

AAPCHO TB Learning Collaborative

Jessica Hancock-Allen RN, MSN FNP-BC, MPH

April 13, 2023



Objectives

- Overview of the population served
- Multidrug resistant TB cases
- Specific efforts related to TEA funding:
 - Provider outreach
 - High-risk patient outreach
 - Community outreach
- Pilot: LTBI Nurse Case Manager

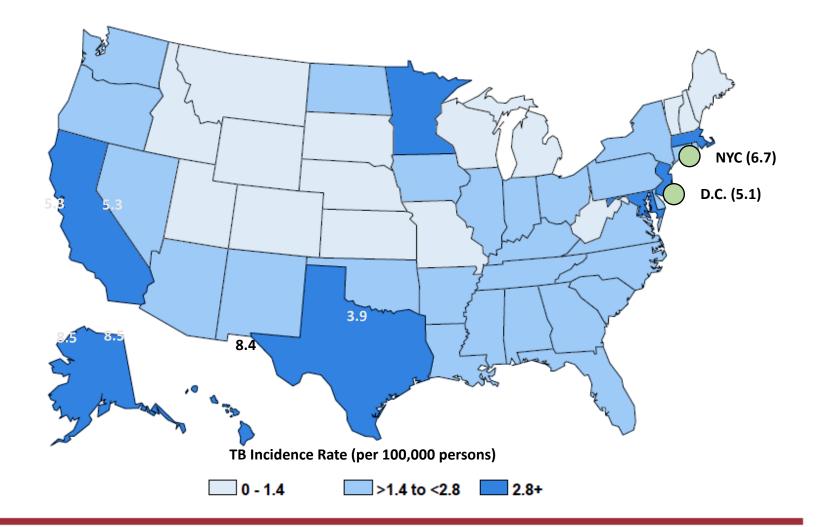


Objectives

- Overview of the population served
- Multidrug resistant TB cases
- Specific efforts related to TEA funding:
 - Provider outreach
 - High-risk patient outreach
 - Community outreach
- Pilot: LTBI Nurse Case Manager

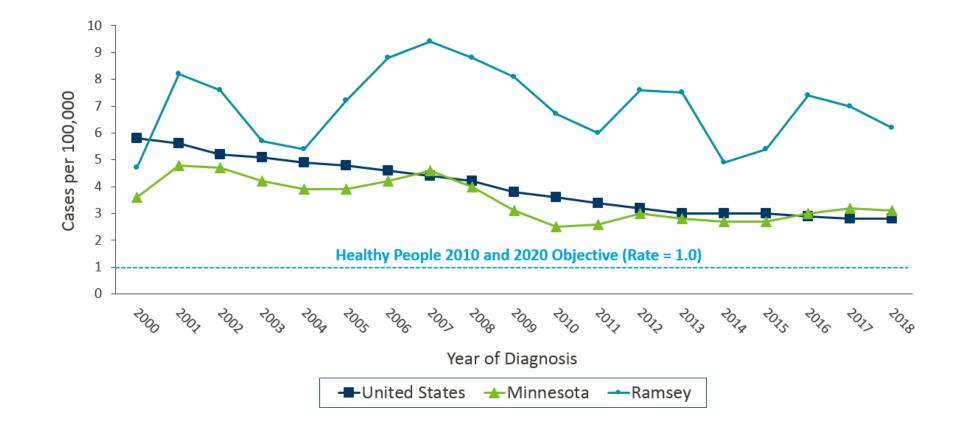


Tuberculosis Case Rates by Reporting Area United States, 2018





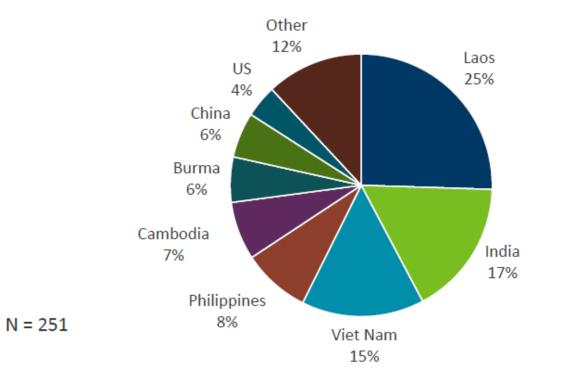
TB Incidence Rates per 100,000 Population, United States and Minnesota, 2000-2018



