Health

HIV/AIDS

Updated

November 2010

IT'S YOUR HEALTH



HIV/AIDS

Issue

Acquired **Immune Deficiency Syndrome** (AIDS) was first detected in Canada more than 25



years ago. Since then, thousands of Canadians continue to become infected with the Human Immunodeficiency Virus (HIV) every year.

HIV is a virus that attacks the immune system, resulting in a chronic, progressive illness that leaves people vulnerable to infections. When the body can no longer fight infection, the disease has progressed to become AIDS.

AIDS is a deadly disease and continues to be a global health issue. According to the Joint United Nations Programme on HIV/AIDS, in 2008, there were an estimated 2 million deaths worldwide due to AIDS. There is no cure for AIDS and currently no vaccine to prevent the HIV infection.

Background

Over a period of years, HIV can weaken the body's immune system to the point where it no longer can fight usually harmless bacterial and viral infections, parasites, fungi, and cancers. These diseases are called "opportunistic infections", and their appearance for a person living with HIV

may lead to the onset of AIDS, which is the last stage of the HIV infection. Advanced opportunistic infections can lead to death.

HIV Infection

HIV is not transmitted through air, food, or water or through everyday social contact, such as shaking hands, sneezing, touching, and swimming. For a person to become infected with HIV, the virus must enter the bloodstream. As such, there are a limited number of ways that a person can transmit or become infected by HIV.

The following activities can place a person at high-risk for HIV infection:

- engaging in unprotected sexual intercourse (anal or vaginal);
- sharing sex toys;
- sharing needles or equipment for injecting drugs or steroids; and
- mother-to-child transmission during pregnancy, delivery, and breast-feeding.





HIV cannot be transmitted in the following ways:

- · shaking hands, hugging;
- · coughing, sneezing;
- giving blood;
- using swimming pools, toilet seats;
- sharing eating utensils, water fountains;
- mosquito and other insect bites;
- · animal bites.

The following activities pose a low risk for contracting the HIV infection, but they still carry a risk. They pose a high risk when one of the partners has a pre-existing infection that resulted from a previous sexual experience or contact with infected blood.

- Unprotected oral sex poses a lower risk for HIV transmission, but a higher risk for causing other <u>sexually</u> <u>transmitted infections</u>, such as <u>chlamydia</u>, <u>gonorrhea</u>, <u>herpes</u>, <u>genital</u> <u>warts (HPV)</u>, and <u>syphilis</u>.
- Kissing, in almost all circumstances, has no risk of HIV transmission.
 However, kissing with the exchange of blood (when there are bleeding cuts, open sores, or ulcers present in the mouth) can still carry a low risk for HIV transmission.
- Reusing or sharing needles for tattooing, skin piercing, electrolysis, or acupuncture carry a low risk for HIV transmission and a high risk for the transmission of other blood-borne infections, such as hepatitis B and hepatitis C.
- Exposure to blood and bodily fluids in an occupational setting (for example, in an emergency response or a medical environment) carries a low risk if infection-control precautions are followed. However, the transmission risk is higher in an occupational setting if precautions are not followed, or if the skin is punctured while being exposed to bodily fluids.

Even without treatment, it can take many years for a person infected with HIV to

develop noticeable symptoms. That is why people can be unaware that they are infected with HIV. The Agency estimates that, at the end of 2008, 26% of the people in Canada who were living with HIV did not know they were infected. If people have HIV and do not know it, they may unknowingly infect others by not taking proper precautions during sex, or while injecting drugs or steroids. The only way to confirm if you are infected is through a blood test.

Minimizing Your Risk

<u>HIV</u> is not an easy virus to transmit. It can only be passed from body to body through blood, semen, pre-ejaculate (presemen), vaginal fluids, and breast milk.

There are several steps a person can take to reduce the risk of HIV infection.

1. If you decide to have sex, discuss HIV and other <u>sexually transmitted</u> <u>infections</u> with your sexual partner, and only have sex with a partner who agrees to have safe sex.

