

**BC Strategic Plan
for
Tuberculosis
Prevention, Treatment and Control:
First Annual Progress Report**

BC Communicable Disease Policy Advisory Committee

2014

In addition to the large number of groups and people, the following organizations have played a significant role in the development of the *BC Strategic Plan for Tuberculosis Prevention, Treatment and Control*. The multiple partners highlight the joint ownership of tuberculosis control from a wide cross-section of the health system.



BC Strategic Plan for Tuberculosis Prevention, Treatment and Control: First Annual Progress Report

Introduction

Despite many efforts to eliminate tuberculosis (TB), this old disease persists as a global epidemic and is one of the most common causes of death worldwide¹. Canada, when compared to international statistics and historical epidemiology, is fortunate to have a very low incidence of active TB (4.7 active TB cases per 100,000 people)². Although the rates of active tuberculosis in British Columbia have fallen significantly from 9.7/100,000 in 1993 to 5.9/100,000 in 2011, there is still more work to do.³ The apparent small burden of TB in BC could foster complacency towards addressing the disease with consequent diversion of resources elsewhere; however measuring TB incidence overlooks the vast pool of dormant or latent TB infection (LTBI) in BC that periodically transforms into active TB. The progression from LTBI to active TB can occur in international travellers and immigrants, who import the disease in its latent form after having lived in areas where TB is common, or in people who have been recently exposed to active TB by being a close contact to an infectious TB case, or in those with medical conditions, treatments or behaviours that predispose them to developing active TB once infected⁴.

TB is preventable and curable. Efforts to eradicate TB focus on three broad mechanisms: a) reducing transmission of TB b) reducing the reactivation of LTBI to active TB c) diagnosing, isolating and treating anyone with the TB disease early in the disease course (Figure 1). With these in mind, the BC Strategic Plan for TB Prevention, Treatment and Control (Strategic Plan) was released in June 2012, after over one year of collaborative input⁵.

The BC Strategic Plan for TB Prevention, Treatment and Control

The Strategic Plan aims to half the TB incidence in BC over a ten year period⁶. This policy framework was developed to ensure British Columbians are protected from TB infection, and provided with state-of-the-art diagnosis, treatment and care if infection should occur. The Strategic Plan supports and guides British Columbia's response to TB by focusing on five strategic goals over a ten year period:

- 1) reducing the incidence of active TB;
- 2) preventing transmission of TB;

