Chapter 4: B Notifications

Contents

Introduction

Purpose

Use this section to do the following:

- Follow up on TB B class notifications
- Evaluate and treat immigrants with B class notifications

TB B class notifications are sent by the Centers for Disease Control and Prevention (CDC) to the Wisconsin Tuberculosis (TB) Program as follow-up to the screening mandated by United States immigration law. The purpose of mandated screening is to limit entry to people who have a communicable disease of public health significance (active TB disease).

This notification system follows up on medical screenings of people with TB classifications after their arrival in the United States.[1] Immigrants with TB classifications are identified at ports of entry to the United States by the United States Citizenship and Immigration Services (USCIS) and are reported to CDC's Division of Global Migration and Health (DGMH). The DGMH notifies state and local health departments of refugees and immigrants with TB classifications who are moving to their jurisdictions.

Pre-arrival medical screening for tuberculosis

Not all non-U.S.-born people who enter the United States go through the same official channels or through the screening process. For a summary of which groups of non-U.S.-born people are screened, refer to Table 4.1 below: **Numbers of Foreign-Born People Who Entered the United States, by visa category.** People entering in the nonimmigrant category do not require pre-entry screening, but as a condition of entry, people migrating as immigrants, refugees, humanitarian parolees, and some non-immigrant visas are required to be screened outside the United States for diseases of public health significance, including TB.[2,3]

Table 4.1 Numbers of foreign-born people who entered the United States, by visa category[4,5]

Category	Number	Percentage of total	Screening required?
Immigrants are defined by the Office of Immigration Statistics (OIS) as people legally admitted to the United States as permanent residents.	465,718	1.38%	Yes

Category	Number	Percentage of total	Screening required?
Refugees and asylees, as defined by OIS, are people admitted to the United States because they are unable or unwilling to return to their country of nationality due to persecution or a well-founded fear of persecution. Refugees apply for admission at an overseas facility and enter the United States only after their application is granted; asylees apply for admission when already in the United States or at a point of entry.	25,519	0.46%	Yes
Nonimmigrants are aliens granted temporary entry to the United States for a specific purpose (the most common visa classifications for nonimmigrants are visitors for pleasure, visitors for business, temporary workers, and students).	27,907,000	98.18%	No
The foreign-born population, as defined by the Census Bureau, refers to all residents of the United States who were not US citizens at birth, regardless of their current legal or citizenship status.	28,423,000	100%	See above
Unauthorized immigrants (also referred to as illegal or undocumented immigrants) are foreign citizens illegally residing in the United States. They include both those who entered without inspection and those who violated the terms of a temporary admission without having gained either permanent resident status or temporary protection from removal.[6]			

Applicants for immigration who plan to relocate permanently to the United States are required to have a medical evaluation prior to entering the country. The technical instructions, or requirements, for the TB-related components of these medical evaluations differ depending upon the country of most recent origin, population group, and date of screening.

Most applicants for U.S. immigration are being screened according to the 2024 Technical Instructions for Panel Physicians.

According to the 2024 technical instructions:

- Visa applicants less than 2 years of age from high-burden countries (defined as a WHO-estimated tuberculosis disease incidence rate of 20 or more cases per 100,000 population) who have signs or symptoms suggestive of infectious tuberculosis disease or have known HIV infection must have an IGRA or tuberculin skin test (TST) and a chest x-ray (CXR) and must provide three sputum specimens for smears and culture plus molecular testing of the first sample.

- Applicants greater than 2 years of age from high-burden countries must receive an IGRA. Additionally,
    - For children 2 through 14 years old, if the IGRA is positive or if the applicant has tuberculosis symptoms or HIV infection, a CXR must be performed. Applicants who have a CXR with findings suggestive of infectious tuberculosis disease, signs or symptoms of tuberculosis disease, or known HIV infection must provide three sputum specimens for smears and culture plus molecular testing of the first sample.
    - Applicants 15 years of age or older who are examined in high-tuberculosis-burden countries must have a CXR regardless of IGRA result. Applicants who have a CXR with findings suggestive of infectious tuberculosis disease, signs or symptoms of tuberculosis disease, or known HIV infection must provide three sputum specimens for smears and culture plus molecular testing of the first sample.

Classification of Immigrants and Refugees in the TB class B Notification Program. An applicant whose chest radiograph is compatible with active TB but whose sputum smear, culture, and molecular results are negative is classified as having Class B1 status and may enter the United States. If the IGRA is positive and the CXR does not suggest TB, the applicant enters the country with Class B2 status. If abnormalities are present in a chest radiograph and if sputum AFB smears are positive, the applicant must receive a Class A waiver before entry into the United States. Very few people with Class A waivers enter the United States, so Class A waivers are not covered in these guidelines.

