B Notifications

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Introduction

Purpose

Use this section to do the following:

- Follow up on B1 and B2 notifications.
- Evaluate and treat immigrants with B1 and B2 notifications.

B notifications are sent by the Centers for Disease Control and Prevention (CDC) to the Wyoming Tuberculosis (TB) Program as follow-up to the screening mandated by United States immigration law. 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. Therefore, screening of foreign born persons is a public health priority. 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. Legal immigrants and refugees with Class B1 and B2 TB notification status are also a high-priority subpopulation for screening for latent TB infection.

This notification system follows up on medical screenings of persons with TB classifications after their arrival in the United States. ^{1,2} Immigrants with TB classifications are identified at ports of entry to the United States by the United States Citizenship and Immigration Services (USCIS) on entry to the United States and are reported to CDC's Division of Global Migration and Quarantine (DGMQ). The DGMQ 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 foreign-born persons who enter the United States go through the same official channels or through the screening process.³ For a summary of which groups of foreign-born persons are screened, refer to Table 1: **Numbers of Foreign-Born Persons Who Entered the United States, by Immigration Category, 2002**. Persons entering in the nonimmigrant category do not require pre-entry screening, but as a condition of entry, persons migrating as immigrants, refugees, and asylees are required to be screened outside the United States for diseases of public health significance, including TB.^{4,5}

Table 1: NUMBERS OF FOREIGN-BORN PERSONS WHO ENTERED THE UNITED STATES, BY IMMIGRATION CATEGORY, 20026,7

Category	Number	Percentage of Total	Screening Required?
Immigrants are defined by the Office of Immigration Statistics (OIS) as persons legally admitted to the United States as permanent residents.	384,000	1.38%	Yes
Refugees and asylees, as defined by OIS, are persons 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.	132,000	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.⁸

Sources: Congress of the United States, Congressional Budget Office. A Description of the Immigrant Population.

Washington, DC: Congressional Budget Office; November 2004; and ATS, CDC, IDSA. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. MMWR 2005;54(No. RR-12):46.

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 US immigration are being screened according to the 1991 Technical Instructions for Panel Physicians. These instructions are available at this hyperlink: http://www.cdc.gov/ncidod/dg/panel_1991.htm.

According to the 1991 technical instructions, visa applicants 15 years or older must have a chest radiograph performed overseas as part of that medical evaluation. If the chest radiograph is suggestive of pulmonary TB disease, sputa for acid-fast bacilli (AFB) smears must be obtained. Applicants who are identified as having abnormalities in their chest radiographs consistent with TB are classified according to the criteria in Table 2: Classification of Immigrants and Refugees in the B Notification Program. An applicant whose chest radiograph is compatible with active TB but whose sputum AFB smear results are negative is classified as having Class B1 status and may enter the United States. If the chest radiograph is compatible with inactive TB, no sputum specimens are required, and 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 persons with Class A waivers enter the United States, so Class A waivers are not covered in these guidelines.

Table 2: TB CLASSIFICATION OF IMMIGRANTS AND REFUGEES ACCORDING TO THE 1991 TECHNICAL INSTRUCTIONS¹⁰

Immigrant/ Refugee Classification	Overseas Chest Radiograph	Overseas Sputum Acid- Fast Bacilli Smears	Restrictions
A Waiver*	Abnormal, suggestive of active tuberculosis (TB) disease	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.
B1	Abnormal, suggestive of active TB disease	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	Negative	Same as above.

In 2007, new technical instructions for TB medical evaluation were approved and are in the process of being phased into use. The 2007 instructions revise the definitions of B1 and B2 classifications, add a B3 classification for contacts, and strengthen the TB screening components. Applicants for US immigration from the populations listed in Table 3 should be screened according to the 2007 *Technical Instructions for Tuberculosis Screening and Treatment*. These instructions are available at this hyperlink: http://www.cdc.gov/ncidod/dq/pdf/ti_tb_8_9_2007.pdf.

Table 3: POPULATIONS REQUIRED TO BE SCREENED ACCORDING TO THE 2007 TECHNICAL INSTRUCTIONS

Country of Most Recent Origin	Population	Start Date
Mexico	All applicants	October 1, 2007
Nepal	Refugees (Bhutanese)	December 13, 2007
Philippines	All applicants	October 1, 2007
Thailand	Refugees (includes Burmese and Hmong refugees)	April 9, 2007

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.¹¹

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.¹²



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

^{*} Very few persons with A waivers enter the United States, so they are excluded from these guidelines.

Source: California Department of Health Services (CDHS)/California Tuberculosis Controllers Association (CTCA). Guidelines for the follow-up and assessment of persons with Class B1/B2 tuberculosis. CDHS/CTCA Joint Guidelines [CTCA Web site]. September 1999:1. Available at: http://www.ctca.org/guidelines/IIA7bnotification.pdf . Accessed November 1, 2006.

