aboriginal youth. [219]

"HIV/AIDS Community Building" was the theme for the CAAN Skills Building Forum 1999. The theme was designed to integrate Aboriginal beliefs and healing practices and to fortify the need to reconnect with the teaching and traditions of Aboriginal ancestors.

Legal Issues

CAAN and the Canadian HIV/AIDS Legal Network produced a series of nine information sheets on Aboriginal people and HIV/AIDS legal issues. Topics included human rights law, dealing with discrimination, jurisdictional barriers, confidentiality and access to HIV testing.

Jurisdictional, Program and Organizational Coordination and Collaboration

The Canadian Aboriginal AIDS Network organized the annual Aboriginal AIDS Awareness Day to increase knowledge and understanding of HIV/AIDS issues among Aboriginal leaders and communities. [220, 221, 222]

The Indigenous People's Forum was an official satellite to the AIDS Impact Conference held in July 1999. The theme for the 135 participants was "Hands Across the World," an attempt to symbolize the unity of Aboriginal people regardless of their country of origin. The Forum's goal was to examine the struggle against HIV/AIDS by Indigenous people in an international context.

Research

Research on HIV/AIDS in Aboriginal People: A Background Paper — Final Report was prepared by the Northern Health Research Unit at the University of Manitoba. The paper was developed to assist Aboriginal stakeholders, researchers and governments in establishing HIV/AIDS research priorities. [223]

CAAN conducted a social marketing assessment to examine HIV/AIDS information sources for Aboriginal people, the effectiveness of that information, and levels of knowledge and awareness about HIV/AIDS issues.

Specific Issues

Health Canada provided support to the Two- Spirited People of the First Nations to develop a needs assessment of issues facing two-spirited men in Canada. [224, 225]

INTERNATIONAL ACTION ON HIV/AIDS

HIV/AIDS remains a truly worldwide issue that respects no boundaries. The Strategy's international component focuses on increasing coordination of Canadian international HIV/AIDS activities, strengthening information sharing with other countries and international organizations, building the capacity of Canadian NGOs, and enhancing collaboration among participating groups, individuals and departments and agencies (e.g., the Canadian International Development Agency).

HIV/AIDS has become a global epidemic since its identification over 20 years ago. At the end of 1998, the United Nations Joint Program on HIV/AIDS (UNAIDS) estimated that more than 33 million people around the globe are living with HIV/AIDS, an increase of 5.8 million in one year. Every minute of every day 11 people contract the virus. Today it is considered the single greatest international threat undermining developmental gains in life expectancy, infant and child survival rates, and skilled labour forces. Ninety-five per cent of the HIV infections and AIDS deaths occur in the developing world and controlling the spread of the virus has major implications for public health, humanitarian and human rights, and sustaining social and economic viability.

For the International Action on HIV/AIDS component, activities are presented under the following categories:

- Identifying Participants and Activities;
- Developing Partnerships;
- Disseminating Information; and
- Projects.

Identifying Participants and Activities

Health Canada, through the International Affairs Directorate, which is responsible for the international collaboration component of the Strategy, formed a Working Group on International HIV/AIDS Issues to facilitate a more collaborative approach among federal departments and agencies and NGOs dealing with international issues. [226, 227, 228, 229]

Canada's active participation in the global response to the HIV/AIDS epidemic led to the development of a manual to enhance the capacity of Canadian NGOs to undertake twinning projects with organizations in other countries. *Beyond Our Borders: A Guide to Twinning for HIV/AIDS Organisations*, was developed by the Interagency Council on AIDS and Development, with funding support from Health Canada. [230, 231, 232, 233]

The participation of the Minister of Health and other Canadian delegates at the XII International Conference on AIDS reinforced Canada's commitment to global efforts. Canadian agencies were actively engaged in a diverse range of global projects and activities to reduce the transmission of HIV and to enable countries and communities to mitigate the negative impacts of HIV and AIDS. [234]

The Interagency Coalition on AIDS and Development continued to participate in various networks, organizations and working groups to keep informed about developments and initiatives, contribute to advocacy initiatives and influence policy and decision-makers. ICAD consulted and networked with the International Council of AIDS Service Organizations (ICASO); the North American Council of AIDS Service Organizations (NACASO); the Health Canada Working Group on International HIV/AIDS Issues; the Canadian Working Group on Children and Families Affected by HIV/AIDS; the Children and AIDS International NGO Network (CAINN); and the Non-governmental Delegation to the UNAIDS Programme Coordinating Board. ICAD also interacts on HIV/AIDS issues with international development organizations in the Netherlands, Australia, the United States and the United Kingdom. [235]

International activities of CAS included:

- representing Canada on the International Council of AIDS Service Organizations;
- participating in the activities of the North American Council of AIDS Service Organizations;
- membership on the International Steering Committee at Health Canada;
- partnerships with international NGOs such as ICAD;
- contributing to preparations for the XII International Conference on AIDS in Geneva;
- producing a paper on the barriers and challenges of doing international HIV/AIDS work, based on a survey of members; and
- co-sponsoring the International AIDS Candlelight Memorial. [236]

Developing Partnerships

Health Canada continued to develop partnerships and other mechanisms to enhance Canada's international role and influence in the global response to HIV/AIDS. For example, a partnership with UNAIDS led to the development of the first international policy dialogue on HIV/AIDS, jointly hosted by Canada, in the fall of 1999. [237, 238, 239, 240] ICAD completed a survey to develop an inventory of international HIV/AIDS projects undertaken by Canadian organizations, to facilitate networking and the development of partnerships. [241, 242, 243, 244]

The Canadian HIV/AIDS Legal Network and the AIDS Law Project in South Africa developed a partnership agreement that is essentially a declaration of global solidarity and an intent to work together for mutual benefit. A list of possible joint activities was drafted and a proposal was developed for the period 1999-2000.

Disseminating Information

Health Canada developed a communications plan to ensure that information about the CSHA is communicated to the international community, as well as Strategy partners and the Canadian public. Toward this end:

- a special logo was created and the CSHA web site (www.aidsida.com) was redesigned;
- activities related to the XII International Conference on AIDS in Geneva reached an estimated 600 000 Canadians; and

- ICAD, in collaboration with Health Canada, produced and distributed *Canada's International Response to HIV/AIDS*, a compendium of international initiatives supported by Canadian NGOs, universities, research institutes and government departments and agencies. [245]

ICAD maintained a small resource centre of materials (books, papers, articles, technical manuals, videos, etc.) on the international dimension of the AIDS pandemic and HIV/AIDS and development. [246]

The 8th Canadian Conference on HIV/AIDS Research was held, using the theme "The Shifting Epidemic: Research Directions for the New Millennium." The conference addressed a broad range of basic, clinical, epidemiological and social science issues. [247]

The International Council of AIDS Service Organizations made a statement to the World Health Assembly in support of a resolution on the Revised Drug Strategy. ICASO's statement called for improved access to medications for those living with HIV/AIDS and asserted that price should not be the sole determining factor for access. [248]

HIV/AIDS and Human Rights: Stories from the Frontlines was released at ICASO's annual general meeting to raise awareness that human rights protection is vital to slowing the spread of HIV/AIDS. [249]

Some 1 000 people from 48 countries participated in "AIDS Impact 99," a multi-disciplinary international forum organized by ICASO to bring research into practice and to deliver expertise to the frontlines. [250]

Health Canada and UNAIDS co-sponsored a conference entitled "Dialogue on HIV/AIDS: Policy Dilemmas Facing Governments." The goal of the conference, which involved mainly high-income countries, was to foster the development and implementation of more effective public policies on HIV/AIDS and the emergence of an international network to support national and international policy development. [251]

Projects

ICAD, the University of Victoria's Unit for Research and Education on the Convention on the Rights of the Child and the International Development Research Centre began to develop a project that will use the Convention on the Rights of the Child as a framework for documenting at the community level:

- the needs of AIDS-affected children around the world;
- gaps in knowledge and services in responding to these needs;
- best practices in responding to these needs; and
- recommendations for future action.

The project will result in a set of guidelines to facilitate a more effective response at all levels to the needs of HIV/AIDS-affected children. [252]

Health Canada participated in a planning committee for the 3rd International Satellite on HIV Prevention Works to be held during the XIV International Conference on AIDS.

To promote support for and involvement in international HIV/AIDS work, Health Canada's International Affairs Directorate and the Interagency Coalition on AIDS and Development co-sponsored a one-day forum on "Canada's Global Response to HIV/AIDS" as part of CAS's 2nd Canadian HIV/AIDS Skills Building Symposium (November 1999). The forum provided important information about the current status of HIV/AIDS internationally; why Canadian AIDS service organizations and NGOs should engage in international work; the opportunities for international involvement; the range of activities currently being undertaken by Canadian groups; and the benefits of this work for Canadian and overseas organizations. Participants included representatives of two dozen organizations from across Canada.

RESEARCH

Canadian research has helped reduce the number of new HIV infections, as well as improve the quality of life for many people living with HIV and AIDS. Yet much still needs to be learned about this complex disease and the best ways to respond to it. The CSHA funds a broad range of research and surveillance activities that are increasing our understanding of the social, economic, biomedical, clinical, health and public policy aspects of HIV/AIDS. This understanding will help improve not just HIV/AIDS treatment, but also programs for youth at risk, family caregivers, social support networks, and other groups affected by HIV/AIDS.

For the Research component, activities are presented under the following categories:

- Funding Streams and Advocacy;
- Projects;
- Dissemination of Results; and
- Research Planning.

Funding Streams and Advocacy

The Medical Research Council and National Health Research and Development Program continued to fund a wide range of extramural HIV/AIDS research. The MRC funded biomedical and clinical HIV/AIDS research and personnel awards, and the NHRDP funded projects and personnel awards in the areas of health services, population health, and psychosocial and behavioural research. The NHRDP also delivered the Aboriginal Research Program and the Community-Based Research Program, and provided funding for the Canadian HIV Trials Network.

The Canadian HIV Trials Network continued to support clinical trials of HIV/AIDS therapies and vaccines in Canada. [253, 254] By March 31, 1999, the CTN and its committees had reviewed 135 submissions, implemented 56 submissions and completed 44 trials. A total of 6 900 Canadians had enrolled in these trials, and another 9 900 Canadians had enrolled in expanded access programs facilitated by the CTN. [255]

The Federal/Provincial/Territorial Advisory Committee on HIV/AIDS initiated a research study on the cost and accessibility of HIV therapy. [256, 257]

At the end of the 1998-99 fiscal year, $1.8 million in unspent CSHA research funding was carried forward into the next fiscal year. This decision was due in part to advocacy by CAS and its members, as well as other NGOs and the Ministerial Council on HIV/AIDS. [258]

Staff of CAS, the Ministerial Council and the NHRDP met to discuss the issue of funding for community-based research. Community groups were advised of the availability of $1 million in funding for HIV/AIDS community-based research and of the four deadlines for proposals. Few proposals were submitted. [259]

In May 1999, the NHRDP held a two-day consultation in Victoria, B.C., with approximately 55 national stakeholders. The purpose of the consultation was to begin redesign of the Community-Based Research Program. [260]

Projects

Table 4 summarizes available information on research funded by the Canadian HIV Trials Network.

Information on HIV/AIDS research funded by the Medical Research Council is provided in Table 5.

Table 6 identifies HIV/AIDS research projects funded by the National Health Research and Development Program.

Dissemination of Results

The CTN published the results of 25 clinical trials. [261]

Approximately 500 HIV/AIDS research articles were published arising from projects funded by the MRC in 1998-99.

The results of more than 200 scientific investigations were presented at the Canadian Association for HIV Research conference in Vancouver.

Research Planning

Health Canada organized a two-day multi- sectoral meeting to discuss key issues in the area of HIV prevention research and to identify priority areas and issues for the next several years. This meeting resulted in the creation of a national prevention research reference group. [262]

Table 4: CTN Research Grants and Awards [263]

The CTN is participating in Canada's first HIV vaccine trial, involving 300 volunteers in Vancouver, Toronto and Montreal. The study is part of a larger international investigation involving 5 000 North American volunteers who engage in high-risk sexual behaviour.
The CTN conditionally approved five new trials involving: twice daily indinavir and ritonavir (CTN 143); ril-2 (CTN 145, SILCAAT Study); gender differences in lipodystrophy syndrome (CTN 148); intermittent rifabutin for MAC and TB (CTN 117); and Virulizin-2-Gamma (CTN 104).
The CTN is supporting a 28-week study to determine if a once-daily combination of four drugs (adefovir, didanosine, lamivudine and nevirapine) has antiviral effects equivalent to the common regimens of zidovudine or stavudine, plus lamivudine, combined with indinavir or nelfinavir or saquinavir.
The CTN has established a collaborative relationship with the American-based Community Programs for Clinical Research on AIDS to undertake marijuana clinical trials (CTN 102).

Table 5: MRC Research Grants and Awards [264]

As a result of funding delivered by the MRC in 1998-99, an additional 28 Canadian researchers receiving training and salary support for HIV/AIDS research. The total number of Canadian researchers being trained in HIV/AIDS research is now estimated to be 186.
The MRC funded 43 world-class research projects to produce new ideas, knowledge and insights that will contribute to international efforts to find a cure and provide effective vaccines, drugs and therapies. This includes the efforts of seven well-established investigators at the McGill AIDS Centre who examined mechanisms regulating HIV gene expression, latency and persistence.

