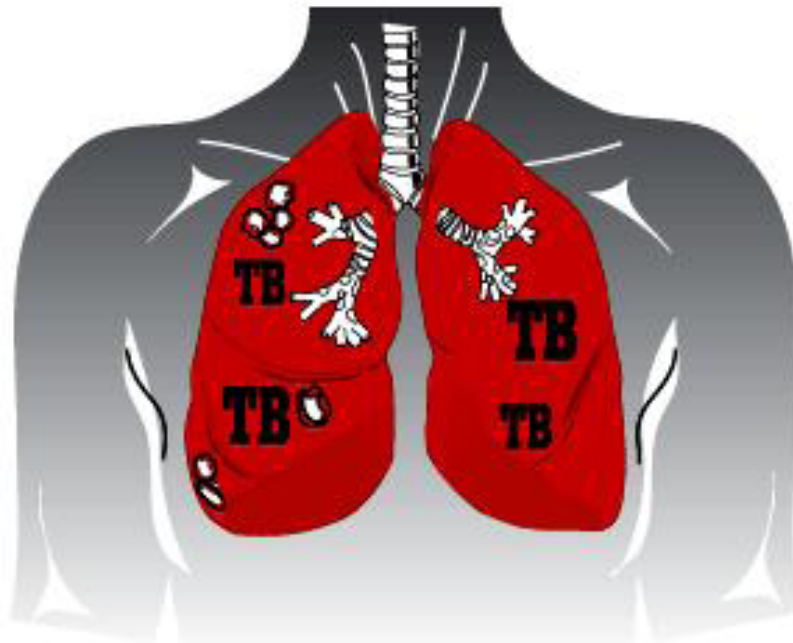


2008 Georgia Tuberculosis Report



HEAR **A**CT **L**EARN **T**REAT
TUBERCULOSIS



GEORGIA DEPARTMENT OF
COMMUNITY HEALTH
Division of Public Health

Georgia Department of Community Health | Division of Public Health

2008 Georgia Tuberculosis Report

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Tuberculosis (TB) Surveillance in Georgia

TB is a reportable disease in Georgia. All Georgia physicians, laboratories and other health care providers are required by law to immediately report clinical and laboratory confirmed TB cases under their care to Georgia public health authorities. TB cases may be directly reported to a County Health Department, a District Health office, or to the state TB Program and TB Epidemiology Team of the Georgia Department of Community Health, Division of Public Health (DCH-DPH), which is responsible for the systematic collection of all reported TB cases in the state. Immediate reporting of TB cases enables appropriate public health follow-up of patients, including administration of directly observed therapy, monitoring TB treatment until completion, evaluating and screening contacts exposed to a TB case, and outbreak investigation and control.

TB cases in Georgia can be reported electronically through the State Electronic Notifiable Disease Surveillance System (SendSS), a secure Web-based surveillance software developed by DPH, or by calling, mailing or faxing a report to public health authorities. Hospital infection control practitioners as well as public health nurses, outreach staff, epidemiologists, and communicable disease specialists involved in disease surveillance are encouraged to report TB through SendSS and register to become a SendSS user by logging into the system's Web site at: <https://sendss.state.ga.us> then selecting TB from the list of reportable diseases.

Public health authorities collect data on reported TB cases that include demographic, clinical, risk factor, and contact information, which are analyzed to describe the distribution of the disease among Georgia's population, identify high risk groups and TB clusters, describe trends in morbidity, mortality and drug resistance patterns, treatment outcomes, and infection rates among contacts to TB cases. The data are used at state and local levels to guide policy and decision making, set priorities for program interventions, evaluate program performance for the prevention and control of TB in Georgia, and educate key stakeholders and the general public on TB. Georgia's TB surveillance data are transmitted electronically to the U.S. Centers for Disease Control and Prevention and become part of the national TB surveillance database.

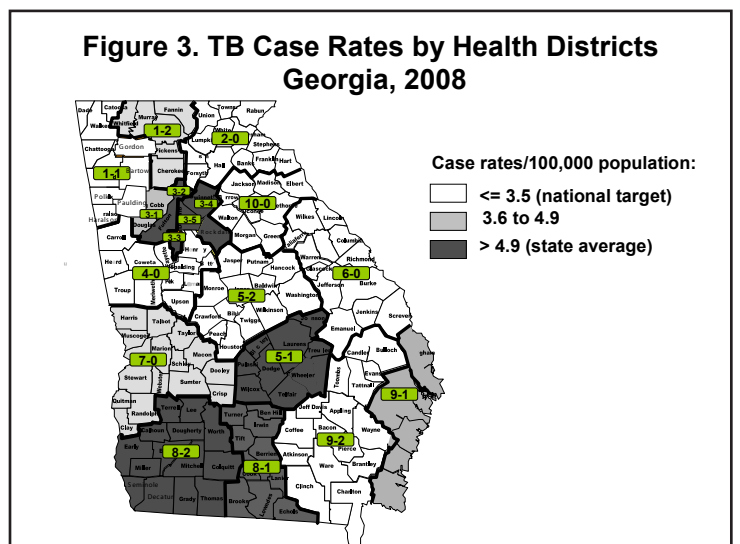
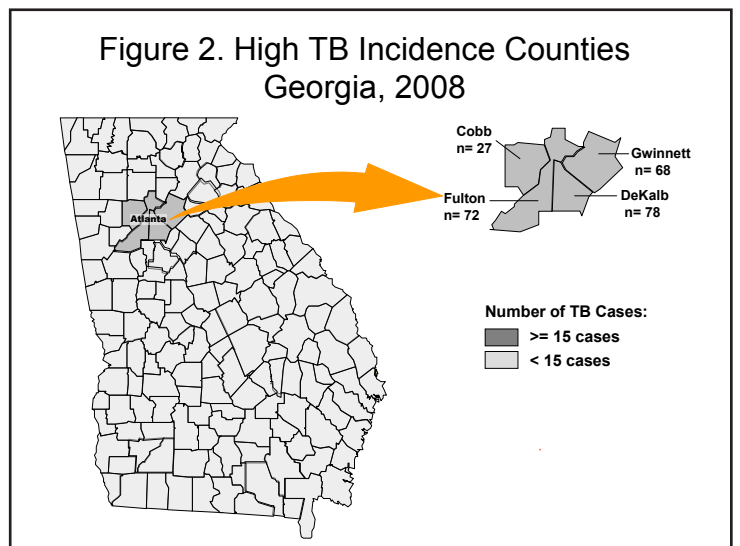
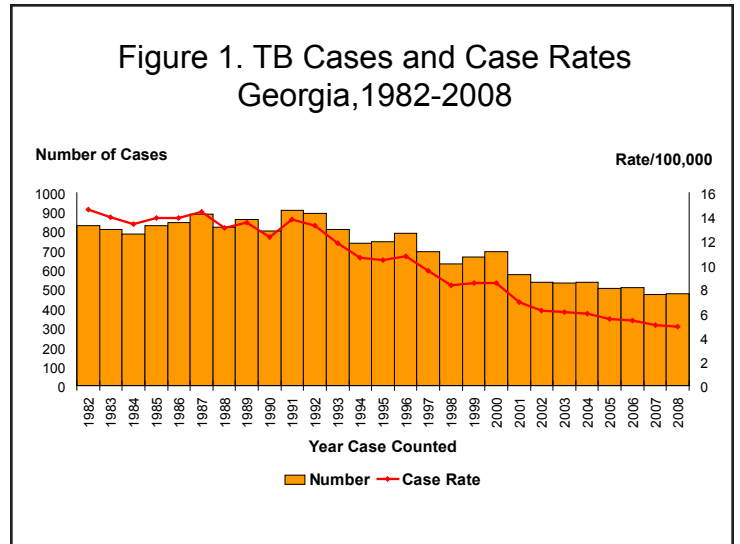
Current Epidemiology of Tuberculosis (TB) in Georgia

In 2008, 478 tuberculosis (TB) cases were reported in Georgia, representing a 1% increase from 473 TB cases reported the year before, but a 47% reduction in cases from the height of a resurgence in TB that occurred in Georgia in the early 1990s (Figure 1). Despite the declining incidence of cases, however, Georgia's TB case rate of 4.9 cases per 100,000 population is still higher than the national average of 4.2 cases per 100,000, and Georgia has the ninth highest TB case rate among the 50 states of the United States.

Geographic Distribution

Among Georgia's 18 Health Districts, which have oversight responsibility for public health in the 159 counties of the state, the three Health Districts with the highest TB case rates in 2008 were: DeKalb (10.5 per 100,000), Lawrenceville (8.3 per 100,000), and Fulton (7.1 per 100,000). These three Health Districts accounted for 48% of TB cases reported in Georgia in 2008, with the Lawrenceville Health District reporting the most (81 cases), followed by DeKalb (78) and Fulton (72). While the TB case rate in Fulton Health District decreased by half over the past 5 years (from 14.2/100,00 in 2004 to 7.1/100,000 in 2008), TB case rates increased dramatically in the Lawrenceville Health District (from 5.3/100,000 in 2004 to 8.3/100,000 in 2008), while sporadic year-to-year increases occurred in DeKalb.

Among 159 counties in Georgia, five metropolitan Atlanta counties reported the highest number of TB cases in 2008: DeKalb (78 cases), Fulton (72), Gwinnett (68), Cobb (27), and Clayton (14). Only two other counties reported 10 or more TB cases in 2008: Chatham (12 cases) and Dougherty (10). Eighty-three counties did not report a single case of TB, 57 counties reported fewer than 5 cases, and 12 counties reported between 5-8 cases in 2008 (Table 1, Figure 2).



