Tuberculosis

(Last updated on 17 October 2017)

Clinical description

Tuberculosis (TB) is a chronic bacterial infection characterized pathologically by the formation of granulomas, most common site of infection is the lungs, but other organs may be involved:

- **Pulmonary tuberculosis:** Classical symptoms including persistent cough, haemoptysis, afternoon fever, night sweating and weight loss.
- **Extrapulmonary tuberculosis:** Clinical features referable to the respective organ/ system and general well-being affected.

Clinical case definition

A case that meets the following criteria:

- Signs and symptoms compatible with active tuberculosis; AND
- Supporting evidence from relevant and clinically indicated diagnostic evaluation (e.g., abnormal, unstable [i.e., worsening or improving] chest radiographs); **AND**
- The attending physician forms the opinion that treatment for active tuberculosis with a combination of anti-tuberculosis medications is required

Laboratory criteria

Any of the following:

- Isolation of *Mycobacterium tuberculosis complex* (*M. tuberculosis*, *M. bovis* or *M. africanum*, excluding *M. bovis var BCG*) from a clinical specimen (through culture and identification tests)
- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification test (e.g., polymerase chain reaction together with species-specific probe)
- Demonstration of acid-fast bacilli in a clinical specimen (e.g., histological examination)

Confirmed case

A clinically compatible illness that is laboratory confirmed, or in the absence of laboratory confirmation, a case meeting the clinical case definition and showing an appropriate response to treatment.

Probable case

All cases meeting either the clinical case definition or laboratory criteria, but not the full set of criteria for a confirmed case.

Remarks on TB notification:

- If there is strong clinical suspicion of active tuberculosis, notify the case even before all the criteria for clinical case definition are met
- Notification should be made for suspected or confirmed cases even after their death
- When a fresh episode of active tuberculosis, such as relapse of pulmonary tuberculosis, occurs in the same patient
- <u>Notification is not necessary</u> for the following conditions when there is no evidence of active TB:
 - i. Persons who are found to have old TB scars on chest radiographs
 - ii. Recent conversion of tuberculin skin test from negative to positive without supportive clinical or radiographic evidence of active disease
 - iii. Cases given medications for treatment of latent TB infection only (or "TB chemoprophylaxis")
 - iv. Cases diagnosed as having disease caused by non-tuberculous mycobacteria
 - v. Complications of BCG vaccination or diseases caused by Mycobacterium bovis var BCG