Table 4.2: TB classification of immigrants and refugees according to the 2024 technical instructions[7]

Immigrant or refugee classification	Overseas chest radiograph	IGRA	Overseas sputum acid-fast bacilli smears and molecular testing	Restrictions
A Waiver*	Abnormal, suggestive of active tuberculosis disease	Positive or negative	Positive	May not enter the United States unless started on antituberculosis therapy and sputum smears are negative **and** apply for a waiver signed by the local health department in their intended destination in the United States (A Waiver). **or** Complete TB therapy overseas (B0)

B1	Abnormal, suggestive of active TB disease **Or** Known HIV infection	Positive or negative	Negative	Instructed to voluntarily report to the local health department in the United States for further medical evaluation within 30 days of arrival.
B2	Abnormal, suggestive of inactive TB disease	Positive	Negative	Instructed to voluntarily report to the local health department in the United States for further medical evaluation within 30 days of arrival.
B3 (contact)	Applicants who are a recent contact of a person with known infectious tuberculosis disease, regardless of IGRA or TST results. The IGRA result or the size of the applicant's TST reaction must be documented. Applicants can be both Class B3 and Class B1 (a contact who required sputum testing with negative cultures), or Class B3 and Class B2 (a contact with LTBI). However, other combinations of tuberculosis classifications are not permitted.			

Source: Centers for Disease Control and Prevention Tuberculosis Technical Instructions for Panel Physicians January 2024. Available at: https://www.cdc.gov/immigrantrefugeehealth/panel-physicians/tuberculosis.html#screening Accessed February 7, 2024.

Table 4.3: Populations required to be screened according to the 2024 technical instructions

Country of most recent origin's tuberculosis burden	Age	Screening requirements
Low Burden (Less than 20 cases per 100,000 population)	Less than 15 years of age	• If symptoms of TB or known HIV infection: IGRA (or TST for those under age 2) • CXR • Three sputum smears and cultures plus molecular testing of the first specimen
	15 years of age or older	CXR. If CXR is abnormal or symptoms of TB: • Three sputum smears and cultures plus molecular testing of the first specimen

Country of most recent origin's tuberculosis burden	Age	Screening requirements
High Burden (More than 20 cases per 100,000 population)	Less than 2 years of age	If symptoms of TB or known HIV infection: • IGRA or TST • CXR • Three sputum smears and cultures plus molecular testing of the first specimen

	2 years of age or older	• IGRA
		• CXR required for:
		  • Applicants over 15 years of age regardless of IGRA result
		  • Applicants less than 15 years of age with positive IGRA, TB symptoms, or known HIV infection
		  • If CXR suggestive of TB, applicant has TB symptoms, or known HIV infection
		  • Three sputum smears and cultures plus molecular testing of the first specimen

Policy

The CDC and the Advisory Council for the Elimination of Tuberculosis (ACET) recommend screening high-risk populations for TB, including recent arrivals from areas of the world with a high prevalence of TB. On the basis of its very high success rate of detecting TB cases, domestic follow-up evaluation of immigrants and refugees with Class B1 and B2 TB notification status should be given highest priority by all TB control programs.[8]

Newly arrived refugees and immigrants with Class B TB will receive thorough and timely TB evaluations and appropriate treatment to ensure prompt detection of TB disease and prevention of future cases.

For roles and responsibilities, refer to the "Roles, Responsibilities, and Contact Information" topic in the Introduction.

Program Standards

- Follow-up should be initiated within 30 days of notification of the arrival.
- Follow-up should be completed within 90 days of notification of the arrival (not including treatment).

Division of global migration and health forms

The Centers for Disease Control and Prevention (CDC) Division of Global Migration and Health (DGMH) generates the following Class B notification forms:

- DS-2054 Medical Exam
- DS-3025 Vaccination
- DS-3026 Medical History
- DS-3030 TB Worksheet

The Wisconsin Tuberculosis Program receives these notifications and documentation via DGMH's Electronic Disease Notification (EDN) system. After review, relevant information is entered into the Wisconsin Electronic Disease Surveillance System (WEDSS) and faxed to the appropriate local jurisdiction. Within WEDSS, a Tuberculosis Class A or B Disease Incident is created. Local health departments can keep track of follow up within this disease incident. If LTBI or active TB are confirmed, local jurisdictions are advised to create a second disease incident corresponding to the confirmed diagnosis. If LTBI and TB disease are both ruled out, the Class A or B Disease Incidents are the only reporting metrics that should be in WEDSS.

