HIV/AIDS Epi Update Public Health Agency of Canada

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HIV/AIDS Among Older Canadians

At a Glance

- As of December 31, 2008, 12.4% (2,644) of all reported AIDS cases occurred in people 50 years of age or older.
- The proportion of annual positive HIV test reports among those aged 50 years and older increased from 10.6% in 1999 to 15.3% in 2008.
- Sexual contact is the predominant risk factor reported for HIV test reports among older Canadians. In 2008, the exposure categories of men who have sex with men and heterosexual contact made up similar proportions of HIV test reports, accounting for 38.5% and 38.0% respectively.
- Males account for the majority of reported AIDS and positive HIV test reports among older Canadians, representing 92.6% and 84.9% of all reports in 2008 respectively.

Introduction

HIV/AIDS has generally been viewed as a disease affecting younger people; however, it has become apparent that older Canadians are not only affected by but are also at risk of HIV infection. For the purpose of this document, "older" is defined as 50 years of age and older.

Older persons living with HIV may have been infected with the virus after the age of 50, or they may have been infected at a younger age and survived into older age. More and more HIV-positive individuals are surviving for longer, largely as a result of medical advances such as highly active antiretroviral therapy. In turn, the HIV/AIDS prevalence rate is affected by those surviving into older age.

Several factors may put older Canadians at increased risk of HIV infection, such as limited knowledge of modes and risks of HIV transmission, increasing divorce rates, ¹ access to sexual performance enhancing drugs, ^{2,3} misconceptions about sexuality in older age in the health care and policy fields, and age-related physiological changes, such as tissue fragility.⁴

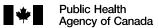
The intent of this chapter is to summarize trends in HIV and AIDS surveillance data in older Canadians and to highlight findings from a growing body of Canadian and international research, which have implications for the prevention and diagnosis of HIV/AIDS among older Canadians.

Routine Surveillance

The Centre for Communicable Diseases and Infection Control (CCDIC) of the Public Health Agency of Canada (PHAC) collects surveillance data on positive HIV test reports and reported AIDS cases in Canada. Epidemiologic information includes (but is not limited to) age, sex, risks associated with the transmission of HIV and self-reported ethnicity. For AIDS cases, death data are also collected.

Health care providers and/or laboratories forward this information to provincial and territorial public health officials, who, in turn, voluntarily submit positive HIV test reports and AIDS diagnoses to the Centre, where the data are synthesized and analyzed at the national level. There are several limitations regarding surveillance data, including reporting delays, underreporting, missing information and the inability to capture information on undiagnosed infections.

(Please refer to Chapter 3, "HIV Testing and Surveillance Systems", for a full description of HIV/AIDS surveillance in Canada.)







AIDS surveillance data Summary of data/findings

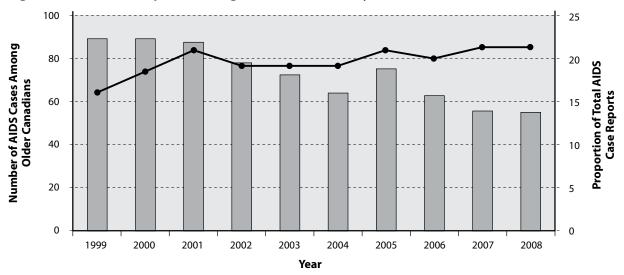
The total number of AIDS cases with known age information reported to CCDIC from 1979 to December 31, 2008, was 21,298. Of these reports, 2,644 (12.4%) were among older Canadians (age 50 and over);⁵ the majority (90.2%) of the 2,644 were males, who reported having sex with men (61.3%) and identified themselves as White (85.3%).

Over the past 10 years, there has been an increase in the percentage of AIDS case reports among older Canadians, as well changes in the male:female ratio and reported exposure categories in this age group.

Description of trends

As shown in Figure 1, a general upward trend has been observed in the annual percentage of AIDS case reports among older Canadians. Over the past 10 years, the percentage of total AIDS reports among older Canadians ranged from 15.9% in 1999 to 21.6% in 2008, a 35.8% increase.

Figure 1. AIDS Case Reports Among Older Canadians, by Year



From 1999 to 2008, among older Canadians the number of reported AIDS cases indicating an exposure category of men who have sex with men (MSM) has generally decreased. This same time period also saw a general increase in the percentage of reported cases among older Canadians attributed to IDU (people who inject drugs), ranging from 5.3% to 26.1%. Heterosexual contact accounted for roughly one-quarter to one-third of reported AIDS cases among older Canadians between 1998 and 2008, with the exceptions of 2006 and 2007, when heterosexual exposure accounted for 54.3% and 61.3%.