To practise safer sex:

- Use a latex or polyurethane <u>condom</u> or a female condom consistently and correctly whenever you have anal or vaginal sex;
- Use a latex or polyurethane <u>condom</u> or a dental dam consistently and correctly every time you have oral sex;
- Use only water-based lubricants with latex condoms, as oil-based lubricants like Vaseline, can weaken a latex <u>condom</u> and cause it to break;
- Don't share sex toys without properly cleaning them first; and



- Refrain from kissing when there is the possibility of blood exchange via bleeding cuts, open sores, or ulcers in the mouth.
- 2. If you are injecting drugs or steroids, practise safer injection:
 - Never share needles or injection equipment; and
 - Always use a new needle and new injection equipment (cookers, spoons, water, etc.) every time you inject.
- 3. If you are <u>pregnant</u> and concerned about HIV, talk to your doctor about being tested. Early treatment with medication can prevent the transmission of HIV from a mother to her baby.
- 4. If you are getting a tattoo, body piercing, electrolysis, or acupuncture, ensure these activities are only carried out by professionals who follow universal infection-control precautions similar to those used in hospitals (see Need More Info below for information on universal infection-control precautions). The law requires that all needles used in these procedures are used only once and are disposed of after use.
- 5. If you are exposed to bodily fluids in an occupational setting, follow applicable health and safety guidelines and universal infectioncontrol precautions (see Need More Info below for information on universal infection-control precautions). If accidental exposure to these fluids occurs through a needlestick or a sharp-object injury or through a skin puncture, follow organizational guidelines or, in the absence of guidelines, let the wound bleed freely and go to a hospital emergency room as soon as possible.

Remember, if you have engaged in risky behaviour, get an HIV test.



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Treating HIV/AIDS and Living with HIV/AIDS

Receiving a positive diagnosis for HIV infection changes your life forever. If you have recently been diagnosed with HIV, the Canadian AIDS Treatment Information Exchange website (listed in the Need More Info section below) this site offers helpful advice, information, and recommendations for people living with HIV/AIDS.

There is no cure for the HIV infection. Treatments, known as antiretrovirals, only suppress the virus replication in the body and disrupt the action of the virus. Advances in treatment have helped prolong the lives and improve the quality of life of people living with HIV/AIDS. However, antiretrovirals are not a cure. If treatment is discontinued, the virus becomes active again. Therefore, a person on antiretrovirals must take them for life.

Like all medications, HIV drugs can cause side effects. In most cases, the <u>side effects</u> are mild, like a headache or an upset stomach. In some cases, more serious side effects can happen, such as <u>liver damage</u>, <u>heart diseasa</u> severe skin rash. There

may also be long-term side effects we don't

know about yet.
Many of the
HIV drugs have
not been on the
market long
enough for all
the possible
long-term effects
to have been
discovered.
Some drug
treatments for
HIV also fail



because some new strains of the virus have developed drug resistance.

The bottom line is that HIV/AIDS is still a deadly disease. Prevention is the only answer.



HIV in Canada

The Public Health Agency of Canada (PHAC) estimates that approximately 65,000 people were living with HIV infection in Canada at the end of 2008—a 14% increase from 2005. PHAC also estimates that in Canada, in 2008, there were from 2,300 to 4,300 new HIV infections.

According to <u>PHAC 2008</u> estimates, men who have sex with men continue to be the group most affected by HIV/AIDS in Canada. Estimates were classified according to the following exposure categories for new infections:

- 44% were men who have sex with men;
- 17% were people who use injection drugs;
- 3% were men who have sex with men and use injection drugs;
- 36% were heterosexuals.



At the end of 2008, women living with HIV accounted for approximately 22% of the national total. Aboriginal peoples account for a disproportionately high percentage of the individuals living with HIV infection in Canada. Although Aboriginal peoples represented only 3.8% of the Canadian population in the 2006 census, they accounted for approximately 7.4% of individuals living with HIV and for 12.5% of those who were newly infected.

Similarly, people from countries where HIV is endemic (mainly countries of sub-Saharan Africa and the Caribbean) also represent a disproportionate percentage of the total number of HIV infections in Canada. In 2008, individuals who originated from a country where HIV is endemic accounted for 16% of estimated new infections in Canada, an infection rate of almost 8.5 times higher than among other Canadians.

