

Managing transitions of care in Tuberculosis Treatment for Afghan Refugees

Melony Chakrabarty, MD

Sacramento County TB controller

Assistant Professor of Medicine, Division of Infectious Diseases

Department of Internal Medicine UC Davis Medical Center

SACRAMENTO COUNTY



Promote • Prevent • Protect

Objectives

- Review TB screening for Afghan Refugees after arrival to the US
- Understand the impact migration has on transitions of care during TB evaluation or treatment
- Identify challenges related transitions of care and develop methods to adapt clinical workflow
- Address cultural considerations to TB treatment

Afghanistan Refugee Crisis

- Conflict and instability for past 40 years
- Estimated 24 million Afghans require humanitarian assistance
 - 2.6 million hosted as refugees
- August 2021 – Intensification of instability with Taliban’s take over of Kabul
 - Over 100,000 Afghan nationals were evacuated from Afghanistan
- **Operation Allies Welcome (OAW)**
 - Offered temporary housing at Safe havens
 - Received medical and immigration screening
 - Complete medical examination after arrival to final destination

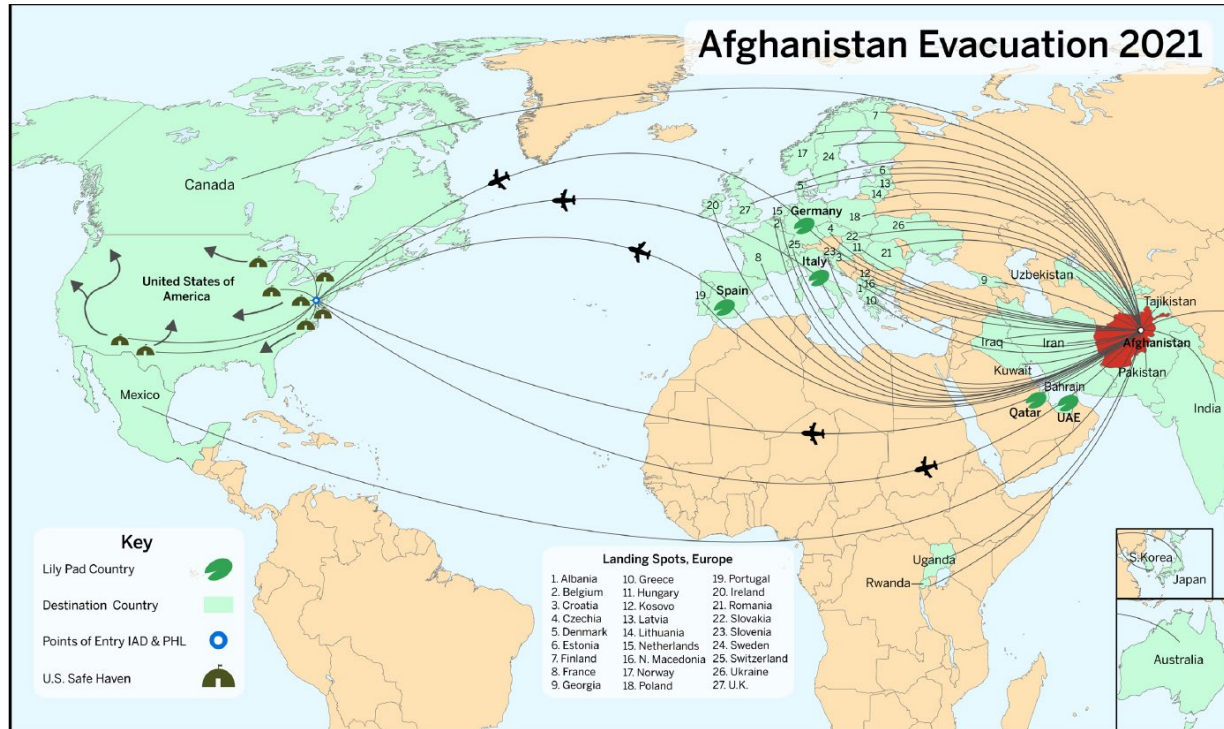


— U.S. Airmen and U.S. Marines guide evacuees aboard a U.S. Air Force C-17 Globemaster III in support of the Afghanistan evacuation at Hamid Karzai International Airport in Kabul, Afghanistan, on Aug. 21, 2021. Senior Airman Brennen Lege / U.S. Air Force via AP file