Sex and Age Distribution

TB occurred predominantly among men (64%) while the highest number and proportion of TB cases by age group for both sexes occurred among persons 25-44 years old (177 cases, 37%) (Figure 4). The highest case rate by age group was among persons 45- 64 years old (6.6 per 100,000) while the lowest was in children 5-14 years old (0.6 per 100,000) (Figure 5).

Race/Ethnicity Distribution and TB Disparities

TB disproportionately affects racial/ethnic minorities in Georgia. In 2008, non-Hispanic blacks, Hispanics, and Asians accounted for 48%, 20% and 18% of TB cases in Georgia but only represented 30%, 8% and 3% of Georgia's population respectively (Figure 6). Non-Hispanic whites constituted 14% of cases in 2008. The highest TB case rate among race/ethnic groups was in Asians (27.2 per 100,000), followed by Hispanics (11.8 per 100,000), and non-Hispanic blacks (7.8 per 100,000). The non-Hispanic black case rate has been steadily decreasing but was still 6.5 times higher than the non-Hispanic white rate (1.2 per 100,000) in 2008 (Figure 8). From 2007-2008, TB case rates decreased among Hispanics and non-Hispanic blacks, increased among Asians, and remained stable for non-Hispanic whites (Figure 7).

Figure 5. TB Case Rates* by Age Group 2004-2008, Georgia

Age Group	2004	2005	2006	2007	2008
< 5 yrs.	3.5	4.3	4.1	3.5	4.5
5-14 yrs.	1	0.7	0.8	0.8	0.6
15-24 yrs.	4.9	5.6	5.1	4.3	3.9
25-44 yrs.	6.9	6.6	6.9	6.0	6.3
45-64 yrs.	8.5	6.1	6.6	6.0	6.6
65+ yrs.	8.9	8.6	6.1	7.4	5.4

*Rates are per 100,000 population

Figure 6. TB Cases by Race/Ethnicity Georgia, 1998 and 2008

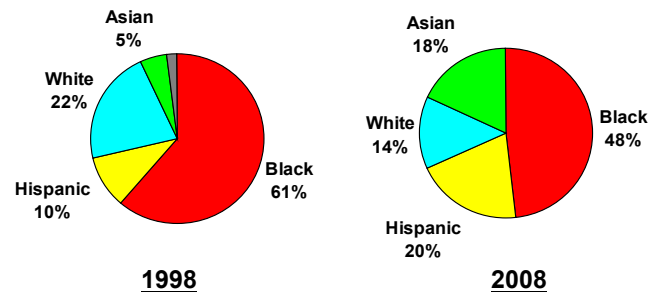


Figure 4. TB Cases by Age Group and Sex Georgia, 2008

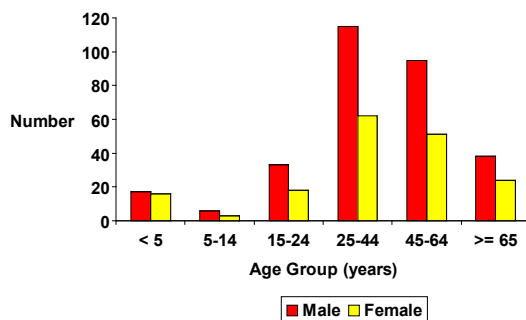
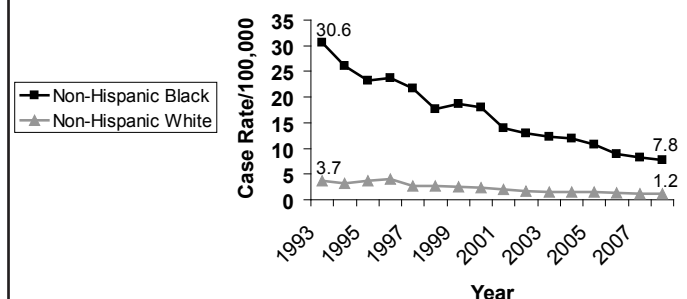


Figure 7. TB Case Rates* by Race/Ethnicity Georgia, 2004-2008

Race/ Ethnicity	2004	2005	2006	2007	2008
Asian, non-Hispanic	22.4	17.8	26.4	21.5	27.2
Hispanic, All races	15.3	13.6	16.5	12.9	11.8
Black, non-Hispanic	12	10.8	9.0	8.3	7.8
White, non-Hispanic	1.5	1.5	1.3	1.2	1.2

*Rates are per 100,000 population

Figure 8. TB Case Rates in non-Hispanic Blacks and Whites, Georgia, 1993-2008



High-Risk Populations

Foreign-born

The number of TB cases in Georgia among persons born outside of the United States increased five-fold from 1993 to 2008 (from 40 to 197 cases). In 2008, foreign-born TB cases made up 41% of TB cases in Georgia compared to only 5% in 1993. Most foreign-born cases reported in 2008 came from Mexico (27%), Vietnam (13%), India (10%), Ethiopia (10%), and Guatemala (7%) - countries where TB is an endemic disease (Figures 9-10). Of these foreign-born cases, 49% were diagnosed in the first five years of their arrival in the U.S.

In 2004-2008, the majority of foreign-born TB cases in Georgia were reported from five Health Districts: Lawrenceville (229 cases), DeKalb (209), Fulton (108), Cobb (88), and Dalton (40). Among these five Health Districts, foreign-born TB cases accounted for more than half of the TB cases in four Districts: Lawrenceville (74%), DeKalb (68%), Cobb (58%), and Dalton (53%). The number of foreign-born TB cases in Fulton Health District, though more numerous than that in Cobb and Dalton, represented only a fourth of the TB case load in Fulton during this time period.

Refugees and Immigrants

From 2004-2008, the GA TB Program received 914 B1/B2 notifications (B1=non-infectious active or inactive TB, B2= latent TB infection) from CDC's Division of Global Migration and Quarantine (DGMQ) for immigrants and refugees (I/Rs) who resettled in Georgia (average = 183 notifications/year, range: 152-279). A large increase in the number of B1/B2 notifications occurred in 2008 because I/Rs diagnosed with LTBI abroad were added to I/R notifications in 2008, after DGMQ changed their technical instructions (TIs) for evaluating I/Rs in 2007.

Of the 914 I/Rs with a B1/B2 classification who resettled in Georgia in 2004-2008, 42 (5%) were diagnosed by local health departments with active TB; 36 had laboratory confirmed TB and 12 were clinical cases. DeKalb Health District received the majority of the 914 I/Rs with a B1/B2 classification (374 I/Rs, 41%), followed by Lawrenceville (135 I/Rs, 15%) and Fulton (78 I/Rs, 9%). The countries where most of I/Rs with B1/B2 classifications came from were: the Philippines (127 I/Rs, 14%), Vietnam (121, 14%), Kenya (95, 11%), Thailand (89, 10%), and Mexico (71, 8%).

Figure 9. US-born and Foreign-born TB Cases Georgia, 1993-2008

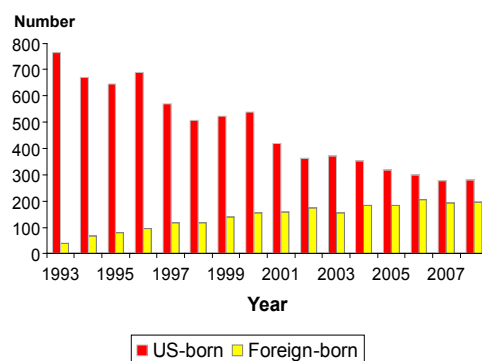
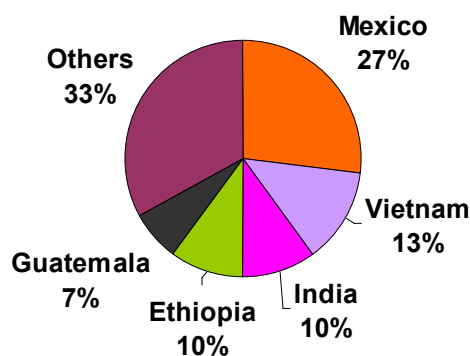


Figure 10. Percent of Foreign-born TB Cases (n=197) by Country of Origin, Georgia, 2008



HIV co-infection

All TB patients need to be tested for HIV infection because TB treatment may change when antiretroviral therapy for HIV is given, and active TB often accelerates the natural progression of HIV infection. In 2008, 411 (86%) TB cases had documented test results for HIV. Of these cases, 50 (12%) had HIV infection (Figure 11). Forty-three (9%) cases were not offered the HIV test, 13 (3%) had an unknown HIV status, 10 (2%) refused to be tested, and 1 (0.2%) had the test done but results were unknown. Among the 50 HIV co-infected TB cases, 80% were non-Hispanic blacks, 74% were male, and 50% were 25-44 years old.

Reporting of the HIV status of TB cases has much improved in Georgia. When expanded TB surveillance started in 1993, less than 50% of TB cases had HIV test results reported. From 2004-2008, HIV test reporting among TB cases ranged from 86% to 87%, exceeding national averages each year and the annual program target of 85% each year. Among the high-risk age group of adults 25-44 years of age, HIV reporting reached 95% in 2007 and 94% in 2008.

