Site-Base Screening and Congregate Settings

In some settings, it is far more practical and feasible to carry out contact investigation for an entire group (such as a class at school or coworkers in a work setting) than attempt to identify the specific individuals who were most exposed. Practical factors, such as the ability to reliably measure the degree of exposure of different individuals in the setting, the administrative ability to provide efficient testing and TB education, and the ramifications of extending the investigation to a larger group later if it becomes necessary, should be taken into account in deciding on the extent and number of people to be tested. Similarly, in certain settings (e.g. shelters for the homeless) in which contacts may be difficult to identify or to find, it may be helpful to do wider testing from the outset.

School, workplace and other congregate setting investigations are usually best carried out on site. This leads to higher participation rates among contacts, better communication and less anxiety; it is usually the most effective and efficient way of carrying out the investigation and obtaining the necessary information.

Screening Contacts in a Contact Investigation

Contacts with No Record of Previous TB Treatment or Negative TST

- Do a symptom inquiry
- Perform a TST (see **Section 4, Tuberculin Skin Testing**)
- Obtain CXR and sputa collection if person is symptomatic
- Complete **NWT Tuberculosis Assessment Form**

If any of these investigations suggest clinical or laboratory evidence of tuberculosis, the contact is considered a case, and should be managed accordingly.

If TST is positive and TB is ruled out, the contact may have latent TB infection (LTBI) and could be a candidate for preventive treatment. Notify the OCPHO.

See **Figure 9.2**

Contacts with Documented Previous TB Diagnosis and/or Treatment or Previous Positive TST

- Do **NOT** perform a TST
- Do a symptom inquiry
- Collect three consecutive sputa specimens (if the contact is unable to produce sputum, consult with the attending physician or OCPHO regarding alternatives)
- Do PA and lateral CXR

If any of these investigations suggest clinical or laboratory evidence of tuberculosis, the contact is considered a case, and should be managed accordingly.

If test results are negative on initial investigation but the contact has not previously received anti-tuberculosis treatment or preventive treatment, treatment for LTBI should be considered.

Repeat the symptom inquiry, sputa collection and CXR in 8 weeks. If any of these investigations suggest clinical or laboratory evidence of tuberculosis, then the contact becomes a case, and should be managed accordingly.

See **Figure 9.3.**

INH Preventive Treatment for Contacts

INH **preventive** treatment should be prescribed in consultation with the OCPHO or Public Health Officer (PHO), designate for contacts confirmed not to have active TB disease.

- The success of preventive treatment depends upon the patient's understanding of the disease and his or her willingness and/or ability to receive it.
- Persons who are unable or unwilling to take preventive medication for a full treatment period should have periodic screening at least every 6 months for the initial 24 months after contact with an active case, as this is a period of high risk for progression to active disease.

Primary Preventive Treatment for Contacts who are <5 years

- Primary preventive treatment is an important consideration in children <5 years who were exposed to an infectious case of respiratory TB (sputum is smear positive for AFB).
- Primary preventative treatment is started on a child <5 years old who has an initial TST between 0–4mm.
    - A repeat TST is performed 8 weeks after the last known exposure or after the initial assessment due to high risk.
    - If this second TST is less than 5mm of induration, preventative treatment may be discontinued.
    - If the repeat TST results have increased by 6mm or more, further investigation should be carried out to rule out active TB, and treatment should continue for the specified duration set out by the OCPHO or Pediatrician.

N.B. In situations where a case is highly infectious, preventative treatment may be prescribed for 8 weeks to high-risk contacts, especially children younger than five years of age even if the initial TST is negative. Children have a 40% risk of progression to active disease in the first 2 years after initial exposure to tuberculosis.