UNHCR June 2022 , Image source : NBC News, OBP Aug 2021

Operation Allies Welcome & Screening at US Safe Havens

DEPT. OF DEFENSE SUPPORT TO DEPT. OF HOMELAND SECURITY AT CONUS-BASED TASK FORCES DURING OPERATION ALLIES WELCOME, JULY 2021 - FEBRUARY 2022



8	07/30/21	02/19/22	~73,170	526	~12,720
Task Force & DOD Installations/Safe Havens	Date First Afghan Evacuees Arrived DoD Safe Havens	Date Last Afghan Evacuees Departed DoD Safe Havens	Number of Afghan Evacuees Supported via DOD Safe Havens	Babies Born to Afghan Evacuees	Number of Service Members Supporting at Height of Operation

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Task Force Eagle Fort Lee, VA	07/30/21	11/17/21	-3,050	25	-510
Task Force Bliss Fort Bliss' Doña Ana Range Complex, NM	08/21/21	12/30/21	-11,340	41	-2,025
Task Force McCoy Fort McCoy, WI	08/22/21	01/13/22	-12,730	82	-2,060
Joint Task Force Liberty Joint Base McGuire-Dix-Lakehurst, NJ	08/24/21	02/19/22	-16,500	179	-2,250
Task Force Pickett Fort Pickett, VA	08/28/21	02/01/22	-10,360	62	-1,355
Task Force Holloman Holloman Air Force Base, NM	08/31/21	01/25/22	-7,200	14	-915
Task Force Quantico Marine Corps Base Quantico, VA	08/29/21	12/22/21	-4,790	74	-935
Task Force Atterbury Camp Atterbury, IN	09/02/21	01/25/22	-7,200	49	-2,670

The Department of Defense, through U.S. Northern Command, and in support of the Department of Homeland Security, provided transportation, temporary housing, medical screening, and general support for tens of thousands of Afghan evacuees at eight CONUS DoD safe havens on military installations. This initiative provided Afghan personnel essential support at secure locations outside Afghanistan, enabling them to complete requirements as part of the resettlement process.

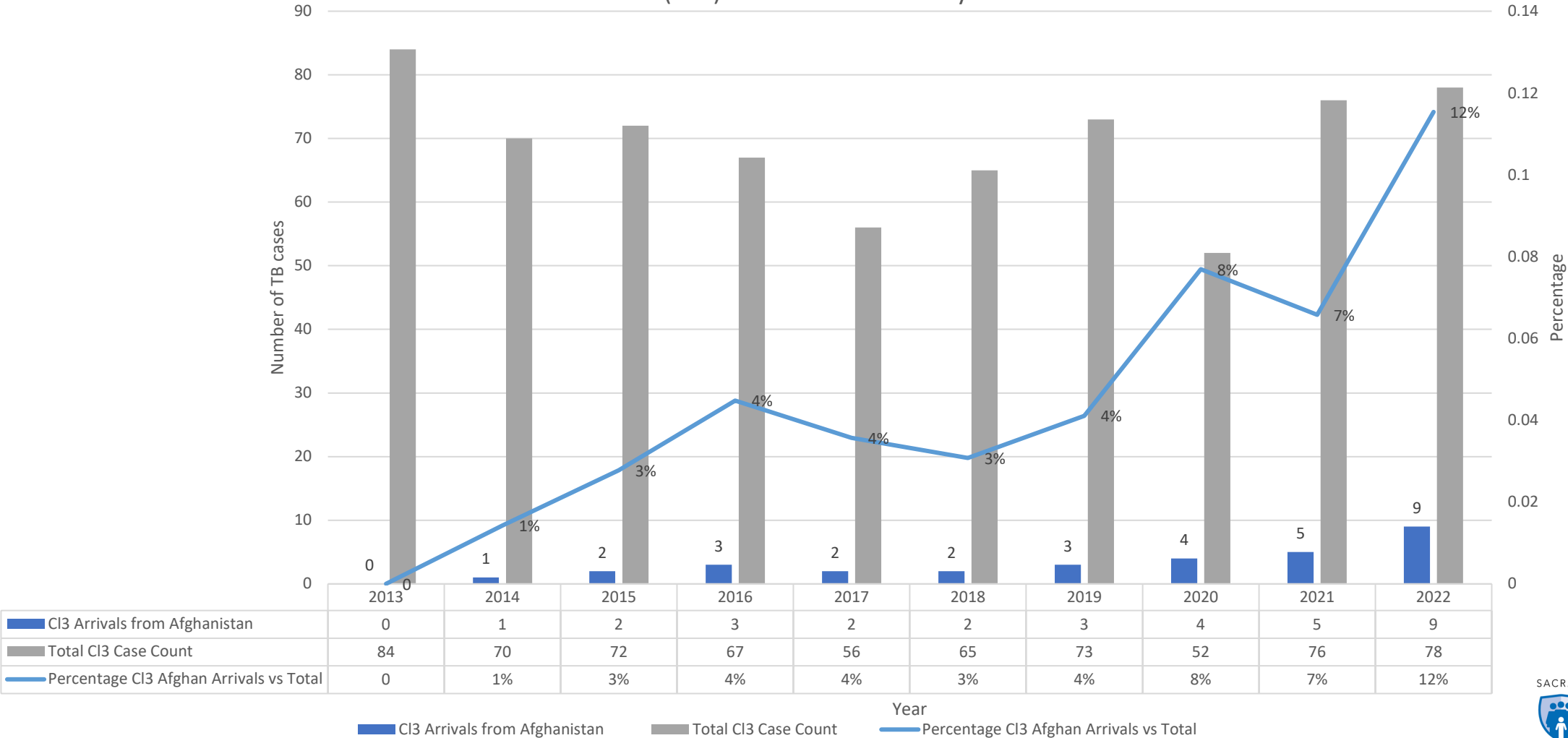
March 2022, The Foreign Service Journal. Operations Allies Refuge : The FS View from the Front Lines

