Position Statement
Directly Observed Therapy (DOT)

Purpose:

To outline the roles and responsibilities for the provision of Directly Observed Therapy (DOT) for Tuberculosis (TB) treatment in New Brunswick.

A Multidisciplinary, integrated partnership approach to TB management

TB is a multifaceted disease resulting from linked biological, medical, economic and various social factors .To ensure best outcomes in the prevention and treatment of TB, the Canadian Tuberculosis Strategy (CTS) recommends a multi-disciplinary, integrated and client centered approach.

TB programs should be integrated with all partners, beyond public health, including but not limited to, government and non- government sectors including the provision of health services through hospitals, community health and other primary care facilities.
Organizations involved in TB prevention and control should establish clear accountabilities; define how effective partnerships can be formed and address the social and other determinants of health affecting the incidence of TB in largely marginalized populations.

Directly Observed Therapy (DOT)

The goals of TB management are to treat the individual patient and minimize transmission of TB to other persons in the community. Treatment consists of taking a combination of medications for an extensive period (6-12 months). Poor adherence to prescribed TB therapy is the most common cause of treatment failure in TB. The consequences of poor adherence to TB therapy are relapses and risk of acquired drug resistance. Direct Observed Therapy is an effective way to monitor adherence to therapy.

DOT is defined as “a method whereby a health care worker or independent observer watches the patient swallow each dose of medication, helping to ensure that higher treatment completion rates are achieved[i] “.

DOT is prescribed by a health care provider in situations where cases are suspected of or proven to meet any of the following criteria:

- drug-resistant organisms,
- treatment failure,
- documented re-treatment of disease,
- injection drug use,
- homelessness,
- suspected or previous non-adherence,
- psycho-pathology,
- sputum smear remaining positive for acid fast bacteria,
- HIV infection or
- in children[ii].

DOT may be prescribed daily or 2-3 times a week and may also be prescribed for latent as well as active TB disease.DOT has been shown to increase compliance rates and reduce the rate of drug resistance and relapse.

Roles and Responsibilities

OCMOH

The OCMOH provides leadership and oversight in planning, monitoring and funding to support regional Public Health practice by collaborating with regional teams consisting of the Regional Health Authorities (RHAs), Regional Medical Officers of Health (RMOHs), other health care providers and community partners to uphold the Public Health Act and regulations for the control of Tuberculosis. The OCMOH also contributes to surveillance of TB disease and outcomes through the PHAC TB surveillance system.
The OCMOH, through the New Brunswick Prescription Drug Program (NBPDP), funds the cost of medications used in the treatment of active TB and latent TB infections (LTBI) as identified in the NB TB Drug Formulary. It does not cover the cost of non-specific drugs associated with treatment, including but not limited to Pyridoxine (Vitamin B6), anti-emetic medication, nor does it cover the cost of pharmacist delivered DOT.

Regional Medical Officer of Health (RMOH)

The RMOHs have the authority under the Health Act, for the prevention, investigation and control of TB which provides the administrative authority to issue orders for compliance, treatment, and suppression of TB to preserve human health.

RHAs

With the closure of the TB sanatoriums and the end to a centralized program in the 1980's, the TB control program in New Brunswick is de-centralized as part of the regional health authorities program. The RHAs have the responsibility to support the RMOH by ensuring that measures stipulated by the RMOH are implemented, such as DOT. This may require collaboration of staff from public health, other RHA Divisions, such as the Extra-mural Hospital (EMH) program, Community Health Centers (CHCs), community pharmacies, health care institutions and agencies or the training of lay people, in order to provide comprehensive services, including DOT, to clients within their homes and communities. *It is essential for community facilities, health care providers and agencies to be part of a collaborative model working towards the prevention, management and control of TB.*

OCMOH position

The OCMOH supports the RHAs, along with the RMOHs, and other community partners, to work collaboratively to provide a client centered collaborative plan for DOT when it is prescribed. The OCMOH funds the costs of the tuberculosis medications however it does not provide funding or resources for the administration of DOT.

The DOT implementation model may vary from region or geographical area however in conjunction with other health care providers Regional Public Health's role is to ensure that clients receive equitable access to the necessary control measures for the prevention and management of TB, which includes DOT administration when it is prescribed.

[i] Canadian Tuberculosis Strategy 2011
[ii] Canadian Tuberculosis Standards, 6th ed., Chapter 6

References

CDC Annual report (draft) 2009, New Brunswick OCMOH

TB Prevention and Control PHAC and the Canadian Lung Association/Canadian Thoracic Society. *Canadian Tuberculosis Standards*, 6th ed., 2007

Public Health Agency of Canada. *Canadian Tuberculosis Prevention and Control Strategy.* Ottawa, ON. Ministry of Public Works and Government Services, 2011