Table 6: NHRDP Research Grants and Awards [265]

Canadian Women's HIV Study/Étude Canadienne des femmes infectées par le VIH — Catherine Hankins, Hôpital Sainte-Justine
Étude de l'incidence des déterminants psychosociaux de l'infection au VIH chez les hommes homosexuels et bisexuels de Montréal (OMEGA) — Michel Alary, Hôpital du St-Sacrement
Role of Syringe Access and Risk Factors for HIV Transmission: The Saint Luc Cohort — Julie Bruneau, Centre de recherche du CHUM Campus Saint-Luc
Empowerment des jeunes gais, lesbiennes et bisexuels: analyse d'implementation et effets du projet "Safe Space" dans quatre villes canadiennes — Joanne Otis, Université du Québec à Montréal
Development of a Novel and Improved HIV-1 Vaccine Efficacy Measure — Marie-Claude Boily, Centre hospitalier affilié universitaire de Québec
Representation sociale des nouvelles thérapies contre le VIH/sida répercussions sur le vécu d'hommes ayant des relations sexuelles avec d'autres hommes — Joseph Levy, Université du Québec à Montréal
Polaris HIV Seroconversion Study — Liviana Calzavara, University of Toronto
A Qualitative Study of the Psychosocial Factors Affecting Return to Work from Long Term Disability for People Living with HIV/AIDS — Sue Ferrier, Institute for Work and Health
The Economic Impact of HIV Infection in a Region of Canada — John Gill, University of Calgary
Investigations into Sexual Behaviour and Determinants of HIV Incidence and Progression Among Gay and Bisexual Men — Robert Stephen Hogg, University of British Columbia
A Comparison of Strategies for Containing HIV Epidemics Among Injection Drug Users — Janet Marie Raboud, University of British Columbia
The Economic Costs and Resource Impacts of HIV/AIDS in British Columbia: The Community Health Resource Project — Robin A. Hanvelt, University of British Columbia

HIV/AIDS SURVEILLANCE

Like research, surveillance is critical to combat the HIV epidemic. Indeed, early and accurate reporting can prevent or limit HIV outbreaks. Yet the stigma and ostracism attached to HIV/AIDS still discourage many HIV-infected Canadians from reporting their infection. Early, accurate and ongoing reporting has proved to be critical to preventing and containing outbreaks of HIV.

For the Surveillance and Laboratory Science component, activities are presented under the following categories:

- Surveillance;
- Research Into Psychosocial and Behavioural Risk Factors;
- Testing Technologies and Policies;
- Quality Assurance and Diagnostic Services;
- Information Dissemination; and
- Community Consultation.

Surveillance

A national consultation meeting was held in early 1999 to discuss the proposed Integrated National Health Surveillance Network for Canada. The network is being designed as part of the federal government's commitment to improve access to medical information for all Canadians. At the meeting, staff of CAS expressed concerns about how, and to what extent, privacy and confidentiality would be protected in such a network. A follow-up meeting was held at the end of March 1999. [266]

Research Into Psychosocial and Behavioural Risk Factors

Health Canada supported the psychosocial and behavioural component of the Polaris HIV Seroconversion Study (see Table 4). Support was also provided for research into HIV testing; the quality of counselling and barriers to HIV risk reduction. [267, 268, 269, 270]

Health Canada supported the development of a mechanism to translate research findings from the Omega Cohort Study (see Table 4) into direct and targeted prevention programming for men who have sex with men. [271, 272, 273, 274]

Testing Technologies and Policies

The Canadian HIV/AIDS Legal Network consulted its members, national stakeholder organizations and Health Canada to determine which new and emerging issue the Network should focus on in 1999-2000. As a result of this process, the Legal Network began a comprehensive analysis of the selected issue — rapid testing.

CAS monitored clinical trials by a pharmaceutical company of an HIV rapid test kit in point-of-care situations. The trial is verifying the reliability of the kit by collecting samples from both known and unknown HIV-status individuals. Once approved, the test kit will be available for use by medical professionals. [275]

HIV rapid test kits were discussed at a meeting hosted by the Medical Devices Bureau of Health Canada's Laboratory Centre for Disease Control. CAS urged LCDC to organize a larger meeting as soon as possible to discuss the potential harms and benefits of such kits. CAS also wrote a joint letter with the Canadian HIV/AIDS Legal Network requesting further consultations as soon as possible. [276]

The Canadian HIV/AIDS Legal Network held a national meeting to follow up on the *Final Report on Testing and Confidentiality*. Groups from across Canada discussed priority issues such as immigration policy, rapid testing and the impact of the *R. v. Cuerrier* decision on community-based AIDS organizations. [277]

Quality Assurance and Diagnostic Services

Health Canada enhanced its surveillance capabilities for at-risk groups to support evidence-based policy and program development. [278]

Improvements were also made to Health Canada's HIV/AIDS Case Reporting Surveillance System. Specifically, information gaps in relation to First Nations, Inuit and Métis people were addressed in collaboration with the Aboriginal Working Group on HIV/AIDS Epidemiology and Surveillance. [279]

The Correctional Service of Canada created a working group to develop an automated surveillance system for HIV and other infectious diseases in federal correctional facilities. [280]

Health Canada provided quality assurance and monitoring programs to support physician and provincial testing laboratories. Quality assurance programs for HIV serology and viral load ensured that other Canadian HIV diagnostic laboratories and HIV clinical monitoring sites had access to high quality methods. This led to fewer errors in immune status monitoring. [281]

Health Canada provided diagnostic testing of difficult samples for determination of HIV status, to ensure that Canadians were obtaining timely and reliable treatment. As well, Health Canada's National Laboratory for Analytical Cytology provided accurate monitoring of the impact of anti-retroviral drug regimes for progression and manifestation. [282]

Information Dissemination

Health Canada published epidemiological information in various reports, such as *HIV/AIDS Epi Updates*, the *Inventory of HIV Incidence and Prevalence Studies in Canada*, and the *HIV/AIDS Surveillance Report*. [283]

Health Canada's Bureau of Epidemiology and Surveillance provided technical expertise and new information on HIV epidemiology and surveillance to policy makers, infected communities, public health and government officials, and the Canadian public. [284]

Community Consultation

Staff of CAS and Health Canada's Bureau of HIV/AIDS, STD and TB met to discuss the report from the Community Consultation on Surveillance Initiatives, carried out by the Health Protection Branch. The report includes recommendations on the needs of AIDS service organizations with respect to epidemiological and surveillance information. [285]

CAS participated in an advisory committee developing input for the National Epidemiology Meeting held in November 1998. Among the issues raised by CAS were the lack of available data on women and HIV/AIDS and the omission of new information on federal prisoners. CAS presented information at the meeting on community perspectives on epidemiological trends and surveillance needs, as reported during the Community Consultation on Surveillance Initiatives. Also at the meeting, Health Canada's Division of Epidemiology released a new *Epi Update* on seroprevalence and seroincidence of HIV/AIDS.

PRISONS

As part of its National HIV/AIDS Program, the Correctional Service of Canada (CSC) continued to develop and implement initiatives aimed at preventing the transmission of HIV and at reducing the harm associated with high-risk behaviour. Evidence indicates that some inmates continue to engage in high-risk behaviour such as needle sharing, tattooing and unprotected sex. Aboriginal people and injection drug users are over-represented in the prison population. Addressing the needs of these "hard-to-reach" marginalized populations within the correctional environment is a primary focus for CSC. There should be recognition that offenders will, for the most part, reintegrate into the general population when released and while it is CSC's role to care for HIV-positive offenders while in custody, the population-at-large is where they will return. Finally, it should be noted that HIV prevalence rates in Canadian prisons are estimated to be 10 times higher than in the population-at-large.

For the Prisons component, activities are presented under the following categories:

- Education and Awareness Programs;
- Surveillance;
- Care, Treatment and Support;
- Strategic Planning;
- Training for Staff in NGOs; and
- Advocacy.

Education and Awareness Programs

The Correctional Service of Canada enhanced education and awareness programs for inmates and staff in federal correctional institutions. New initiatives included the implementation of a peer education and counselling program. [286]

An anonymous testing and counselling pilot project was initiated at a federal institution in Prince Albert, Saskatchewan. [287]

Inmates at Donnaconna Institution in Quebec developed and published a comic book for inmates discussing HIV in prison. [288]

Surveillance

The results of an HIV outbreak investigation at Springhill Institution in Nova Scotia enhanced the CSC's capacity for informed policy making to manage future outbreak activities. [289]

Care, Treatment and Support

CSC initiated a National Palliative Care Committee to develop standards of care, treatment and support for inmates requiring palliative interventions. [290]

Methadone maintenance treatment programs were made available for opioid-dependent inmates who were previously in a community methadone maintenance program. [291]

Strategic Planning

Work continued within CSC on a strategic action plan to respond to certain recommendations set out in the document *HIV/AIDS in Prisons: Final Report*. [292]

CSC organized a Round Table on Aboriginal Prisoners and HIV/AIDS, with participation by CAS, the Canadian HIV/AIDS Legal Network and others. As a result, a working group was established to draft an action plan on this issue. [293, 294]

CSC continued to address issues related to confidentiality, disclosure of information and "duty to warn". [295]

Training for Staff in NGOs

CAS participated in the advisory committee for the National Prison Training Project, which offered training on prison outreach and advocacy to staff at one AIDS service organization per region. The project, which ended in November 1999, was coordinated by the Prisoners' AIDS Support Action Network (PASAN) and funded by ACAP. [296]

Advocacy

PASAN, the Canadian HIV/AIDS Legal Network and CAS issued a joint news release on the issue of hepatitis C and HIV in federal prisons. [297]

PASAN and CAS collaborated on a letter writing campaign to the Solicitor General of Canada advocating the implementation of harm reduction programs and a pilot needle exchange program in federal correctional facilities. [298]

CAS and PASAN monitored CSC's commitment to harm reduction and gathered information for use in further advocacy initiatives. [299]

CAS surveyed its member groups in November 1998 to determine the extent to which they provide HIV/AIDS services to inmates in federal and provincial prisons. The results were published in the document *Inventory of CAS Member Groups' Activities in HIV/AIDS in Prisons*. [300]

CAS, PASAN and the Canadian HIV/AIDS Legal Network requested a meeting with the new Solicitor General appointed in November 1998 to discuss the need to accelerate the introduction of harm reduction programs in federal prisons. [301]

STRATEGIC MANAGEMENT, COORDINATION, EVALUATION AND MONITORING

The Canadian Strategy on HIV/AIDS is built on a clear premise: the complexity and extent of Canada's HIV epidemic demands unprecedented cooperation and collaboration. Addressing the full range of issues and challenges requires that all voices in Canada's HIV/AIDS community are at the table early in the decision making process, and that final decisions embody shared understanding and hope. At the same time, Canadians expect full reporting and accountability to ensure that Strategy objectives are met.

For the Strategic Management, Coordination, Evaluation and Monitoring component, activities are presented under the following categories:

- Establishment of the CSHA;
- Management and Coordination; and
- Private Sector.

Establishment of the CSHA

The Canadian Strategy on HIV/AIDS was launched by the Minister of Health at a news conference in Ottawa on May 28, 1998. The CSHA policy document, *The Canadian Strategy on HIV/AIDS: Moving Forward Together*, was unveiled at this time. As well, a news release and various fact sheets on HIV/AIDS and the CSHA were distributed to the media. [302, 303]

Health Canada published *Renewing Canada's Strategy on HIV/AIDS: Successes, Barriers and Lessons Learned*, a report on the national consultation process leading up to the CSHA. The process is seen as a possible model for involving stakeholders in public policy development on health and social issues. [304]

Redesign of the CSHA web site and creation of a CSHA logo led to increased awareness of the Strategy, broader distribution of Strategy information and increased public accountability. [305]

Management and Coordination

A network of committees was established to ensure effective coordination of the CSHA and to support a pan-Canadian approach to address HIV/AIDS. Within the federal government, the Inter-Branch Strategy Team and Inter-Branch Committee on HIV/AIDS and Aboriginal Peoples oversee and coordinate Health Canada and Correctional Service of Canada activities. The following committees were established to foster linkages and partnerships among key stakeholders:

- the Ministerial Council on HIV/AIDS;
- the Federal/Provincial/Territorial Advisory Committee on HIV/AIDS;
- the Federal/Provincial/Territorial Heads of Corrections Working Group on HIV/AIDS;
- the National Aboriginal Reference Group on HIV/AIDS;
- the Interdepartmental Coordinating Committee on HIV/AIDS; and
- the Working Group on International HIV/AIDS Issues. [306, 307]

In 1998-99, the Ministerial Council on HIV/AIDS:

- established three standing committees (monitoring and evaluation, championing and visioning) and a special working group on Aboriginal issues;

- developed a visioning statement;
- developed a framework for monitoring the CSHA;
- worked with the NHRDP to design community-based and Aboriginal research programs;
- developed recommendations on unspent CSHA research funds;
- participated in a working group on the drug review process in Canada, including post-approval surveillance; and
- influenced the development of the CSHA Performance Reporting Framework (see next bullet). [308]

Health Canada and CSC prepared an Accountability Framework for the CSHA.

A working group was established to develop strategic directions for the regional offices of Health Canada's Health Promotion and Programs Branch and to recommend revised roles and responsibilities under the CSHA. A paper was developed outlining a process to be undertaken to achieve this mandate. [309]

The Program Evaluation Division at Health Canada developed the CSHA Performance Reporting Framework, which was completed in February of 1999, and the first annual report for the CSHA.

In 1998-99, the Federal/Provincial/Territorial Advisory Committee on HIV/AIDS:

- developed an environmental scan to identify gaps, duplications and cross-jurisdictional issues in providing HIV/AIDS services to Aboriginal people;
- established a formal relationship with the Federal/Provincial/Territorial Heads of Corrections Working Group on HIV/AIDS to ensure close collaboration on issues affecting incarcerated populations; and
- published *Intergovernmental Collaboration on HIV/AIDS: A Discussion Paper*, as a companion document to *Intersectoral Action Toward Population Health*, a report developed by the Advisory Committee on Population Health. [310]

Private Sector

Health Canada completed secondary research on attitudes about HIV/AIDS in Canada's corporate sector. Based on the results of this research, the document *The Business Case for HIV/AIDS* was revised to reflect current statistics, trends and needs. This exercise led to increased corporate participation in addressing HIV/AIDS and minimizing the impact of HIV/AIDS on individuals and communities (e.g., the development of workplace policies, rehabilitation services and return-to-work initiatives). [311]

CHAPTER 4

Key Trends in HIV/AIDS in Canada

INTRODUCTION AND TENTATIVE CONCLUSIONS

As reported in Chapter 3, process indicators are being developed and used to monitor progress toward the goals set out in the CSHA. As well, a number of evaluation studies that are in the planning or implementation stages will help inform Canadians about the impacts of key Strategy activities and components in the years ahead.

