



## Ontario HIV and Substance Use Training Program

**Vision**

- Substance use, mental health and allied services will be relevant and meaningful to all people living with HIV/AIDS and those at risk for HIV.

**Mission**

- To enhance the treatment, care and support provided to people living with HIV/AIDS and those at risk for HIV.

**Mandate**

- The program provides training to substance use, mental health and allied service providers in Ontario in order to increase knowledge of HIV/AIDS and promote skills development.

We are a program of Fife House, funded by the AIDS Bureau, Ministry of Health and Long Term Care, and we are guided by a Provincial Advisory Committee composed of representatives of addictions, mental health and AIDS service organizations from across the province.

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## Fife House

- Over the last year, we provided support services to 173 residents/clients through the Supportive & Transitional Housing Programs and to an additional 317 clients through our Homeless Outreach Program.
- Fife House operates three Supportive Housing Programs that offer support services through a network of qualified staff and volunteers:
  - Jarvis, an 82 unit apartment building;
  - Denison, a residential program for 5 individuals; staff also provide support services to 14 persons at two non-profit housing programs;
  - Sherbourne, an integrated apartment building with 45 units designated for People Living With HIV/AIDS (PHAs).
- Transitional Housing Program (THP) provides 11 individuals with private units in a communal living and dining space with 24-hour support services.
- Homeless Outreach Program provides a client-centred case management approach to link clients with community supports based on clients needs. Such areas of support may include: health and mental health; addictions; life skills in housing retention; immigration and settlement.
- [www.fifehouse.org](http://www.fifehouse.org)

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## Ontario HIV and Substance Use Training Program

- HIV/AIDS 201
- Stigma and Discrimination
- Disclosure and Legal Issues
- HCV and HIV Co-infection
- Substances 101
- Harm Reduction
- Tips, Tricks, and Tools

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## Group Guidelines

**Purpose:**

- To build a safe, respectful, and supportive learning environment for the workshop.
- Some of you have chosen to be here, while some of you have been mandated to be here by your work.
- We value diversity and learn from comparing and contrasting experiences.
- Some participants may have a personal connection to the issues we will be discussing and we should acknowledge this.
- Everyone participates in their own way.
- Risk taking and self-disclosure is encouraged and supported.
- Everyone has the right to pass.
- All voices are heard.
- Use "I" statements.
- Everyone uses their own strengths and resources.
- One person speaks at a time.
- Confidentiality is maintained but not guaranteed. (context of coworkers and people you know outside of work)
- Learning is a process. Open yourself to the possibilities.
- Step Up, Step Back

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## Disclaimer

- We encourage sharing and adaptation of the information and ideas presented here.
- We ask that you credit our sources and reference the individuals or organizations that we have credited.
- Please send us a copy of any resource where OHSUTP has been credited.
- If you have concerns about anything presented here (e.g., we have incorrect factual information), please alert us.
- We may use language that you may find different or challenging. Our intent is to use language that your clients use.
- We will be updating the information in our resources on a continual basis. If you have requested this presentation after attending a workshop, please note that some of the content may have changed.
- While we do our best to keep things as up-to-date as possible, we can not guarantee that web links are the most current, and are not responsible for content on sites we that we have linked.

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ONTARIO  
HIV & Substance Use  
Training Program

HIV / AIDS 201  
Updated: August, 2011

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## HIV / AIDS 201

**Goal:**

- To increase participants' knowledge of HIV/AIDS: virology, transmission, prevention, testing, treatment, and epidemiology.


**Objectives:**

- To provide participants with:
  - An overview of the virology of HIV/AIDS, including an understanding of the impact of HIV on the immune system.
  - Accurate information about HIV transmission and prevention.
  - An understanding of their role in promoting testing and supporting treatment.
  - An opportunity to see the impact of HIV/AIDS locally, provincially, nationally and internationally.

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## Outline

- Immune system
- How HIV is/is not transmitted
- Prevention
- Testing
- Disease Progression
- Treatment
- HIV and Mental Health
- Epidemiology

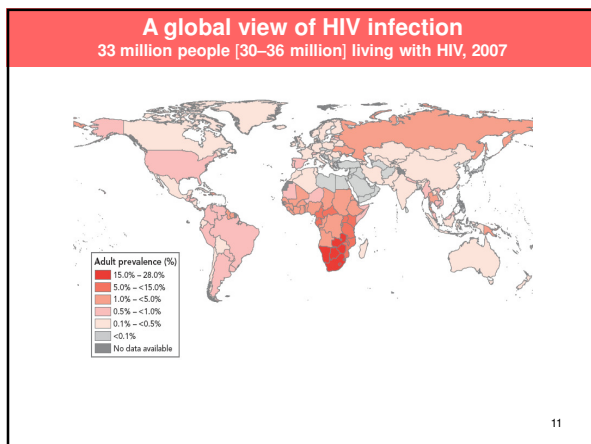


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## Where we get our information

- Sources include:
  - CATIE, OHTN, CAS, ICASO, UNAIDS, CDC
  - Professional and personal experiences, including those from people living with HIV/AIDS.
- Our broader knowledge of HIV/AIDS is about 30 years old:
  - Most information presented today is based on what is known as "generally accepted scientific theory".
  - This is a relatively new field - new information all the time.
  - As time goes on, new issues come up and our thinking may change.
- This workshop is focused on the reality of HIV/AIDS in Ontario.