Congregate Settings and Substance Abuse

Persons residing in crowded congregate settings such as homeless shelters, prisons, and nursing homes are at risk for acquiring TB. In 2008, 49 (10%) cases were homeless, 28 (6%) were residents of correctional facilities, and 8 (2%) were residents of long-term care facilities. Of the 28 cases incarcerated in correctional facilities, 11 were inmates in state prisons, 10 in the Immigration and Custom Enforcement Detention Center in Stewart County, and seven in county jails.

Substance abuse is the most commonly reported behavioral risk factor among patients with TB in the United States. TB patients who abuse substances often experience treatment failure and remain infectious longer because treatment failure presumably extends periods of infectiousness. In Georgia, abuse of either illicit drugs or alcohol was reported in 114 (24%) cases in 2008 (Table 3, Figure 12).

Pediatric TB

TB in children is considered a sentinel public health event because it often indicates recent transmission from an infectious adult case. Additionally, potentially lethal forms of TB such as TB meningitis or miliary TB can develop in very young children. In 2008, children younger than 15 years old comprised 9% of Georgia TB cases; 33 cases (4.5 per 100,000) were reported in children younger than 5 years old, nine cases (0.6 per 100,000) were reported in children 5-14 years old.

From 2004-2008, 141 TB cases among children younger than 5 years of age were reported in Georgia (average: 28/year; range: 24-33). Eight children had

Figure 11. HIV Status of TB Cases Georgia, 1993-2008

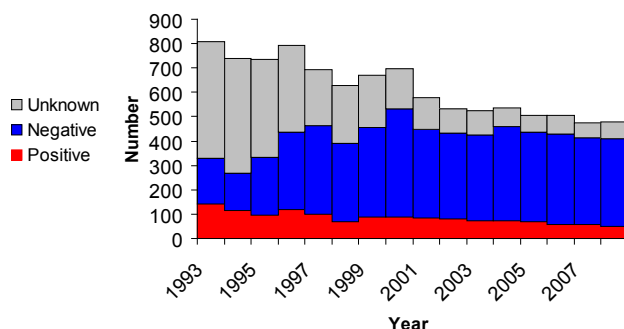
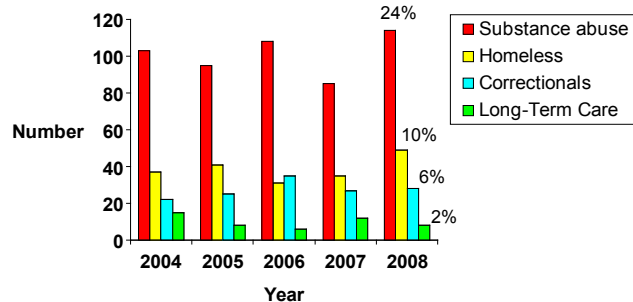


Figure 12. TB in Other High-Risk Populations Georgia, 2004-2008



deadly forms of TB during this time period: six had disseminated TB and two had meningial TB, but none died. Young children are a priority for the Georgia TB program. All CDC/American Thoracic Society recommendations for treatment of pediatric TB cases and the follow-up of children, who are contacts to TB cases, including directly observed preventive therapy for children < 5 years old, are being followed.

Drug Resistance

Of 353 culture-confirmed cases in 2008, 347 (98%) were tested for drug susceptibility to the three first line anti-TB medications: isoniazid (INH), rifampin (RIF), and ethambutol (EMB). Of 345 tested isolates from cases with no previous history of TB, 29 (9%) had primary resistance to INH, 2 (0.6%) to RIF, and 1 (0.3%) to EMB (Table 4). One multidrug-resistant TB (MDR-TB, i.e. TB resistant to at least INH and RIF) cases was reported in 2008. The percentage of cases with primary INH resistance (INH-R) ranged from 5% to 9% in the past 5 years while an average of one MDR-TB case per year was reported over that same time period (Figure 13).

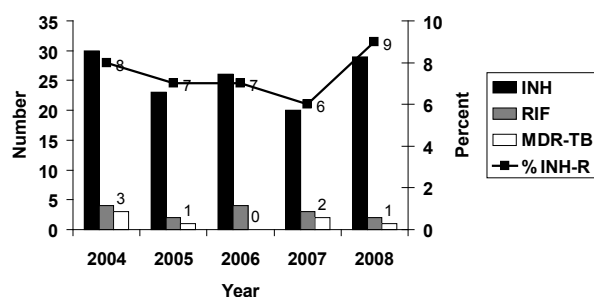
Indicators of Infectiousness

Persons with pulmonary or laryngeal TB have the potential of infecting others with TB, and infectiousness is higher if their sputum smears are positive for acid-fast bacilli (AFB), sputum cultures are positive for *Mycobacterium tuberculosis*, or cavitory lesions are present on chest radiography. In 2008, 79% of cases had pulmonary TB, 55% had sputum cultures that were positive for *Mycobacterium tuberculosis*, 34% had positive sputum AFB smears, and 32% showed radiographic evidence of cavitory lesions.

Initial Diagnosis, Health Provider Data, and Directly Observed Therapy

In Georgia, majority of TB patients are initially diagnosed in a hospital and are followed up by county health departments after discharge to continue their TB treatment. In 2008, 322 (67%) of TB patients were initially reported to public health authorities by 90 different hospitals in Georgia. The hospitals in Georgia that admitted the most number of TB patients in 2008 were Grady Memorial Hospital (59 patients), Gwinnett Medical Center (17), DeKalb Medical Center (16), Wellstar Kennestone Hospital (11), Piedmont Hospital (11), and Southern Regional Medical Center (11). County health departments provided case management for 87% of TB patients and 13% of cases were cared for solely by a private physician. County health department staff provide directly observed

Figure 13. Drug Resistance and MDR-TB Georgia, 2004-2008



therapy (DOT) to TB patients, which entails watching a patient swallow every dose of their TB medications for at least 6 months. In 2007, among 401 patients with case completion data, 82% received TB treatment entirely by DOT, 14% were treated by a combination of DOT and self-administered therapy, and only 4% self-administered their medications for the entire duration of their treatment.

TB Mortality

Sixteen persons died of TB in GA in 2007, the most recent year with available mortality data. The age-adjusted TB mortality rate was 0.2 per 100,000. From 2002 to 2006, an average of 19 people died of TB each year (range = 15-31).

TB Contact Investigations and Latent TB Infection

Public health authorities routinely conduct a contact investigation among persons exposed to a TB case to identify secondary TB cases and contacts with latent TB infection (LTBI). Index TB cases with positive acid-fast bacillus (AFB) sputum-smear results or pulmonary cavities have the highest priority for investigation. During a contact investigation, public health staff ask recent contacts to a case if they have TB-like symptoms, administer a TB skin test (TST), repeat the TST after 8-10 weeks if the initial TST is negative, and have a chest radiology exam performed if the TST is positive

(>= 5 millimeters induration). Persons with LTBI have a positive TST, but are asymptomatic and have a normal chest radiology exam. They are not contagious but have a 10% chance of developing TB disease later in life if they do not receive treatment for LTBI.

Among 4,824 identified contacts of TB cases reported in 2007, the most recent year with completed contact

investigation data, 4,265 (88%) were completely evaluated for TB disease and LTBI (Table 8). Of these evaluated contacts, 50 (1%) had TB disease and 932 (20%) had LTBI (Table 9). Among contacts with LTBI, 634 (68%) started LTBI therapy, of which 401 (66%) completed LTBI treatment (Table 10).

TB Program Objectives

Objective 1: 90% of Georgia TB patients will complete a course of TB treatment within 12 months of starting treatment.

Among 396 TB patients started on TB treatment in 2007 who were slated to complete treatment in 2008, 95% completed their full course of treatment; however, only 87% of patients eligible for a 12-month treatment course completed treatment in 12 months (Table 5, 6). Timely treatment completion was much lower than the state average among HIV-infected persons (67%), homeless persons (73%), and persons abusing illegal drugs (76%). Interventions need to focus on these populations to improve timely treatment completion. Though this objective was not achieved, timely treatment completion has improved since 1994, when directly observed therapy became the recommended standard of care for TB treatment in Georgia (Figure 14).

Objective 2: 95% of TB cases with sputum smears that are positive for acid-fast bacillus will have contacts identified.

Georgia nearly attained this objective in 2007, the most recent year with completed data on contacts to TB cases. Of 179 TB cases with sputum smears that were positive for acid-fast bacillus (an indicator of infectiousness), 165 (92%) had contacts identified by county health departments (Table 7). Of the 14 sputum AFB-smear positive cases with no identified contacts, four cases were uncooperative or refused to identify their contacts; contacts to two cases were uncooperative or refused to be evaluated; one case died or was too ill to be interviewed; in one case contact investigation was not done, in three cases, “other” was indicated as the reasons for why no contacts were identified; and for three cases, the reason no contact investigation results were entered in SENDSS was missing.

Objective 3: At least 70 percent of persons with latent TB infection (LTBI) who started therapy for latent TB infection (LTBI) will complete LTBI therapy.

