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THE ECONOMIC BURDEN OF HIV/AIDS IN CANADA

Summary of the Findings and Policy Implications

by

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Over the past seven years Canada has lost ground in the fight against the HIV/AIDS epidemic. Infection is spreading in more marginalized populations who are harder to reach with prevention programs. The economic burden of HIV/AIDS to Canadian society is significant and continues to grow.

There is a strong economic incentive to invest in HIV prevention. Canada's investment in HIV prevention amounts to approximately $2,044 per person living with HIV/AIDS, while Britain invests about $3,900 per person living with HIV/AIDS. The British have been more successful in epidemic control with approximately 48 people per 100,000 population living with HIV/AIDS. In Canada, there are 129 people living with HIV/AIDS per 100,000 population. Over the next five years, $4 billion dollars could be saved should Canada achieve more effective epidemic control.

In order to better control the epidemic, Canada must improve monitoring and analysis through the creation of a strategic sentinel surveillance network, and it must invest more in prevention and education designed to reach the people most vulnerable to infection.

It has become clear that social and economic marginalization is feeding this epidemic. This demands a policy framework that embraces social and economic ministries and focuses on "community-level" interventions.

Highlights

- There are approximately 40,000 people living with HIV in Canada.
- The annual number of new infections (incidence) has risen by 33 percent over the past five years from 2,700 to 4,000.
- The epidemic has moved into marginalized populations: injection drug users, young gay men, Aboriginals, and vulnerable women.
- The cost of the epidemic to date is approximately $36.4 billion.
- The lifetime costs of treating someone living with HIV infection are $153,000.
- Canada invested an estimated $83 million from public and private sources to prevent the spread of HIV infection in 1996.
- By effectively controlling the epidemic and reducing the number of new infections to 1,700 per year by 2001, Canada could save $4 billion.

Introduction

Seven years ago the report card on the HIV/AIDS epidemic would have been impressive. Prevention investments of the 1980s were paying off, and the tide of the epidemic was subsiding. HIV incidence among gay men dropped to half of the 1985 peak incidence and remained fairly flat from 1987 to 1990.

Since 1990, the epidemic has gained ground primarily through a shift into younger and more marginalized populations comprised of injection drug users (IDU), Aboriginals, women and young gay men. The spread in the IDU risk group was in theory predictable, a research paper in the journal *Public Health Reports* in 1988 warned of the "underrecognized potential for a rapid increase in infection ... and a silent explosion of infection among IV drug abusers could occur long before a rise in IV drug-associated AIDS cases became evident" (Dondero et al., 1988). The increase in incidence among young gay men came as a surprise to many. Both groups have two things in common – marginalization and high risk of contracting HIV. Both groups also represent avenues for the spread of HIV into other populations. The prevention needs of both groups were probably addressed too late as evident in the higher levels of incidence reported in this study.

There are lessons to be learned from the lost ground in the fight against the HIV/AIDS epidemic and there can be far-reaching consequences to not acting or not acting appropriately. The design of a third national AIDS strategy offers an opportunity to avoid old pitfalls and move towards a truly integrated strategy that is based on the principles of best practice and *upstream* endeavours. It will be critical to improve upon surveillance in order to provide for pre-emptive strikes at the leading edge of the epidemic. The key message: surveillance and prevention must be as dynamic as the epidemic itself.

Key Findings

The new methods of research used in the National HIV/AIDS Economic Research Initiative (see back cover) coordinated by CPRN have produced a solid base of evidence to support decisions in the next phase of the National AIDS Strategy. Much more will be added once the findings of all the projects commissioned by Health Canada in this initiative are completed in the Spring of 1998. In the meantime, the main findings are the following:

1. *New Trends in the Epidemic*

   The epidemic has increased: HIV is on the rise again and infection is spreading in more marginalized and younger populations. The median age of infection is now 23 and many young Canadians are becoming infected in their teens (Laboratory Centre for Disease Control [LCDC], 1996). HIV prevalence is at an all time high – almost 40,000 people living with HIV/AIDS (Table 1) and the annual number of new infections (incidence) has risen by 33 percent over the past five years from 2,700 to 4,000 (Remis, 1997). Most of this increase (86 percent) stems from the injection drug user and young gay men populations. There is also evidence of an increase among Aboriginals and women.

2. *New Populations Affected*

   The epidemic is spreading to new populations – drug users, Aboriginal people, young gay men, and vulnerable women – people who live at the margins of society (Chart 1). They are hard to reach and challenge current techniques for monitoring and for preventing the spread of the epidemic. In short, the epidemic has become more complex.

