



Dr. Julio Montaner, director, BC-CfE poses with renowned AIDS activist Stephen Lewis at the recently concluded first International Workshop on Treatment as Prevention. Pioneer of the Treatment as Prevention strategy, the BC-CfE hosted this workshop that was attended by top international HIV/AIDS experts.

## International workshop highlights made-in-B.C. prevention strategy

### World's top researchers review evidence for Treatment as Prevention

More than 150 of the globe's leading experts in HIV/AIDS research gathered in Vancouver this month for the first International Workshop on Treatment as Prevention.

The event, hosted by the BC Centre for Excellence in HIV/AIDS (BC-CfE) represented a unique opportunity to advance the global discourse on the preventive benefits of highly active antiretroviral therapy (HAART). Researchers and policy leaders from a broad range of international organizations contributed to a critical review of the current state of evidence supporting HAART's impact on HIV transmission, as well as population- and region-specific issues.

Over the course of the three-day program, presenters described work currently underway and planned, and identified areas of potential synergy as well as gaps where further targeted research efforts may be needed. The workshop served as a focal point for researchers involved in Treatment as Prevention to share data, protocols, and findings, and to foster an open collaborative environment around this emerging area of research.

"This workshop has forged an invigorating dialogue around the critically important issue of Treatment as Prevention," said BC-CfE director Dr. Julio Montaner. "We all understand that optimizing the therapeutic use of antiretroviral therapy will control morbidity and mortality.

Now we must translate the evidence into policies that will harness the secondary preventive benefit of HAART in our response to the pandemic."

A compelling body of evidence, led by extensive BC-CfE research, has demonstrated HAART's ability to consistently suppress HIV replication, placing the virus into long-term remission and dramatically reducing the likelihood of transmission by appropriately treated individuals. Despite the evidence, HAART remains chronically underutilized in many regions.

In his remarks to the workshop, renowned AIDS activist Stephen Lewis delivered a spirited call for the international community to fully realize Treatment as Prevention's potential as a powerful tool to curb the spread of the HIV epidemic.

"The single most effective intervention at the moment is Treatment as Prevention," Lewis said in an interview with the BC-CfE. "All of the other preventive interventions, including the passionate efforts at behaviour change, have clearly not worked adequately, because prevention is still not in place.

"The validity of Treatment as Prevention seems to me to be proven by Julio and others beyond a reasonable

doubt, and to delay the implementation any further is frankly unconscionable."

The workshop, which ran from May 4 to 6 at Vancouver's Sheraton Wall Centre, was co-hosted by the World Health Organization, UNAIDS, the International AIDS Society, and the National Institute on Drug Abuse.

#### Event sponsors:

- NIH Office of AIDS Research
- National Institute of Allergy and Infectious Disease
- U.S. President's Emergency Plan for AIDS Relief (PEPFAR)
- The Bill & Melinda Gates Foundation
- French National Agency for Research on AIDS and Viral Hepatitis
- Canadian Institutes of Health Research
- Public Health Agency of Canada

#### Academic partners:

- UBC
- SFU
- Providence Health Care
- Vancouver Coastal Health

#### Industry partners:

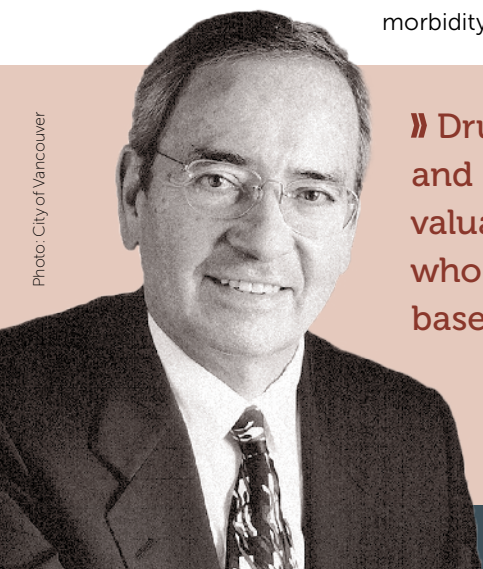
- Bristol-Myers Squibb
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- Merck
- ViiV Healthcare
- Abbott
- Boehringer Ingelheim
- bioLytical

» Drug addiction is a health issue, not a criminal issue, and Insite needs to be recognized for what it is: a valuable health service that saves lives. To help people who are addicted, we need a comprehensive, health-based approach, and Insite needs to be a part of that."

