

# Action Plan to Strengthen Tuberculosis Management and Control In the NWT

## A Status Report

March 2004



## BACKGROUND

An external review of the NWT was done between October and December of 2000 to address concerns by the Chief Medical Health Officer about the death of an NWT resident consequent to tuberculosis (TB). Dr. Anne Fanning, a world-renowned TB expert, conducted the external review and made 26 recommendations to improve the NWT Program. The Department of Health and Social Services released a public response to these recommendations in an *Action Plan to Strengthen Tuberculosis Management and Control in the NWT* in March of 2001. Since then, progress has been made with implementation of this Action Plan.

**The main goal of the NWT TB Program is early detection in order to improve outcomes for those diagnosed with TB while decreasing the spread of this contagious disease.**

*Mycobacterium tuberculosis*, the bacterium causing tuberculosis, can become airborne when a person with the disease coughs, talks, or spits. The presence of the organism in the air then allows all who breathe the contaminated air to become exposed. Early detection, contact tracing, surveillance and training are integral components of any TB program. Another critical component of a TB program is raising awareness among the general population. These have all been major areas of focus of the Action Plan, with our goal to reduce the rate of TB in the NWT to the national level of 5/100,000 by 2005.

Figure 1 demonstrates a declining rate since 1999, when the TB incidence rate had reached 39/100,000, due to an increased number of TB cases in one Dogrib community. The following years of 2000, 2001, 2002 and 2003 shows rates of 24, 19, 10 and 29 per 100,000, respectively. Due to our small population, the five-year running average incidence rate provides more stable TB rates. For instance in 2001, there were eight cases of TB reported resulting in a 19/100,000 TB case incidence rate compared to 2000, where there were 10 new cases of TB reported, an incidence of 24/100,000 which was a 47% decrease from the previous year. The five-year running average is 24/100,000 in 1999-2003 and 22/100,000 in 1998-2002 demonstrates the relative stability in the TB rates. To date in 2004, there have been five new cases of tuberculosis reported.

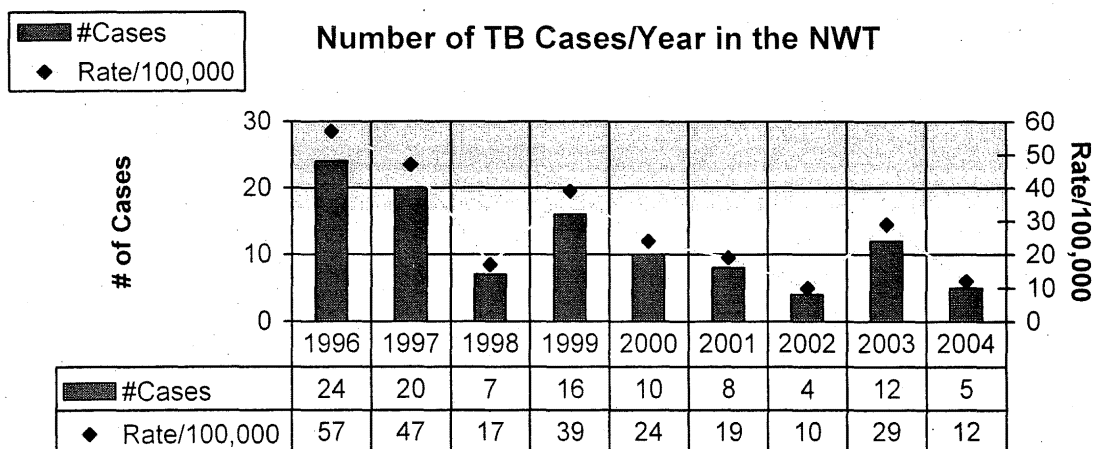


Figure 1: TB rates in the NWT January 1, 1996 to March, 2004

## **ACTION PLAN PROGRESS**

Detailed information on the status of all action items can be found in Appendix 1. This information is presented according to four headings: case finding, surveillance and monitoring, training and awareness.

Highlights of Action Plan activities are presented below.

### **Case Finding**

- ❖ The first priority is to treat all infected contacts so that the disease will not threaten them later in life. The second is to treat those with LTBI who have been inadequately treated in the past. Treating infected contacts prevents the spread of TB. This is the only way to truly eliminate TB.
- ❖ In 2002, 117 people were treated for Latent TB Infection (LTBI), while 114 people had been treated in 2001 and 84 people in 2000. These individuals are primarily identified through TB surveillance and contact tracing.