Nevertheless, the ultimate measures of progress toward the CSHA's goals are:

- the incidence and prevalence of HIV;
- the incidence and prevalence of AIDS,
- AIDS-related premature mortality; and
- the quality of life for people living with HIV/AIDS.

These indicators have been used historically to monitor changes in the epidemic in Canada and, as such, can provide a framework for measuring the impact and success of the current Strategy. However, since the CSHA is in its initial stages of implementation, it would be premature to attribute current long-range trends or outcomes to specific Strategy activities. Accordingly, the intent of this chapter is to summarize existing baseline data that can be used to monitor future progress. (See Appendix 1 for a complete description of these outcome indicators and related data sources.)

As will be described in this chapter, the epidemic continues to evolve, resulting in constantly changing needs for the different groups affected by HIV/AIDS, as well as new challenges for policy makers, physicians and caregivers, researchers and others. However, there is sufficient evidence to draw the following tentative conclusions about the epidemic:

- **HIV Diagnoses (Positive Test Reports):** A cumulative total of 45 534 positive HIV tests were reported in Canada up to December 31, 1999. Although the cumulative number of diagnoses continues to increase, the number of new diagnoses has shown signs of abating somewhat in recent years. In 1999, 2 231 positive HIV tests were reported, as compared with 2 989 positive test reports during 1995. During 1999, the largest proportion of positive tests was attributed to MSM (37.1 per cent), followed by heterosexual transmission (28.9 per cent) and IDU (28.3 per cent). From 1995 to

1999, the proportion of positive tests accounted for by MSM continued to decline steadily, while the proportion of new diagnoses attributed to IDU and, in particular, to heterosexual contact increased. There were increases as well in the proportion of positive tests accounted for by women.

- **HIV Incidence:** The true incidence of HIV in Canada remains unknown. Positive HIV test reports (reported cases of HIV diagnoses) understate the magnitude of the problem since not all people who are infected with HIV have been tested for HIV. The number of HIV test reports in a given year is composed partly of individuals infected in that year, but mostly of individuals infected in previous years. Furthermore, some individuals infected in a given year will be diagnosed (tested positive for HIV) in that year, but the majority will not be diagnosed until some subsequent year. Therefore, the relationship between HIV incidence and HIV test reports is determined by HIV testing behaviour, which is influenced by many factors and is not well understood in quantitative terms. In fact, UNAIDS has described this dilemma as follows: "HIV case reports are even harder to interpret than AIDS case reports, since it is not possible to know how representative those who are tested are of the whole population. Even trends over time are hard to interpret, since changes in access to testing, access to therapy, perceived effectiveness of therapy, reporting regulations and other factors may affect people's willingness to be tested for HIV." Despite these difficulties, HIV test report data may be combined with data on HIV testing behaviour as one method to estimate HIV incidence. The Bureau of HIV/AIDS, STD and TB at Health Canada has used this method together with other methods to produce estimates of HIV incidence at the national level: the Bureau estimates that 4 200 new HIV infections occurred in Canada in 1996, which was a substantial increase over the estimated number of 2 500 to 3 000 new infections per year during the period 1989-1994. [312] Estimates of HIV incidence in 1999 will be produced by the Bureau in the autumn of 2000, and these will be important to help answer questions about where the leading edge of the epidemic is in Canada at present, and also about whether the number of new infections has been decreasing or increasing in recent years.

- **HIV Prevalence:** There can be little doubt that HIV prevalence — the number of people living with HIV/AIDS in Canada — continues to rise, and that more people are living longer with HIV/AIDS. This can be deduced by the fact that the number of AIDS-related deaths in Canada has dropped substantially in recent years, to numbers much lower than the estimated number of new HIV infections. The most recent national estimates of HIV prevalence in Canada are for the year 1996. During that year, it is estimated that 37 100 to 43 300 Canadians were living with HIV [313] and that as many as 15 000 HIV-infected individuals were alive but undiagnosed as of that date. [314] According to these estimates, MSM accounted for 63 per cent of those

currently living with HIV/AIDS followed by IDU (18 per cent) and heterosexuals (14 per cent). Women accounted for 11.5 per cent of those living with HIV during 1996. Unfortunately, no estimates have been produced for Aboriginal persons or for members of other vulnerable groups.

- **Continued Shifts in the Epidemic:** More HIV-positive tests continue to be attributed to MSM than any other group, and MSM continue to account for nearly two-thirds of people living with HIV/AIDS. Nevertheless, there is relatively strong evidence that the epidemic continues to shift from one that primarily affected men who have sex with men in its early stages to one that increasingly involves other groups, including heterosexuals, IDUs, Aboriginal people and women. A variety of sources suggest that the proportion of new infections among these latter groups continues to increase, and the most recent incidence estimates (for 1996) actually show a higher number of new infections among IDUs than among MSM. In addition, the increasing representation of heterosexuals, women, IDUs, Aboriginal people and others among new infections suggests that the population of those living with HIV/AIDS will continue to become increasingly diverse.

- **Morbidity and Premature Mortality:** As of December 31, 1999, an estimated 18 860 AIDS cases and 11 748 AIDS-related deaths had been reported in Canada. However, strong evidence also exists of an ongoing decline in reported AIDS cases and AIDS-related deaths in Canada (this decline has occurred to a greater extent among some communities than others). In 1999, there were an estimated 701 reported AIDS cases and 106 AIDS-related deaths were reported in Canada — as compared with 1 562 reported AIDS cases and 1 410 AIDS-related deaths during 1995. There is insufficient evidence to determine whether this downward trend can be sustained.

- **Quality of Life Issues:** Emerging information suggests the quality of life for people living with HIV/AIDS may be improving. At the same time, new quality of life issues are arising due to the fact that more people are living longer with HIV.

- **Determinants of Health:** A growing body of evidence suggests that members of socio- economically disadvantaged groups are more likely to experience living and working conditions that place them at risk of HIV infection; are more likely to engage in risk-related activities; are more likely to become HIV-positive; are less likely to follow treatment regimens; and are more likely to die prematurely than are members of less disadvantaged groups.

Impressive baseline data exists to permit ongoing monitoring of the HIV/AIDS epidemic in Canada. Data sources include national surveillance systems, positive HIV test reports, imputed estimates of HIV incidence and prevalence, results from large-scale national surveys, targeted prevalence and incidence studies, community-based studies (including studies of special populations), AIDS case reports, AIDS-related death reports, and studies of the broader determinants of health.

At the same time, there are significant gaps in Canada's HIV/AIDS information base, and several emerging issues need to be further researched to enhance our ability to monitor and respond to changes in the epidemic.

Specifically, there is a need for:

- continued improvements in the measurement of HIV incidence and prevalence. Canada's surveillance and epidemiologic databases, although impressive in scope, vary substantially in their level of precision, especially from group to group. Reported HIV test results need to be supplemented with better information about HIV testing behaviour;
- databases that better reflect shifts in the epidemic itself. There is a particular need for better information relating to prison populations, IDUs, women, Aboriginal peoples and members of other ethnic, racial and cultural communities;
- more focus on intermediate indicators and evaluation studies of the impacts of CSHA activities (particularly studies that focus on interventions in key communities);
- better information about HIV/AIDS from major national surveys, such as the National Population Health Survey, the First Nations and Inuit Regional Health Surveys, and the planned Canadian Community Health Survey;
- more attention to broad determinants of health related to HIV/AIDS, including income, education, shelter and security; and
- additional research related to the quality of life for people living with HIV/AIDS.

BACKGROUND: HISTORICAL TRENDS IN HIV/AIDS IN CANADA

This section of the chapter provides a brief overview of epidemiological trends that influenced the development of the renewed Canadian Strategy on HIV/AIDS. As noted earlier, this information will also provide a context for monitoring the future impact and success of the Strategy.

Although HIV/AIDS reports commonly refer to a "rapidly shifting" epidemic, an examination of available information suggests that the epidemic in Canada has been evolving steadily over at least the past decade. Reports from Health Canada suggest that from the early 1980s to 1996, there was a progressive and relatively continuous decline in the predominance of new infections among MSM, accompanied by increasing infections in other at-risk groups. Specifically:

- the estimated proportion of new infections accounted for by MSM declined from more than 80 per cent in 1981-83 to 29.5 per cent in 1996;
- the estimated proportion of new infections accounted for by IDUs increased from less than 10 per cent before 1986 to 46.9 per cent in 1996; and
- the estimated proportion of new infections accounted for by women increased from less than 10 per cent before 1986 to 22.6 per cent in 1996. [315]

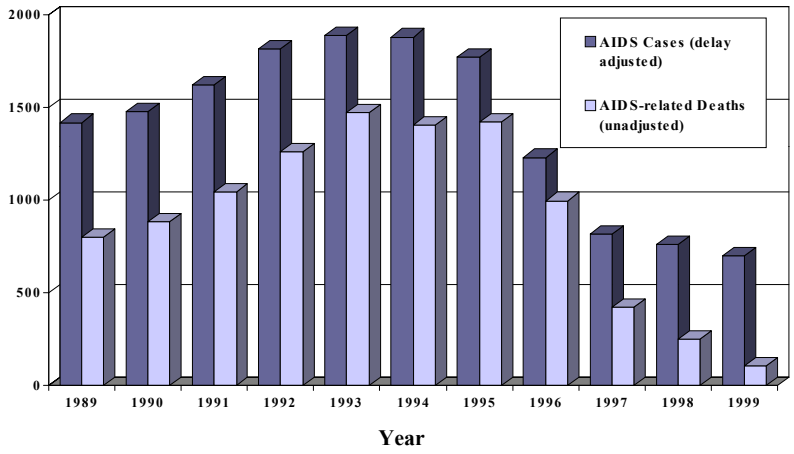
This is confirmed by *Albert and Williams*, who in 1998 described two significant waves of the Canadian epidemic. "The first significant wave of the epidemic was driven by very high rates of infection among MSM, and the second driven by high rates of infection among the IDU population ... Intensive infections in the IDU population did not probably begin until 1985, at which point infections among MSM had already peaked." [316]

As well, although data on infection rates are less plentiful for other population groups, during development of the CSHA concerns were being voiced about possible major increases of HIV/AIDS incidence among Aboriginal peoples and prison populations. [317, 318]

Another significant trend, illustrated in Figure 3, is the major decline in reported AIDS cases and AIDS-related mortality in Canada in recent years. Despite important limitations to these sources of data, and potential problems of under-reporting (see Appendix 1), it is clear that the annual number of AIDS cases and AIDS-related deaths has declined in recent years. The number of AIDS diagnoses declined from 1 889 (in 1993) to 701 (in 1999). The number of reported AIDS-related deaths has declined as well, from 1 372 (in 1993) to 106 during 1999. Even after adjusting for reporting delay, these declines are significant and are attributed in part to new anti-retroviral treatment regimens and perhaps also to more effective secondary prevention efforts. [319, 320]

Figure 3

Reported AIDS Cases and AIDS-related Deaths, by Year, Canada, 1989 - 1999



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada, April, 2000.

CURRENT NATIONAL TRENDS

Within the backdrop of the historical trends noted above, this section of the chapter describes current national HIV/AIDS trends. To the extent possible, the same data sources (national surveillance systems, supplemented occasionally with information from community-based studies) have been used for determining both current and historic trends.

Although uncertainty remains about the true incidence and prevalence of HIV, particularly among certain groups, there is little evidence to suggest any recent dramatic departure from historical trends. Later in the chapter, changes in the epidemic are described in some detail to better illustrate key national trends and emerging challenges.

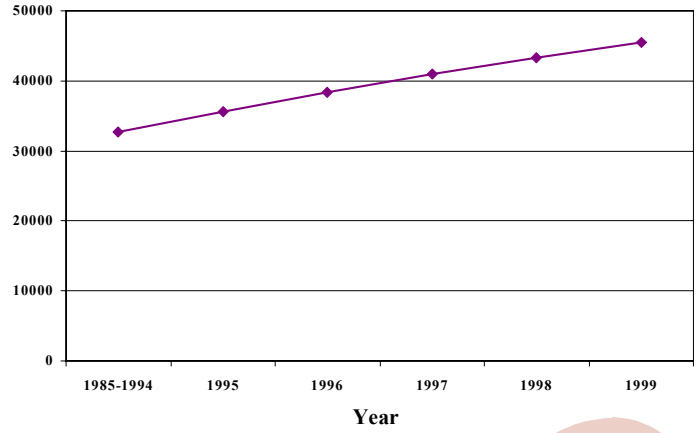
Positive HIV Test Reports

The number of positive HIV test reports provides an important estimate of the number and characteristics of Canadians *known* to be HIV-positive. It reflects the number of people who have been tested, diagnosed and reported to be HIV- positive. As an important caveat, which will be discussed in subsequent sections, the number *known* to be HIV-positive does not necessarily provide an accurate estimate of the number of people who are HIV-positive for a variety of reasons.

A cumulative total of 45 534 positive HIV tests were reported in Canada up to December 31, 1999 (see Figure 4). Approximately 95 per cent of the reported HIV-positive tests, reported AIDS cases and reported AIDS-related deaths in Canada are accounted for by the four largest provinces — Ontario, Quebec, British Columbia and Alberta — which together represent 85 per cent of Canada's population. Note, however, that the number of reported HIV diagnoses from Quebec is an underestimate of the actual number, since the process to rule out duplicate reports is still being developed. Therefore, the number of HIV diagnoses reported for Canada as a whole is an underestimate of the true number.

Figure 4

Cumulative Number of HIV Positive Tests Reported in Canada, to December 31, 1999

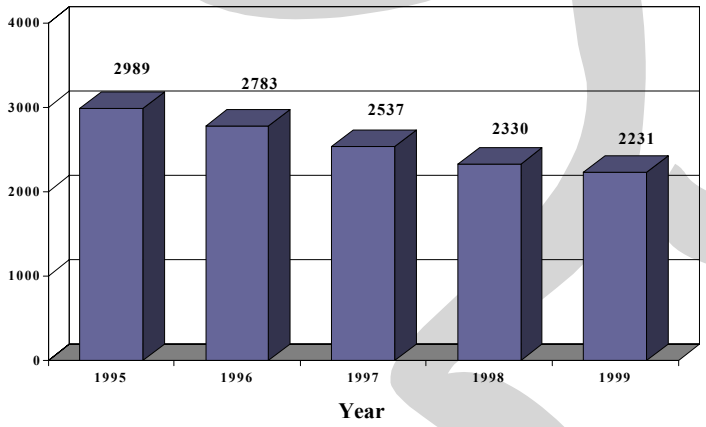


Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada: April, 2000.

