GUIDANCE NOTES FOR NOTIFICATION OF TUBERCULOSIS

Background

According to the Prevention and Control of Disease Ordinance (Cap. 599) in Hong Kong, a medical practitioner who makes a diagnosis of TB should notify the case to the Director of Health, using the notification form DH 1A(s) (Rev. Jul 2008). The aims of notification are to allow close surveillance of the disease and facilitate implementation of public health measures like contact tracing and examination. In order to minimize variations in notification practice and improve the quality of data in the local TB surveillance system, the following set of guidance notes and case definitions are prepared for the local professionals' reference.

Guidance notes[1]

1. *Case Definition of Tuberculosis*

(a) Clinical Description

TB is a chronic bacterial infection caused by *Mycobacterium tuberculosis complex*, characterized pathologically by the formation of granulomas. The most common site of disease is the lung, but other organs may be involved. Classical symptoms of pulmonary tuberculosis include persistent cough, haemoptysis, afternoon fever, night sweating and weight loss. However, these may not always be present and symptom combinations vary from case to case. Involvement of extrapulmonary sites may cause clinical features referable to the respective organ/system. In cases of late or disseminated disease, overt systemic symptoms and signs may predominate.

(b) Clinical Case Definition

A case that meets the following criteria:

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

(c) Laboratory Criteria for Diagnosis

(i) Isolation of *Mycobacterium tuberculosis* complex from a clinical specimen (through culture and identification tests); or
(ii) Demonstration of *Mycobacterium tuberculosis* from a clinical

specimen by nucleic acid amplification test (e.g., polymerase chain reaction together with species-specific probe); or

(iii) Demonstration of acid-fast bacilli in a clinical specimen (e.g., histological examination);

where the clinical picture is compatible with the diagnosis of active tuberculosis.

2. *Cases which should be notified:*

(a) All cases that meet the clinical case definition should be notified. Where there is strong clinical suspicion of active tuberculosis, cases may be notified before all the criteria for clinical case definition are met, so as to facilitate early implementation of public health measures.
(b) All cases that meet the laboratory criteria for diagnosis of TB should be notified. In case the diagnosis of TB is made after the patient has died, notification is still required.
(c) For those cases where anti-tuberculosis treatment has been given as an empirical trial, the attending physician may judge, or seek expert advice, on whether or not and when to notify on a case-by-case basis.
(d) When a fresh episode of active tuberculosis (e.g. relapse of pulmonary tuberculosis) occurs in the same patient, notification should be made again.

3. *Cases for which TB notification is not required:*

(a) For cases without evidence of currently active disease, notification is not required. Examples include persons who are found to have old TB scars on chest radiographs which, according to the opinion of the attending physician, do not require treatment.
(b) Recent conversion of tuberculin skin test from negative to positive does not, by itself, indicate active disease. In the absence of supporting clinical and / or radiographic evidences, persons with such skin test conversion should not be considered as cases for notification.
(c) Cases given medications for treatment of latent TB infection only (or "TB chemoprophylaxis") are not required to be notified.
(d) Cases diagnosed as having disease caused by non-tuberculous mycobacteria instead of *Mycobacteria tuberculosis complex* are not required to be notified.

Notification Forms

Notification forms can be obtained from Statistics Unit in the Tuberculosis and Chest Service (Tel: 2572 3487, Fax: 2572 8921) or from any nearby chest clinic. Alternatively, notification forms may be downloaded from the homepage of the Department of Health (https://www.dh.gov.hk/english/useful/useful_forms/useful_forms_qpd.html), the Centre for Health Protection of Department of Health (https://www.chp.gov.hk/en/static/24040.html) or notify directly through web-based system CENO (https://cdis.chp.gov.hk/CDIS_CENO_ONLINE/index.html). Prompt notification and accurate

completion of all items on the form will facilitate the implementation of any necessary public health measures. In case certain information (e.g. culture results) is not yet available at the time of notification, supplementary information can be sent at a later date when available.

Summary

Today, TB is still a major public health problem in the HKSAR. A vigilant surveillance system is essential for a good TB control programme. It is a statutory requirement for TB cases to be notified to the Department of Health. It is noted that grey areas and confusion do exist as on when to notify. These guidance notes aim at providing clarification and minimising variation in notification practice. Complete and accurate data obtained from notification will allow continuous evaluation of the trend of the disease. Cooperation of all medical practitioners is necessary to achieve this goal. With a quality surveillance programme, public health measures for TB can be planned, implemented and monitored more effectively.

References

1. CDC. Case definitions for infectious conditions under public health surveillance. MMWR 1997;46:40-41.

(last updated 5.5.2022)