### **Surveillance and Monitoring**

- ❖ Since the spring of 2001, TB surveillance has been enhanced in all communities in the NWT.
- ❖ The Department is working closely with HSS Authorities to develop a pro-active screening program in the NWT. Community TB surveillance profiles have been completed for 28 communities using data from the centralized TB registry which is a tool to identify those at higher risk for developing TB.
- ❖ Yellowknife (including Dettah and D'ilo) and Hay River (including Hay River Reserve and Enterprise) have TB surveillance in place that ensures their high-risk groups are captured in their surveillance programs. Surveillance allows for early case identification and treatment. People inadequately treated for TB in the past or who have chronic conditions such as renal disease, diabetes, or compromised immunity are considered at high risk for developing TB.

### **Training**

- ❖ TB training and orientation for front line staff have been done by the Department's communicable disease specialists during community visits. In 2002, visits were made to Aklavik, Inuvik, Fort Liard, Fort Simpson, Hay River, Fort Smith and Rae-Ezdo along with visits to four HSS Authorities. For 2003, visits were made to Lutsel'ke, Fort Providence, Rae-Edzo, Wha Ti, Wekweti, Fort Smith, Aklavik and Inuvik. Visits also include evaluating TB programs to determine the proficiency of work being done in the TB program at the community and authority levels.
- ❖ In March 17, 2003, five NWT physicians attended the TB conference in Edmonton: *Tuberculosis-Elimination/Resurgence* and benefited from three days of advanced TB training with Dr. Anne Fanning and other TB experts.
- ❖ In 2003-2004, the Department provided funding to Aurora College to bring training in X-ray procedures at the Rae-Edzo Health Centre to five participants from Rae, Wha Ti, and Lutsel k'e and to two participants from the Inuvik Regional Health and Social Services Authority.

## Awareness

- ❖ New TB posters were produced and distributed in 2002. *Stop TB in the NWT* was printed in eight official languages and sent to every hospital, community health center, public health unit and physician office in the NWT for general distribution in their communities.
- ❖ A TB video was produced and distributed to all community health centers, public health units, physician offices, schools, and Aboriginal organizations in 2003. The aim of the video is to increase TB awareness among health care providers and the general population in the NWT and to encourage those at risk for TB to be tested and treated. The video records NWT residents telling their stories about how TB has affected their lives and their families. Health care professionals are encouraged to use this video to educate clients who have been diagnosed with TB, as well as to inform people about the disease so that participation in community TB screening is enhanced. The video was translated into select Aboriginal languages (Gwich'in & Dogrib) to enhance communications efforts for communities with higher prevalence of TB.
- ❖ The newly revised TB manual, *NWT TB Manual*, was distributed in June 2003. It has a newer look, is completely updated and has additional sections on pediatric TB and surveillance.

These are only highlights of the work that has been done in the NWT TB Program this year. The TB Action Plan is halfway through the 5-year life of the plan, however, these activities are building a stronger, a sustainable TB Program that will achieve lasting success.

Lessons have been learned from increased TB activity in the past decade - one in particular is that complacency and premature cessation of surveillance activities will give rise to epidemics rather than elimination of this disease. The continued interest and dedication among health professionals - and a shared concern to protect NWT residents, their families and communities from TB - motivates us to keep the goal of the TB Action Plan a priority.

No.	Action Item	Amended Timeline	Status
<b>CASE FINDING</b>			
1	Within the next year, a new set of TB Clinical Practice Standards will be put in place to support primary care providers. One of these will deal specifically with patients presenting with persistent chest/respiratory symptoms. It will ensure that such patients are screened for TB.	Mar 31, 2003  <b>COMPLETE</b>	<ul style="list-style-type: none"> <li>• Clinical Practice Standards were developed and distributed via health professional posters.</li> <li>• Clinical Practice Guidelines have been incorporated into the NWT TB Protocol.</li> <li>• Ongoing process (e.g., planned revisions to drug dosages or hospital standing orders)</li> </ul>
2	The Department will continue to ensure that all cases and contacts are followed-up and conform to the standards set out in the NWT TB manual.	Quarterly and Annually  <b>ONGOING</b>	<ul style="list-style-type: none"> <li>• Case data and contact summary for 2001 and case summary for 2002 were published in Winter edition of <i>Epi North</i>. Data for 2003 will be published in the upcoming issue.</li> </ul>
3	The Department will implement a strategy to assist the HSS Authorities and Health Centres to identify and offer treatment to all individuals with latent TB infections.	<b>ONGOING</b>	<ul style="list-style-type: none"> <li>• The Department provides community profile summaries outlining TB disease in each community.</li> <li>• Communities provided with training and community profiles as follows: <ul style="list-style-type: none"> <li>• Deh Cho communities – Sep 2002, Aug. 2003</li> <li>• Inuvik communities – May 2001, July 2002, Jan 2003</li> <li>• Dogrib communities – Apr and Nov 2002, Feb 2003, Nov 2003</li> <li>• Physician orientation – Hay River (June 2001); Fort Smith - (Sept. 2001 and May 2002); Deh Cho (spring 2003)</li> <li>• Hay River HSS Authority – Oct. 3, 2002</li> <li>• Stanton Territorial Hospital and Yellowknife HSS Authority – ongoing visits and orientation.</li> </ul> </li> <li>• Community profiles will continue to be provided on an ongoing basis.</li> </ul>

