



Dr. Julio Montaner, director, and Dr. Robert Hogg, director of Epidemiology and Population Health, BC Centre for Excellence in HIV/AIDS.

Treatment as Prevention leads to B.C. having largest decline in rate of new HIV diagnoses

'It's time for Canada's leaders to emulate the government of B.C. and adopt this as the national strategy to stop HIV/AIDS,' says Dr. Julio Montaner

Policymakers need to adopt Treatment as Prevention as a national strategy to fight HIV/AIDS, urges researchers at the BC Centre for Excellence in HIV/AIDS (BC-CfE) in an article published this month in *HIV Medicine*.

New HIV diagnoses in British Columbia are continuing to decline at a rate faster than in other Canadian regions, report researchers after analyzing Health Canada data from 1995 to 2011.

"British Columbia, of all Canadian jurisdictions, has had the largest decline in the rate of new HIV diagnoses and in lifetime costs averted over the study period," write the authors, who include Dr. Julio Montaner, director of the BC-CfE, and Dr. Robert Hogg, director of the Epidemiology and Population Health Program at the BC-CfE. "Further efforts are needed to optimize the potential impact of Treatment as Prevention in the whole of Canada."

B.C., where the Treatment as Prevention strategy was pioneered and implemented, is the only province to promote widespread and fully government-supported access to HIV testing and highly active antiretroviral therapy (HAART). As a result, B.C. has seen HIV-related

morbidity and mortality decline by approximately 90 per cent since the early 1990s, and the number of new HIV diagnoses has fallen from approximately 800 per year prior in 1996 to 238 in 2012.

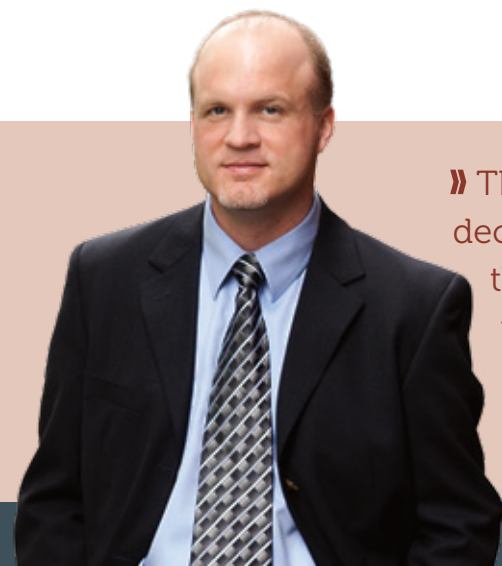
"The consistent and sustained decrease in new HIV diagnoses in B.C. reinforces Treatment as Prevention as a highly effective approach in the fight against HIV/AIDS," said Dr. Montaner. "The evidence should be absolutely clear: Treatment as Prevention is the best way to achieve an HIV- and AIDS-free generation. It's time for Canada's leaders to emulate the government of B.C. and adopt this as the national strategy to stop HIV/AIDS."

In Canada, there are an estimated 71,300 individuals living with HIV. While annual rates of new HIV diagnoses declined slightly in Ontario, Quebec and the Atlantic provinces, B.C. demonstrated the most significant decline between 1995 and 2011, from 18.05 to 6.49 per 100,000 population. In comparison, rates in Saskatchewan increased from 2.76 to 16.17 per 100,000 population, and in Manitoba they increased from 4.52 to 6.53 per 100,000 population. Rates of new HIV diagnoses in Alberta and in the Territories remained constant over the study period, demonstrating neither an increase nor a decrease.

It is estimated that B.C. has averted \$3.06 million per 100,000 population in lifetime costs for averted cases of HIV infection since 1996, compared to \$1.38 million and \$432,000, respectively, for Ontario and Quebec. In contrast, it is estimated Saskatchewan and Manitoba have incurred an additional cost of \$2.06 million and \$956,000, respectively, per 100,000 population for the increase in new cases since 1996.

