

STEP 1. Pre-Latent tuberculosis (TB) infection screening activities by Medical Technical Assistants (MTAs)*

- Identification of asylum seekers eligible for latent tuberculosis (LTBI) infection screening**

The Public Health Service (PHS) periodically receives a list with names, birthdates, nationalities, addresses and identification numbers of asylum seekers eligible for TB follow-up screening. The MTA selected the asylum seekers living in the asylum centres that participated in the study
- Determine location of LTBI-screening: asylum seeker centre or public health service**
- Invitation package send to client**

The project provided PHS teams with bilingual invitation letters (Dutch and mother tongue), information brochures about latent TB infection (LTBI) testing and bilingual health questionnaires. Written materials were available in eight languages. PHS teams sent the invitation, health questionnaire and information brochure to all clients eligible for LTBI screening

STEP 2. LTBI-screening activities by Medical Technical Assistants (MTAs)*

If necessary, interpreters -on location or by phone- were used during LTBI screening activities.

- Registration of the client**

Check personal information of client (name, ID number, birthdate, nationality, insurance number) on list against ID card and health insurance card
- Education on TB, LTBI and screening purpose (in-person, verbal in a group or individually):**
 - Explanation TB and LTBI
 - Explanation LTBI screening objectives
 - Explanation LTBI screenings process: health questionnaire and blood sampling
 - Explanation (communication) of results and TB/LTBI treatment possibilities
- Health assessment through evaluation of the health questionnaire:**

Complaints (>3 weeks) suggestive of TB disease*?

YES

Chest X-ray & consultation TB physician

TB disease

YES

Treatment TB disease

NO

Active TB in the past?

YES

Chest X-ray & Consultation TB physician

TB disease

YES

Treatment TB disease

NO

Current radiological TB screening

NO

Positive IGRA in the past?

YES

Received LTBI treatment in the past?

NO

Chest X-ray + Consult TB physician

YES

Chest X-ray follow-up screening

NO

Immune suppressive illness*** or medications****

YES

Chest X-ray & Consultation TB physician

TB disease

YES

Treatment TB disease

NO
- LTBI testing (persons 12 years and older)**

LTBI testing was done with Interferon Gamma Release Assay (IGRA) using QuantiFERON-TB Gold Plus (QFT-Plus; Qiagen, Germantown MD) in accordance with the manufacturer’s instructions.
- Communication of LTBI test results**

Communication of result through bilingual letter in (Dutch and mother tongue client)

Positive IGRA test result (≥0.35 IU/ml) or Indeterminate IGRA test result

Negative IGRA test result (<0.35 IU/ml)

Invitation for consultation with TB physician at the PHS for further examination regarding TB

No further examination needed

STEP 3. LTBI treatment provision and support by the TB physician and TB nurse

6. Consultation TB physician

If necessary, interpreters were used during consultations and other LTBI treatment activities

Chest X-ray & medical examination

TB disease

YES

Treatment TB disease

NO

LTBI

Educate client on TB, LTBI and LTBI treatment (including potential side-effects)

Offer LTBI treatment (3-month daily Isoniazid-Rifampicin regimen) based on: contra-indications & motivation client

Agreement between TB physician and LTBI client to start LTBI treatment?

NO

Chest Xray follow-up screening (every 6 months for 2 years)

YES

LTBI treatment

Day 0: Hepatotoxicity test if indicated

Month 1: Chest X-ray & hepatotoxicity test if indicated

Month 3: Chest X-ray & hepatotoxicity test if indicated

LTBI treatment completion

LTBI treatment support by TB nurse

If necessary, interpreters were used during consultations and other LTBI treatment activities

Day 0: Intake + discuss demand-driven treatment support plan with client

Day 14: Contact moment

Frequency of other contact moments is dependent on LTBI treatment progression and needs of the client

No LTBI

*Medical Technical Assistants (MTA), healthcare assistants trained to perform TB screening activities (symptom screening, tuberculin skin test, IGRA, and chest X-ray), BCG vaccination, to give information on the scope of the screening and TB in general, to document screening results and to perform specific administrative tasks.

**Complaints: Cough, fever (>38 degrees Celsius), night sweats, poor appetite / weight loss

***Immune suppressive illnesses: Inflammatory bowel disease, kidney failure / dialysis, diabetes, HIV/AIDS, cancer, organ transplantation, psoriasis, rheumatism, sarcoidosis, silicosis

****Immune suppressive medications: Prednisone / Dexamethasone / Methotrexate, TNF-alpha blockers (biologicals), cancer medication, medication following organ transplantation

Acronyms: TB: tuberculosis, LTBI: latent tuberculosis infection, IGRA: Interferon Gamma Release Assay, PHS: Public Health Service, MTA: Medical Technical Assistant