Once follow up is complete and the TB Follow Up Worksheet tab in WEDSS is completed, the local jurisdiction can change the process status to "sent to state."

The state will review the case, reach out if more information is needed, and close the case with DGMH.

Patient follow-up

The immigration paperwork may make it appear that a patient has had a complete evaluation for TB disease. However, the overseas evaluation is designed only to detect abnormal radiographs and determine infectiousness at the time of travel and does not rule out disease. Remember that all B1 and B2 arrivals need a new diagnostic evaluation for active disease including at least an IGRA and new chest radiograph. Even if active TB disease is ruled out, most B1 and B2 arrivals are priority candidates for treatment of latent TB infection.

Follow-up on each B1 and B2 arrival screened under the 2024 Technical Instructions as described below.

1. Check to see if the immigrant has already visited the health department or a private provider.

    a. If not, then make a telephone call to the home of the immigrant's sponsor, refugee's resettlement agency or case manager within five business days after receiving the notification. Arrange for the immigrant to come in during clinic hours at the health department or arrange for the patient to see a private provider. Whenever possible, communications should be made in the immigrant's first language.

2. If the immigrant does not visit the health department or a private provider within 10 business days (two weeks) of the telephone call, send a letter to the home of the immigrant's sponsor or relative. Whenever possible, communications should be made in the immigrant's first language.

3. If the immigrant does not visit the health department or a private provider within 10 business days (two weeks) of the letter, make a visit to the home of the immigrant's sponsor or relative. Take a representative who speaks the immigrant's preferred language if at all possible (if necessary).

4. Every effort should be made to locate B1 or B2 arrivals as these individuals are considered high risk for TB disease. Contact the Wisconsin TB Program for consultation when a person with B status is not located.

5. Complete Class B follow-up within 90 days (not including treatment).

6. Complete documentation of all required fields in WEDSS (fields in red). You should also upload any forms, documents, etc. associated with the case to the filing cabinet. Then change the process status to "sent to state". This form is essential for the Wisconsin TB Program to conduct statewide surveillance, follow up on all B1 and B2 arrivals, and report results to the CDC.

Evaluation of B1 and B2 tuberculosis arrivals

Evaluation activities

Refer to the table 4.4 to determine which evaluation tasks should be done for B1 and B2 arrivals.

Table 4.4: TB follow up recommendations

TB classification	U.S. TB follow-up recommendations

Class A—Infectious TB including extrapulmonary with abnormal CXR	• Review overseas medical exam documentation. • Perform a stateside chest X-ray (CXR). • Assess the patient clinically and perform additional diagnostic testing, such as sputum collection for acid-fast bacilli (AFB) smear and culture, if indicated. • Continue or revise treatment regimen, as indicated.
Class B0—Completed treatment for active TB with overseas panel physician	• No follow-up guideline has been established by CDC. • No TB follow-up is recommended at this time.
Class B1—May have clinically active (**Not** infectious) pulmonary or extrapulmonary TB (previously treated TB without panel physician).	• Perform an interferon gamma release assay (IGRA). • Review overseas medical exam documentation. • Perform a stateside CXR. • Evaluate for signs and symptoms of active TB. • If there is a positive IGRA and abnormal CXR, collect three sputa for AFB smear and culture. • Treat for latent tuberculosis infection (LTBI) or active TB, as appropriate.
B2—May have TB infection (**Not** active)	• Review overseas medical exam documentation. Perform a stateside CXR. • In cases where a TST was performed overseas, perform an IGRA. • If there is a positive IGRA and abnormal CXR, collect three sputa for AFB smear and culture. • Treat for LTBI or active TB as appropriate.
B3 **-** Contact with someone with active TB	• Review overseas medical exam documentation. • Perform an IGRA. • If IGRA is positive, perform a stateside CXR. • If the IGRA is positive and the CXR is abnormal, collect three sputa for AFB smear and culture. • Treat for LTBI or active TB as appropriate.

Source: https://www.dhs.wisconsin.gov/publications/p0/p00619.pdf;Francis J. Curry National Tuberculosis Center. Recommended TB clinic procedures for Class B1 TB arrivals and recommended TB clinic procedures for Class B2 TB arrivals. In: Text: step-by-step guide. *B Notification Assessment and Follow-up Toolbox* [Francis J. Curry National Tuberculosis Center Web site]. San Francisco, CA; January 2004. Available at: Toolbox: B Notification Assessment and Follow-up | CDC FTBR Accessed November 1, 2006.