"The evidence we reviewed really demonstrates further efforts are needed to optimize the potential impact of Treatment as Prevention in the whole of Canada," said Dr. Hogg. "We should look at what has been accomplished in British Columbia and apply those lessons to other jurisdictions without further delay."

The World Health Organization and the Joint United Nations Programme on HIV/AIDS (UNAIDS) have adopted the Treatment as Prevention strategy, as have other jurisdictions throughout the world, including China and, most recently, France. In addition, the U.S. has identified Treatment as Prevention as a key strategy to achieve an AIDS-free generation.



» This proposed legislation seems to ignore evidence from a decade of experience in Vancouver and, in so doing, jeopardizes the expansion of these services to other Canadian cities where a need for them has been identified."

– BC-CfE researchers Drs. Thomas Kerr (pictured at left), Julio Montaner, Evan Wood, and Maria Zlotorzynska on Bill C-65, in a commentary published in *Canadian Medical Association Journal* entitled, "Supervised injection sites: prejudice should not trump evidence of benefit."



Dr. Julio Montaner receives Canadian Medical Association's highest honour

» Dr. Julio Montaner, director of the BC-CfE, has been awarded the 2013 Canadian Medical Association (CMA) Frederic Newton Gisborne Starr Award.

"Dr. Montaner's research and clinical work in alternative therapeutic strategies has changed how medicine treats and perceives HIV disease," said CMA president Dr. Anna Reid. "The advances he has achieved make him an internationally recognized leader in the fight against HIV and AIDS."

The CMA FNG Starr Award is the highest award the CMA can bestow upon one of its members. It is awarded to Dr. Montaner for his significant contribution to the



Dr. Anna Reid, past president CMA; Dr. Julio Montaner, director, BC-CfE; Dr. Louis Hugo Francescutti, president, CMA.

treatment and prevention of HIV and AIDS provincially, nationally, and internationally, as well as his work in promoting well-constructed public health policies in B.C., Canada and around the world.

The award recognizes Dr. Montaner for being a tireless advocate for improving the efficacy and accessibility of HIV treatment and care. His innovative research led to the development of highly active antiretroviral therapy (HAART), a triple-drug therapy that is now the gold standard of HIV treatment, and the Treatment as Prevention strategy.

"I am honoured to have been selected by the Canadian Medical Association to receive the prestigious 2013 CMA Frederic Newton Gisborne Starr Award," said Dr. Montaner. "This represents a tremendous show of support by my colleagues for the work we have carried out over the last three decades to stop HIV and AIDS."

"This recognition furthers my commitment to do whatever is needed to ensure the Treatment as Prevention strategy we pioneered in B.C., in partnership with the provincial government, is promptly, fully and optimally deployed across Canada and the world."

The 2013 CMA Frederic Newton Gisborne Starr Award was presented to Dr. Montaner at the CMA's annual meeting in Calgary in late August.

Evidence-based treatment best approach for opioid dependence

Access to heroin and opioid medical treatment needs to be expanded to reduce the harms associated with addiction, say BC-CfE researchers in a study published in *Health Affairs*.

Researchers examined the gaps between current heroin and prescription opioid treatment practices and evidence-based standards in both Canada and the United States.

"We found restrictions on office-based prescriptions and financial barriers to treatment are limiting access to much-needed treatment," said Dr. Bohdan Nosyk, health economist at the BC-CfE and lead author of the paper. "And, perhaps the most distressing, we found a continued reliance on detox programs emphasizing abstinence to treat addiction, particularly in the United States."

Evidence shows that using opioid substitutes, such as methadone and buprenorphine, is effective in lowering the risk of illicit drug abuse and retaining clients in treatment, and improving both individual and public health. This treatment can lead to reductions in illicit drug use, overdoses, behaviours that increase the risk of contracting HIV and hepatitis C, and criminal activity. Opioid substitution treatment has also been shown to be highly cost-effective and potentially cost saving.

