

# TUBERCULOSIS

## Rationale

In many countries, TB is a major health problem and one of the ten leading causes of morbidity and mortality. Many countries have been implementing DOTS, the TB control strategy recommended by the World Health Organization (WHO). DOTS combines the following: 1) case detection by sputum smear microscopy among patients with TB symptoms who report to health services, 2) standardized short-course chemotherapy with directly observed treatment, and 3) a standardized recording and reporting system that tracks the treatment of each patient and in turn provides data to the TB control program.

Among people directly exposed to TB, only about one third will actually become infected. In the general population, only about one out of every 20 infected persons will develop active primary TB within two years. This activation rate is much higher for both the very young and very old, and for persons with a suppressed immune system (because of HIV infection or other causes).

Worldwide, the case fatality rate for TB has been estimated to be 55 percent for untreated persons and 15 percent for persons receiving treatment. TB fatality estimates vary widely by region and by level of socioeconomic development.

The primary TB indicators include mortality, incidence and prevalence due to TB (all forms, pulmonary); TB case detection rate; TB treatment success rate. In countries with good civil registration and vital statistics systems that use ICD for certifying and coding of deaths, TB mortality rates can be obtained. Verbal autopsy is used to ascertain the probable cause of death through an interview with the deceased (see Verbal Autopsy module).

Health facility data are the primary source for monitoring TB epidemiology and interventions, using a WHO standardized system of recording and reporting. The health facility data are used to monitor TB notification rates, which is a critical input into incidence and prevalence estimates, and treatment outcomes.

In recent years however a population-based TB prevalence survey has been developed and implemented in an increasing number of countries. The main objective is to determine the prevalence of pulmonary TB at a given point in time in a population and to identify care seeking patterns of people with TB or those with symptoms suggestive of pulmonary TB (ref: WHO. Tuberculosis prevalence surveys; a handbook. Geneva. 2011 [http://whqlibdoc.who.int/publications/2011/9789241548168\\_eng.pdf?ua=1](http://whqlibdoc.who.int/publications/2011/9789241548168_eng.pdf?ua=1).)

## Experience and evidence

The assessment of the prevalence of tuberculosis through survey questions has been unsuccessful. For instance, the World Health Survey (WHS) 2002-2003 included three questions to try to identify respondents that may have tuberculosis (TB) and whether respondents have had a TB test in the last 12 months, but not much use was made of the results. The Demographic and Health Surveys Program (DHS) core questionnaire for Phase 5 (2003-2008) included a set of four questions on tuberculosis to determine knowledge and stigma related to TB. The DHS tuberculosis module has been applied in more than 70 countries since 2005 although it is not included anymore in the current core DHS questionnaire (January 2012). Most countries have used the core module with the basic four questions but several have included additional questions on knowledge of symptoms and causes, specific means of transmission, experience of symptoms and treatment, and positive attitudes about tuberculosis (stigma).

## **Tuberculosis: Short Module**

Surveys can provide information on the prevalence of pulmonary TB among the population 15 years and over. Large samples are required as population prevalence is low. Screening is based on a standardized questionnaire, chest X-Ray examination, and bacteriological examination of sputum samples.

The X-Ray exam is done for everyone, preceded by questions on whether the person is on TB treatment. The questionnaire includes a few screening questions (do you have a cough, a least 2 weeks, do you give up sputum). If positive, a sputum sample is requested, and a questionnaire is applied.

TB prevalence surveys have generally been conducted as stand-alone surveys, now in more than a dozen countries since 2010.

- TB prevalence rate: number of TB cases (pulmonary) at a given point in time per 100,000 population calculated as the number of TB cases divided by the number of persons.

Based on the survey results, and health facility TB notification data and other data, the TB prevalence rate is adjusted and estimated for all forms of TB, and incidence is also estimated.

## **Tuberculosis: Long Module**

A longer module could include knowledge and stigma questions that can be used to obtain data on indicators related to knowledge and stigma. The short module currently proposed includes the four standard questions currently used in household surveys:

- Have you ever heard of an illness called tuberculosis or TB?
- How does tuberculosis spread from one person to another?
- Can tuberculosis be cured?
- If a member of your family got tuberculosis, would you want it to remain a secret or not?

In addition to the four basic questions in the short module, the long module includes the following questions:

- What symptoms will a person with tuberculosis or TB have?
- What do you think is the cause of TB?
- Do you know of other illnesses that are associated with tuberculosis or TB?
- What is the duration of treatment for TB nowadays?
- Would you be willing to work with someone who has been previously treated for tuberculosis?
- Have you been given any information about tuberculosis by a health worker?
- Do you know a place where a person can get diagnosis and treatment for TB?
- Where is that?





NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1003	Can tuberculosis be cured?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 1003B → 1003B
1003A	What is the duration of treatment of TB now adays?	MONTHS <input type="text"/> DON'T KNOW ..... 8	
1003B	Would you be willing to work with someone who has been previously treated for tuberculosis?	YES ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8	
1004	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/DEPENDS ..... 8	
1004A	Have you been given any information about tuberculosis by a health worker?	YES ..... 1 NO ..... 2	
1004B	Do you know a place where a person can get diagnosis and treatment for TB?	YES ..... 1 NO ..... 2	→ 1005
1004C	Where is that?  Any other place?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).  IF UNABLE TO DETERMINE IF HOSPITAL, VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))  RECORD ALL SOURCES MENTIONED.	<b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER ..... B GOVT. HEALTH POST ..... C MOBILE/OUTREACH CLINIC ..... D COMMUNITY HEALTH WORKER ..... E OTHER PUBLIC _____ F (SPECIFY)  <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/CLINIC ..... G PHARMACY ..... H PRIVATE DOCTOR ..... I MOBILE CLINIC ..... J OTHER PRIVATE MEDICAL _____ K (SPECIFY)  <b>OTHER SOURCE</b> NGO ..... L TRADITIONAL PRACTITIONER ..... M  <b>OTHER</b> _____ X (SPECIFY)	
1005	GO TO NEXT SECTION		