3. *Economic Burden Is Significant*

   The economic burden is rising significantly because the number of cases is increasing, the people infected are living longer, and new therapies are more expensive. The total tab to date amounts to some $36 billion or about $1,200 per Canadian citizen (Table 2). The new and emerging HIV episode is longer and total direct costs of care and treatment in this new episode are much higher (Table 3). Between 1997 and 2001, financial savings in the order of $4 billion are available in moving from the status quo to more effective epidemic control. More importantly, if the epidemic shifts from the status quo to becoming uncontrolled, the cost increases are estimated to be some $7.5 billion over this five-year period (Chart 2).

Table 1

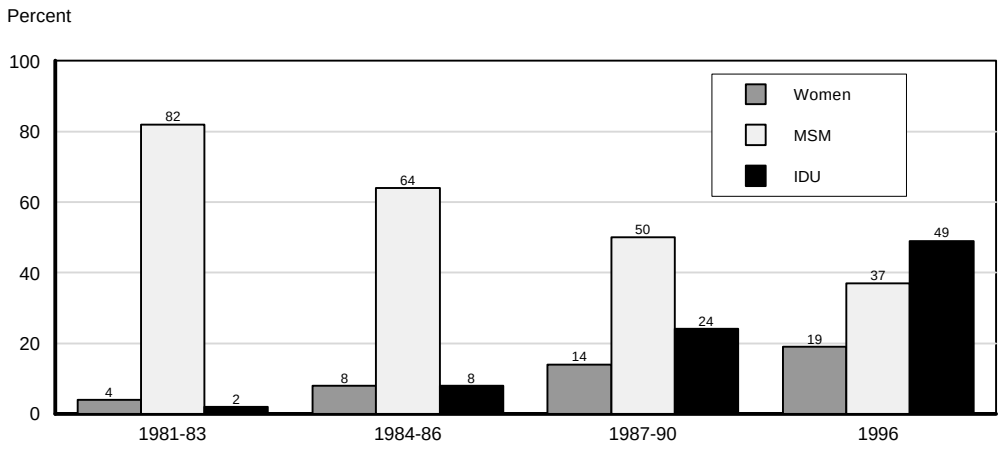
Estimated HIV Prevalence and Incidence for Canada, 1996

	Injection drug users	Men who have sex with men	Heterosexuals	Other	Total
Prevalence (persons living with HIV/AIDS)	6,100	25,100	7,300	300	38,900 (35,700-41,900)
Percent of total	16	65	19	<1	
Incidence (number of new infections)	1,950	1,470	500	20	3,940 (2,950-4,900)
Percent of total	49	37	13	<1	

Source: Dr. Chris Archibald, Laboratory Centre for Disease Control, in collaboration with CPRN.

Chart 1

HIV Incidence in Canada by Three Risk Groups



MSM = Men who have sex with men; IDU = injection drug users.
Note: Comparison based on back-calculations.
Source: Based on data presented by Dr. Chris Archibald, LCDC, at the Canadian Association HIV Research Scientific Conference '97.

4. Productivity Losses and the New Therapies

To the extent that the new high activity antiretroviral therapies (HAART) permit people living with HIV to return to normal patterns of living, the economic burden – in terms of lost productivity and participation in society – is reduced. If HAART treatment increases the period of productive life for those people living with HIV/AIDS by 15 percent, the savings in indirect costs will cover the increased costs of treatment.[1] These indirect costs of HIV/AIDS far outweigh the costs of care and treatment, and prevention.

Table 2

The Costs of the HIV/AIDS Epidemic to Date in Canada

	AIDS deaths[a]	Prevalent population	Total
		($ billions)	
Direct costs	0.97	5.4[b]	6.4
Indirect costs	6.60	23.3	29.9
Total	**7.60**	**28.7**	**36.3**

a Based on 11,000 deaths to date in Canada.
b Includes a combination of pre-HAART and HAART costs (i.e., High Activity Antiretroviral Therapies or triple combination therapies).

Table 3

The Old vs. the New HIV/AIDS Episode

	Length	Health care (direct) costs	Indirect costs[a] (lost productivity)	Total cost
	(Years)		(Dollars)	
Old episode (pre-HAART)[b]	11	67,000	600,000	667,000
New episode (HAART)	17	153,000	600,000[c]	753,000
Change (percent)	+54	+127	--	

a Derived from the Canadian estimate produced by Hanvelt et al. (1994) at the BC Centre for Excellence in HIV/AIDS.
b Estimates based on data provided by Dr. John Gill and Mr. Bill Davidson, Southern Alberta Clinic, Calgary Regional Health Authority.
c The indirect cost estimate was not adjusted relative to the new episode.

