

Field Workers' Forum

TECHNICAL GUIDE FOR SPUTUM EXAMINATION FOR TUBERCULOSIS BY DIRECT MICROSCOPY

The International Union Against Tuberculosis: 3 rue Georges Ville, 75116 Paris, France

Rather than review it under the usual section of this journal, we take this opportunity to describe at some length the content of a booklet of great practical value, which should be of interest to those engaged in combined tuberculosis/leprosy programmes, and which may hopefully stimulate the production of a full and detailed guide of a similar type for slit-skin smears in leprosy.

The Preface by Professor V Farga and Dr Annik Rouillon (Editors of the Bulletin of IUAT) reads as follows:

This Guide is based upon one initiated as early as 1969 by Dr J Holm (then Executive Director of the International Union Against Tuberculosis). It was felt that the auxiliary personnel, especially in developing countries, needed a simple guide for collection, storage and transport of sputum specimens and for examination for tuberculosis by direct microscopy.

This document, the third edition, has been carefully examined and revised by the members of the two IUAT Scientific Committees on Bacteriology/Immunology and Diagnostic Methods; account was also taken of suggestions made by other experienced authorities, as well as those of workers who have been using the Guide in the field.

The Guide is intended for field laboratories which may often have very limited facilities and personnel. It presents the basic general principles for collection, transportation, and examination by smear of sputum possibly containing tubercle bacilli.

While the Guide provides basic procedures for the detection of infectious tuberculous patients, it is recognized that local modifications of methods may be both desirable and appropriate.

To clarify all points of procedure or detail all possible modifications of methods would be prohibitive. It is anticipated that some users of this Guide, in consultation with colleagues, supervisors, and central laboratory personnel, may modify certain procedures to accommodate local facilities and equipment.

The inside cover contains a quotation from the Ninth Report of the *WHO Expert Committee on Tuberculosis (Technical Report series, 1974, No. 552)* which is worth recording in full, if only because of its relevance, with the change of a few words, to the control of leprosy:

The object of tuberculosis control is to break the chain of transmission of infection. This can be achieved by detecting the sources of infection as early as possible and rendering them non-infectious by chemotherapy. Transmission is maintained in the community particularly by subjects whose sputum is so heavily positive that tubercle bacilli can be detected by smear microscopy.

The subject matter of the booklet is dealt with under the following main headings:

- I. Collection of sputum specimens.
- II. Storage and transport of sputum specimens.
- III. The laboratory.
- IV. Reception and registration of sputum specimens.
- V. Preparation of smears.
- VI. Staining technique.
- VII. Examination by microscopy.
- VIII. Results of examination.
- IX. Recording at a microscopy centre.
- X. Disposal of examined slides.
- XI. Dispatch of results of examination.
- XII. Formulation of reagents.

There are 21 figures which illustrate with great clarity the equipment needed and the technical procedures involved in making, fixing and correctly staining slides for the detection of tubercle bacilli. Dr S G Browne, in The Leprosy Mission publication *Partners*, has already described, with excellent line drawings, the basic steps in the taking and examination of slit-skin smears for leprosy, but there is nevertheless a place for a full technical guide, comparable in scope and length to this one from IUAT. It is in fact a matter of concern that such a booklet, on a laboratory procedure of vital importance to leprosy control, has not long ago been produced and circulated, in several languages.

EDITOR