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<b>SURVEILLANCE AND MONITORING</b>			
4	A second Communicable Disease Control (CDC) Consultant position to be created in the Department, with TB control as a major area of focus.	May 2001 <b>COMPLETE</b>	<ul style="list-style-type: none"> <li>Implemented</li> </ul>
5	The Ministerial Directives to HSS Authorities will be strengthened to ensure that designated public health positions are protected to deliver public health services, including TB surveillance and control.	<b>ONGOING</b>	<ul style="list-style-type: none"> <li>New Hospital Standard Regulations are being developed, requiring HSS Authorities to implement infection control monitoring activities. The Stanton Authority is at the policy approval stage. The Hay River, Fort Smith and Inuvik Authorities are implementing infection control committees.</li> <li>TB control remains a system-wide public health program priority.</li> </ul>
6	The Department will establish a dedicated Disease Registries Officer position to maintain the TB Registry for at least the next three years, or until TB rates have been brought down to the national level.	Jun 2002 Dec 2003 <b>ONGOING</b>	<ul style="list-style-type: none"> <li>The dedicated Disease Registries position was maintained in the last reorganization.</li> <li>Dedicated personnel have worked with Authorities to develop pro-active TB screening programs. TB profiles have been completed for 28 communities. The profiles assist with identification of high-risk groups and allow for early case detection and treatment, as well as treating those with latent TB infection to prevent progression to the disease stage.</li> </ul>
7	The TB Registry will be upgraded to make it more user friendly and easier to generate required reports to support front-line staff and program monitoring activities.	Dec 2003	<ul style="list-style-type: none"> <li>The new TB Registry web-based database application was implemented November 2003.</li> <li>The NWT is working with Health Canada and other jurisdictions (notably Alberta) to improve the functionality of this software product produced through the pan-Canadian Public Health Information system collaborative.</li> </ul>

No.	Action Item	Amended Timeline	Status
8	The Department will develop evaluation tools and procedures to enable a thorough and comprehensive evaluation of TB Control Programs at a community level.	ONGOING	<ul style="list-style-type: none"> <li>• The evaluation tools (Environmental Scan and TB Audit) are being used during all HSS Authority and community visits.</li> <li>• The Environmental Scan at the Authority level evaluates knowledge of the TB program and implementation at the local level.</li> <li>• The TB Audit at the Health Centre level evaluates program implementation on surveillance, screening, and level of expertise and TB activity status.</li> <li>• The evaluation tools are indicators to determine what resources each HSS Authority will need to deliver service at the local level.</li> </ul>
9	The Department will ensure that each HSSA receives a visit by one of its Communicable Disease Consultants and/or Medical Health Officer twice yearly. Reports will be provided to health centres at least quarterly.	ONGOING	<ul style="list-style-type: none"> <li>• Ongoing audits are done during community Health Centre visits to ensure the delivery of the TB program.</li> <li>• 2002 visits – 5 Authorities and 8 communities</li> <li>• 2003 visits – 4 Authorities and 7 communities</li> </ul>
10	The Department will facilitate the sharing and implementation of best practices with regard to sustaining surveillance activities at the community level.	ONGOING	<ul style="list-style-type: none"> <li>• Annual TB summary published in <i>EpiNorth</i>, summarizing reported TB cases for 1999, 2000, 2001 and 2002.</li> <li>• Arctic Nursing Leadership Network annual face-to-face meeting (October 2003) provided opportunity to update members on TB Action Plan.</li> <li>• Quarterly summaries and annual reporting to HSS Authorities have been temporarily delayed due to implementation of new TB Registry. Regular reporting will resume in the 2004 year.</li> </ul>
11	The Department also commits to have an external review of the TB Control Program done every three years.	Jun 2004	<ul style="list-style-type: none"> <li>• An external review by a TB expert will be done early in fiscal year 2004-05.</li> </ul>
12	Assure surge capacity so that when a case occurs and contact/follow-up is large, retraining is available and staff can be centered in the region involved for the following year or two to complete the execution of the tasks.	Dec 2002  ONGOING	<ul style="list-style-type: none"> <li>• Nurse Educator/Mentor positions, funded through the Maximizing Northern Employment Program, provide TB and TB Control program orientation to nurses who are either new or new to the North.</li> <li>• More nurses are being trained to execute TB control work when required for each Authority.</li> </ul>



