

# MEDUAMPLIFY LOCAL

## Bridging the Divide: Integrating Culturally Relevant Healing to Tuberculosis Care and Prevention



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Indigenous communities in Canada continue to face challenges in access to healthcare, creating long-standing health disparities.<sup>1</sup> These barriers range from having to navigate complex healthcare policies, a lack of culturally relevant treatment options, and inaccessibility to healthcare centres.<sup>1</sup> One of the most apparent disparities in Indigenous healthcare is the high rates of tuberculosis (TB), a result of colonial practices such as forced relocation and residential schools.<sup>2</sup> These historical practices have fostered intergenerational trauma, reducing trust in healthcare institutions among Indigenous populations.<sup>2</sup> Therefore, it is crucial to amend the healthcare system to rebuild trust by integrating culturally safe practices such as working alongside Indigenous health practitioners, incorporating traditional healing methods, and ensuring care is guided by respect for Indigenous values.<sup>2,3</sup> Through a 2024 survey, Statistics Canada found that health care services that support Indigenous traditional medicines, healing, and wellness practices are important to 86% of Indigenous people living off reserve, 82% of Inuit, and 70% of Métis individuals.<sup>2</sup> By supporting the use of traditional medicines, the healthcare system can improve health outcomes for Indigenous communities.

TB is an airborne illness caused by *Mycobacterium tuberculosis*, a bacterium that infects alveolar macrophages.<sup>4</sup> After undergoing phagocytosis, the mycobacterium multiplies within the macrophage.<sup>4,5</sup> Eventually, when the infected cell bursts, it releases the mycobacteria and propagates the spread of TB. The infection travels through blood, reaching additional organs and resulting in extrapulmonary TB.<sup>5</sup> Additionally, TB can take an inactive, latent state, where an individual is asymptomatic and non-infectious. Latent TB is difficult to detect on chest X-rays, reactivating in 5-15% of individuals who do not receive proper treatment.<sup>5,6</sup> Although progress has been made to combat this illness, TB continues to affect Indigenous communities at significantly higher rates when compared to the general Canadian population.<sup>7</sup> Historically, TB has disproportionately affected marginalized communities, as poor nutrition and crowded living environments are major social determinants of the disease.<sup>7,8</sup> Furthermore, the lack of culturally relevant healthcare and physical distance from healthcare centers hinder effective TB management which typically requires long-term, consistent antibiotic regimens.<sup>9</sup> Dormant mycobacteria can remain undetected even after symptoms are resolved, considering the latent nature of TB.<sup>5</sup> This lack of continuous care, combined with a lack of culturally relevant treatment, often leads to delayed diagnoses and progression of drug-resistant disease.<sup>9</sup>

The rate of TB in Inuit populations is 204 cases per 100,000 people.<sup>10,11</sup> This is over 510 times higher than the rate in non-Indigenous Canadian populations, which is 0.4 cases per

100,000.<sup>11</sup> The gap in TB incidence is 46 times greater among First Nations populations, who have a rate of 19 cases per 100,000.<sup>11</sup> Poverty exacerbates conditions that allow TB to spread and worsen.<sup>12</sup> Specifically, in Indigenous communities, the issue results from historical trauma, social determinants of poor health, barriers to health services, and a lack of cultural understanding.

**SOCIAL FACTORS**

Overcrowding in homes increases airborne TB transmission.<sup>13,14</sup> Many families, especially in Northern Indigenous communities, live in small spaces with ten or more individuals in just two or three bedrooms.<sup>15</sup> This situation increases the likelihood of familial transmission. Additionally, these homes often have structural issues such as mold, poor insulation, and heating systems that harm respiratory health.<sup>14</sup> Many households rely on woodstove heating, which produces smoke and irritants that can damage the respiratory tract by causing inflammation. This increases susceptibility to TB infection and exacerbates disease progression. Besides housing problems, malnutrition from food insecurity weakens immunity against TB. In some Inuit communities, nearly 60% of households face food insecurity, which is almost ten times the national rate.<sup>16</sup> Research shows that protein-energy malnutrition leads to nutritionally acquired immunodeficiency syndrome, impairing T-cell function and reducing macrophage activation, both of which are crucial for the immune response against TB.<sup>17,18</sup> Malnourished family members who live with TB patients were found to have increased inflammation, decreased white blood cell counts, and higher expression of TB risk markers.<sup>18</sup>

**HISTORICAL FACTORS**

The current TB crisis has origins in colonial history as European colonizers brought TB to the Indigenous populations of Canada. By the mid-20th century, infection rates among Indigenous peoples exceeded 700 per 100,000, nearly 50 times higher than the non-Indigenous Canadian population at that time.<sup>19</sup> The government's response caused further harm.<sup>20</sup> From the 1940s to the 1960s, federal authorities sent ships to Northern Indigenous communities for mass TB screenings. Infected individuals, especially children, were taken from their families and transported thousands of kilometers south to tuberculosis sanatoria.<sup>19</sup> In these facilities, Indigenous patients faced unethical medical experimentation without informed consent. Between 1948 and 1952 at the Fort Qu'Appelle Indian Hospital in Saskatchewan, researchers enrolled Indigenous patients in clinical trials to test experimental treatments. They deliberately only used ineffective treatments for control groups to evaluate experimental drugs, even when effective treatments were available. Some patients received inadequate doses of antibiotics, while others received no treatment despite having active TB. Many patients died during the trials, and their deaths were classified as treatment failures instead of intentional negligence in care.<sup>21</sup> Patients were separated from their communities for months or years at a time, with no family contact.<sup>20</sup> Many died far from home, with their families often left uninformed of their deaths.<sup>20</sup> Often, children who survived and returned home had missed opportunities for cultural transmission.<sup>19</sup> This family separation resembled the destruction of Indigenous culture caused by the residential school system.<sup>22</sup> Many residential schools had TB rates over 50% among students, and sick children were sometimes moved directly from schools



to sanatoria.<sup>23</sup> These experiences created intergenerational trauma that persists today in the form of mistrust of healthcare systems and reluctance to participate in TB screening and treatment programs.<sup>19</sup>