The Government of Canada's Role

The Federal Initiative to Address
HIV/AIDS in Canada is a key element of
the Government of Canada's long-term,
comprehensive approach to HIV/AIDS.
The Federal Initiative provides funding
for prevention and support programs
reaching key populations, as well as
research, surveillance, public awareness,
and evaluation. Working in partnership
with Health Canada, the Canadian
Institutes of Health Research, and
Correctional Service of Canada, the
Public Health Agency of Canada serves
as the focal point for federal expertise in
HIV/AIDS.

The goals of the Federal Initiative are as follows:

- to prevent the acquisition and transmission of new infections;
- to slow the progression of the disease and improve quality of life;
- to reduce the social and economic impact of HIV/AIDS; and

Original: December 2003 ©Her Majesty the Queen in Right of Canada, represented by the Minister of Health, 2010 Catalogue # H13-7/79-2010E-PDF ISBN # 978-1-100-15909-6 • to contribute to the global effort to reduce the spread of HIV and mitigate the impact of the disease.

Canada also recognizes the importance of investing in the development of new HIV-prevention technologies. In February 2007, Prime Minister Harper announced a commitment to the <u>Canadian HIV</u> <u>Vaccine Initiative (CHVI)</u>, an effort funded by the <u>Government of Canada</u> and the Bill & <u>Melinda Gates</u> <u>Foundation</u>. The CHVI will contribute to international efforts to develop a safe, effective, affordable, and globally accessible HIV vaccine.

Need More Info?

For more information on preventing HIV or taking an HIV test, you can contact:

- your local public health unit
- in Quebec, a CLSC (Local Community Service Centre)
- your local sexual health or family planning clinic
- a testing clinic
- your local AIDS service organization
- your doctor or primary health care provider
- your provincial or territorial HIV hotline at: http://www.cdnaids.ca/web/ casmisc.nsf/cl/CAS-gen-0023! opendocument&language=english

For information on issues relating to the disclosure of HIV-positive status when engaging in risk activities, view:

- The Canadian HIV/AIDS Legal Network website, at www.aidslaw.ca
- The Canadian AIDS Treatment Information Exchange website, at www.catie.ca/eng/home.shtml
- You may also choose to seek formal legal advice by consulting a lawyer.
- For information on universal infection-control precautions, consult the Public Health Agency of Canada document Preventing the Transmission of Bloodborne Pathogens in Health Care and Public

- Service Settings at: www.phac-aspc.gc.ca/publicat/ ccdr-rmtc/97vol23/23s3/index.html
- If you are travelling and concerned about HIV/AIDS, consult Well On Your Way: A Canadian's Guide to Healthy Travel Abroad at: www.voyage.gc.ca/publications/ well-way_bon-depart-eng.asp

For general information on HIV/AIDS, consult:

- The Public Health Agency's (PHAC)
 HIV/AIDs web section, at:
 www.phac-aspc.gc.ca/aids-sida/
 index-eng.php
- Health Canada's HIV/AIDs web section, at www.hc-sc.gc.ca/dc-ma/aids-sida/ index e.html
- The Canadian AIDS Treatment Information Exchange's website, at: www.catie.ca
- For information on the Government of Canada's domestic response to HIV/AIDS, visit PHAC's website, at: www.phac-aspc.gc.ca/aids-sida/ fi-if/index.html
- For information on the Government of Canada's international response to HIV/AIDS, consult the Canadian International Development Agency's website, at www.acdi-cida.gc.ca/index-e.htm

The following organizations are involved in the global response to HIV/AIDS:

- Joint United Nations Programme on HIV/AIDS (UNAIDS) at: www.unaids.org/en/default.asp
- International Council of AIDS Service Organizations (ICASO) at: www.icaso.org/
- World Health Organization (WHO) HIV/AIDS Programme at: www.who.int/hiv/en/
- For additional articles on health and safety issues go to the *It's Your Health* web section at: www.healthcanada.gc.ca/iyh

You can also call toll-free at 1-866-225-0709 or TTY at 1-800-267-1245*