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## Canada to 2007

- 58,000 currently living with HIV and AIDS
- 27% are unaware of their HIV status
- 2, 558 new cases of HIV reported in 2006
- People who use injection drugs represent 14% of total.
- Men who have sex with men (MSM) account for the largest proportion of newly reported cases (39.6%)
- Women now account for approximately 17% of all people living with HIV/AIDS in Canada. (1985 - 1995 = 10%)

Source: Public Health Agency of Canada. *HIV and AIDS in Canada Surveillance Report to December 31, 2006*. Ottawa: November 2007

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## Ontario to 2008

By the end of 2008:

- Overall, 26,630 people were living with HIV in Ontario.
- Most affected groups were:
  - MSM 15,072
  - People from HIV endemic regions 4,878
  - Heterosexual transmission 3,920 (largely female sex workers, persons born in Canada and persons born elsewhere)
- 25% of new HIV diagnoses were among women
- 1,620 persons were newly infected in 2008 in Ontario
- On average, about 1,100 people in Ontario have been newly diagnosed with HIV over the past 8 years.
- Approximately 35% of those infected with HIV do not know their status

Report on HIV/AIDS in Ontario to 2008

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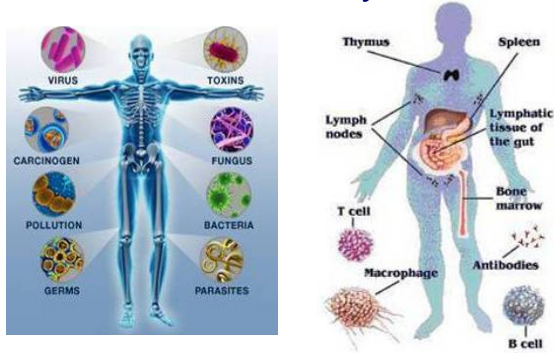
## What does HIV / AIDS mean?

- HIV
  - Human
  - Immuno-deficiency
  - Virus
- AIDS
  - Acquired
  - Immuno
  - Deficiency
  - Syndrome



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## The Immune System



## The Immune System

### HIV Attacks Your Immune System

HIV cannot multiply on its own, so it invades healthy cells in your body.

HIV invades specialized cells called T cells (CD4+ cells), an important part of your immune system.

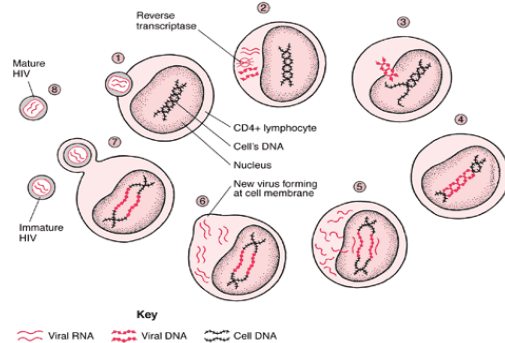


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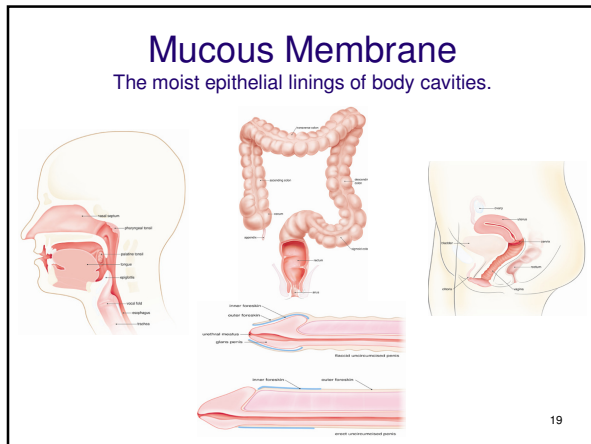
## CD4 / T-Helper cells



## Replication of HIV



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- ## Significance of Mucous Membranes
- Only 2% of the body's immune cells circulate in the blood
  - 98% of the body's immune cells are located in the lymph nodes and the mucous membranes
  - Mucous membranes are rich in T-cells and macrophages to provide defence
  - The majority of these cells are organized into "lymphoid follicles" just under the surface of the mucosal membrane
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- ## Membrane Health
- The health of the mucosal membrane is affected by:
- Age (cells in the cervix do not fully develop until age 18)
  - The presence of other sexually transmitted infections
  - Lack of lubrication and the use of irritating substances
- When the mucosal membrane in the anus, vagina or mouth is broken, inflamed or infected, the risk of HIV transmission is much greater.
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- ## Hormone Levels
- The presence of female hormones during the menstrual cycle, or from hormonal contraceptives (in particular depomedroxyprogesterone) can make women more susceptible to HIV infection.
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- ## Transmission
- Transmission of HIV involves a complex association of behavioural and biological factors
- HIV status of partner(s)
  - Viral Load
  - Frequency of sex
  - Type of sex
  - Duration of sex
  - Barrier use and timing
  - Male circumcision
  - Presence of other sexually transmitted infections
  - Types of substances used, methods of administration, new or used equipment, and frequency of use
- 
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- ## Sexually Transmitted Infections
- Increased chance of transmission of HIV
  - People with an STI:
    - May have a sore or opening
      - Easier for HIV to get in or out
    - May have increased white blood cell count
      - Increased opportunity for HIV to attach
  - People with HIV who get an STI:
    - Faster progression of HIV
    - Complications in STI treatment
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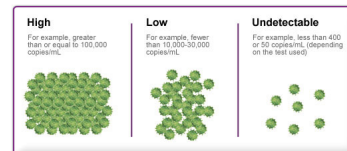
## Bodily Fluids: Presence of HIV Virus

High	Low	None
Blood	Saliva	Tears
Rectal Secretions	Vomit	Sweat
Vaginal Secretions	Urine	Feces
Semen		
Pre-cum		
Breast Milk		
Menstrual Blood		
Brain/Spinal fluid		