For those with a chest x-ray suggestive of tuberculosis, or signs or symptoms of tuberculosis, or known HIV infection:

- Three sputum specimens must be collected for AFB smear and culture plus molecular testing of the first specimen.
- Once the panel physician notifies the applicant that sputum specimens are required, the applicant must report for testing as soon as possible. If testing is delayed longer than two weeks, the panel physician should strongly consider testing the applicant for the presence of medications used to treat tuberculosis disease.

- The sputum specimen must be an early morning fasting specimen, and collection must be directly observed by a health care provider. Applicants should be instructed not to brush their teeth, use mouth wash, or eat anything prior to sputum collection. Three specimens consisting of 5–10 mL each must be collected at least 24 hours apart, preferably on consecutive working days. Applicants must rinse their mouths with purified or distilled water before providing a sputum specimen. Do not use water from plastic water dispensers, water coolers or sinks, even if filtered.

- Salivary specimens are unacceptable. The collection of a good-quality sputum specimen is of critical importance to rule out infectious tuberculosis disease, and the person collecting sputum must ensure it is not a salivary specimen before sending it to the laboratory.

- For applicants who have difficulty producing sputum, there are several methods of obtaining a specimen. Inhalation of an aerosol of sterile hypertonic saline (3%–5%), usually produced by an ultrasonic nebulizer, can be used to stimulate the production of sputum (sputum induction). Sputum induction can be used for children as young as 3 years of age. Even though aerosol-induced specimens may appear thin and watery, they should be processed. The specimen must be labeled clearly as “induced sputum” so it will not be discarded by the laboratory as an inadequate (salivary) specimen.

- Although sputum testing is best, for the small number of applicants unable to produce sputum specimens even with induction (such as young children or people with advanced dementia) alternative methods of specimen collection and testing must be performed. These methods include molecular testing of stool, early morning gastric aspirates and flexible bronchoscopy.

- For the small number of people unable to produce sputum even with induction, a molecular test performed on three stool specimens is an acceptable first alternative. A molecular stool test can be performed if the panel-designated laboratory has completed an internal validation of the test for that purpose and testing has been approved for use in the country in which the panel physician practices. Three specimens must be collected, preferably on consecutive days. If an applicant has a positive stool test, three gastric aspirates must be collected to attempt to culture the organism and allow drug susceptibility testing.

- If neither sputum nor stool testing is possible a gastric aspirate specimen can be used for any aged applicant and may be especially helpful for young children. Three specimens must be collected, preferably on consecutive days. Detailed gastric aspirate guidance is published by the Curry International Tuberculosis Center.

- If an adult is unable to provide sputum and stool testing or gastric aspirates are not available, flexible bronchoscopy is acceptable for obtaining a specimen, but is the most invasive of the three alternative methods. Contact DGMH for approval by emailing cdcqap@cdc.gov if planning to use this procedure. If bronchoscopy is used, only one procedure is required. During the bronchoscopy, two specimens must be obtained from different areas of the lung. These specimens must then be sent to the laboratory for AFB smears and cultures. If the panel-designated laboratory has

completed an internal validation of molecular testing of bronchoscopy specimens and testing has been approved for use in the country in which the panel physician practices, both specimens should also be sent for molecular testing.

- Specimens must be transported to the laboratory promptly within 24 hours after collection. If not transported within one hour, specimens must be refrigerated (but not frozen). Specimens received in the laboratory must be kept refrigerated and processed within 24 hours of receipt.

Treatment

Prescribe medications as appropriate. *Do not start patients on single-drug therapy for latent TB infection (LTBI) until tuberculosis (TB) disease is ruled out.* B1 and B2 immigrants with positive IGRAs or TSTs and for whom active TB has been ruled out are priority candidates for treatment of LTBI because of the increased probability of recent infection and subsequent progression to active TB disease. Patients with fibrotic lesions on a chest radiograph suggestive of old, healed TB are candidates for treatment of LTBI, regardless of age. LTBI treatment is highly encouraged when indicated but not compulsory.

The overseas diagnosis of clinically active TB disease is based on the abnormal chest radiograph. Reevaluation in the United States may show the patient to have old, healed TB. According to current CDC and American Thoracic Society (ATS) recommendations, old, healed TB can be treated with one of four CDC-recommended treatment regimens for latent TB infection that use isoniazid, rifapentine, or rifampin. The CDC offer more information on treatment regimens for LTBI.

For more information on treatment, see the Treatment of Latent Tuberculosis Infection and Treatment of Tuberculosis Disease sections.

Resources and references

Resources

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