As shown in Figure 5, the number of HIV-positive tests has shown signs of moderating in recent years. In 1995, 2 989 positive tests were reported; by December 31, 1999, this had declined to 2 231 reported positive tests.

Figure 5

Annual Number of HIV Positive Tests Reported, Canada, 1995 - 1999



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada: April, 2000.

POPULATIONS

The frequency of HIV testing is suspected to vary among different population groups and by mode of transmission. This section provides a brief description of trends in positive HIV tests in Canada:

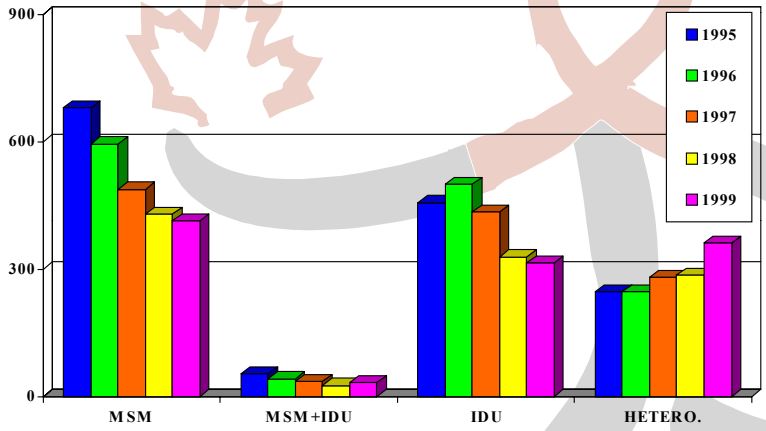
- by mode of transmission;
- among men and women; and
- among Aboriginal people.

Mode of Transmission

Figures 6 and 7 provide data on the number and proportion of HIV-positive test results, by mode of transmission. These estimates must be treated with caution since changes in the number of positive tests may reflect changes in the frequency of testing among certain groups. As well, information on mode of transmission was not available for more than half of the positive test reports during 1999, the most recent year for which published data are available. [321]

Figure 6

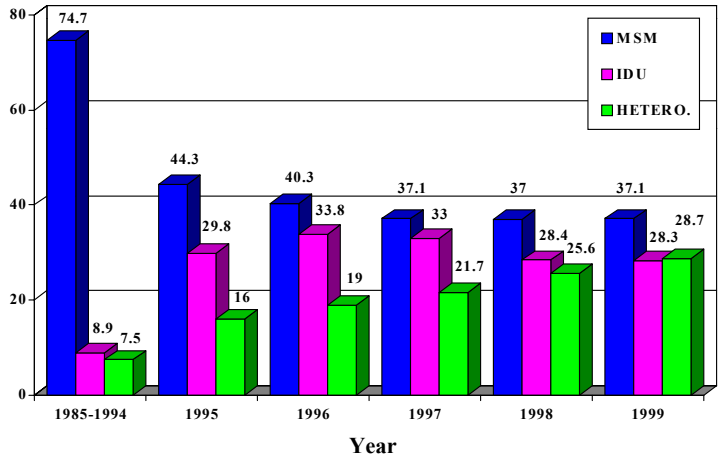
Annual Number of Positive Tests Reported By Mode of Transmission, Canada, 1995 - 1999



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada: April, 2000.

Figure 7

Percentage of all HIV Positive Test Reports, Selected Populations, Canada, 1985/94 - 1999



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada: April, 2000.

Among MSM, the number of HIV-positive test reports per annum declined steadily from 680 in 1995 to 413 in 1999. Nevertheless, this still accounts for the highest number of positive tests for any of the reported modes of transmission. The number of all positive tests attributed to IDU also declined steadily throughout this period, from 457 cases in 1996 to 315 cases in 1999. [322] To some extent, these trends are consistent with a recent major decline in IDU incidence rates reported in the Vancouver cohort. [323]
The causal factors underlying this apparent decline in HIV incidence among IDUs, particularly in Vancouver, have been the subject of considerable debate, invoking such explanations as "saturation" and methadone maintenance treatment (MMT). [324]

While the number of positive tests attributed to MSM and IDU declined during this period, the number of positive tests attributed to heterosexual contact increased steadily from 247 in 1995 to 361 in 1999.

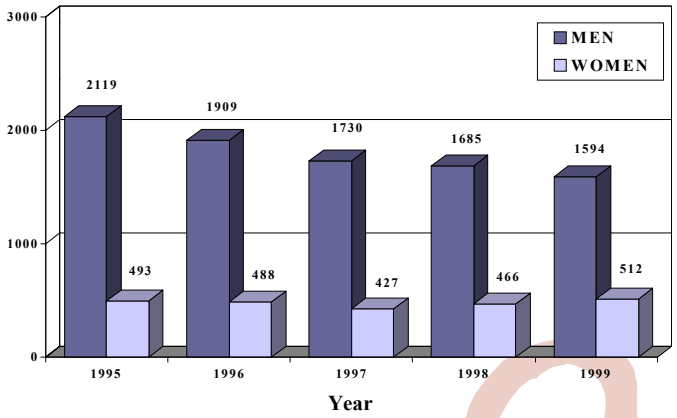
Despite the limitations intrinsic to the use of test results to monitor changes in the epidemic, these results suggest a continued evolution of the epidemic in recent years. MSM accounted for 74.7 per cent of all positive test results from 1985 to 1994; by 1999 this mode of transmission accounted for 37.1 per cent of all positive test reports. By contrast, IDU accounted for 8.9 per cent of all positive test reports during the period 1985 to 1994, but had increased to 33 per cent of new diagnoses in 1997, and to 28.3 per cent in 1999. Heterosexual transmission accounted for only 7.5 per cent of newly reported infections in 1985-1994, but by 1999 this had increased to 28.7 per cent.

Men and Women

In all but about 10 per cent of cases, gender is identified in reports of HIV test results. As can be seen in Figures 8 and 9, from 1995 to 1999, the number of positive tests reported among adult men declined from 2 119 to 1 594. Among adult women, the number of reported positive tests actually increased slightly, from 493 in 1995 to 512 in 1999. However, the percentage of all positive tests attributed to women has increased substantially in recent years, from only 10 per cent in the period 1985 to 1994, to 19 per cent in 1995 and 24 per cent in 1999.

Figure 8

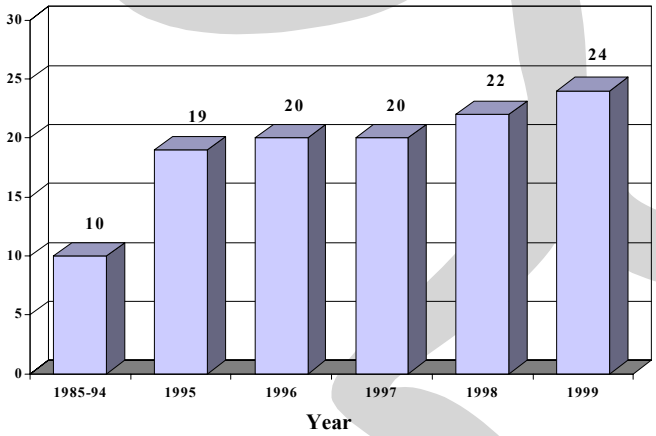
Men and Women: Annual Number of HIV Positive Tests Reported, Canada, 1995 - 1999



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada: April, 2000.

Figure 9

Women: Percentage of all HIV Positive Tests Reported, Canada, 1985/94 - 1999



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada: April, 2000.

In slightly more than half of the HIV-positive tests involving women in 1999, mode of transmission was recorded. [325] In 49.9 per cent of these cases, the mode of transmission was heterosexual contact, a substantial increase from the 35.2 per cent reported in 1995. At the same time, there was a slight decrease in the number of positive tests attributed to IDU, from 53.9 per cent in 1995 to 46.1 per cent in 1999.

Among HIV-positive men whose mode of transmission was recorded, 48.5 per cent of new infections in 1999 were attributed to MSM — a substantial decrease from the 55.1 per cent reported in 1995. A further 22.9 per cent of new infections among men in 1999 were attributed to IDU, and 3.8 per cent to the combined category of MSM+IDU, compared to 24 per cent and 4 per cent, respectively, in 1995. In 1999, 22.1 per cent of new infections among men were attributed to heterosexual contact, a substantial increase from 11.5 per cent in 1995.

Aboriginal People

There is a marked paucity of information on test results for members of different cultural, racial or ethnic communities in Canada, and this applies to Canada's Aboriginal people as well. National data on positive HIV test results among Aboriginal people in Canada are scarce and currently under development. However, recent data on diagnosed HIV infections from provinces and territories that report ethnicity information (British Columbia, Alberta, Saskatchewan, Manitoba, Yukon, Prince Edward Island, Nova Scotia and Newfoundland) reveal that the proportion attributed to Aboriginal persons increased from 19.4 per cent in 1998 to 24.8 per cent in 1999. [326]

PREVALENCE OF HIV

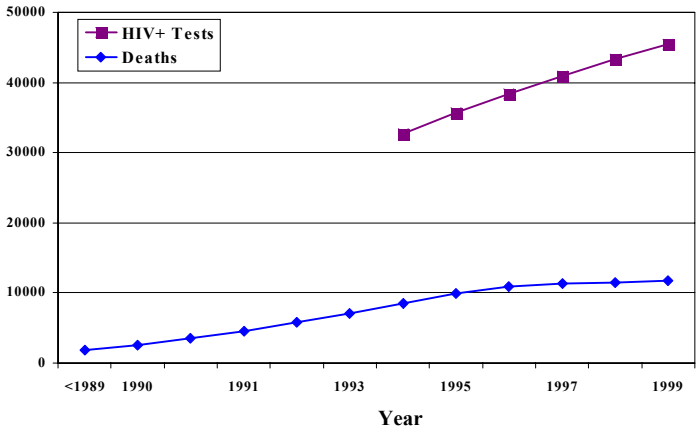
HIV prevalence refers to the number or proportion of individuals in a specific at-risk population group who are HIV-infected at a particular point in time. Individuals with asymptomatic HIV infection and those diagnosed with an AIDS-defining illness are usually included in this number.

HIV prevalence reflects the number of people who are currently living with HIV/AIDS — that is, the number of people who have been infected with HIV over the course of the epidemic, less those who have died (irrespective of cause of death). Such data provide an indicator of the burden of HIV among various sub-populations and the extent to which HIV has spread within that population throughout the epidemic. These estimates are also relevant for the issues of care, treatment and support. [327] As well, from the perspective of epidemic control, the size of the prevalent population affects the likelihood of further spread of the virus throughout the population. [328]

The true prevalence of HIV in Canada is unknown. The number of people who have tested positive for HIV continues to increase at a faster rate than the number known to have died (Figure 10). This suggests that the prevalence of HIV in Canada continues to increase.

Figure 10

Cumulative Number of HIV Positive Tests, and Deaths Reported in Canada, to December 31, 1999



Source: HIV and AIDS in Canada: Surveillance Report to December 31,1999. Health Canada, April, 2000.

However, as described in Appendix 1, there are important limitations to the use of positive test results and death reports in estimating HIV prevalence. For a number of reasons, Health Canada does not recommend that the difference between reported positive cases and reported AIDS-related deaths be used to calculate the total number of persons living with HIV/AIDS. First, as previously noted, positive test results tend to substantially understate the number of people who are HIV-positive. Similarly, reported deaths tend to understate the number of HIV-positive individuals who have died as a result of an AIDS- related cause.

Reports from Health Canada's Laboratory Centre for Disease Control and the Canadian Policy Research Network (CPRN), based on data up to 1996, dramatically illustrate the extent of under-reporting. By the end of 1996, approximately 39 000 individuals had tested positive for HIV (after adjustments for duplicate tests). An estimated 13 000 to 15 000 of these individuals had died of AIDS-related causes (again after adjustments for reporting delays and under-reporting). Thus, based on test reports, an estimated 24 000 to 26 000 of these 39 0000 individuals were living with HIV/AIDS at the end of 1996, and knew that they were infected. [329]

Health Canada has estimated that about 15 000 HIV infections may have been undiagnosed or unreported in 1996. [330] Taking these numbers into account, Health Canada estimated that 37 100 to 43 300 Canadians were HIV-positive in 1996. [331, 332] Based on the underlying trends noted earlier in this chapter, there is good reason to believe that the prevalence of HIV in Canada has continued to increase since these 1996 studies. Revision of these imputed estimates would be an important contribution to future monitoring reports.

Prevalence of HIV Among Different Populations

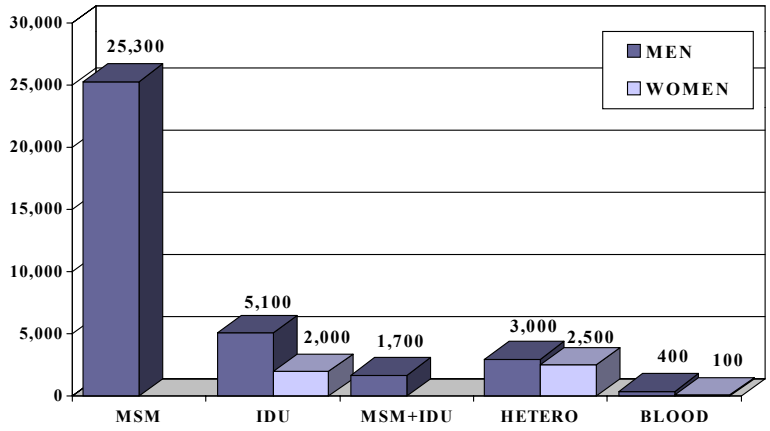
As noted earlier, historical data have revealed a gradual shift in the HIV/AIDS epidemic from one that initially affected MSM to one that now involves many other groups, in particular IDUs, Aboriginal people, women and prison populations. Despite uncertainties in the data, it would appear that both the incidence and prevalence of HIV increasingly involves members of these latter groups.