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## HIV Viral Load

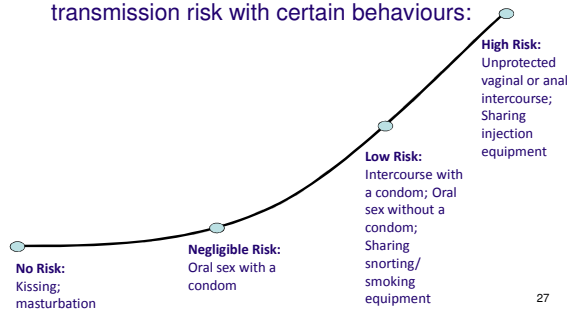
- HIV is present as free virus in the fluids and in infected cells, that continue to produce HIV
- Load refers to how much virus is present
- Varies over time
  - Changes with health, presence of other viruses, and use of medications.
- Different in different body fluids



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## Assessment of Risk

- Can help in understanding the degree of HIV transmission risk with certain behaviours:



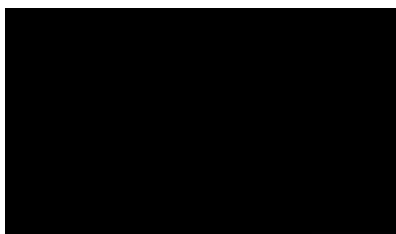
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## Female Condoms



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## Male Condoms



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## Condoms

- Male condoms; different:
  - Sizes & shapes: every guy is different
  - Materials:
    - latex, polyurethane, polyisoprene
    - lamb skin (not effective against STIs)
    - avoid nonoxynol-9 (a spermicide)
- Female condoms
- Other “barriers”
  - Dental dams; gloves

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## Sexual Transmission

- Sexual transmission is complex process. There is no clear way of quantifying risk.
- In sexual transmission, HIV has to pass through the mucous membrane.
  - Unprotected sexual intercourse makes it easy for this to happen.
  - Inflammation increases the likelihood of transmission.
- Sex toys:
  - Best to not share.
  - Should be covered with barriers where possible.
  - Should be thoroughly cleaned and disinfected.
- Dehydration, lowered inhibitions, increased sex drive and impaired judgment sometimes associated with substance use.
- The CAS Guidelines are a good place to start, but risk in any situation is a continuum of factors.

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## Sexually Transmitted Infections



## What's up with Syphilis?

- We've seen a dramatic increase in infectious syphilis over the past seven years in Toronto. Today the number of new syphilis cases is **ten times higher** than in 2002.
- Most (95%) of these cases of infectious syphilis have been among men. Over 80% of these have been among gay and bisexual men. And, **almost 1/2 of cases in 2008 were among men who were also HIV-positive.**
- It's important to get tested - and treated - as syphilis is *much* easier than HIV to get or pass on. If you are HIV-positive, syphilis can make you *very* sick, *very* quickly.

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## HIV and Pregnancy

- Fetus is protected; transmission could occur during birthing process.
- Test pregnant women; meds to reduce mothers viral load; meds and ongoing testing of new born.
- Risk: 5-10%
- Should not breast feed if possible.
  - In some countries breast feeding may be less harmful than using contaminated water for formula preparation.
- Sperm washing possible for HIV positive men.

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## HIV Transmission and Substance Use



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## Substance Use Concerns

- Injection equipment including water, cookers, ties, filters, needles and swabs
- Smoking equipment (esp. with crack; greater concern with Hep C transmission)
- Intranasal (snorting)
- Oral abrasions with stimulant drug use
- Dehydration of mucous membranes increasing sexual risk
- Decreased inhibitions and judgment (for some people)

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## Piercing, Branding, Tattooing



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## Piercing, Branding, Tattooing

- Higher risk with re-using or sharing equipment
  - Needles, gloves, cotton balls, jewelry, clamps, etc.
  - Using the same 'ink wells'

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## HIV Outside the Body

- The length of time HIV can survive outside the body depends on:
  - The amount of HIV present in the body fluid
  - What conditions the fluid is subjected to
- The chances of becoming infected with HIV by handling a body fluid are extremely small, because that fluid will rarely have access to a person's bloodstream.
- HIV can survive for several days in the small amount of blood that remains in a needle after use, because the blood is trapped where air cannot dry it out.

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## Occupational Exposure



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## Accidental / Occupational Exposure

- Accidentally sticking yourself "Needle stick injury"
- First aid
  - Contaminated needle stick, sharps injury, bite or scratch - encourage bleeding, wash with soap and running water
  - Blood or body fluid in eyes or mouth - irrigate with copious quantities of cold water
  - Blood or body fluid on broken skin - encourage bleeding if possible, and wash with soap under running water (but without scrubbing)
- Consider Post Exposure Prophylaxis (PEP)

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## PEP

- Post Exposure Prophylaxis
  - Short-term antiretroviral treatment after potential exposure.
  - Must be initiated within hours of possible HIV exposure (72 hours max).
  - Continues for a period of 28 days.
  - Potential side effects; time off work is likely necessary.
  - It has been proven to be effective after needle stick injuries but not for other exposure (e.g. sexual assault).

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## Accidental / Occupational Exposure

- Routine Practices and Universal Precautions
- Treat everyone the same, not diagnosis driven
- Hand Washing
- Protective Barriers – gowns, gloves, masks, goggles
- SHARPS – no recapping, disposal in special container
- Keep everyone else's wet stuff out of your wet stuff!!