<https://www.arnorth.army.mil/JFLCC/>

Current as of 07/20/2022

Sacramento County TB3 Case Count (2013-2022)

Table 1: Active TB Cases (TB3) in Sacramento County from 2013-2022



Data Source: RVCT, CDPH TBCB Shameela Ali



Sacramento County TB3 Cases

Country of Origin: Afghanistan

Table 2: Number of Active TB Cases born in Afghanistan
(2012-2022)

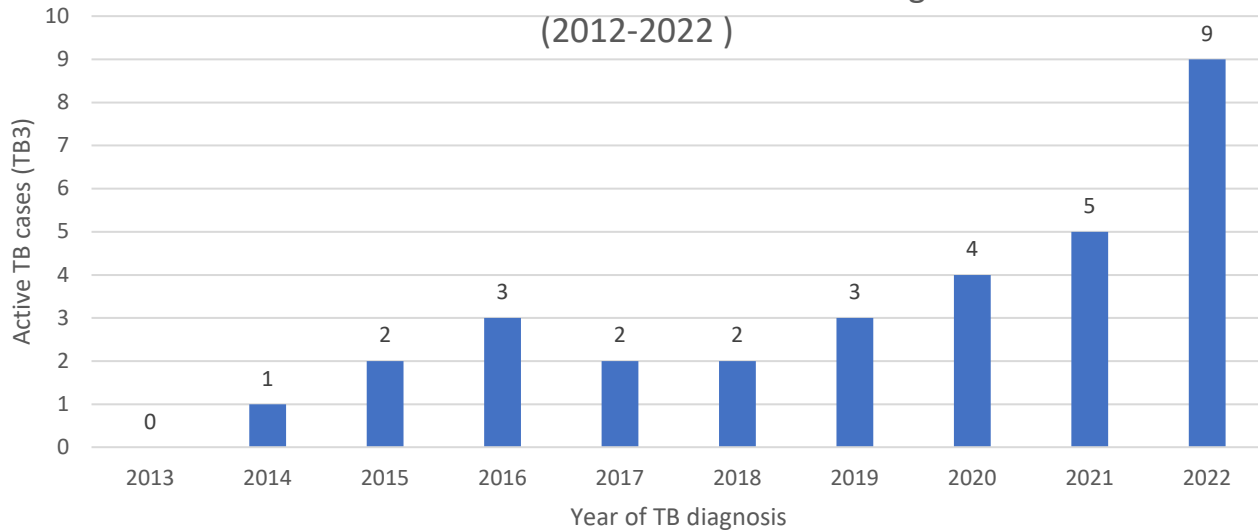
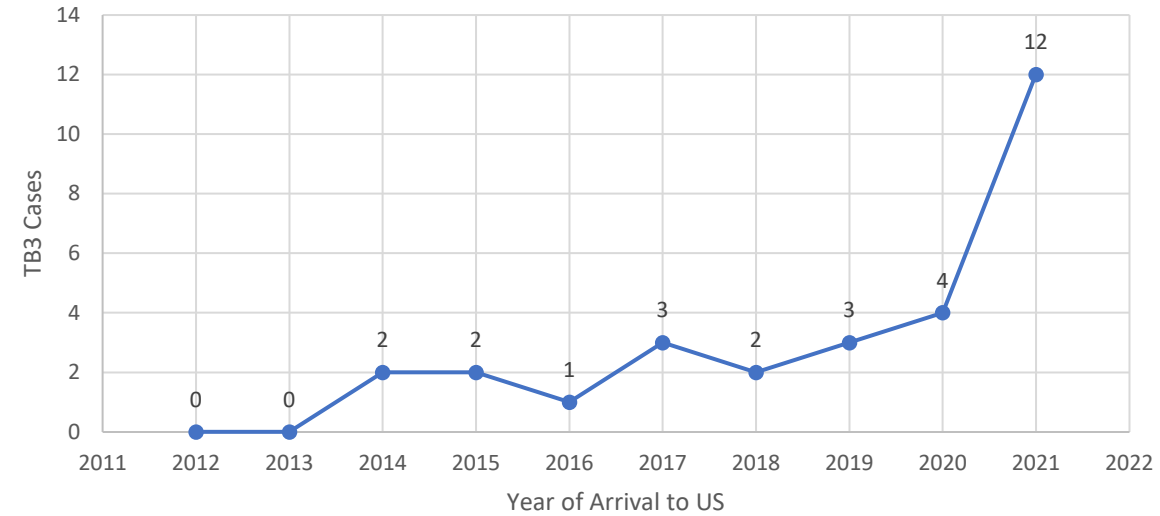


Table 3: Year of Arrival to US for
Sacramento TB3 Cases born in Afghanistan (2012-2022)



LTBI Evaluation in Afghan Population

- 7/1/2021 to 12/31/2022
 - **3,964** Arrivals from Afghanistan attended Refugee Intake Examination
 - 506 LTBI (12.7%)
 - Majority seen at Sacramento County Chest Clinic
 - 81 Indeterminate QFT
- 2023 - ongoing evaluation in arrivals from Afghanistan
 - Class B1 (e.g. Evacuated to Pakistan)
