The Establishment of Rapid Screening, Isolation, and Treatment of Tuberculosis among Operation Allies Welcome Refugees

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Agenda

1. Overview
   a) OAW
   b) TB in Afghanistan
2. Camp Layout
3. Screening
   a) I-693 Form
   b) Screening results
4. Challenges of Screening and Isolation
5. Wisconsin State Lab of Hygiene
   a) Volume of samples
   b) Challenges of Testing
6. Compliance
7. Lessons moving forward
Operation Allies Welcome (OAW)

- United States military operation to airlift certain at-risk Afghan civilians, particularly interpreters, U.S. embassy employees, and other prospective Special Immigrant Visa (SIV) applicants from Afghanistan

- Approximately 84,600 Afghan nationals, American citizens, and Lawful Permanent Residents have arrived in the U.S. as part of Operation Allies Welcome (OAW)
Tuberculosis in Afghanistan

- On the WHO’s “High Burden TB Country List 2022” for having TB incidence rates of ≥ 20/100,000 population
- In 2019 women represent about 38 percent of TB infections globally, but in Afghanistan they’re about 54 percent
- Data from recent years has been difficult to obtain

Afghanistan WHO TB Data from 2020

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Rate per 100,000 population</th>
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<tbody>
<tr>
<td>Total TB incidence</td>
<td>75,000</td>
<td>193</td>
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<tr>
<td>HIV-negative TB mortality</td>
<td>11,000</td>
<td>27</td>
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<table>
<thead>
<tr>
<th></th>
<th>Percentage of Confirmed TB Cases</th>
<th>Rate per 100,000 population</th>
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<tbody>
<tr>
<td>Incidence of resistant TB in new cases</td>
<td>3%</td>
<td>6</td>
</tr>
<tr>
<td>Incidence of resistant TB in retreatment cases</td>
<td>12%</td>
<td>23</td>
</tr>
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TB Trends in Afghanistan

TB, 2010-2020
- People Developing TB
- On Treatment
- Successfully Treated

Drug Resistant TB, 2010-2020
- People Developing DR-TB
- On Treatment
- Successfully Treated

TB-HIV Co-infection, 2010-2020
- People Developing TB-HIV
- On Treatment
- Successfully Treated

Source: WHO

https://www.stoptb.org/static_pages/AFG_Dashboard.html
Fort McCoy
Camp Layout

Barracks
- 50-70 people in open bays
- 2 floors with shared air flows
- Multiple families
- Single males and single females
- Shared bathrooms
- To-Go meals in cafeteria
- Group gathering areas including schools, women/men centers, and immigration centers
Camp Layout

Camp Liberty

- 12 person tents
- One shared shower
- Port-a-potties and pump hand-washing
- Multiple diseases in proximity

<table>
<thead>
<tr>
<th>TB</th>
<th>Measles</th>
<th>Varicella</th>
<th>COVID-19</th>
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GSA PARKING

BUS PARKING
I-693 Immigration Screening

Form I-693 reports results of a medical examination to U.S. Citizenship and Immigration Services (USCIS). USCIS requires the examination to establish that applicants who are seeking immigration benefits are not inadmissible to the United States on public health grounds.
TB Case Management Flow Diagram – Ft. McCoy, WI

**Precautions for staff interacting with suspected & confirmed cases:**
1. Staff should follow airborne precautions and wear n95 masks when transporting patients.
2. Patients should wear surgical mask.

**Risk Assessment:** Should patient be isolated and moved from current accommodation; barracks and household contacts identified in consultation with state and local TB department.

**Evaluation** in acute medical care clinic by Loyal Source Provider:

1. Symptom screen (fever, chills, weight loss, cough, night sweats)
2. If HIV (+) or evidence of extrapulmonary TB
3. IGRA (if not already done by SRP)
4. If TB contact

**CXR**

- Abnormal
- Normal / not consistent with TB

**Sputum sample collection for AFB and cultures, labs if indicated, and risk assessment; discuss with county / state health department**

**If IGRA (+), LTBI diagnosis; call health department if under 5 y.o. or high risk**

Medical team: counsel patients and provide a surgical mask.

In any circumstance where a person with suspected or confirmed TB is being transferred to a medical facility for care, EMS/transport and the receiving facility must be notified in advance about the potential infection and need for airborne isolation upon arrival.
73,714 Medical Exams across 8 OAW sites

12,388 Medical Exams at Fort McCoy

1,562 Positive IGRAs and CXRs

56 Abnormal CXRs

1 Drug Resistant TB Patient

17 Active TB Patients

~137/100,000
Lower than the 193/100,000 Afghan national average

14.1% Positive IGRA rate
Challenges of Screening, Identification, and Isolation

- Other competing disease priorities
- Gender norms and treatment of females
- Lack of English speakers and interpreters
  - 2 languages
- Lack of unique identification of refugees
  - Different name spellings and name translation
  - No birthdays for many which led to issues with lab
  - No unique number
Challenges of Screening, Identification, and Isolation

- Fort McCoy is set for screening of military members
  - Availability of treatment space
  - It took time to concentrate resources for treatment
  - Population from a war-zone like environment
- Supply chain issues with medications
- Resources of the surrounding labs and medical facilities were stressed
### Wisconsin State Lab of Hygiene Testing
Data courtesy of WSLH’s Nate Simon

<table>
<thead>
<tr>
<th></th>
<th>2020 AFB Smear/ Culture Volume</th>
<th>2021 AFB Smear/ Culture Volume</th>
<th>Percent Increase from 2020 to 2021</th>
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<tbody>
<tr>
<td>20-Aug</td>
<td>280</td>
<td>403</td>
<td>44%</td>
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<tr>
<td>20-Sep</td>
<td>343</td>
<td>434</td>
<td>27%</td>
</tr>
<tr>
<td>20-Oct</td>
<td>322</td>
<td>455</td>
<td>41%</td>
</tr>
<tr>
<td>20-Nov</td>
<td>288</td>
<td>435</td>
<td>51%</td>
</tr>
<tr>
<td>20-Dec</td>
<td>335</td>
<td>421</td>
<td>26%</td>
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WSLH Mycobacteriology: Monthly Testing Volume

Specimen Receipt

Aug  2018  2019  2020  2021
Sep  300   350   320   380
Oct  350   350   320   400
Nov  300   350   320   380
Dec  300   350   320   400

Data courtesy of WSLH's Nate Simon
Challenges with Testing

- Lack of unique identifiers, misspellings of names, and no birthdays
- Increase in volume of testing
  - TB, measles, chicken pox, and others
- Difficulty establishing new communication
- Availability of testing kits
- Learning curve with labeling and shipping samples
Compliance

- TB can be seen as a punishment for sins so stigma can be high
  - Individuals will deny that they have it
  - Families may ostracize individuals

- Difficulties with understanding and trust
  - Translation of medical concepts are not always available
  - Some believed that the medicine was toxic
  - Lack of trust of the military and government.
Lessons Moving Forward

- A coordinated response is a quick response
- Develop SOPs for site of operation and surrounding areas
- Prioritize Prevention
  - Vaccines
  - Screening
Acknowledgements