

Date: April 2, 2019

To: South Zone Physicians

From: Lizette Elumir, Medical Officer of Health – South Zone
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RE: Tuberculosis in South Zone

Think TB in patients with a history of chronic cough or other symptoms, particularly in those who are foreign-born (especially recent arrivals). Other high risk groups would include the elderly and individuals with suppressed immune systems.

South Zone has had six active TB cases in 2019. We are currently investigating and identifying contacts for two active cases in Brooks, Alberta. One of these cases goes to Brooks Composite High School.

It is projected that there may be quite some anxiety and concern when a school contact has been identified with acute infectious tuberculosis. AHS Public Health is working collaboratively with Brooks Composite High School and Grass Lands School Division to ensure any high risk contacts are offered screening at the 6-8 week post last exposure mark. The 6-8 week delay is to ensure accurate results.

FOR SUSPECT ACTIVE DISEASE

SYMPTOMS OF ACTIVE TB DISEASE MAY INCLUDE:

- cough of at least 3 weeks' duration, particularly if productive and associated with hemoptysis
- fever (often low grade)
- unexplained weight loss
- night sweats
- fatigue
- anorexia

INVESTIGATION:

1. **Refer confirmed, clinical and suspected cases immediately to TB Services at (587) 787 – 2930. After hours, page TB physician on-call directly through UAH Switchboard at (780) 407-8822.**
 2. Chest X-ray.
 3. When Pulmonary TB is suspected:
 - Order sputum for smear microscopy and mycobacterial culture.
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- **Sputum collection:** Collect in sterile screw top container and transport to ProvLab as soon as possible accompanied by a ProvLab requisition. For patients without spontaneous sputum, induction of cough and sputum by inhalation of sterile aerosol of saline is preferred.

(Do not TB skin test. It is not useful in diagnosing nor ruling out active TB.)

INFECTION PREVENTION AND CONTROL:

- TB is transmitted through the **airborne route** via inhalation of tubercle bacilli in droplet nuclei created by infectious individuals during coughing, sneezing, and other forceful expiratory efforts.
- Duration of exposure needed for transmission is usually prolonged, but can be shorter with exposure to highly infectious individuals.
- **Wear an N95 respirator** when providing care for confirmed, clinical or suspected cases.

CASE DEFINITIONS:

Confirmed Case: Demonstration on culture of *Mycobacterium (M.) tuberculosis* complex, [specifically *M. tuberculosis*, *M. africanum*, *M. canetti*, *M. caprae*, *M. microti*, *M. pinnipedii* or *M. bovis* (excluding BCG strain)] OR

In the absence of culture proof, cases clinically compatible with active TB that have, for example:

- chest x-ray changes compatible with active TB
- active non-respiratory TB (meningeal, bone, kidney, peripheral lymph nodes, etc.)
- pathologic or post-mortem evidence of active TB,
- favorable response to therapeutic trial of anti-TB drugs

Clinical Case: Clinical findings (see first 3 bullets under confirmed case) compatible with active TB in the absence of bacteriologic proof

Suspect Case: High index of suspicion of TB in whom empiric treatment is being contemplated.

ADDITIONAL REFERENCES:

- Alberta Medical Association. TOP Clinical Practice Guideline. Tuberculosis. November 2011. http://www.topalbertadoctors.org/cpgs.php?sid=18&cpg_cats=84