 - Active TB cases
 - Latent Disease
 - Pediatric LTBI & Source Case Investigation

اگر مبتلا به عفونت توپرکلوز غیرفعال (LTBI) باشیم، چی قسم میتوانم از مصابیت به مریضی توپرکلوز جلوگیری کنم؟

در صورت عدم تداوی، ممکن است عفونت توپرکلوز غیرفعال (LTBI) پیشرفت کرده و تبدیل به مریضی توپرکلوز شود. اگر LTBI دارید باید تداوی شوید تا از ایجاد مریضی توپرکلوز جلوگیری شود، حتی اگر احساس مریضی نمیکنید. تداوی LTBI برای جلوگیری از توپرکلوز ضروری میباشد چراکه خطر پیشرفت LTBI و تبدیل آن به مریضی توپرکلوز را به میزان قابل توجهی کم میکند.

تداوی LTBI در جلوگیری از مریضی توپرکلوز مؤثر میباشد. انتخاب های مختلفی برای تداوی LTBI وجود دارد. پیشرفت هایی در حصة کوتاه کردن مدت زمان تداوی LTBI، از 6 تا 9 ماه، به 3 تا 4 ماه انجام شده است. تداوی های کوتاه مدت LTBI مؤثر و مصنوعی بوده و نرخ تکمیل آنها نسبت به تداوی های طولانی تر، بیشتر است.

