

# TUBERCULOSIS PREVENTION & CONTROL

## About Our Program

The Ben Franklin TB Control Program consists of the TB Clinic and the Direct Observed Therapy (DOT) Team. The Clinic screens for TB and treats patients for latent TB infection (LTBI) in contacts and in governmental Quarantine Referrals, and in persons at high risk for TB. The DOT Program treats active TB patients and their contacts at home, observes patients taking their medications for at least 6 months, investigates new cases, works to stop TB disease from spreading, and educates the community.

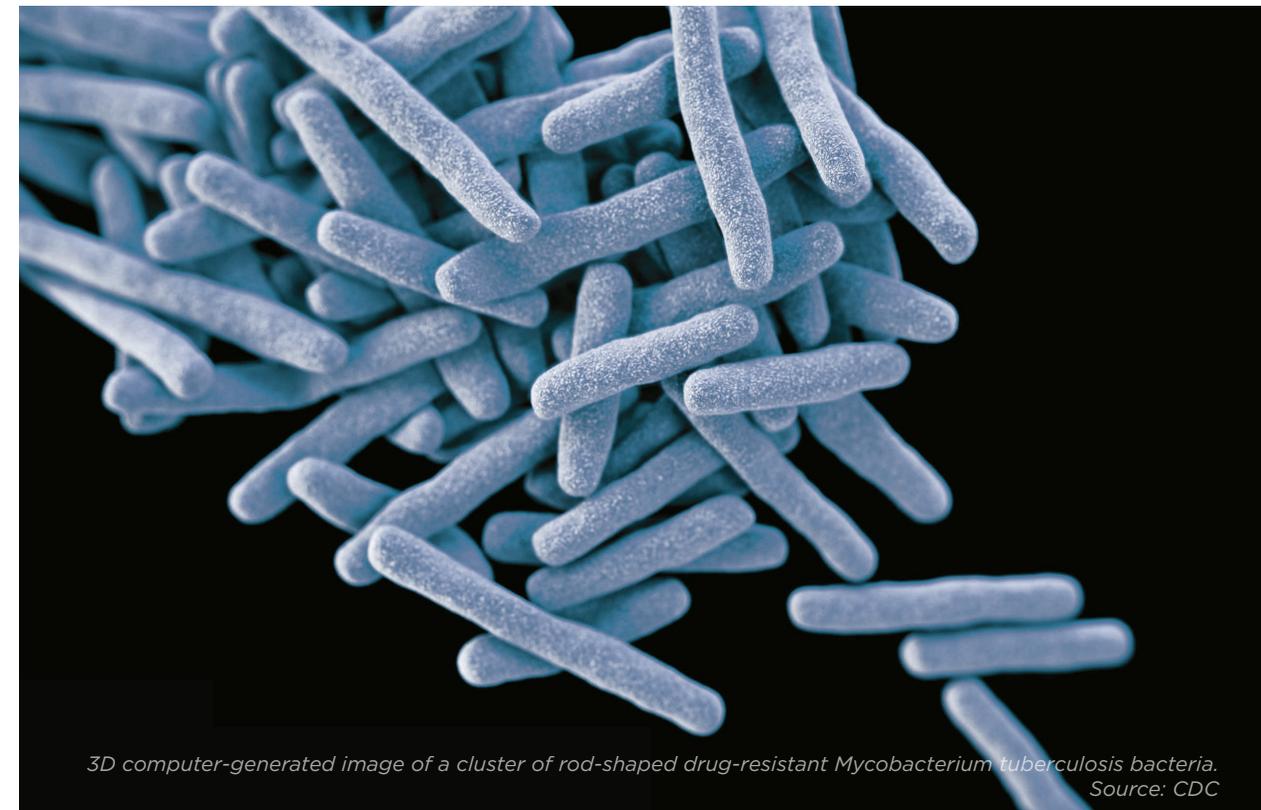
## Tuberculosis

Tuberculosis (TB) is a communicable, airborne disease caused by the bacillus *Mycobacterium tuberculosis (M.tb)*.

Persons who are infected with *M.tb* but not sick or contagious, have latent TB infection (LTBI). They most likely have a positive skin or blood test and a normal chest x-ray. About 10% of people with LTBI will go on to develop active TB disease in their lifetime. However, a two-drug medication regimen of Rifampine and Isoniazid, taken weekly for 12 weeks, kills the latent TB germ.