Figure 14. Timely TB Treatment Completion and Directly Observed Therapy (DOT) Georgia, 1993-2007

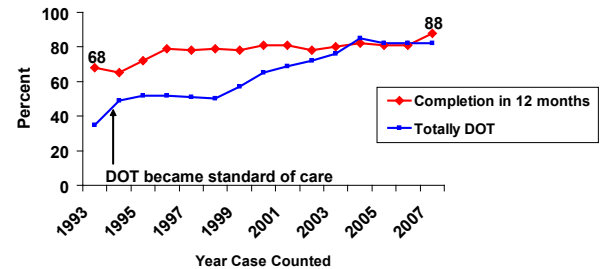
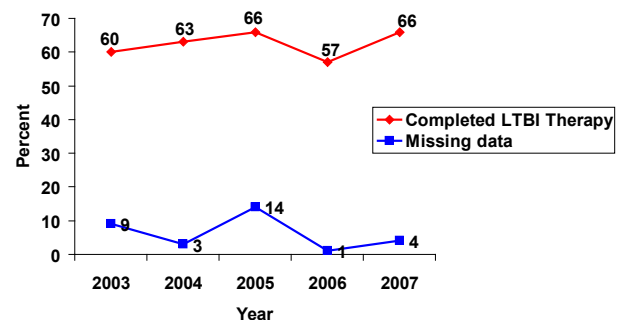


Figure 15. Completion of Latent TB Infection (LTBI) Therapy, Georgia, 2003-2007



In 2007, 635 infected contacts were started on LTBI therapy who should have completed preventive treatment by 2008, and 22 (4%) contacts had missing data for reason why LTBI treatment was stopped. Of the 613 infected contacts with complete LTBI treatment data, 403 (66%) completed LTBI treatment, 99 (16%) chose to stop therapy on their own, 57 (9%) were lost to follow-up, 21 (3%) stopped taking medications due to a recommendation from their provider, 19 (3%) moved before completing therapy, 9 (1.5%) had an adverse reaction to the medications, 4 (0.7%) developed active TB, and one (0.2%) died before LTBI therapy was completed.

Table 1. Number of TB Cases and TB Case Rates per 100,000 population by County, Georgia, 2007- 2008*

COUNTY	2007		2008	
	Number of cases	Case Rate	Number of cases	Case Rate
Appling	<5	--	0	0
Atkinson	<5	--	<5	--
Bacon	0	0	0	0
Baker	0	0	0	0
Baldwin	0	0	<5	--
Banks	<5	--	0	0
Barrow	<5	--	<5	--
Bartow	0	0	<5	--
Ben Hill	0	0	0	0
Berrien	<5	--	<5	--
Bibb	<5	--	7	4.5
Bleckley	0	0	<5	--
Brantley	0	0	0	0
Brooks	0	0	<5	--
Bryan	<5	--	0	0
Bulloch	<5	--	<5	--
Burke	<5	--	0	0
Butts	<5	--	<5	--
Calhoun	0	0	<5	--
Camden	0	0	0	0
Candler	0	0	0	0
Carroll	<5	--	<5	--
Catoosa	<5	--	<5	--
Charlton	0	0	0	0
Chatham	16	6.4	12	4.8
Chattahoochee	0	0	0	0
Chattooga	0	0	<5	--
Cherokee	<5	--	5	--
Clarke	5	4.4	<5	--
Clay	0	0	0	0
Clayton	14	5.1	14	5.1
Clinch	0	0	<5	--
Cobb	27	3.9	27	3.9
Coffee	<5	--	0	0
Colquitt	<5	--	6	13.2
Columbia (excludes ASMP)	<5	--	5	4.5
Cook	<5	--	0	0
Coweta	<5	--	<5	--
Crawford	0	0	0	0
Crisp	0	0	<5	--
Dade	0	0	0	0
Dawson	0	0	0	0
Decatur	<5	--	0	0
DeKalb	74	10	78	10.5
Dodge	<5	--	<5	--
Dooley	<5	--	<5	--

COUNTY	2007		2008	
	Number of cases	Case Rate	Number of cases	Case Rate
Dougherty	<5	--	10	10.4
Douglas	<5	--	<5	--
Early	0	0	<5	--
Echols	0	0	<5	--
Effingham	0	0	<5	--
Elbert	<5	--	<5	--
Emanuel	<5	--	<5	--
Evans	0	0	0	0
Fannin	0	0	0	0
Fayette	<5	--	0	0
Floyd	7	7.3	<5	--
Forsyth	<5	--	<5	--
Franklin	<5	--	0	0
Fulton	78	7.9	72	7.1
Gilmer	<5	--	<5	--
Glascocock	0	0	0	0
Glynn	<5	--	5	6.6
Gordon	<5	--	<5	--
Grady	<5	--	<5	--
Greene	0	0	0	0
Gwinnett	53	6.8	68	8.6
Habersham	<5	--	0	0
Hall	5	2.8	<5	--
Hancock	<5	--	<5	--
Haralson	0	0	0	0
Harris	0	0	<5	--
Hart	0	0	0	0
Heard	0	0	0	0
Henry	<5	--	<5	--
Houston	5	3.8	6	4.5
Irwin	0	0	0	0
Jackson	0	0	0	0
Jasper	0	0	0	0
Jeff Davis	0	0	0	0
Jefferson	<5	--	0	0
Jenkins	0	0	0	0
Johnson	0	0	0	0
Jones	0	0	0	0
Lamar	0	0	0	0
Lanier	0	0	0	0
Laurens	<5	--	<5	--
Lee	0	0	0	0
Liberty	5	8.3	<5	--
Lincoln	0	0	<5	--
Long	0	0	0	0
Lowndes	<5	--	<5	--
Lumpkin	0	0	0	0
Macon	<5	--	0	0

COUNTY	2007		2008	
	Number of cases	Case Rate	Number of cases	Case Rate
Madison	0	0	0	0
Marion	0	0	0	0
McDuffie	0	0	0	0
McIntosh	0	0	0	0
Meriwether	<5	--	<5	--
Miller	0	0	0	0
Mitchell	0	0	5	20.8
Monroe	<5	--	<5	--
Montgomery	0	0	<5	--
Morgan	<5	--	0	0
Murray	<5	--	<5	--
Muscogee	11	5.9	8	4.3
Newton	<5	--	8	8.1
Oconee	0	0	0	0
Oglethorpe	0	0	0	0
Paulding	<5	--	0	0
Peach	<5	--	0	0
Pickens	0	0	<5	--
Pierce	<5	--	0	0
Pike	0	0	0	0
Polk	<5	--	<5	--
Pulaski	<5	--	0	0
Putnam	<5	--	0	0
Quitman	<5	--	0	0
Rabun	0	0	0	0
Randolph	0	0	0	0
Richmond	7	3.6	5	2.5
Rockdale	<5	--	5	6.0
Schley	0	0	0	0
Screven	<5	--	0	0
Seminole	0	0	0	0
Spalding	<5	--	<5	--
Stephens	<5	--	<5	--
Stewart (excludes ICE Detention Ctr)	0	0	0	0
Sumter	<5	--	<5	--
Talbot	0	0	0	0
Taliaferro	0	0	0	0
Tattnall	<5	--	0	0
Taylor	0	0	<5	--
Telfair	0	0	<5	--
Terrell	<5	--	0	0
Thomas	7	15.5	<5	--
Tift	<5	--	<5	--
Toombs	<5	--	<5	--
Towns	0	0	0	0
Treutlen	0	0	0	0
Troup	7	11.0	<5	--
Turner	0	0	<5	--

COUNTY	2007		2008	
	Number of cases	Case Rate	Number of cases	Case Rate
Twiggs	0	0	0	0
Union	0	0	<5	--
Upson	0	0	0	0
Walker	<5	--	0	0
Walton	0	0	<5	--
Ware	<5	--	0	0
Warren	0	0	0	0
Washington	0	0	0	0
Wayne	0	0	0	0
Webster	0	0	0	0
Wheeler	0	0	0	0
White	0	0	<5	--
Whitfield	<5	--	8	8.5
Wilcox	0	0	0	0
Wilkes	0	0	0	0
Wilkinson	0	0	0	0
Worth	0	0	0	0
GEORGIA	473	5.0	478	4.9

* In counties where one to four cases were reported, "< 5" is used to represent the number of reported cases, and the case rate is not calculated.

Table 2. Number of TB Cases and TB Case Rates per 100,000 population by Health District, Georgia, 2007- 2008

Health District	2007		2008	
	Number of cases	Case rate	Number of Cases	Case rate
1.1 Rome	18	3.0	12	1.9
1.2 Dalton	14	3.3	17	4.0
2.0 Gainesville	15	2.6	11	1.8
3.1 Cobb	30	3.7	31	3.8
3.2 Fulton	78	7.9	72	7.1
3.3 Clayton	15	5.5	14	5.1
3.4 Lawrenceville	57	6.0	81	8.3
3.5 DeKalb	72	9.8	78	10.5
4.0 LaGrange	20	2.6	12	1.5
5.1 Dublin	9	5.6	8	5.5
5.2 Macon	15	3.0	18	3.5
6.0 Augusta	16	3.6	14	3.1
Augusta State Medical Prison (ASMP)	13	na	11	na
7.0 Columbus	21	6.0	14	3.9
ICE Detention Center	8	62.7	10	46.1
8.1 Valdosta	5	2.1	13	5.3
8.2 Albany	20	5.8	25	6.8
9.1 Coastal	26	4.8	23	4.3
9.2 Waycross	13	3.8	8	2.3
10 Athens	8	1.8	6	1.3
Total	473	5.0	478	4.9

Table 3. Percentage of TB Cases with Risk Factors for TB by Health District, Georgia, 2008

