



Figure: Tuberculosis incidence in Canada<sup>2</sup>

“Canada is on track to meet the eradication goals for tuberculosis set by the high-level meeting”.<sup>1</sup> Eradication is defined as less than 0.1 tuberculosis cases per 100 000 population by 2050 for countries with a low incidence of tuberculosis.<sup>2</sup> The incidence of tuberculosis in Canada has been stagnant for more than a decade (figure), and the incidence among First Nations people, Inuit people, and those born outside of Canada is still disproportionately high.<sup>2</sup>

Recent Canadian research suggests that performance measurement of tuberculosis programmes,<sup>3</sup> enhanced screening and treatment for latent tuberculosis infection among people born outside of Canada,<sup>4</sup> and a focus on paediatric tuberculosis will be essential for tuberculosis elimination in Canada.<sup>5</sup> Tuberculosis was a key driver in the development of the Canadian public health-care system;<sup>6</sup> yet ironically, the system seems to be ill-equipped, at present, to achieve tuberculosis elimination.

A coordinated national strategy for tuberculosis elimination is desperately needed. The minimum requirements for such a strategy would be: development of strong partnerships between the provinces’ tuberculosis programmes, federal tuberculosis activities, Indigenous communities, and immigrant communities from countries with high tuberculosis incidence; implementation of clear performance measures and targets,

with annual reporting to allow for transparency and accountability; and collaboration across jurisdictional boundaries. In particular, a genuine partnership with Indigenous communities will require control over tuberculosis programmes to be shared. Canada will not make progress towards tuberculosis elimination without federal leadership. Reviving and reimagining the Canadian Tuberculosis Committee, which was dismantled in 2011,<sup>7</sup> would be a forward-thinking first step.

We declare no competing interests.

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## The guidelines on infection control in prisons need revising

Owing to a series of environmental and individual risk factors within prisons worldwide, major infectious diseases have become substantially more prevalent.<sup>1</sup> The proportion of prisoners in the world with HIV has been estimated at 3.8%, hepatitis C virus (HCV) at 15.1%, hepatitis B virus (HBV) at 4.8%, and tuberculosis at 2.8%.<sup>2</sup> Since most prisoners will eventually be released back into their communities, these individuals have the potential to further spread these contagious diseases, presenting a risk to society.<sup>2</sup>

That prevention and treatment of these diseases is part of a prisoner’s right to health should also be taken into account. Despite this pressing public health challenge, most countries have failed to implement interventions that have the potential to alleviate this risk.<sup>1</sup>

In 2013, the UN Office on Drugs and Crime, International Labour Organization, the United Nations Development Programme, WHO, and UNAIDS responded to this challenge by developing guidelines for the standardisation of the control of HIV and related infectious diseases in prisons worldwide.<sup>3</sup> The guidelines suggested interventions with 15 elements. Among them are education and risk communication, HIV testing and counselling, drug dependence treatment, needle and syringe programmes, and prevention, diagnosis, and treatment of viral hepatitis, tuberculosis, and sexually transmitted infections. Although old, these comprehensive guidelines are arguably the most quoted, or at least one of the most quoted, references

This online publication has been corrected. The corrected version first appeared at [thelancet.com](http://thelancet.com) on July 30, 2019

about prison health worldwide. We have identified four major shortcomings of the guidelines that jeopardise its comprehensiveness.

First, screening and treatment of alcohol use are omitted from the guidelines. Alcohol use is a strong risk factor for HIV, HBV, and HCV infection, and is a behaviour common in prisoners around the world.<sup>4</sup> Lowered inhibitions combined with impulsivity and poor decisions that discount the consequences all increase engagement in high-risk behaviours, such as unprotected sex.<sup>4</sup> Alcohol use also reduces HIV treatment adherence,<sup>5</sup> a major element of antiretroviral treatment that is necessary for its efficacy. We believe that updated guidelines should add the regulation of alcohol use to the other elements of the current intervention package.

Second, screening and treatment of psychiatric disorders, which are overrepresented in prison populations<sup>6</sup> and increase the risk of engaging in high-risk behaviours, such as unprotected sex and sharing drug injection equipment,<sup>7</sup> are also omitted. Universal screening of prisoners would identify individuals in need of a more detailed evaluation, which might reduce their high-risk behaviours and enhance their compliance with treatment for infections.

Third, we believe that leaving the sexual partners of prisoners out of the sexually transmitted infection testing protocols is a costly mistake for any measures that aim to reduce transition of infections from prisons to society. Not only are partners and spouses of prisoners more likely to be at risk of infections, they also more commonly engage in sex work for money or drugs and are more likely to have multiple sex partners.<sup>8</sup> Sex with prisoners through conjugal visits makes their partners a vehicle for transmission of a wide range of sexually transmitted infections from prisons to the community. Hence, offers of testing and treatment for partners should be added to the intervention package.

Finally, overcrowding and poor ventilation are among the major environmental risk factors of tuberculosis transmission in prison,<sup>9</sup> but are not addressed by the guidelines. The guidelines are exclusively behaviour-oriented and don't emphasise higher level structural barriers to the same degree. Conditions of the physical environment of the prison should not be overlooked in the next iteration of the guidelines.

To maximise the efficacy of strategies to reduce the burden of infectious diseases in prisons, the existing guidelines should be updated. A new version should go beyond drug use and include evaluation of prisoners for alcohol use and psychiatric disorders and comprehensive sexually transmitted infection testing. This protocol should also incorporate evaluation of sexual partners of the prisoners. Without these elements, interventions will be suboptimal and will not fulfil Sustainable Development Goal 3's aim of leaving no one behind.

We declare no competing interests.

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Published Online  
July 15, 2019

[http://dx.doi.org/10.1016/S0140-6736\(19\)31637-X](http://dx.doi.org/10.1016/S0140-6736(19)31637-X)



Published Online  
June 13, 2019

[http://dx.doi.org/10.1016/S0140-6736\(19\)31408-4](http://dx.doi.org/10.1016/S0140-6736(19)31408-4)



Published Online  
July 1, 2019

[http://dx.doi.org/10.1016/S0140-6736\(19\)31527-2](http://dx.doi.org/10.1016/S0140-6736(19)31527-2)

## Department of Error

*Yousuf H, Narula J, Zwetsloot P-P, et al.*

*Using entertainment to improve lifestyles and health.* *Lancet* 2019; **394**: 119–20—In this Correspondence, the country in which the movie based on the 11th season of *SpangaG* will be distributed in has been changed from Germany to the Netherlands. This correction has been made to the online version as of July 15, 2019.

*Evidence for Contraceptive Options and HIV Outcomes (ECHO) Trial Consortium.* *HIV incidence among women using intramuscular depot medroxyprogesterone acetate, a copper intrauterine device, or a levonorgestrel implant for contraception: a randomised, multicentre, open-label trial.* *Lancet* 2019; **394**: 303–13. In this Article, in the second paragraph of the Discussion, the last sentence should have said “Although this trial had low statistical power to detect an increase in HIV incidence of less than 30%, for individual women at very high HIV risk, we acknowledge that even a relatively small effect might be important in contraceptive and HIV prevention decision making.” This correction has been made to the online version as of June 13, and the printed version is correct.

*Nosten FH, Pyae Phyo A.* *New malaria maps.* *Lancet* 2019; **394**: 278–79—In this Comment, the spelling of author Aung Pyae Phyo's name was incorrect. This correction has been made to the online version as of July 1, 2019, and the printed version is correct.