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## Cleaning Up a Mess

- Treat all body fluids as infectious. Clean and sanitize surfaces after a spill. Here's how:
  - Wear gloves while cleaning. Household rubber gloves are alright for most spills, but not for blood. Wear disposable latex / polyurethane gloves when cleaning up blood. Throw them away after use.
  - Wipe up the mess with disposable towels or newspaper.
  - Clean the area with a detergent solution. Rinse and dry the area.
  - Sanitize the area with a 10% bleach solution (1 part bleach in 9 parts water).
  - Rinse rubber gloves in bleach solution, then store. If disposable gloves are worn, remove and throw out.
  - Rinse mops in fresh sanitizing solution, then air dry.
  - If clothing is soiled: change into fresh clothing.
  - Wash hands thoroughly.

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## Ways HIV is Not Transmitted

- Insect bites
- Casual contact/sharing dishes or food
- Donating blood
- Swimming pools and hot tubs
- Pets/Animals
- Contact with saliva, tears, sweat, feces or urine

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## Other Factors that Play Into People's Risk

- Stigma and Denial
- Cultural Factors
- Gender
- Poverty
- Intimacy, pleasure and the brain's response...What is sex for anyway?

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## The Bottom Line

- HIV transmission is highly complex
- Estimates of risk involve a number of behavioural and biological variables interacting at once
- "Low risk" activity can become high risk depending on certain modifiers
- "High risk" can be lowered depending on certain modifiers.

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## Getting an HIV Test

- Once infected with HIV, the body starts producing antibodies to it.
- The HIV test checks for these antibodies.
  - Need to wait 3 months post exposure for the window period to pass.
  - If positive for antibodies a confirmatory test is done.

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## HIV Testing

- Types of HIV tests include:
  - Nominal
  - Non-Nominal
  - Anonymous
- There are 50 Anonymous testing sites across Ontario, an increase from 26 in 2005. There are 60 Point of Care testing sites.
- Point of Care Testing (rapid)
- AIDS Hotline
  - 1-800-668-2437 (E)
  - 1-800-267-7432 (F)
- HIV testing among pregnant women has increased from 34% in 1998 to approximately 94% in 2006.

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## HIV Testing

- Pre-test counselling
- Post-test counselling
- Reportable to public health
  - Contact tracing

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## HIV Testing

In Ontario, there are three types of HIV testing available:

- Anonymous – the name or identity of the person being tested is not requested, recorded or reported. The test is ordered using a code known only to the person being tested.
- Non-nominal – the practitioner ordering the test knows the name or identity of the person being tested, but orders the test using a code. If the test is positive, the laboratory is required to report the result to the local medical officer of health.
- Nominal testing – the practitioner orders the test using the person's name. If the test is positive, the laboratory is required to report the result to the local medical officer of health.

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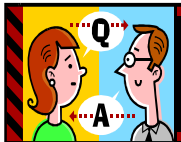
## I am HIV positive... Can I immigrate to Canada?

Citizenship and Immigration Canada requires a medical exam for all immigrants and refugees. The medical exam includes a screening test for HIV for everyone over the age of 15. If you are under 15, but have an HIV-positive parent, have received blood or blood products or are going to be adopted in Canada, you will also be tested for HIV. On most applications for status in Canada, you will be asked if you have any serious illnesses. If you say no and later Immigration finds out that you lied, Immigration could try to remove you from Canada.

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## Risk History

Counsellors should not make assumptions about clients' sexual or substance use activities or practices. Some clients may be unwilling to discuss their practices; however, to do an accurate risk assessment, it is important for counsellors to know "**who put what where**". When taking a risk history, counsellors should ask direct questions, such as...



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## Stages of HIV Infection

- Acute HIV Infection
- Early HIV Infection
- Asymptomatic
- Symptomatic
- AIDS

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## Acute HIV Infection

- The greatest spike in viral load occurs during acute HIV infection (AHI), the brief period of weeks to about 2 months between the time when an individual first contracts infection and the completion of seroconversion.
- Due to the high viral load, individuals are unusually infectious to others during this acute phase.
- Acute HIV shedding is over about 10 weeks post-infection.
- Elevated onward transmission is likely due to ongoing high-risk behaviors, associated sexually transmitted infections that increase transmission risk, and transmission amplification through high-risk sexual and drug use networks.

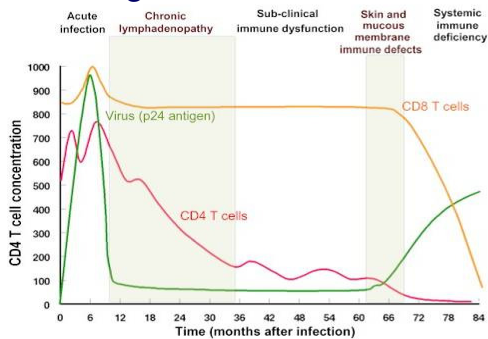
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## Early HIV Infection

- Elevated onward transmission likely extends through the period of early infection (defined as the 6 month period after seroconversion) again, due to ongoing high-risk behaviors, associated sexually transmitted infections that increase transmission risk, and transmission amplification through high-risk sexual and drug use networks.
- Transmissions during acute/early infection may account for as many as half of new infections.