اگر مبتلا به LTBI بوده و در یک گروه با ریسک بلند قرار دارید (به صفحه 7 مراجعه کنید) در این موارد مصرف دوا اولویت بیشتری دارد تا مصاب به مریضی توپرکلوز نشوید. برای تداوی LTBI، دواهای توپرکلوز ذیل به تنهایی یا به صورت ترکیبی مورد استفاده قرار میگیرند:



CDC و انجمن ملی کنترل کنندگان توپرکلوز، یکی از انتخاب های تداوی زیر را برای LTBI توصیه میکنند:

« سه ماه ایزونیازید یک مرتبه در هفته به همراه ریفاپنتین (3HP)

« چهار ماه ریفامپین روزانه (4R)

« سه ماه ایزونیازید روزانه به همراه ریفامپین (3HR)

Questions and Answers about Tuberculosis (Dari)
Division of TB elimination , CDC April 2022,

Case 1:

- 30 year old pregnant Afghan woman arrived to US **10/26/21** to Holloman Air Force Base (New Mexico)
- TB screening
 - Abnormal CXR – RUL nodular and linear infiltrates (report only)
 - AFB Sputum Smear neg, **MTB PCR positive** (no RPOb Mutation), cultures pending at time of arrival
- PMH
 - Second trimester pregnancy (25w4d at time of PTB diagnosis)
- Social:
 - Traveled to US with husband (CI2 LTBI) and 3 year old son on window ppx

Treatment Initiation

- **11/16/2021** Started on H300, R600, E 1200, PDX 50mg (PZA avoided in setting of pregnancy)
- Started TB therapy late second trimester (25w4d)

Therapy at Holloman

- DOT received 11/16/2021 – 12/9/21
- Removed from isolation tent 12/9/21

Travel to Sacramento

- Provided a 1-month supply of medications
- IJN submitted 12/16/21

Managing treatment interruptions

Holloman 10/26/21 – 12/9/21

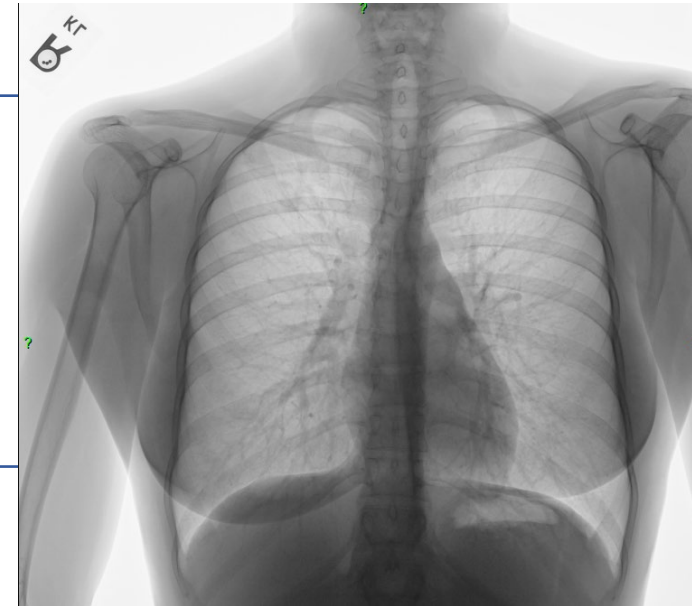
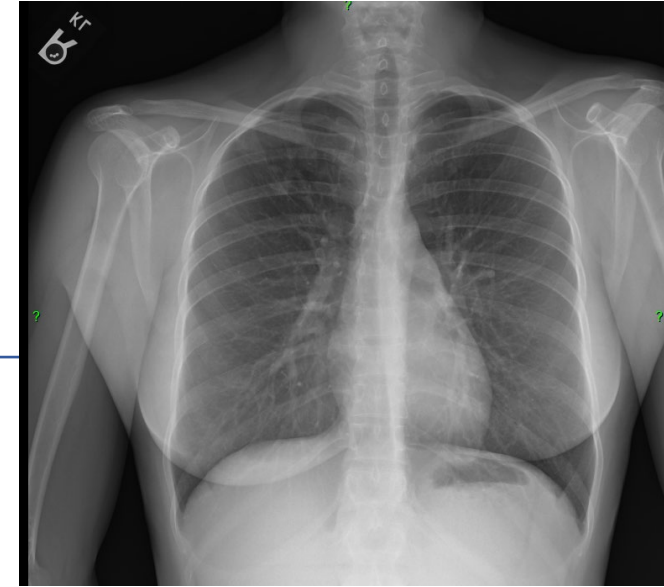
- **11/16/2021** Started on H300, R600, E 1200, PDX 50mg
 - (PZA avoided in setting of pregnancy - late second trimester (25w4d))
- Received DOT 11/16/21 – 12/9/21