5



Asian/Asian-American TB Cases by Place of Birth, MN, 2013-2017





Multidrug resistant case update

	2016	2017	2018	2019	Total from
					2016 to date
Total MDR TB cases	9	9	9	4	31
Total Hmong MDR TB cases	6	8	7	3	24
Hennepin County	0	0	1	1	2
Ramsey County	5	8	6	2	21
Washington County	1	0	0	0	1
Link to Ramsey senior center	3	6	2	0	11
Died – all causes	3	3	1	0	7
Died from TB	1	2	0	0	3
Outbreak cases = related cluster of	4	6**	3	0	13**
Hmong MDR TB (based on WGS,					
epidemiology, and clinical					
information)**					
Ramsey County	4	6	3	0	13
Link to senior center	3	5	2	0	10
Died – all causes	2	2	1	0	5
Died from TB	0	1	0	0	1



Closing of the Wat Thom Krabok Camp

Multidrug-Resistant Tuberculosis Outbreak among US-bound Hmong Refugees, Thailand, 2005

John E. Oeltmann, Jay K. Varma, Luis Ortega, Yecai Liu, Thomas O'Rourke, Maria Cano, Theresa Harrington, Sean Toney, Warren Jones, Samart Karuchit, Lois Diem, Dhanida Rienthong, Jordan W. Tappero, Kashef Ijaz, and Susan A. Maloney

TB cases halt arrival of Hmong refugees

Immigrants to undergo screening for disease

January 30, 2005 | By MINNEAPOLIS STAR TRIBUNE



LTBI in the patient exposed to MDR-TB

- Patients age 15 or older Moxifloxacin 400 mg daily for 9 months
- Patients age 14 or younger Levofloxacin 15-20 mg/kg daily (max 750 mg) for 9 months
- If unable to tolerate Moxi, then Levofloxacin 500 mg (< 45.5 kg), 750 mg (>45.5 kg)
- renal failure/dialysis: Levofloxacin 750-1000mg 3 times weekly after dialysis
- If unable to tolerate LTBI treatment MDR exposed patients should be actively monitored for 2 years



Community Engagement Workgroup

- Specific efforts related to TEA funding:
 - Provider outreach Think. Test. Treat.
 - High-risk patient outreach
 - Community outreach





Pilot: LTBI Nurse Case Manager

• St. Paul – Ramsey County Public Health TB Clinic treated 283 LTBI cases in CY 2022.

LTBI NCM

- A. Manage identified complex LTBI cases throughout their treatment period.
 - I. Multidrug-resistant LTBI patients
 - II. Multidrug-resistant LTBI pediatric patients
 - III. Pediatric patients on window treatment
 - IV. Patients with a history of resistance to treatment and/or history of refusing treatment
 - V. Patients with complex comorbidities
- B. Educates patients about active tuberculosis (TB) disease and LTBI, including transmission, symptoms, treatment, and prevention
- C. Provide counseling to patients about the importance of adhering to treatment and reducing the risk of transmission
- D. Initiating LTBI treatment for eligible patients, and monitoring their adherence to treatment to ensure that they complete their full course of medication
- E. Monitors patients for the development of active TB disease, and ensures that patients receive appropriate follow-up care and testing as needed
- F. Regularly collects and analyzes data on LTBI cases
- G. Work closely with the healthcare team, including physicians, nurses, social workers, and other healthcare providers to ensure patients receive comprehensive care
- Goal is to increase the number of LTBI patient that agree to treatment, and complete full treatment course