Follow-up of B1 and B2 Tuberculosis Arrivals

Division of Global Migration and Quarantine Forms

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

- CDC 75.17: "Notice of Arrival of Alien with Tuberculosis"
- DS-2053: "Medical Examination for Immigrant or Refugee Application"
- DS-3024: "Chest X-Ray and Classification Worksheet"

The DGMQ sends the notifications to the Wyoming TB Program. The DGMQ also sends a letter to any immigrant or refugee with a tuberculosis (TB) condition, indicating that follow-up is needed in the United States.¹³

The Wyoming TB Program will work closely with the local public health entity. The immigrant or refugee will be contacted and brought into the local public health office for education and health assessment.

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 a tuberculin skin test 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 1991 Technical Instructions as described below.

- 1. Check to see if the immigrant has already visited the local health department or a private provider.
- 2. If not, then make a telephone call to the home of the immigrant's sponsor or relative within five business days after receiving the notification. Arrange for the immigrant to come in during clinic hours at the health department and/or arrange for the patient to see a private provider. 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 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.
- **4.** 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 first language if at all possible (if needed).
- **5.** Every effort should be made to locate B1 or B2 arrivals as these immigrants are considered high risk for TB disease. Call the Wyoming TB Program for consultation when an immigrant is not located.
- **6.** Complete Class B follow-up within one month.
- 7. Complete and return the B notification form CDC 75.17 to the Wyoming TB Program. This form is essential for the Wyoming 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 Table 4 to determine which evaluation tasks should be done for B1 and B2 arrivals. **B1 arrivals** had negative sputum acid-fast bacilli results overseas and have overseas chest radiographs that are abnormal and suggestive of **active TB disease**. **B2 arrivals** had negative sputum acid-fast bacilli results overseas and have overseas chest radiographs that are abnormal and suggestive of **inactive TB disease**.

Table 4: EVALUATION ACTIVITIES FOR B1 AND B2 ARRIVALS15

	Perform Evaluation Activities for	
Evaluation Activities	B1 Active TB	B2 Inactive TB
Determine tuberculin skin test (TST) status. If documentation is not available, administer a TST. A reaction of ≥5 mm is considered significant for persons with an abnormal chest radiograph.	Yes	Yes
Review the chest radiograph. Even if patients have their overseas chest radiographs available for comparison, a new chest radiograph generally should be taken.	Yes	Yes
Review tuberculosis (TB) treatment history with the patient. Treatment history may be on the visa medical examination report, form DS-2053: <i>Medical Examination for Immigrant or Refugee Application.</i> In some cases, patients have received treatment not documented on the DS-2053. Regardless of chest radiograph result, collect sputa specimens if the patient is symptomatic.	Yes	Yes
Collect sputum for testing. Sputa specimens should be collected 8 to 24 hours apart, with at least one being an early morning specimen. Collect sputum for testing, at the provider's discretion, based on the evaluation. Remember that a chest radiograph does not rule out TB disease with certainty. Regardless of chest radiograph result, collect sputa specimens if the patient is symptomatic.	Yes	If symptoms present

Sources: 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: http://www.nationaltbcenter.edu/products/product_details.cfm?productID=WPT-06%20A . Accessed November 1, 2006.

Treatment

Prescribe medications as appropriate. *Do not start patients on single-drug therapy for latent TB infection (LTBI) until active tuberculosis (TB) disease is ruled out.* B1/B2 immigrants with positive tuberculin skin tests 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.



The overseas diagnosis of clinically active TB disease is based on the abnormal chest radiograph. Reevaluation in the United States may show the patient actually to have old, healed TB. According to current CDC/American Thoracic Society (ATS) recommendations, old, healed TB can be treated with four months of isoniazid and rifampin using a combined pill, Rifamate (if available), or with nine months of isoniazid.¹⁶



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

Resources and References

Resources

- California Department of Health Services (CDHS)/California Tuberculosis Controllers Association (CTCA). "Guidelines for the Follow-up and Assessment of Persons with Class B1/B2 Tuberculosis" (CDHS/CTCA Joint Guidelines; September 1999). Available at: http://www.ctca.org/guidelines/IIA7bnotification.pdf.
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⁶ Congress of the United States, Congressional Budget Office. A Description of the Immigrant Population. Washington, DC: Congressional Budget Office; November 2004:2. Available at: http://www.cbo.gov/ftpdocs/60xx/doc6019/11-23-lmmigrant.pdf. Accessed March 6, 2007.

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⁸ Congress of the United States, Congressional Budget Office. *A Description of the Immigrant Population*. Washington, DC: Congressional Budget Office; November 2004:2. Available at: http://www.cbo.gov/ftpdocs/60xx/doc6019/11-23-lmmigrant.pdf. Accessed March 6, 2007.

9 ATS, CDC, IDSA. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. MMWR 2005;54(No. RR-12):47.

California Department of Health Services (CDHS)/California Tuberculosis Controllers Association (CTCA). Guidelines for the follow-up and assessment of persons with Class B1/B2 tuberculosis. CDHS/CTCA Joint Guidelines [CTCA Web site]. September 1999:1. Available at: http://www.ctca.org/guidelines/IIA7bnotification.pdf. Accessed November 1, 2006.

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