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## Stages of HIV Infection



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## Symptoms of Acute and Early Infection

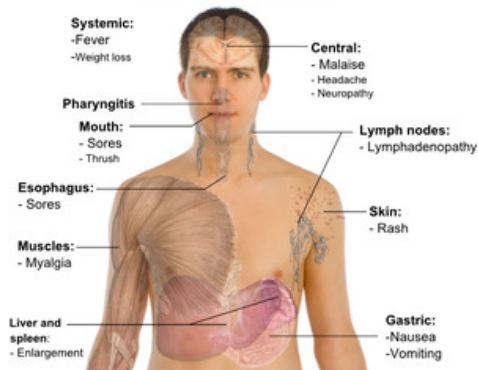
Common symptoms include:

- Prolonged fever (4 to 14 days) and aching limbs
- Red blotchy rash over the trunk
- Sore throat (pharyngitis)
- Ulceration in the mouth or genitals
- Diarrhea
- Severe headaches
- Night sweats
- Aversion to the light

→ Remember these symptoms are easily confused with other common illnesses but if they are going for an HIV test these may indicate seroconversion is occurring

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## Main symptoms of Acute HIV infection



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## Asymptomatic

- May have no symptoms of HIV
- Person may feel well for 1 – 15 years (avg 10)
- Person will test positive for HIV
- CD4/T-cells may decrease in number (immune suppression)
- Viral load will increase
- If HIV+ status is known:
  - Regular health check-ups
  - Medication may or may not be started, depending on CD4 count

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## Symptomatic

- Physical signs of HIV
  - Many and varied symptoms (refer to handout)
- Decreased CD4 counts
- Increased viral load
- Prone to opportunistic infections
- If HIV+ status is known:
  - Regular health check-ups
  - Medication may be started depending on CD4 count

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## HIV Symptoms

- Intense and ongoing fatigue, lethargy, lack of appetite
- Intense and ongoing nausea, diarrhea, dry heaving
- Intense and ongoing gastrointestinal distress
- Unexplained fevers, night sweats, swollen glands
- Dizziness, headaches
- Susceptibility to viral or bacterial infections
- Susceptibility to fungal or protozoan infections
- Risk of normally low-grade infections becoming serious
- Aggravated STD's

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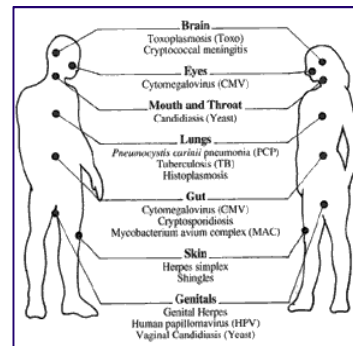
## HIV Symptoms

### Infections or conditions related to or aggravated by HIV Progression

- Gingivitis, gum/jaw decay, enamel breakdown, other dental issues
- Hip and joint dysfunction
- Shingles
- Thrush, Candidiasis
- Co-infection and interaction with other STD's
- Aggravated fungal infections (athletes foot, psoriasis, etc)
- Wasting, dehydration
- Depression
- Mood swings, anger

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## Opportunistic Infections



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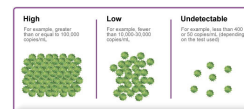
## HIV+ ↔ AIDS

- Once a person is diagnosed with one of the 26 opportunistic infections associated with AIDS, this is noted in their medical records.
- If the opportunistic infection is brought under control, and CD4 counts increase, the person is considered to no longer have AIDS.

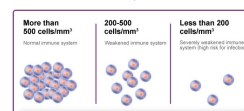
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## Monitoring HIV Infection

- Tests that monitor HIV infection:
  - **HIV Viral Load** (how much virus is in the body)



- **CD4/T-cell Count** (marker of immune system health)



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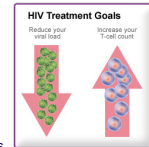
## Monitoring the Immune System

- CD4/T-cell Count (marker of immune system health)
  - 600 – 1,500 (normal counts in non-infected people)
  - around 500 (mild damage)
  - 400-500 (moderate damage)
  - <400 (possible symptoms and infections)
    - Medications are offered at 350 to 500 (this is an ongoing target # that changes with new research)
  - <200 (severe immunodeficiency /opportunistic infections)
    - Medications are strongly urged as you would be at risk for an OI and thus AIDS

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## HIV Treatment

- No cure or vaccine for HIV/AIDS
- The goal of treatment is to attain an undetectable viral load (less than 50 copies in ml of blood)
- Most common treatments in Canada:
  - Anti-retrovirals which block HIV from reproducing in T-cells
  - Over 20 different combinations available
  - People take a combination of anti-retrovirals
  - Many people take other medications to help with side-effects of anti-retrovirals
- Generally, people attain an undetectable viral load within about 3 months after starting treatment
- HIV may become resistant to meds, especially if they are not adhered to fully



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## Side effects to anti-retrovirals

Numerous complications and side effects.

- Nausea & Diarrhea
- Fatigue
- Sensitivities to or interactions with a variety of medications and drugs
- Rashes
- Neurological side effects
- Depression
- Sexual dysfunction
- Kidney stones
- Kidney/Liver dysfunction
- Lypodystrophy
- Diabetes Mellitus
- Early on-set heart disease
- Early on-set aging
- Peripheral Neuropathy

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## A Day's Worth



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## Why Antiretroviral Therapy?



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## Other Issues Impacting Treatment

- Stress
- Poverty, including those that fall between the cracks "i.e., working poor"
- Episodic or consistent homelessness
- Substance use issues
- Mental health issues
- Being the primary caregiver for other people
- Stigmatization leading to lack of natural supports
- Feeling marginalized from mainstream society
- Feeling disenfranchised from larger service providers
- Fear of or inability to access universal health care
- Multiple diagnoses (i.e., HPV, HCV, MRSA, TB, etc)

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## Mental Health

- Impact of HIV on mental health
- Diagnosis (depression; social isolation; friend; family; job loss)
- Stigma and Discrimination (How do people in general feel about HIV+ people?)
- HIV itself
- Med effects
- Concurrent disorders
- Take a moment and think about how it would feel to be “infectious”?