HEALTH DISTRICT	Foreign-born %	HIV Infected %	Homeless %	Inmate %	Nursing Home %	Substance Abuse %
1.1 Rome	33	25	8	0	0	8
1.2 Dalton	53	0	0	0	0	6
2.0 Gainesville	45	9	0	0	18	27
3.1 Cobb	58	3	3	0	3	19
3.2 Fulton	22	24	31	3	0	33
3.3 Clayton	43	0	0	0	0	21
3.4 Lawrenceville	68	5	1	2	0	15
3.5 DeKalb	50	13	12	3	3	17
4.0 LaGrange	50	0	8	0	0	42
5.1 Dublin	12	25	0	12	0	38
5.2 Macon	11	0	6	0	6	17
6.0 Augusta	21	14	7	0	0	36
ASMP inmates	0	27	18	100	0	36
7.0 Columbus	36	0	14	0	7	50
ICE detainees	100	0	0	100	0	12
8.1 Valdosta	15	15	8	0	0	23
8.2 Albany	28	8	12	0	0	24
9.1 Coastal	26	4	13	0	0	39
9.2 Waycross	12	12	0	0	12	25
10 Athens	33	17	17	0	0	50
GEORGIA	41	10	10	6	2	24

Table 4. Primary Resistance to First-line Anti-TB Medications by Health District Georgia, 2008

TB Drug	Isoniazid		Rifampin		Ethambutol	
	No.	%	No.	%	No.	%
1.1 Rome	0	0	0	0	0	0
1.2 Dalton	1	9	0	0	0	0
2.0 Gainesville	1	12	0	0	0	0
3.1 Cobb	1	5	0	0	0	0
3.2 Fulton	12	20	0	0	0	0
3.3 Clayton	0	0	0	0	0	0
3.4 Lawrenceville	6	12	0	0	0	0
3.5 DeKalb	1	2	0	0	0	0
4.0 LaGrange	1	9	0	0	0	0
5.1 Dublin	0	0	0	0	0	0
5.2 Macon	0	0	0	0	0	0
6.0 Augusta & ASMP	5	26	1	5	1	5
7.0 Columbus & ICE	1	5	0	0	0	0
8.1 Valdosta	0	0	0	0	0	0
8.2 Albany	0	0	1	6	0	0
9.1 Coastal	0	0	0	0	0	0
9.2 Waycross	0	0	0	0	0	0
10 Athens	0	0	0	0	0	0
GEORGIA	29	9	2	0.6	1	0.3

Table 5. Completion of Cases' TB Treatment by Health District, Georgia, 2006-2007

HEALTH DISTRICT	2006		2007	
	No. Cases that Completed Treatment (Tx) / No. Cases Started on Treatment	%	No. Cases that Completed Tx/No. Cases Started on Tx	%
1.1 Rome	16/16	100	15/15	100
1.2 Dalton	13/13	100	10/11	91
2.0 Gainesville	10/10	100	14/14	100
3.1 Cobb	26/29	90	28/28	100
3.2 Fulton	68/71	96	68/69	99
3.3 Clayton	11/16	69	12/12	100
3.4 Lawrenceville	52/60	87	47/48	98
3.5 DeKalb	50/53	94	59/63	94
4.0 LaGrange	21/24	88	17/18	94
5.1 Dublin	12/13	92	7/7	100
5.2 Macon	22/27	82	9/10	90
6.0 Augusta ASMP	11/13	85	10/12	83
	15/15	100	11/12	92
7.0 Columbus ICE	17/18	94	9/11	82
	na		1/5	20
8.1 Valdosta	8/8	100	3/3	100
8.2 Albany	22/23	96	17/17	100
9.1 Coastal	15/16	94	23/24	96
9.2 Waycross	15/15	100	8/10	80
10 Athens	4/4	100	8/8	100
GEORGIA	417/453	92	376/397	95

Table 6. Timely Completion of Cases' TB Tx by Health District, GA, 2006-2007

HEALTH DISTRICT	2006		2007	
	No. Cases Completed Tx in 12 months / No. Started Tx	%	No. Cases Completed Tx in 12 months / No. Started Tx	%
1.1 Rome	13/15	87	14/15	93
1.2 Dalton	13/13	100	10/11	91
2.0 Gainesville	7/9	78	13/14	93
3.1 Cobb	20/25	80	24/28	86
3.2 Fulton	57/71	80	66/69	96
3.3 Clayton	10/16	62	11/12	92
3.4 Lawrenceville	51/60	85	43/48	90
3.5 DeKalb	49/53	92	51/63	81
4.0 LaGrange	20/24	83	16/18	89
5.1 Dublin	12/13	92	7/7	100
5.2 Macon	14/26	54	6/10	60
6.0 Augusta ASMP	23/28	82	10/12	83
	13/15	87	10/12	83
7.0 Columbus ICE	14/18	78	8/11	73
	na		1/5	20
8.1 Valdosta	5/8	62	3/3	100
8.2 Albany	19/23	83	15/17	88
9.1 Coastal	13/16	81	21/24	88
9.2 Waycross	14/15	93	8/10	80
10 Athens	2/4	50	8/8	100
GEORGIA	364/448	81	345/397	87

Table 7. Sputum Smear Positive (SSP) Cases with Contacts Identified by Health District, Georgia, 2006-2007

HEALTH DISTRICT	2006		2007	
	No. SSP Cases with Contacts Identified / No. SSP Cases	%	No. SSP Cases with Contacts Identified / No. SSP Cases	%
1.1 Rome	5/5	100	6/6	100
1.2 Dalton	8/8	100	5/5	100
2.0 Gainesville	3/3	100	5/5	100
3.1 Cobb	7/8	88	10/10	100
3.2 Fulton	36/36	100	34/34	100
3.3 Clayton	6/6	100	5/5	100
3.4 Lawrenceville	18/21	86	14/21	67
3.5 DeKalb	16/21	76	23/26	88
4.0 LaGrange	9/9	100	7/7	100
5.1 Dublin	4/4	100	2/2	100
5.2 Macon	10/10	100	4/4	100
6.0 Augusta	13/13	100	11/11	100
7.0 Columbus	4/4	100	13/13	100
8.1 Valdosta	6/6	100	3/3	100
8.2 Albany	8/8	100	7/7	100
9.1 Coastal	16/16	100	11/11	100
9.2 Waycross	2/2	100	4/4	100
10 Athens	1/1	100	4/4	100
GEORGIA	176/185	95	165/179	92

Table 8. Completely Evaluated Contacts by Health District, Georgia, 2006-2007

HEALTH DISTRICT	2006		2007	
	No. Contacts that were Completely Evaluated / No. Contacts Identified	%	No. Contacts that were Completely Evaluated / No. Contacts Identified	%
1.1 Rome	163/182	90	190/209	91
1.2 Dalton	148/163	91	107/122	88
2.0 Gainesville	71/82	87	76/89	85
3.1 Cobb	430/492	87	466/541	86
3.2 Fulton	1174/1521	77	1446/1606	90
3.3 Clayton	78/103	76	80/89	90
3.4 Lawrenceville	184/225	82	182/226	80
3.5 DeKalb	183/284	64	193/241	80
4.0 LaGrange	125/145	86	101/124	82
5.1 Dublin	135/142	95	54/54	100
5.2 Macon	144/157	92	76/88	86
6.0 Augusta	882/1103	80	412/457	90
7.0 Columbus	158/192	82	291/322	90
8.1 Valdosta	372/405	92	29/32	91
8.2 Albany	1375/1640	84	300/332	90
9.1 Coastal	243/289	84	147/161	91
9.2 Waycross	57/70	81	66/75	88
10 Athens	20/27	74	43/49	88
GEORGIA	5942/7222	82	4265/4824	88

Table 9. Contacts with Latent TB Infection by Health District, Georgia, 2006-2007

HEALTH DISTRICT	2006		2007	
	No. Contacts with LTBI/ No. Contacts Completely Evaluated	%	No. Contacts with LTBI/ No. Contacts Completely Evaluated	%
1.1 Rome	63/163	39	85/190	45
1.2 Dalton	70/148	47	28/107	26
2.0 Gainesville	25/71	35	11/76	14
3.1 Cobb	64/430	15	68/466	15
3.2 Fulton	211/1174	18	207/1446	14
3.3 Clayton	29/78	37	23/80	29
3.4 Lawrenceville	76/184	41	93/182	51
3.5 DeKalb	50/183	27	79/193	41
4.0 LaGrange	43/125	34	16/101	16
5.1 Dublin	36/135	27	9/54	17
5.2 Macon	56/144	39	16/76	21
6.0 Augusta	117/882	13	78/412	19
7.0 Columbus	64/158	40	86/291	30
8.1 Valdosta	13/372	4	7/29	24
8.2 Albany	239/1375	17	45/300	15
9.1 Coastal	102/243	42	46/147	31
9.2 Waycross	13/57	23	23/66	35
10 Athens	13/20	65	15/43	35
GEORGIA	1284/5942	22	935/4265	22

Table 10. Infected Contacts Started on LTBI Treatment by Health District Georgia, 2006-2007

HEALTH DISTRICT	2006		2007	
	No. Infected Contacts on LTBI Treatment / No. Infected Contacts	%	No. Infected Contacts on LTBI Treatment / No. Infected Contacts	%
1.1 Rome	57/63	90	79/85	93
1.2 Dalton	61/70	87	27/28	96
2.0 Gainesville	15/25	60	9/11	82
3.1 Cobb	34/64	53	43/68	63
3.2 Fulton	138/211	65	124/207	60
3.3 Clayton	24/29	83	15/23	65
3.4 Lawrenceville	57/76	75	70/93	75
3.5 DeKalb	41/50	82	43/79	54
4.0 LaGrange	36/43	84	15/16	94
5.1 Dublin	33/36	92	8/9	89
5.2 Macon	47/56	84	14/16	88
6.0 Augusta	57/117	49	34/78	44
7.0 Columbus	50/64	78	50/86	58
8.1 Valdosta	8/13	62	7/7	100
8.2 Albany	170/239	71	30/45	67
9.1 Coastal	95/102	93	34/46	74
9.2 Waycross	4/13	31	19/23	83
10 Athens	2/13	15	14/15	93
GEORGIA	929/1284	72	635/935	68