¹ http://apps.who.int/iris/bitstream/10665/75938/1/9789241564502_eng.pdf

² <http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2013/tuber-eng.php>

³ <http://www.bccdc.ca/util/about/annreport/default.htm#heading5>

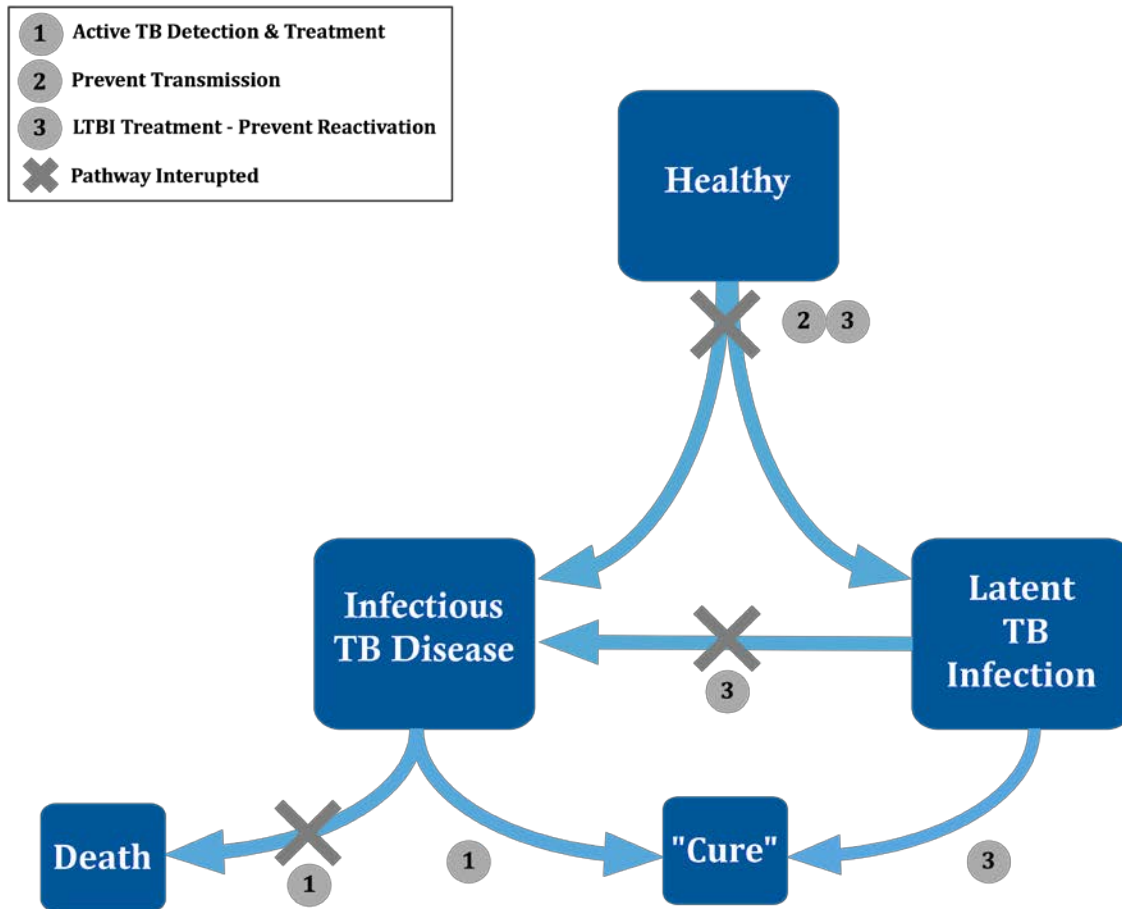
⁴ <http://www.respiratoryguidelines.ca/tb-standards-2013>

⁵ Provincial Regional Health Authorities, First Nations Health Authority, BC Ministry of Health, Provincial Labs, BC Centre for Disease Control

⁶ http://www.bccdc.ca/NR/rdonlyres/371821DC-D135-4BC6-8AD9-4F09CF667B29/0/BC_Strategic_Plan_Tuberculosis.pdf

- 3) preventing the progression of latent TB to active TB;
- 4) ensuring a robust public health response; and
- 5) ensuring state-of-the-art diagnosis, treatment, and care of active cases.