The quality of information available to monitor shifts in the epidemic varies dramatically. To a certain extent, this appears to reflect variations in the rates at which members of different groups are tested for HIV. A growing body of literature identifies many reasons for these variations (the results of these studies are described in some detail in Appendix 1). [333, 334, 335, 336] In any case, there is a clear need for further research on the testing issue due to its implications for prevention, early intervention, care, treatment and support, and for Canada's ability to estimate the magnitude and characteristics of the HIV/AIDS epidemic in this country.

The most recent estimates of the prevalence of HIV among different population groups are from the 1996 Health Canada imputed estimates described earlier (see Figure 11). According to that analysis, in 1996 men accounted for an estimated 88.5 per cent of Canadians living with HIV, and women for 11.5 per cent. The largest population group was MSM (an estimated 25 300 cases, or 63.1 per cent of the total), followed by IDUs (7 100 cases, or 17.7 per cent of the total), non-IDU heterosexuals (5 500 cases, or 13.7 per cent of the total), MSM-IDUs (1 700 cases, or 4.2 per cent of the total) and recipients of blood or the clotting factor (500 cases, or 1.3 per cent of the total). No estimates of HIV prevalence were produced in relation to Canada's Aboriginal people, or in relation to other cultural, racial or ethnic groups.

Figure 11

Estimated Prevalence of HIV in Canada, by Population Group, 1996



Source: HIV Prevalence and Incidence in Canada. Health Canada: Epi Updates, May, 1999.

Among women, heterosexual contact accounted for an estimated 54 per cent of infections, with 43 per cent of infections attributed to IDU and the remainder (3 per cent) to receiving blood or the clotting factor. Few community-based studies of HIV prevalence focus specifically on women; most estimates of HIV prevalence among women are derived from sub-studies of other groups, such as IDUs, Aboriginal people, sex-trade workers, street youth and, more recently, pregnant women.

Among MSM, a national survey carried out by *Myers et al.* in the early 1990s reported that 65 per cent of MSM had been tested for HIV. Self-reported prevalence rates were 18.2 per cent nationally, 23 per cent in Vancouver, 27 per cent in Toronto and 21 per cent in Montreal. However, to the best of the authors' knowledge, this study has not been repeated. [337]

A number of community-based studies have documented steady increases in HIV prevalence, particularly among inner-city IDUs. For example, in Montreal, HIV prevalence in IDUs increased from 5 per cent prior to 1988 to 19.5 per cent in 1997. In Vancouver, HIV prevalence increased from 4 per cent in 1992-93 to 23 per cent in 1996-97, and in Toronto, prevalence increased from 4 per cent in 1991-92 to 9.5 per cent in 1996-97. Studies carried out in needle exchange programs (NEPs) show similar results, with a 10.8 per cent increase in HIV prevalence among Ottawa NEP participants between 1992-93 and 1996-97. [338, 339] More recent studies (1998) have estimated the prevalence of HIV among IDUs at 18 per cent in Montreal, 20 per cent in Ottawa, 28 per cent in Vancouver and 13 per cent in Winnipeg. [340, 341, 342]

A number of studies have also been carried out on HIV prevalence among Aboriginal populations. HIV prevalence rates for this population group vary widely by locale, ranging from 0.4 per cent to 29.7 per cent in various settings in Vancouver (i.e., Native Alcohol and Drug Treatment Centres, correctional institutions, NEPs), 2.1 per cent in Alberta STD clinics, 7.9 per cent on Ontario reserves (self-reported), 13.4 per cent among Winnipeg Aboriginal IDUs, and 1.4 per cent in Montreal among street youth. [343, 344, 345, 346]

Among federal prison inmates, the number of reported cases of HIV/AIDS increased from 14 in January 1989, to 159 in March 1996, and to 200 in April 1999. This means that more than 1 per cent of all inmates in federal institutions are known to be HIV-positive. [347, 348]

It must be emphasized that these are known cases, and that the extent of under-reporting in institutions is not clear. For example, a study by *Ford et al* carried out in Joyceville Prison in 1999 reported that 1.7 per cent of the prisoners who participated in the study were HIV-positive (compared to 1 per cent in 1995), and that 33 per cent were hepatitis C-positive (compared to 28 per cent in 1995). Even these estimates are likely to understate the true magnitude of the problem, since nearly one out of three prisoners declined to participate in the study. [349]

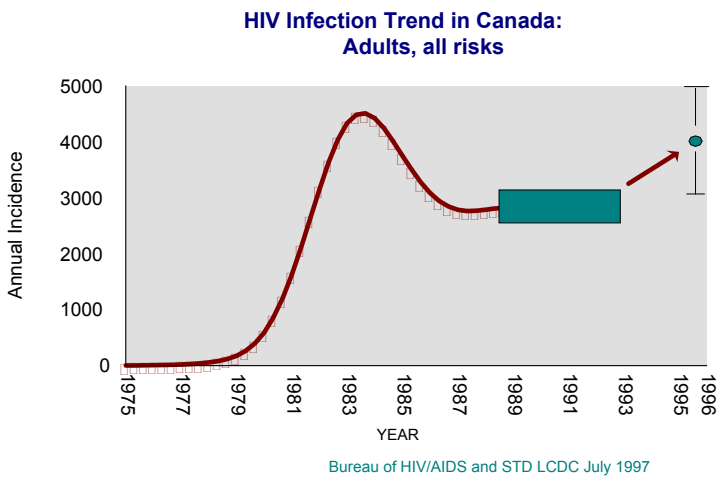
Studies carried out in provincial prisons have shown HIV seroprevalence rates to be up to 10 times higher than in the general population, ranging from 1 per cent to 7.7 per cent. [350] Clearly, the magnitude of the problem of HIV/AIDS in prison populations remains extremely poorly documented in Canada.

INCIDENCE OF HIV

HIV incidence refers to the rate at which new HIV infections are occurring during a given time period. It is therefore an important indicator of the current dynamics of the epidemic. [351] HIV incidence estimates can support both prevention initiatives and care, treatment and support programs.

As mentioned previously, the number of positive HIV test reports do not represent the incidence of HIV. A variety of methods have been developed to estimate HIV incidence. [352] From 1975 to 1989, the method of back-calculating new infections from reported AIDS cases was used, but new treatments that lengthen the interval between HIV infection and AIDS onset now prevent the use of this method. Other methods were used to estimate the average number of annual HIV infections for the years 1989 to 1994 as a whole (shown as a block in Figure 12) and for the year 1996. These later estimates combine data from HIV/AIDS surveillance, vital statistics, epidemiologic studies and testing behaviour studies in a type of triangulation process to maximize the use of available information.

Figure 12



New HIV infections in Canada were estimated to be 4 200 in 1996. This is lower than the estimated peak in annual HIV infections of 5 000 or more in the mid-1980s, but is higher than the estimated 2 500 to 3 000 infections per year for the period between 1989 to 1994. Of note, there were only 2 783 HIV-positive test reports during 1996.

Incidence of HIV Among Different Population Groups

This section provides a brief description of the estimated incidence of HIV in Canada, by mode of transmission, among men and women; and among Aboriginal people. This is followed by a brief discussion of prenatal and perinatal aspects of HIV transmission.

Trends in Mode of Transmission and Gender

During 1996, there were an estimated 4 200 new HIV infections in Canada. [353] As shown in Table 7, a total of 1 240 (29.5 per cent) of the new infections were among MSM, 290 (6.9 per cent) were among MSM-IDUs, 1,970 (46.9 per cent) were among IDUs, and 700 (16.7 per cent) were among heterosexuals. Figure 13 shows the differences in exposure category distribution between prevalent infections (those living with HIV infection, many of whom were infected years ago) and incident infections (those newly infected in 1996). There is a clear shift from the predominance of MSM among older, prevalent infections to the predominance of IDU among new incident infections.

Figure 13

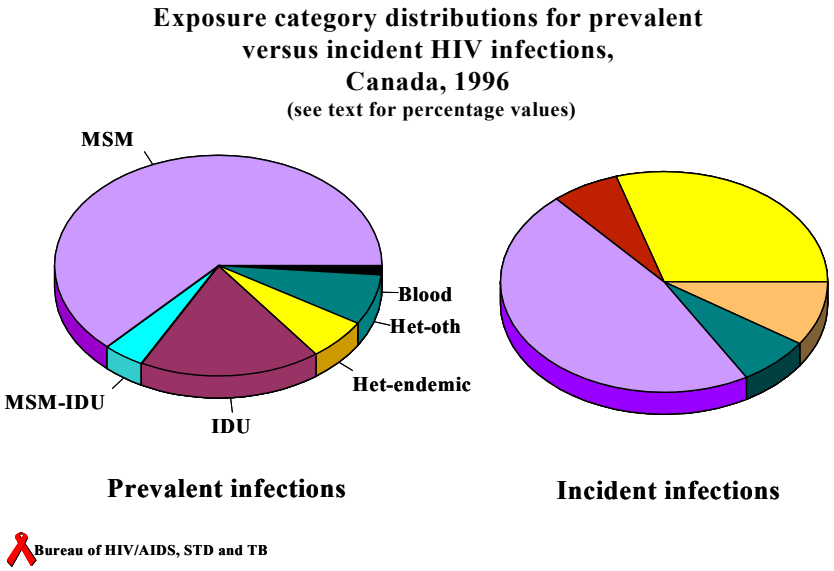


Table 7: Point Estimates and Ranges (95 per cent confidence interval) for Number of Incident HIV Infections in Canada at the End of 1996, by Exposure Category and Gender

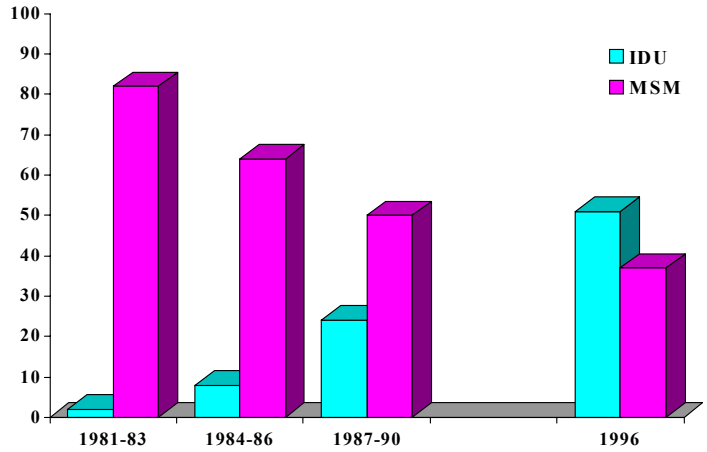
	MSM	MSM-IDUs	IDUs	Hetero	Blood/ Clotting	Total
Men and Women 95% CI	1 240 1 050 - 1 460	290 230 - 370	1 970 1 600 - 2 400	700 540 - 910	0	4 200 3 700 - 4 750
Women 95% CI	0	0	600 460 - 770	350 260 - 475	0	950 780 - 1 150

Source: Bureau of HIV/AIDS, STD and TB, LCDC, Health Canada, May 1999.

A better illustration of this shift in the Canadian HIV epidemic is shown in Figure 14a, which depicts the proportion of MSM and IDUs among new infections for different time periods. Since the beginning of the HIV epidemic in Canada, there has been a steady decline in the proportion of MSM among new infections, from over 80 per cent during 1981-83 to 29.5 per cent in 1996. Recently, there has been a sharp increase in the proportion of IDUs among new infections: from less than 10 per cent before 1986 to 24 per cent in 1987-90 and to 46.9 per cent in 1996.

Figure 14a

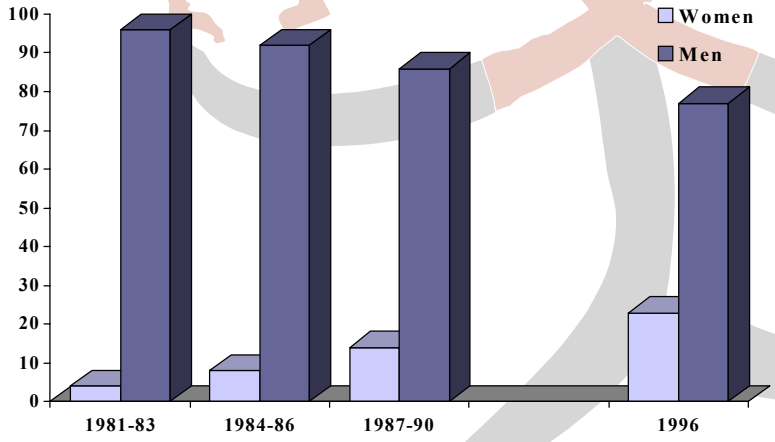
Percentage of IDU and MSM among new HIV infections in Canada, by time period (results before 1996 by back-calculation)



There were an estimated 4 600 women living with HIV infection at the end of 1996. Women were estimated to comprise 22.6 per cent of new HIV infections in Canada, an increase from less than 10 per cent before 1986 and 14 per cent in 1987-90 (Figure 14b).

Figure 14b

Percentage of women and men among new HIV infections in Canada, by time period (results before 1996 by back-calculation)



In summary, the estimated HIV incidence of 4 200 in 1996 is lower then the estimated peak in annual HIV incidence of about 5 000 to 6 000 that occurred in the mid-1980s (estimated by back-calculation), but is higher than a previous estimate of 2 500 to 3 000 per year for the period 1989-94. [354] The majority of this recent increase in HIV infections appears to be occurring among IDUs, who now comprise nearly half of all new infections. However, MSM still comprise a significant proportion of new infections and available data also suggest increasing HIV infections among non-IDU heterosexuals (especially women).