5. Economic Burden and the Prevention Response

There is a strong economic incentive for investment in HIV prevention and education. Canada invested over $80 million in HIV prevention and education in 1996 (Chart 3). Of the $60 million invested by the provinces, territories and municipalities, roughly 29 percent was transferred to community-based AIDS service organizations (ASOs) (Chart 4). At the federal level, Health Canada invested roughly 52 percent of its total HIV prevention and education funds at the community-based level (Chart 5). Canada invested roughly $2,044 per person living with HIV compared to $3,897 in Britain and $1,300 in the United States (Table 4).

6. Canada in an International Context

Control of an HIV epidemic is not just a pipe dream. Britain, for example, has made a solid, ongoing commitment to prevention over time. It

Chart 2

Historical HIV Incidence in Canada and Three Plausible Scenarios of Infection to 2001

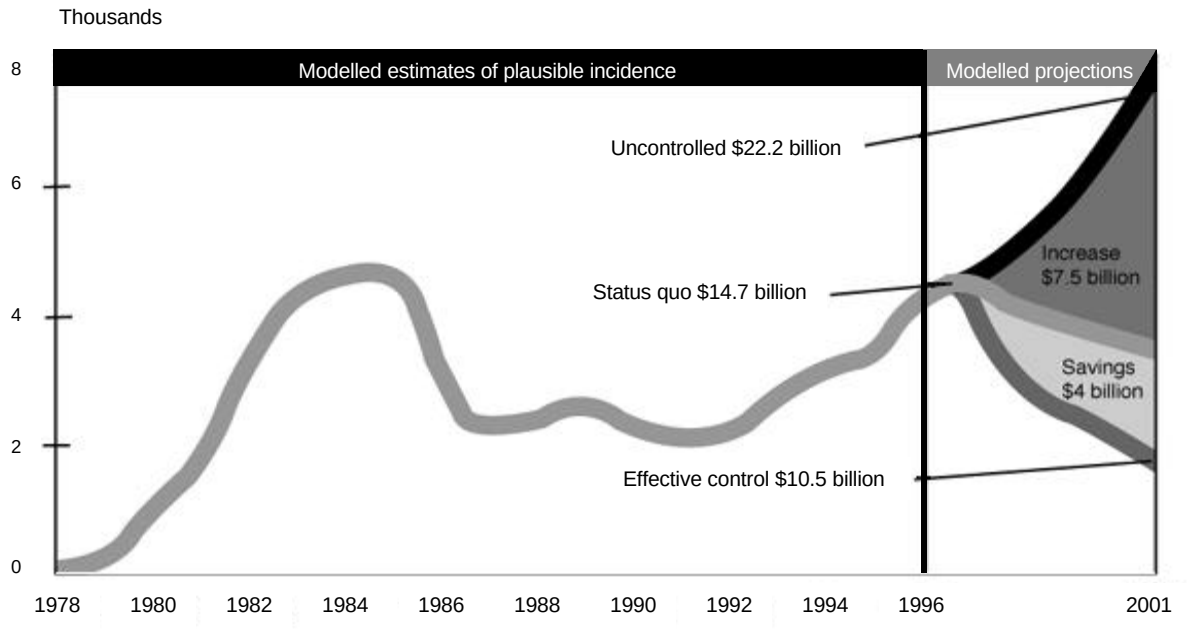


Chart 3

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

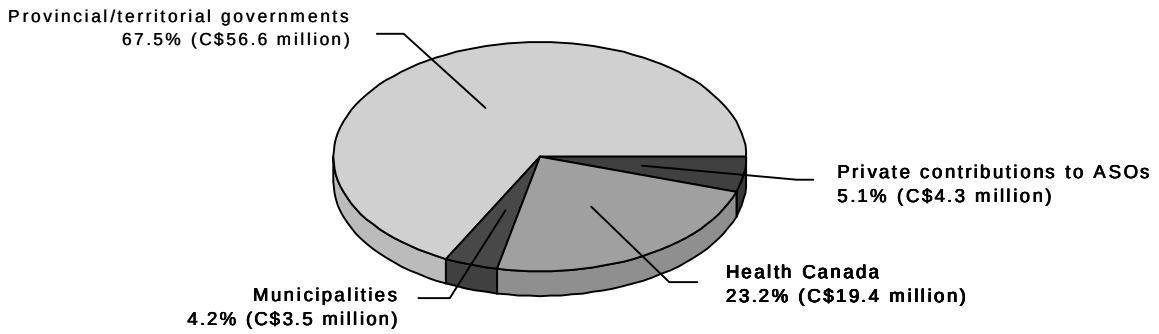


Chart 4

Estimated Provincial, Territorial and Municipal HIV Education and Prevention Expenditures, 1996-97

