



Dr. Julio Montaner, director, BC-CfE

## World AIDS Day letter: Made-in-Canada AIDS strategy a blueprint for targeted disease elimination

Proven model a cost-effective strategy to potentially eliminate other diseases such as hepatitis, writes Dr. Julio Montaner

*Insanity is doing the same thing over and over again and expecting different results.*  
– Albert Einstein

The national AIDS strategy is nearly a decade old and desperately needs updating. In B.C., our Treatment as Prevention (TasP) strategy has been successful in dramatically decreasing new cases of HIV and morbidity and mortality. It is now providing the road map for global elimination of the HIV pandemic. While this made-in-B.C. strategy is now embraced globally, this is not the case in the rest of Canada.

Nearly 20 years ago, the BC Centre for Excellence in HIV/AIDS (BC-CfE) created triple drug therapy, the new highly active antiretroviral therapy (HAART) regimen. HAART turned HIV and AIDS from a death sentence into a chronic manageable condition. A decade later, we pioneered and demonstrated the very same HAART regimen could dramatically reduce the likelihood of HIV transmission – this strategy we named Treatment as Prevention.

Simply put: we now have definitive evidence a person infected with HIV with undetectable levels of HIV virus, as a result of HAART use, has little to no chance of

developing AIDS and transmitting HIV. In 2006, this led us to advocate for the expansion of HAART coverage, under the banner of Treatment as Prevention, to prevent illness, death and secondarily, new HIV infections. Of note, the TasP strategy not only saves lives, it is cost-averting.

The TasP strategy involves widespread HIV testing and immediate facilitated access to HAART for all eligible residents of B.C. In B.C., we have decreased progression to AIDS and related premature deaths by over 95% since we began treating with HAART, and decreased the spread of new HIV infections by over 66%. The strategy has been so successful, the province's dedicated HIV/AIDS ward – which opened in 1997 at St. Paul's Hospital in Vancouver – was re-purposed earlier this year due to the significant decline in new cases of AIDS in the province.

To date, B.C. is the only province in Canada that has seen consistent declines in new infections over the last decade. The rate of new infections in B.C. has gone from the highest per capita to one of the lowest in the country. Sadly, an estimated 77,000 Canadians are currently living with HIV, representing an increase of 5,700 people (8%) since 2011. An estimated 18,500 people living with HIV in Canada remain undiagnosed – and unaware of their HIV status. The burden of HIV is particularly felt within our Aboriginal communities.

The end of the HIV/AIDS pandemic is within reach. Countries around the world are rallying behind the made-in-B.C.-and-Canada TasP strategy. We can only hope the rest of Canada will follow suit.

Importantly, we are proud our made-in-Canada TasP strategy has provided the foundation for the United Nations' (UN) new global plan to end the AIDS epidemic by 2030. Announced in September, the UN plan, known as the "90-90-90 target" of which I was the architect proposes by 2020:

- 90% of all people living with HIV will know their HIV status
- 90% of them (all people diagnosed with HIV) will receive sustained antiretroviral therapy, and
- 90% of them (all people receiving antiretroviral therapy) will have sustained viral suppression

This plan is ambitious, but achievable. Indeed, a growing number of jurisdictions around the world – both in the north and south – have shown that one or more of the three components of the proposed targets can be achieved. The problem is, it's not always the same player achieving the best performance. Yet, we can learn from each other and succeed in meeting all three components of the target.

*World AIDS Day continued on pg 2*



» While Australia, for example, has recently released its seventh HIV strategy targeted to the virtual elimination of HIV by 2020, Canada's second strategy is outdated, and there are no targets. It's time to step up."

– Laurie Edmiston, Executive Director, Canadian AIDS Treatment Information Exchange (CATIE), in OpEd column published in Postmedia outlets.



## World AIDS Day *continued from pg. 1*

» If optimally implemented, this strategy will dramatically change the course of the epidemic globally, from a pandemic to a sporadic endemic disease (i.e. decreasing the burden of HIV/AIDS-related illness, death and transmission by 90% compared to 2010 levels). While total eradication of HIV/AIDS will depend on the emergence of an effective cure and/or vaccine, for those of us who have been involved in the fight against HIV/AIDS from the early dark days, this strategy's evidence-based goals would not have been even remotely imaginable as recently as a decade ago.

There is another important reason to celebrate the success of the TasP strategy: it is exportable to other infectious diseases, such as viral hepatitis, tuberculosis (TB), sexually transmitted infections, and also to other communicable (non-infectious) diseases, including smoking-related diseases and other addictions. The optimal implementation of a TasP strategy in these therapeutic areas could potentially lead to a "targeted

disease elimination" state, defined as decreasing burden of disease by 90%. This would have tremendous implications for health care sustainability. Targeted disease elimination is a strategy that the BC-CfE has been exploring using TasP as its platform.

At a time when we are acutely concerned about the sustainability of our health care system, it is critical to apply a new mindset. If we truly expect different results, we must start doing things differently. TasP offers not only a proven strategy for targeted disease elimination of HIV/AIDS and beyond, but a means to promote health care sustainability. Given the pressures our health care system is under, there is no room for complacency. We urge the federal government's leadership to mobilize the resources needed and urgently apply the lessons learned in B.C. to control HIV/AIDS across the country and to export the strategy to other communicable diseases, for the benefit of all Canadians and to serve as a model for health care innovation and sustainability.

## SPOTLIGHT

# New hope for Addiction Treatment

» Consider this: a new report from the Canadian Centre on Substance Abuse (CCSA) highlights the cost of hospitalizing people with substance use disorders as significant, increasing 22% from 2006 to 2011 (\$219M to \$267M). At St. Paul's Hospital, in the heart of Metro Vancouver, the past four years has seen an 89% increase in the number of patients with addiction issues.