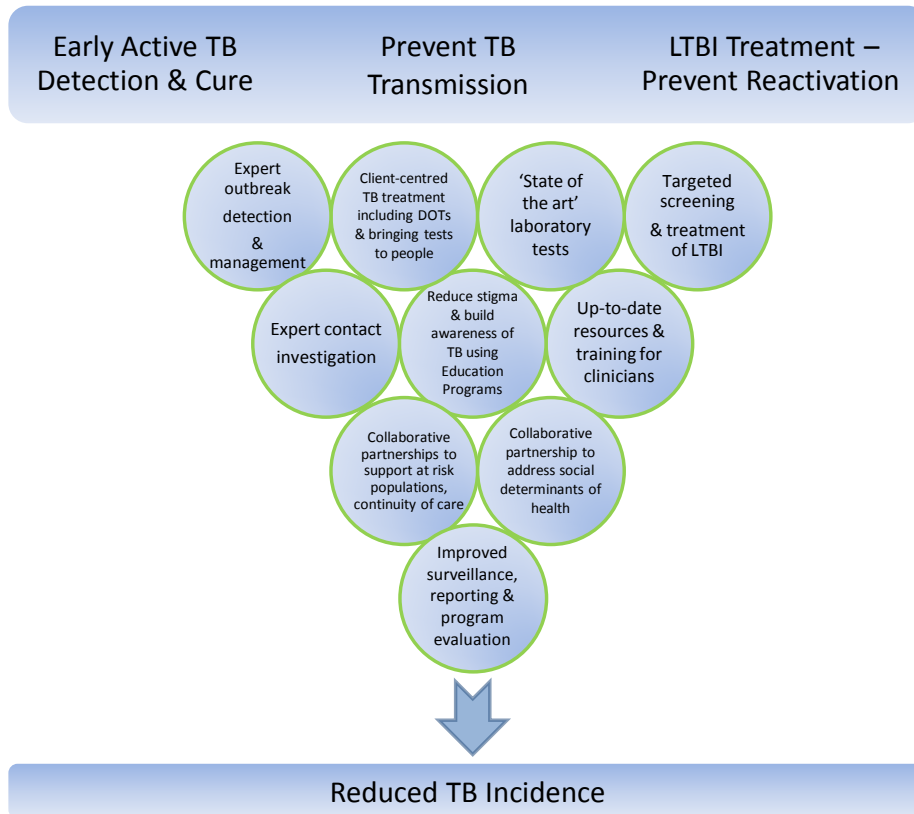
Figure 1: Mechanisms to Reduce TB



Eighteen specific actions that address the five goals were identified as priorities for the Strategic Plan Implementation Committee. For simplicity, these have been condensed into a list of 10 broad actions (Figure 2). Since many of these actions address more than one of the three mechanisms previously noted, they are grouped into the over-arching goal of reducing the burden of TB disease in BC.

Figure 2: BC Strategic Actions to Reduce TB Incidence

BC Strategic Plan for TB Prevention, Treatment and Control



NB: The green borders of the circles signify that all actions have begun during the first year of the Strategic Plan.

Achievements to date

Some notable achievements of the Committee during the first year include the following:

1. **Collaborations:** Collaborative processes to date include the implementation committee which meets every two months. Working groups that address priority actions of the Strategic Plan have been developed and meet regularly outside of formal committee meetings. Because the Strategic Plan aims to expand BC’s response to TB, higher levels of collaboration between several public health institutions, hospitals and TB experts, are necessary and are to be described in service level agreements between Health Authorities and BCCDC. These agreements will detail roles and responsibilities and how the services would best be rolled out in each region or health authority. Developing these agreements has begun and will continue into 2014.
2. **Educational materials:** Five prioritized educational tools and courses for nurses have been identified and recommended as educational opportunities for the Strategic Committee. These