### SYSTEMIC FACTORS

Current systemic barriers concentrate the risk of TB within Indigenous communities.<sup>19,23</sup> Remote and Northern communities face ongoing shortages of healthcare professionals.<sup>19</sup> Some have visiting nurses for only a few days each month with no resident physician.<sup>23</sup> Nursing stations often lack basic diagnostic tools such as X-ray machines needed for TB diagnosis.<sup>23</sup> Delays in diagnosis result in individuals with undiagnosed TB continuing to spread the infection in the interim.<sup>23</sup> Patients experiencing complicated cases of TB, such as drug-resistant TB, may have to move to urban centers to access additional care for an extended period of time.<sup>23</sup> Suspected cases must be medically transported to regional centers; however, transportation is also a problem since many remote communities can only be reached by air or icy winter roads.<sup>23,24</sup> The federally funded Non-Insured Health Benefits program is meant to cover medical transport, but complicated approval processes and limited flight availability create significant barriers.<sup>23</sup> Individuals requiring directly observed therapy (DOT) for TB, where healthcare workers must oversee each dose of medication, face additional challenges.<sup>19</sup> The lack of local healthcare capacity means patients must travel frequently for medication or are administered doses without proper support.<sup>23</sup>

There is also a lack of Indigenous representation in the health system and few healthcare professionals are trained to meet Indigenous needs.<sup>19</sup> Indigenous populations require specific supports, including services in Indigenous languages, community healing practices, and holistic care approaches involving spiritual health.<sup>19</sup> These needs are often overlooked, resulting in a lack of personalized and appropriate services.<sup>19</sup> Some TB treatments involve isolation, restricting patients from their family and community which conflicts with values of collective healing.<sup>25</sup> Racism in healthcare settings drives Indigenous peoples further away from seeking care.<sup>26</sup> Indigenous patients frequently report being stereotyped as non-compliant or substance-users, having their pain dismissed or undertreated, and experiencing verbal abuse from healthcare providers.<sup>26</sup> 24% of First Nations people, 23% of Inuit people, and 15% of Métis people reported facing unfair treatment, racism, or discrimination from healthcare professionals in 2024.<sup>27</sup> These issues reflect ongoing impacts of colonial structures, which prioritize non-Indigenous health approaches while undermining Indigenous peoples' access to culturally appropriate healthcare.

### SOLUTIONS AND CHALLENGES

Addressing long-standing gaps requires a mix of biomedical strategies and community-driven approaches; the optimal solution is dependent on the surrounding cultural and clinical contexts of a given patient. For example, DOT is widely used to ensure patients complete the long course of antibiotics.<sup>28</sup> This strategy improves cure rates, but often forces remote patients to travel to urban centres for supervised dosing.<sup>29</sup> Early evaluations of DOT in northern Indigenous communities in British Columbia showed that it significantly improved treatment completion rates.<sup>30</sup> However, these programs were more expensive than self-administered therapy due to the logistical demands of supervision and travel from remote settings. These findings emphasize the need to

deliver DOT within communities and to align delivery with cultural and social norms.<sup>30</sup>

In Inuit Nunangat, neonatal TB vaccination is routinely administered to prevent severe childhood TB.<sup>31,32</sup> While effective at lowering mortality, the vaccination can complicate later screening because it often creates false-positive reactions on tuberculin skin tests, making it harder to distinguish past vaccination from true infection. During outbreaks, regions have also implemented community-wide screening campaigns. In Nunavut, over 90% participation was achieved through intensive community engagement and education with Inuit health leaders.<sup>33</sup> These programs emphasized home-based testing, cultural safety, and language inclusion, reducing stigma and increasing screening uptake. Furthermore, Indigenous-led frameworks are shifting the paradigm. The Inuit Tuberculosis Elimination Framework calls for action in four areas: community empowerment, integrated TB care, housing and poverty solutions, and Inuit-specific program design.<sup>34</sup> Each region under Inuit governance has developed tailored TB elimination strategies through this model. These initiatives emphasize Inuit leadership and are rooted in Indigenous knowledge, prioritizing culturally safe, community-based care. Experts advocate for trauma-informed care models that integrate traditional healing, involving Elders in treatment, and supporting language-based education to rebuild trust in the health system.<sup>29</sup> These models view TB treatment not just as bacterial eradication, but as a relational and cultural process that requires trust, dignity, and healing on Indigenous terms.

Recent efforts to create more culturally welcoming spaces, like the Indigenous Healing Space, opened in October 2025 at Juravinski Hospital and Cancer Centre in Hamilton. Additional spaces are to be implemented at Hamilton General and St. Peter's Hospitals, representing a parallel shift in institutional care.<sup>35</sup> These facilities hope to offer patients a space for ceremony, reflection, and cultural safety within mainstream organizations. By combining Indigenous-led governance with biomedical care and structural reform, these approaches aim to overcome current gaps and move toward equitable TB outcomes.

### REVIEWED BY: DR. PATRICIA FARRUGIA (MD, FRCSC)

Dr. Patricia Farrugia is a member of the Chippewas of Nawash community, Saugeen Ojibway Nation. She received a medical degree from McMaster University and a Masters in Health Research at the University of Toronto. In January 2025, she was appointed as associate dean of Indigenous Health for McMaster University's Faculty of Health Sciences, and practices in the Orthopaedic and Spine divisions at Hamilton General Hospital.

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