



Georgia Department of Public Health

2016 Georgia Program and Data Summary

TUBERCULOSIS

Tuberculosis (TB) is an infectious disease caused by the germ *Mycobacterium tuberculosis complex* or tubercle bacilli. It usually affects the lungs but can affect any part of the body. TB is curable, but can be fatal if not treated.

WHAT IS TUBERCULOSIS (TB)?

TB is an infectious bacterial disease that is spread from person to person through the air. It usually affects the lungs (pulmonary TB), but can affect any part of the body. TB is transmitted when persons with pulmonary or laryngeal TB cough, sneeze, speak, or sing, and expel droplets containing TB bacilli. A susceptible person may inhale the tubercle bacilli and get infected.

WHAT ARE THE SIGNS AND SYMPTOMS OF TB?

The most common symptoms of pulmonary TB include a persistent, productive cough lasting more than 2-3 weeks, fever, night sweats, weakness, and weight loss.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF TB?

The best way to stop TB transmission is immediate respiratory isolation of infectious TB patients at home or at a healthcare facility and starting effective TB therapy. Infectiousness declines rapidly after adequate therapy is started and the patient adheres to the prescribed TB treatment. TB patients must cover their mouths and noses when coughing, and take the prescribed medicines as directed by their healthcare provider.

WHO IS AT RISK FOR TB?

Anyone can get TB, but some people are at higher risk:

- Close contacts of a person with infectious TB
- HIV-infected individuals
- Immunosuppressed persons, e.g., on prolonged corticosteroid therapy or taking tumor necrosis factor blockers
- Foreign-born persons from countries where TB is common
- Injecting drug users
- Residents and employees of homeless shelters, nursing homes, jails, and prisons
- Mycobacterial laboratory personnel and healthcare workers who serve high-risk clients
- Persons with diabetes mellitus, silicosis, end stage renal disease, gastrectomy, jejunioileal bypass, leukemia, lymphoma, or cancer of the head or neck

These persons should receive a TB skin test annually to screen for active TB or latent TB infection.

What is the difference between active TB disease and latent TB infection?

In active TB disease, the person is symptomatic and TB bacilli are actively multiplying and attacking different parts of the body. Persons with active TB disease can infect other people.

Latent TB infection (LTBI) is a condition in which TB bacilli are present in the body but are inactive because the immune system can fight the bacteria to stop it from multiplying. Persons with LTBI

have no symptoms and are not contagious, but may develop TB disease later in life if they do not receive treatment for LTBI.

TB PROGRAM OVERVIEW

The mission of the Georgia DPH TB Program is to control TB transmission, prevent illness, and ensure TB treatment completion. This is accomplished by the following:

1. Identifying and treating persons who have active TB disease
2. Finding, screening and treating infected contacts
3. Screening high-risk populations

The Georgia TB Program is funded by the state of Georgia and the U.S. Centers for Disease Control and Prevention.

WHAT DOES THE TB PROGRAM DO?

- Conducts case reviews to ensure that all TB cases in Georgia receive appropriate treatment
- Provides individualized case management to TB patients that includes supportive social services, including incentives and enablers to complete treatment by directly observed therapy
- Identifies, locates, and evaluates persons exposed to TB (TB contacts)
- Provides TB testing, bacteriology, radiologic services, and anti-TB medications to persons who have active TB and their infected contacts
- Provides education and treatment to contacts with LTBI to prevent future illness
- Maintains statewide TB surveillance system and ensures complete, accurate, and timely reporting of newly diagnosed and suspected TB cases
- Provides oversight and builds capacity of health districts, hospitals, and health providers to identify, treat, and control transmission of TB through education, training, and technical assistance

WHAT TB PROGRAM SERVICES ARE AVAILABLE?

- Medical consultation
- Nurse case management
- Free laboratory diagnostic testing
- Free TB and LTBI medications
- Directly observed therapy
- Contact investigation
- Outbreak and TB cluster investigation
- Surveillance and data analysis
- Education and training
- Incentives and enablers for patients to complete TB and LTBI therapy

WHERE ARE SERVICES LOCATED?

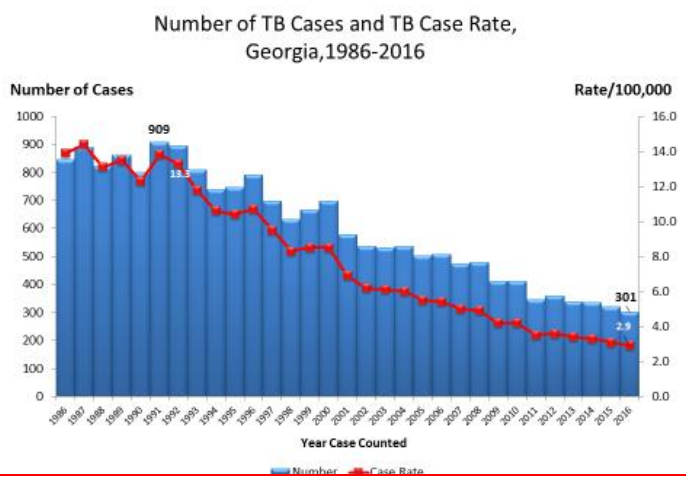
In every County Health Department and District Health Office in Georgia

WHO IS ELIGIBLE FOR PROGRAM SERVICES?