Failure to finish the entire treatment for LTBI can lead to active TB disease and not taking medication as directed can lead to multidrug-resistant (MDR) TB. This means that some drugs will no longer work to kill the infection.

People in close contact with someone who has active TB are at greatest risk for developing active TB disease themselves within two years.



3D computer-generated image of a cluster of rod-shaped drug-resistant *Mycobacterium tuberculosis* bacteria. Source: CDC

## COLUMBUS OHIO'S BEN FRANKLIN TUBERCULOSIS CONTROL PROGRAM

# 2013 REPORT

### Ben Franklin Tuberculosis Control Program

Serving Columbus and Franklin County Residents

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# FRANKLIN COUNTY TUBERCULOSIS STATISTICS

	2011	2012	2013
<b>TB Cases in Franklin County</b>	50	42	50
<b>Cases per 100,000 in Franklin County</b>	4.3	3.7	4.2
<b>TB Cases in Ohio</b>	145	149	148
<b>Cases per 100,000 in Ohio</b>	1.3	1.3	1.3
<b>Cases per 100,000 in the US</b>	3.4	4.2	3.0

## OUR CASES

### Residence & Origin:

- 33.8% of Ohio's active TB patients lived in Franklin County.
- 70% of active TB patients were foreign-born.

### Cases by Age: :

- 4 and under: 0%
- 5 - 14 years: 6%
- 15 - 24 years: 12%
- 25 - 44 years: 46%
- 45 and over: 36%

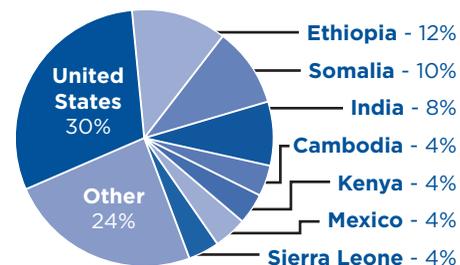
### Infection Location:

- TB infection in the lungs: 58%
- TB in other parts of the body: 28%
- TB in both lungs and other: 14%

### Other Demographics:

- 52% of our TB cases were black, 22% were white, and 26% were Asian.
- 14% of active TB cases abused alcohol, 12% non-injection drugs, and 6% abused injection drugs. Both immune system and nutrition factors affect how a person can fight and overcome TB infection.
- Almost 12% of active TB cases were unemployed and 10% had a history of homelessness. People who are unemployed or homeless have poorer nutrition and often poorer health, making it harder to fight off TB.

### Leading Countries of Origin:



# TUBERCULOSIS CONTROL PROGRAM OUTCOMES

- 98.8% of contacts who were positive TB cases were evaluated for infection and disease, helping to limit transmission in the community.
- 100% of contacts to active TB patients newly diagnosed with LTBI were started on prevention treatment.
- 96% of active TB patients were treated using Directly Observed Therapy, assuring that they have completed their full treatment.
- 96% of TB patients had an HIV status documented in their medication record, a crucial factor in the TB plan of care. People infected with HIV have weak immune systems, making it harder to fight TB infection.

## A PATIENT'S EXPERIENCE WITH TB

L.O. is foreign-born female who came to the U.S. as a refugee from South East Asia in the spring of 2010. Her immigration screenings were negative for TB in her lungs when she arrived in the U.S, but she had some lower back pain and a positive TB skin test. As she became more comfortable with her new life in central Ohio with her husband and two children, her back pain started getting worse.

By January of 2013, she was hospitalized for severe pain and leg weakness. She was now unable to sit or stand and could barely walk. Her CT scans showed that two discs in her lumbar spine were damaged and she had an abscess (puss pocket) in her left leg muscle. The hospital sent a specimen to find out the cause and Mycobacterium tuberculosis grew from the specimen. She was referred to the Ben Franklin TB Control Program and was started on a four-drug TB medication regimen. In the winter and spring of 2013, she returned to the hospital more three times. The TB Program staff delivered her TB medications to her home and watched her take them during the week, which is called Direct Observed Therapy. Additionally, she needed physical therapy to regain her leg strength and learn to walk again. This type of TB is called "Pott's Disease" and needs treatment with TB medications for up to 18 months.

By June of 2013, tests showed her infection was getting better. The TB social worker helped her secure nutrition assistance and health coverage for her family. By the fall of 2013, her strength had improved and she started working, while still on her TB treatment. She now assists other immigrants from South East Asia with adjusting to life in central Ohio, so they may also have a healthier, safer life!