No.	Action Item	Amended Timeline	Status
<b>TRAINING</b>			
13	Training opportunities for health care professionals in the area of TB Control will be provided through the Department on an ongoing basis. In particular, special attention will be paid to CHR's who can play an important role in the coordination of surveillance activities at the community level.	<b>ONGOING</b>	<ul style="list-style-type: none"> <li>• Department staff are working with HSSAs to: <ul style="list-style-type: none"> <li>• increase TB awareness; and</li> <li>• orientation for nurses, doctors, CHR's and TB workers to the TB Program.</li> </ul> </li> <li>• TB control was addressed in the Community Health Representative (CHR) Conference held in Yellowknife, May 14-16, 2002.</li> <li>• TB training was provided to Nurse Educators (Jan 2002) and Nurse Practitioners (Aug 2002).</li> <li>• Participation in the annual HSS Official Languages Workshop (Nov 2002); reviewed with interpreter/translators the basics of TB and their integral role in interpretive services.</li> <li>• TB orientation will be provided to all Community Health Center Nurses-in-Charge (NIC) at the annual NIC Conference in Inuvik in Mar 2004.</li> </ul>
14	In conjunction with the HSSAs, the Department will develop a plan to intensify and enhance orientation of new health care professionals to NWT public health programs, including TB. In consultation with appropriate stakeholders, the Department will seek to make such orientation a mandatory credentialing requirement for all primary health care professionals in the NWT.	<b>ONGOING</b>	<ul style="list-style-type: none"> <li>• TB Program orientation for all new Nurse Educator/Mentors is ongoing. The Nurse Educator/Mentors will provide orientation to nurses.</li> <li>• Department provided TB orientation for 2 physicians from Fort Smith, 1 physician from Hay River and 1 physician from the Deh Cho.</li> <li>• Five physicians attended a TB Conference in Edmonton and a 3-day training course in advanced TB training. Stanton's new Medical Health Officer received training in September 2003.</li> <li>• Stanton's Medical Health Officer is providing ongoing orientation to YHSSA medical staff.</li> <li>• Vacant Medical Health Officer position in Inuvik region limits the outreach in that region.</li> </ul>

No.	Action Item	Amended Timeline	Status
15	The Health Protection Unit will work with Recruitment and Retention Unit to provide training in TB Control to the "float pool" of nurses, to allow greater capacity and flexibility to bring in extra expertise at the community level in the event of an outbreak (surge capacity).	<b>ONGOING</b>	<ul style="list-style-type: none"> <li>To date, there is not a pool of trained nurses for surge capacity for any of the Authorities. Insufficient staff retention is still a major factor.</li> </ul>
16	The TB Control Manual will be updated in 2001/2002. Increased emphasis will be placed on surveillance activities, particularly for high-risk groups.	Mar 31, 2003 <b>COMPLETE</b>	<ul style="list-style-type: none"> <li>Manual was printed and distributed in June 2003.</li> <li>Manual will be updated on an ongoing basis.</li> </ul>
<b>AWARENESS</b>			
17	Case reviews and analysis of program outcomes will be conducted annually. This information will be published annually in <i>EpiNorth</i> . The Department will also provide an Annual Report on Reportable Communicable Disease Control to the Legislative Assembly.	Annually <b>ONGOING</b>	<ul style="list-style-type: none"> <li>Cases reported in 1999 and 2000 published in <i>EpiNorth</i>, Winter 2002. 2003 data to be published in upcoming issue, Spring 2004.</li> <li>The TB Review Committee was activated on February 2004. This committee will meet on a regular and ongoing basis.</li> </ul>
18	In conjunction with HSS Authorities, the Department will develop communication/awareness strategies about TB for use at the community, regional and territorial levels.	Mar 2003 <b>ONGOING</b>	<ul style="list-style-type: none"> <li>A TB Awareness group has been formed to develop an information package. This group consists of representatives from Health Promotion, Communications, Health Protection, Public Health Nurses and Community Health Representatives.</li> <li>The TB awareness video (Stop TB) will be launched on World TB Day (Mar 24). This video has been translated in French, Gwich'in, Dogrib, and North Slavey.</li> <li>HSS Authorities are being encouraged to develop regional and community TB awareness activities.</li> <li>The TB Manual, poster and video were distributed to all NWT health care facilities and medical/public health clinics in Jun 2003. The translated versions of the video will be distributed in Mar 2004.</li> </ul>
19	Each year, territorial-wide awareness activities will be planned to coincide with World TB Day.	Mar 24, 2004	<p><i>See also Action Item 18</i></p> <ul style="list-style-type: none"> <li>Increased public awareness activities are planned for the upcoming World TB Day - March 24, 2004, including the release of the status report.</li> </ul>