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## HIV and Depression

- Up to 50% of people living with HIV/AIDS experience depression.
- Depression leads to worse outcomes in people living with HIV.
- It is unclear whether this difference is driven by depression or another factor such as differences in medication adherence or both.
- More research is needed to help further explain the relationship between depression, HAART and differences in medication adherence.

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## HIV and Depression

- There are many reasons why some people living with HIV experience depression. Biological and psychological mechanisms can explain this phenomenon. For example:
  - May be related to the psychological impact of an HIV positive test report and with the progression of HIV.
  - May be caused by HIV penetration of the blood-brain barrier and infection of the central nervous system (sometimes called “organic depression”).
  - May be caused by HIV-related opportunistic illness such as infections or tumors of the brain (also called “organic depression”).
  - Depression and other preexisting psychiatric disorders may be exacerbated by HIV.
  - Depression or other negative impacts on mental health may be a side effect of certain HIV medications .

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## HIV and Depression

- Eight of the HIV anti-retrovirals surveyed list depression as a possible side effect.
- Some HIV antiretroviral medications have proven serious or lesser side effects related to depression, including ‘strange dreams’ and ‘night terrors’.

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## Dementia

- HIV can cause a range of nervous system problems, from forgetfulness and balance problems to serious dementia.
- These problems usually don’t show up until the later stages of HIV disease.
  - However, problems with verbal memory can show up even in people with no other symptoms.
- Currently, it is estimated that 20% of people with AIDS suffer from “neuroAIDS”. This milder form of brain damage results in physical and mental slowing.

Source: [thebody.com](http://thebody.com)

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## Dementia

- The new combination therapies for HIV seem to protect the central nervous system against the worst damage from the virus.
- Only a few HIV medications can get into the brain, and it’s not known if these help with neuroAIDS. Other treatments are being studied.
- Infection with hepatitis C and dependence on methamphetamines increase the risk of mental health issues in people with HIV.

Source: [thebody.com](http://thebody.com)

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## Bereavement / Grief

- Coping with HIV, loss and grief
- Long term survivors and substance use
- How do you and your organization deal with grief and loss?

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## Epidemiology

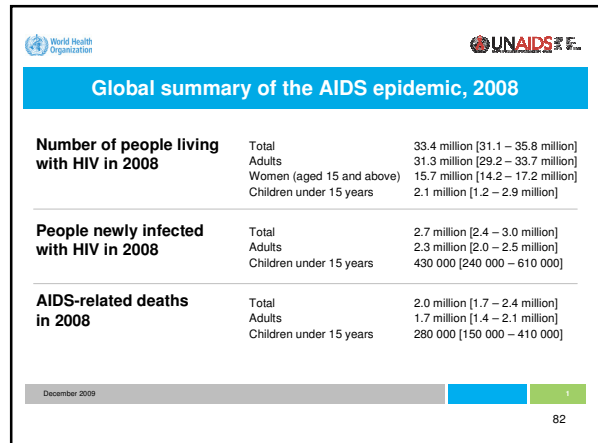
Global to Local Statistics and Overview  
Incidence and Prevalence Rates  
The situation to 2008:  
Globally,  
Canada,  
Ontario

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## Epidemiology Asks or Uses

- Person- Who?
- Place- Where?
- Time- When?
- Helps us to understand: Why?
- Limitations

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## UN AIDS - Key Findings 2008

- In 2007 there were 2.7 million new HIV infections and 2 million HIV-related deaths.
- The rate of new HIV infections has fallen in several countries, but globally these favourable trends are at least partially offset by increases in new infections in other countries.
- As treatment access has increased over the last ten years the annual number of AIDS deaths has fallen.
- Sub-Saharan Africa remains the region most heavily affected by HIV, accounting for 67% of all people living with HIV and for 75% of AIDS deaths in 2007. However, some of the most worrisome increases in new infections are now occurring in populous countries in other regions, such as Indonesia, the Russian Federation, and various high-income countries.
- Globally, the percentage of women among people living with HIV has remained stable (at 50%) for several years, although women's share of infections is increasing in several countries.
- In virtually all regions outside sub-Saharan Africa, HIV disproportionately affects injecting drug users, men who have sex with men, and sex workers.

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## HIV in Vulnerable Populations

Among Canadians living with HIV:

- An estimated 55% are gay men or other men who have sex with men (MSM)\* (Ontario: 56.6%)
- An estimated 21% are people who inject drugs (IDU)\*\* (Ontario: 9.8%)
- An estimated 27% acquired HIV through heterosexual sex (Ontario: 33%)  
This is comprised of:
  - 12% in people from countries where HIV is endemic (Ontario: 18.3%)
  - 15% in people from countries where HIV is not endemic (Ontario: 14.7%)
- An estimated 20% are women (Ontario: 25%)
- An estimated 8% are Aboriginal people
- An estimated 2% of prisoners are HIV positive

\*This estimate includes 51% who HIV status is attributable to MSM and 4% whose HIV status could either be attributed to MSM or IDU  
\*\*This estimate includes 17% whose HIV status is attributable to IDU and 5% whose HIV status could either be attributed to MSM or IDU

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## Since 2003

- There has been a 62% increase in HIV prevalence from HIV-endemic regions
- There has been a 41% increase among others infected through heterosexual transmission
- It is estimated that only 56% of persons in the above demographics have been diagnosed

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## Since 1996

- HIV prevalence in Ontario increased by 90%
- However, this is largely due to the fact that in that same time period the mortality rate decreased by 65%

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## MSM: Epi Highlights (Ontario)

- New HIV diagnoses in 2008 up 70% over 1996
- 745 new HIV infections in 2008
- HIV prevalence 17.2%
  - Toronto 23.2%
  - Ottawa 11.9%
  - Other 10.2%