Reported AIDS cases among older Canadians tend to be male: 88.0% of all cases since 1999 and 92.6% in 2008.

With respect to the ethnicity/race of reported AIDS cases since 1999, the majority were identified as White, followed generally by Aboriginals and then Blacks, as shown in Figure 2. Because of changes in the reporting of AIDS cases in Ontario, data on ethnicity/race were not available for cases reported after the second half of 2005.

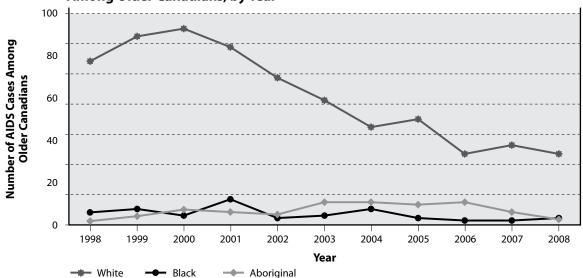


Figure 2. Most Frequently Reported Race/Ethnicities of AIDS Cases Reports Among Older Canadians, by Year

HIV surveillance data Summary of data/findings

Since HIV reporting began in 1985 up to December 31, 2008, a total of 67,442 positive HIV test have been reported to PHAC, of which 62,762 included age information⁵. Of these reports, 6,036 (9.6%) were older Canadians (age 50 years and over). The majority (86.4%) of the reports were among men, the most frequently reported risk exposure category was MSM (48.7%), and the majority self-identified as White (74.3%).

Description of trends

There has been a decreasing proportion of positive HIV test reports among younger adults (ages 15-39) and an increasing proportion among older adults, as shown in Figure 3.

In the past 10 years, a general upward trend can be observed in the proportion of positive HIV test reports among older Canadians, ranging from 10.6% in 1999 to 15.3% in 2008. Further, the number of annual positive HIV test reports has increased among those 50 years old and over by 76.5% since 1999. This is the largest increase over the 10-year period, aside from those aged 15-19, whose numbers increased by 93.5%.

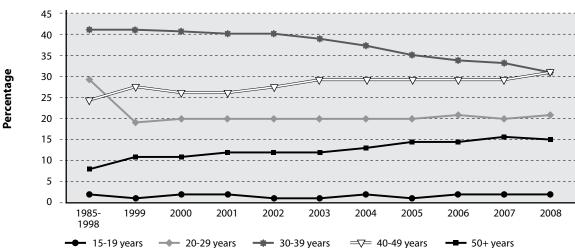


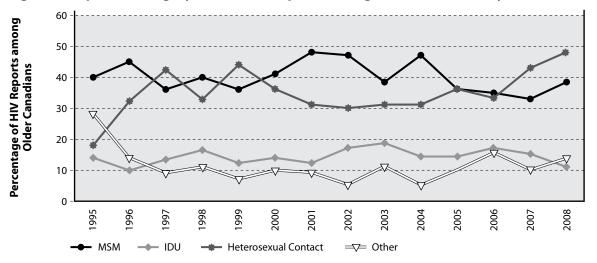
Figure 3. HIV Case Reports by Age Group and Year

Over the past 10 years, the highest percentage of positive HIV test reports among older Canadians has generally been attributed to the MSM exposure category, as shown in Figure 4. However, in the past 20 years there has been a decrease in the percentage of HIV cases in the MSM exposure category and an increase in those in the heterosexual exposure category. From the period 1985-1998 to 1999-2008 the proportion of positive HIV test reports in the MSM exposure category decreased from 58.6%

of all reports (3.8 times the proportion of heterosexual reports) to 39.9% of all reports (1.1 times greater than heterosexual reports).

The proportion of positive HIV test reports among older Canadians in the injection drug use exposure category has varied over the past 10 years. However, it has generally declined since 2003, showing a high of 19.1% to a low of 10.6% in 2008.

Figure 4. Exposure Category of HIV Case Reports Among Older Canadians, by Year



There are several limitations associated with reported race/ethnicity, and thus caution is recommended in interpreting these data. Information on ethnicity/race is not available for all provinces and territories, most notably Ontario and Quebec. As a result of the variation in reporting, the ethnic status reflected in positive HIV test reports should not be viewed as representative of Canada. Other issues related to reported ethnicity/race are a limited choice for identification of ethnic or racial status, misclassification and underreporting.

