What the syph is going on? Responding to syphilis outbreaks in Canada

By Marc-André LeBlanc

In Canada, syphilis rates are on the rise. This is concerning for people working in HIV because syphilis can increase the risk of an HIV-negative person becoming infected with HIV and of an HIV-positive person passing HIV to others. Also, syphilis can progress more quickly and be more difficult to treat in people who are HIV-positive.

So what is happening? This article provides an overview of outbreaks that have occurred across the country and of responses from public health and community sectors.

Syphilis in Canada

Let’s take a look at the number of reported new cases of infectious syphilis in Canada since 1993 (see Figure 1). In the years prior to 2000, there were fewer than 200 new cases of syphilis reported each year. Since then, there has been a fairly sharp and steady increase in the number of new cases reported annually: over 1,750 cases in 2010 (5.2 cases per 100,000 people). That translates to a 910% (or 10-fold) increase compared to the number of reported cases in 2000.1

Figure 1. Number of new cases of infectious syphilis reported each year in Canada (1993-2010)

Here are a few key facts about the epidemic in Canada:2

- In 2010, British Columbia, Alberta, Ontario and Quebec had the highest number of new cases of infectious
syphilis. That is not surprising since these are also the provinces in Canada with the most people.

- In 2010, the Northwest Territories, Ontario and Quebec had the highest rates of syphilis—all above the national average. (The rate refers to the number of cases of infectious syphilis per 100,000 people and isn’t influenced by the size of the population in the province.)
- Syphilis has affected more males than females. In 2010, males accounted for 90% of reported cases.
- Unlike other STIs, such as chlamydia and gonorrhea, for which rates of new cases tend to be highest among 15-24 year olds, syphilis is more commonly diagnosed in people who are somewhat older; incidence rates (new cases) are highest among those between the ages of 20 and 60.

### Syphilis in the provinces and territories

Syphilis outbreaks are playing out differently across the country and it’s important to know about one’s local epidemic in order to develop an effective response. Below are some key facts about the syphilis epidemic in different regions throughout Canada. The last year for which the Public Health Agency of Canada (PHAC) has compiled the number of new cases and the rate of infectious syphilis for each province and territory is 2010. For the sake of easy comparison, we have indicated those 2010 numbers.

Where data to describe the populations affected within a given province/territory were available, these were also compiled to provide a fuller picture of the epidemic.

#### British Columbia

- **Number of new cases in 2010:** 155
- **Rate in 2010:** 3.4 cases per 100,000 people
- **Trends:** Since 1996 there has been an ongoing syphilis epidemic, in two successive but overlapping waves. Over 300 new cases were reported in both 2006 and 2008.
- **Sex:** In 2010, the vast majority of cases were among males (91%).
- **Populations:** A large proportion of cases are among gay men and other men who have sex with men (MSM). Gay men and other MSM who are HIV-positive account for approximately 40% of all infectious syphilis cases in BC in recent years.

#### Yukon Territory

- **Number of new cases in 2010:** 1
- **Rate in 2010:** 2.9 cases per 100,000 people
- **Trends:** After having only 1 case of infectious syphilis between 1993 and 1999, an outbreak occurred between 2000 and 2003, reaching a high of 22 cases in 2001. Since 2004 there have been a total of only 6 cases.

#### Alberta

- **Number of new cases in 2010:** 168
- **Rate in 2010:** 4.5 per 100,000 people
- **Trends:** An outbreak in Alberta started in 2003 and reached a high of 279 new cases in 2009. The number of new cases declined sharply in 2010 to 168.
- **Sex:** In 2010, there were twice as many cases among males as females.
- **Populations:** Aboriginal communities are disproportionately affected, accounting for 30.6% of new cases. Gay men and other MSM accounted for an estimated 27%-33% of cases.

#### Northwest Territories

- **Number of new cases in 2010:** 8
- **Rate in 2010:** 18.3 cases per 100,000 people
- **Trends:** Only three cases of syphilis were reported between 1993 and 2007 but this grew to 47 cases in 2008 and 41 cases in 2009. The number of new cases appears to be on the decline with only 8 cases reported in 2010.
- **Sex:** In 2010, there were 3 cases among males and 5 cases among females.
- **Populations:** The outbreak has been concentrated among injection drug users and heterosexuals.
Saskatchewan

- **Number of new cases in 2010:** 36
- **Rate in 2010:** 3.4 cases per 100,000 people
- **Trends:** The number of syphilis cases has been increasing since 2006, reaching a high of 36 cases in 2010.
- **Sex:** In 2010, about one-quarter of cases was among females and three-quarters of cases were among males.

Manitoba

- **Number of new cases in 2010:** 17
- **Rate in 2010:** 1.4 cases per 100,000 people
- **Trends:** The number of cases began to increase in 2003 and peaked in 2005 with 51 cases. Since then, there has been a gradual decline, followed by a slight rebound in 2010. The rebound is due mainly to an increase of cases among women.
- **Sex:** In 2010, 9 new cases were among males and 8 were among females. Before 2010, most cases were among males.