Aboriginal People

No estimates of HIV incidence have been produced in relation to Canada's Aboriginal people, although the 1999 estimates to be produced by the Bureau of HIV/AIDS, STD and TB in the fall of 2000 will include such estimates. Information on HIV incidence among Aboriginal people is in the early stages of development. Nevertheless, preliminary data indicate there are reasons for concern, particularly in light of the over-representation of Aboriginal people among IDUs, prison populations and the socio-economically disadvantaged. [355]

The general decline in recent years in the number of reported AIDS cases has not been reflected among Aboriginal people. The proportion of AIDS cases accounted for by Aboriginal people (where ethnicity is known) increased from 2 per cent prior to 1989, to more than 10 per cent in 1996-97 and to 15 per cent in 1998-99. [356]

Data from British Columbia, Saskatchewan and Alberta show that the proportion of Aboriginal people among new HIV diagnoses ranged from 15 per cent to 26 per cent (over varying time periods from 1993 to 1998). [357, 358] In addition, recent data on diagnosed HIV infections from provinces and territories that report ethnicity (British Columbia, Alberta, Saskatchewan, Manitoba, Yukon, Newfoundland, Nova Scotia, Prince Edward Islands) found the proportion attributed to Aboriginal persons was 19.4 per cent in 1998 and 24.8 per cent in 1999. [359] Further comparisons showed that Aboriginal persons diagnosed with HIV are younger, more likely to be female, and more likely to be IDU. Thus, while there are indications that the magnitude of the HIV problem may be increasing among Aboriginal people in Canada, considerable uncertainty remains about the exact nature and extent of the problem. National data collection processes and systems have been slow to respond to this shift in the epidemic, and the estimates of HIV incidence and prevalence among Aboriginal people will prove useful for future reports.

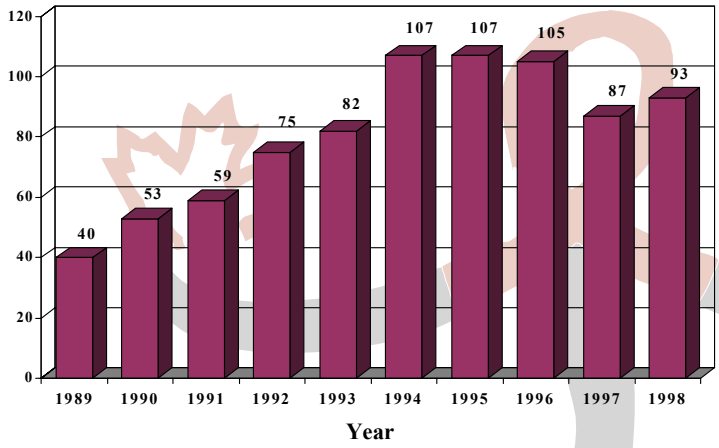
Prenatal and Perinatal

As noted earlier, the proportion of reported new HIV infections among women continues to increase. Evidence also suggests that the increases may be most rapid among certain subsets of young, socio-economically disadvantaged women. [360, 361, 362]

The Canadian Pediatric AIDS Research group monitors cases of infants known to have been exposed perinatally to HIV. In total, 765 infants were exposed to HIV from their mothers between 1989 and 1998, and of the reported total, 232 have been confirmed HIV-positive and an additional 61 have indeterminate serostatus and are being monitored. Nationally over the past decade, the number of infants born to HIV-infected mothers has increased steadily (see Figure 15).Whether this constitutes a valid trend or is simply the result of increased HIV testing among pregnant women remains to be determined. As well, it is important to emphasize here, once again the limitations of basing estimates of prevalence and incidence on positive test results. Unfortunately, no estimates of incidence and prevalence have yet been produced that account for changes in testing patterns.

Figure 15

Reported Number of Infants Exposed to HIV in Utero, by Year, Canada, 1989-1998



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1998. Health Canada, April, 1999.

For example, *Remis* (1999) reports that rates of HIV testing among pregnant women in Ontario increased by approximately 50 per cent between 1992 and 1998, while rates of testing among men remained unchanged. Moreover, the increase in HIV testing of Ontario women was almost exclusively among those aged 15 to 39. Similarly, data from

Quebec show a dramatic increase between 1997 and 1999 in the number of physicians who offered or prescribed HIV testing to pregnant women. [363, 364] Questions also remain regarding subsets of women who are characterized by higher risk living and working conditions, and the likelihood of HIV testing within these population subsets. [365]

A study of all HIV pediatric centres in Canada found that 19 per cent of women known to be HIV- positive at the time of giving birth between 1995 and 1997 were Aboriginal. [366]

REPORTED AIDS CASES

The number of reported AIDS cases can also be used to illustrate the changing face of the HIV/AIDS epidemic. As of December 31, 1999, an estimated 18 860 AIDS cases had been reported in Canada. As a result, Canada's cumulative rate of AIDS cases was 618 per one million persons. This places Canada somewhere in the middle of industrial nations, where cumulative rates vary from a high of 2 392 cases per one million persons in the United States to a low of 14.2 cases per one million persons in Japan.

On a province-by-province basis, reported AIDS cases and reported deaths due to AIDS are roughly proportional to the province's population. The exception is Quebec, which reports 33 per cent of total cases but is home to only 24 per cent of Canadians.

As shown in Figure 3 earlier, the number of AIDS cases reported annually in Canada has declined steadily in recent years, from 1 889 in 1993 to 701 in 1999. This decrease can be attributed in part to improved treatment regimens that delay or prevent the onset of AIDS.

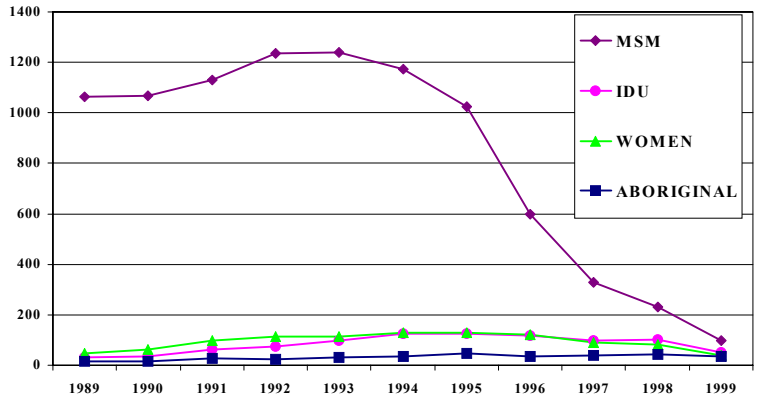
An important issue — for which little data are currently available — is the extent to which these reductions can be sustained. While the delayed onset of AIDS is a positive and important development, it means that the number of people living with HIV in Canada continues to increase. The long-term implications of these trends for care, treatment and support, as well as for future changes in morbidity and mortality, are not yet known.

Reported AIDS Cases Among Different Populations

Figure 16 shows that the annual number of reported AIDS cases has declined among most groups in recent years, but especially among MSM. As the percentage of reported AIDS cases attributed to MSM has declined, the percentage attributed to heterosexual contact, IDU, and among women and Aboriginal people has increased (see Figure 17).

Figure 16

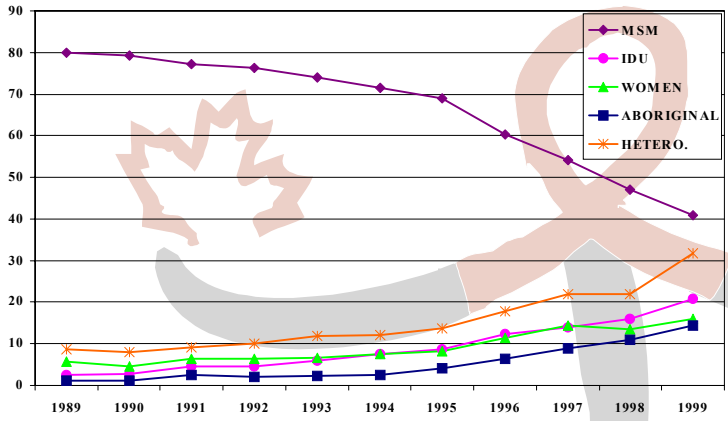
Number of Reported AIDS Cases, by Population Group
Canada, 1989 – 1999 (non delay adjusted)



Source: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada, April, 2000.

Figure 17

Percentage Distribution of Reported AIDS Cases,
by Population Group, Canada, 1989 - 1999



Source: Health Canada: HIV and AIDS in Canada: Surveillance Report to December 31, 1999. Health Canada: April, 2000.

MSM accounted for 79.9 per cent of AIDS cases diagnosed in 1989, but only 69 per cent in 1995 and 40.9 per cent in 1999. At the same time, the proportion of AIDS cases attributed to IDU increased from 2.5 per cent in 1989, to 8.4 per cent in 1995 and 20.7 per cent in 1999. The proportion of reported AIDS cases attributed to heterosexual contact also increased steadily throughout this period, from 8.6 per cent in 1989, to 14.8 per cent in 1995 and 31.8 per cent in 1999.

The proportion of new AIDS cases also increased among both women and Aboriginals between 1995 and 1999. Women accounted for 5.8 per cent of reported AIDS diagnoses in 1989, 8.3 per cent in 1995 and 16.5 per cent in 1999. Information on the proportion of AIDS diagnoses accounted for by Aboriginal people is somewhat less reliable due to problems related to the reporting of ethnicity. [367] Nevertheless, among cases where ethnicity was reported, Aboriginal people accounted for 1.2 per cent of reported AIDS diagnoses in 1989, 4.1 per cent in 1995 and 14.4 per cent in 1999.

Some limited data are available with regards to the distribution of AIDS cases by ethnicity. In 1999, the most recent year for which such information is available, those whose ethnic status was classified as "white" accounted for 64 per cent of new AIDS diagnoses; 14 per cent were classified as "Aboriginal"; 13 per cent as "black"and 4 per cent as "Latin American". However, it should be emphasized that data related to the reporting of ethnicity suffer from a number of important limitations, including but not limited to misclassification, non-disclosure, variations in reporting and classification biases which may result in the systematic under-representation of specific communities.

AIDS Death Reports

As of December 31, 1998, 71 per cent (11 525) of the 16 236 individuals in Canada reported to have AIDS were known to be deceased. It must be emphasized that AIDS-related deaths tend to be under-reported for various reasons (see Appendix 1 for details). In particular, reporting delays tend to result in even more substantial underestimates for more recent years. However, the number of reported AIDS-related deaths has declined significantly in recent years. In 1999, only 106 AIDS-related deaths were reported, compared to 1 410 in 1995 — a decline of 92.5 per cent. Questions remain as to whether this trend can be sustained in future years. As well, further research is required on the extent to which members of different groups have benefited from these trends. [368] This latter issue is discussed briefly in the next section of the report.

BROADER DETERMINANTS OF HEALTH

As is the case with other areas of public health, there is reason to believe that many of the populations most vulnerable to HIV/AIDS tend to be economically disadvantaged and may lack the "prerequisites for health" identified in the Ottawa Charter, such as adequate income, education, food, shelter, safety and security. [369, 370]

In Canada, the disproportionate health risks faced by vulnerable populations are only now beginning to be documented. In the field of HIV/AIDS, several recent studies have focussed on some of these broader determinants of health as they relate to vulnerable populations, including homeless people, street youth, Aboriginal people, IDUs, sex- trade workers, inmates and other frequently marginalized groups. [371, 372, 373]

These studies strongly suggest that members of socio-economically disadvantaged groups are more likely to experience living and working conditions that place them at risk of HIV infection; are more likely to engage in more risk-related activities; are more likely to become HIV-positive; are less likely to follow treatment regimens; and are more likely to die prematurely than are members of less disadvantaged groups.

Reports from *Strathdee* and others indicate convincingly that the likelihood of AIDS-related deaths is strongly influenced by socio-economic factors. For example, in the Vancouver Lymphadenopathy AIDS Study, it was found that HIV-positive gay men with incomes below the poverty level were twice as likely to die within a 10-year period than HIV-positive gay men with higher incomes. [374]

Similarly, a study by *Echenberg* (1997), based on a national survey of 1 136 HIV-infected Canadians (most of whom identified themselves as gay men), suggests a trend toward both lower education and lower income levels among those most recently infected. [375]

Low-Beer (1999) found that HIV-positive gay men in Vancouver were 40 per cent less likely than HIV-negative men to be employed full-time and 34 per cent more likely to have an annual income of less than $10,000. However, the study found no relationship between education and HIV sero-positivity. [376]

These characteristics were especially pronounced among Aboriginal MSM. In the VanGuard cohort, Aboriginal MSM were found to be significantly more likely to be unemployed, to live in unstable housing, to have annual incomes of less than $10,000, to receive social assistance, and to report both non-consensual sex and sexual abuse during childhood. [377]

There also appears to be a strong link between education levels and risk behaviours among MSM. In an analysis of three large surveys of gay and bisexual men, *Myers* and colleagues found that men with less education were more likely to report unprotected sex. [378]

In many ways, the impacts of determinants of health (such as income, education, shelter and safety) become even more pronounced among IDUs, Aboriginal people and street-involved people. *O'Shaughnessy* (1998), in commenting on the Vancouver Injection Drug Users Study (VIDUS), notes that "Inadequate housing was originally felt to be one of the factors driving the HIV epidemic among IDU, and this has not changed substantially throughout the study." In a separate study, unstable housing was linked to significantly poorer health status among members of the VIDUS cohort. [379] These risks

were even more pronounced among female sex-trade workers enrolled in the VIDUS cohort, approximately two-thirds of whom were found to collect welfare and to live in unstable housing. *Weber* concluded that female sex-trade workers appear to be at risk for HIV infection due to the socio-economic conditions in which they live. [380]

Another Vancouver study found significantly lower use of anti-retroviral therapy by IDUs and women than by MSM, [381] while a study by *Goldstone* (1999) found that IDUs survive for a significantly shorter time after HIV or AIDS diagnosis than do others. [382]

As noted earlier, Aboriginal persons are over- represented in both IDU and prison populations. A review by *Nguyen* of studies conducted among IDUs in Vancouver, Edmonton, Winnipeg and Ontario found that Aboriginal persons represented 12 per cent of the IDU participants in Ontario, 27 per cent in Vancouver and nearly two-thirds in Edmonton and Winnipeg. Women made up between 27 per cent and 52 per cent of the Aboriginal participants. Aboriginal participants were also found to have generally lower levels of education and less housing stability, where this information was available. [383]

These findings have been reinforced by the results of a recent survey of Aboriginal IDUs carried out in six major urban centres across Canada (Toronto, Thunder Bay, Winnipeg, Saskatoon, Edmonton and Vancouver) and in two federal prisons. [384] This study concluded that the predictors for sero-conversion among the respondents were both socio-economic and behavioural, and included:

- unstable housing (44 per cent lived on the street or in boarding houses, hotels or shelters);
- poverty (74 per cent were on welfare);
- low education (30 per cent had less than Grade 10 education);
- abusive background (62 per cent)
- domestic violence (64 per cent); and
- previous imprisonment.