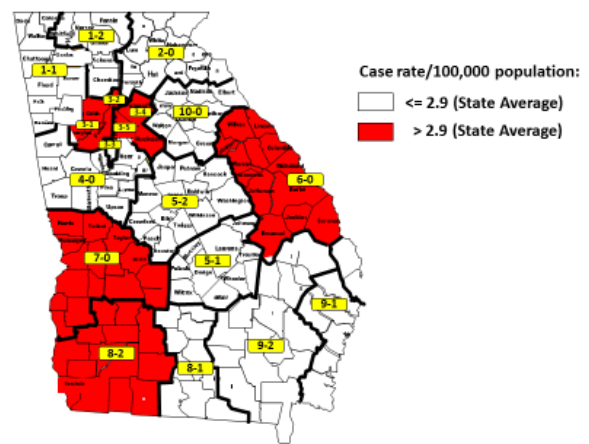
TB Program services are provided at no charge to persons who have confirmed active TB disease or presumptive TB, persons exposed to TB patients and infected TB contacts regardless of their ability to pay.

TB cases are decreasing in Georgia due to successful Public Health

- In 2016, 301 TB cases were reported in Georgia – a 6% decrease from 2015 and a 67% decrease from the early 1990s when ~900 cases were reported every year.
- Georgia has the 10th highest TB case rate (2.9 per 100,000) among the 50 U.S. states
- DeKalb (58 cases), Fulton (44), Gwinnett (33), and Cobb (24) Counties accounted for more than half of reported TB cases in Georgia during 2016.
- The highest proportion of TB cases by race/ethnicity were among Black, non-Hispanics (50%), and the highest proportion of TB cases by age group (37%) occurred among persons 45-64 years old.
- High-risk populations: 48% of TB cases in 2016 were foreign-born, 14% abused alcohol, 11% were HIV-positive, 10% abused drugs, 9% were homeless, 2% were inmates of correctional facilities, and less than 1% were nursing home residents.
- Three multidrug-resistant (resistant to at least isoniazid and rifampin) TB cases were reported in Georgia during 2016.



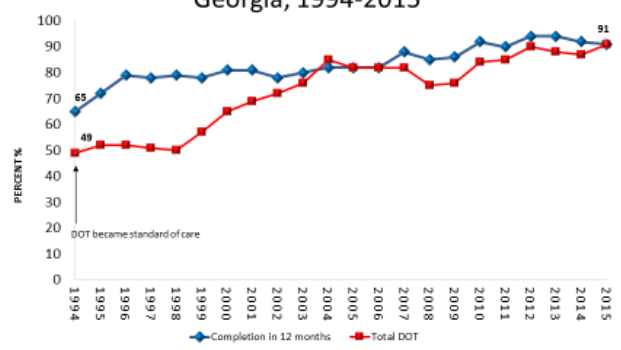
TB Case Rate by Health District, Georgia, 2016



Public Health Departments monitor TB treatment by directly observed therapy

- Public Health staff directly observe TB patients take every dose of their TB medications to ensure treatment completion. Directly observed therapy (DOT) prevents the development of drug-resistant TB.
- TB treatment usually takes at least 6-9 months to complete for drug-susceptible TB. Of 287 TB cases treated in 2015 in Georgia, 275 (96%) received treatment by DOT and 276 (96%) completed TB treatment.

TB Treatment Completion within 12 months and Directly Observed Therapy (DOT), Georgia, 1994-2015*



*In 2009, CDC changed the calculation for TB treatment completion within 12 months to exclude TB cases who moved out of the U.S. while on TB treatment.

Public Health Departments conduct contact investigations to prevent the spread of TB in the community

Public Health staff clinically evaluate individuals exposed to a person with TB for signs and symptoms of TB and administer a TB test. If the TB test is positive, these contacts will receive a chest x-ray (3, 4).

In 2015, the latest year with the most complete data on contact investigations, Public Health Departments in Georgia completely evaluated 3,750 (87%) of 4,323 contacts.

Among contacts completely evaluated for TB in 2015, 587 (16%) had latent TB infection (LTBI) and 21 (0.6%) had active TB. Among 361 infected contacts started on LTBI treatment, 270 (75%) completed treatment.

Education and Training Opportunities

The Georgia DPH TB Program can provide speakers for on-site training and educational events. Call the Georgia TB Program at 404-657-2634 to be referred to state TB nurse consultants to discuss the needs of your facility and staff.

The following classes are offered to Public Health Districts upon request:

- TB Update and Skin Test Certification
- TB Case Management
- Directly Observed Therapy (DOT)
- TB Contact Investigation
- Outreach Worker Training

Web-based Resources for TB Information:

- Georgia TB Program:
<https://dph.georgia.gov/tuberculosis-tb-prevention-and-control>
- Southeastern National TB Center:
<http://sntc.medicine.ufl.edu/>
- CDC Division of TB Elimination:
<http://www.cdc.gov/tb/default.htm>
- World Health Organization:
<http://www.who.int/topics/tuberculosis/en/>

References:

1. Georgia Department of Public Health, Georgia TB Reference Guide, 2016.
2. CDC. Treatment of Tuberculosis. *MMWR* 2003; 52 (No. RR-11).
3. CDC. Guidelines for the Investigation of Persons with Infectious TB: Recommendations from the National TB Controllers Association and CDC. *MMWR* 2005; 54 (No. RR-15, 1-37).
4. CDC. Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection. *MMWR* 2000; 49 (No. RR-6).

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