

## Health Indicator

### ACTIVE TUBERCULOSIS IN THE DENVER METRO AREA

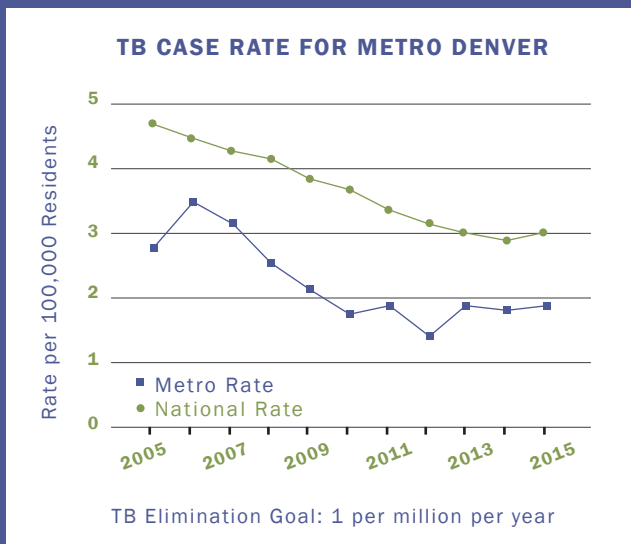
Tuberculosis (TB) is an infectious disease that is spread through the air. It usually affects the lungs but may also affect other parts of the body, including the brain, kidneys or spine.

Most people are infected many years before developing active disease. By diagnosing and treating people with TB infection, we can prevent them from getting sick and spreading TB to others. Despite this, TB has not been eliminated from Colorado, and people in metro Denver get sick from TB every year.

Working toward TB elimination through treatment of infection is important because:

- TB is the leading cause of death from an infection globally and kills people in Colorado every year.
- TB can cause permanent scarring in the lungs, making it difficult to breathe even after treatment.
- TB prevents people from working or going to school, which is costly for the individuals and for the community.

This health indicator reports the number of active TB cases in the Denver Metro Area and explains how we are working to eliminate TB in our community.



### What are we measuring and how are we measuring it?

Denver Public Health routinely evaluates, treats and collects data for all patients diagnosed with active TB in the seven-county Denver metropolitan area (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson Counties).

- Data is sent to the Colorado Department of Public Health and Environment (CDPHE) and the Centers for Disease Control and Prevention (CDC).

### Why do we measure this, and what is the data telling us?

The TB elimination goal is less than one case per million people each year.

- In 2015, the national rate was 30 cases per million and the rate in the Denver Metro Area was 18 per million.
- Recent trends suggest that TB rates in the U.S. and in the Denver Metro Area have plateaued.
- TB rates remain the highest among individuals who have lived in a country or community where TB disease is common.

