Appendix 16. Basic TB infection control risk assessment tool

16.1 Instructions

This tool helps to give an idea of the risk of transmission of *M. tuberculosis* in health facilities. The results should be interpreted ideally by a TB infection control (IC) committee.

For the "Yes"/"No" questions, a "Yes" answer indicates good TB IC practices. In "Comments", write down any pertinent information on "No" answers.

16.2 Overview of the facility *(interview with the health facility manager)*

Name, address, telephone number of facility	
Name of assessor	
Name of health facility manager	
Date of this TB IC assessment	
Date of last TB IC assessment	
Type of facility (e.g. primary health care)	
Medical services offered (e.g. OPD consultation, VCT, antenatal care)	
Laboratory services related to TB (e.g. sputum microscopy)	
Size of the population served by this facility	
Health facility TB case notification rate /100,000/year	
National TB case notification rate /100,000/year	
Health facility % of drug-resistant TB cases	
National % of drug-resistant TB cases	

Health facility overall HIV prevalence rate	
National overall HIV prevalence rate	
Avg. no. cases of TB reported/month in facility	
Is there a TB ICC in the facility or a committee at which TB IC is discussed?	
Is there a person in charge of TB IC?	
How often does TB IC committee meet?*	
Does this facility have a TB IC plan?*	

* *If possible, get a copy of the minutes of the last ICC meeting and TB IC plan.*

Is there a particular reason why this risk assessment is being carried out now? (cause for concern, issue raised by staff/manager, etc.) ☐ Yes ☐ No

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Administrative measures

Risk identification/segregation

	Yes	No
High risk areas (i.e. smear positive wards, lab) properly identified as such?		
If yes, is there information on measures to be taken there (i.e. wear respirators)?		
Suspect TB cases placed in single rooms?		
Is segregation by smear status (positive/negative) implemented?		
If treating DR-TB patients, is segregation by resistance pattern also implemented?		
Ambulatory treatment for DR-TB patients encouraged in the intensive phase?		
Do people visit TB patients outside (if weather permitting)?		
Is access to high risk areas limited or restricted?		

Comments:

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Waiting areas *(observe behaviour for 1 hour, ideally in the main (and/or specific TB) waiting area during the busy early morning)*

	Yes	No
Patients given health education talks on TB while they wait?		
Is there educational literature on display regarding TB and cough hygiene?		
Do patients cover their mouth when they cough or sneeze?		
Patients asked by HCW to cover their mouth if they are not doing it?		
Suspect or confirmed TB cases separated in any way from other patients?		

Comments:

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Management of suspect/confirmed TB cases *(interview a TB clinician)*

	Yes	No
Results of sputum smear microscopy available in less than 48 hours?		
TB treatment started immediately after TB diagnosis?		

Comments:

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Sputum collection/preparation *(witness a sputum sample collection and preparation)*

	Yes	No
Sputum collection performed in a designated, well ventilated area?		
Collected sputum in labelled, screw-top plastic containers?		
If international lab, sputum samples sent in triple packaging?		
If induced sputum, mask and tube replaced/disinfected between patients?		
Sputum samples prepared in Class I BSC or ventilated workstation?		

Comments:

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Staff measures *(interview health facility manager)*

	Yes	No
Educational sessions for HCW on TB risk annually?		
No employees have developed TB disease in the last 24 months?		
Awareness of national occupational health and safety regulations regarding TB?		

Comments:

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Environmental measures

If possible, make rough estimates of ventilation using an anemometer and smoke tube/incense stick.

	Yes	No
Natural ventilation possible?		
If yes, windows open during the day?		
HCW positioned 'up-wind' from patients during consultation/counselling?		
Waiting areas in outdoor/open spaces areas?		
Measurement of ACH possible?		
At least 12 ACH in all waiting areas?		
At least 12 ACH in consultation rooms and wards?		
At least 20 ACH in the sputum collection area (or in open air)?		
Mechanical ventilation system used in the health facility?*		
UVGI lighting system used in the health facility?*		

* *Explain in a detailed way its functioning, maintenance in a separated sheet.*

Comments:

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Obtain a scale drawing of the floor plan of the whole facility including doors and windows (if this is not available, make a sketch). Shade the different areas accordingly:

High risk of TB transmission	Dark grey
Limited risk of TB transmission	Grey
Low risk of TB transmission	White

Include patients and staff flow, environmental measures (i.e. fans, UVGI lights, etc.).

Personal protective measures

Walk unannounced around the facility and observe. Discuss with staff.

	Yes	No
Surgical/face masks available for smear-positive patients in sufficient quantity?		
Respirators are FFP2 or N95 standards?		
Respirators available in sufficient quantities for all HCW?		
Respirators available in sufficient quantities for all visitors?		
HCW wear respirators when assisting sputum collection/induction?		
HCW wear respirators when preparing sputum smear slides?		
HCW wear respirators before entering the room of suspected/confirmed smear-positive patient?		
Facility has a Fit Test Program for HCW using respirators?		
All HCW that use respirators are Fit Tested when employed?		

Comments:

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Conclusions (final discussion with the health facility manager after completing assessment)

What, according to the assessor and the health facility manager, are currently the main issues regarding TB IC in this facility?

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What, according to the assessor and the facility manager, are the priority actions regarding TB IC in this facility?

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