Despite the enormous burden of disease attributable to harmful drug use, major obstacles continue to undermine the development and implementation of evidence-based prevention and treatment modalities for substance use disorders. In particular, while remarkable advances have been made in basic science, clinical and behavioural research on substance use disorders, many evidence-based tools, therapies and other interventions remain greatly under-utilized in B.C. and Canada.

One of the key reasons B.C. has yet to realize the potential of the latest developments in evidence-based prevention and treatment for substance use disorders is due to a lack of qualified health care providers. The traditional failure to train healthcare providers in the care of patients with substance dependence and related harms means new, even standard treatments go underutilized in B.C.

Thanks to support from GoldCorp Inc. and the BC Ministry of Health, educational opportunities are coming online to address this major structural barrier.

The first is the St. Paul's Hospital GoldCorp Addiction Medicine Fellowship, founded by Dr. Evan Wood, Co-director of the BC-CfE's Urban Health Research Initiative, and Medical Director for Addiction Services at Vancouver Coastal Health and Providence Health Care. Remarkably, this is Western Canada's only American

Board of Addiction Medicine (ABAM) accredited training program for addiction medicine physicians. The Addiction Medicine Fellowship addresses the critical lack of skilled addiction medicine specialists in the province of B.C. by providing one year of specialty training in addiction

medicine. Participating fellows will develop diverse skills in leadership and addictions research. In addition to this fellowship, St. Paul's Hospital hosts a year-round hands-on training program for medical students and residents from across the province, and will soon expand to include social work and nursing trainees.

By the end of 2014, a total of 140 physician trainees will pass through our addiction training program. In addition, the ABAM has indicated this year we will see the highest ever number of B.C. physicians writing the board's accreditation exam, making B.C. the province with the most addiction medicine specialists per capita in Canada. As Terry Lake, Minister of Health, noted in his remarks acknowledging the passing of Addiction Awareness Week, this is "great news for patients and families seeking help."

To learn more about the fellowship and other addiction medicine training opportunities at St. Paul's Hospital, please visit: <http://addictionmedicinefellowship.org/>.



Dr. Evan Wood

# Key dates for IAS 2015 conference

» December 1 marked World AIDS Day and kicked off many key dates for the 8th IAS Conference on HIV Pathogenesis, Treatment and Prevention (IAS 2015), being held in Vancouver, **July 19-22, 2015**.

Registration for the event is now open with the standard fee deadline set for **February 26**. Other **December 1** opening dates include:

- Abstract submissions
- Exhibition applications
- Satellite applications
- Accommodation

Researchers can submit their abstract for mentoring. A pool of expert mentors will provide feedback on how to develop successful abstracts for each of the conference tracks. Each participant is allowed a maximum of two submissions to the program and can choose to re-submit a draft abstract or submit two different abstracts for one round of review each.

The Abstract Mentor Program closes **January 12** and the abstract submission deadline is **January 27**.

IAS 2015 is the largest open scientific conference on HIV/AIDS-related issues, and is expected to gather some 6,000 delegates from across the globe.

The conference will be a unique opportunity for all those involved in the global response to HIV, including scientists, clinicians, public health experts, community leaders, and media professionals, to meet and examine the latest scientific developments in HIV-related research, and explore how such developments can be realistically applied in implementation programs.

IAS 2015 is organized by the International AIDS Society, in partnership with the University of British Columbia Division of AIDS, based at St. Paul's Hospital, Providence Health Care. The organizing committee includes BC-CfE's Dr. Julio Montaner (co-chair) and Dr. Thomas Kerr (member). The event will be hosted by IAS and Dr. Montaner.

For more information, visit [ias2015.org](http://ias2015.org)

## AWARDS

### Award-winning doctor directs prize money to Centre

It is with deep gratitude BC-CfE congratulates and thanks Dr. Robert Young who so generously chose the BC-CfE as recipient of a \$20,000 prize money award.

Dr. Young received the Rx&D Health Research Foundation Medal of Honour for his work in the discovery and development of Singulair®, used to prevent asthma attacks. Recipients of this prize are asked to invest the funds back into innovative health research at the Canadian academic facility of their choice to promote further life sciences research in Canada.

"I have had the pleasure of getting to know Dr. Young and I am simply thrilled he received this well-deserved recognition and touched that he would choose the BC-CfE as a recipient of the prize money," says Dr. Julio Montaner, director of the BC-CfE.

The Rx&D Health Research Foundation (HRF) is a non-profit organization whose mission is to support health research in Canadian academic health centres and promote the value of health research in Canada. The HRF Medal of Honour is granted by the HRF on an annual basis. This award recognizes truly outstanding individuals whose research and/or contribution to public policies supportive of research and development in Canada have achieved international recognition.

## LECTURES & EVENTS

### Forefront Lecture

*Toward safer spaces of health access: spatial and contextual barriers and facilitators of HIV prevention, treatment and care among sex workers*

Dr. Kathleen Deering  
Postdoctoral Fellow and the Analytic Research Coordinator for the AESHA Project at the Gender and Sexual Health Initiative (GSHI).

Wednesday December 17, 2014  
12-1:00 PM  
Hurlburt Auditorium, St. Paul's Hospital

### Forefront Lecture

90-90-90

Dr. Julio Montaner  
Director of BC Centre for Excellence in HIV/AIDS  
UNAIDS Global Advisor on HIV Therapeutics

Wednesday, January 7, 2015  
12- 1:00 PM  
Large Lecture Theatre, Room 1477,  
Providence Level 1, St. Paul's Hospital

For more information visit:  
[education.cfenet.ubc.ca/forefront-lectures/](http://education.cfenet.ubc.ca/forefront-lectures/)

## 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

1.888.511.6222

Website

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

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