– Former Mayor Philip Owen is one of six former and current mayors of Vancouver who signed an open letter issued to the federal government in support of Insite. He was quoted in *The Vancouver Sun*, May 10, 2011.



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# Landmark study confirms preventive benefits of HIV treatment

International support for the BC-CfE-pioneered concept of Treatment as Prevention continued to build this month with the release of a landmark study demonstrating the overwhelming effectiveness of antiretroviral therapy in reducing HIV transmission.

The study, led by the National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID), confirmed that the use of highly active antiretroviral therapy (HAART) decreased HIV transmission by more than 90 per cent in sero-discordant heterosexual couples and slowed the rate of HIV disease progression by more than 40 per cent.

Sero-discordant is a term used to describe a couple in which one partner is HIV positive and the other is HIV negative.

The study represents the first randomized clinical trial to investigate HAART's impact on HIV transmission, and its findings add to a growing body of evidence supporting the expansion of HIV treatment as part of a comprehensive approach to prevention.

"The BC-CfE celebrates the successful completion of this important study that definitively confirms the secondary preventive value of HAART, as it not only decreases HIV disease progression, it also dramatically decreases HIV transmission," said Dr. Julio Montaner, BC-CfE director. "These results mirror the findings of our own research, which has reported similar declines in HIV incidence among injection drug users in Vancouver's Downtown Eastside in response to increased HAART coverage."

Pioneered by Dr. Montaner and colleagues at the BC-CfE, Treatment as Prevention is based on the groundbreaking notion that appropriate treatment with HAART reduces HIV concentrations in blood and sexual fluids to undetectable



Director of the BC-CfE Dr. Julio Montaner's pioneering role in Treatment as Prevention was recognized by *The Economist* in wake of the new evidence showing Treatment as Prevention effectively reduces HIV transmission.

levels, significantly diminishing the probability of transmission. The model has been implemented in British Columbia through the BC-CfE's STOP HIV/AIDS pilot project and similar initiatives are currently underway in San Francisco, New York, and Washington, D.C.

Internationally, China recently became the first country to adopt a national HIV strategy based on Treatment as Prevention.

The BC-CfE's central role in the development of Treatment as Prevention was acknowledged in coverage of the NIH study by major international media sources, including *The New York Times* and *The Economist*. On its science and technology blog, *The Economist* declared, "This is a decisive result, and a triumph both for the study's organizers, and for Julio Montaner of the University of British Columbia, who pioneered this approach and has been pushing for its implementation for years."

## HAARTbeats

# New primary care management guidelines support the expansion of HIV treatment

With the expansion of HIV treatment in British Columbia through the STOP HIV/AIDS pilot project, primary care providers will play an increasingly important role in the clinical management of HIV infection.

To help support HIV care and treatment in the primary care setting, the BC Centre for Excellence in HIV/AIDS (BC-CfE) recently published the province's first guidelines for primary care providers. These guidelines aim to provide consensus recommendations for the management of HIV-positive individuals and make available flow-care sheets that can be used as an electronic or paper-based template to guide diagnosis, follow-up and referral.

The new guidelines represent the consensus of an expert panel composed of primary and infectious disease physicians, a nurse practitioner, a pharmacist, and a person living with HIV. Panel members were instructed to perform a detailed review of existing HIV primary care

guidelines in Canada and the United States. They were asked to create recommendations in the absence of existing guidelines and reconcile differences between current practices and the general recommendations of the BC-CfE.

The guidelines encompass 73 distinct recommendations on a broad range of HIV-related issues, including antiretroviral therapy, co-morbidities, immunizations, scheduling of care, addictions, special considerations for women, and the psycho-social implications of HIV infection. Each recommendation is classified according to a grading scale, which assigns a value to the strength of the recommendation and the quality of evidence to support it.

The primary care guidelines and patient care flow sheets are available for download on the BC-CfE website at: <http://www.cfenet.ubc.ca/our-work/initiatives/therapeutic-guidelines>.