With respect to race/ethnicity for reported HIV cases among older Canadians, individuals identified as White have accounted for the majority of positive HIV test reports each year and for 74.3% of the reports with known ethnicity/race since 1998; reports for individuals identified as Aboriginal and Black accounted for 12.9% and 5.6% respectively.

A gradual decline can be observed in the proportion of positive HIV test reports among older men and a corresponding increase among women since the beginning of the epidemic. During the 1985-1996 period, women made up 10.5% of HIV reports among older Canadians as compared with 15.8% during1997-2008. In 2008, males represented 84.9% of positive HIV test reports among older Canadians.

Summary of Recent Research

Recent research has identified some trends among older people in the areas of HIV/AIDS prevention, diagnosis and treatment/outcomes. These trends have implications for the education of older persons about HIV/AIDS transmission, HIV/AIDS testing guidelines and outreach policies, and future directions in medical research.

Prevention

Recent research suggests that older adults in Canada and elsewhere tend to be less informed about HIV/AIDS and its transmission than other adult age groups. For example, the 2006 Canadian HIV/AIDS Attitudinal Tracking Survey⁶ reported that seniors (65 and older) tended to be unaware that an HIV-positive person is more susceptible to a number of illnesses and diseases than those who are seronegative; were more likely than young Canadians to believe that HIV/AIDS can be cured; were more likely to incorrectly believe that HIV can be transmitted through a sneeze or a cough; were aware of the fact that they know less than other Canadians on the issue of HIV/AIDS; and were most likely to agree that HIV/AIDS is mostly a gay person's disease or a Third World disease.

There is also evidence that physicians do not regularly discuss sexual issues with patients aged 50 and older. A large study of people in the United States (n = 3,005) over the age of 57 reported that "a total of 38% of men and 22% of women reported having discussed sex with a physician since the age of 50 years". This trend appears to continue despite an apparent increase in sexual activity among older people.^{3,8}

Older people's lack of HIV/AIDS awareness does not necessarily correspond to lack of HIV risk. While Canadians aged 65 years and older in the HIV/AIDS Attitudinal Tracking Survey were in the age group least likely to report sexual activity in the previous 12 months (30%), this age group had the highest percentage of any age group that reported not having used a condom the last time they had sex and perceiving that they had no risk of infection.⁶

Recent studies of older adults with HIV/AIDS suggest that risk behaviour is prevalent in this subpopulation. One study, which involved 290 HIV-positive adults aged 50+ recruited from AIDS service organizations in four large cities in the United States, found that of those who were sexually active in the previous three months (n = 110), 33% had had unprotected anal or vaginal intercourse. This was reported by 27% of the male heterosexual respondents, 36% of the gay/ bisexual male respondents and 35% of the heterosexual female respondents.

Another recent US study interviewed 624 men aged 49 and older who were either HIV positive or HIV negative and who engaged in high-risk sexual activities. This study found that in the previous six months, 25% of both the HIV-negative and HIV-positive respondents had had more than one sexual partner. Further, only 18% of the HIV-negative men and 58% of the HIV-positive men always used condoms with their sexual partners.¹⁰

Diagnosis

Along with limited knowledge of HIV transmission, the uptake of HIV testing among older Canadians appears to be low. For example, a study of 219 on- and off-reserve rural Aboriginal people in British Columbia found that those over the age of 40 were least likely to undergo HIV testing.11 Similarly, in a review of Australian surveillance data adults aged 50 and over were found to present later than younger adults for testing, regardless of sexual exposure category.¹² An American study of 488 women over the age of 50 in a population with a high HIV prevalence reported low rates of testing (35%) in this age group, testing rates decreasing significantly as age increased.¹³ Variables that predicted testing behaviour among these older women included being younger in age and recalling a health care provider recommending HIV testing.

Comment

The research described suggests that there are gaps both in Canada and internationally in the areas of HIV/AIDS education among older people, promotion of HIV testing among older adults and outreach to older high-risk populations. Such gaps affect counselling and treatment access for older people, as well as increasing older people's risk of HIV infection. Further research on HIV/AIDS and ageing will seek to shed light on these issues, which hold increasing importance for our ageing population.

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Mission

To promote and protect the health of Canadians through leadership, partnership, innovation and action in public health.

Public Health Agency of Canada

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