Nunavut

- There were no reported cases of syphilis in Nunavut in 2010. Only 1 case of syphilis was reported between 2000 and 2010—one female in 2004.

Ontario

- **Number of new cases in 2010:** 774
- **Rate in 2010:** 5.9 cases per 100,000 people
- **Trends:** The number of cases began to increase in 2002 and continues to rise. More than three-quarters (76%) of all cases in Ontario were reported by health units in Toronto and Ottawa, despite the fact that only 27% of Ontario’s population live in Toronto and Ottawa.2
- **Sex:** In 2010, the vast majority of cases were among males (94%).
- **Populations:** Gay men and other men who have sex with men (MSM) represented the vast majority (84%) of cases among men between 2008 and 2011.2 Between 2008 and 2011, 42-45% of Ontarians diagnosed with syphilis were co-infected with HIV. A quarter of cases in 2011 (24%) were repeat infections (people getting infected more than once).2 The vast majority of people living with HIV co-infected with syphilis in 2011 (87.5%) had received an HIV diagnosis in the previous year.2

Quebec

- **Number of new cases in 2010:** 539
- **Rate in 2010:** 6.8 cases per 100,000 people
- **Trends:** The number of new cases began increasing in 2002 and shows no signs of slowing down, reaching a high of 539 cases in 2010. Two thirds of cases are in Montreal (66%), despite accounting for only 24% of the Quebec population.8
- **Sex:** In 2010, the vast majority of cases were among males (95%).
- **Populations:** The vast majority of cases were among gay men and other MSM (91% for 2000-2009).8

New Brunswick

- **Number of new cases in 2010:** 34
- **Rate in 2010:** 4.5 cases per 100,000 people
- **Trends:** Between 1993 and 2009 there were fewer than 10 cases per year, but in 2010 this grew to 34 cases.
- **Sex:** In 2010, most of the cases were among males (94%).
- **Populations:** Most cases were among gay men and other MSM.9

Prince Edward Island and Nova Scotia10
Number of new cases in 2010: 21  
Rate in 2010: 1.9 cases per 100,000 people  
Trends: After outbreaks in 1993-1994 and 2003-2004, the number of new cases started to increase again in 2009—from zero cases in 2008 to 24 cases in 2009 and 21 cases in 2010.  
Sex: In 2010, most cases were among males (95%).  
Populations: Most cases were among gay men and other MSM.  

Newfoundland and Labrador  
Number of new cases in 2010: 4  
Rate in 2010: 0.8 cases per 100,000 people  
Trends: The number of new cases of syphilis has seen no significant change over time, ranging from 0 to 8 per year since 1993.  
Sex: All of the new cases in 2010 were among males.  

Our response to the syphilis epidemic  
The responses of public health and community-based organizations in many parts of Canada to the syphilis outbreaks in their region may be partly responsible for the decreasing or stabilizing rates in some parts of Canada.  

In British Columbia, efforts to stem the syphilis outbreak have been led by the British Columbia Centre for Disease Control (BCCDC). Activities include:

- Education for healthcare providers  
- Centralized follow-up of infectious syphilis cases  
- Promotion of syphilis testing among gay men and other MSM  
- Inclusion of syphilis testing with routine blood-work for people living with HIV who are on antiretroviral therapy  
- The promotion of STI and HIV testing by service providers and community agencies  

In Alberta the government launched two successive campaigns. The first one, “Look What's Back,” ran in Calgary in 2010. The first phase of the campaign focussed first on heterosexuals, and the second phase on gay men and other MSM. It included a website, online ads on Priape, Manhunt and Facebook, print advertisements, posters, buttons, coasters, and condom pack inserts. There were outreach activities with key opinion leaders, peer outreach workers, syphilis education sessions and incentives for testing. Community outreach workers provided a $10 monetary incentive for being tested and $20 for returning for test results.  

In 2011, the Alberta government launched a second campaign in two phases. The first phase, called “Don't You Get It,” included a website, posters, and TV and print ads. The second phase, called “Plenty of Syph,” was a satire of online dating and cruising sites. The campaign also included radio and TV ads. It was the source of much debate and controversy. Some people praised the campaign,
and the Alberta government credits it in part for the drop in the number of syphilis cases in the province. However, many prevention advocates and behavioural researchers described the campaign as stigmatizing, homophobic and sexphobic, and questioned whether it was likely to promote behaviour change.

The **Northwest Territories** Department of Health and Social Services began an aggressive “syphilis alert” campaign in 2008, putting up posters in health centres, schools and on buses, urging people to get tested for syphilis. Health officials also enhanced screening of the general population in affected regions and among high-risk populations, including expectant mothers. At the same time, a Sexual Health Social Marketing campaign was launched to address high rates of sexually transmitted infections, including the website [www.respectyourself.ca](http://www.respectyourself.ca).

