The Ministry of Health, Permanent Secretary Dr. Peter Mwaba authorized the implementation of the TB infection control (TB IC) Ndola Demonstration Project. The National TB Control Program, through the leadership of Dr. Nathan Kapata has provided oversight for the TB IC project under the guidance of the Permanent Secretary. The Provincial Medical Officer, Dr. Chandwa Ng’ambi, the District Medical Officer, Dr. Mathildah Kakungu Simpungwe and the District Office Community liaison, Ms. Lynette Maambo have provided daily support for project implementation with district facility staff members. Dr. Max Meis from KNCV Tuberculosis Foundation coordinated the process of this job aid development in collaboration with FHI360 staff, including Mr. Dickens Mutumbisha providing project management oversight in Ndola District. The editing, layout and cover design was done by Tristan Bayly from KNCV Tuberculosis Foundation.

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Health facilities are places of healing and hope, yet they can also put patients and health care workers at risk. In crowded waiting areas of health centers patients are at risk of contracting airborne diseases, in particular tuberculosis (TB), from patients around them.

This job aid lists effective procedures how you can reduce the risk of the transmission of TB, at your workplace. Select those procedures which are applicable in your work setting and incorporate them in your routine work practices.

You and your colleagues should aim to improve your routine work practices and to adhere to (selected) procedures at all times. By doing this, you will contribute to achieving the following objectives of the Tuberculosis Infection Prevention Control policy:

- To identify individuals with TB symptoms promptly
- To separate infectious and presumed infectious individuals from others
- To enforce compliance with cough etiquette
- To minimize the time for diagnosis, onset of treatment and the time spent in the facility by infectious patients and patients suspected to have TB
- To prevent staff from acquiring and developing TB and support those who have contracted TB
- To ensure that building design and use are appropriate for the buildings intended use and ease of operation
- To ensure sufficient air exchange and controlled airflow direction where necessary
- To facilitate community-based infection control measures
1. **Triage – Assigned Cough monitor responsible**

   a. Identify patients with current cough, upon entering facility
      - Any client and their family member with current cough that lasted two weeks or more

   b. Direct patients with current cough to an outside sputum collection area FIRST to provide a sputum sample
      - Use a sputum container with a screw cap

   c. Explain to them how to provide a sputum sample
      - Take precautions if you assist with sputum collection

   d. Instruct them where to bring the sputum sample
      - A place outside the laboratory

   e. When they return direct them immediately to a designated well ventilated waiting area
      - Away from regular patients where they can wait until they can be seen

   f. List all TB suspects into the TB Suspects Register

   g. Document, evaluate and report the number of confirmed sputum smear positive patients against the total number of patients suspected of having TB

   h. Document, evaluate and report in the Patient book the (average) number of days between submission of sputum, dispatch of sputum results and the day of commencing treatment at the end of each quarter
2. **Separation – Assigned member of staff responsible**
   
a. Separate patients with current cough from others

b. Separate diagnosed TB patients from other patients by giving them a specific time slot for visiting the TB clinic, if they have not yet started treatment
3. **Cough etiquette – Assigned Cough Monitor responsible**

   a. Display cover-your-cough posters at waiting areas and examination room, where patients cannot miss to see them (directly in front of them at eye-level and not on a back wall)

   b. Provide health education on cough etiquette as part of one-on-one counseling or as part of pre-clinic health talks
   - cover mouth and nose when coughing or sneezing
   - turn head away from others
   - do not spit on the floor
   - wash hands frequently

   c. If available, provide disposable surgical masks to all confirmed infectious PTB patients and patients suspected of having TB
   - If surgical masks are not available, provide paper tissues or serviettes

   d. Instruct them to discard the surgical masks and paper tissues in a plastic bag and then in a trash bin
4. **Minimize time for diagnosis, onset of treatment, and time spent in enclosed areas – Entire team responsible**
   
a. Move patients with current cough to the front of the waiting queue to be seen with priority
   - If a well-ventilated waiting area is not available

b. Document in the Patient book the date on which:
   - Laboratory tests were dispatched and received
     - Ideally, the turn-around time for sputum examination is 48 hours
   - The patient received results and medications
     - Ideally, the patient is started on treatment within the same day of receiving the results

c. Evaluate and report delays in:
   - The average time for diagnosis
   - The average time between diagnosis and onset of treatment

d. Educate patients to minimize contact with others in enclosed areas
5. **TB screening of all staff and TB treatment supporters – In-charge responsible**

   a. Be aware of the occupational risk to acquire TB

   b. Be familiar with the TB Infection Prevention Control policy and procedures of the clinic to ensure that the workplace practice conforms to the national guidelines
      - A copy of the TB IC national guidelines and the HCW TB Screening Protocol should be available at the clinic

   c. Be alert to signs and symptoms of TB and seek care promptly in case of signs and symptoms
      - Symptoms are: 1) cough that lasts longer than 2-3 weeks; 2) more than 10% unintended weight loss; 3) night sweats; 4) fever; 5) productive blood stained cough; and 6) TB history
      - If symptomatic, tests are: 1) sputum examination; 2) X-ray; 3) culture; and 4) GeneXpert, if available
      - If you notice a colleague with prolonged cough, encourage him/her to seek care

   d. Get screened at least annually (periodic TB screening)

   e. Know your HIV status
      - Have a HIV test done annually, if you are HIV negative
      - Get HIV prevention and treatment, if you are HIV positive

   f. Know that medical information is kept confidential
      - Data on staff screened for TB and HIV
      - Data on staff diagnosed with TB disease
6. **Natural ventilation – Assigned member of staff responsible**

   a. Do not allow patients to sit in crowded hallways or waiting areas

   b. Create a designated waiting area for patients with current cough
      - At the general waiting area of the OPD
      - At the TB clinic and ART clinic

   c. Ensure that doors and windows are kept open during consultation hours in all exam rooms
      - Signage must be installed directing HCWs to keep doors and windows open

   d. Place furniture in examination rooms such that staff-patient interactions occur with air flow passing between patient and staff, rather than from patient to staff
      - Sketch a floor plan for each room
      - Display the (laminated) floor plans at the inside of the door

   e. Maintain moving parts of windows, especially the stays, to allow for maximum opening and adequate air exchange

   f. Keep a log to document the date and what was done:
      1) checking; 2) servicing; 3) replacement of part, repair
      - Record the date when the windowsshould be checked again
      - Have deficiencies repaired as soon as possible
      - Allocate adequate resources (budget and staffing) for maintenance
7. **Mixed-mode ventilation – Assigned member of staff responsible**

   a. Install extractor fans in enclosed areas deemed necessary by the infection prevention control committee

   b. Service ventilation equipment on a regular schedule
      ◇ Administrative controls regarding the operation of the fans should be in place to guarantee a flawless functioning

   c. Keep a log to record the date and what was done: 1) checking; 2) cleaning; 3) replacement of part, repair
      ◇ Record the date when the equipment should be serviced again
      ◇ Have deficiencies repaired as soon as possible
      ◇ Allocate adequate resources (budget and staffing) for maintenance
Notes