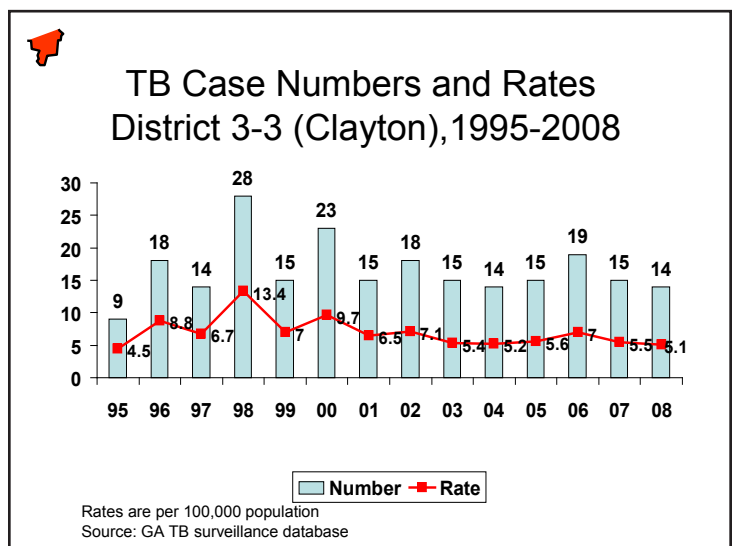
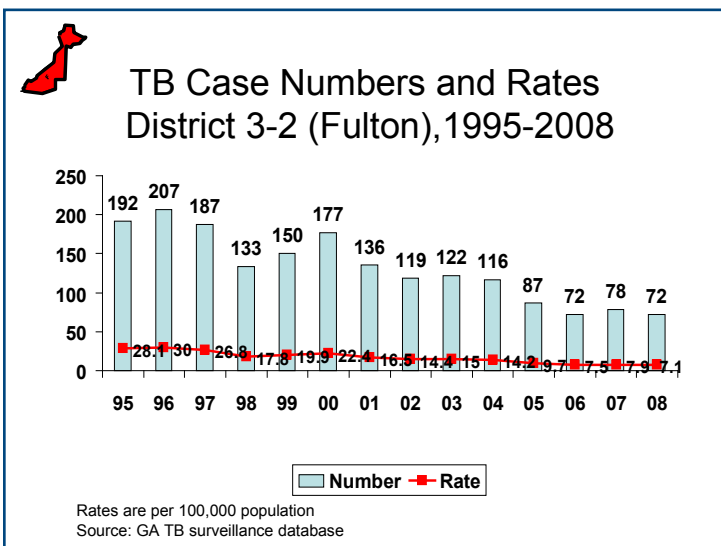
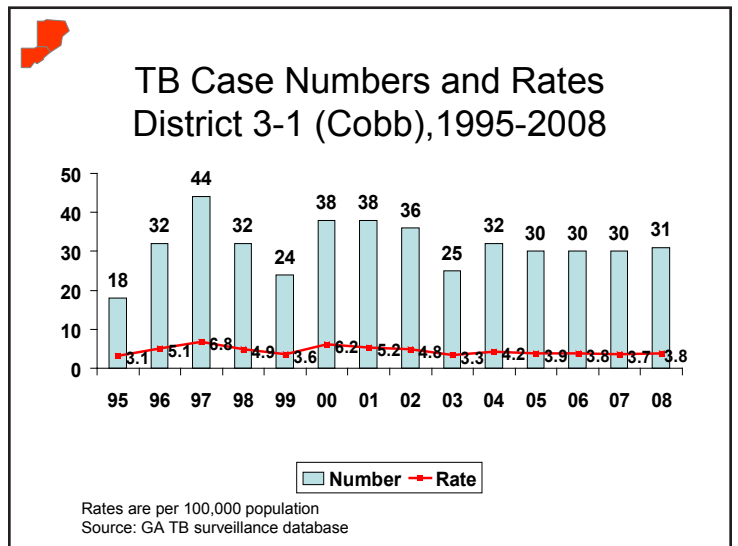
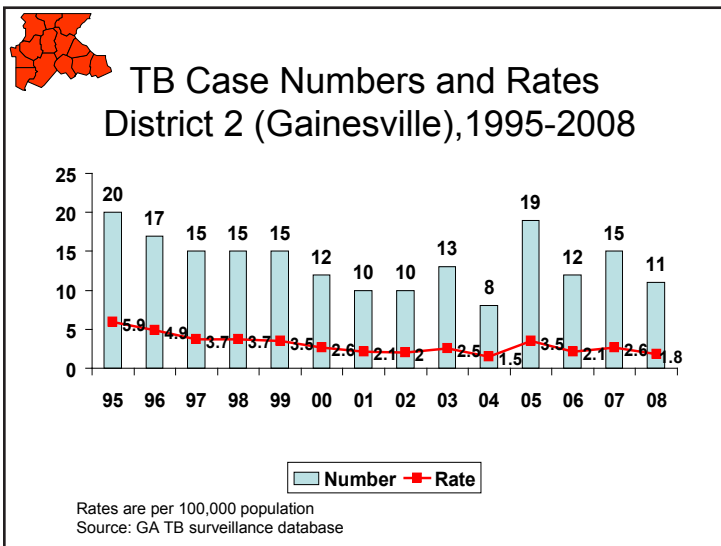
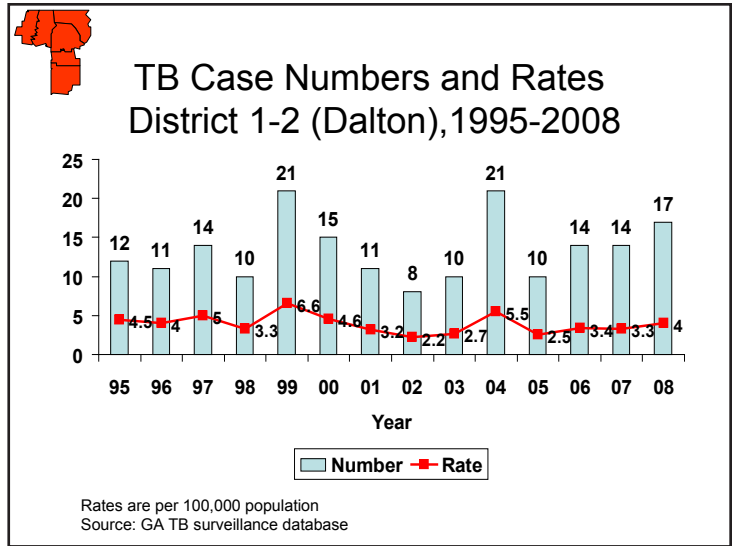
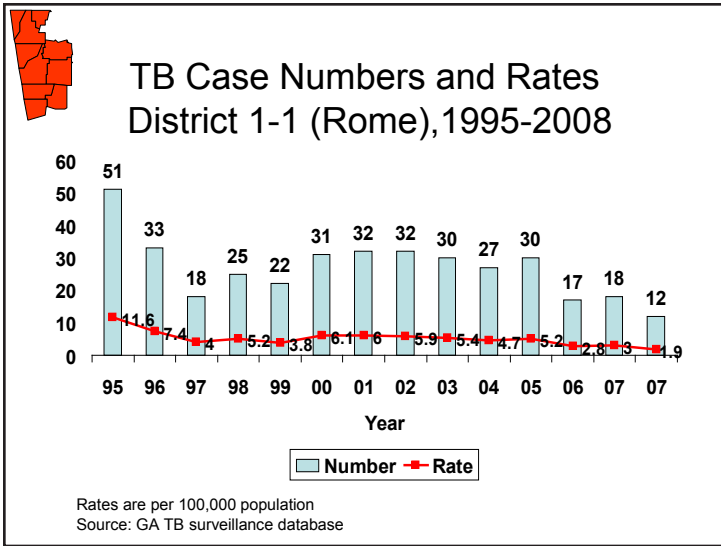
**Table 11. LTBI Treatment Completion of Infected Contacts by Health District
Georgia, 2006-2007**

HEALTH DISTRICT	2006			2007		
	No. Contacts that Completed LTBI Treatment / Contacts Treated	%	No. Contacts with Missing data	No. Contacts that Completed LTBI Treatment / Contacts Treated	%	No. Contacts with Missing data
1.1 Rome	21/54	39	3	64/79	81	0
1.2 Dalton	32/59	54	2	18/27	67	0
2.0 Gainesville	10/15	67	0	5/9	56	0
3.1 Cobb	13/34	38	0	23/43	54	0
3.2 Fulton	59/138	43	0	83/123	68	1
3.3 Clayton	10/24	42	0	9/15	60	0
3.4 Lawrenceville	42/57	74	0	51/69	74	1
3.5 DeKalb	36/40	90	1	27/31	87	12
4.0 LaGrange	29/36	81	0	11/15	73	0
5.1 Dublin	17/33	52	0	7/8	88	0
5.2 Macon	22/47	47	0	6/14	43	0
6.0 Augusta	31/56	55	1	14/34	41	0
7.0 Columbus	27/50	54	0	25/42	60	8
8.1 Valdosta	6/8	75	0	7/7	100	0
8.2 Albany	103/169	61	1	17/30	57	0
9.1 Coastal	59/95	62	0	18/34	53	0
9.2 Waycross	3/4	75	0	14/19	74	0
10 Athens	2/2	10	0	4/14	29	0
GEORGIA	522/921	57	8	403/613	66	22