However, short-term opioid detoxification programs (generally one to three months in length) that focus on abstinence are often ineffective and potentially unsafe. Opioid dependence is a chronic and recurrent condition, and treatment should reflect this. The risk of death for someone seeking treatment for opioid addiction is highest during the first two weeks of treatment and the two weeks immediately after they stop.

"Removing barriers to treatment – both financial and environment – and training physicians how to integrate treatments into their practice will go a long toward putting the best evidence-based treatment into practice," said Dr. Nosyk.

STOP HIV/AIDS resource centre

A complete resource centre for the Seek and Treat for the Optimal Prevention of HIV/AIDS (STOP HIV/AIDS) initiative is available at www.stophiv aids.ca.

Participants in the STOP HIV/AIDS Structured Learning Collaborative (SLC) can log in to access the latest news and information.

HIV/Antiretroviral Update

Monday, November 18, 2013 - 08:30 - 17:00

Grand Ballroom-North Tower Sheraton Wall Centre Hotel - located across from St. Paul's Hospital in Downtown Vancouver.

Register at www.cfenet.ubc.ca

Strong HIV strategy lowers incidence of tuberculosis

» Countries that received the most intensive HIV-fighting support saw greater drops in incidence of illness and deaths due to tuberculosis (TB) than countries receiving less intensive support, says a new study from BC-CfE researchers in the *Journal of Infectious Diseases*.

The study, "Potential Impact of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) on the Tuberculosis/HIV co-epidemic in selected Sub-Saharan African countries," examined TB incidence and death rates in the years before and after the heightened U.S. response to global HIV.

"Our research found a link between high levels of HIV investment and broader effects on related diseases such as TB," said Dr. Viviane Lima, senior statistician at the BC-CfE and lead author of the study. "This is Treatment as Prevention in action, and the results point to the need for increased access to HIV and TB services and increased investment in these regions to diminish the burden of these two devastating epidemics."

Researchers compared data from 12 PEPFAR focus countries where the program made its largest investments to prevent and treat HIV, with data from 29 countries with generalized HIV epidemics that received less direct U.S. funding to fight HIV.

Before the arrival of PEPFAR support, the median TB incidence rate across focus countries was 1139 for every 100,000 people. A median of 445 of every 100,000 people died of TB in the focus countries. After PEPFAR's arrival, the median incidence of TB dropped to 842 for every 100,000 people, and deaths dropped to 342 per 100,000. Overall, more than half a million cases of TB illness and an estimated 379,432 deaths were averted.



Dr. Viviane Lima, senior statistician, BC-CfE

STOP HIV/AIDS NEWS

Northern Health receives accolades for early testing and treatment campaign

» Northern Health and its community partners have been recognized provincially and internationally for its STOP HIV/AIDS education and awareness campaign promoting the benefits of early HIV testing and treatment.

The campaign won three Gold Quill Merit Awards from the International Association of Business Communicators (IABC), presented to Northern Health, with Prince George-based Splash Media Group, in the following categories: Corporate Social Responsibility, Advocacy Communication, and Advertising Campaigns. The Gold Quill Awards are presented annually to the top communications projects selected from hundreds of entries from around the world.

Provincially, Northern Health and its community partners also won the Gold Apple Award in the Collaborative Solutions category at the seventh annual Excellence in BC Health Care Awards, presented in Vancouver on June 24, 2013.

Using traditional and online advertising, as well as community outreach, the campaign featured persons living with HIV, health care providers, HIV educators and other HIV champions spreading a key message: that everyone, regardless of age or gender, should be encouraged to take an HIV test.

A cornerstone of Northern Health's campaign is HIV101.ca, a website designed to provide comprehensive information on HIV/AIDS testing, treatment and support services in northern BC. The website not only offers information to the general public, but also to health care professionals.

The BC-CfE STOP HIV/AIDS initiative was conducted as a pilot project from 2009 to 2013 in Prince George and Vancouver's Downtown Eastside before expanding province-wide earlier this year. The success of the campaign led to HIV tests in northern B.C. increasing by over 1,800 in 2012.

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

E-mail
info@cfenet.ubc.ca

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