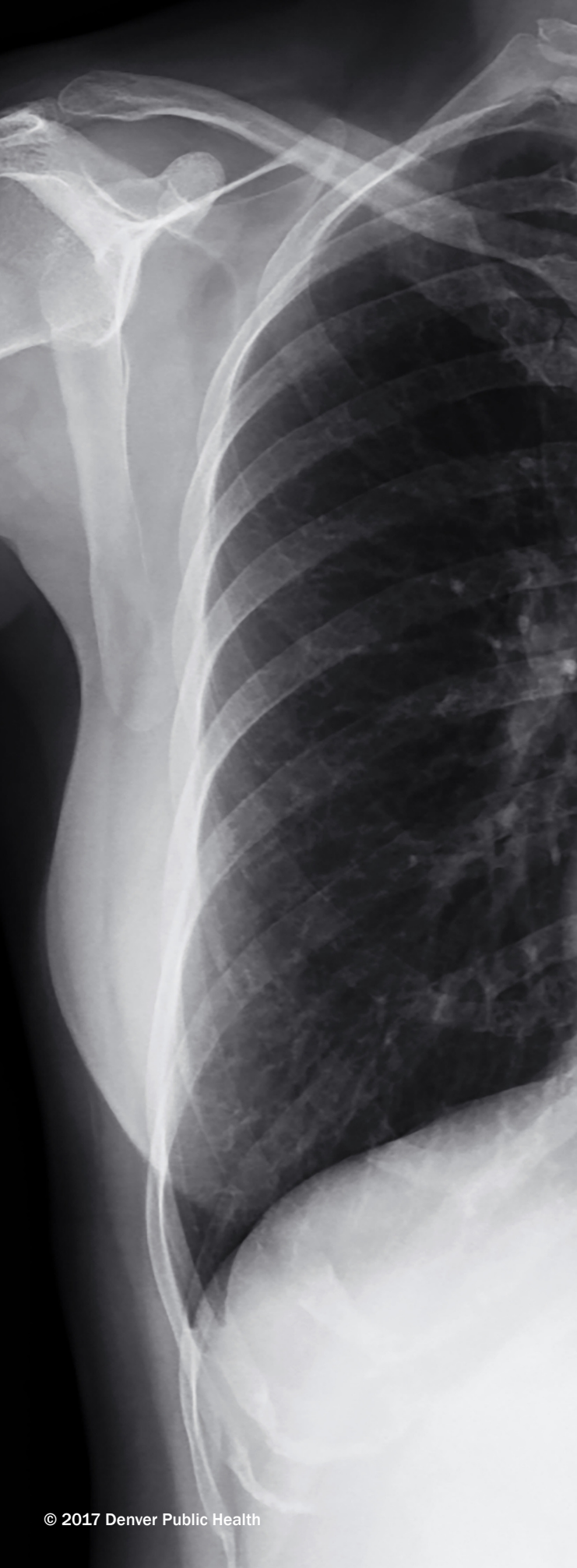
### What evidence-based actions or practices are we using at Denver Public Health to eliminate TB?

- Screening high-risk individuals for TB infection and disease, including testing people who have been in close contact with someone who was sick with TB.
- Monitoring TB treatment using directly-observed therapy (DOT) to ensure patients receive the correct medications with every dose and are not having side effects.
  - Denver Public Health is also using video technology to make treatment monitoring easier for patients and the TB clinic staff.
- Treating individuals with TB infection and no active disease to reduce their risk of developing active TB later in life.
- Genotyping TB specimens to monitor for TB transmission in our community.
- Using nucleic acid amplification testing (NAAT) to identify patients with TB disease faster and more accurately than with traditional microbiological tests.
- Encouraging primary care providers to screen their patients for TB infection.

### What is the Colorado TB elimination plan?

Denver Public Health is partnering with CDPHE to implement the Colorado TB Elimination Plan to guide state-wide efforts to reduce the burden of TB.

- **Goal 1:** Find and engage individuals and populations at-risk for TB infection.
- **Goal 2:** Test those at-risk for TB infection and progression to TB disease so individuals know their status.



- **Goal 3:** Ensure completion of treatment of those diagnosed with TB infection.
- **Goal 4:** Create systematic support for TB prevention.
- **Goal 5:** Tailor communication messages to key groups.
- **Goal 6:** Integrate emerging technologies/report and track with ongoing evaluation of programmatic effectiveness.

### Who are our partners?

- Boulder County Public Health
- Colorado Department of Public Health and Environment (CDPHE)
- Community groups that provide services for populations at higher risk for TB infection
- Denver Health's Community Health Services
- Jefferson County Public Health
- Metro Community Provider Network
- Tri-County Health Department

### How to learn more or partner with us

- Call (303) 602-7240
- Email our clinic administrator, Kathy Root, at [kathryn.root@dhha.org](mailto:kathryn.root@dhha.org)
- Visit the [Denver Metro TB Clinic Website](#)

### Additional sources of data related to the measurement being monitored:

- [Colorado Department of Public Health and Environment's TB site](#), including TB rates for Colorado counties.
- [Center for Disease Control and Prevention's Division of Tuberculosis Elimination](#)
- World Health Organization's page on TB: <http://www.who.int/tb/en/>

#### GRAPH SOURCES

*National Rates: CDC Division of Tuberculosis elimination: CDC. TB Incidence in the United States, 1953-2015. Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2014.*

*Metro Rates: Denver Metro Tuberculosis Clinic; Population estimates are year-based estimates from State Demography Office, Colorado Department of Local Affairs*