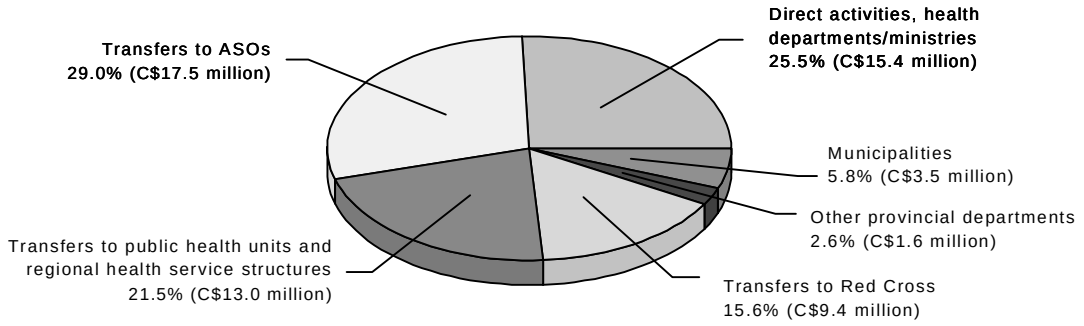
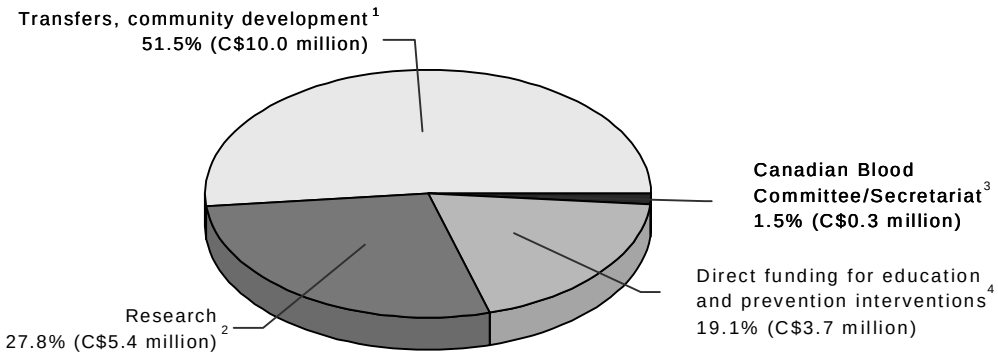


Chart 5

Health Canada Expenditures on HIV/AIDS Education and Prevention, 1996-97



1 Includes funds for infrastructure of NGOs; comprised of transfers to AIDS Community Action Program (includes some care and support activities), and includes initiatives involving Correctional Services Canada, the Canadian AIDS Society, and the Canadian Hemophilia Society.
2 Includes 25 percent of total National Health Research and Development Program grants; includes epidemiology and surveillance; includes programs for blood safety.
3 Assumed half of the total funding of the Canadian Blood Committee as attributable to HIV up to 1991-92 when HIV was an emerging issue in dealing with blood borne pathogens; from 1993-94, includes total expenditures of the Canadian Blood Secretariat.
4 Includes "HIV in the Workplace" program; funding for First Nations and Inuit programs.