Other studies reinforce the notion that Aboriginal IDUs are more likely to be female, more likely to be HIV-positive, and less likely to be enrolled in a methadone program than are non-native IDUs. [385]

A qualitative study carried out in northern Alberta suggests that HIV risk behaviours may become survival techniques for some Aboriginal women. In-depth analyses of the life histories of eight key informants revealed past histories of unstable family relationships, frequent moves and physical, emotional or sexual abuse. High-risk behaviours associated

with escaping these conditions (e.g., running away, substance abuse, promiscuity and prostitution) were considered appropriate survival techniques by the respondents. [386]

This theme of persistent social and economic disadvantage has been reflected in a study of Aboriginal persons who are living with HIV/AIDS. These individuals are more likely to be underemployed, poorer and less well-educated than their non-native counterparts. The authors of the study concluded that, as a result of these inequities, HIV-positive Aboriginal people may have difficulty in receiving the benefits of available therapies. These findings underline the need for basic social, educational and support services directed toward Aboriginal people living with HIV infection or AIDS. [387]

LIFE EXPECTANCY AND QUALITY OF LIFE

In the face of the increasing prevalence of HIV, continued declines in the incidence and prevalence of diagnosed AIDS cases and in reported AIDS- related deaths suggest that life expectancy has continued to improve.

A number of recent community-based studies have reported improvements in life expectancy and the quality of life among people living with HIV/AIDS. (It should be noted that these studies have generally been conducted in large urban centres, and their applicability to smaller communities or non-urban populations is unclear.)

For example, a recent study in British Columbia assessed the improvements in life expectancy among HIV-positive gay and bisexual men in West Vancouver from 1990-92 to 1995-97. [388] During this period, life expectancy increased by 3.8 years. The authors suggest that the gain in life expectancy is attributable to the rapid uptake of more potent anti-retroviral regimens among HIV-positive gay and bisexual men. However, they caution that even in this new era of anti-retroviral therapy, life expectancy in this population is still low and loss of life attributable to HIV is high.

Other studies have suggested that recent mortality declines have been associated with reduced medical service costs, improvements in employment and health status, and enhanced quality of life, at least among the populations studied. [389, 390, 391]

In one study, the proportion of persons on anti-retroviral therapy who rated their health to be better than one year ago increased from 19 per cent in 1995 to 39 per cent in 1998. Over the same period, the number of persons who rated their health to be much worse than one year ago declined sharply, from 43 per cent to 18 per cent. In addition, the unemployment rate among the study group dropped from 64 per cent in 1995 to 56 per cent in 1998. [392]

Another study reported that the use of protease inhibitors was associated with a marked overall improvement in quality of life, including improvement in health perception, mental health, social functioning, physical functioning and role functioning. [393]

A recent survey of persons living with HIV/AIDS carried out by the Canadian AIDS Society [394] found that 38 per cent of respondents were currently working, 36 per cent were doing volunteer work, and 20 per cent of unemployed respondents were looking for work. However, among those considering a return to work, a majority indicated "great concern" about:

- losing disability benefits (70 per cent);
- losing drug benefits (69 per cent);
- losing extended health care coverage (59 per cent);
- receiving time off for medical appointments without losing pay or their job (55 per cent);
- managing a treatment schedule and side effects in the workplace (51 per cent); and
- disclosing their HIV status (51 per cent).

The CAS national survey further revealed that more than 50 per cent of respondents who were working had not disclosed their HIV status to employers. Of the group that had not disclosed, 45 per cent expected discrimination from their employer or co-workers. Among respondents not working, 65 per cent indicated they would not reveal their HIV status to a future employer or co-worker because of fear of discrimination or negative attitudes.

As these studies reveal, the improved prognosis for many HIV-positive people, as well as the changing nature of the epidemic itself, have important implications related to quality of life — implications that to date have been the subject of very little research. This research is urgently needed since changes in quality of life — whether positive or negative — will impact virtually every component of the Canadian Strategy on HIV/AIDS.

CONCLUSION

"Increased public accountability" is a key policy direction guiding implementation of the Canadian Strategy on HIV/AIDS. This first annual monitoring report for the CSHA responds to this policy direction by providing:

- a description of the Strategy, its goals and program components;
- information on the CSHA Monitoring Logic and the role of all key national partners;
- a "snapshot" of activities undertaken by partners in the first 18 months of the CSHA; and
- a detailed look at key indicators used to monitor the HIV/AIDS epidemic in Canada and general observations about current trends in the epidemic.

The CSHA-supported activities described in this report illustrate the comprehensive nature of Canada's response to HIV/AIDS. As well, these activities point to the important role of partnerships in achieving CSHA goals. It is hoped that even more organizations, at the national, regional and local levels, will be encouraged to take an active role in the pan-Canadian approach in the years ahead.

This monitoring report also draws attention to Canada's impressive baseline data on HIV/AIDS, and how this information is being used to monitor the epidemic. At the same time, there is a recognition that significant data gaps exist and that several key issues need further research.

As noted in the introduction, this first monitoring report is essentially a descriptive rather than an analytical document. It is anticipated that future monitoring reports will provide more information on the impact of various CSHA activities and their contribution to the goals of the Strategy.

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APPENDIX 1

Key Indicators and Data Sources

INTRODUCTION

The key indicators traditionally used to monitor changes in the HIV/AIDS epidemic in Canada include:

- HIV incidence;
- HIV prevalence;
- incidence and prevalence of AIDS;
- premature mortality;
- changes in life expectancy; and
- quality of life.

Each of these key indicators has been the subject of considerable research in Canada, using a range of methodologies and approaches. As a result, data for each indicator are available from multiple sources. Although each data source has its limitations, taken together they can provide a relatively coherent portrayal of key outcomes related to HIV/AIDS in Canada.

This appendix provides a brief overview of these key indicators and data sources.

KEY INDICATORS

HIV Prevalence

HIV prevalence refers to the proportion of individuals in a given at-risk population group who are HIV-infected at a particular point in time. Individuals with asymptomatic HIV infection and those diagnosed with an AIDS-defining illness are often included in this number.

Such data provide an indicator of the burden of HIV among various population groups and the extent to which HIV has spread within that population throughout the course of the epidemic. These estimates are also relevant to the subsidiary issues of care, treatment and support. [395] In addition, from the perspective of epidemic control, increases in the size of the prevalent population increases the likelihood of further spread of the virus throughout the population. [396]

HIV Incidence

HIV incidence refers to the rate at which new HIV infections are occurring during a given time period. Such data provide an important indicator of the current dynamics of the epidemic [397] When combined with information about the changing demographics of at-risk populations, HIV incidence estimates also have relevance for prevention initiatives, as well as for care, treatment and support. For example, recent increases in HIV incidence among IDUs have implications not only for prevention, but for treatment as well, given the high rate of HIV co-infection, among other important factors.

AIDS-Related Mortality

This indicator reflects the number of deaths attributed to AIDS. The main source of information used to monitor trends in AIDS- related mortality is reported AIDS-related deaths.

Premature Mortality

Premature mortality is an indicator used to measure the extent of reduced life expectancy among persons living with HIV/AIDS.

DATA SOURCES

The data sources most commonly used to monitor changes in the incidence and prevalence of HIV/AIDS include:

- positive HIV test results (as reported in national surveillance systems and community-based studies);
- reported AIDS cases;
- national surveys; and
- imputed estimates based on triangulation from multiple data-sets.

Positive Test Reports

Positive test reports summarize the number and characteristics of people who have tested HIV-positive. These reports are critical to monitoring the incidence and prevalence of HIV, not only through national surveillance systems but in community-based studies as well. They provide a reasonably accurate reflection of the number of people known be HIV positive. However, since not everyone is tested for HIV, and not all positive cases are reported, the estimates reflect the minimum number of Canadians known to be HIV-positive.

While they are important, positive test reports tend to underestimate the true extent of HIV infection in Canada for several reasons, including reporting delays, under-reporting of positive HIV tests and, especially, differences in testing patterns.

The 1996 National Population Health Survey found that 41 per cent of men and 31 per cent of women in Canada had been tested for HIV(these percentages take into account ancillary testing related to life insurance applications or donating blood,). [398]

Canadians at risk of HIV infection are more likely to be tested for HIV than those without risk factors. Nevertheless, a significant portion of persons with HIV risk factors have never been tested for HIV. Although rates of testing are believed to be higher among individuals who report risk factors, these rates vary from group to group. For example, reported rates of testing tend to be higher among people who had multiple opposite sex partners during the previous year (51 per cent) than for people who had sex with only one partner (17 per cent); among men who had sexual intercourse with another man (71 per cent); and among male IDUs (62 per cent) [399, 400]

A study of female respondents to the 1996 National Population Health Survey found that 41 per cent of the women who reported IDU had been tested for HIV, as had 40 per cent of women who had two or more sexual partners in the previous year, and 42 per cent of women with a history of a sexually transmitted disease (STD) in the previous two years. The lowest rate of testing among Canadian women was for individuals who had less than a high school education (8 per cent). Rates of HIV testing increased to 19 per cent for women who had a university education [401]

Due to these many factors related to testing, it has been estimated that as many as one out of three positive cases may go unreported. [402]

Imputed Estimates

Imputed estimates of HIV incidence and prevalence are an important complement to reported test results. Large numbers of Canadians (including those from high-risk groups) have never been tested for HIV, and others who have tested HIV-positive have not been reported.. [403] Imputed estimates attempt to determine the incidence and prevalence of HIV in Canada had everyone been tested.

Reports from the Canadian Policy Research Network and Health Canada's Laboratory Centre for Disease Control suggest that as many as 11 000 to 17 000 HIV infections may have been undiagnosed or unreported as recently as 1996. [404, 405, 406]

Of course, imputed estimates of HIV prevalence also have important data limitations, including difficulties in estimating the size of at-risk populations and the frequency with which these individuals present themselves for testing. Nevertheless, imputed estimates are extremely useful and suggest that the true magnitude of the problem may be considerably greater than test reports would indicate, particularly within certain groups.

Another major limitation of imputed estimates is that they have only been produced for one year — 1996. These 1996 estimates are included as part of the baseline data in this report with the expectation that they will be updated in future years.

Reported AIDS Cases and AIDS-Related Deaths

Reported AIDS cases and reported AIDS-related deaths are the main sources of information on the incidence and prevalence of AIDS in Canada. They also provide important information on the burden of the disease in Canada, since they are used as the basis for estimating premature mortality and potential years of life lost.
The number of reported AIDS cases also provides an indication of the number and characteristics of people who were HIV-positive several years earlier. These estimates have provided important historical information to complement information based on test reports.

In recent years, however, both the validity and the reliability of estimating HIV incidence and prevalence based on the "back-calculating" of reported AIDS cases has diminished. The median incubation period for HIV/AIDS has increased substantially in recent years, due to improved treatment and prophylaxis regimens that delay the onset of AIDS. Thus, a recent decrease in reported AIDS cases does not necessarily translate into a reduction in HIV incidence and prevalence. Nevertheless, reported AIDS-related cases still provide a useful measure to compare changes across groups over time.

National Surveys

National surveys can provide useful estimates of the number of Canadians who know that they are HIV-positive or have been diagnosed with HIV/AIDS. Such surveys can also provide important information on key characteristics of the target populations, such as their socio-economic status, risk behaviours and whether they have been tested for HIV.
However, since the pioneering studies carried out by *King et al* (1998) and *Ornstein* (1990), there has been a dearth of information on HIV/AIDS from national surveys. [407, 408] Major national surveys (like the National Population Health Survey) provide only limited information, while large-scale surveys of special populations (like the First Nations and Inuit Regional Health Surveys of 1999) have yet to address the topic. [409, 410]

A major limitation of national surveys data is the reliance on self-reporting. In addition, major surveys often under-represent some of the populations of greatest interest, such as the very poor, the homeless, remote populations and some Aboriginal communities. As a result, national surveys often are supplemented by results from community-based surveys of special populations.