## STOP HIV/AIDS

# Structured Learning Collaborative builds partnerships for better HIV care



Participants in the STOP HIV/AIDS Structured Learning Collaborative discuss quality improvement in HIV care at the first learning session in January.

Since its official launch in January, the STOP HIV/AIDS Structured Learning Collaborative has been hard at work to strengthen care partnerships and improve HIV care throughout British Columbia.

In addition to monthly teleconferences and data reporting, Collaborative participants recently undertook a webinar focused on the development and implementation of the new HIV/AIDS Primary Care Guidelines (see HAARTbeats article). The interactive format enabled Collaborative faculty to present the new recommendations to health care providers province-wide and respond to questions from participants in real time.

Dialogue and partnerships among providers have also been promoted through active engagement in the online Virtual Community of Practice forum hosted on the project website ([www.stophiv aids.ca](http://www.stophiv aids.ca)).

The Collaborative, an initiative of the STOP HIV/AIDS pilot project, aims to connect health care teams to identify and address gaps between best practice and current practice. By fostering collaboration among service providers, it aims to promote better co-ordination of HIV care and help break down silos of care.

## Research

### Drug use and HIV risk factors among sexual minorities

In a study published recently in the *BMC Public Health*, researchers at the BC Centre for Excellence in HIV/AIDS assessed potential relationships between methamphetamine (MA) use and HIV risks among sexual minorities (lesbian, gay, bisexual or transgendered).

From 2005 to 2008, 2,109 people who use drugs were enrolled into one of three cohort studies in Vancouver. Among these, 104 males and 144 females reported sexual minority status. Among these participants, 64 males and 58 females reported MA use in the past six months.

Study results showed that among males, MA use was associated with younger age, Aboriginal ancestry, injection drug use, having a legal order or area restriction, unprotected intercourse, and increased depressive symptoms. Among females, MA use was associated with injection drug use, Downtown South residency (i.e., an area known for drug use), and unprotected intercourse with sex trade clients.

Researchers concluded that MA use was more prevalent among sexual minority males and females and was associated with different sets of HIV risks and vulnerabilities.

### HAART beneficial for HIV and tuberculosis co-infected individuals

Researchers at the BC Centre for Excellence in HIV/AIDS recently published a study that compared mortality rates in tuberculosis (TB)/HIV co-infected individuals globally.

Researchers obtained TB mortality rates in HIV-positive and HIV-negative individuals from the World Health Organization for 212 recognized countries/territories in the years 2006 to 2008.

The study results showed that in 2008, an estimated 13 TB/HIV deaths occurred per 100,000 population globally with the African region having the highest death rate at 86 per 100,000 individuals. The study also found that every US\$100 of government per capita health expenditure was associated with a 33 per cent decrease in TB/HIV mortality rates.

Study authors concluded that increasing health expenditure directed towards universal access to HAART may reduce mortality rates from both diseases.

## What's New

### Forefront Lecture Series

**Date:** Wednesday, June 1, noon to 1 p.m.

**Location:** Hurlburt Auditorium, St. Paul's Hospital

**Speaker:** Dr. Lindsey Richardson, PhD student, Sociology, University of Oxford

**Lecture:** *Predicting employment and its impact among people who inject drugs*

**Contact:** Andrea Keesey at 604-682-2344 ext. 66357 or [akeesey@cfenet.ubc.ca](mailto:akeesey@cfenet.ubc.ca)

A light lunch and refreshments will be served.

## BC Centre for Excellence in HIV/AIDS

- > Improve the health of British Columbians with HIV through comprehensive research and treatment programs;
- > Develop cost-effective research and therapeutic protocols;
- > Provide educational support programs to health-care professionals;
- > Monitor the impact of HIV/AIDS on B.C. and conduct analyses of the effectiveness of HIV-related programs.

Physician Drug Hotline  
1.800.665.7677

St. Paul's Hospital Pharmacy Hotline  
1.888.551.6222

Website  
[www.cfenet.ubc.ca](http://www.cfenet.ubc.ca)

E-mail  
[info@cfenet.ubc.ca](mailto:info@cfenet.ubc.ca)

Funding for the BC Centre for Excellence in HIV/AIDS is provided by the B.C. Ministry of Health through Pharmacare and the Provincial Health Services Authority.