Table 4

Profile of Comparative Expenditures on HIV/AIDS Education and Prevention

	Total population[a] (millions)	Public sector expenditures: HIV/AIDS education/ prevention (C$ millions)	Estimated per capita expenditure (C$)	HIV prevalence (1996)	HIV prevalence per 100,000 population	Expenditure per prevalent case (C$)
Canada	29.9	79.5	2.65	38,900[b]	129	2,044
Australia	17.8	47.3[c]	2.64	19,661[d]	109	2,407
United States	268.5	975.0[e]	3.64	750,000[f]	270	1,300
Great Britain	58.9	110.8[g]	1.88	28,477[h]	48	3,897

a Populations for Great Britain and Australia based on 1993-94 figures, to which 1993-94 growth rates applied (compounded). Source: Labour force Statistics, 1974-94, OECD, Paris, 1996.
b Dr. Chris Archibald, Laboratory Centre for Disease Control, in collaboration with CPRN.
c Source: Public Health Education Unit, Commonwealth Department of Health and Family Services. Estimate includes Commonwealth funding, plus contributions of States and Territories. Australian dollar multiplied by 1.08.
d HIV infections. Source: Public Health Education Unit, Commonwealth Department of Health and Family Services.
e Based on US$500 million expenditure by the Centre for Disease Control plus a very conservative estimate of state investment of US$250 million. The total does not include private investment, nor that of the National Institutes of Health. US$ multiplied by 1.3.
f Prevalence estimate taken from Holmberg, S.D. (1996), "The Estimated Prevalence and Incidence of HIV in 96 Large US Metropolitan Areas," *American Journal of Public Health* 86.
g Source: *AIDS Newsletter* 1996, 12(1), Section 32, page 7. UK£ currency multiplied by 2.12.
h HIV infections. Source: Aggleton, P. (1997), "Success in HIV Prevention," AVERT, West Sussex, England.

spends much more per prevalent case on prevention than does Canada, but the result seems to be a much smaller epidemic – 48 people living with HIV/AIDS per 100,000 population compared to 129 per 100,000 in Canada (Table 4). Success in preventing infections reduces total investment in care and treatment, as well as the suffering and productivity losses when relatively young people die.

The United States provides the opposite example. Its investments in prevention and education per prevalent case are less than Canada's, and the epidemic there is twice the size of Canada's, at 270 per 100,000 population (Table 4). Thus Canada should not be using the United States as its benchmark for effective prevention.

Investing in well-targeted prevention interventions that have strong links to a well-structured surveillance network could contribute to achieving effective epidemic control and savings in the order of some $4 billion over the next five years. Upfront investments in HIV prevention are required to achieve this potential payback.

These findings lead to two sets of conclusions that are highly relevant to the National AIDS Strategy, which will begin in 1998-99. That strategy will have to include initiatives with respect to clinical research and the ongoing care and treatment of people with HIV, in order to build the knowledge base required to find the cure and improve care. But, if Canada is to regain control of the HIV epidemic, it will have to move on two fronts.

- First, the National Strategy must significantly improve the techniques for monitoring an epidemic that is largely hidden from view.

- Second, the National Strategy must give a much higher priority (in money and leadership) to needs-based investment in prevention and education, targeting the marginalized populations that are now so vulnerable to infection.

In both cases, governments, communities, and society are confronting the complex challenge of

reaching out to people living on the margins of society. For the most part, these are people who do not hear or read the messages from mainstream society, and when they do, they reject these messages out of distrust or a sense of hopelessness.

The Policy Context

> *Sometimes it feels like this. There I am standing by the shore of a swiftly flowing river and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to shore and apply artificial respiration. Just when he begins to breathe, there is another cry for help. So I jump into the river, reach him, pull him to shore, apply artificial respiration, and then just as he begins to breathe, another cry for help. So back into the river again, reaching, pulling, applying, breathing and then another yell. Again and again, without end, goes the sequence. You know, I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have no time to see who the hell is upstream pushing them all in (McKinlay, 1990).*

Canadian society has experienced substantial socio-economic change over the last five to seven years. The combination of new technologies and global competition has polarized the labour market into good jobs and bad jobs, and cutbacks in the social safety net have pushed more people to the margins of society (Betcherman and Lowe, 1997; Maxwell, 1996). In general, there are fewer social buffers and the bridges to a better life are lacking for many.

Canadians are alarmed at this polarization – forcing governments to give a higher priority to addressing child poverty and youth unemployment, for example. The current challenges in containing the HIV/AIDS epidemic are very much tied to poverty and lack of hope among marginalized groups in society – especially vulnerable women and young people. The risk of becoming HIV infected is only one of several risks to "well-being" for this disenfranchised population, which faces risks such as addiction, homelessness, unemployment, violence, crime, and so on.

The links between socio-economic status and health are more than a matter of ideology and speculation. Research from Manitoba has demonstrated that those regions whose residents were in the poorest health are those regions whose residents score the most poorly on indicators of socio-economic risk (Cohen, 1995). Low dwelling value; unemployment at all ages; lack of high school completion at all ages; and female-headed single-parent families all increase the risk of poor health. The residents of these regions have good access to health care. Much of the variation in health status can be explained by a few socio-economic factors (Mustard and Frohlich, 1995).