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## IDU: Epi Highlights (Ontario)

- Relatively stable number of new infections over the past 7 years
- 96 new HIV infections in 2008
- HIV prevalence 7.5%
  - Ottawa 14.5%
  - Toronto 4.1%
  - Other 4.0%

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## Women: Epi Highlights (Ontario)

- 25% of HIV diagnoses in 2008 were among women
- There were 4,749 women living with HIV in Ontario in 2008
- This represents a 71 per cent increase since 1999

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## Fact Sheets on Women at Risk in Ontario

- [Aboriginal Women](#)
- [Women from African and Caribbean Countries](#)
- [Women from Asian and South Asian Countries](#)
- [Street-Involved Women](#)
- [Transgendered People](#)
- [Women Who Use Injection Drugs](#)
- [Women in Prison](#)
- [Women Involved in the Sex Trade](#)
- [Young Women](#)

[http://www.health.gov.on.ca/english/providers/pub/pub\\_menus/pub\\_aids.html#women\\_factsheets](http://www.health.gov.on.ca/english/providers/pub/pub_menus/pub_aids.html#women_factsheets)

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## HIV Endemic – Epi Highlights

- 228 new HIV infections in 2008
- Only about 56% of those infected know they are
- HIV prevalence 0.94%: Toronto 1.1%, Ottawa 2.8% and other 0.49%

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## Heterosexual – Epi Highlights

- 204 new HIV infections in 2008
- HIV prevalence 0.040%
  - Toronto 0.105%
  - Ottawa 0.080%
  - Other 0.020%

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## Aboriginal Peoples

- Ontario does not currently track HIV rates in Aboriginal communities, however federal statistics indicate that HIV disproportionately impacts Aboriginal peoples.
- The infection rate for Aboriginal people is 7.3%, while Aboriginal people represent approximately 3% of the Canadian population. (Ethnicity data is not collected consistently across all jurisdictions. This estimate may under represent actual rates.)
- Compared to non-Aboriginal people, Aboriginal people with a positive HIV test report, are more likely to be female and be young.

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## Modeled HIV prevalence, by LHIN region and exposure category, Ontario, December 2008

	MSM	MSM-IDU	IDU	HIV-endemic	Heterosexual	Clotting factor	Transfusion	Total	Column %
Erie St. Clair	330	15	40	95	120	5	0	610	2.3%
South West	590	20	75	155	225	5	0	1,070	4.0%
Waterloo Wellington Hamilton Niagara Halldimand Brant	255	15	60	100	95	5	0	535	2.0%
Central West	615	40	140	245	230	10	0	1,280	4.8%
Central West	710	25	60	225	220	5	0	1,240	4.7%
Mississauga Halton	710	25	75	245	230	5	0	1,295	4.9%
Toronto Central	4,900	145	305	1,285	830	55	10	7,520	28.2%

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## Modeled HIV prevalence, by LHIN region and exposure category, Ontario, December 2008

	MSM	MSM-IDU	IDU	HIV-endemic	Heterosexual	Clotting factor	Transfusion	Total	Column %
Central	2,695	90	190	745	570	10	5	4,215	15.8%
Central East	2,610	85	185	740	590	10	0	4,195	15.8%
South East	195	15	105	60	75	0	0	450	1.7%
Champlain	1,310	100	540	940	510	15	10	3,420	12.8%
North Simcoe Muskoka	75	5	15	15	25	0	0	135	0.51%
North East	120	30	145	20	145	0	0	460	1.7%
North West	45	10	55	10	80	0	0	205	0.77%
Total	15,070	615	1,990	4,880	3,920	125	30	26,630	100%

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## Proportion of HIV infections by exposure category for each LHIN health region, row percent

	MSM	MSM-IDU	IDU	HIV-endemic	Heterosexual	Clotting factor	Transfusion	Total
Erie St. Clair	54.5%	2.5%	6.6%	15.7%	19.8%	0.8%	0.0%	100.0%
South West	55.1%	1.9%	7.0%	14.5%	21.0%	0.5%	0.0%	100.0%
Waterloo Wellington Hamilton Niagara Halldimand Brant	48.1%	2.8%	11.3%	18.9%	17.9%	0.9%	0.0%	100.0%
Central West	48.0%	3.1%	10.9%	19.1%	18.0%	0.8%	0.0%	100.0%
Central West	57.0%	2.0%	4.8%	18.1%	17.7%	0.4%	0.0%	100.0%
Mississauga Halton	55.0%	1.9%	5.8%	19.0%	17.8%	0.4%	0.0%	100.0%
Toronto Central	65.1%	1.9%	4.1%	17.1%	11.0%	0.7%	0.1%	100.0%
Central	61.8%	2.1%	4.5%	17.7%	13.5%	0.2%	0.1%	100.0%

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### Proportion of HIV infections by exposure category for each LHIN health region, row percent

	MSM	MSM+DU	IDU	HIV endemic	Heterosexual	Clotting factor	Transfusion	Total
Central East	62.3%	2.0%	4.4%	17.7%	13.4%	0.2%	0.0%	100.0%
South East	43.3%	3.3%	23.3%	13.3%	16.7%	0.0%	0.0%	100.0%
Champlain	38.2%	2.9%	15.8%	27.4%	14.9%	0.4%	0.3%	100.0%
North Simcoe Muskoka	55.6%	3.7%	11.1%	11.1%	18.5%	0.0%	0.0%	100.0%
North East	26.1%	6.5%	31.5%	4.3%	31.5%	0.0%	0.0%	100.0%
North West	22.5%	5.0%	27.5%	5.0%	40.0%	0.0%	0.0%	100.0%