In **Ontario**, the “Attack of the Cursed Syphilis” campaign was developed by the AIDS Committee of Toronto (ACT), and it was further developed and distributed provincially by the Ontario Gay Men’s Sexual Health Alliance (GMSH) and nationally by CATIE. It included print materials, a website, subway ads, and print and online advertising. Some materials were developed specifically for HIV-positive gay men. The campaign is a creative, humorous and ‘campy’ satirical twist on publicity materials for B movies and horror films from the 1950s.

An HIV testing campaign developed by Hassle Free Clinic in Toronto ran in late 2011 and early 2012 in Toronto and Ottawa. While it focused on HIV, it also encouraged men to get tested for syphilis. The blitz was promoted through a website, gay media, mobile uploads, billboards and business cards.
In terms of a government response, the Ontario Ministry of Health and Long-Term Care has created a Syphilis Working Group, which has enhanced surveillance and epidemiology activities, provided educational opportunities to health units and funding for awareness and health promotion activities.

In Quebec, Montreal Public Health—la Direction de santé publique de Montréal—launched two syphilis awareness campaigns: “Je suis Phil” in 2004-2005 and “Mieux vaut y voir” (Don’t Turn a Blind Eye) in 2007-2008. They promoted condom use and regular testing for syphilis through posters, flyers, factsheets, a website, banner and print ads, and a video. REZO, a community-based organisation in Montreal, offers syphilis, HIV and other STI testing in conjunction with public health on site at their location, in bars and saunas, and also through its sex work outreach program.

In 2004 a campaign was launched in Ottawa, Toronto and Montreal to improve awareness of syphilis. The campaign was developed jointly by gay community organizations, AIDS service organizations (ASOs) and public health units in those three cities. Images were posted in saunas and bars, and public service announcements (PSAs) ran on PrideVision.

In 2011, the New Brunswick government developed print materials and a video encouraging condom use and testing.
In Nova Scotia, as in many provinces, public health has sent out regular reminders to all physicians about the syphilis outbreak and about the importance of testing. The AIDS Coalition of Nova Scotia has been doing outreach to popular websites for gay men and other MSM. Testing for syphilis, HIV and other STIs is provided through a number of venues, including the Halifax Sexual Health Centre, the STD Clinic, prideHealth, family physicians and walk-in clinics.

**Summary**

For the past 10 to 12 years, the number of new cases of infectious syphilis reported each year in Canada has been increasing. The higher rates of syphilis may be facilitating HIV transmission and impacting the health of people you work with.

The vast majority of cases in Canada are among men. The vast majority of those men are gay men or other MSM. A large proportion of those gay men and other MSM are HIV-positive. In some cases, these men are testing positive for HIV and syphilis within a year of each other. However, in some parts of the country, where the rates among men to women are closer to equal, outbreaks may be caused by injection drug use, and Aboriginal people and young people may be at higher risk.

So what can you do? Learning more about the syphilis epidemic in your region is critical to developing an effective response. Campaigns to raise awareness about syphilis and encourage regular testing have been launched in different parts of the country and may be contributing to declining rates of syphilis cases in those areas. If you or your organization is interested in launching a syphilis campaign of your own, learning more about the various syphilis campaigns highlighted in this article is a good place to start. To learn more about key messages you can provide to clients or patients regarding syphilis transmission, prevention, testing and treatment, go to CATIE's syphilis information page. You may also want to check out the Resources listed below.

**Resources**

**Canadian epidemiology and surveillance**


**British Columbia**

BC Centre for Disease Control. [HIV and Sexually Transmitted Infections 2010](http://www.bccdc.ca).


“Don’t You Get It” campaign

**Northwest Territories**

“Respect Yourself” campaign

**Ontario**

Michael Whelan and Shilpa Raju. “Epidemiology of syphilis in Ontario” (Presentation to the 2012 Guelph Sexuality Conference), Surveillance Services, Public Health Ontario.


**AIDS Committee of Toronto campaign**

**Quebec**


**Syphilis information pages** from the Direction des communications du ministère de la Santé et des Services sociaux du Québec

“Mieux vaut y voir” (Don’t turn a blind eye) campaign

**New Brunswick**

**Syphilis information and resources**

**National campaign**


**CATIE syphilis information page**

**References**

7. a b Michael Whelan and Shilpa Raju. “Epidemiology of Syphilis in Ontario” (Presentation to the 2012 Guelph Sexuality Conference), Surveillance Services, Public Health Ontario.
About the author(s)

**Marc-André LeBlanc** has worked in the community-based HIV/AIDS movement for 20 years at local, national and international levels. And since 2007, he has worked as an independent consultant.

Marc-André is a recognized leader in the field of community engagement, capacity-building and policy work related to biomedical HIV prevention research, both in Canada and globally.
Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

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