Socio-economic indicators are also predictive of risk for infectious disease including HIV infection. An investigation into the behaviour of HIV-negative gay men identified that risk takers were both younger and had lower incomes than non-risk takers in the study (Hogg et al., 1993). In Quebec, HIV-infected mothers reside in regions with revenue indexes below the Quebec provincial median (Hankins et al., 1990). Within the HIV-infected population, socio-economic status prior to infection is a predictor of the rate of disease progression and survival (Schecter et al., 1994; Hogg et al., 1994). For example, HIV-positive gay men with incomes less than $10,000 annually experienced significant weight loss, as a pre-AIDS defining condition, significantly faster than their richer counterparts (Voight, 1994). In short, scoring poorly on indicators of socio-economic risk has not only put subpopulations at greater risk for HIV infection but can also accelerate the rate at which these individuals will become sick and die after infection.

Success in controlling the current wave of the epidemic will have to focus on all the social and economic factors that determine the health of these subpopulations. The ideal policy framework will require an integrated approach by a large number of government agencies (across agencies and across jurisdictions) and community-based organizations. Better coordination would mitigate situations where some government departments develop policies that confound the efforts of others. A prime example is the tension between the criminal justice system and departments of health with respect to injection drug use. Needle exchange programs are directed at reducing the risk of HIV transmission among drug users. Because the use of these needles to inject illicit drugs is a criminal offence, law enforcement officers sometimes pursue clients of needle exchange programs, often driving them away from a risk reduction service.[2]

A first step towards a new strategy for HIV/AIDS will be to better understand the organizational barriers to implementing population health. As Greg Stoddart (1996) has said, "New policy partnerships and coalitions will need to be developed." He goes on to point out that departments apply their knowledge of the determinants of health "vertically" to their own policy sector and thereby miss the horizontal linkages needed for effective policy.

The Federal-Provincial-Territorial (FPT) Committee apparatus functioning under the Conference of Ministers of Health has served as a coordinating mechanism for health issues, within the ambit of departments of health (some of which also deal with social and community services). The problem is, however, that population health issues like HIV/AIDS are not and cannot be the sole responsibility of ministries of health. Thus the FPT Advisory Committee on HIV/AIDS should include representatives from justice, housing, education and employment, at a minimum.

The role of governments is in setting the policy frameworks, monitoring progress and funding and delivering both treatment and prevention. But interventions on the ground critically depend on community organizations. Community interventions have been shown to be highly effective at reaching people at high risk of becoming HIV infected. Most of these organizations emerged as the gay community mobilized to deal with the first and second waves of the epidemic in the 1980s. They have been remarkably effective in looking after their own, but if they are going to remain at the leading edge, they will have to find ways to serve the injection drug users, the youth, the poor women and Aboriginal people who are caught in the third wave of the epidemic. Governments must monitor the response of the existing AIDS service organizations and determine whether and where they need to promote the development of new community-based infrastructures to reach the most vulnerable population groups.

New Surveillance Networks Are Needed

Clearly, there is a critical need to stay as close as possible to the leading edge of this elusive epidemic. What best practices can be defined and operationalized to assist in this effort? One possibility lies in the development of a formal and strategic national sentinel surveillance system. Sentinel is defined as "a person stationed to keep watch and guard against surprise attack" (Gage Canadian Dictionary, 1983).

Surveillance is currently performed at the national, provincial and regional levels through several mechanisms and techniques.[3] While much information and intelligence is shared, it is not done in a systematic, nor integrated, fashion. Dondero et al. (1988) note that

> For monitoring the levels and trends of a condition such as HIV infection, which is not routinely or completely ascertained, quality information collected under standardized conditions in a limited number of places is preferable to information collected haphazardly everywhere.

Examples of sentinels relevant to the current epidemic in Canada would include: select hospitals, women's health clinics, addiction treatment centres, homeless shelters, food banks and free-meal locations, needle exchange programs, physician HIV practices, Aboriginal reserves, prisons and HIV testing sites. As well, monitoring the results of other related HIV studies would contribute further to staying at the leading edge of the epidemic. For example, two studies currently underway through the National HIV/AIDS Economic Research Initiative have discovered striking insights into the level of the epidemic in the Aboriginal community.[4] Studies following cohorts of risk populations would also be considered key sentinels.