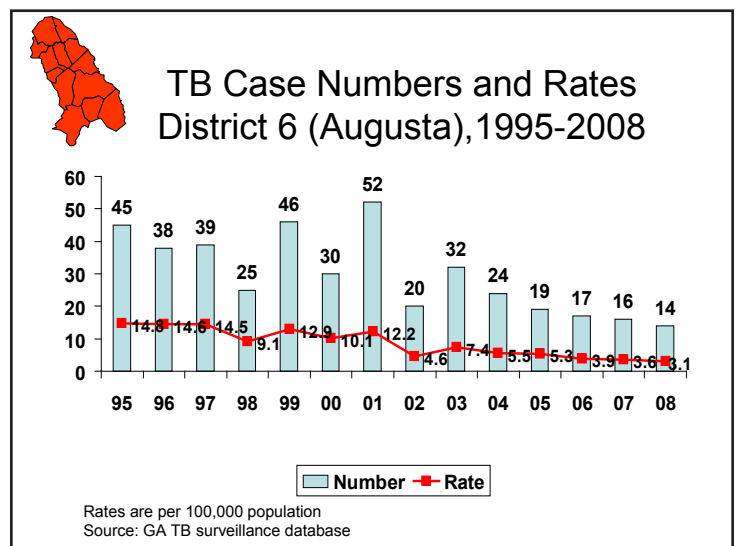
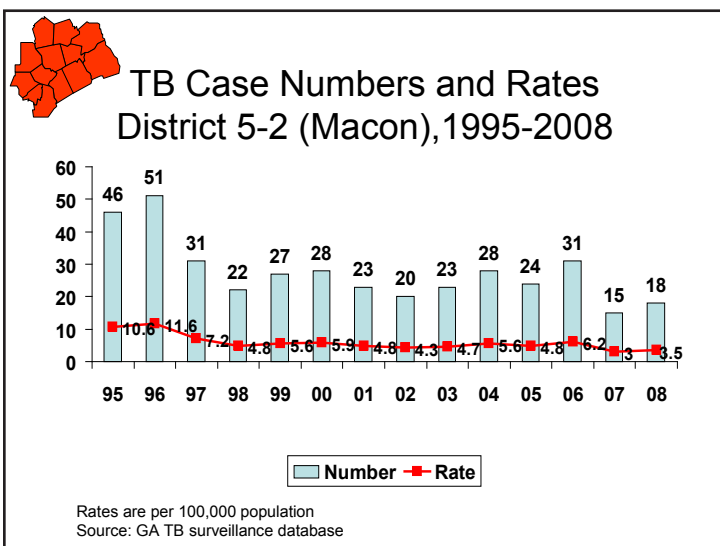
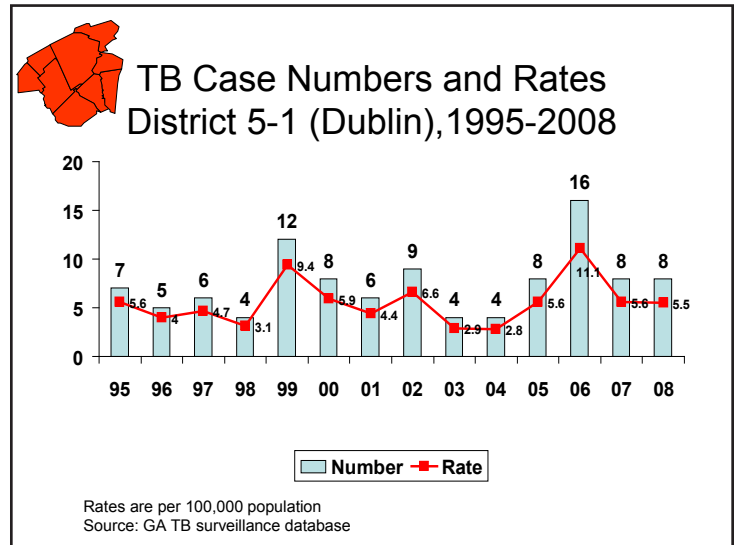
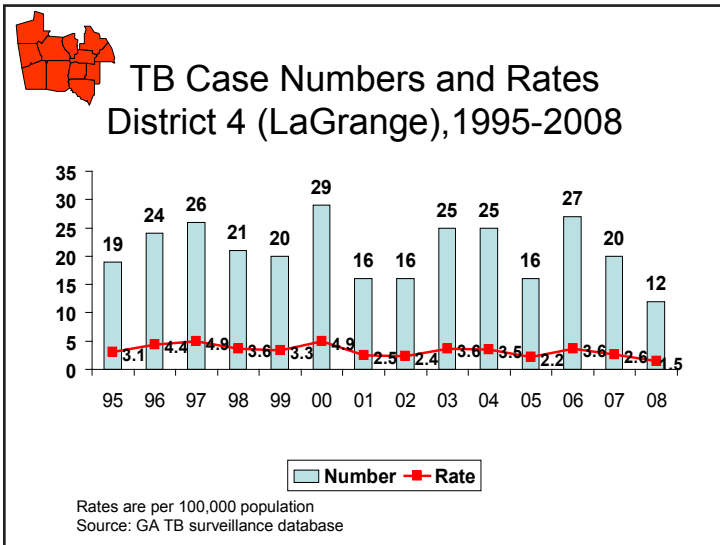
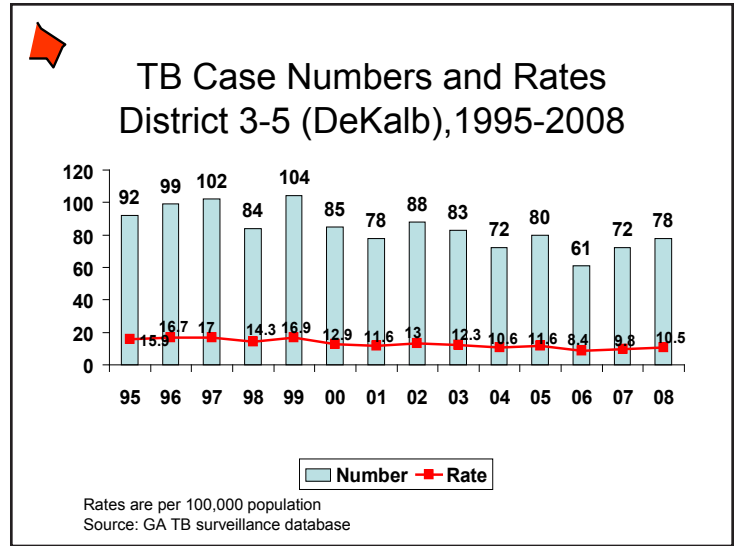
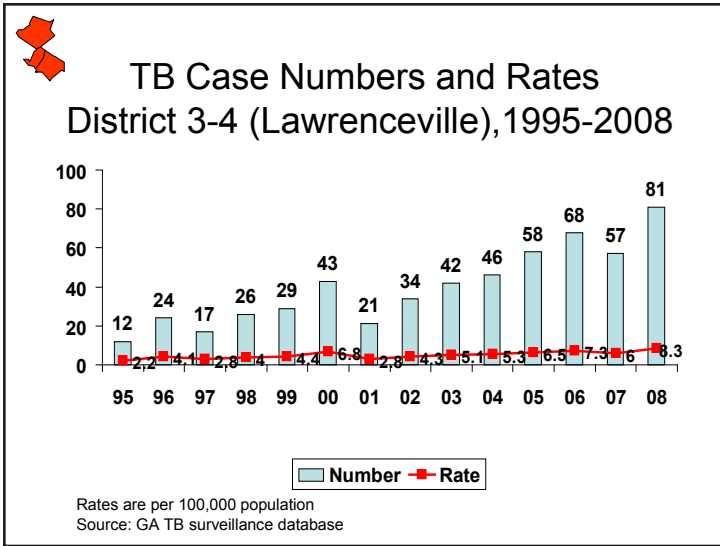
**Table 12. Reasons Why Infected Contacts Treated for LTBI Stopped LTBI Therapy
Georgia, 2003-2007**

Reasons for Stopping LTBI Therapy	2003 n=655 %	2004 n=720 %	2005 n=738 %	2006 n=921 %	2007 n=613 %
Completed Therapy	60	63	66	57	66
Chose to Stop	19	19	15	19	16
Lost to Follow-Up	13	10	9	11	9
Provider Decision	4	3	4	7	3
Moved	3	3	3	4	3
Adverse Reactions	1	1	2	1	2
Active TB Developed	0.6	0.4	0.4	0.8	0.7
Death	0.2	0.1	0	0.3	0.2