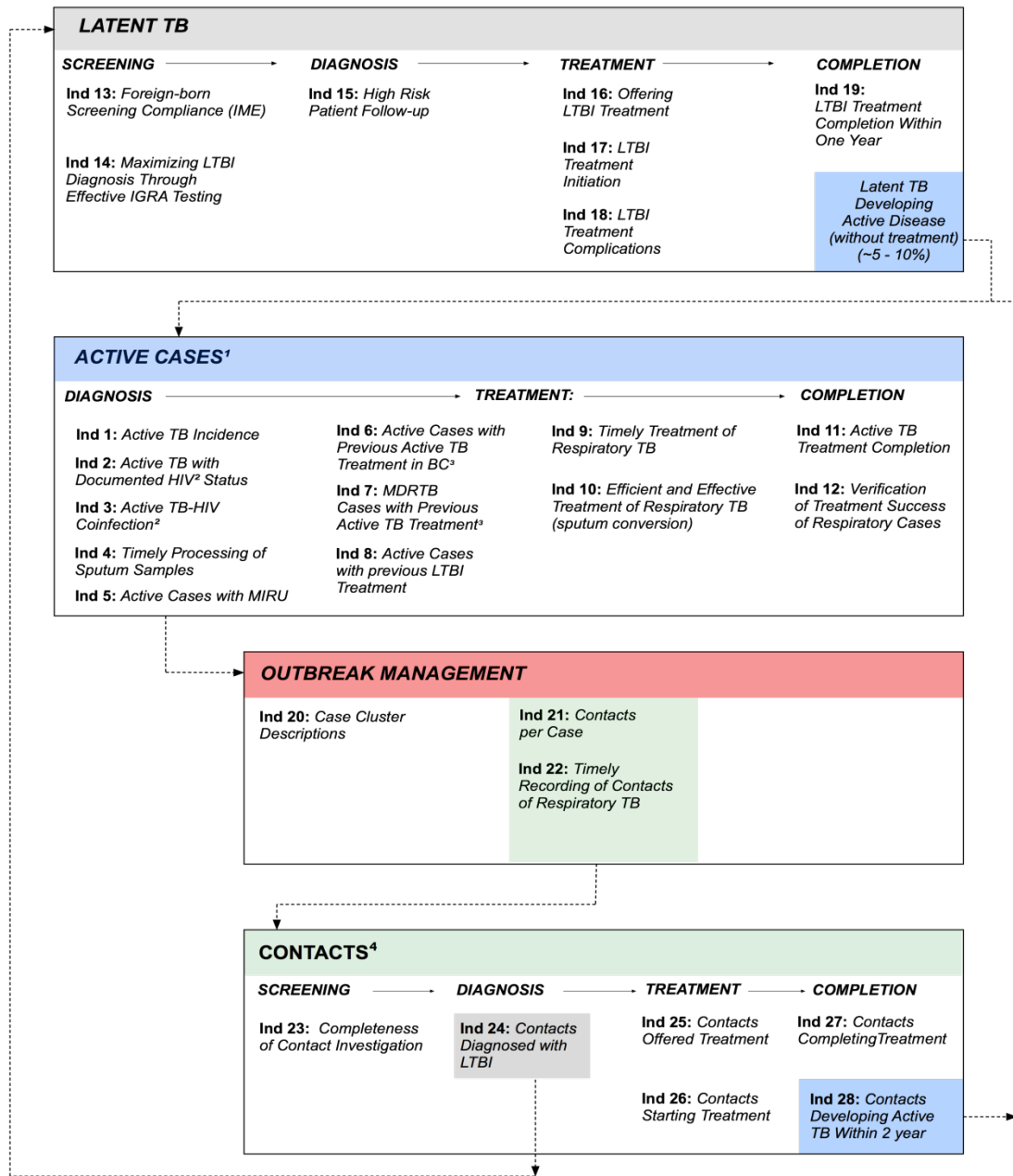
tools include updates to the Provincial TB Manual, release of a self-directed online TB course, and adaptations of existing resources.

3. **Protocols and tools:** A protocol for managing TB outbreaks and clusters to facilitate quick, efficient and effective containment of TB has been drafted and is under revision. Draft protocols and tools for improving and standardizing continuity of care between institutions and communities are being edited. Contact investigation protocols have been developed and implemented in two health authorities and an evaluation of the process will be planned shortly. Tools to facilitate this process are being modified for inclusion in the Provincial TB Manual and implementation in other Health Authorities is planned for next year.
4. **Surveillance:** A framework for monitoring and evaluating performance in TB services has been devised so that progress of the Strategic Plan can be demonstrated and quality can be improved (Figure 3). The annual TB Report for BC (2012) has been completed and quarterly reports have been shared across jurisdictions. The next step in this effort is to further develop the indicators that have not yet been measured over the next 2 – 5 years.

Conclusions and Moving Forward

During the first year of implementation of the Strategic Plan efforts have centred on setting the groundwork for subsequent years. Future efforts will focus on further developing indicators and reports so that they better describe the Strategic Plan goals. Educational activities for healthcare workers and for the public will be devised with the intent of raising awareness of TB so that services will be sought by the public and be provided to those requiring it. Service level agreements to reinforce the collaborative nature of these activities will be elaborated. Provincial protocols addressing outbreaks and continuity of care will be completed and potentially implemented.

Figure 3: Cascade of Care Approach to Monitoring the Strategic Plan



¹ Stratify by respiratory and non-respiratory

² Expand to include other comorbid conditions

³ Stratify by complete and incomplete treatment

⁴ Stratify by high and low risk contacts

High Risk Contacts:

- 1) smear positivity (case infectiousness)
- 2) contact type (exposure)
- 3) contacts risk factors for disease progression