Many of the necessary sentinel sites currently exist, but are not formally integrated into a strategic national surveillance framework. Ultimately, this organized series of sentinel sites would form a network to support highly effective surveillance that will inform decisions about timely and well-targeted prevention policies, programs and inter-

ventions. Creating this network should be a primary goal for the next phase of the national AIDS strategy.

HIV Prevention: The Need for Best Practices

Greg Stoddart (1996) has observed that

> Specific policies, however, come not from frameworks but from evidence about which interventions work well for different targets and in different groups. At this level of detail, our knowledge of effective interventions appears to lag behind our knowledge of determinants.

As far as HIV prevention interventions are concerned, knowledge of effectiveness is very limited. The HIV/AIDS epidemic has pushed the limits of existing capacity to respond and, at times, it is necessary to move quickly based on very little information and evidence. Hence prevention practice has advanced much faster than the evaluation research surrounding these practices. Governments have a responsibility to invest on two fronts: prevention programs and research that will shed light on what programs work best and why, and what does not work and why.

The main objective now is to identify the principal attributes of best practice in order to ensure that the resources available for HIV prevention will be used to maximize the number of infections averted.

Best practice should occur within a surveillance-response-evaluation cycle responding to the dynamics of the epidemic. Surveillance intelligence can inform the prevention response and allow for the design and delivery of timely interventions before "the horse is out of the barn." It will allow for the location and containment of the "burning embers" of the epidemic so that it does not flare up into a raging and uncontrollable forest fire. The best practice model shows that for high-risk populations, the number of infections prevented is maximized when prevention is targeted early or at a time of low HIV prevalence in the population in question (Kahn, 1996).

There is an urgent need to identify best practices in targeting prevention programs at the hard-to-reach populations who are most vulnerable to this epidemic. Governments and community organizations need to know what are the optimal methods, designs and structures for delivering and supporting HIV prevention services. Much can be learned from the success in prevention programs that persuaded gay men to change their behaviours in the 1980s, from the rich experiences developed by the AIDS service organizations that sprang up in every major community across the country during the 1980s, and from international successes. In many cases, these same organizations may be well placed to reach one or more of these groups: young gay men, drug users, street people, Aboriginal people and vulnerable women. In other cases, however, it may be necessary to foster the development of new kinds of community-based organizations to reach these groups.

At the same time, the lessons learned from population health literature suggests that many of the most successful interventions will be at the "community level":

> A community-level intervention is an intervention organized to modify the entire community through community organization and activation, as distinct from interventions that are simply community-based, which may attempt to modify individual behaviours. (Patrick and Wickizer, 1995, cited in Lomas, 1997.)

The distinction between community-level and community-based is important. It is clear that the first-order buffers against HIV infection are a safe home, a job, and an education. When young people lack those buffers, they drift to the streets, and begin to engage in risky behaviours. The second-order buffers, then, are likely to be youth-service supports that offer safe housing, mentoring, drug addiction programs, a chance to get into a training program, complete education, and/or to find a job. While individual community organizations can and do offer one or more of these buffers, it will take a community-level commitment to ensure that young people drifting to the streets are aware that such options exist and are encouraged to try them out.

The third-order buffers are the programs aimed at people who have already committed to risky behaviours in terms of drug use and sexual activity. These programs are aimed at harm reduction, but they do not in any way alter the tendency to

take risks in the first place: they offer clean needles to drug users and condoms to those who engage in risky sexual activity.

Health Canada has commissioned CPRN to undertake a number of economic research projects on prevention interventions to be completed in the Spring of 1998. These projects will add to the limited existing knowledge base, but they are only the first stage of an intensive effort to think through the best ways to target vulnerable groups and to begin to establish best practices.

At this early stage, the major steps to include in the prevention segment of the National AIDS Strategy are:

1 A commitment to build careful evaluation into all prevention programs, so that the successful ones are emphasized and the ones that do not work are eliminated. In addition, the key factors leading to success should be well documented and publicized so that they will shape the design of prevention programs across all jurisdictions and all types of government agencies.

2 A commitment to open up a dialogue with all the health and social service agencies that understand, have access to, and are likely to encounter the vulnerable groups, in order to discover how best to mobilize their resources to prevent the spread of HIV infection.

3 A commitment to explore with existing AIDS service organizations, many of which have a historical connection to the gay community, the degree to which they are able to use their existing infrastructure to serve the needs of the new target groups.

