

U.S. destinations of newly arrived immigrants and refugees with suspect TB, 2009–2010

Deborah Lee*, Richard Chang, Kevin Liske, Sharmila Shetty, Heather Burke, Rossanne Philen and John Painter

CDC, Atlanta, GA, USA

Objective

To conduct preliminary assessment of the U.S. destination locations among newly arriving immigrants and refugees with tuberculosis (TB) classifications.

Introduction

Immigrants and refugees are required to undergo TB screening before entering the United States (1). Nearly 700 overseas panel physicians designated by the U.S. Department of State perform these screenings (2). Over 450,000 new immigrants and nearly 80,000 refugees arrive in the United States each year with their medical documentation (3). Those with culture positive or smear positive TB are treated prior to arrival in the United States; those with radiographic or symptomatic TB but negative smears and culture may enter the United States with Class B TB (4). After arrival, CDC's Electronic Disease Notification system (EDN) notifies the health departments of the results of overseas examinations.

Methods

We assessed destination information from the EDN system for immigrants and refugees arriving during 2009 and 2010 with TB disease (Class A TB with waiver) or a radiographic TB without positive smear or culture for TB (Class B1), or LTBI (Class B2), or contact with a TB case. The destination information was mapped with ArcGIS software to the county level and aggregated at the national level. Data were categorized by region according to the 10 Agency for Toxic Substances and Disease Registry (ATSDR) regions (5). Since the change of location after arrival can be entered into the EDN system by the health department, this information was assessed for the system's ability to provide secondary migration information.

Results

The EDN system provided 23,348 and 24,707 notifications with TB classifications during 2009 and 2010, respectively. The largest number of notifications occurred in the region comprising Arizona, California, Hawaii and Nevada (ATSDR Region 9); these increased by 8.2% from 9,058 in 2009 to 9,802 in 2010. Over 80% of these notifications are for people whose birth countries are the Philippines, Mexico and Vietnam. Notifications of persons born in Mexico decreased by 10.8% from 2009 to 2010 in ATSDR Region 9 whereas those born in the Philippines and Vietnam increased by 2.8% and 72.9% respectively. Information on secondary migration was reported to the EDN system by health departments on 1,307 (5.6%) and 1,880

(7.6%) records for 2009 and 2010, respectively. The median number of days from arrival to updated location was 115 in 2009 and 70 in 2010.

Conclusions

Over one third of immigrant and refugee arrivals with TB notifications were in the region comprising Arizona, California, Hawaii and Nevada. The increase in TB notifications in this region was attributed to those born in Vietnam. Secondary migration data were available, but the relatively early change in locations may indicate corrections to initial destination data rather than true secondary migration.

Keywords

Tuberculosis; immigrants; refugees; electronic disease notification; EDN

References

1. US, Citizenship and Immigration Services. Immigration and Nationality Act (INA): ACT 221—ISSUANCE OF VISAS (Sec. 221. [8 U.S.C. 1201]). [Cited 2011 August 17, 2011]; Available from <http://www.uscis.gov/ilink/docView/SLB/HTML/SLB/0-0-0-1/0-0-0-29/0-0-0-5106.html>.
2. American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America: controlling tuberculosis in the United States. *Am J Respir Crit Care Med.* 2005;172:1169–227.
3. US Department of Homeland Security. 2009 Yearbook of Immigration Statistics: U.S. Department of Homeland Security. 2010 [July 20, 2011]; Available from http://www.dhs.gov/xlibrary/assets/statistics/yearbook/2009/ois_yb_2009.pdf.
4. Centers for Disease Control and Prevention. 2007 Tuberculosis Screening and Treatment Technical Instructions for Panel Physicians. [Updated June 17, 2011; July 20, 2011]; Available from <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/tuberculosis-panel-technical-instructions.html>.
5. US Agency for Toxic Substances and Disease Registry. Division of Regional Operations. 2011 [August 17, 2011]; Available from http://www.atsdr.cdc.gov/DRO/dro_org.html.

*Deborah Lee

E-mail: DLEE1@cdc.gov