Lost to Followup Lost to followup during travels

- 12/10/21 - 1/9/22 SAT doses ; verbally reports no missed doses
- Ran out of supply on 1/10/22
- Off Medications **1/10/22 – 2/3/22**

Sacramento County

- Integrated into care 2/2022 after seeking pregnancy services at local FQHC
- 3.5 week gap in treatment
- Sputum collected x 3 and therapy started 2/4/22



Audio Response Question:

How would you manage her treatment interruption?

- A) Restart intensive phase – e.g. restart from Day 1 of DOT
- B) Give credit for prior DOT + SAT doses

Join by Web PollEv.com/mchakrabarty551

Join by Text Send **mchakrabarty551** to **22333**



Systematic Challenges

Locating Patient

- Initial IJN submitted 12/16/21
 - No known destination address in our jurisdiction
 - No access to telephone
 - Email listed, but no response received
- Ongoing efforts with collaboration with State and NM DOH to locate patient
 - Phone number found of friend – unable to locate
- Established OB care at local FQHC 2/2022 and immediately referred to Sacramento County Chest Clinic

Laboratory Processing of AFB culture specimens

- Contracted with reference lab (Labcorp)
 - Order sets used (AFB Smears and MTB PCR without AFB cultures)
 - Large volume of labs - some processed at health department lab
- New Mexico DOH provided consultation

Drug Susceptibility Testing?

Genotyping?

Lab Cross-Contamination?

Case Outcomes

- Restarted therapy from beginning
- Completed DOT 130 (HRE+PDX)
- Delivered a healthy baby girl!
- Undergoing Posttreatment surveillance monitoring

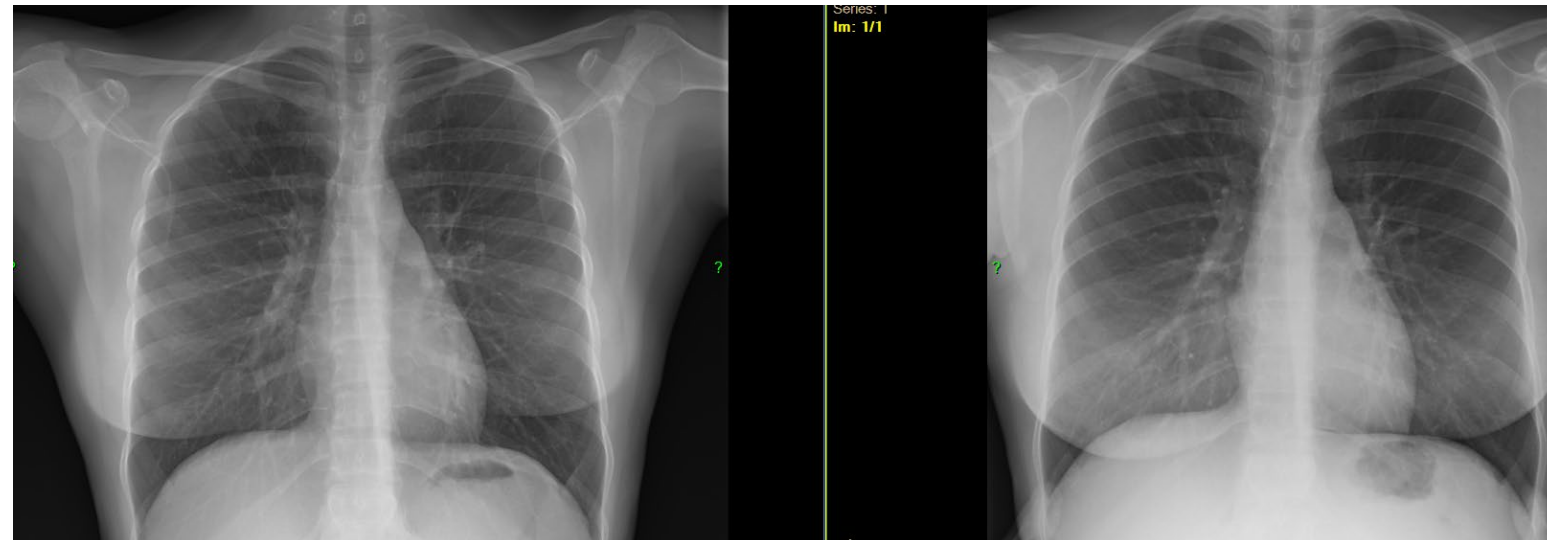
Table 6. Management of Treatment Interruptions^a