4 A commitment to work with youth-serving agencies in all types of government departments at all levels of government to think through the kinds of community-level strategies that would offer young people drifting to the streets alternatives to life on the margins. What many of them need most is hope – a chance to escape marginalization.

Concluding Comments

The economic analysis presented in this report shows that Canada has once again lost effective control of the HIV/AIDS epidemic, that the direct health care costs (excluding indirect costs) of the epidemic are already in the range of $570 million a year, and that the leading edge of the epidemic is largely hidden from view. Nevertheless, there is good reason to hope that the epidemic can be controlled. To regain control, it will be essential to do three things: 1) make an unwavering commitment to better surveillance through a formal network of sentinel observers; 2) give a much higher priority to prevention and education that is rooted in best practice; and 3) ensure a close linkage between surveillance and the prevention response.

HIV infection is a life-shattering event – wherever it hits. In its new metamorphosis, the epidemic attacks, for the most part, young people who are already feeling down and out. As long as the epidemic thrives among these marginalized people, there is a risk that it will spread to others who are also marginalized and, through them, to those in the mainstream. There is, as yet, no cure and the epidemic remains a current and long-term threat to the well-being of Canadian society and to the sustainability of its health care system . But this is a disease that is preventable – one hundred percent preventable.

Notes

1 Physicians participating in the clinical Delphi session convened by CPRN for the purposes of this study suggested that, based on their initial experience with HAART, about 20 percent of their patient population would become well enough to return to work.

2 As well, governments are reluctant to embrace innovative prevention approaches such as the creation of controlled injection centres (sometimes referred to as shooting galleries), which would ensure safer injection practices. These are difficult decisions that often boil down to choosing "the lesser of two evils."

3 For example, HIV testing centres provide data for surveillance. Back calculation is a technique that uses AIDS data to provide insights into the historical directions of the epidemic.

4 Dr. Robin Hanvelt and his research team at the BC Centre for Excellence in HIV/AIDS recruited a significant cohort of Aboriginals to the Community Health Resource Project in Vancouver. Dr. Philip Jacobs and his research team (located at the Streetworks Program in Edmonton) conducted interviews from the back of a needle exchange van and discovered that two-thirds of those interviewed were Aboriginal.

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The Economic Burden of HIV/AIDS in Canada

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CPRN's Health Network

The Health Network concentrates on health care services and population health. It begins with the assumption that many health policy issues are common to most provinces and territories and that there is much to learn from the diverse efforts to restructure health services. It also recognizes that population health policy research must consider much more than health services.

Background

This *REFLEXION* is the summary of findings to date from a major program of economic research on HIV/AIDS commissioned by Health Canada. Concerns about the magnitude and impact of HIV/AIDS on the health care system and on society in general were raised soon after AIDS was recognized in 1981. Economists make up the third wave of researchers to consider the implications of HIV/AIDS, following the initial involvement of epidemiologists and clinicians, and second wave of social and behavioural study researchers (Hanson, 1992). From the perspective of a person living with HIV/AIDS (PHA), a cure will be the ultimate result of the research effort. However, it is widely accepted that the HIV/AIDS epidemic is still largely in front of us and not behind us (Hankins and Handley, 1992) and society must cope with cumulating numbers of new infections each year and the related economic impacts. Hence, while the search for a cure continues, we must also better understand the economic dimensions of the epidemic as a guide in formulating evidence-based policy and for optimal resource allocation.

Health Canada's contribution in this area was the creation of the National HIV/AIDS Economic Research Initiative. The primary objective was to make a healthy start and build a solid foundation for future research. The initiative is comprised of two major components, each with a number of major projects in locations across the country: 1) HIV/AIDS care and treatment; and 2) HIV prevention and education. CPRN was given the mandate to coordinate the initiative and to also undertake a research project on "The Economic Burden of HIV/AIDS in Canada."

Two research workshops have been convened to date under the initiative in order to share interim results and explore linkages between the research projects. A final national workshop for the research initiative will be held in February 1998. CPRN will be preparing a final report in March 1998, which will synthesize the research findings from the initiative and identify a longer term research agenda in this area.

A key objective in conducting this research on the economic burden of HIV/AIDS in Canada was to capitalize on findings emerging from the National HIV/AIDS Economic Research Initiative, link these results to other research, and bring these interim results to bear on pressing policy issues. A cost-of-illness or economic burden approach was selected as the most suitable framework. The overriding objective was to quantify and make explicit several key economic dimensions of the HIV/AIDS epidemic in Canada.