Community-Based Studies

Community-based studies often provide more accurate estimates than do national surveys of the magnitude, characteristics and changing nature of the HIV/AIDS epidemic, particularly within specific groups, communities or settings. Local studies include studies in the general population (e.g., sentinel hospital patients, clients of voluntary testing and blood donors), as well as studies of special groups such as women, ethnic populations, Aboriginal people, blood and blood product recipients and hemophiliacs, MSM, IDUs, STD clientele, inmates, street people and sex-trade workers. Yet local studies tend to suffer from problems of generalization, which can inhibit the development of a coherent national picture. With this in mind, comprehensive reviews have been carried out of previous HIV incidence and prevalence studies, [411] HIV risk behaviours, [412] and current ongoing studies. [413]

Studies of the Broader Determinants of Health

Most studies that monitor the incidence and prevalence of HIV/AIDS report on the basis of mode of transmission or socio-demographic groups. Yet, as noted by *Albert and Williams*, "the trend toward social and economic marginalization continues to provide fertile ground for the virus to spread. Increasingly, those communities most at risk appear to be those most poorly equipped to resist the epidemic". [414] Moreover, a review by *Strathdee* (1997) concluded that "social determinants influence both the risk of HIV infection, and the speed with which HIV infection will advance to full-blown AIDS". [415]

Recently, an increasing number of Canadian studies have documented the powerful influence of income, education, housing and other determinants of health on risk behaviours, HIV incidence and treatment outcomes. [416, 417, 418, 419, 420, 421, 422, 423, 424]

APPENDIX 2

Regional and National ACAP Project Funding

(Fiscal Year 1998-99)

Sponsor Organization	Project Title
National Office:	
Canadian AIDS Society	Empowering Youth to Confront AIDS
Canadian Public Health Association	Canadian HIV Resource Centre Network (CANNET) Phase III
Community AIDS Treatment Information Exchange (CATIE)	Tools for Finding and Evaluating HIV/AIDS Treatment Information
Fife House Foundation	Project Sustain
Mouvement d'information et d'entraide dans la lutte contre le sida à Québec (MIELS-QUÉBEC)	L'indésirable....d'un océan à l'autre
Planned Parenthood Federation of Canada	Planned Parenthood Skills and Needs Assessment
Prisoners with HIV/AIDS Support Action Network (PASAN)	National Skills-Building Initiative on HIV/AIDS and Prisoners
The Teresa Group	Strengthening the National Working Group for Children, Youth and Families Living With and Affected by HIV/AIDS
The Canadian AIDS Society	The 2nd Canadian HIV/AIDS Skills Building Symposium: Sharing Our Successes in HIV/AIDS Work
Atlantic Region	
AIDS Coalition of Cape Breton	Community Response Team Development – Phase II
AIDS Coalition of Nova Scotia	AIDS Coalition of Nova Scotia – Operational Funding
AIDS New Brunswick	AIDS Prevention and Support – Phase II

Sponsor Organization	Project Title
AIDS PEI	AIDS PEI – Operational Funding
AIDS Saint John	AIDS Saint John Inc. – Phase II
Atlantic First Nations AIDS Task Force	Sustaining First Nations AIDS Programming in Atlantic Canada Through Partnership Development
Mainline Needle Exchange	Aboriginal Injection Drug Users and Needle Exchange Programs: Identifying Barriers in Nova Scotia
Newfoundland/Labrador AIDS Committee (NLAC)	AIDS Prevention and Support Program – Phase 2
SIDA AIDS Moncton	SIDA AIDS Moncton – Phase II
AIDS Coalition of Nova Scotia	HIV/AIDS Survival Training
Quebec Region	
Action Séro Zéro	Projet d'intervention auprès des prostitués masculin de 14 ans et plus
Association des intervenants en toxicomanie du Québec Inc. (AITQ)	Projet d'intervention VIH/SIDA dans les établissements carcéraux
Bureau régional d'action sida (BRAS)	Bénévoles Action-Sida
Mouvement d'aide et d'information sida Bas-Saint-Laurent	Coordination des ressources bénévoles
Association des bénévoles accompagnateurs-accompagnatrices de personnes atteintes du sida) (ABAAPAS)	ABAAPAS - projet soutien
Action Séro-Zéro	Projet d'intervention auprès des gais d'origine latino-américaine
AIDS Community Care Montreal (ACCM)	AIDS Community Care Montreal
Bureau Local d'Intervention Traitant du Sida (BLITS)	BLITS
Bureau régional d'action sida (BRAS)	BRAS

Sponsor Organization	Project Title
Centre d'action communautaire auprès des toxicomanes utilisateurs de seringues (CACTUS) – UDI-SIDA Montréal	Action Santé dans un milieu menacé par le VIH/SIDA
Centre d'Action SIDA Montréal (Femmes)	Centre d'Action SIDA Montréal (Femmes)
Centre d'amitié autochtone de Montréal Inc / Native Friendship Centre of Montreal Inc.	Urban Aboriginal AIDS Awareness
Centre Pierre Hénault Inc.	Centre Pierre Hénault Inc.
Centre sida amitié	• Centre sida amitié • Réseau de bénévoles et environnement social
Coalition des organismes communautaires québecois de lutte contre le sida (COCQ-sida)	COCQ-sida
Coalition Sida des Sourds du Québec (CSSQ)	CSSQ
Comité d'aide et prévention au sida (Montérégie) Inc. (CAP-SIDA)	Projet de coordination de bénévoles
Comité des personnes atteintes du VIH du Québec (CPAVIH)	Comité des personnes atteintes du virus d'immuno-déficience humaine du Québec
GAP-VIES	Le groupe d'action pour la prévention du sida (GAP-VIES)
Groupe d'Entraide à l'Intention des Personnes Séropositives et Itinérantes (GEIPSI)	Créativité
Groupe d'intervention régionale et d'information sur le side en Estrie (I.R.I.S. Estrie)	• I.R.I.S. Estrie • I.R.I.S. Estrie – PVVIH – Toxico
Maison Plein Coeur	• Maison Plein Coeur • Formation d'intervenants en matière de prévention du VIH/SIDA
Points Repères	Amélioration de l'accès aux seringues stériles dans la région de Québec pour la prévention du SIDA chez les UDI
Productions Virage Inc.	Projet de prévention MTS/SIDA à l'intention des jeunes du Québec
Regroupement des personnes atteintes du VIH-sida de Québec et de la région	Regroupement des personnes vivant avec le VIH/Sida de Québec et la région

Sponsor Organization	Project Title
Sida Information Prévention Écoute Lanaudière	• Sida Information Prévention Écoute Lanaudière • Projet de support psycho-social et de sensibilisation VIH/SIDA
Sidaction (Trois-Rivières) Inc.	• Sidaction Trois-Rivières • Sidaction
Société canadienne de l'hémophilie Section Québec	Société canadienne de l'hémophilie Section Québec
Spectre de rue	Spectre de rue
Stella	Réduction des barrières à l'accès aux services de santé et sociaux
Taqramiut Nipingat Inc. (TNI)	Prévention des MTS et du VIH/SIDA chez les Inuit du Nunavik
Mouvement d'information et d'éducation et d'entraide dans la lutte contre le sida à Québec (MIELS-QUÉBEC)	• MIELS-QUÉBEC • Projet de concertation pour les personnes vivant avec le VIH-Sida en mouvance sociale
Centre Pierre Héneault Inc.	Rapprochement entre les personnes vivant avec le VIH/SIDA et leurs proches
Centre d'Amitié Autochtone de Québec	La sagesse autochtone contre le sida
Centre de ressources et d'intervention en santé et sexualité (CRISS)	Bulletin d'intervention et d'échange
La fondation du refuge pour femmes chez Doris Inc.	The battle against HIV infection and AIDS among Inuit women
Le Théatre Cyroy	Élégies pour les anges, les anarchistes et les folles enragées
Association des Intervenants en Toxicomanie du Québec Inc. (AITQ)	• Réalisation de répertoires • Congrès national "Drogues et injections: enjeux et société"
Centre Option Prévention Toxicomanie Violence Delinquance Suicide (Centre Option Prévention TVDS)	Action prévention Sida dans les maisons de jeunes
Ontario Region	
African Community Health Services	African Community Health Services

Sponsor Organization	Project Title
AIDS Committee of Cambridge Kitchener, Waterloo and Area (ACCKWA)	• Operational Education Project • Positive Approaches
AIDS Committee of Guelph and Wellington County	AIDS Guelph
AIDS Committee of London	• Safer Sex Education for Targeted Groups – Phase II • Communities Access Project • Organization Development Team Project
AIDS Committee of Ottawa	• Safer Sex Outreach for Men who Have Sex with Men • Women's Different Realities Confronting HIV/AIDS
AIDS Committee of Simcoe County	Strengthening Health Among Us
AIDS Committee of Toronto	• Women's Outreach Project • AIDS Committee of Toronto Operational Project
AIDS Committee of Windsor	• Safer Sex/Confronting AIDS Project (op.) • Gay Youth Project
Algoma AIDS Network	The HARP Project (HIV/AIDS and Risk Populations) (op.)
Alliance for South Asian AIDS Prevention	South Asian PHA Outreach and Life Enhancement Project
Asian Community AIDS Service	Asian Community AIDS Service
Black Coalition for AIDS Prevention	Targeted AIDS Prevention (Black Cap)
Canadian African Women's Organization	HIV/AIDS Health Promotion
Hamilton AIDS Network	Men and Men Project
Ontario AIDS Network	PHA Projects Program
Peterborough AIDS Resource Network	AIDS Peterborough (op.)
Street Health Community Nursing Foundation	Street Health AIDS Prevention Project
Voices of Positive Women	• Voices of Positive Women (op.) • Health Promotion and Community Development

Sponsor Organization	Project Title
ACCESS - AIDS Committee of Sudbury	Healthy Choices
ACCWA	Positive Approaches
AIDS Committee of Niagara	Community Education/Outreach
AIDS Committee of North Bay & Area	Education Services Project
AIDS Committee of Thunder Bay	Substance Use Outreach Project
HIV/AIDS Regional Services	Kingston & Area AIDS Education and Prevention Program
Ontario Federation of Indian Friendship Centres	Aboriginal Off-Reserve AIDS Project
Peel HIV/AIDS Network	Healthy Alternatives
Prisoners & HIV/AIDS Support Action Network (PASAN)	Prison Outreach Peer Project
The Teresa Group	Innovative Outreach & Education
Toronto PWA Foundation	Treatment Resources Program
Positive Straight Men	Support, Referral and Information Project
Kitchener/Waterloo Multicultural Centre	Cultural Interpreting in HIV/AIDS Context
Toronto YWCA	HIV/AIDS Education and Prevention Program for Young Women at Risk
AIDS Committee of Durham Region	High-Risk Youth HIV/AIDS Outreach Project
Centre for Spanish - Speaking People	AIDS Education and Prevention for Marginalized Spanish-Speaking Youth
Manitoba/Saskatchewan region	
AIDS Brandon, Inc.	AIDS Brandon/Westman Region AIDS Programme (W.R.A.P.)
AIDS Regina	• All Nations Hope Project • AIDS Initiatives
AIDS Saskatoon	• Community Action Project • Saskatchewan AIDS Network Project
AIDS Shelter Coalition of Manitoba Inc.	AIDS Shelter Project

Sponsor Organization	Project Title
Healthy Thompson Inc.	Thompson AIDS Project
Kali-Shiva AIDS Service	• Creating Supportive Social Environments • Manitoba AIDS Coalition Building Networks • Positive Women's Support Service Network
Manitoba Aboriginal AIDS Task Force	• Strengthening the Manitoba Aboriginal AIDS Task Force • Community Development Approach to Managing HIV/AIDS Phase II
Persons Living with AIDS Network of Saskatchewan Inc.	Strengthening PLWA Network
Winnipeg Gay/Lesbian Resource Centre	Breaking Down Barriers
Sexuality Education Resource Centre of Manitoba (SERC)	Youth STD/HIV Prevention Project
Women's Health Clinic	HIV Prevention for Young Women
Alberta/NWT Region	
AIDS Calgary Awareness Association	• Managing Health Promotion Programs – Phase II • HIV Outreach Prevention and Program Evaluation • HIV Prevention Peer Education Project to Street Involved Youth
AIDS Yellowknife	• Building Community Networks – Phase II Outreach Program • Building Community Network – Phase II
Alberta Community Council on AIDS	• Sustainability Project • Partnership for the 90s – Phase II • Skill Enhancement for the 90s
Feather of Hope Aboriginal AIDS Prevention Society (FOHAAPS)	• Sustainability Project – Phase II • Thundering Buffalo • Circle of Friends • The Healing Begins • Sharing and Caring
HIV Edmonton	HIV/AIDS Public Education Awareness and Program Coordination
AIDS Jasper	The Jasper Strategy

Sponsor Organization	Project Title
South Peace AIDS Council	• Keeping Afloat • South Peace AIDS Council: Three Year Strategic Planning Project • Coming Home • Harm Reduction Outreach Project
Lethbridge AIDS Connection Society	• Creating Positive Environments • Challenging Fears: Creating Supportive Environments and Sokinakssinapi • Women and HIV: Identifying Barriers
Central Alberta AIDS Network Society	• Removing Community Barriers • Route of Entry into Cell Block B • CAANS Volunteer Project • Rural Sex Trade Workers – Peer Prevention Project Rural IV Drug/Steroid Users Health Promotion Needs Assessment
Ingamo Hall Friendship Centre	Inuvik Youth Project
Deh Cho Tribal Council	Deh Cho First Nations AIDS Awareness – Phase I
Canadian Mental Health Association	• Iqaluit HIV/AIDS Outreach Project – Phase I • Iqaluit HIV/AIDS Outreach Project – Phase II
Interfaith Association on AIDS	HIV/AIDS and the Faith Communities – Phase II
The Edmonton Social Planning Council	Shared Responsibility
Banff Regional AIDS Committee	Service Industry Outreach Project
AIDS Network of Edmonton	Community HIV Information Exchange Through Resources and Peer Education
AIDS Medicine Hat Association	Sexuality/HIV/AIDS Education for Marginalized Youth
AIDS Bow Valley	Service Industry Outreach Project
Living Positive	Peer Counselling Training Program
Native Women's Association of the NWT	Native Women's HIV/AIDS Workshop
Denendeh National Office	HIV/AIDS Awareness in Denendeh

Sponsor Organization	Project Title
B.C./Yukon	
AIDS Vancouver	• Operational Funding • HIV/AIDS Training Project
AIDS Vancouver Island	• Operational Funding • Men's Outreach Project
AIDS Yukon Alliance	Operational Funding
B.C. Persons With AIDS Society	Operational Funding
AIDS Prince George	Reducing Barriers by Building Partnerships
Victoria AIDS Respite Care Society	Caring for Family and Community: Volunteer Training Project
Youth Community Outreach AIDS Society	Youth HIV/AIDS Education Project
(ANKORS) West Kootnay/Boundary AIDS Network Outreach and Support Society	Community Care Team Project
AIDS Vancouver Island	Pacific AIDS Network
ASIA	ASIA BASE
WINGS Housing Society	Centralized Housing Information & referral
BC Multicultural Health Services Society	Peer Support for Immigrant Women
Positive Women's Network	National Distribution of the Pocket Guides for Women Living With HIV/AIDS
Downtown Eastside Youth Activities Society	Educational Video for HIV+ Injection Drug Users

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