Time Point of Interruption	Details of Interruption	Approach
During intensive phase	Lapse is <14 d in duration	Continue treatment to complete planned total number of doses (as long as all doses are completed within 3 mo)
	Lapse is ≥14 d in duration	Restart treatment from the beginning
During continuation phase	Received ≥80% of doses and sputum was AFB smear negative on initial testing	Further therapy may not be necessary
	Received ≥80% of doses and sputum was AFB smear positive on initial testing	Continue therapy until all doses are completed
	Received <80% of doses and accumulative lapse is <3 mo in duration	Continue therapy until all doses are completed (full course), unless consecutive lapse is >2 mo If treatment cannot be completed within recommended time frame for regimen, restart therapy from the beginning (ie, restart intensive phase, to be followed by continuation phase) ^b
	Received <80% of doses and lapse is ≥3 mo in duration	Restart therapy from the beginning, new intensive and continuation phases (ie, restart intensive phase, to be followed by continuation phase)

Abbreviation: AFB, acid-fast bacilli.

^a According to expert opinion, patients who are lost to follow-up (on treatment) and brought back to therapy, with interim treatment interruption, should have sputum resent for AFB smear, culture, and drug susceptibility testing.

^b The recommended time frame for regimen, in tuberculosis control programs in the United States and in several European countries, is to administer all of the specified number of doses for the intensive phase within 3 months and those for the 4-month continuation phase within 6 months, so that the 6-month regimen is completed within 9 months.



Aug 2023 – 1 year post treatment

Feb 2022

Lessons Learned – Adaptations in Clinical Workflow

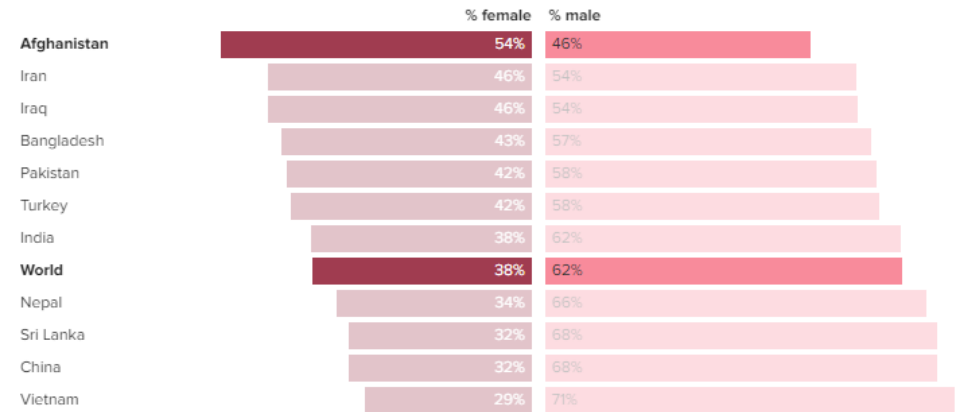
- **Barriers to get finalized culture data** from reference lab
 - Only provider affiliated w/ Holloman Air Force Base could obtain result
 - Collaborated w/ CDPH and California Lab Corp lab representative
 - Unsure of any lab error or cross contamination
 - Designate public health lab / local or state DOH to receive positive TB isolates
- **Unclear pretreatment imaging & treatment interruptions**
 - Goal to avoid > 2 weeks of interruptions during intensive phase of treatment
 - If prior imaging was available, maybe a shorter duration could be pursued
 - Can we build a mechanism for electronic data transfer of images?
- **IJN & Improving linkage to care**
 - Barriers to accessing phone / email
 - Educating patient / family on anticipated end of treatment
 - Can we establish a followup visit prior to departure & provide clinic information to family?
 - Chest Clinic info / nonstigmatizing TB awareness - at local refugee health clinics / organizations – refugee navigator