Data source: Ontario HIV Epidemiologic Monitoring Unit, April 2010

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## Resources

- Canadian AIDS Society**  
 Registered as a charity since 1988, the Canadian AIDS Society (CAS) is a national coalition of over 125 community-based AIDS organizations across Canada.  
[www.cdnaids.ca](http://www.cdnaids.ca)
- Canadian AIDS Treatment Information Exchange**  
 A Canadian non-profit charity supporting people affected by HIV/AIDS. Website provides information about treatment, services, and support. Primarily focused on HIV/AIDS, website contains information on HCV treatment and coinfection.  
[www.catie.ca](http://www.catie.ca)
- Canadian HIV/AIDS Legal Network**  
 An advocacy organization dedicated to promoting the human rights of people living with and vulnerable to HIV/AIDS, through research, legal and policy analysis, education, and community mobilization.  
[www.aidslaw.ca](http://www.aidslaw.ca)
- The Ontario HIV Treatment Network (OHTN)**  
 An independently incorporated, not-for-profit organization funded by the AIDS Bureau, Ontario Ministry of Health and Long-Term Care. The OHTN acts as a collaborative network of people living with HIV/AIDS, health care providers, consumers, researchers, community-based organizations and government, with a mandate to provide leadership and to advance policy relating to the optimal treatment and care of people living with HIV in Ontario.  
[www.ohtn.on.ca](http://www.ohtn.on.ca)

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## Resources

- Ontario AIDS Network**  
 915-25 Adelaide St, TORONTO, ON, M5C 3A1  
[www.ontarioaidsnetwork.on.ca](http://www.ontarioaidsnetwork.on.ca)
- HIV & AIDS Legal Clinic Ontario (HALCO)**  
 65 Wellesley St. E., Ste 400, TORONTO, ON, M4Y 1G7  
 Tel: 416-340-7790 Toll Free: 1-888-705-8889  
 TTY: 416-922-2352 / 1-866-513-9883  
[www.halco.org](http://www.halco.org)
- PASAN - Prisoners' HIV/AIDS Support Action Network**  
 314 Jarvis St., 1st Flr, TORONTO, ON, M5B 2C5  
 Tel: 416-920-9567 (Collect Calls) Fax: 416-920-4314 Toll Free: 1-866-224-9978  
[www.pasan.org](http://www.pasan.org)
- Ontario Aboriginal HIV/AIDS Strategy**  
 201-7 Hayden Street, Toronto ON M4Y 2P2  
 Tel: 416-944-9481 Toll Free 1-800-743-8851  
[www.oahas.org](http://www.oahas.org)

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## Resources

- African and Caribbean Council on HIV/AIDS in Ontario**  
 110 Spadina Ave., Suite 207, Toronto Ontario M5V 2K4  
 Tel: 416-977-9955 ext. 294  
[www.accho.ca](http://www.accho.ca)
- The Teresa Group**  
 Canada's oldest community-based charitable organization specifically serving children affected by HIV and AIDS and their families.  
[www.teresagroup.ca](http://www.teresagroup.ca)
- ASO 411**  
[www.aso411.ca](http://www.aso411.ca)
- Live Positive – Youth Website**  
 This site was developed by a partnership between Positive Youth Outreach (PYO), The Hospital for Sick Children Divisions of Adolescent Medicine & Infectious Disease, Canadian AIDS Treatment Information Exchange (CATIE), and TeenNet at the University of Toronto in collaboration with youth and youth serving agencies across Canada. [www.livepositivelive.ca](http://www.livepositivelive.ca)

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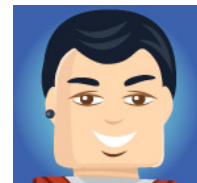
"You don't have to be poz, but it helps."

- Websites dedicated to the needs of those who are HIV-positive typically tend to be serious and frankly a bit of a downer as we read through all of our health issues, treatment problems, stigma etc.
- For the editor-in-chief, and founder, however, a sense of humour is what has gotten him through the last 23 years of living with HIV. There is no question about the role of humour and its relationship to positive health outcomes, there needed to be something different available that celebrated having fun.
- The result is the creation of Positive Lite, a Canadian-driven website for both positive gay men and their friends, irrespective of sexual orientation, gender or nationality. HIV-positive people in Canada get labeled with various acronyms, including PHA, PLWHIV, PWA, etc. All of these are variations of "people living with HIV or people with AIDS" and all of these define us through disease.
- The goal is for readers to see us as whole and complete people whose lives are so much more than just a positive HIV diagnosis. Positive Lite is a venue for us to explore our lives in their entirety and to express our individuality through writing, photography and video.
- In essence, this is our playground. The site's motto is, "You don't have to be poz, but it helps." Even though all contributors are HIV-positive, one cannot assume that anyone interviewed or participating in the production of content is positive. We cannot live in sero-isolation. It is important to bring in the broader community if we are to achieve the set-out goals.

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## Paul

Paul is a 44 year old gay man who's long term relationship ended about six months ago. At that time, neither of them were HIV positive. Paul's behaviour has changed, he's hooking up with guys online and is drinking and using party drugs and Viagra. He tested HIV positive a month ago. He now is looking to hook up with other Poz guys.



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## Questions to consider...

- What else about his behaviour has changed?
- How does he feel about his sero-status? Has he contacted partners?
- What is his relationship with his previous partner?
- Is he receiving medical care? Is he on HIV meds?
- Are you comfortable discussing safer sex and harm reduction practices with him?
- What are the other risks if he's having unsafe sex?
- What has provoked the unsafe behaviour?

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## Contact Us

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