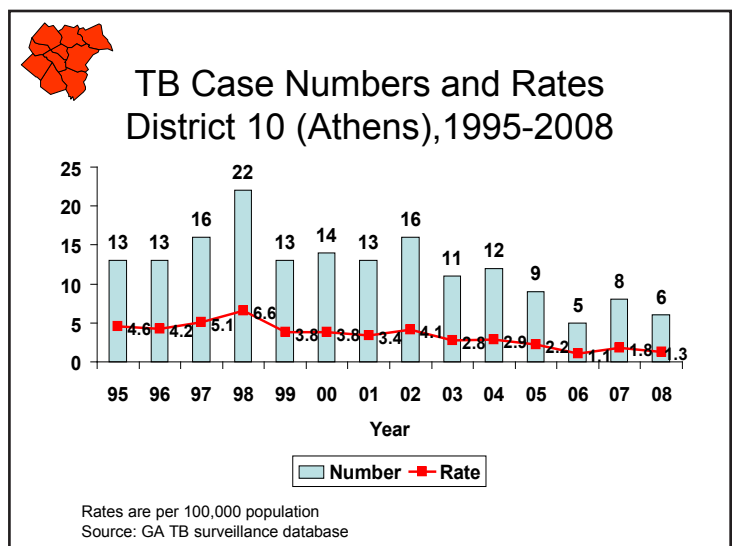
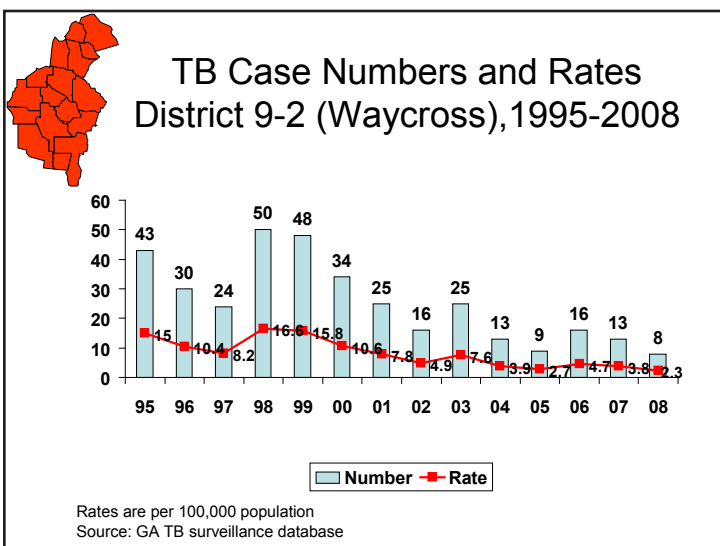
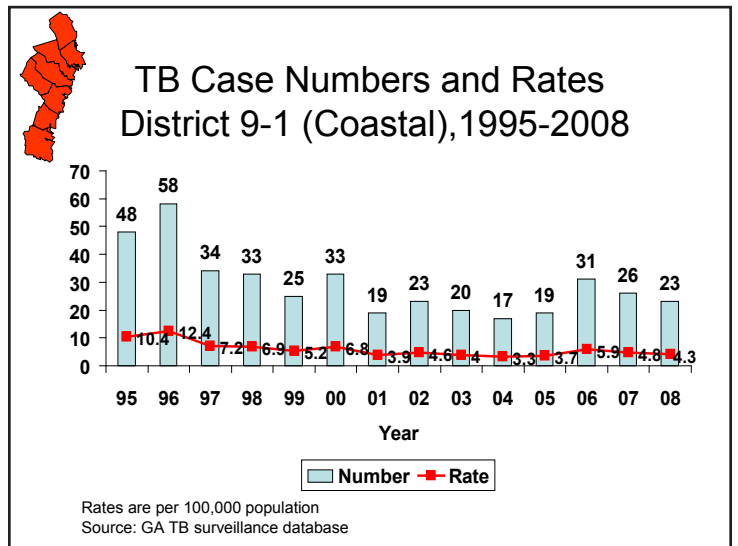
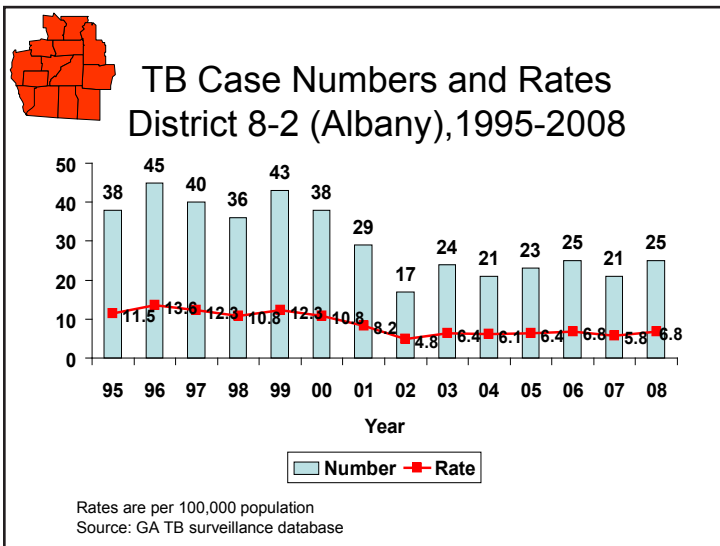
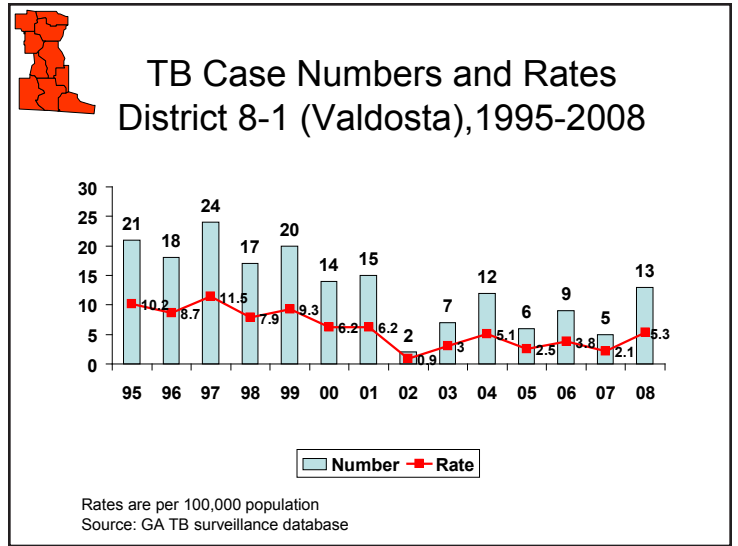
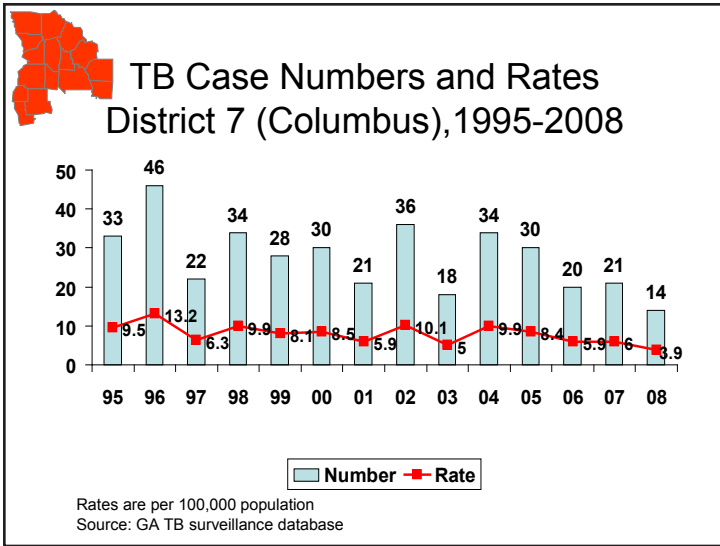
Tuberculosis Morbidity Trends by Health District, Georgia, 1995-2008

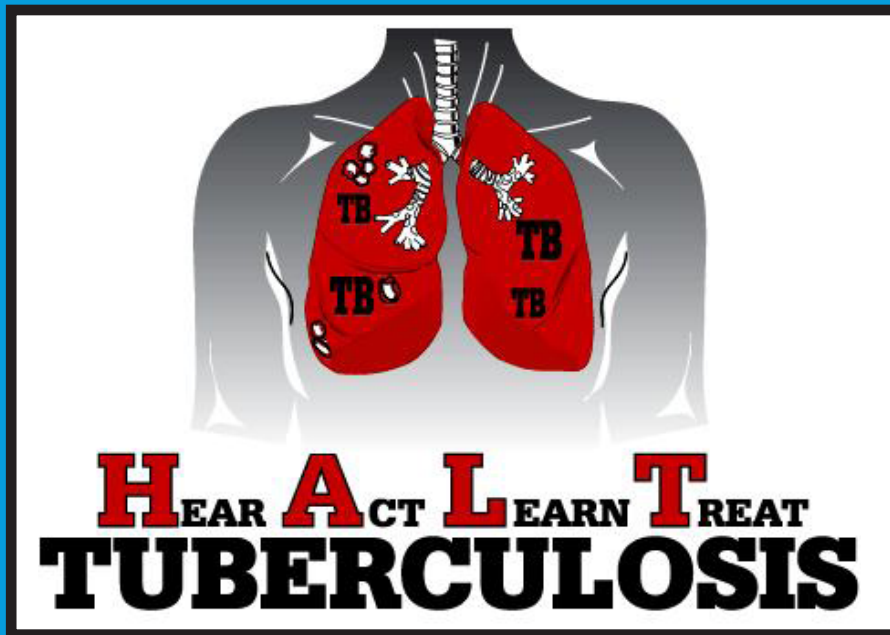


Tuberculosis Morbidity Trends by Health District, Georgia, 1995-2008



Tuberculosis Morbidity Trends by Health District, Georgia, 1995-2008





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