Cultural Considerations

- TB reporting in Afghanistan
 - Lack of resources to access TB services
 - Limited reporting TB cases & unclear rates of drug resistance
 - Perception that TB is acquired from refugee camps
- Gender disparity in TB
- TB preventative therapy
 - Why do I need treatment if I am not sick?
- Challenges to access to record (unknown documentation/date of birth – “Jan 1st birthday”)
- Duration of therapy & perception of toxicity
 - Another case w/ treatment interruptions, continuation phase of treatment
 - What to do about reintroducing PZA?

Afghanistan's tuberculosis gender disparity

Globally, most tuberculosis cases are men. In **Afghanistan**, the majority are women. This chart shows how the gender balance compares to the global average, and to 10 other countries.



Source: Global Tuberculosis Report, WHO, October 2020

The New Humanitarian



<https://www.thenewhumanitarian.org/news-feature/2021/2/24/tuberculosis-hits-more-women-in-afghanistan>

Uniting for Ukraine : TB Screening Campaigns

U4U LTBI, Evaluation and Treatment Rates

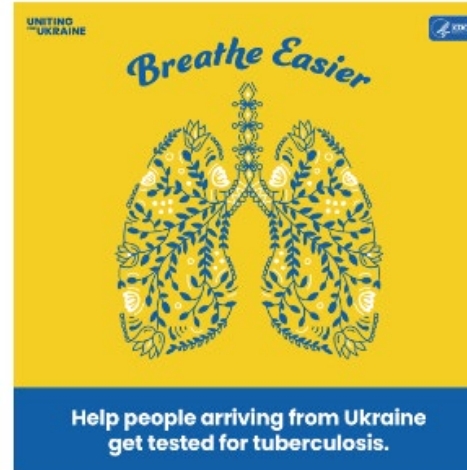
U4U Arrivals	Sacramento County	California
Referred	311	2536
Evaluated	308	2295
By TST	14	34
By IGRA	294	2261
TB disease	0	1
Latent TB infection	178	293
Started treatment	44	100
Completed treatment	8	22
Evaluation rate	99.0%	90.5%
Disease rate	0.00%	0.04%
LTBI rate	57.8%	12.8%
Treatment rate	24.7%	34.1%
Completion rate	18.2%	22.0%

Data Source: CalREDIE, U4U Arrivals Feb 1, 2022 – Sept 7, 2023. CDPH TBCB Melissa Ehman

Images

Top Left: <https://www.cdc.gov/tb/programs/unitingforukraine.htm>

Top Right & Bottom TB campaign – Sacramento County & Rachel Benn, Runyon Saltzman Marketing





You can treat Latent Tuberculosis
 Ви МОЖЕТЕ вилікувати латентний туберкульоз,

before it becomes trouble.
 перш ніж він стане проблемою.

Treat Latent Tuberculosis now to prevent serious symptoms later. Talk to your primary care provider or contact the Sacramento County Chest Clinic for treatment.
 Лікуйте латентний туберкульоз зараз, щоб запобігти появі серйозних симптомів пізніше. Поговоріть зі своїм постачальником первинних медичних послуг або зверніться стосовно лікування до клініки Sacramento County Chest Clinic.

You CAN be TB free.
 Ви МОЖЕТЕ позбутися туберкульозу.

TBFreeSac.com


Citrus Plaza Market - 6240 San Juan Ave Citrus Heights CA 95610

Russian & Ukrainian Grocery

Thank you!

- Colleagues at Safe Havens & Health Departments
- CPDH TBCB
- CDC Division of TB Elimination
- Sacramento County Chest & Refugee Clinic teams
 - Etta Dixon, Melanie Capiccioni
 - Karen Giordano, Sharon Hutchins